

# **POSEIDON** Marine Hoses





# POSEIDON LINE

ACCORDING TO GMPHOM 2009



**manuli**<sup>®</sup>  
RUBBER INDUSTRIES



# SUMMARY

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- **Manuli** entered the oil and marine business in 1973, when it was trading as Uniroyal –Manuli SpA, a joint venture owned 50 % by Uniroyal, and 50 % by Dardanio Manuli SpA



Manuli Rubber Industries: main hose plant established in 1973 (Italy)

- In 1973 established its modern hose production facility at Ascoli Piceno in Italy
- Factory awarded with the first ISO 9001 by DNV in 1992, renewed in 2002 as ISO 9001 "Vision 2000"
- 1986, Dardanio Manuli SpA purchased Uniroyal's stake in the company
- Uniroyal – Manuli Rubber SpA name changed also on three other occasions:
  - (i) to Uniroyal – Manuli Rubber Srl in 1988
  - (ii) to Manuli Rubber Industries Srl in 1990
  - (iii) to Manuli Rubber Industries SpA in 1997

# OIL & MARINE MILESTONES

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In 2005 Manuli Rubber Industries S.p.A. created a new division completely dedicated to the Oil and Marine Business

- Capitalize on the high level of business opportunities within the international petroleum community
- Improve the manufacturing facilities
- Modernize the manufacturing layout and capabilities in accordance with the strictest international product rules in the latest edition and industrial standards ISO 9001 & API Q1.





Manuli Rubber Industries, with its 70 years of experience developing technical products, is recognized worldwide as a leader in terms of innovation, quality and performance.

To strengthen this leadership, the MRI research and development activities are carried out by the **MHIC** (Manuli Hydraulics Innovation Center) in Bologna, in the core of a region with a high density of universities and skilled professionals.

The facility of the T&PD Centre has a **covered area of more than 2,000 square meters**, and is equipped with state-of-the-art test and laboratory equipment, able to offer **research, product development and training** for the MRI Group worldwide.

The team of engineers is dedicated to creating new products and keeping Manuli one step ahead in our fast paced industry. MRI engineers use the most up-to-date computer modeling procedures and work closely with the customer to ensure customer satisfaction.

As a back-up to our own in-house R&D Department, we frequently call on the services of the specialised test engineers and equipment of third party specialists who are in a position to produce detailed unbiased reports.

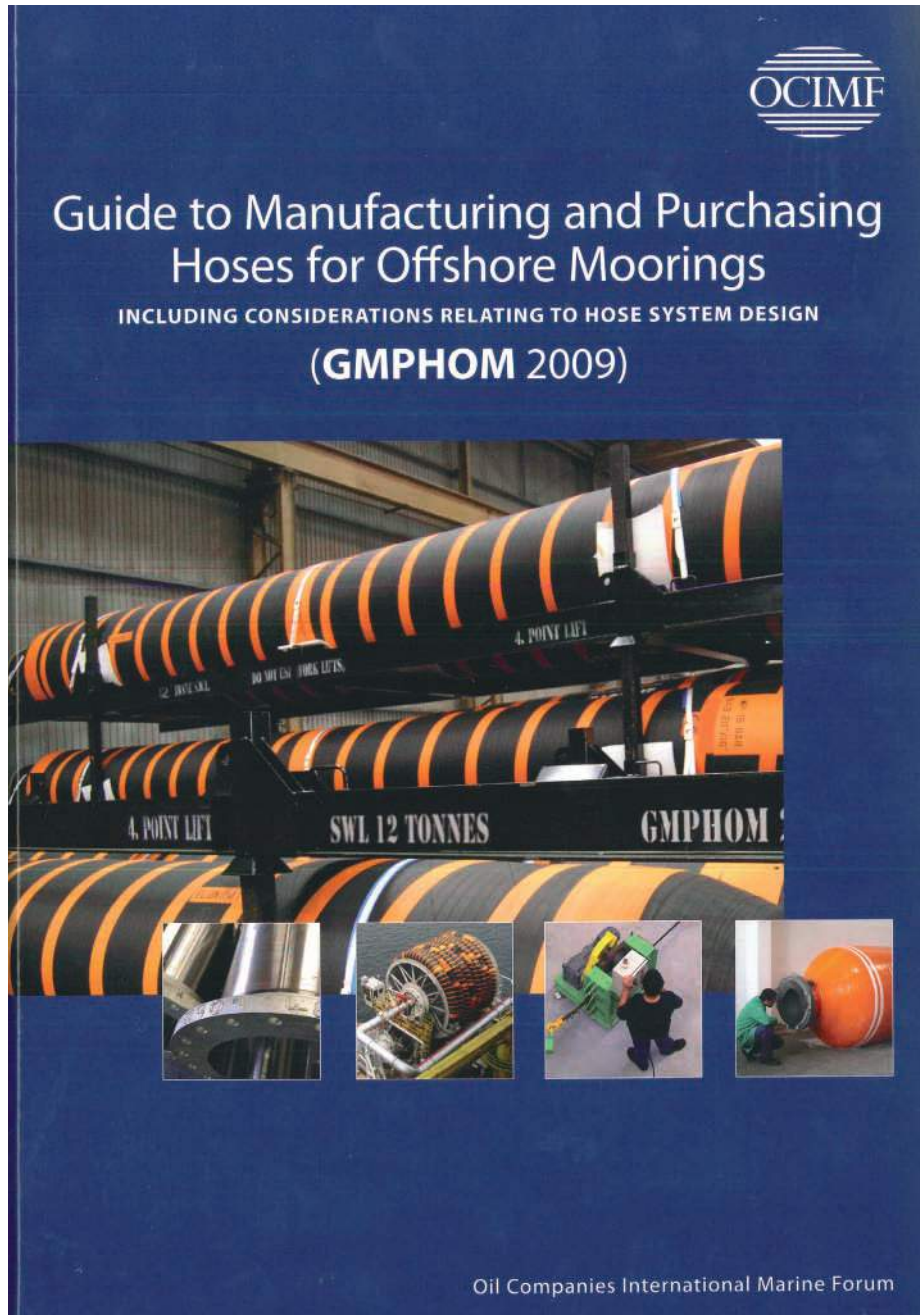
Manuli Rubber Industries also has the in-house capabilities to computer model hose systems, both static and dynamic analysis, from SPM hose strings to complete long length elastomeric hose systems, such as extended well tests and export off-take systems.



Aldo Occari Technology and Product Development Centre (Italy)

# OIL & MARINE PRODUCTS CERTIFICATIONS

Guide to Manufacturing and Purchasing Hoses for Offshore Moorings, Fifth Edition 2009. Issued by:  
Oil Companies International Marine Forum (OCIMF) Fully effective starting from: June 2012.





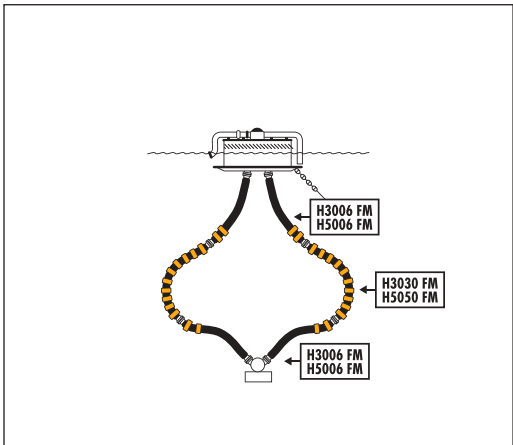
# OIL & MARINE QUALITY SYSTEM CERTIFICATIONS



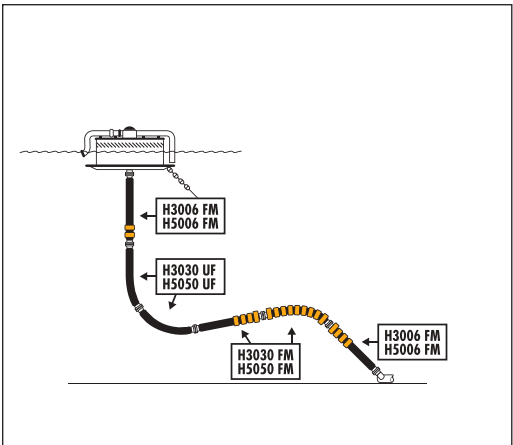
Manuli Oil & Marine Division Quality system has been recognized, through the following certifications, being in accordance to the ISO & API Q1 Standards



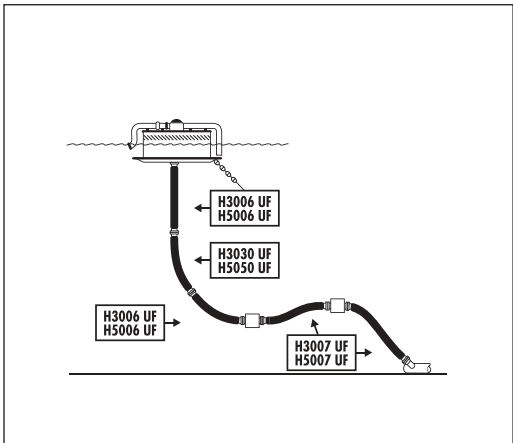
# OFF-SHORE MAIN CONFIGURATIONS



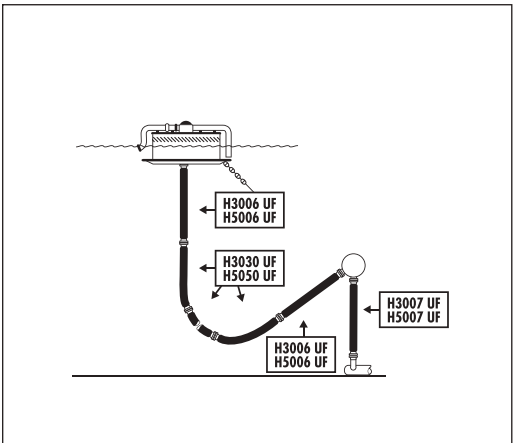
Chinese Lantern



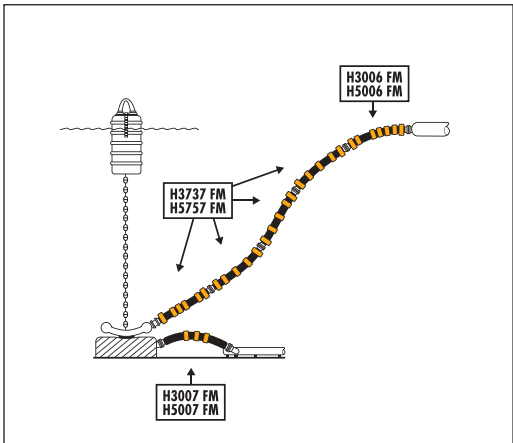
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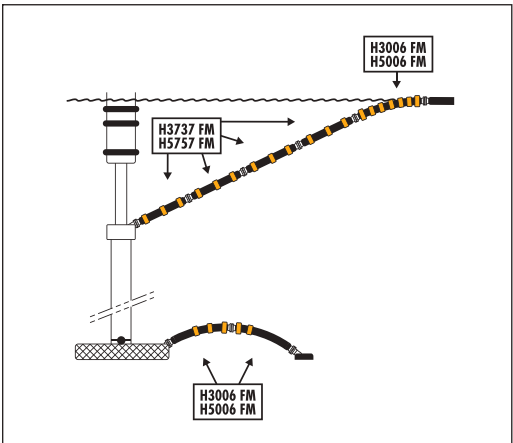
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Steep S

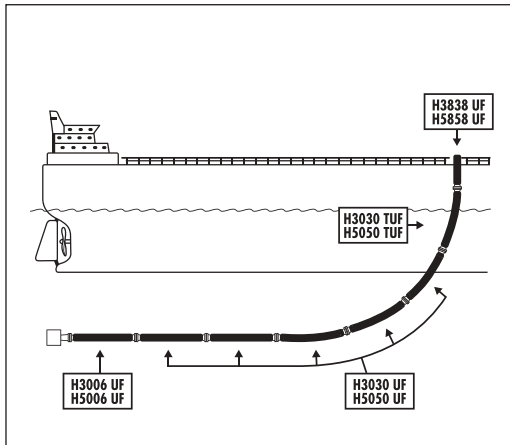


SALM (S.W.)

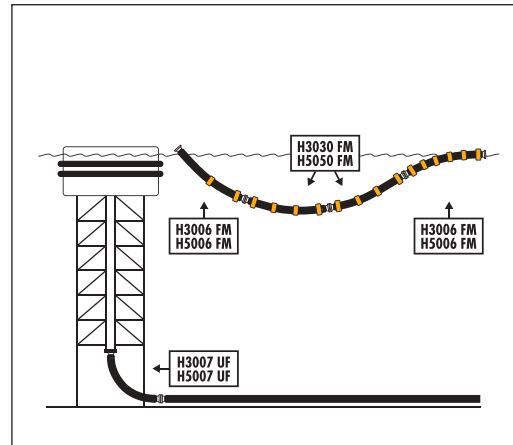


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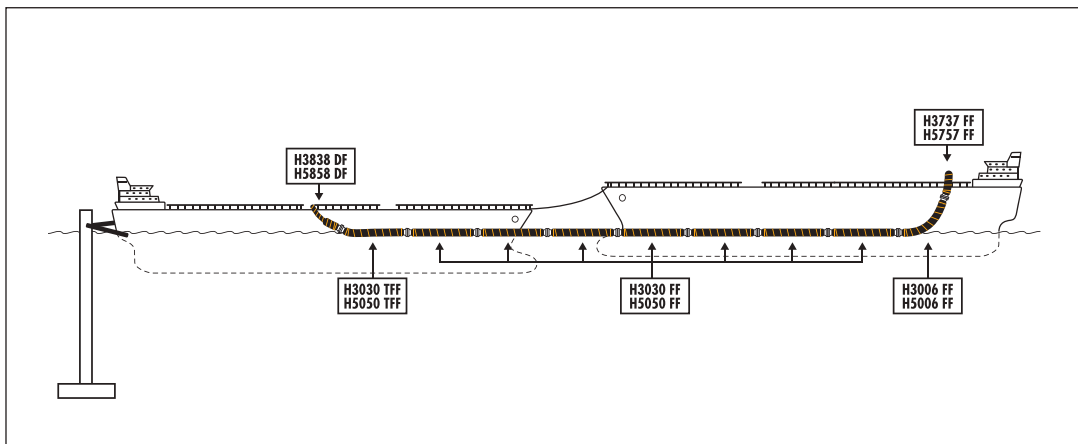
# OFF-SHORE MAIN CONFIGURATIONS



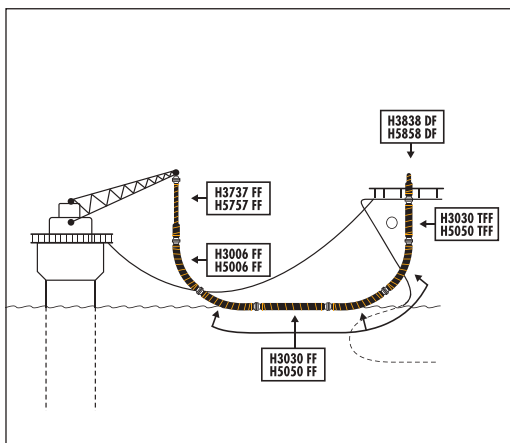
**C.B.M.**



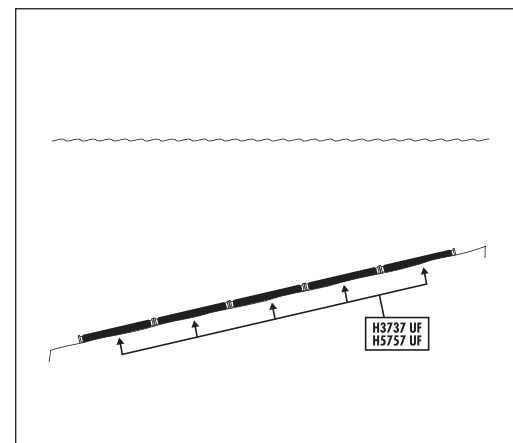
**S.P.M.T.**



**P.M.S.T.**



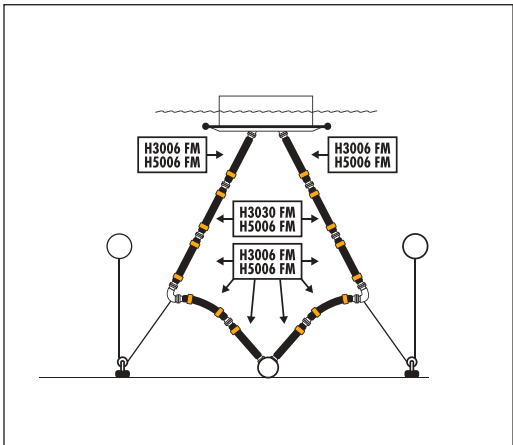
**A.L.P.**



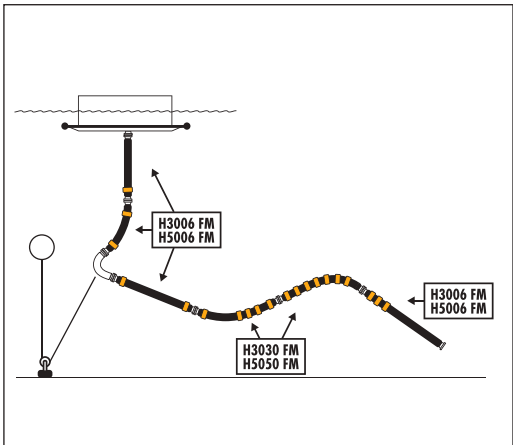
**SEA-LINE Rubber Hose**



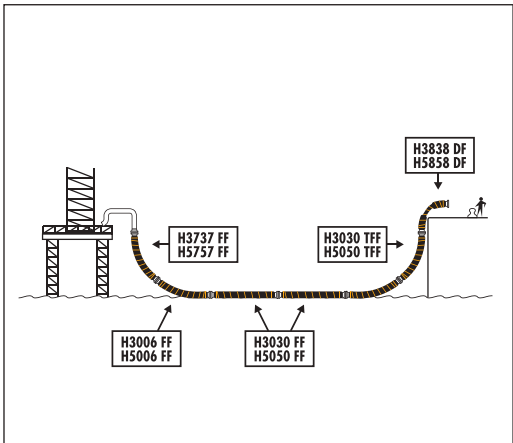
# OFF-SHORE MAIN CONFIGURATIONS



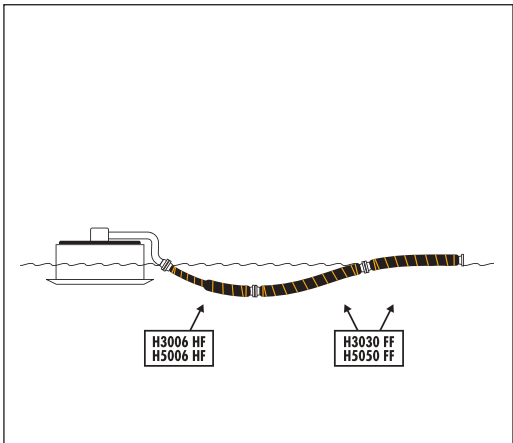
**M.A.S.P.A.**



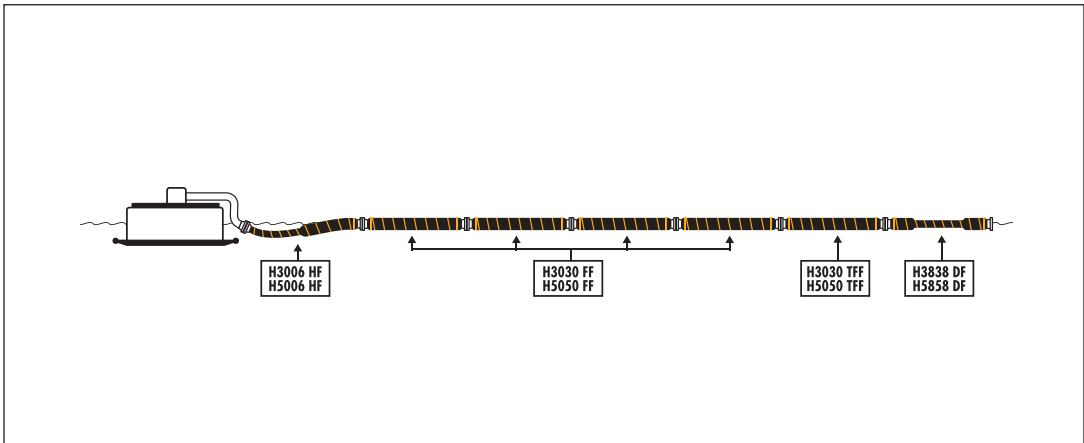
**M.A.S.P.B.**



**PLATFORM**



**OFF S.P.M. HOSE**



**FLOATING HOSE STRING**

# GMPHOM 2009 SINGLE AND DOUBLE CARCASS HOSES

The new Manuli Single and Double Carcass POSEIDON hoses exceed the Guide to Manufacturing and Purchasing Hoses for Offshore Moorings, Fifth Edition 2009 issued by Oil Companies International Marine Forum (OCIMF).

- Have liner compounds with high aromatic resistance
- Have Superior Pressure Surge resistance
- Have Higher Collapse Resistance
- Have Higher Tensile Load Resistance and Increased Resistance to Bending
- Have Higher resistance of the Secondary Carcass of Double Carcass Hoses
- Are equipped with New lifting lugs for higher SWL (Safe Working Loads)
- Have New mechanical Leak Detectors for Double Carcass Hoses
- Are designed with two independent carcasses in case of double carcass hoses
- Have higher Burst Pressures
- Have higher Adhesion values between layers
- Have negligible buoyancy loss of buoyancy material under external pressure
- Have higher cover abrasion resistance
- Show no hose degradation after dynamic test

All Manuli marine hoses are manufactured and tested according to GMPHOM 2009 rules and meet special requirements of other specifications from the major Petroleum Company.

Each hose is built following specific technical instructions and under a strict control by Quality Control DPT.

On request hoses for special application can be manufactured.



Wire helix application



Lining application



Very long working life



Steel cord reinforcement application

# MANULI HOSE CONSTRUCTION: GENERAL ADVANTAGES

## ***Rubber lining to handle higher aromatic contents***

The rubber compound is constantly exposed to crude oil and the adhesion between the inner lining and the adjacent carcass must work against the forces created by the flow of crude oil through the hose. Because it is so critical, Manuli applies an extruded tube to a carefully prepared mandrel by means of continuous extrusion of hot, uncured rubber. The extrusion is applied in a spiral at constant pitch, tension, and overlap. The curing process yields a uniform lining that is tightly fitted around the mandrel and remarkably smooth. Our standard tube compound is capable of handling aromatic content up to 80%.

## ***Steel wire cord Reinforcement***

The spiral reinforcing layers within the carcass of the hose contain the pressure and control the movement of the hose under load. The main reinforcement of **all Manuli Rubber Industries marine hose is steel tire cord** applied at an optimum angle to give maximum pressure retention and maximum stability. Using steel wire cords Manuli designs marine hoses (single and double carcass) with low elongations and zero twist (we achieve a temporary elongation of up to 1% at test pressure, with **zero twist and zero permanent elongation**.) still proving a hose with flexibility superior to hoses with synthetic fabric. The fatigue characteristics of steel wire cord and the stability of construction in working conditions result in a longer working life for the hose.

## ***Zero twist and zero permanent elongation***

Regardless of the application, a hose is a flexible link providing a service where rigid pipe work would not survive. Using steel cord plies, we engineer a stable and predictable product **with low elongation and zero twist**, yet still provide a hose with **flexibility superior** to multilayer synthetic fabric reinforced hoses.

## ***Superior Fatigue resistance***

The fatigue resistance characteristics of steel cord and the stability of the construction in working conditions result in a **longer working life** for the hose. An example of the fatigue capability of steel cord comes from the modern tire industry. **Ninety five percent of automobile tires now use steel cord reinforcement** rather than synthetic fiber materials. These tires far exceed the performance of the previous cross-ply textile construction. The average steel belted tire can now be expected to complete more than 29 million flex cycles (revolutions) during its useful life. **Manuli Rubber Industries uses steel tire cord** in their marine hose construction. By its daily usage in automobile tires, steel cord continues to demonstrate its superior ability to absorb fatigue. If this aspect is related to a marine hose where the source of the movement is the wave action and considering (for example) a wave cycle of one minute the tire test would relate to a 90 year flex fatigue life on marine hose applications.

## ***Superior Pressure Surge resistance***

The steel cords are applied at an optimum angle, which gives low elongation but still provides sufficient movement and resilience to absorb sudden pressure surges. Each individual cord is pre-tensioned on application to ensure that they are effectively sharing the load.

## ***Superior Foam Material for Floating Hoses***

Floating marine hose employs layers of foam to give the required buoyancy. Manuli marine hose uses **closed-cell polyethylene foam**. This high quality foam provides excellent flexibility, no water absorption, low buoyancy decay, and high rebound from crush loads (including auto-submersion).

## ***Hose outer cover***

The tube, main carcass, and floatation layers of the hose are protected from the external environment by the cover which is specially compounded for weather, sea water, oil, and abrasion resistant. The properties of the outer cover often play a major role in the working life of the hose. **Manuli Rubber Industries has developed a special chloroprene cover compound** to give our marine hose maximum resistance to abrasion, weathering, and fluid attack, seawater, aromatic oils.



**H3006 UF POSEIDON** pag. 17  
One end reinforced Submarine Hose



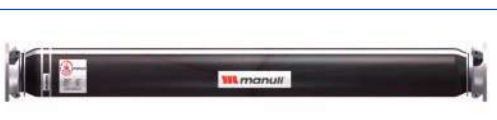
**H3030 UF POSEIDON** pag. 20  
Mainline Submarine Hose



**H3232 UF POSEIDON** pag. 23  
Reducer Submarine Hose



**H3030T UF POSEIDON** pag. 26  
Tail Submarine Hose



**H3838 UF POSEIDON** pag. 29  
Tanker Rail Submarine Hose



**H3737 UF POSEIDON** pag. 32  
Fully reinforced Submarine Hose

## ON REQUEST

the submarine hoses will be build with locations collars  
for the application of deep water floats.



On request hoses for special applications can be manufactured



# FLOATING

## SINGLE CARCASS



**H3006 HF POSEIDON** pag. 35  
One end reinforced Submarine Hose



**H3030 FF POSEIDON** pag. 38  
Mainline full floating Hose



**H3232 FF POSEIDON** pag. 41  
Reducer full floating Hose



**H3030T FF POSEIDON** pag. 44  
Tail full floating Hose



**H3838 DF POSEIDON** pag. 47  
Tanker Rail dumbel floating Hose



**H3737 FF POSEIDON** pag. 50  
Fully reinforced full floating Hose



On request hoses for special applications can be manufactured

## One end reinforced submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 15                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 75                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 286       | 228 | 279 | 150 x 9,1  | 385                 | 559                         | 538                                  | 396          | 163                           | 142                         |
| 150                                                                                 | 286       | 228 | 279 | 150 x 10,7 | 438                 | 640                         | 615                                  | 460          | 180                           | 155                         |
| 150                                                                                 | 286       | 228 | 279 | 150 x 12,2 | 490                 | 722                         | 694                                  | 524          | 198                           | 170                         |
| 200                                                                                 | 352       | 290 | 337 | 200 x 9,1  | 573                 | 883                         | 845                                  | 633          | 250                           | 212                         |
| 200                                                                                 | 352       | 290 | 337 | 200 x 10,7 | 652                 | 1013                        | 969                                  | 736          | 277                           | 233                         |
| 200                                                                                 | 352       | 290 | 337 | 200 x 12,2 | 734                 | 1147                        | 1096                                 | 839          | 308                           | 258                         |
| 250                                                                                 | 417       | 348 | 402 | 250 x 9,1  | 799                 | 1285                        | 1226                                 | 911          | 375                           | 315                         |
| 250                                                                                 | 417       | 348 | 402 | 250 x 10,7 | 907                 | 1474                        | 1405                                 | 1059         | 415                           | 346                         |
| 250                                                                                 | 417       | 348 | 402 | 250 x 12,2 | 1018                | 1666                        | 1587                                 | 1207         | 459                           | 380                         |
| 300                                                                                 | 465       | 398 | 450 | 300 x 9,1  | 971                 | 1665                        | 1580                                 | 1187         | 478                           | 393                         |
| 300                                                                                 | 465       | 398 | 450 | 300 x 10,7 | 1097                | 1906                        | 1807                                 | 1381         | 525                           | 426                         |
| 300                                                                                 | 465       | 398 | 450 | 300 x 12,2 | 1225                | 2150                        | 2038                                 | 1575         | 575                           | 463                         |
| 400                                                                                 | 574       | 499 | 551 | 400 x 9,1  | 1506                | 2617                        | 2482                                 | 1866         | 751                           | 615                         |
| 400                                                                                 | 574       | 499 | 551 | 400 x 10,7 | 1711                | 3007                        | 2849                                 | 2172         | 835                           | 677                         |
| 400                                                                                 | 574       | 499 | 551 | 400 x 12,2 | 1919                | 3401                        | 3220                                 | 2478         | 923                           | 742                         |
| 500                                                                                 | 690       | 608 | 660 | 500 x 9,1  | 2043                | 3811                        | 3595                                 | 2758         | 1053                          | 837                         |
| 500                                                                                 | 690       | 608 | 660 | 500 x 10,7 | 2304                | 4366                        | 4114                                 | 3211         | 1155                          | 903                         |
| 500                                                                                 | 690       | 608 | 660 | 500 x 12,2 | 2577                | 4933                        | 4646                                 | 3664         | 1269                          | 982                         |
| 600                                                                                 | 809       | 716 | 771 | 600 x 9,1  | 2729                | 5309                        | 4994                                 | 3830         | 1479                          | 1164                        |
| 600                                                                                 | 809       | 716 | 771 | 600 x 10,7 | 3070                | 6079                        | 5712                                 | 4460         | 1620                          | 1253                        |
| 600                                                                                 | 809       | 716 | 771 | 600 x 12,2 | 3427                | 6867                        | 6447                                 | 5089         | 1777                          | 1358                        |

# H3006 UF POSEIDON

## SINGLE CARCASS

### One end reinforced submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 19                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 95                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 286       | 228 | 279 | 150 x 9,1  | 385                 | 559                         | 538                                  | 396          | 163                           | 142                         |
| 150                                                                                 | 286       | 228 | 279 | 150 x 10,7 | 438                 | 640                         | 615                                  | 460          | 180                           | 155                         |
| 150                                                                                 | 286       | 228 | 279 | 150 x 12,2 | 490                 | 722                         | 694                                  | 524          | 198                           | 170                         |
| 200                                                                                 | 352       | 290 | 337 | 200 x 9,1  | 573                 | 883                         | 845                                  | 633          | 250                           | 212                         |
| 200                                                                                 | 352       | 290 | 337 | 200 x 10,7 | 652                 | 1013                        | 969                                  | 736          | 277                           | 233                         |
| 200                                                                                 | 352       | 290 | 337 | 200 x 12,2 | 734                 | 1147                        | 1096                                 | 839          | 308                           | 258                         |
| 250                                                                                 | 417       | 348 | 402 | 250 x 9,1  | 814                 | 1300                        | 1241                                 | 911          | 390                           | 330                         |
| 250                                                                                 | 417       | 348 | 402 | 250 x 10,7 | 923                 | 1490                        | 1421                                 | 1059         | 432                           | 362                         |
| 250                                                                                 | 417       | 348 | 402 | 250 x 12,2 | 1036                | 1685                        | 1606                                 | 1207         | 478                           | 399                         |
| 300                                                                                 | 465       | 398 | 450 | 300 x 9,1  | 991                 | 1684                        | 1600                                 | 1187         | 497                           | 413                         |
| 300                                                                                 | 465       | 398 | 450 | 300 x 10,7 | 1119                | 1928                        | 1830                                 | 1381         | 547                           | 449                         |
| 300                                                                                 | 465       | 398 | 450 | 300 x 12,2 | 1250                | 2175                        | 2062                                 | 1575         | 600                           | 487                         |
| 400                                                                                 | 574       | 499 | 551 | 400 x 9,1  | 1425                | 2536                        | 2401                                 | 1866         | 670                           | 534                         |
| 400                                                                                 | 574       | 499 | 551 | 400 x 10,7 | 1618                | 2914                        | 2756                                 | 2172         | 742                           | 584                         |
| 400                                                                                 | 574       | 499 | 551 | 400 x 12,2 | 1814                | 3296                        | 3115                                 | 2478         | 818                           | 637                         |
| 500                                                                                 | 690       | 608 | 660 | 500 x 9,1  | 2099                | 3866                        | 3651                                 | 2758         | 1108                          | 893                         |
| 500                                                                                 | 690       | 592 | 660 | 500 x 10,7 | 2367                | 4429                        | 4117                                 | 3211         | 1218                          | 966                         |
| 500                                                                                 | 690       | 592 | 660 | 500 x 12,2 | 2647                | 5003                        | 4716                                 | 3664         | 1339                          | 1052                        |
| 600                                                                                 | 809       | 716 | 771 | 600 x 9,1  | 2806                | 5386                        | 5072                                 | 3830         | 1556                          | 1242                        |
| 600                                                                                 | 809       | 716 | 771 | 600 x 10,7 | 3156                | 6166                        | 5799                                 | 4460         | 1706                          | 1339                        |
| 600                                                                                 | 809       | 716 | 771 | 600 x 12,2 | 3523                | 6963                        | 6543                                 | 5089         | 1873                          | 1454                        |

## One end reinforced submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 21                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 105                      |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                           |                                   |                                            |                    |                                     |                                   |
| 150        | 286       | 228      | 279      | 150 x 9,1      | 385                       | 559                               | 538                                        | 396                | 163                                 | 142                               |
| 150        | 286       | 228      | 279      | 150 x 10,7     | 438                       | 640                               | 615                                        | 460                | 180                                 | 155                               |
| 150        | 286       | 228      | 279      | 150 x 12,2     | 490                       | 722                               | 694                                        | 524                | 198                                 | 170                               |
| 200        | 352       | 290      | 337      | 200 x 9,1      | 584                       | 893                               | 856                                        | 633                | 260                                 | 223                               |
| 200        | 352       | 290      | 337      | 200 x 10,7     | 664                       | 1025                              | 981                                        | 736                | 289                                 | 245                               |
| 200        | 352       | 290      | 337      | 200 x 12,2     | 748                       | 1160                              | 1110                                       | 839                | 322                                 | 271                               |
| 250        | 417       | 348      | 402      | 250 x 9,1      | 813                       | 1299                              | 1240                                       | 911                | 389                                 | 329                               |
| 250        | 417       | 348      | 402      | 250 x 10,7     | 922                       | 1489                              | 1420                                       | 1059               | 431                                 | 361                               |
| 250        | 417       | 348      | 402      | 250 x 12,2     | 1035                      | 1684                              | 1605                                       | 1207               | 477                                 | 397                               |
| 300        | 473       | 406      | 458      | 300 x 9,1      | 1053                      | 1747                              | 1662                                       | 1235               | 512                                 | 427                               |
| 300        | 473       | 406      | 458      | 300 x 10,7     | 1194                      | 2003                              | 1904                                       | 1437               | 566                                 | 468                               |
| 300        | 473       | 406      | 458      | 300 x 12,2     | 1337                      | 2262                              | 2149                                       | 1638               | 623                                 | 511                               |
| 400        | 574       | 499      | 551      | 400 x 9,1      | 1463                      | 2574                              | 2439                                       | 1866               | 708                                 | 573                               |
| 400        | 574       | 499      | 551      | 400 x 10,7     | 1662                      | 2958                              | 2800                                       | 2172               | 786                                 | 627                               |
| 400        | 574       | 499      | 551      | 400 x 12,2     | 1864                      | 3345                              | 3165                                       | 2478               | 867                                 | 687                               |
| 500        | 690       | 608      | 660      | 500 x 9,1      | 2099                      | 3866                              | 3651                                       | 2758               | 1108                                | 893                               |
| 500        | 690       | 608      | 660      | 500 x 10,7     | 2367                      | 4429                              | 4177                                       | 3211               | 1218                                | 966                               |
| 500        | 690       | 608      | 660      | 500 x 12,2     | 2647                      | 5003                              | 4716                                       | 3664               | 1339                                | 1052                              |
| 600        | 826       | 724      | 788      | 600 x 9,1      | 2955                      | 5535                              | 5220                                       | 3922               | 1613                                | 1298                              |
| 600        | 826       | 724      | 788      | 600 x 10,7     | 3330                      | 6340                              | 5973                                       | 4566               | 1774                                | 1407                              |
| 600        | 826       | 724      | 788      | 600 x 12,2     | 3722                      | 7162                              | 6743                                       | 5210               | 1953                                | 1533                              |



# H3030 UF POSEIDON

## SINGLE CARCASS

### Mainline submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 15                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 75                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 279       | 225 | 279 | 150 x 9,1  | 373                 | 546                         | 525                                  | 383          | 163                           | 142                         |
| 150                                                                                 | 279       | 225 | 279 | 150 x 10,7 | 422                 | 625                         | 600                                  | 445          | 180                           | 155                         |
| 150                                                                                 | 279       | 225 | 279 | 150 x 12,2 | 472                 | 703                         | 675                                  | 507          | 197                           | 168                         |
| 200                                                                                 | 337       | 282 | 337 | 200 x 9,1  | 527                 | 837                         | 799                                  | 601          | 236                           | 198                         |
| 200                                                                                 | 337       | 282 | 337 | 200 x 10,7 | 598                 | 959                         | 915                                  | 698          | 261                           | 217                         |
| 200                                                                                 | 337       | 282 | 337 | 200 x 12,2 | 669                 | 1082                        | 1031                                 | 796          | 286                           | 235                         |
| 250                                                                                 | 402       | 340 | 402 | 250 x 9,1  | 745                 | 1231                        | 1172                                 | 872          | 360                           | 300                         |
| 250                                                                                 | 402       | 340 | 402 | 250 x 10,7 | 843                 | 1411                        | 1341                                 | 1014         | 397                           | 328                         |
| 250                                                                                 | 402       | 340 | 402 | 250 x 12,2 | 941                 | 1590                        | 1511                                 | 1155         | 434                           | 355                         |
| 300                                                                                 | 450       | 390 | 450 | 300 x 9,1  | 918                 | 1612                        | 1528                                 | 1143         | 470                           | 385                         |
| 300                                                                                 | 450       | 390 | 450 | 300 x 10,7 | 1035                | 1844                        | 1745                                 | 1329         | 515                           | 416                         |
| 300                                                                                 | 450       | 390 | 450 | 300 x 12,2 | 1151                | 2076                        | 1963                                 | 1516         | 560                           | 448                         |
| 400                                                                                 | 536       | 480 | 536 | 400 x 9,1  | 1223                | 2334                        | 2198                                 | 1719         | 614                           | 479                         |
| 400                                                                                 | 536       | 480 | 536 | 400 x 10,7 | 1380                | 2676                        | 2518                                 | 2001         | 675                           | 517                         |
| 400                                                                                 | 536       | 480 | 536 | 400 x 12,2 | 1537                | 3018                        | 2838                                 | 2284         | 735                           | 554                         |
| 500                                                                                 | 658       | 592 | 658 | 500 x 9,1  | 1843                | 3611                        | 3395                                 | 2619         | 992                           | 776                         |
| 500                                                                                 | 658       | 592 | 658 | 500 x 10,7 | 2071                | 4133                        | 3882                                 | 3049         | 1085                          | 833                         |
| 500                                                                                 | 658       | 592 | 658 | 500 x 12,2 | 2300                | 4656                        | 4369                                 | 3478         | 1178                          | 890                         |
| 600                                                                                 | 770       | 697 | 770 | 600 x 9,1  | 2504                | 5084                        | 4769                                 | 3626         | 1457                          | 1143                        |
| 600                                                                                 | 770       | 697 | 770 | 600 x 10,7 | 2808                | 5818                        | 5451                                 | 4222         | 1596                          | 1229                        |
| 600                                                                                 | 770       | 697 | 770 | 600 x 12,2 | 3112                | 6552                        | 6133                                 | 4818         | 1734                          | 1314                        |

## Mainline submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 19                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 95                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|            | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|            | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150        | 279       | 225 | 279 | 150 x 9,1  | 373                 | 546                         | 525                                  | 383          | 163                           | 142                         |
| 150        | 279       | 225 | 279 | 150 x 10,7 | 422                 | 625                         | 600                                  | 445          | 180                           | 155                         |
| 150        | 279       | 225 | 279 | 150 x 12,2 | 472                 | 703                         | 675                                  | 507          | 197                           | 168                         |
| 200        | 337       | 282 | 337 | 200 x 9,1  | 527                 | 837                         | 799                                  | 601          | 236                           | 198                         |
| 200        | 337       | 282 | 337 | 200 x 10,7 | 598                 | 959                         | 915                                  | 698          | 261                           | 217                         |
| 200        | 337       | 282 | 337 | 200 x 12,2 | 669                 | 1082                        | 1031                                 | 796          | 286                           | 235                         |
| 250        | 402       | 340 | 402 | 250 x 9,1  | 760                 | 1246                        | 1187                                 | 872          | 375                           | 315                         |
| 250        | 402       | 340 | 402 | 250 x 10,7 | 860                 | 1427                        | 1358                                 | 1014         | 414                           | 345                         |
| 250        | 402       | 340 | 402 | 250 x 12,2 | 960                 | 1608                        | 1529                                 | 1155         | 453                           | 374                         |
| 300        | 450       | 390 | 450 | 300 x 9,1  | 938                 | 1632                        | 1547                                 | 1143         | 489                           | 405                         |
| 300        | 450       | 390 | 450 | 300 x 10,7 | 1057                | 1866                        | 1768                                 | 1329         | 537                           | 439                         |
| 300        | 450       | 390 | 450 | 300 x 12,2 | 1176                | 2101                        | 1988                                 | 1516         | 585                           | 472                         |
| 400        | 544       | 488 | 544 | 400 x 9,1  | 1297                | 2408                        | 2272                                 | 1777         | 631                           | 495                         |
| 400        | 544       | 488 | 544 | 400 x 10,7 | 1468                | 2765                        | 2607                                 | 2068         | 696                           | 538                         |
| 400        | 544       | 488 | 544 | 400 x 12,2 | 1640                | 3122                        | 2941                                 | 2360         | 762                           | 581                         |
| 500        | 658       | 592 | 658 | 500 x 9,1  | 1899                | 3666                        | 3451                                 | 2619         | 1048                          | 832                         |
| 500        | 658       | 592 | 658 | 500 x 10,7 | 2134                | 4196                        | 3945                                 | 3049         | 1148                          | 896                         |
| 500        | 658       | 592 | 658 | 500 x 12,2 | 2369                | 4726                        | 4439                                 | 3478         | 1247                          | 960                         |
| 600        | 770       | 697 | 770 | 600 x 9,1  | 2581                | 5161                        | 4846                                 | 3626         | 1535                          | 1220                        |
| 600        | 770       | 697 | 770 | 600 x 10,7 | 2895                | 5904                        | 5537                                 | 4222         | 1682                          | 1315                        |
| 600        | 770       | 697 | 770 | 600 x 12,2 | 3208                | 6648                        | 6228                                 | 4818         | 1830                          | 1410                        |

# H3030 UF POSEIDON

## SINGLE CARCASS

### Mainline submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 279       | 225 | 279 | 150 x 9,1  | 373                 | 546                         | 525                                  | 383          | 163                           | 142                         |
| 150                                                                                 | 279       | 225 | 279 | 150 x 10,7 | 422                 | 625                         | 600                                  | 445          | 180                           | 155                         |
| 150                                                                                 | 279       | 225 | 279 | 150 x 12,2 | 472                 | 703                         | 675                                  | 507          | 197                           | 168                         |
| 200                                                                                 | 337       | 282 | 337 | 200 x 9,1  | 538                 | 847                         | 810                                  | 601          | 247                           | 209                         |
| 200                                                                                 | 337       | 282 | 337 | 200 x 10,7 | 610                 | 971                         | 927                                  | 698          | 273                           | 229                         |
| 200                                                                                 | 337       | 282 | 337 | 200 x 12,2 | 683                 | 1095                        | 1045                                 | 796          | 300                           | 249                         |
| 250                                                                                 | 402       | 340 | 402 | 250 x 9,1  | 760                 | 1246                        | 1187                                 | 872          | 375                           | 315                         |
| 250                                                                                 | 402       | 340 | 402 | 250 x 10,7 | 860                 | 1427                        | 1358                                 | 1014         | 414                           | 345                         |
| 250                                                                                 | 402       | 340 | 402 | 250 x 12,2 | 960                 | 1608                        | 1529                                 | 1155         | 453                           | 374                         |
| 300                                                                                 | 458       | 398 | 458 | 300 x 9,1  | 1000                | 1694                        | 1609                                 | 1189         | 504                           | 420                         |
| 300                                                                                 | 458       | 398 | 458 | 300 x 10,7 | 1131                | 1940                        | 1842                                 | 1384         | 557                           | 458                         |
| 300                                                                                 | 458       | 398 | 458 | 300 x 12,2 | 1262                | 2187                        | 2074                                 | 1578         | 609                           | 496                         |
| 400                                                                                 | 544       | 488 | 544 | 400 x 9,1  | 1335                | 2446                        | 2310                                 | 1777         | 669                           | 534                         |
| 400                                                                                 | 544       | 488 | 544 | 400 x 10,7 | 1512                | 2808                        | 2650                                 | 2068         | 740                           | 582                         |
| 400                                                                                 | 544       | 488 | 544 | 400 x 12,2 | 1690                | 3171                        | 2991                                 | 2360         | 811                           | 631                         |
| 500                                                                                 | 658       | 592 | 658 | 500 x 9,1  | 1899                | 3666                        | 3451                                 | 2619         | 1048                          | 832                         |
| 500                                                                                 | 658       | 592 | 658 | 500 x 10,7 | 2134                | 4196                        | 3945                                 | 3049         | 1148                          | 896                         |
| 500                                                                                 | 658       | 592 | 658 | 500 x 12,2 | 2369                | 4726                        | 4439                                 | 3478         | 1247                          | 960                         |
| 600                                                                                 | 787       | 705 | 787 | 600 x 9,1  | 2728                | 5308                        | 4993                                 | 3716         | 1592                          | 1278                        |
| 600                                                                                 | 787       | 705 | 787 | 600 x 10,7 | 3067                | 6077                        | 5710                                 | 4325         | 1751                          | 1384                        |
| 600                                                                                 | 787       | 705 | 787 | 600 x 12,2 | 3406                | 6845                        | 6426                                 | 4935         | 1910                          | 1491                        |

## Reducer submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 15                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 75                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil<br>s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------|-----------------------------------|-----------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                           |                                   |                                               |                    |                                     |                                   |
| 200/150    | 286       | 228      | 279      | 200/150 x 9,1  | 396                       | 570                               | 548                                           | 396                | 174                                 | 153                               |
| 200/150    | 286       | 228      | 279      | 200/150 x 10,7 | 448                       | 651                               | 626                                           | 460                | 191                                 | 166                               |
| 200/150    | 286       | 228      | 279      | 200/150 x 12,2 | 501                       | 732                               | 704                                           | 524                | 209                                 | 180                               |
| 250/200    | 352       | 290      | 337      | 250/200 x 9,1  | 586                       | 895                               | 858                                           | 633                | 262                                 | 225                               |
| 250/200    | 352       | 290      | 337      | 250/200 x 10,7 | 665                       | 1026                              | 982                                           | 736                | 290                                 | 246                               |
| 250/200    | 352       | 290      | 337      | 250/200 x 12,2 | 747                       | 1159                              | 1109                                          | 839                | 321                                 | 270                               |
| 300/250    | 417       | 348      | 402      | 300/250 x 9,1  | 821                       | 1308                              | 1248                                          | 911                | 397                                 | 338                               |
| 300/250    | 417       | 348      | 402      | 300/250 x 10,7 | 929                       | 1496                              | 1427                                          | 1059               | 437                                 | 368                               |
| 300/250    | 417       | 348      | 402      | 300/250 x 12,2 | 1040                      | 1688                              | 1609                                          | 1207               | 481                                 | 402                               |
| 400/300    | 465       | 398      | 450      | 400/300 x 9,1  | 1006                      | 1700                              | 1615                                          | 1187               | 513                                 | 428                               |
| 400/300    | 465       | 398      | 450      | 400/300 x 10,7 | 1132                      | 1941                              | 1842                                          | 1381               | 560                                 | 461                               |
| 400/300    | 465       | 398      | 450      | 400/300 x 12,2 | 1260                      | 2185                              | 2072                                          | 1575               | 610                                 | 498                               |
| 500/400    | 566       | 491      | 543      | 500/400 x 9,1  | 1395                      | 2506                              | 2371                                          | 1807               | 699                                 | 563                               |
| 500/400    | 566       | 491      | 543      | 500/400 x 10,7 | 1573                      | 2869                              | 2711                                          | 2104               | 766                                 | 607                               |
| 500/400    | 566       | 491      | 543      | 500/400 x 12,2 | 1755                      | 3236                              | 3055                                          | 2400               | 836                                 | 656                               |
| 600/500    | 690       | 608      | 660      | 600/500 x 9,1  | 2096                      | 3864                              | 3648                                          | 2758               | 1106                                | 890                               |
| 600/500    | 690       | 608      | 660      | 600/500 x 10,7 | 2357                      | 4419                              | 4168                                          | 3211               | 1208                                | 957                               |
| 600/500    | 690       | 608      | 660      | 600/500 x 12,2 | 2630                      | 4987                              | 4699                                          | 3664               | 1323                                | 1035                              |



# H3232 UF POSEIDON

## SINGLE CARCASS

### Reducer submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 19                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 95                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |                |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|----------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |                |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size           | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |                |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m         | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 200/150                                                                             | 286       | 228 | 279 | 200/150 x 9,1  | 396                 | 570                         | 548                                  | 396          | 174                           | 153                         |
| 200/150                                                                             | 286       | 228 | 279 | 200/150 x 10,7 | 448                 | 651                         | 626                                  | 460          | 191                           | 166                         |
| 200/150                                                                             | 286       | 228 | 279 | 200/150 x 12,2 | 501                 | 732                         | 704                                  | 524          | 209                           | 180                         |
| 250/200                                                                             | 352       | 290 | 337 | 250/200 x 9,1  | 586                 | 895                         | 858                                  | 633          | 262                           | 225                         |
| 250/200                                                                             | 352       | 290 | 337 | 250/200 x 10,7 | 665                 | 1026                        | 982                                  | 736          | 290                           | 246                         |
| 250/200                                                                             | 352       | 290 | 337 | 250/200 x 12,2 | 747                 | 1159                        | 1109                                 | 839          | 321                           | 270                         |
| 300/250                                                                             | 417       | 348 | 402 | 300/250 x 9,1  | 836                 | 1322                        | 1263                                 | 911          | 412                           | 353                         |
| 300/250                                                                             | 417       | 348 | 402 | 300/250 x 10,7 | 946                 | 1513                        | 1444                                 | 1059         | 454                           | 385                         |
| 300/250                                                                             | 417       | 348 | 402 | 300/250 x 12,2 | 1059                | 1707                        | 1628                                 | 1207         | 500                           | 421                         |
| 400/300                                                                             | 465       | 398 | 450 | 400/300 x 9,1  | 1026                | 1719                        | 1635                                 | 1187         | 532                           | 448                         |
| 400/300                                                                             | 465       | 398 | 450 | 400/300 x 10,7 | 1154                | 1963                        | 1865                                 | 1381         | 582                           | 484                         |
| 400/300                                                                             | 465       | 398 | 450 | 400/300 x 12,2 | 1285                | 2210                        | 2097                                 | 1575         | 635                           | 522                         |
| 500/400                                                                             | 574       | 499 | 551 | 500/400 x 9,1  | 1471                | 2582                        | 2446                                 | 1866         | 715                           | 580                         |
| 500/400                                                                             | 574       | 499 | 551 | 500/400 x 10,7 | 1663                | 2959                        | 2801                                 | 2172         | 787                           | 629                         |
| 500/400                                                                             | 574       | 499 | 551 | 500/400 x 12,2 | 1860                | 3341                        | 3161                                 | 2478         | 863                           | 683                         |
| 600/500                                                                             | 690       | 608 | 660 | 600/500 x 9,1  | 2152                | 3920                        | 3704                                 | 2758         | 1162                          | 946                         |
| 600/500                                                                             | 690       | 608 | 660 | 600/500 x 10,7 | 2420                | 4482                        | 4230                                 | 3211         | 1271                          | 1019                        |
| 600/500                                                                             | 690       | 608 | 660 | 600/500 x 12,2 | 2700                | 5056                        | 4769                                 | 3664         | 1392                          | 1105                        |

## Reducer submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |                |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|----------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |                |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size           | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |                |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m         | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 200/150                                                                             | 286       | 228 | 279 | 200/150 x 9,1  | 396                 | 570                         | 548                                  | 396          | 174                           | 153                         |
| 200/150                                                                             | 286       | 228 | 279 | 200/150 x 10,7 | 448                 | 651                         | 626                                  | 460          | 191                           | 166                         |
| 200/150                                                                             | 286       | 228 | 279 | 200/150 x 12,2 | 501                 | 732                         | 704                                  | 524          | 209                           | 180                         |
| 250/200                                                                             | 352       | 290 | 337 | 250/200 x 9,1  | 597                 | 906                         | 868                                  | 633          | 273                           | 235                         |
| 250/200                                                                             | 352       | 290 | 337 | 250/200 x 10,7 | 677                 | 1038                        | 994                                  | 736          | 302                           | 258                         |
| 250/200                                                                             | 352       | 290 | 337 | 250/200 x 12,2 | 761                 | 1173                        | 1123                                 | 839          | 334                           | 284                         |
| 300/250                                                                             | 417       | 348 | 402 | 300/250 x 9,1  | 835                 | 1322                        | 1262                                 | 911          | 411                           | 352                         |
| 300/250                                                                             | 417       | 348 | 402 | 300/250 x 10,7 | 945                 | 1512                        | 1443                                 | 1059         | 453                           | 384                         |
| 300/250                                                                             | 417       | 348 | 402 | 300/250 x 12,2 | 1058                | 1706                        | 1627                                 | 1207         | 499                           | 420                         |
| 400/300                                                                             | 473       | 406 | 458 | 400/300 x 9,1  | 1088                | 1782                        | 1697                                 | 1235         | 547                           | 462                         |
| 400/300                                                                             | 473       | 406 | 458 | 400/300 x 10,7 | 1228                | 2038                        | 1939                                 | 1437         | 601                           | 503                         |
| 400/300                                                                             | 473       | 406 | 458 | 400/300 x 12,2 | 1372                | 2297                        | 2184                                 | 1638         | 658                           | 546                         |
| 500/400                                                                             | 574       | 499 | 551 | 500/400 x 9,1  | 1509                | 2620                        | 2484                                 | 1866         | 754                           | 618                         |
| 500/400                                                                             | 574       | 499 | 551 | 500/400 x 10,7 | 1707                | 3003                        | 2845                                 | 2172         | 831                           | 673                         |
| 500/400                                                                             | 574       | 499 | 551 | 500/400 x 12,2 | 1909                | 3391                        | 3210                                 | 2478         | 913                           | 732                         |
| 600/500                                                                             | 690       | 608 | 660 | 600/500 x 9,1  | 2152                | 3920                        | 3704                                 | 2758         | 1162                          | 946                         |
| 600/500                                                                             | 690       | 608 | 660 | 600/500 x 10,7 | 2420                | 4482                        | 4230                                 | 3211         | 1271                          | 1019                        |
| 600/500                                                                             | 690       | 608 | 660 | 600/500 x 12,2 | 2700                | 5056                        | 4769                                 | 3664         | 1392                          | 1105                        |

# H3030T UF POSEIDON

## SINGLE CARCASS

### Tail submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 15                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 75                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 287       | 232 | 287 | 150 x 9,1  | 404                 | 577                         | 556                                  | 409          | 168                           | 147                         |
| 150                                                                                 | 287       | 232 | 287 | 150 x 10,7 | 458                 | 661                         | 636                                  | 475          | 186                           | 161                         |
| 150                                                                                 | 287       | 232 | 287 | 150 x 12,2 | 513                 | 745                         | 716                                  | 541          | 203                           | 175                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 9,1  | 567                 | 876                         | 838                                  | 633          | 243                           | 205                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 10,7 | 644                 | 1005                        | 961                                  | 736          | 269                           | 225                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 12,2 | 722                 | 1134                        | 1084                                 | 839          | 296                           | 245                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 9,1  | 795                 | 1281                        | 1221                                 | 911          | 370                           | 311                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 10,7 | 901                 | 1468                        | 1399                                 | 1059         | 409                           | 340                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 12,2 | 1008                | 1656                        | 1577                                 | 1207         | 449                           | 370                         |
| 300                                                                                 | 459       | 400 | 459 | 300 x 9,1  | 995                 | 1689                        | 1604                                 | 1199         | 490                           | 406                         |
| 300                                                                                 | 459       | 400 | 459 | 300 x 10,7 | 1125                | 1934                        | 1836                                 | 1395         | 540                           | 441                         |
| 300                                                                                 | 459       | 400 | 459 | 300 x 12,2 | 1255                | 2180                        | 2067                                 | 1591         | 589                           | 476                         |
| 400                                                                                 | 547       | 490 | 547 | 400 x 9,1  | 1368                | 2479                        | 2344                                 | 1796         | 683                           | 548                         |
| 400                                                                                 | 547       | 490 | 547 | 400 x 10,7 | 1550                | 2847                        | 2689                                 | 2090         | 756                           | 598                         |
| 400                                                                                 | 547       | 490 | 547 | 400 x 12,2 | 1733                | 3214                        | 3033                                 | 2385         | 829                           | 648                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 9,1  | 1948                | 3715                        | 3499                                 | 2686         | 1029                          | 814                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 10,7 | 2194                | 4256                        | 4004                                 | 3127         | 1129                          | 878                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 12,2 | 2440                | 4797                        | 4509                                 | 3568         | 1229                          | 942                         |

## Tail submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 19                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 95                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 287       | 232 | 287 | 150 x 9,1  | 404                 | 577                         | 556                                  | 409          | 168                           | 147                         |
| 150                                                                                 | 287       | 232 | 287 | 150 x 10,7 | 458                 | 661                         | 636                                  | 475          | 186                           | 161                         |
| 150                                                                                 | 287       | 232 | 287 | 150 x 12,2 | 513                 | 745                         | 716                                  | 541          | 203                           | 175                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 9,1  | 568                 | 877                         | 839                                  | 633          | 244                           | 206                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 10,7 | 646                 | 1007                        | 963                                  | 736          | 271                           | 227                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 12,2 | 723                 | 1136                        | 1086                                 | 839          | 297                           | 247                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 9,1  | 809                 | 1295                        | 1236                                 | 911          | 385                           | 326                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 10,7 | 918                 | 1485                        | 1416                                 | 1059         | 426                           | 357                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 12,2 | 1026                | 1674                        | 1595                                 | 1207         | 467                           | 388                         |
| 300                                                                                 | 459       | 400 | 459 | 300 x 9,1  | 1015                | 1709                        | 1624                                 | 1199         | 510                           | 425                         |
| 300                                                                                 | 459       | 400 | 459 | 300 x 10,7 | 1147                | 1957                        | 1858                                 | 1395         | 562                           | 463                         |
| 300                                                                                 | 459       | 400 | 459 | 300 x 12,2 | 1279                | 2204                        | 2092                                 | 1591         | 614                           | 501                         |
| 400                                                                                 | 555       | 498 | 555 | 400 x 9,1  | 1444                | 2555                        | 2420                                 | 1854         | 701                           | 565                         |
| 400                                                                                 | 555       | 498 | 555 | 400 x 10,7 | 1641                | 2938                        | 2779                                 | 2159         | 779                           | 621                         |
| 400                                                                                 | 555       | 498 | 555 | 400 x 12,2 | 1839                | 3320                        | 3139                                 | 2463         | 857                           | 676                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 9,1  | 2003                | 3771                        | 3555                                 | 2686         | 1085                          | 869                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 10,7 | 2257                | 4319                        | 4067                                 | 3127         | 1192                          | 940                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 12,2 | 2510                | 4866                        | 4579                                 | 3568         | 1299                          | 1011                        |

# H3030T UF POSEIDON

## SINGLE CARCASS

### Tail submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 287       | 232 | 287 | 150 x 9,1  | 404                 | 577                         | 556                                  | 409          | 168                           | 147                         |
| 150                                                                                 | 287       | 232 | 287 | 150 x 10,7 | 458                 | 661                         | 636                                  | 475          | 186                           | 161                         |
| 150                                                                                 | 287       | 232 | 287 | 150 x 12,2 | 513                 | 745                         | 716                                  | 541          | 203                           | 175                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 9,1  | 579                 | 888                         | 850                                  | 633          | 255                           | 217                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 10,7 | 658                 | 1019                        | 975                                  | 736          | 283                           | 239                         |
| 200                                                                                 | 344       | 290 | 344 | 200 x 12,2 | 737                 | 1150                        | 1099                                 | 839          | 311                           | 261                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 9,1  | 809                 | 1295                        | 1236                                 | 911          | 385                           | 326                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 10,7 | 918                 | 1485                        | 1416                                 | 1059         | 426                           | 357                         |
| 250                                                                                 | 409       | 348 | 409 | 250 x 12,2 | 1026                | 1674                        | 1595                                 | 1207         | 467                           | 388                         |
| 300                                                                                 | 467       | 408 | 467 | 300 x 9,1  | 1074                | 1768                        | 1683                                 | 1247         | 521                           | 436                         |
| 300                                                                                 | 467       | 408 | 467 | 300 x 10,7 | 1218                | 2027                        | 1928                                 | 1451         | 576                           | 478                         |
| 300                                                                                 | 467       | 408 | 467 | 300 x 12,2 | 1361                | 2286                        | 2174                                 | 1655         | 632                           | 519                         |
| 400                                                                                 | 555       | 498 | 555 | 400 x 9,1  | 1503                | 2614                        | 2479                                 | 1854         | 760                           | 624                         |
| 400                                                                                 | 555       | 498 | 555 | 400 x 10,7 | 1710                | 3006                        | 2848                                 | 2159         | 847                           | 689                         |
| 400                                                                                 | 555       | 498 | 555 | 400 x 12,2 | 1916                | 3398                        | 3217                                 | 2463         | 934                           | 754                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 9,1  | 2003                | 3771                        | 3555                                 | 2686         | 1085                          | 869                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 10,7 | 2257                | 4319                        | 4067                                 | 3127         | 1192                          | 940                         |
| 500                                                                                 | 666       | 600 | 666 | 500 x 12,2 | 2510                | 4866                        | 4579                                 | 3568         | 1299                          | 1011                        |



## Tanker rail submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 15                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 75                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight<br>in air<br>empty<br>kg | Weight<br>in air<br>full of<br>water<br>kg | Weight<br>in air<br>full of oil<br>s.g. = 0,9<br>kg | Displacement<br>kg | Submerg.<br>weight<br>full of<br>water<br>kg | Submerg.<br>weight<br>full of<br>oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------------|--------------------------------------------|-----------------------------------------------------|--------------------|----------------------------------------------|--------------------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                                 |                                            |                                                     |                    |                                              |                                            |
| 150        | 287       | 232      | 287      | 150 x 9,1      | 404                             | 577                                        | 556                                                 | 409                | 168                                          | 147                                        |
| 150        | 287       | 232      | 287      | 150 x 10,7     | 458                             | 661                                        | 636                                                 | 475                | 186                                          | 161                                        |
| 150        | 287       | 232      | 287      | 150 x 12,2     | 513                             | 745                                        | 716                                                 | 541                | 203                                          | 175                                        |
| 200        | 344       | 290      | 344      | 200 x 9,1      | 567                             | 876                                        | 838                                                 | 633                | 243                                          | 205                                        |
| 200        | 344       | 290      | 344      | 200 x 10,7     | 644                             | 1005                                       | 961                                                 | 736                | 269                                          | 225                                        |
| 200        | 344       | 290      | 344      | 200 x 12,2     | 722                             | 1134                                       | 1084                                                | 839                | 296                                          | 245                                        |
| 250        | 409       | 348      | 409      | 250 x 9,1      | 795                             | 1281                                       | 1221                                                | 911                | 370                                          | 311                                        |
| 250        | 409       | 348      | 409      | 250 x 10,7     | 901                             | 1468                                       | 1399                                                | 1059               | 409                                          | 340                                        |
| 250        | 409       | 348      | 409      | 250 x 12,2     | 1008                            | 1656                                       | 1577                                                | 1207               | 449                                          | 370                                        |
| 300        | 459       | 400      | 459      | 300 x 9,1      | 995                             | 1689                                       | 1604                                                | 1199               | 490                                          | 406                                        |
| 300        | 459       | 400      | 459      | 300 x 10,7     | 1125                            | 1934                                       | 1836                                                | 1395               | 540                                          | 441                                        |
| 300        | 459       | 400      | 459      | 300 x 12,2     | 1255                            | 2180                                       | 2067                                                | 1591               | 589                                          | 476                                        |
| 400        | 547       | 490      | 547      | 400 x 9,1      | 1368                            | 2479                                       | 2344                                                | 1796               | 683                                          | 548                                        |
| 400        | 547       | 490      | 547      | 400 x 10,7     | 1550                            | 2847                                       | 2689                                                | 2090               | 756                                          | 598                                        |
| 400        | 547       | 490      | 547      | 400 x 12,2     | 1733                            | 3214                                       | 3033                                                | 2385               | 829                                          | 648                                        |
| 500        | 666       | 600      | 666      | 500 x 9,1      | 1948                            | 3715                                       | 3499                                                | 2686               | 1029                                         | 814                                        |
| 500        | 666       | 600      | 666      | 500 x 10,7     | 2194                            | 4256                                       | 4004                                                | 3127               | 1129                                         | 878                                        |
| 500        | 666       | 600      | 666      | 500 x 12,2     | 2440                            | 4797                                       | 4509                                                | 3568               | 1229                                         | 942                                        |

# H3838 UF POSEIDON

## SINGLE CARCASS

### Tanker rail submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 19                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 95                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

### CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight<br>in air<br>empty<br>kg | Weight<br>in air<br>full of<br>water<br>kg | Weight<br>in air<br>full of oil<br>s.g. = 0,9<br>kg | Displa-<br>cement<br>kg | Submerg.<br>weight<br>full of<br>water<br>kg | Submerg.<br>weight<br>full of<br>oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------------|--------------------------------------------|-----------------------------------------------------|-------------------------|----------------------------------------------|--------------------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                                 |                                            |                                                     |                         |                                              |                                            |
| 150        | 287       | 232      | 287      | 150 x 9,1      | 404                             | 577                                        | 556                                                 | 409                     | 168                                          | 147                                        |
| 150        | 287       | 232      | 287      | 150 x 10,7     | 458                             | 661                                        | 636                                                 | 475                     | 186                                          | 161                                        |
| 150        | 287       | 232      | 287      | 150 x 12,2     | 513                             | 745                                        | 716                                                 | 541                     | 203                                          | 175                                        |
| 200        | 344       | 290      | 344      | 200 x 9,1      | 568                             | 877                                        | 839                                                 | 633                     | 244                                          | 206                                        |
| 200        | 344       | 290      | 344      | 200 x 10,7     | 646                             | 1007                                       | 963                                                 | 736                     | 271                                          | 227                                        |
| 200        | 344       | 290      | 344      | 200 x 12,2     | 723                             | 1136                                       | 1086                                                | 839                     | 297                                          | 247                                        |
| 250        | 409       | 348      | 409      | 250 x 9,1      | 809                             | 1295                                       | 1236                                                | 911                     | 385                                          | 326                                        |
| 250        | 409       | 348      | 409      | 250 x 10,7     | 918                             | 1485                                       | 1416                                                | 1059                    | 426                                          | 357                                        |
| 250        | 409       | 348      | 409      | 250 x 12,2     | 1026                            | 1674                                       | 1595                                                | 1207                    | 467                                          | 388                                        |
| 300        | 459       | 400      | 459      | 300 x 9,1      | 1015                            | 1709                                       | 1624                                                | 1199                    | 510                                          | 425                                        |
| 300        | 459       | 400      | 459      | 300 x 10,7     | 1147                            | 1957                                       | 1858                                                | 1395                    | 562                                          | 463                                        |
| 300        | 459       | 400      | 459      | 300 x 12,2     | 1279                            | 2204                                       | 2092                                                | 1591                    | 614                                          | 501                                        |
| 400        | 555       | 498      | 555      | 400 x 9,1      | 1444                            | 2555                                       | 2420                                                | 1854                    | 701                                          | 565                                        |
| 400        | 555       | 498      | 555      | 400 x 10,7     | 1641                            | 2938                                       | 2779                                                | 2159                    | 779                                          | 621                                        |
| 400        | 555       | 498      | 555      | 400 x 12,2     | 1839                            | 3320                                       | 3139                                                | 2463                    | 857                                          | 676                                        |
| 500        | 666       | 600      | 666      | 500 x 9,1      | 2003                            | 3771                                       | 3555                                                | 2686                    | 1085                                         | 869                                        |
| 500        | 666       | 600      | 666      | 500 x 10,7     | 2257                            | 4319                                       | 4067                                                | 3127                    | 1192                                         | 940                                        |
| 500        | 666       | 600      | 666      | 500 x 12,2     | 2510                            | 4866                                       | 4579                                                | 3568                    | 1299                                         | 1011                                       |

## Tanker rail submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight<br>in air<br>empty<br>kg | Weight<br>in air<br>full of<br>water<br>kg | Weight<br>in air<br>full of oil<br>s.g. = 0,9<br>kg | Displacement<br>kg | Submerg.<br>weight<br>full of<br>water<br>kg | Submerg.<br>weight<br>full of<br>oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------------|--------------------------------------------|-----------------------------------------------------|--------------------|----------------------------------------------|--------------------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                                 |                                            |                                                     |                    |                                              |                                            |
| 150        | 287       | 232      | 287      | 150 x 9,1      | 404                             | 577                                        | 556                                                 | 409                | 168                                          | 147                                        |
| 150        | 287       | 232      | 287      | 150 x 10,7     | 458                             | 661                                        | 636                                                 | 475                | 186                                          | 161                                        |
| 150        | 287       | 232      | 287      | 150 x 12,2     | 513                             | 745                                        | 716                                                 | 541                | 203                                          | 175                                        |
| 200        | 344       | 290      | 344      | 200 x 9,1      | 579                             | 888                                        | 850                                                 | 633                | 255                                          | 217                                        |
| 200        | 344       | 290      | 344      | 200 x 10,7     | 658                             | 1019                                       | 975                                                 | 736                | 283                                          | 239                                        |
| 200        | 344       | 290      | 344      | 200 x 12,2     | 737                             | 1150                                       | 1099                                                | 839                | 311                                          | 261                                        |
| 250        | 409       | 348      | 409      | 250 x 9,1      | 809                             | 1295                                       | 1236                                                | 911                | 385                                          | 326                                        |
| 250        | 409       | 348      | 409      | 250 x 10,7     | 918                             | 1485                                       | 1416                                                | 1059               | 426                                          | 357                                        |
| 250        | 409       | 348      | 409      | 250 x 12,2     | 1026                            | 1674                                       | 1595                                                | 1207               | 467                                          | 388                                        |
| 300        | 467       | 408      | 467      | 300 x 9,1      | 1074                            | 1768                                       | 1683                                                | 1247               | 521                                          | 436                                        |
| 300        | 467       | 408      | 467      | 300 x 10,7     | 1218                            | 2027                                       | 1928                                                | 1451               | 576                                          | 478                                        |
| 300        | 467       | 408      | 467      | 300 x 12,2     | 1361                            | 2286                                       | 2174                                                | 1655               | 632                                          | 519                                        |
| 400        | 555       | 498      | 555      | 400 x 9,1      | 1503                            | 2614                                       | 2479                                                | 1854               | 760                                          | 624                                        |
| 400        | 555       | 498      | 555      | 400 x 10,7     | 1710                            | 3006                                       | 2848                                                | 159                | 847                                          | 689                                        |
| 400        | 555       | 498      | 555      | 400 x 12,2     | 1916                            | 3398                                       | 3217                                                | 2463               | 934                                          | 754                                        |
| 500        | 666       | 600      | 666      | 500 x 9,1      | 2003                            | 3771                                       | 3555                                                | 2686               | 1085                                         | 869                                        |
| 500        | 666       | 600      | 666      | 500 x 10,7     | 2257                            | 4319                                       | 4067                                                | 3127               | 1192                                         | 940                                        |
| 500        | 666       | 600      | 666      | 500 x 12,2     | 2510                            | 4866                                       | 4579                                                | 3568               | 1299                                         | 1011                                       |

# H3737 UF POSEIDON

## SINGLE CARCASS

### Fully reinforced submarine hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 15                       |
| Min. burst pressure    | bar          | 75                       |
| Minimum Bending Radius |              | 4 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |

#### CHARACTERISTICS

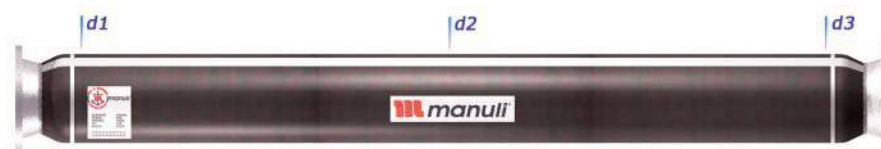


| Nom. diam. | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|            | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|            | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150        | 286       | 232 | 286 | 150 x 9,1  | 400                 | 573                         | 552                                  | 409          | 164                           | 143                         |
| 150        | 286       | 232 | 286 | 150 x 10,7 | 454                 | 656                         | 631                                  | 475          | 181                           | 156                         |
| 150        | 286       | 232 | 286 | 150 x 12,2 | 508                 | 739                         | 711                                  | 541          | 198                           | 170                         |
| 200        | 352       | 297 | 352 | 200 x 9,1  | 611                 | 920                         | 882                                  | 666          | 254                           | 216                         |
| 200        | 352       | 297 | 352 | 200 x 10,7 | 696                 | 1057                        | 1013                                 | 775          | 282                           | 238                         |
| 200        | 352       | 297 | 352 | 200 x 12,2 | 781                 | 1194                        | 1143                                 | 883          | 311                           | 260                         |
| 250        | 416       | 355 | 416 | 250 x 9,1  | 843                 | 1329                        | 1270                                 | 950          | 379                           | 320                         |
| 250        | 416       | 355 | 416 | 250 x 10,7 | 958                 | 1525                        | 1456                                 | 1105         | 420                           | 351                         |
| 250        | 416       | 355 | 416 | 250 x 12,2 | 1073                | 1722                        | 1643                                 | 1260         | 462                           | 383                         |
| 300        | 465       | 405 | 465 | 300 x 9,1  | 1035                | 1729                        | 1644                                 | 1232         | 496                           | 412                         |
| 300        | 465       | 405 | 465 | 300 x 10,7 | 1171                | 1980                        | 1882                                 | 1434         | 546                           | 448                         |
| 300        | 465       | 405 | 465 | 300 x 12,2 | 1307                | 2232                        | 2119                                 | 1635         | 597                           | 484                         |
| 400        | 564       | 502 | 564 | 400 x 9,1  | 1476                | 2587                        | 2451                                 | 1888         | 699                           | 563                         |
| 400        | 564       | 502 | 564 | 400 x 10,7 | 1674                | 2970                        | 2812                                 | 2198         | 772                           | 614                         |
| 400        | 564       | 502 | 564 | 400 x 12,2 | 1872                | 3353                        | 3173                                 | 2507         | 846                           | 666                         |
| 500        | 694       | 622 | 694 | 500 x 9,1  | 2222                | 3989                        | 3774                                 | 2896         | 1094                          | 878                         |
| 500        | 694       | 622 | 694 | 500 x 10,7 | 2515                | 4577                        | 4326                                 | 3371         | 1206                          | 955                         |
| 500        | 694       | 622 | 694 | 500 x 12,2 | 2809                | 5165                        | 4878                                 | 3846         | 1319                          | 1032                        |
| 600        | 808       | 735 | 808 | 600 x 9,1  | 3014                | 5593                        | 5279                                 | 4029         | 1564                          | 1249                        |
| 600        | 808       | 735 | 808 | 600 x 10,7 | 3406                | 6416                        | 6049                                 | 4692         | 1724                          | 1357                        |
| 600        | 808       | 735 | 808 | 600 x 12,2 | 3798                | 7238                        | 6819                                 | 5355         | 1883                          | 1464                        |

## Fully reinforced submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |              |                          |
|--------------------------|------------------------------------------|------------------------|--------------|--------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar          | 19                       |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar          | 95                       |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius |              | 4 x id                   |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | %            | 2,5                      |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | %            | 0,7                      |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to        | % 80                     |
|                          |                                          | Fluid temp. range      | °C           | -20; +82                 |
|                          |                                          | Ambient temp. range    | °C           | -29; +52                 |
|                          |                                          | Flow velocity          | up to        | m/s 21                   |
|                          |                                          | Electrically           | as requested | continuous/discontinuous |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                           |                                   |                                            |                    |                                     |                                   |
| 150        | 286       | 232      | 286      | 150 x 9,1      | 400                       | 573                               | 552                                        | 409                | 164                                 | 143                               |
| 150        | 286       | 232      | 286      | 150 x 10,7     | 454                       | 656                               | 631                                        | 475                | 181                                 | 156                               |
| 150        | 286       | 232      | 286      | 150 x 12,2     | 508                       | 739                               | 711                                        | 541                | 198                                 | 170                               |
| 200        | 352       | 297      | 352      | 200 x 9,1      | 611                       | 920                               | 882                                        | 666                | 254                                 | 216                               |
| 200        | 352       | 297      | 352      | 200 x 10,7     | 696                       | 1057                              | 1013                                       | 775                | 282                                 | 238                               |
| 200        | 352       | 297      | 352      | 200 x 12,2     | 781                       | 1194                              | 1143                                       | 883                | 311                                 | 260                               |
| 250        | 416       | 355      | 416      | 250 x 9,1      | 857                       | 1344                              | 1284                                       | 950                | 394                                 | 334                               |
| 250        | 416       | 355      | 416      | 250 x 10,7     | 975                       | 1542                              | 1473                                       | 1105               | 437                                 | 368                               |
| 250        | 416       | 355      | 416      | 250 x 12,2     | 1092                      | 1740                              | 1661                                       | 1260               | 481                                 | 402                               |
| 300        | 465       | 405      | 465      | 300 x 9,1      | 1055                      | 1748                              | 1664                                       | 1232               | 516                                 | 431                               |
| 300        | 465       | 405      | 465      | 300 x 10,7     | 1193                      | 2003                              | 1904                                       | 1434               | 569                                 | 470                               |
| 300        | 465       | 405      | 465      | 300 x 12,2     | 1332                      | 2257                              | 2144                                       | 1635               | 621                                 | 509                               |
| 400        | 572       | 510      | 572      | 400 x 9,1      | 1552                      | 2663                              | 2527                                       | 1948               | 715                                 | 579                               |
| 400        | 572       | 510      | 572      | 400 x 10,7     | 1765                      | 3061                              | 2903                                       | 2268               | 794                                 | 636                               |
| 400        | 572       | 510      | 572      | 400 x 12,2     | 1978                      | 3460                              | 3279                                       | 2587               | 873                                 | 692                               |
| 500        | 694       | 622      | 694      | 500 x 9,1      | 2278                      | 4045                              | 3830                                       | 2896               | 1150                                | 934                               |
| 500        | 694       | 622      | 694      | 500 x 10,7     | 2578                      | 4640                              | 4389                                       | 3371               | 1269                                | 1018                              |
| 500        | 694       | 622      | 694      | 500 x 12,2     | 2878                      | 5235                              | 4948                                       | 3846               | 1389                                | 1102                              |
| 600        | 808       | 735      | 808      | 600 x 9,1      | 3091                      | 5671                              | 5356                                       | 4029               | 1641                                | 1327                              |
| 600        | 808       | 735      | 808      | 600 x 10,7     | 3492                      | 6502                              | 6135                                       | 4692               | 1810                                | 1443                              |
| 600        | 808       | 735      | 808      | 600 x 12,2     | 3894                      | 7334                              | 6915                                       | 5355               | 1979                                | 1560                              |



# H3737 UF POSEIDON

## SINGLE CARCASS

### Fully reinforced submarine hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|            | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|            | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150        | 286       | 232 | 286 | 150 x 9,1  | 400                 | 573                         | 552                                  | 409          | 164                           | 143                         |
| 150        | 286       | 232 | 286 | 150 x 10,7 | 454                 | 656                         | 631                                  | 475          | 181                           | 156                         |
| 150        | 286       | 232 | 286 | 150 x 12,2 | 508                 | 739                         | 711                                  | 541          | 198                           | 170                         |
| 200        | 352       | 297 | 352 | 200 x 9,1  | 621                 | 931                         | 893                                  | 666          | 264                           | 227                         |
| 200        | 352       | 297 | 352 | 200 x 10,7 | 708                 | 1069                        | 1025                                 | 775          | 294                           | 250                         |
| 200        | 352       | 297 | 352 | 200 x 12,2 | 795                 | 1207                        | 1157                                 | 883          | 324                           | 274                         |
| 250        | 416       | 355 | 416 | 250 x 9,1  | 857                 | 1344                        | 1284                                 | 950          | 394                           | 334                         |
| 250        | 416       | 355 | 416 | 250 x 10,7 | 975                 | 1542                        | 1473                                 | 1105         | 437                           | 368                         |
| 250        | 416       | 355 | 416 | 250 x 12,2 | 1092                | 1740                        | 1661                                 | 1260         | 481                           | 402                         |
| 300        | 473       | 413 | 473 | 300 x 9,1  | 1118                | 1811                        | 1727                                 | 1281         | 530                           | 446                         |
| 300        | 473       | 413 | 473 | 300 x 10,7 | 1268                | 2078                        | 1979                                 | 1491         | 587                           | 489                         |
| 300        | 473       | 413 | 473 | 300 x 12,2 | 1419                | 2344                        | 2232                                 | 1700         | 644                           | 532                         |
| 400        | 572       | 510 | 572 | 400 x 9,1  | 1590                | 2701                        | 2566                                 | 1948         | 753                           | 618                         |
| 400        | 572       | 510 | 572 | 400 x 10,7 | 1809                | 3105                        | 2947                                 | 2268         | 838                           | 680                         |
| 400        | 572       | 510 | 572 | 400 x 12,2 | 2028                | 3509                        | 3329                                 | 2587         | 922                           | 742                         |
| 500        | 694       | 622 | 694 | 500 x 9,1  | 2278                | 4045                        | 3830                                 | 2896         | 1150                          | 934                         |
| 500        | 694       | 622 | 694 | 500 x 10,7 | 2578                | 4640                        | 4389                                 | 3371         | 1269                          | 1018                        |
| 500        | 694       | 622 | 694 | 500 x 12,2 | 2878                | 5235                        | 4948                                 | 3846         | 1389                          | 1102                        |
| 600        | 824       | 743 | 824 | 600 x 9,1  | 3240                | 5820                        | 5505                                 | 4123         | 1697                          | 1382                        |
| 600        | 824       | 743 | 824 | 600 x 10,7 | 3668                | 6678                        | 6311                                 | 4801         | 1877                          | 1510                        |
| 600        | 824       | 743 | 824 | 600 x 12,2 | 4096                | 7535                        | 7116                                 | 5478         | 2058                          | 1638                        |

## One end reinforced half floating hose (first of buoy)

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 15                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 75                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |      |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2   | D3  | D4  |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm   | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 403       | 349  | 242 | 296 | 150 x 9,1  | 490                 | 663                         | 642                                  | 667          | 3                          | 24                       | 0,5                   | 3,8                 |
| 150                                                                                 | 403       | 349  | 242 | 296 | 150 x 10,7 | 560                 | 762                         | 737                                  | 777          | 16                         | 40                       | 2,1                   | 5,5                 |
| 150                                                                                 | 403       | 349  | 242 | 296 | 150 x 12,2 | 629                 | 860                         | 832                                  | 888          | 28                         | 57                       | 3,3                   | 6,8                 |
| 200                                                                                 | 461       | 406  | 307 | 362 | 200 x 9,1  | 697                 | 1005                        | 968                                  | 959          | -46                        | -8                       | -4,5                  | -0,8                |
| 200                                                                                 | 461       | 406  | 307 | 362 | 200 x 10,7 | 795                 | 1155                        | 1111                                 | 1119         | -36                        | 8                        | -3,1                  | 0,7                 |
| 200                                                                                 | 461       | 406  | 307 | 362 | 200 x 12,2 | 896                 | 1307                        | 1257                                 | 1278         | -29                        | 21                       | -2,2                  | 1,6                 |
| 250                                                                                 | 563       | 501  | 365 | 427 | 250 x 9,1  | 961                 | 1444                        | 1385                                 | 1425         | -19                        | 40                       | -1,3                  | 2,9                 |
| 250                                                                                 | 563       | 501  | 365 | 427 | 250 x 10,7 | 1094                | 1658                        | 1589                                 | 1661         | 3                          | 72                       | 0,2                   | 4,5                 |
| 250                                                                                 | 563       | 501  | 365 | 427 | 250 x 12,2 | 1231                | 1876                        | 1797                                 | 1897         | 21                         | 100                      | 1,1                   | 5,6                 |
| 300                                                                                 | 648       | 588  | 415 | 475 | 300 x 9,1  | 1171                | 1864                        | 1779                                 | 1914         | 51                         | 135                      | 2,7                   | 7,6                 |
| 300                                                                                 | 648       | 588  | 415 | 475 | 300 x 10,7 | 1328                | 2136                        | 2038                                 | 2232         | 96                         | 194                      | 4,5                   | 9,5                 |
| 300                                                                                 | 648       | 588  | 415 | 475 | 300 x 12,2 | 1489                | 2412                        | 2300                                 | 2550         | 137                        | 250                      | 5,7                   | 10,9                |
| 400                                                                                 | 749       | 686  | 521 | 584 | 400 x 9,1  | 1742                | 2857                        | 2721                                 | 2772         | -85                        | 51                       | -3,0                  | 1,9                 |
| 400                                                                                 | 749       | 686  | 521 | 584 | 400 x 10,7 | 1984                | 3285                        | 3126                                 | 3226         | -58                        | 101                      | -1,8                  | 3,2                 |
| 400                                                                                 | 749       | 686  | 521 | 584 | 400 x 12,2 | 2230                | 3717                        | 3536                                 | 3681         | -36                        | 145                      | -1,0                  | 4,1                 |
| 500                                                                                 | 931       | 863  | 633 | 700 | 500 x 9,1  | 2372                | 4144                        | 3928                                 | 4277         | 133                        | 349                      | 3,2                   | 8,9                 |
| 500                                                                                 | 931       | 863  | 633 | 700 | 500 x 10,7 | 2684                | 4752                        | 4500                                 | 4980         | 228                        | 481                      | 4,8                   | 10,7                |
| 500                                                                                 | 931       | 863  | 633 | 700 | 500 x 12,2 | 3009                | 5372                        | 5084                                 | 5683         | 311                        | 599                      | 5,8                   | 11,8                |
| 600                                                                                 | 1079      | 1005 | 745 | 819 | 600 x 9,1  | 3146                | 5732                        | 5417                                 | 5884         | 152                        | 467                      | 2,7                   | 8,6                 |
| 600                                                                                 | 1079      | 1005 | 745 | 819 | 600 x 10,7 | 3552                | 6569                        | 6201                                 | 6845         | 275                        | 643                      | 4,2                   | 10,4                |
| 600                                                                                 | 1079      | 1005 | 745 | 819 | 600 x 12,2 | 3974                | 7422                        | 7002                                 | 7805         | 383                        | 803                      | 5,2                   | 11,5                |

# H3006 HF POSEIDON

## SINGLE CARCASS

One end reinforced half floating hose (first of buoy)

### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 19                       |
| Min. burst pressure    | bar          | 95                       |
| Minimum Bending Radius |              | 4 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |

### CHARACTERISTICS



| Nom. diam. | Hose O.D. |      |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2   | D3  | D4  |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm   | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 403       | 349  | 242 | 296 | 150 x 9,1  | 490                 | 663                         | 642                                  | 667          | 3                          | 24                       | 0,5                   | 3,8                 |
| 150        | 403       | 349  | 242 | 296 | 150 x 10,7 | 560                 | 762                         | 737                                  | 777          | 16                         | 40                       | 2,1                   | 5,5                 |
| 150        | 403       | 349  | 242 | 296 | 150 x 12,2 | 629                 | 860                         | 832                                  | 888          | 28                         | 57                       | 3,3                   | 6,8                 |
| 200        | 461       | 406  | 307 | 362 | 200 x 9,1  | 697                 | 1005                        | 968                                  | 959          | -46                        | -8                       | -4,5                  | -0,8                |
| 200        | 461       | 406  | 307 | 362 | 200 x 10,7 | 795                 | 1155                        | 1111                                 | 1119         | -36                        | 8                        | -3,1                  | 0,7                 |
| 200        | 461       | 406  | 307 | 362 | 200 x 12,2 | 896                 | 1307                        | 1257                                 | 1278         | -29                        | 21                       | -2,2                  | 1,6                 |
| 250        | 563       | 501  | 365 | 427 | 250 x 9,1  | 976                 | 1459                        | 1400                                 | 1425         | -34                        | 25                       | -2,3                  | 1,8                 |
| 250        | 563       | 501  | 365 | 427 | 250 x 10,7 | 1110                | 1674                        | 1605                                 | 1661         | -13                        | 56                       | -0,8                  | 3,5                 |
| 250        | 563       | 501  | 365 | 427 | 250 x 12,2 | 1250                | 1895                        | 1816                                 | 1897         | 2                          | 81                       | 0,1                   | 4,4                 |
| 300        | 648       | 588  | 415 | 475 | 300 x 9,1  | 1190                | 1883                        | 1798                                 | 1914         | 32                         | 116                      | 1,7                   | 6,5                 |
| 300        | 648       | 588  | 415 | 475 | 300 x 10,7 | 1351                | 2159                        | 2061                                 | 2232         | 73                         | 171                      | 3,4                   | 8,3                 |
| 300        | 648       | 588  | 415 | 475 | 300 x 12,2 | 1513                | 2436                        | 2324                                 | 2550         | 113                        | 226                      | 4,6                   | 9,7                 |
| 400        | 749       | 686  | 521 | 584 | 400 x 9,1  | 1661                | 2776                        | 2640                                 | 2772         | -4                         | 132                      | -0,2                  | 5,0                 |
| 400        | 749       | 686  | 521 | 584 | 400 x 10,7 | 1891                | 3192                        | 3033                                 | 3226         | 35                         | 194                      | 1,1                   | 6,4                 |
| 400        | 749       | 686  | 521 | 584 | 400 x 12,2 | 2125                | 3612                        | 3431                                 | 3681         | 69                         | 250                      | 1,9                   | 7,3                 |
| 500        | 931       | 863  | 633 | 700 | 500 x 9,1  | 2427                | 4199                        | 3983                                 | 4277         | 78                         | 294                      | 1,9                   | 7,4                 |
| 500        | 931       | 863  | 633 | 700 | 500 x 10,7 | 2747                | 4815                        | 4563                                 | 4980         | 165                        | 418                      | 3,4                   | 9,2                 |
| 500        | 931       | 863  | 633 | 700 | 500 x 12,2 | 3079                | 5442                        | 5154                                 | 5683         | 241                        | 529                      | 4,4                   | 10,3                |
| 600        | 1079      | 1005 | 745 | 819 | 600 x 9,1  | 3223                | 5809                        | 5494                                 | 5884         | 75                         | 390                      | 1,3                   | 7,1                 |
| 600        | 1079      | 1005 | 745 | 819 | 600 x 10,7 | 3638                | 6655                        | 6287                                 | 6845         | 189                        | 557                      | 2,8                   | 8,9                 |
| 600        | 1079      | 1005 | 745 | 819 | 600 x 12,2 | 4070                | 7518                        | 7098                                 | 7805         | 287                        | 707                      | 3,8                   | 10,0                |

## One end reinforced half floating hose (first of buoy)

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |

| CHARACTERISTICS                                                                     |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |      |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2   | D3  | D4  |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm   | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 403       | 349  | 242 | 296 | 150 x 9,1  | 490                 | 663                         | 642                                  | 667          | 3                          | 24                       | 0,5                   | 3,8                 |
| 150                                                                                 | 403       | 349  | 242 | 296 | 150 x 10,7 | 560                 | 762                         | 737                                  | 777          | 16                         | 40                       | 2,1                   | 5,5                 |
| 150                                                                                 | 403       | 349  | 242 | 296 | 150 x 12,2 | 629                 | 860                         | 832                                  | 888          | 28                         | 57                       | 3,3                   | 6,8                 |
| 200                                                                                 | 498       | 443  | 307 | 362 | 200 x 9,1  | 724                 | 1032                        | 995                                  | 1069         | 37                         | 75                       | 3,6                   | 7,5                 |
| 200                                                                                 | 498       | 443  | 307 | 362 | 200 x 10,7 | 827                 | 1186                        | 1143                                 | 1247         | 61                         | 105                      | 5,1                   | 9,2                 |
| 200                                                                                 | 498       | 443  | 307 | 362 | 200 x 12,2 | 933                 | 1344                        | 1294                                 | 1425         | 82                         | 132                      | 6,1                   | 10,2                |
| 250                                                                                 | 563       | 501  | 365 | 427 | 250 x 9,1  | 975                 | 1458                        | 1399                                 | 1425         | -33                        | 26                       | -2,3                  | 1,8                 |
| 250                                                                                 | 563       | 501  | 365 | 427 | 250 x 10,7 | 1110                | 1674                        | 1605                                 | 1661         | -13                        | 56                       | -0,8                  | 3,5                 |
| 250                                                                                 | 563       | 501  | 365 | 427 | 250 x 12,2 | 1249                | 1894                        | 1815                                 | 1897         | 3                          | 82                       | 0,2                   | 4,5                 |
| 300                                                                                 | 656       | 596  | 423 | 483 | 300 x 9,1  | 1256                | 1948                        | 1864                                 | 1974         | 26                         | 110                      | 1,3                   | 5,9                 |
| 300                                                                                 | 656       | 596  | 423 | 483 | 300 x 10,7 | 1429                | 2236                        | 2138                                 | 2302         | 65                         | 164                      | 2,9                   | 7,7                 |
| 300                                                                                 | 656       | 596  | 423 | 483 | 300 x 12,2 | 1604                | 2527                        | 2415                                 | 2629         | 102                        | 214                      | 4,0                   | 8,9                 |
| 400                                                                                 | 749       | 686  | 521 | 584 | 400 x 9,1  | 1699                | 2814                        | 2678                                 | 2772         | -42                        | 94                       | -1,5                  | 3,5                 |
| 400                                                                                 | 749       | 686  | 521 | 584 | 400 x 10,7 | 1935                | 3236                        | 3077                                 | 3226         | -9                         | 150                      | -0,3                  | 4,9                 |
| 400                                                                                 | 749       | 686  | 521 | 584 | 400 x 12,2 | 2174                | 3661                        | 3480                                 | 3681         | 20                         | 201                      | 0,5                   | 5,8                 |
| 500                                                                                 | 931       | 863  | 633 | 700 | 500 x 9,1  | 2427                | 4199                        | 3983                                 | 4277         | 78                         | 294                      | 1,9                   | 7,4                 |
| 500                                                                                 | 931       | 863  | 633 | 700 | 500 x 10,7 | 2747                | 4815                        | 4563                                 | 4980         | 165                        | 418                      | 3,4                   | 9,2                 |
| 500                                                                                 | 931       | 863  | 633 | 700 | 500 x 12,2 | 3079                | 5442                        | 5154                                 | 5683         | 241                        | 529                      | 4,4                   | 10,3                |
| 600                                                                                 | 1096      | 1013 | 753 | 836 | 600 x 9,1  | 3376                | 5962                        | 5646                                 | 5994         | 33                         | 348                      | 0,5                   | 6,2                 |
| 600                                                                                 | 1096      | 1013 | 753 | 836 | 600 x 10,7 | 3818                | 6834                        | 6467                                 | 6972         | 138                        | 505                      | 2,0                   | 7,8                 |
| 600                                                                                 | 1096      | 1013 | 753 | 836 | 600 x 12,2 | 4275                | 7723                        | 7303                                 | 790          | 227                        | 647                      | 2,9                   | 8,9                 |

# H3030 FF POSEIDON

## SINGLE CARCASS

### Mainline full floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 15                       |
| Min. burst pressure    | bar          | 75                       |
| Minimum Bending Radius |              | 6 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 395       | 341 | 395  | 150 x 9,1  | 486                 | 659                         | 638                                  | 845          | 186                        | 207                      | 28                    | 32                  |
| 150        | 395       | 341 | 395  | 150 x 10,7 | 555                 | 757                         | 732                                  | 987          | 231                        | 255                      | 30                    | 35                  |
| 150        | 395       | 341 | 395  | 150 x 12,2 | 623                 | 854                         | 826                                  | 1130         | 276                        | 304                      | 32                    | 37                  |
| 200        | 489       | 434 | 489  | 200 x 9,1  | 695                 | 1003                        | 965                                  | 1359         | 357                        | 394                      | 36                    | 41                  |
| 200        | 489       | 434 | 489  | 200 x 10,7 | 797                 | 1156                        | 1112                                 | 1590         | 434                        | 478                      | 38                    | 43                  |
| 200        | 489       | 434 | 489  | 200 x 12,2 | 893                 | 1304                        | 1254                                 | 1821         | 517                        | 567                      | 40                    | 45                  |
| 250        | 554       | 492 | 554  | 250 x 9,1  | 927                 | 1410                        | 1351                                 | 1751         | 340                        | 399                      | 24                    | 30                  |
| 250        | 554       | 492 | 554  | 250 x 10,7 | 1055                | 1620                        | 1551                                 | 2047         | 427                        | 496                      | 26                    | 32                  |
| 250        | 554       | 492 | 554  | 250 x 12,2 | 1184                | 1829                        | 1750                                 | 2344         | 515                        | 593                      | 28                    | 34                  |
| 300        | 637       | 577 | 637  | 300 x 9,1  | 1159                | 1851                        | 1767                                 | 2399         | 547                        | 632                      | 30                    | 36                  |
| 300        | 637       | 577 | 637  | 300 x 10,7 | 1317                | 2124                        | 2026                                 | 2808         | 683                        | 782                      | 32                    | 39                  |
| 300        | 637       | 577 | 637  | 300 x 12,2 | 1474                | 2397                        | 2284                                 | 3217         | 820                        | 932                      | 34                    | 41                  |
| 400        | 724       | 667 | 724  | 400 x 9,1  | 1501                | 2616                        | 2480                                 | 3210         | 595                        | 731                      | 23                    | 29                  |
| 400        | 724       | 667 | 724  | 400 x 10,7 | 1705                | 3006                        | 2847                                 | 3757         | 751                        | 909                      | 25                    | 32                  |
| 400        | 724       | 667 | 724  | 400 x 12,2 | 1908                | 3395                        | 3213                                 | 4303         | 908                        | 1089                     | 27                    | 34                  |
| 500        | 918       | 851 | 918  | 500 x 9,1  | 2253                | 4026                        | 3809                                 | 5191         | 1165                       | 1381                     | 29                    | 36                  |
| 500        | 918       | 851 | 918  | 500 x 10,7 | 2551                | 4619                        | 4367                                 | 6080         | 1461                       | 1713                     | 32                    | 39                  |
| 500        | 918       | 851 | 918  | 500 x 12,2 | 2848                | 5211                        | 4923                                 | 6969         | 1759                       | 2047                     | 34                    | 42                  |
| 600        | 1055      | 989 | 1055 | 600 x 9,1  | 2902                | 5488                        | 5172                                 | 6969         | 1481                       | 1796                     | 27                    | 35                  |
| 600        | 1055      | 989 | 1055 | 600 x 10,7 | 3278                | 6295                        | 5927                                 | 8169         | 1875                       | 2242                     | 30                    | 38                  |
| 600        | 1055      | 989 | 1055 | 600 x 12,2 | 3648                | 7096                        | 6675                                 | 9370         | 2274                       | 2694                     | 32                    | 40                  |



## Mainline full floating hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 19                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 95                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 6 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |
|                          |                                          | Reserve buoyancy       | min. % 20                             |

| CHARACTERISTICS                                                                     |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 395       | 341 | 395  | 150 x 9,1  | 486                 | 659                         | 638                                  | 845          | 186                        | 207                      | 28                    | 32                  |
| 150                                                                                 | 395       | 341 | 395  | 150 x 10,7 | 555                 | 757                         | 732                                  | 987          | 231                        | 255                      | 30                    | 35                  |
| 150                                                                                 | 395       | 341 | 395  | 150 x 12,2 | 623                 | 854                         | 826                                  | 1130         | 276                        | 304                      | 32                    | 37                  |
| 200                                                                                 | 489       | 434 | 489  | 200 x 9,1  | 695                 | 1003                        | 965                                  | 1359         | 357                        | 394                      | 36                    | 41                  |
| 200                                                                                 | 489       | 434 | 489  | 200 x 10,7 | 797                 | 1156                        | 1112                                 | 1590         | 434                        | 478                      | 38                    | 43                  |
| 200                                                                                 | 489       | 434 | 489  | 200 x 12,2 | 893                 | 1304                        | 1254                                 | 1821         | 517                        | 567                      | 40                    | 45                  |
| 250                                                                                 | 554       | 492 | 554  | 250 x 9,1  | 942                 | 1425                        | 1366                                 | 1751         | 325                        | 384                      | 23                    | 28                  |
| 250                                                                                 | 554       | 492 | 554  | 250 x 10,7 | 1072                | 1637                        | 1568                                 | 2047         | 410                        | 479                      | 25                    | 31                  |
| 250                                                                                 | 554       | 492 | 554  | 250 x 12,2 | 1202                | 1847                        | 1768                                 | 2344         | 497                        | 575                      | 27                    | 33                  |
| 300                                                                                 | 637       | 577 | 637  | 300 x 9,1  | 1179                | 1871                        | 1787                                 | 2399         | 527                        | 612                      | 28                    | 34                  |
| 300                                                                                 | 637       | 577 | 637  | 300 x 10,7 | 1340                | 2147                        | 2049                                 | 2808         | 660                        | 759                      | 31                    | 37                  |
| 300                                                                                 | 637       | 577 | 637  | 300 x 12,2 | 1498                | 2421                        | 2308                                 | 3217         | 796                        | 908                      | 33                    | 39                  |
| 400                                                                                 | 732       | 675 | 732  | 400 x 9,1  | 1578                | 2693                        | 2557                                 | 3288         | 595                        | 731                      | 22                    | 29                  |
| 400                                                                                 | 732       | 675 | 732  | 400 x 10,7 | 1797                | 3098                        | 2939                                 | 3848         | 750                        | 908                      | 24                    | 31                  |
| 400                                                                                 | 732       | 675 | 732  | 400 x 12,2 | 2016                | 3503                        | 3321                                 | 4407         | 905                        | 1086                     | 26                    | 33                  |
| 500                                                                                 | 918       | 851 | 918  | 500 x 9,1  | 2308                | 4081                        | 3864                                 | 5191         | 1110                       | 1326                     | 27                    | 34                  |
| 500                                                                                 | 918       | 851 | 918  | 500 x 10,7 | 2613                | 4681                        | 4429                                 | 6080         | 1399                       | 1651                     | 30                    | 37                  |
| 500                                                                                 | 918       | 851 | 918  | 500 x 12,2 | 2917                | 5280                        | 4992                                 | 6969         | 1690                       | 1978                     | 32                    | 40                  |
| 600                                                                                 | 1055      | 989 | 1055 | 600 x 9,1  | 2982                | 5568                        | 5252                                 | 6969         | 1401                       | 1716                     | 25                    | 33                  |
| 600                                                                                 | 1055      | 989 | 1055 | 600 x 10,7 | 3365                | 6382                        | 6014                                 | 8169         | 1788                       | 2155                     | 28                    | 36                  |
| 600                                                                                 | 1055      | 989 | 1055 | 600 x 12,2 | 3744                | 7192                        | 6771                                 | 9370         | 2178                       | 2598                     | 30                    | 38                  |

# H3030 FF POSEIDON

## SINGLE CARCASS

### Mainline full floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 21                       |
| Min. burst pressure    | bar          | 105                      |
| Minimum Bending Radius |              | 6 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 395       | 341 | 395  | 150 x 9,1  | 486                 | 659                         | 638                                  | 845          | 186                        | 207                      | 28                    | 32                  |
| 150        | 395       | 341 | 395  | 150 x 10,7 | 555                 | 757                         | 732                                  | 987          | 231                        | 255                      | 30                    | 35                  |
| 150        | 395       | 341 | 395  | 150 x 12,2 | 623                 | 854                         | 826                                  | 1130         | 276                        | 304                      | 32                    | 37                  |
| 200        | 489       | 434 | 489  | 200 x 9,1  | 706                 | 1014                        | 976                                  | 1359         | 346                        | 383                      | 34                    | 39                  |
| 200        | 489       | 434 | 489  | 200 x 10,7 | 807                 | 1166                        | 1122                                 | 1590         | 424                        | 468                      | 36                    | 42                  |
| 200        | 489       | 434 | 489  | 200 x 12,2 | 906                 | 1317                        | 1267                                 | 1821         | 504                        | 554                      | 38                    | 44                  |
| 250        | 554       | 492 | 554  | 250 x 9,1  | 942                 | 1425                        | 1366                                 | 1751         | 325                        | 384                      | 23                    | 28                  |
| 250        | 554       | 492 | 554  | 250 x 10,7 | 1072                | 1637                        | 1568                                 | 2047         | 410                        | 479                      | 25                    | 31                  |
| 250        | 554       | 492 | 554  | 250 x 12,2 | 1202                | 1847                        | 1768                                 | 2344         | 497                        | 575                      | 27                    | 33                  |
| 300        | 645       | 585 | 645  | 300 x 9,1  | 1244                | 1937                        | 1852                                 | 2466         | 529                        | 614                      | 27                    | 33                  |
| 300        | 645       | 585 | 645  | 300 x 10,7 | 1417                | 2224                        | 2126                                 | 2887         | 662                        | 761                      | 30                    | 36                  |
| 300        | 645       | 585 | 645  | 300 x 12,2 | 1588                | 2512                        | 2399                                 | 3307         | 795                        | 908                      | 32                    | 38                  |
| 400        | 768       | 711 | 768  | 400 x 9,1  | 1656                | 2771                        | 2635                                 | 3625         | 854                        | 990                      | 31                    | 38                  |
| 400        | 768       | 711 | 768  | 400 x 10,7 | 1888                | 3189                        | 3030                                 | 4246         | 1057                       | 1215                     | 33                    | 40                  |
| 400        | 768       | 711 | 768  | 400 x 12,2 | 2119                | 3606                        | 3425                                 | 4866         | 1260                       | 1441                     | 35                    | 42                  |
| 500        | 918       | 851 | 918  | 500 x 9,1  | 2308                | 4081                        | 3864                                 | 5191         | 1110                       | 1326                     | 27                    | 34                  |
| 500        | 918       | 851 | 918  | 500 x 10,7 | 2613                | 4681                        | 4429                                 | 6080         | 1399                       | 1651                     | 30                    | 37                  |
| 500        | 918       | 851 | 918  | 500 x 12,2 | 2917                | 5280                        | 4992                                 | 6969         | 1690                       | 1978                     | 32                    | 40                  |
| 600        | 1072      | 997 | 1072 | 600 x 9,1  | 3131                | 5717                        | 5402                                 | 7097         | 1380                       | 1695                     | 24                    | 31                  |
| 600        | 1072      | 997 | 1072 | 600 x 10,7 | 3540                | 6557                        | 6189                                 | 8317         | 1760                       | 2128                     | 27                    | 34                  |
| 600        | 1072      | 997 | 1072 | 600 x 12,2 | 3946                | 7394                        | 6973                                 | 9537         | 2143                       | 2564                     | 29                    | 37                  |

## Reducer full floating hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 15                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 75                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 6 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |
|                          |                                          | Reserve buoyancy       | min. % 20                             |

| CHARACTERISTICS                                                                     |           |     |     |                |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|-----|----------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |     |                |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size           | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3  |                |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm  | mm x m         | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 200/150                                                                             | 404       | 350 | 404 | 200/150 x 9,1  | 542                 | 715                         | 694                                  | 893          | 178                        | 199                      | 25                    | 29                  |
| 200/150                                                                             | 404       | 350 | 404 | 200/150 x 10,7 | 618                 | 820                         | 795                                  | 1043         | 224                        | 248                      | 27                    | 31                  |
| 200/150                                                                             | 404       | 350 | 404 | 200/150 x 12,2 | 696                 | 926                         | 898                                  | 1194         | 268                        | 296                      | 29                    | 33                  |
| 250/200                                                                             | 502       | 447 | 502 | 250/200 x 9,1  | 789                 | 1097                        | 1060                                 | 1446         | 349                        | 386                      | 32                    | 36                  |
| 250/200                                                                             | 502       | 447 | 502 | 250/200 x 10,7 | 903                 | 1262                        | 1218                                 | 1691         | 429                        | 473                      | 34                    | 39                  |
| 250/200                                                                             | 502       | 447 | 502 | 250/200 x 12,2 | 1019                | 1430                        | 1380                                 | 1937         | 507                        | 557                      | 35                    | 40                  |
| 300/250                                                                             | 603       | 541 | 603 | 300/250 x 9,1  | 1079                | 1563                        | 1504                                 | 2107         | 544                        | 603                      | 35                    | 40                  |
| 300/250                                                                             | 603       | 541 | 603 | 300/250 x 10,7 | 1231                | 1795                        | 1726                                 | 2466         | 671                        | 740                      | 37                    | 43                  |
| 300/250                                                                             | 603       | 541 | 603 | 300/250 x 12,2 | 1384                | 2029                        | 1951                                 | 2825         | 796                        | 875                      | 39                    | 45                  |
| 400/300                                                                             | 651       | 591 | 651 | 400/300 x 9,1  | 1295                | 1988                        | 1903                                 | 2513         | 525                        | 610                      | 26                    | 32                  |
| 400/300                                                                             | 651       | 591 | 651 | 400/300 x 10,7 | 1470                | 2278                        | 2179                                 | 2942         | 664                        | 762                      | 29                    | 35                  |
| 400/300                                                                             | 651       | 591 | 651 | 400/300 x 12,2 | 1647                | 2571                        | 2458                                 | 3370         | 799                        | 912                      | 31                    | 37                  |
| 500/400                                                                             | 784       | 720 | 784 | 500/400 x 9,1  | 1775                | 2890                        | 2754                                 | 3728         | 839                        | 975                      | 29                    | 35                  |
| 500/400                                                                             | 784       | 720 | 784 | 500/400 x 10,7 | 2016                | 3317                        | 3159                                 | 4365         | 1048                       | 1207                     | 32                    | 38                  |
| 500/400                                                                             | 784       | 720 | 784 | 500/400 x 12,2 | 2262                | 3749                        | 3567                                 | 5002         | 1254                       | 1435                     | 33                    | 40                  |
| 600/500                                                                             | 940       | 873 | 940 | 600/500 x 9,1  | 2580                | 4353                        | 4136                                 | 5457         | 1104                       | 1321                     | 25                    | 32                  |
| 600/500                                                                             | 940       | 873 | 940 | 600/500 x 10,7 | 2923                | 4990                        | 4738                                 | 6391         | 1401                       | 1653                     | 28                    | 35                  |
| 600/500                                                                             | 940       | 873 | 940 | 600/500 x 12,2 | 3276                | 5639                        | 5351                                 | 7325         | 1686                       | 1974                     | 30                    | 37                  |

# H3232 FF POSEIDON

## SINGLE CARCASS

### Reducer full floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 19                       |
| Min. burst pressure    | bar          | 95                       |
| Minimum Bending Radius |              | 6 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight<br>in air<br>empty<br>kg | Weight<br>in air<br>full of<br>water<br>kg | Weight<br>in air<br>full of oil<br>s.g. = 0,9<br>kg | Displa-<br>cement<br>kg | Net<br>buoyancy<br>full of<br>water<br>kg | Net<br>buoyancy<br>full of<br>oil<br>kg | R.B.<br>fully<br>of<br>water<br>% | R.B.<br>fully<br>of<br>oil<br>% |
|------------|-----------|----------|----------|----------------|---------------------------------|--------------------------------------------|-----------------------------------------------------|-------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------|---------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                                 |                                            |                                                     |                         |                                           |                                         |                                   |                                 |
| 200/150    | 404       | 350      | 404      | 200/150 x 9,1  | 542                             | 715                                        | 694                                                 | 893                     | 178                                       | 199                                     | 25                                | 29                              |
| 200/150    | 404       | 350      | 404      | 200/150 x 10,7 | 618                             | 820                                        | 795                                                 | 1043                    | 224                                       | 248                                     | 27                                | 31                              |
| 200/150    | 404       | 350      | 404      | 200/150 x 12,2 | 696                             | 926                                        | 898                                                 | 1194                    | 268                                       | 296                                     | 29                                | 33                              |
| 250/200    | 502       | 447      | 502      | 250/200 x 9,1  | 789                             | 1097                                       | 1060                                                | 1446                    | 349                                       | 386                                     | 32                                | 36                              |
| 250/200    | 502       | 447      | 502      | 250/200 x 10,7 | 903                             | 1262                                       | 1218                                                | 1691                    | 429                                       | 473                                     | 34                                | 39                              |
| 250/200    | 502       | 447      | 502      | 250/200 x 12,2 | 1019                            | 1430                                       | 1380                                                | 1937                    | 507                                       | 557                                     | 35                                | 40                              |
| 300/250    | 603       | 541      | 603      | 300/250 x 9,1  | 1093                            | 1577                                       | 1518                                                | 2107                    | 530                                       | 589                                     | 34                                | 39                              |
| 300/250    | 603       | 541      | 603      | 300/250 x 10,7 | 1246                            | 1810                                       | 1741                                                | 2466                    | 656                                       | 725                                     | 36                                | 42                              |
| 300/250    | 603       | 541      | 603      | 300/250 x 12,2 | 1402                            | 2047                                       | 1969                                                | 2825                    | 778                                       | 857                                     | 38                                | 44                              |
| 400/300    | 651       | 591      | 651      | 400/300 x 9,1  | 1314                            | 2007                                       | 1922                                                | 2513                    | 506                                       | 591                                     | 25                                | 31                              |
| 400/300    | 651       | 591      | 651      | 400/300 x 10,7 | 1493                            | 2301                                       | 2202                                                | 2942                    | 641                                       | 739                                     | 28                                | 34                              |
| 400/300    | 651       | 591      | 651      | 400/300 x 12,2 | 1671                            | 2595                                       | 2482                                                | 3370                    | 775                                       | 888                                     | 30                                | 36                              |
| 500/400    | 792       | 728      | 792      | 500/400 x 9,1  | 1853                            | 2968                                       | 2832                                                | 3813                    | 844                                       | 980                                     | 28                                | 35                              |
| 500/400    | 792       | 728      | 792      | 500/400 x 10,7 | 2112                            | 3413                                       | 3254                                                | 4464                    | 1051                                      | 1210                                    | 31                                | 37                              |
| 500/400    | 792       | 728      | 792      | 500/400 x 12,2 | 2372                            | 3859                                       | 3677                                                | 5115                    | 1256                                      | 1437                                    | 33                                | 39                              |
| 600/500    | 940       | 873      | 940      | 600/500 x 9,1  | 2636                            | 4409                                       | 4192                                                | 5457                    | 1048                                      | 1265                                    | 24                                | 30                              |
| 600/500    | 940       | 873      | 940      | 600/500 x 10,7 | 2986                            | 5053                                       | 4801                                                | 6391                    | 1338                                      | 1590                                    | 26                                | 33                              |
| 600/500    | 940       | 873      | 940      | 600/500 x 12,2 | 3346                            | 5709                                       | 5421                                                | 7325                    | 1616                                      | 1904                                    | 28                                | 35                              |

## Reducer full floating hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 6 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |
|                          |                                          | Reserve buoyancy       | min. % 20                             |

| CHARACTERISTICS                                                                     |           |     |     |                |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|-----|----------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |     |                |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size           | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3  |                |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm  | mm x m         | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 200/150                                                                             | 404       | 350 | 404 | 200/150 x 9,1  | 542                 | 715                         | 694                                  | 893          | 178                        | 199                      | 25                    | 29                  |
| 200/150                                                                             | 404       | 350 | 404 | 200/150 x 10,7 | 618                 | 820                         | 795                                  | 1043         | 224                        | 248                      | 27                    | 31                  |
| 200/150                                                                             | 404       | 350 | 404 | 200/150 x 12,2 | 696                 | 926                         | 898                                  | 1194         | 268                        | 296                      | 29                    | 33                  |
| 250/200                                                                             | 502       | 447 | 502 | 250/200 x 9,1  | 800                 | 1108                        | 1071                                 | 1446         | 338                        | 375                      | 30                    | 35                  |
| 250/200                                                                             | 502       | 447 | 502 | 250/200 x 10,7 | 916                 | 1275                        | 1231                                 | 1691         | 416                        | 460                      | 33                    | 37                  |
| 250/200                                                                             | 502       | 447 | 502 | 250/200 x 12,2 | 1033                | 1444                        | 1394                                 | 1937         | 493                        | 543                      | 34                    | 39                  |
| 300/250                                                                             | 603       | 541 | 603 | 300/250 x 9,1  | 1093                | 1577                        | 1518                                 | 2107         | 530                        | 589                      | 34                    | 39                  |
| 300/250                                                                             | 603       | 541 | 603 | 300/250 x 10,7 | 1246                | 1810                        | 1741                                 | 2466         | 656                        | 725                      | 36                    | 42                  |
| 300/250                                                                             | 603       | 541 | 603 | 300/250 x 12,2 | 1402                | 2047                        | 1969                                 | 2825         | 778                        | 857                      | 38                    | 44                  |
| 400/300                                                                             | 659       | 599 | 659 | 400/300 x 9,1  | 1381                | 2073                        | 1989                                 | 2582         | 509                        | 594                      | 25                    | 30                  |
| 400/300                                                                             | 659       | 599 | 659 | 400/300 x 10,7 | 1571                | 2379                        | 2280                                 | 3022         | 643                        | 742                      | 27                    | 33                  |
| 400/300                                                                             | 659       | 599 | 659 | 400/300 x 12,2 | 1763                | 2686                        | 2574                                 | 3462         | 776                        | 889                      | 29                    | 35                  |
| 500/400                                                                             | 792       | 728 | 792 | 500/400 x 9,1  | 1892                | 3007                        | 2871                                 | 3813         | 805                        | 941                      | 27                    | 33                  |
| 500/400                                                                             | 792       | 728 | 792 | 500/400 x 10,7 | 2156                | 3457                        | 3298                                 | 4464         | 1007                       | 1166                     | 29                    | 35                  |
| 500/400                                                                             | 792       | 728 | 792 | 500/400 x 12,2 | 2422                | 3909                        | 3727                                 | 5115         | 1206                       | 1387                     | 31                    | 37                  |
| 600/500                                                                             | 940       | 873 | 940 | 600/500 x 9,1  | 2636                | 4409                        | 4192                                 | 5457         | 1048                       | 1265                     | 24                    | 30                  |
| 600/500                                                                             | 940       | 873 | 940 | 600/500 x 10,7 | 2986                | 5053                        | 4801                                 | 6391         | 1338                       | 1590                     | 26                    | 33                  |
| 600/500                                                                             | 940       | 873 | 940 | 600/500 x 12,2 | 3346                | 5709                        | 5421                                 | 7325         | 1616                       | 1904                     | 28                    | 35                  |



# H3030T FF POSEIDON

## SINGLE CARCASS

### Tail full floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 15                       |
| Min. burst pressure    | bar          | 75                       |
| Minimum Bending Radius |              | 6 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2  | D3  |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 394,8     | 341 | 395 | 150 x 9,1  | 486                 | 659                         | 638                                  | 845          | 186                        | 207                      | 28                    | 32                  |
| 150        | 394,8     | 341 | 395 | 150 x 10,7 | 555                 | 757                         | 732                                  | 987          | 231                        | 255                      | 30                    | 35                  |
| 150        | 394,8     | 341 | 395 | 150 x 12,2 | 623                 | 854                         | 826                                  | 1130         | 276                        | 304                      | 32                    | 37                  |
| 200        | 496,6     | 442 | 497 | 200 x 9,1  | 737                 | 1045                        | 1007                                 | 1410         | 366                        | 403                      | 35                    | 40                  |
| 200        | 496,6     | 442 | 497 | 200 x 10,7 | 843                 | 1203                        | 1159                                 | 1650         | 447                        | 491                      | 37                    | 42                  |
| 200        | 496,6     | 442 | 497 | 200 x 12,2 | 949                 | 1360                        | 1310                                 | 1889         | 529                        | 579                      | 39                    | 44                  |
| 250        | 553,6     | 492 | 554 | 250 x 9,1  | 932                 | 1416                        | 1357                                 | 1751         | 335                        | 394                      | 24                    | 29                  |
| 250        | 553,6     | 492 | 554 | 250 x 10,7 | 1062                | 1626                        | 1557                                 | 2047         | 421                        | 490                      | 26                    | 31                  |
| 250        | 553,6     | 492 | 554 | 250 x 12,2 | 1191                | 1836                        | 1758                                 | 2344         | 507                        | 586                      | 28                    | 33                  |
| 300        | 639,4     | 579 | 639 | 300 x 9,1  | 1182                | 1875                        | 1790                                 | 2415         | 541                        | 625                      | 29                    | 35                  |
| 300        | 639,4     | 579 | 639 | 300 x 10,7 | 1343                | 2151                        | 2052                                 | 2827         | 677                        | 775                      | 31                    | 38                  |
| 300        | 639,4     | 579 | 639 | 300 x 12,2 | 1503                | 2426                        | 2314                                 | 3239         | 813                        | 925                      | 33                    | 40                  |
| 400        | 763       | 706 | 763 | 400 x 9,1  | 1620                | 2735                        | 2599                                 | 3574         | 839                        | 975                      | 31                    | 38                  |
| 400        | 763       | 706 | 763 | 400 x 10,7 | 1846                | 3147                        | 2988                                 | 4186         | 1039                       | 1198                     | 33                    | 40                  |
| 400        | 763       | 706 | 763 | 400 x 12,2 | 2070                | 3556                        | 3375                                 | 4797         | 1241                       | 1422                     | 35                    | 42                  |
| 500        | 917,8     | 851 | 918 | 500 x 9,1  | 2278                | 4051                        | 3834                                 | 5191         | 1140                       | 1356                     | 28                    | 35                  |
| 500        | 917,8     | 851 | 918 | 500 x 10,7 | 2581                | 4649                        | 4397                                 | 6080         | 1431                       | 1683                     | 31                    | 38                  |
| 500        | 917,8     | 851 | 918 | 500 x 12,2 | 2882                | 5245                        | 4957                                 | 6969         | 1725                       | 2013                     | 33                    | 41                  |

### Tail full floating hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 19                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 95                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 6 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |
|                          |                                          | Reserve buoyancy       | min. % 20                             |

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                            |                          |                     |                   |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|  |           |     |     |            |                     |                             |                                      |              |                            |                          |                     |                   |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                            |                          |                     |                   |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150                                                                                 | 395       | 341 | 395 | 150 x 9,1  | 486                 | 659                         | 638                                  | 845          | 186                        | 207                      | 28                  | 32                |
| 150                                                                                 | 395       | 341 | 395 | 150 x 10,7 | 555                 | 757                         | 732                                  | 987          | 231                        | 255                      | 30                  | 35                |
| 150                                                                                 | 395       | 341 | 395 | 150 x 12,2 | 623                 | 854                         | 826                                  | 1130         | 276                        | 304                      | 32                  | 37                |
| 200                                                                                 | 489       | 434 | 489 | 200 x 9,1  | 733                 | 1041                        | 1003                                 | 1359         | 319                        | 356                      | 31                  | 36                |
| 200                                                                                 | 489       | 434 | 489 | 200 x 10,7 | 839                 | 1198                        | 1154                                 | 1590         | 392                        | 436                      | 33                  | 38                |
| 200                                                                                 | 489       | 434 | 489 | 200 x 12,2 | 944                 | 1355                        | 1305                                 | 1821         | 466                        | 516                      | 34                  | 40                |
| 250                                                                                 | 554       | 492 | 554 | 250 x 9,1  | 947                 | 1431                        | 1372                                 | 1751         | 320                        | 379                      | 22                  | 28                |
| 250                                                                                 | 554       | 492 | 554 | 250 x 10,7 | 1079                | 1643                        | 1574                                 | 2047         | 404                        | 473                      | 25                  | 30                |
| 250                                                                                 | 554       | 492 | 554 | 250 x 12,2 | 1209                | 1854                        | 1776                                 | 2344         | 489                        | 568                      | 26                  | 32                |
| 300                                                                                 | 639       | 579 | 639 | 300 x 9,1  | 1201                | 1894                        | 1809                                 | 2415         | 522                        | 606                      | 28                  | 34                |
| 300                                                                                 | 639       | 579 | 639 | 300 x 10,7 | 1366                | 2174                        | 2075                                 | 2827         | 654                        | 752                      | 30                  | 36                |
| 300                                                                                 | 639       | 579 | 639 | 300 x 12,2 | 1528                | 2451                        | 2339                                 | 3239         | 788                        | 900                      | 32                  | 38                |
| 400                                                                                 | 771       | 714 | 771 | 400 x 9,1  | 1700                | 2815                        | 2679                                 | 3656         | 842                        | 978                      | 30                  | 36                |
| 400                                                                                 | 771       | 714 | 771 | 400 x 10,7 | 1940                | 3241                        | 3082                                 | 4282         | 1041                       | 1200                     | 32                  | 39                |
| 400                                                                                 | 771       | 714 | 771 | 400 x 12,2 | 2220                | 3707                        | 3525                                 | 4908         | 1201                       | 1382                     | 32                  | 39                |
| 500                                                                                 | 918       | 851 | 918 | 500 x 9,1  | 2334                | 4107                        | 3890                                 | 5191         | 1084                       | 1300                     | 26                  | 33                |
| 500                                                                                 | 918       | 851 | 918 | 500 x 10,7 | 2643                | 4711                        | 4459                                 | 6080         | 1369                       | 1621                     | 29                  | 36                |
| 500                                                                                 | 918       | 851 | 918 | 500 x 12,2 | 2952                | 5315                        | 5027                                 | 6969         | 1655                       | 1943                     | 31                  | 39                |

# H3030T FF POSEIDON

## SINGLE CARCASS

### Tail full floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 21                       |
| Min. burst pressure    | bar          | 105                      |
| Minimum Bending Radius |              | 6 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2  | D3  |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 395       | 341 | 395 | 150 x 9,1  | 486                 | 659                         | 638                                  | 845          | 186                        | 207                      | 28                    | 32                  |
| 150        | 395       | 341 | 395 | 150 x 10,7 | 555                 | 757                         | 732                                  | 987          | 231                        | 255                      | 30                    | 35                  |
| 150        | 395       | 341 | 395 | 150 x 12,2 | 623                 | 854                         | 826                                  | 1130         | 276                        | 304                      | 32                    | 37                  |
| 200        | 489       | 434 | 489 | 200 x 9,1  | 744                 | 1052                        | 1014                                 | 1359         | 308                        | 345                      | 29                    | 34                  |
| 200        | 489       | 434 | 489 | 200 x 10,7 | 851                 | 1210                        | 1166                                 | 1590         | 380                        | 424                      | 31                    | 36                  |
| 200        | 489       | 434 | 489 | 200 x 12,2 | 958                 | 1369                        | 1319                                 | 1821         | 452                        | 502                      | 33                    | 38                  |
| 250        | 554       | 492 | 554 | 250 x 9,1  | 947                 | 1431                        | 1372                                 | 1751         | 320                        | 379                      | 22                    | 28                  |
| 250        | 554       | 492 | 554 | 250 x 10,7 | 1079                | 1643                        | 1574                                 | 2047         | 404                        | 473                      | 25                    | 30                  |
| 250        | 554       | 492 | 554 | 250 x 12,2 | 1209                | 1854                        | 1776                                 | 2344         | 489                        | 568                      | 26                    | 32                  |
| 300        | 647       | 587 | 647 | 300 x 9,1  | 1267                | 1960                        | 1875                                 | 2483         | 523                        | 608                      | 27                    | 32                  |
| 300        | 647       | 587 | 647 | 300 x 10,7 | 1444                | 2252                        | 2153                                 | 2907         | 655                        | 753                      | 29                    | 35                  |
| 300        | 647       | 587 | 647 | 300 x 12,2 | 1619                | 2542                        | 2430                                 | 3330         | 788                        | 900                      | 31                    | 37                  |
| 400        | 771       | 714 | 771 | 400 x 9,1  | 1759                | 2874                        | 2738                                 | 3656         | 783                        | 919                      | 27                    | 34                  |
| 400        | 771       | 714 | 771 | 400 x 10,7 | 2009                | 3310                        | 3151                                 | 4282         | 972                        | 1131                     | 29                    | 36                  |
| 400        | 771       | 714 | 771 | 400 x 12,2 | 2257                | 3744                        | 3562                                 | 4908         | 1164                       | 1345                     | 31                    | 38                  |
| 500        | 918       | 851 | 918 | 500 x 9,1  | 2334                | 4107                        | 3890                                 | 5191         | 1084                       | 1300                     | 26                    | 33                  |
| 500        | 918       | 851 | 918 | 500 x 10,7 | 2643                | 4711                        | 4459                                 | 6080         | 1369                       | 1621                     | 29                    | 36                  |
| 500        | 918       | 851 | 918 | 500 x 12,2 | 2952                | 5315                        | 5027                                 | 6969         | 1655                       | 1943                     | 31                    | 39                  |

## Tanker rail dumbel floating hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 15                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 75                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |
|                          |                                          | Reserve buoyancy       | min. % 20                             |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Net buoyancy full of water<br>kg | Net buoyancy full of oil<br>kg | R.B. fully of water<br>% | R.B. fully of oil<br>% |
|------------|-----------|----------|----------|----------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|----------------------------------|--------------------------------|--------------------------|------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                           |                                   |                                            |                    |                                  |                                |                          |                        |
| 150        | 527       | 344      | 417      | 150 x 9,1      | 630                       | 803                               | 782                                        | 1260               | 457                              | 478                            | 57                       | 61                     |
| 150        | 527       | 344      | 417      | 150 x 10,7     | 729                       | 931                               | 907                                        | 1469               | 537                              | 562                            | 58                       | 62                     |
| 150        | 527       | 344      | 417      | 150 x 12,2     | 829                       | 1060                              | 1031                                       | 1636               | 576                              | 604                            | 54                       | 59                     |
| 200        | 657       | 401      | 510      | 200 x 9,1      | 862                       | 1170                              | 1133                                       | 1825               | 655                              | 693                            | 56                       | 61                     |
| 200        | 657       | 401      | 510      | 200 x 10,7     | 1004                      | 1363                              | 1319                                       | 2131               | 768                              | 812                            | 56                       | 62                     |
| 200        | 657       | 401      | 510      | 200 x 12,2     | 1145                      | 1555                              | 1505                                       | 2368               | 813                              | 863                            | 52                       | 57                     |
| 250        | 715       | 459      | 642      | 250 x 9,1      | 1120                      | 1604                              | 1545                                       | 2389               | 785                              | 844                            | 49                       | 55                     |
| 250        | 715       | 459      | 642      | 250 x 10,7     | 1296                      | 1860                              | 1791                                       | 2768               | 908                              | 977                            | 49                       | 55                     |
| 250        | 715       | 459      | 642      | 250 x 12,2     | 1470                      | 2116                              | 2037                                       | 3107               | 992                              | 1071                           | 47                       | 53                     |
| 300        | 913       | 511      | 803      | 300 x 9,1      | 1438                      | 2131                              | 2046                                       | 3343               | 1213                             | 1297                           | 57                       | 63                     |
| 300        | 913       | 511      | 803      | 300 x 10,7     | 1674                      | 2482                              | 2383                                       | 3894               | 1412                             | 1511                           | 57                       | 63                     |
| 300        | 913       | 511      | 803      | 300 x 12,2     | 1910                      | 2833                              | 2721                                       | 4369               | 1536                             | 1648                           | 54                       | 61                     |
| 400        | 1004      | 601      | 931      | 400 x 9,1      | 1874                      | 2989                              | 2853                                       | 4580               | 1590                             | 1726                           | 53                       | 61                     |
| 400        | 1004      | 601      | 931      | 400 x 10,7     | 2171                      | 3472                              | 3314                                       | 5024               | 1551                             | 1710                           | 45                       | 50                     |
| 400        | 1004      | 601      | 931      | 400 x 12,2     | 2468                      | 3955                              | 3774                                       | 5671               | 1716                             | 1897                           | 43                       | 50                     |
| 500        | 1223      | 711      | 1150     | 500 x 9,1      | 2504                      | 4276                              | 4060                                       | 6371               | 2095                             | 2311                           | 49                       | 57                     |
| 500        | 1223      | 711      | 1150     | 500 x 10,7     | 2900                      | 4968                              | 4716                                       | 6992               | 2024                             | 2276                           | 41                       | 48                     |
| 500        | 1223      | 711      | 1150     | 500 x 12,2     | 3295                      | 5658                              | 5370                                       | 7941               | 2283                             | 2571                           | 40                       | 48                     |

# H3838 DF POSEIDON

## SINGLE CARCASS

### Tanker rail dumbel floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 19                       |
| Min. burst pressure    | bar          | 95                       |
| Minimum Bending Radius |              | 4 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 527       | 344 | 417  | 150 x 9,1  | 630                 | 803                         | 782                                  | 1260         | 457                        | 478                      | 57                    | 61                  |
| 150        | 527       | 344 | 417  | 150 x 10,7 | 729                 | 931                         | 907                                  | 1469         | 537                        | 562                      | 58                    | 62                  |
| 150        | 527       | 344 | 417  | 150 x 12,2 | 829                 | 1060                        | 1031                                 | 1636         | 576                        | 604                      | 54                    | 59                  |
| 200        | 657       | 401 | 510  | 200 x 9,1  | 862                 | 1170                        | 1133                                 | 1825         | 655                        | 693                      | 56                    | 61                  |
| 200        | 657       | 401 | 510  | 200 x 10,7 | 1004                | 1363                        | 1319                                 | 2131         | 768                        | 812                      | 56                    | 62                  |
| 200        | 657       | 401 | 510  | 200 x 12,2 | 1145                | 1555                        | 1505                                 | 2368         | 813                        | 863                      | 52                    | 57                  |
| 250        | 715       | 459 | 642  | 250 x 9,1  | 1135                | 1619                        | 1560                                 | 2389         | 770                        | 829                      | 48                    | 53                  |
| 250        | 715       | 459 | 642  | 250 x 10,7 | 1312                | 1876                        | 1807                                 | 2768         | 892                        | 961                      | 48                    | 53                  |
| 250        | 715       | 459 | 642  | 250 x 12,2 | 1489                | 2135                        | 2056                                 | 3107         | 973                        | 1052                     | 46                    | 51                  |
| 300        | 913       | 511 | 803  | 300 x 9,1  | 1457                | 2150                        | 2065                                 | 3343         | 1194                       | 1278                     | 56                    | 62                  |
| 300        | 913       | 511 | 803  | 300 x 10,7 | 1696                | 2504                        | 2405                                 | 3894         | 1390                       | 1489                     | 56                    | 62                  |
| 300        | 913       | 511 | 803  | 300 x 12,2 | 1934                | 2857                        | 2745                                 | 4369         | 1512                       | 1624                     | 53                    | 59                  |
| 400        | 1012      | 609 | 939  | 400 x 9,1  | 1891                | 3006                        | 2870                                 | 4671         | 1665                       | 1801                     | 55                    | 63                  |
| 400        | 1012      | 609 | 939  | 400 x 10,7 | 2195                | 3496                        | 3337                                 | 5127         | 1631                       | 1789                     | 47                    | 52                  |
| 400        | 1012      | 609 | 939  | 400 x 12,2 | 2500                | 3987                        | 3806                                 | 5788         | 1801                       | 1982                     | 45                    | 52                  |
| 500        | 1223      | 711 | 1150 | 500 x 9,1  | 2560                | 4332                        | 4116                                 | 6371         | 2039                       | 2255                     | 47                    | 55                  |
| 500        | 1223      | 711 | 1150 | 500 x 10,7 | 2962                | 5030                        | 4778                                 | 6992         | 1962                       | 2214                     | 39                    | 46                  |
| 500        | 1223      | 711 | 1150 | 500 x 12,2 | 3365                | 5728                        | 5440                                 | 7941         | 2213                       | 2501                     | 39                    | 46                  |

## Tanker rail dumbel floating hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 21                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 105                               |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 4 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |
|                          |                                          | Reserve buoyancy       | min. % 20                             |

## CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|            | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                     |                   |
|            | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150        | 527       | 344 | 417  | 150 x 9,1  | 630                 | 803                         | 782                                  | 1260         | 457                        | 478                      | 57                  | 61                |
| 150        | 527       | 344 | 417  | 150 x 10,7 | 729                 | 931                         | 907                                  | 1469         | 537                        | 562                      | 58                  | 62                |
| 150        | 527       | 344 | 417  | 150 x 12,2 | 829                 | 1060                        | 1031                                 | 1636         | 576                        | 604                      | 54                  | 59                |
| 200        | 657       | 401 | 510  | 200 x 9,1  | 873                 | 1181                        | 1144                                 | 1825         | 644                        | 682                      | 55                  | 60                |
| 200        | 657       | 401 | 510  | 200 x 10,7 | 1016                | 1375                        | 1331                                 | 2131         | 756                        | 800                      | 55                  | 60                |
| 200        | 657       | 401 | 510  | 200 x 12,2 | 1159                | 1569                        | 1519                                 | 2368         | 799                        | 849                      | 51                  | 56                |
| 250        | 715       | 459 | 642  | 250 x 9,1  | 1135                | 1619                        | 1560                                 | 2389         | 770                        | 829                      | 48                  | 53                |
| 250        | 715       | 459 | 642  | 250 x 10,7 | 1312                | 1876                        | 1807                                 | 2768         | 892                        | 961                      | 48                  | 53                |
| 250        | 715       | 459 | 642  | 250 x 12,2 | 1489                | 2135                        | 2056                                 | 3107         | 973                        | 1052                     | 46                  | 51                |
| 300        | 921       | 519 | 811  | 300 x 9,1  | 1520                | 2213                        | 2128                                 | 3421         | 1208                       | 1293                     | 55                  | 61                |
| 300        | 921       | 519 | 811  | 300 x 10,7 | 1771                | 2579                        | 2481                                 | 3984         | 1405                       | 1503                     | 54                  | 61                |
| 300        | 921       | 519 | 811  | 300 x 12,2 | 2023                | 2946                        | 2833                                 | 4471         | 1525                       | 1638                     | 52                  | 58                |
| 400        | 1049      | 609 | 939  | 400 x 9,1  | 1973                | 3088                        | 2952                                 | 4781         | 1694                       | 1830                     | 55                  | 62                |
| 400        | 1049      | 609 | 939  | 400 x 10,7 | 2296                | 3597                        | 3438                                 | 5237         | 1640                       | 1798                     | 46                  | 50                |
| 400        | 1049      | 609 | 939  | 400 x 12,2 | 2619                | 4106                        | 3924                                 | 5898         | 1792                       | 1974                     | 44                  | 50                |
| 500        | 1223      | 711 | 1150 | 500 x 9,1  | 2560                | 4332                        | 4116                                 | 6371         | 2039                       | 2255                     | 47                  | 55                |
| 500        | 1223      | 711 | 1150 | 500 x 10,7 | 2962                | 5030                        | 4778                                 | 6992         | 1962                       | 2214                     | 39                  | 46                |
| 500        | 1223      | 711 | 1150 | 500 x 12,2 | 3365                | 5728                        | 5440                                 | 7941         | 2213                       | 2501                     | 39                  | 46                |



# H3737 FF POSEIDON

## SINGLE CARCASS

### Fully reinforced full floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 15                       |
| Min. burst pressure    | bar          | 75                       |
| Minimum Bending Radius |              | 6 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 408       | 354  | 408  | 150 x 9,1  | 546                 | 719                         | 698                                  | 911          | 192                        | 213                      | 27                    | 30                  |
| 150        | 408       | 354  | 408  | 150 x 10,7 | 626                 | 828                         | 803                                  | 1065         | 237                        | 261                      | 29                    | 33                  |
| 150        | 408       | 354  | 408  | 150 x 12,2 | 705                 | 936                         | 907                                  | 1218         | 282                        | 311                      | 30                    | 34                  |
| 200        | 510       | 455  | 510  | 200 x 9,1  | 818                 | 1126                        | 1089                                 | 1495         | 369                        | 407                      | 33                    | 37                  |
| 200        | 510       | 455  | 510  | 200 x 10,7 | 938                 | 1297                        | 1253                                 | 1749         | 452                        | 495                      | 35                    | 40                  |
| 200        | 510       | 455  | 510  | 200 x 12,2 | 1058                | 1469                        | 1419                                 | 2002         | 534                        | 584                      | 36                    | 41                  |
| 250        | 574       | 513  | 574  | 250 x 9,1  | 1076                | 1560                        | 1501                                 | 1904         | 344                        | 403                      | 22                    | 27                  |
| 250        | 574       | 513  | 574  | 250 x 10,7 | 1232                | 1796                        | 1728                                 | 2227         | 430                        | 499                      | 24                    | 29                  |
| 250        | 574       | 513  | 574  | 250 x 12,2 | 1386                | 2031                        | 1953                                 | 2549         | 518                        | 596                      | 25                    | 31                  |
| 300        | 658       | 598  | 658  | 300 x 9,1  | 1328                | 2021                        | 1936                                 | 2578         | 557                        | 642                      | 28                    | 33                  |
| 300        | 658       | 598  | 658  | 300 x 10,7 | 1515                | 2323                        | 2224                                 | 3017         | 695                        | 793                      | 30                    | 36                  |
| 300        | 658       | 598  | 658  | 300 x 12,2 | 1699                | 2622                        | 2510                                 | 3457         | 835                        | 947                      | 32                    | 38                  |
| 400        | 794       | 731  | 794  | 400 x 9,1  | 1859                | 2974                        | 2838                                 | 3843         | 869                        | 1005                     | 29                    | 35                  |
| 400        | 794       | 731  | 794  | 400 x 10,7 | 2123                | 3424                        | 3265                                 | 4500         | 1076                       | 1235                     | 31                    | 38                  |
| 400        | 794       | 731  | 794  | 400 x 12,2 | 2384                | 3871                        | 3690                                 | 5156         | 1285                       | 1467                     | 33                    | 40                  |
| 500        | 959       | 887  | 959  | 500 x 9,1  | 2712                | 4485                        | 4269                                 | 5651         | 1166                       | 1382                     | 26                    | 32                  |
| 500        | 959       | 887  | 959  | 500 x 10,7 | 3089                | 5157                        | 4905                                 | 6617         | 1460                       | 1712                     | 28                    | 35                  |
| 500        | 959       | 887  | 959  | 500 x 12,2 | 3464                | 5827                        | 5539                                 | 7583         | 1755                       | 2044                     | 30                    | 37                  |
| 600        | 1108      | 1036 | 1108 | 600 x 9,1  | 3626                | 6212                        | 5897                                 | 7662         | 1449                       | 1765                     | 23                    | 30                  |
| 600        | 1108      | 1036 | 1108 | 600 x 10,7 | 4124                | 7141                        | 6773                                 | 8978         | 1837                       | 2205                     | 26                    | 33                  |
| 600        | 1108      | 1036 | 1108 | 600 x 12,2 | 4619                | 8067                        | 7646                                 | 10294        | 2227                       | 2648                     | 28                    | 35                  |

## Fully reinforced full floating hose

| CONSTRUCTION             |                                          | PERFORMANCE            |                                       |
|--------------------------|------------------------------------------|------------------------|---------------------------------------|
| Oil resistant liner      | NBR                                      | Rated Working Pressure | bar 19                                |
| Main reinforcement       | Steel wire cord skimmed with rubber      | Min. burst pressure    | bar 95                                |
| Wire helix               | Embedded in synthetic rubber             | Minimum Bending Radius | 6 x id                                |
| Reinforcing fabric plies | Polyester                                | Max. temp. elong.      | % 2,5                                 |
| Cover                    | Abrasion resistant rubber in Chloroprene | Max. perm. elong.      | % 0,7                                 |
| Fitting                  | Built-in                                 | Aromatic resistance    | up to % 80                            |
|                          |                                          | Fluid temp. range      | °C -20; +82                           |
|                          |                                          | Ambient temp. range    | °C -29; +52                           |
|                          |                                          | Flow velocity          | up to m/s 21                          |
|                          |                                          | Electrically           | as requested continuous/discontinuous |
|                          |                                          | Reserve buoyancy       | min. % 20                             |

| CHARACTERISTICS                                                                     |           |      |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |      |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 408       | 354  | 408  | 150 x 9,1  | 546                 | 719                         | 698                                  | 911          | 192                        | 213                      | 27                    | 30                  |
| 150                                                                                 | 408       | 354  | 408  | 150 x 10,7 | 626                 | 828                         | 803                                  | 1065         | 237                        | 261                      | 29                    | 33                  |
| 150                                                                                 | 408       | 354  | 408  | 150 x 12,2 | 705                 | 936                         | 907                                  | 1218         | 282                        | 311                      | 30                    | 34                  |
| 200                                                                                 | 510       | 455  | 510  | 200 x 9,1  | 818                 | 1126                        | 1089                                 | 1495         | 369                        | 407                      | 33                    | 37                  |
| 200                                                                                 | 510       | 455  | 510  | 200 x 10,7 | 938                 | 1297                        | 1253                                 | 1749         | 452                        | 495                      | 35                    | 40                  |
| 200                                                                                 | 510       | 455  | 510  | 200 x 12,2 | 1058                | 1469                        | 1419                                 | 2002         | 534                        | 584                      | 36                    | 41                  |
| 250                                                                                 | 574       | 513  | 574  | 250 x 9,1  | 1091                | 1575                        | 1516                                 | 1904         | 329                        | 388                      | 21                    | 26                  |
| 250                                                                                 | 574       | 513  | 574  | 250 x 10,7 | 1248                | 1812                        | 1744                                 | 2227         | 414                        | 483                      | 23                    | 28                  |
| 250                                                                                 | 574       | 513  | 574  | 250 x 12,2 | 1404                | 2049                        | 1971                                 | 2549         | 500                        | 578                      | 24                    | 29                  |
| 300                                                                                 | 658       | 598  | 658  | 300 x 9,1  | 1348                | 2041                        | 1956                                 | 2578         | 537                        | 622                      | 26                    | 32                  |
| 300                                                                                 | 658       | 598  | 658  | 300 x 10,7 | 1537                | 2345                        | 2246                                 | 3017         | 673                        | 771                      | 29                    | 34                  |
| 300                                                                                 | 658       | 598  | 658  | 300 x 12,2 | 1724                | 2647                        | 2535                                 | 3457         | 810                        | 922                      | 31                    | 36                  |
| 400                                                                                 | 802       | 739  | 802  | 400 x 9,1  | 1940                | 3055                        | 2919                                 | 3929         | 874                        | 1010                     | 29                    | 35                  |
| 400                                                                                 | 802       | 739  | 802  | 400 x 10,7 | 2218                | 3519                        | 3361                                 | 4600         | 1080                       | 1239                     | 31                    | 37                  |
| 400                                                                                 | 802       | 739  | 802  | 400 x 12,2 | 2497                | 3983                        | 3802                                 | 5271         | 1287                       | 1469                     | 32                    | 39                  |
| 500                                                                                 | 959       | 887  | 959  | 500 x 9,1  | 2768                | 4541                        | 4325                                 | 5651         | 1110                       | 1326                     | 24                    | 31                  |
| 500                                                                                 | 959       | 887  | 959  | 500 x 10,7 | 3152                | 5220                        | 4968                                 | 6617         | 1397                       | 1649                     | 27                    | 33                  |
| 500                                                                                 | 959       | 887  | 959  | 500 x 12,2 | 3534                | 5897                        | 5609                                 | 7583         | 1685                       | 1974                     | 29                    | 35                  |
| 600                                                                                 | 1108      | 1036 | 1108 | 600 x 9,1  | 3703                | 6289                        | 5974                                 | 7662         | 1372                       | 1688                     | 22                    | 28                  |
| 600                                                                                 | 1108      | 1036 | 1108 | 600 x 10,7 | 4211                | 7228                        | 6860                                 | 8978         | 1750                       | 2118                     | 24                    | 31                  |
| 600                                                                                 | 1108      | 1036 | 1108 | 600 x 12,2 | 4715                | 8163                        | 7742                                 | 10294        | 2131                       | 2552                     | 26                    | 33                  |

# H3737 FF POSEIDON

## SINGLE CARCASS

### Fully reinforced full floating hose

#### CONSTRUCTION

|                          |                                          |
|--------------------------|------------------------------------------|
| Oil resistant liner      | NBR                                      |
| Main reinforcement       | Steel wire cord skimmed with rubber      |
| Wire helix               | Embedded in synthetic rubber             |
| Reinforcing fabric plies | Polyester                                |
| Cover                    | Abrasion resistant rubber in Chloroprene |
| Fitting                  | Built-in                                 |

#### PERFORMANCE

|                        |              |                          |
|------------------------|--------------|--------------------------|
| Rated Working Pressure | bar          | 21                       |
| Min. burst pressure    | bar          | 105                      |
| Minimum Bending Radius |              | 6 x id                   |
| Max. temp. elong.      | %            | 2,5                      |
| Max. perm. elong.      | %            | 0,7                      |
| Aromatic resistance    | up to        | % 80                     |
| Fluid temp. range      | °C           | -20; +82                 |
| Ambient temp. range    | °C           | -29; +52                 |
| Flow velocity          | up to        | m/s 21                   |
| Electrically           | as requested | continuous/discontinuous |
| Reserve buoyancy       | min.         | % 20                     |

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150        | 408       | 354  | 408  | 150 x 9,1  | 546                 | 719                         | 698                                  | 911          | 192                        | 213                      | 27                    | 30                  |
| 150        | 408       | 354  | 408  | 150 x 10,7 | 626                 | 828                         | 803                                  | 1065         | 237                        | 261                      | 29                    | 33                  |
| 150        | 408       | 354  | 408  | 150 x 12,2 | 705                 | 936                         | 907                                  | 1218         | 282                        | 311                      | 30                    | 34                  |
| 200        | 510       | 455  | 510  | 200 x 9,1  | 828                 | 1136                        | 1099                                 | 1495         | 359                        | 397                      | 32                    | 36                  |
| 200        | 510       | 455  | 510  | 200 x 10,7 | 951                 | 1310                        | 1266                                 | 1749         | 439                        | 482                      | 33                    | 38                  |
| 200        | 510       | 455  | 510  | 200 x 12,2 | 1072                | 1483                        | 1433                                 | 2002         | 520                        | 570                      | 35                    | 40                  |
| 250        | 574       | 513  | 574  | 250 x 9,1  | 1091                | 1575                        | 1516                                 | 1904         | 329                        | 388                      | 21                    | 26                  |
| 250        | 574       | 513  | 574  | 250 x 10,7 | 1248                | 1812                        | 1744                                 | 2227         | 414                        | 483                      | 23                    | 28                  |
| 250        | 574       | 513  | 574  | 250 x 12,2 | 1404                | 2049                        | 1971                                 | 2549         | 500                        | 578                      | 24                    | 29                  |
| 300        | 667       | 606  | 666  | 300 x 9,1  | 1415                | 2107                        | 2023                                 | 2648         | 541                        | 625                      | 26                    | 31                  |
| 300        | 667       | 606  | 666  | 300 x 10,7 | 1616                | 2424                        | 2325                                 | 3099         | 676                        | 774                      | 28                    | 33                  |
| 300        | 667       | 606  | 666  | 300 x 12,2 | 1817                | 2740                        | 2627                                 | 3550         | 811                        | 923                      | 30                    | 35                  |
| 400        | 802       | 739  | 802  | 400 x 9,1  | 1978                | 3093                        | 2957                                 | 3929         | 836                        | 972                      | 27                    | 33                  |
| 400        | 802       | 739  | 802  | 400 x 10,7 | 2262                | 3563                        | 3405                                 | 4600         | 1036                       | 1195                     | 29                    | 35                  |
| 400        | 802       | 739  | 802  | 400 x 12,2 | 2546                | 4032                        | 3851                                 | 5271         | 1238                       | 1420                     | 31                    | 37                  |
| 500        | 959       | 887  | 959  | 500 x 9,1  | 2768                | 4541                        | 4325                                 | 5651         | 1110                       | 1326                     | 24                    | 31                  |
| 500        | 959       | 887  | 959  | 500 x 10,7 | 3152                | 5220                        | 4968                                 | 6617         | 1397                       | 1649                     | 27                    | 33                  |
| 500        | 959       | 887  | 959  | 500 x 12,2 | 3534                | 5897                        | 5609                                 | 7583         | 1685                       | 1974                     | 29                    | 35                  |
| 600        | 1125      | 1044 | 1125 | 600 x 9,1  | 3858                | 6444                        | 6128                                 | 7796         | 1352                       | 1668                     | 21                    | 27                  |
| 600        | 1125      | 1044 | 1125 | 600 x 10,7 | 4392                | 7409                        | 7041                                 | 9133         | 1724                       | 2092                     | 23                    | 30                  |
| 600        | 1125      | 1044 | 1125 | 600 x 12,2 | 4922                | 8370                        | 7949                                 | 10470        | 2100                       | 2520                     | 25                    | 32                  |

## ***Primary and secondary carcass***

The Manuli Double Carcass hoses consist of the standard submarine hose design with an additional second Carcass designed to contain any product which may escape from the standard Carcass as a result of a slow leak or sudden failure of the standard Carcass.

## ***The double carcass hoses is designed with two independent carcasses***

Manuli's Double Carcass hoses fulfils all the requirements of GMPHOM 2009.

The two carcasses are independent . Double vulcanization for Double Carcass Hoses. Once the first carcass is built the hose is subjected to the 1st Vulcanization. Only if the result of the inspection of the 1st carcass is satisfactory the second carcass can be manufactured.

## ***Reinforcement***

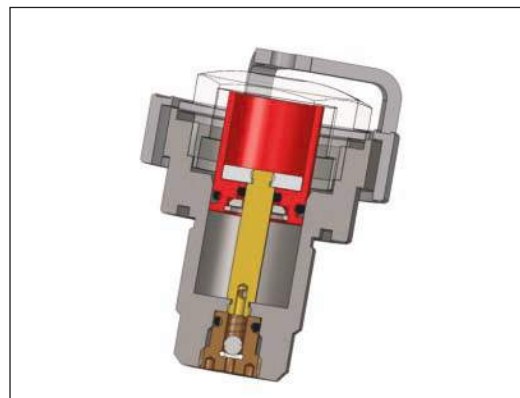
Using steel wire cords Manuli designs the primary carcass of double carcass hoses with low elongations and zero twist still proving a hose with high flexibility. The reinforcement of the secondary carcass consists of high tensile and high elongation nylon capable to withstand the energy coming from an eventual burst of primary carcass. The fatigue characteristics of the combination of the steel wire cord for the primary carcass with the high tensile / high elongation nylon for the secondary carcass and the stability of construction in working conditions result in a longer working life for the hose.

## ***Volume between the two carcasses***

Manuli double carcass hose is designed so that each carcass can contain the Rated Working Pressure; the two carcasses are arranged such that there is a volume between the primary and secondary carcasses. Any product that escapes from the primary carcass can accumulate between the carcasses and travel freely along the entire hose length.

## ***New mechanical Leak Detectors for Double Carcass Hoses***

The new Manuli mechanical Leak Detectors called FAD (Failure Alert Device) have been proven be simple, reliable and with no need of maintenance. Once activated can be used again.



# SUBMARINE

## DOUBLE CARCASS



**H3006 UF DASH POSEIDON** pag. 56  
Double carcass one end reinforced submarine hose



**H3030 UF DASH POSEIDON** pag. 59  
Double carcass mainline submarine hose



**H3232 UF DASH POSEIDON** pag. 62  
Double carcass reducer submarine hose



**H3030T UF DASH POSEIDON** pag. 65  
Double carcass tail submarine hose



**H3838 UF DASH POSEIDON** pag. 68  
Double carcass tanker rail submarine hose



**H3737 UF DASH POSEIDON** pag. 71  
Double carcass fully reinforced submarine hose

### ON REQUEST

**the submarine hoses will be build with locations collars  
for the application of deep water floats.**



**On request hoses for special applications can be manufactured**



**H3006 HF DASH POSEIDON** pag. 74  
Double carcass one end reinforced half floating hose (first of buoy)



**H3030 FF DASH POSEIDON** pag. 77  
Double carcass mainline full floating hose



**H3232 FF DASH POSEIDON** pag. 80  
Double carcass reducer full floating hose



**H3030T FF DASH POSEIDON** pag. 83  
Double carcass tail full floating hose



**H3838 DF DASH POSEIDON** pag. 86  
Double carcass tanker rail dumbel floating hose



**H3737 FF DASH POSEIDON** pag. 89  
Double carcass fully reinforced full floating hose



On request hoses for special applications can be manufactured



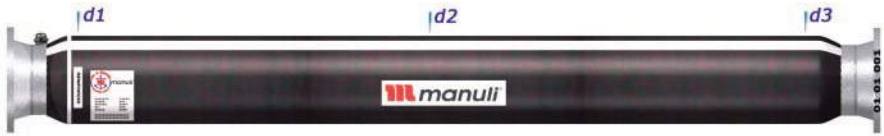
# H3006 UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass one end reinforced submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 373       | 299 | 365 | 150 x 9,1  | 623                 | 797                         | 776                                  | 680          | 117                           | 95                          |
| 150                                                                                 | 373       | 299 | 365 | 150 x 10,7 | 710                 | 912                         | 887                                  | 790          | 122                           | 97                          |
| 150                                                                                 | 373       | 299 | 365 | 150 x 12,2 | 797                 | 1028                        | 1000                                 | 900          | 128                           | 100                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 9,1  | 880                 | 1189                        | 1151                                 | 1035         | 154                           | 117                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 10,7 | 1002                | 1363                        | 1319                                 | 1203         | 161                           | 117                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 12,2 | 1129                | 1541                        | 1491                                 | 1371         | 170                           | 120                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 9,1  | 1180                | 1666                        | 1607                                 | 1383         | 283                           | 224                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 10,7 | 1343                | 1910                        | 1841                                 | 1607         | 302                           | 233                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 12,2 | 1509                | 2158                        | 2079                                 | 1832         | 325                           | 246                         |
| 300                                                                                 | 561       | 478 | 546 | 300 x 9,1  | 1405                | 2099                        | 2014                                 | 1719         | 380                           | 296                         |
| 300                                                                                 | 561       | 478 | 546 | 300 x 10,7 | 1593                | 2402                        | 2303                                 | 1999         | 403                           | 304                         |
| 300                                                                                 | 561       | 478 | 546 | 300 x 12,2 | 1783                | 2708                        | 2595                                 | 2280         | 428                           | 315                         |
| 400                                                                                 | 681       | 582 | 658 | 400 x 9,1  | 2008                | 3119                        | 2984                                 | 2540         | 579                           | 444                         |
| 400                                                                                 | 681       | 582 | 658 | 400 x 10,7 | 2277                | 3574                        | 3415                                 | 2955         | 619                           | 461                         |
| 400                                                                                 | 681       | 582 | 658 | 400 x 12,2 | 2551                | 4032                        | 3851                                 | 3369         | 663                           | 482                         |
| 500                                                                                 | 806       | 698 | 775 | 500 x 9,1  | 2860                | 4628                        | 4412                                 | 3648         | 980                           | 764                         |
| 500                                                                                 | 806       | 698 | 775 | 500 x 10,7 | 3233                | 5295                        | 5043                                 | 4245         | 1049                          | 798                         |
| 500                                                                                 | 806       | 698 | 775 | 500 x 12,2 | 3617                | 5974                        | 5687                                 | 4843         | 1131                          | 844                         |
| 600                                                                                 | 934       | 816 | 896 | 600 x 9,1  | 3883                | 6463                        | 6148                                 | 4983         | 1480                          | 1165                        |
| 600                                                                                 | 934       | 816 | 896 | 600 x 10,7 | 4379                | 7389                        | 7021                                 | 5801         | 1588                          | 1221                        |
| 600                                                                                 | 934       | 816 | 896 | 600 x 12,2 | 4891                | 8331                        | 7911                                 | 6618         | 1713                          | 1293                        |

### Double carcass one end reinforced submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 383       | 309 | 375 | 150 x 9,1  | 693                 | 867                         | 846                                  | 724          | 143                           | 122                         |
| 150                                                                                 | 383       | 309 | 375 | 150 x 10,7 | 792                 | 994                         | 969                                  | 841          | 153                           | 129                         |
| 150                                                                                 | 383       | 309 | 375 | 150 x 12,2 | 891                 | 1122                        | 1094                                 | 958          | 164                           | 136                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 9,1  | 880                 | 1189                        | 1151                                 | 1035         | 154                           | 117                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 10,7 | 1002                | 1363                        | 1319                                 | 1203         | 161                           | 117                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 12,2 | 1129                | 1541                        | 1491                                 | 1371         | 170                           | 120                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 9,1  | 1194                | 1681                        | 1621                                 | 1383         | 298                           | 239                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 10,7 | 1359                | 1926                        | 1857                                 | 1607         | 319                           | 250                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 12,2 | 1528                | 2176                        | 2097                                 | 1832         | 344                           | 265                         |
| 300                                                                                 | 580       | 488 | 565 | 300 x 9,1  | 1515                | 2209                        | 2124                                 | 1792         | 416                           | 332                         |
| 300                                                                                 | 580       | 488 | 565 | 300 x 10,7 | 1720                | 2529                        | 2430                                 | 2084         | 445                           | 346                         |
| 300                                                                                 | 580       | 488 | 565 | 300 x 12,2 | 1927                | 2852                        | 2739                                 | 2376         | 476                           | 363                         |
| 400                                                                                 | 689       | 590 | 666 | 400 x 9,1  | 2088                | 3199                        | 3064                                 | 2609         | 590                           | 454                         |
| 400                                                                                 | 689       | 590 | 666 | 400 x 10,7 | 2373                | 3669                        | 3511                                 | 3036         | 634                           | 476                         |
| 400                                                                                 | 689       | 590 | 666 | 400 x 12,2 | 2662                | 4144                        | 3963                                 | 3462         | 681                           | 501                         |
| 500                                                                                 | 815       | 707 | 785 | 500 x 9,1  | 3042                | 4810                        | 4594                                 | 3748         | 1061                          | 846                         |
| 500                                                                                 | 815       | 707 | 785 | 500 x 10,7 | 3443                | 5505                        | 5254                                 | 4362         | 1143                          | 892                         |
| 500                                                                                 | 815       | 707 | 785 | 500 x 12,2 | 3857                | 6213                        | 5926                                 | 4976         | 1237                          | 950                         |
| 600                                                                                 | 934       | 816 | 896 | 600 x 9,1  | 3960                | 6540                        | 6226                                 | 4983         | 1557                          | 1242                        |
| 600                                                                                 | 934       | 816 | 896 | 600 x 10,7 | 4465                | 7475                        | 7108                                 | 5801         | 1674                          | 1307                        |
| 600                                                                                 | 934       | 816 | 896 | 600 x 12,2 | 4987                | 8427                        | 8007                                 | 6618         | 1809                          | 1389                        |

# H3006 UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass one end reinforced submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 21                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 105                      |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 383       | 309 | 375 | 150 x 9,1  | 693                 | 867                         | 846                                  | 724          | 143                           | 122                         |
| 150                                                                                 | 383       | 309 | 375 | 150 x 10,7 | 792                 | 994                         | 969                                  | 841          | 153                           | 129                         |
| 150                                                                                 | 383       | 309 | 375 | 150 x 12,2 | 891                 | 1122                        | 1094                                 | 958          | 164                           | 136                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 9,1  | 890                 | 1200                        | 1162                                 | 1035         | 165                           | 127                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 10,7 | 1015                | 1376                        | 1332                                 | 1203         | 173                           | 129                         |
| 200                                                                                 | 448       | 370 | 433 | 200 x 12,2 | 1142                | 1555                        | 1505                                 | 1371         | 184                           | 134                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 9,1  | 1194                | 1680                        | 1621                                 | 1383         | 297                           | 238                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 10,7 | 1358                | 1925                        | 1856                                 | 1607         | 318                           | 249                         |
| 250                                                                                 | 513       | 428 | 498 | 250 x 12,2 | 1527                | 2175                        | 2096                                 | 1832         | 343                           | 264                         |
| 300                                                                                 | 588       | 496 | 573 | 300 x 9,1  | 1581                | 2275                        | 2191                                 | 1851         | 424                           | 340                         |
| 300                                                                                 | 588       | 496 | 573 | 300 x 10,7 | 1799                | 2609                        | 2510                                 | 2152         | 456                           | 357                         |
| 300                                                                                 | 588       | 496 | 573 | 300 x 12,2 | 2020                | 2945                        | 2832                                 | 2454         | 491                           | 378                         |
| 400                                                                                 | 689       | 590 | 666 | 400 x 9,1  | 2127                | 3238                        | 3102                                 | 2609         | 628                           | 493                         |
| 400                                                                                 | 689       | 590 | 666 | 400 x 10,7 | 2417                | 3713                        | 3555                                 | 3036         | 678                           | 519                         |
| 400                                                                                 | 689       | 590 | 666 | 400 x 12,2 | 2712                | 4193                        | 4012                                 | 3462         | 731                           | 550                         |
| 500                                                                                 | 815       | 707 | 785 | 500 x 9,1  | 3042                | 4810                        | 4594                                 | 3748         | 1061                          | 846                         |
| 500                                                                                 | 815       | 707 | 785 | 500 x 10,7 | 3443                | 5505                        | 5254                                 | 4362         | 1143                          | 892                         |
| 500                                                                                 | 815       | 707 | 785 | 500 x 12,2 | 3857                | 6213                        | 5926                                 | 4976         | 1237                          | 950                         |
| 600                                                                                 | 970       | 834 | 932 | 600 x 9,1  | 4268                | 6848                        | 6533                                 | 5214         | 1634                          | 1319                        |
| 600                                                                                 | 970       | 834 | 932 | 600 x 10,7 | 4825                | 7835                        | 7468                                 | 6067         | 1768                          | 1401                        |
| 600                                                                                 | 970       | 834 | 932 | 600 x 12,2 | 5398                | 8838                        | 8419                                 | 6920         | 1918                          | 1499                        |

### Double carcass mainline submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 366       | 296 | 366 | 150 x 9,1  | 608                 | 781                         | 760                                  | 663          | 118                           | 97                          |
| 150                                                                                 | 366       | 296 | 366 | 150 x 10,7 | 691                 | 893                         | 869                                  | 770          | 123                           | 98                          |
| 150                                                                                 | 366       | 296 | 366 | 150 x 12,2 | 774                 | 1005                        | 977                                  | 878          | 128                           | 100                         |
| 200                                                                                 | 433       | 363 | 433 | 200 x 9,1  | 828                 | 1137                        | 1100                                 | 993          | 144                           | 107                         |
| 200                                                                                 | 433       | 363 | 433 | 200 x 10,7 | 942                 | 1303                        | 1259                                 | 1154         | 149                           | 105                         |
| 200                                                                                 | 433       | 363 | 433 | 200 x 12,2 | 1056                | 1469                        | 1418                                 | 1316         | 153                           | 103                         |
| 250                                                                                 | 498       | 421 | 498 | 250 x 9,1  | 1116                | 1602                        | 1543                                 | 1334         | 267                           | 208                         |
| 250                                                                                 | 498       | 421 | 498 | 250 x 10,7 | 1268                | 1835                        | 1766                                 | 1551         | 283                           | 214                         |
| 250                                                                                 | 498       | 421 | 498 | 250 x 12,2 | 1419                | 2068                        | 1989                                 | 1768         | 299                           | 220                         |
| 300                                                                                 | 539       | 471 | 539 | 300 x 9,1  | 1348                | 2042                        | 1957                                 | 1662         | 380                           | 295                         |
| 300                                                                                 | 539       | 471 | 539 | 300 x 10,7 | 1525                | 2335                        | 2236                                 | 1934         | 401                           | 302                         |
| 300                                                                                 | 539       | 471 | 539 | 300 x 12,2 | 1703                | 2628                        | 2515                                 | 2205         | 422                           | 310                         |
| 400                                                                                 | 642       | 570 | 642 | 400 x 9,1  | 1868                | 2979                        | 2844                                 | 2430         | 549                           | 414                         |
| 400                                                                                 | 642       | 570 | 642 | 400 x 10,7 | 2115                | 3411                        | 3253                                 | 2828         | 583                           | 425                         |
| 400                                                                                 | 642       | 570 | 642 | 400 x 12,2 | 2362                | 3843                        | 3662                                 | 3226         | 617                           | 436                         |
| 500                                                                                 | 774       | 682 | 774 | 500 x 9,1  | 2634                | 4402                        | 4186                                 | 3487         | 914                           | 699                         |
| 500                                                                                 | 774       | 682 | 774 | 500 x 10,7 | 2970                | 5032                        | 4781                                 | 4058         | 974                           | 722                         |
| 500                                                                                 | 774       | 682 | 774 | 500 x 12,2 | 3306                | 5663                        | 5375                                 | 4629         | 1033                          | 746                         |
| 600                                                                                 | 895       | 797 | 895 | 600 x 9,1  | 3644                | 6224                        | 5909                                 | 4751         | 1474                          | 1159                        |
| 600                                                                                 | 895       | 797 | 895 | 600 x 10,7 | 4101                | 7111                        | 6744                                 | 5529         | 1582                          | 1215                        |
| 600                                                                                 | 895       | 797 | 895 | 600 x 12,2 | 4558                | 7998                        | 7579                                 | 6308         | 1690                          | 1270                        |

# H3030 UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass mainline submarine hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 19                       |
| Min. burst pressure                         | bar          | 95                       |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 4 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS

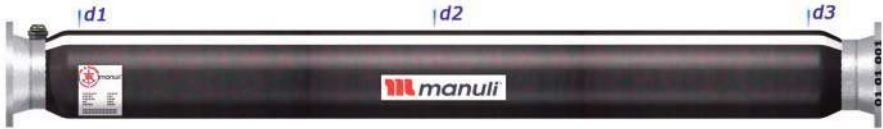


| Nom. diam. | Hose O.D. |     |     | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|------------|-----------|-----|-----|----------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|            | D1        | D2  | D3  |                |                           |                                   |                                            |                    |                                     |                                   |
|            | mm        | mm  | mm  |                |                           |                                   |                                            |                    |                                     |                                   |
| 150        | 375       | 305 | 375 | 150 x 9,1      | 676                       | 850                               | 829                                        | 706                | 144                                 | 122                               |
| 150        | 375       | 305 | 375 | 150 x 10,7     | 772                       | 974                               | 949                                        | 821                | 153                                 | 129                               |
| 150        | 375       | 305 | 375 | 150 x 12,2     | 867                       | 1098                              | 1070                                       | 935                | 163                                 | 135                               |
| 200        | 433       | 363 | 433 | 200 x 9,1      | 828                       | 1137                              | 1100                                       | 993                | 144                                 | 107                               |
| 200        | 433       | 363 | 433 | 200 x 10,7     | 942                       | 1303                              | 1259                                       | 1154               | 149                                 | 105                               |
| 200        | 433       | 363 | 433 | 200 x 12,2     | 1056                      | 1469                              | 1418                                       | 1316               | 153                                 | 103                               |
| 250        | 498       | 421 | 498 | 250 x 9,1      | 1131                      | 1617                              | 1557                                       | 1334               | 282                                 | 223                               |
| 250        | 498       | 421 | 498 | 250 x 10,7     | 1284                      | 1851                              | 1782                                       | 1551               | 300                                 | 231                               |
| 250        | 498       | 421 | 498 | 250 x 12,2     | 1438                      | 2086                              | 2007                                       | 1768               | 318                                 | 239                               |
| 300        | 562       | 477 | 562 | 300 x 9,1      | 1456                      | 2150                              | 2065                                       | 1718               | 432                                 | 348                               |
| 300        | 562       | 477 | 562 | 300 x 10,7     | 1650                      | 2460                              | 2361                                       | 1997               | 463                                 | 364                               |
| 300        | 562       | 477 | 562 | 300 x 12,2     | 1845                      | 2770                              | 2657                                       | 2277               | 493                                 | 380                               |
| 400        | 650       | 578 | 650 | 400 x 9,1      | 1946                      | 3057                              | 2921                                       | 2498               | 559                                 | 424                               |
| 400        | 650       | 578 | 650 | 400 x 10,7     | 2208                      | 3504                              | 3346                                       | 2907               | 597                                 | 439                               |
| 400        | 650       | 578 | 650 | 400 x 12,2     | 2470                      | 3951                              | 3771                                       | 3317               | 635                                 | 454                               |
| 500        | 783       | 692 | 783 | 500 x 9,1      | 2814                      | 4581                              | 4366                                       | 3585               | 996                                 | 780                               |
| 500        | 783       | 692 | 783 | 500 x 10,7     | 3178                      | 5240                              | 4989                                       | 4172               | 1068                                | 816                               |
| 500        | 783       | 692 | 783 | 500 x 12,2     | 3542                      | 5899                              | 5611                                       | 4760               | 1139                                | 852                               |
| 600        | 895       | 797 | 895 | 600 x 9,1      | 3721                      | 6301                              | 5987                                       | 4751               | 1551                                | 1236                              |
| 600        | 895       | 797 | 895 | 600 x 10,7     | 4188                      | 7198                              | 6831                                       | 5529               | 1668                                | 1301                              |
| 600        | 895       | 797 | 895 | 600 x 12,2     | 4654                      | 8094                              | 7675                                       | 6308               | 1786                                | 1366                              |

### Double carcass mainline submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |                                       |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|---------------------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar 21                                |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar 105                               |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi 550                               |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      | 4 x id                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | % 2,5                                 |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | % 0,7                                 |
|                                               |                                          | Aromatic resistance                         | up to % 80                            |
|                                               |                                          | Fluid temp. range                           | °C -20; +82                           |
|                                               |                                          | Ambient temp. range                         | °C -29; +52                           |
|                                               |                                          | Flow velocity                               | up to m/s 21                          |
|                                               |                                          | Electrically                                | as requested continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 375       | 305 | 375 | 150 x 9,1  | 676                 | 850                         | 829                                  | 706          | 144                           | 122                         |
| 150                                                                                 | 375       | 305 | 375 | 150 x 10,7 | 772                 | 974                         | 949                                  | 821          | 153                           | 129                         |
| 150                                                                                 | 375       | 305 | 375 | 150 x 12,2 | 867                 | 1098                        | 1070                                 | 935          | 163                           | 135                         |
| 200                                                                                 | 433       | 363 | 433 | 200 x 9,1  | 839                 | 1148                        | 1110                                 | 993          | 155                           | 117                         |
| 200                                                                                 | 433       | 363 | 433 | 200 x 10,7 | 954                 | 1315                        | 1271                                 | 1154         | 161                           | 117                         |
| 200                                                                                 | 433       | 363 | 433 | 200 x 12,2 | 1070                | 1482                        | 1432                                 | 1316         | 167                           | 116                         |
| 250                                                                                 | 498       | 421 | 498 | 250 x 9,1  | 1131                | 1617                        | 1557                                 | 1334         | 282                           | 223                         |
| 250                                                                                 | 498       | 421 | 498 | 250 x 10,7 | 1284                | 1851                        | 1782                                 | 1551         | 300                           | 231                         |
| 250                                                                                 | 498       | 421 | 498 | 250 x 12,2 | 1438                | 2086                        | 2007                                 | 1768         | 318                           | 239                         |
| 300                                                                                 | 558       | 488 | 558 | 300 x 9,1  | 1518                | 2212                        | 2127                                 | 1788         | 423                           | 339                         |
| 300                                                                                 | 558       | 488 | 558 | 300 x 10,7 | 1724                | 2534                        | 2435                                 | 2081         | 453                           | 354                         |
| 300                                                                                 | 558       | 488 | 558 | 300 x 12,2 | 1931                | 2856                        | 2743                                 | 2373         | 483                           | 370                         |
| 400                                                                                 | 650       | 578 | 650 | 400 x 9,1  | 1984                | 3095                        | 2960                                 | 2498         | 597                           | 462                         |
| 400                                                                                 | 650       | 578 | 650 | 400 x 10,7 | 2252                | 3548                        | 3390                                 | 2907         | 641                           | 483                         |
| 400                                                                                 | 650       | 578 | 650 | 400 x 12,2 | 2519                | 4001                        | 3820                                 | 3317         | 684                           | 503                         |
| 500                                                                                 | 783       | 692 | 783 | 500 x 9,1  | 2814                | 4581                        | 4366                                 | 3585         | 996                           | 780                         |
| 500                                                                                 | 783       | 692 | 783 | 500 x 10,7 | 3178                | 5240                        | 4989                                 | 4172         | 1068                          | 816                         |
| 500                                                                                 | 783       | 692 | 783 | 500 x 12,2 | 3542                | 5899                        | 5611                                 | 4760         | 1139                          | 852                         |
| 600                                                                                 | 930       | 814 | 930 | 600 x 9,1  | 4024                | 6604                        | 6290                                 | 4975         | 1629                          | 1314                        |
| 600                                                                                 | 930       | 814 | 930 | 600 x 10,7 | 4542                | 7552                        | 7185                                 | 5789         | 1762                          | 1395                        |
| 600                                                                                 | 930       | 814 | 930 | 600 x 12,2 | 5059                | 8499                        | 8080                                 | 6603         | 1896                          | 1477                        |



# H3232 UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass reducer submarine hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 15                       |
| Min. burst pressure                         | bar          | 75                       |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 4 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS



| Nom. diam.     | Hose O.D. |          |          | Size<br>mm x m        | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|----------------|-----------|----------|----------|-----------------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|                | D1<br>mm  | D2<br>mm | D3<br>mm |                       |                           |                                   |                                            |                    |                                     |                                   |
| <b>200/150</b> | 373       | 299      | 365      | <b>200/150 x 9,1</b>  | 634                       | 807                               | 786                                        | 680                | 127                                 | 106                               |
| <b>200/150</b> | 373       | 299      | 365      | <b>200/150 x 10,7</b> | 720                       | 923                               | 898                                        | 790                | 133                                 | 108                               |
| <b>200/150</b> | 373       | 299      | 365      | <b>200/150 x 12,2</b> | 807                       | 1039                              | 1010                                       | 900                | 139                                 | 111                               |
| <b>250/200</b> | 448       | 370      | 433      | <b>250/200 x 9,1</b>  | 892                       | 1202                              | 1164                                       | 1035               | 167                                 | 129                               |
| <b>250/200</b> | 448       | 370      | 433      | <b>250/200 x 10,7</b> | 1015                      | 1376                              | 1332                                       | 1203               | 173                                 | 129                               |
| <b>250/200</b> | 448       | 370      | 433      | <b>250/200 x 12,2</b> | 1141                      | 1554                              | 1503                                       | 1371               | 183                                 | 133                               |
| <b>300/250</b> | 513       | 428      | 498      | <b>300/250 x 9,1</b>  | 1202                      | 1688                              | 1629                                       | 1383               | 306                                 | 246                               |
| <b>300/250</b> | 513       | 428      | 498      | <b>300/250 x 10,7</b> | 1365                      | 1932                              | 1863                                       | 1607               | 325                                 | 255                               |
| <b>300/250</b> | 513       | 428      | 498      | <b>300/250 x 12,2</b> | 1532                      | 2180                              | 2101                                       | 1832               | 348                                 | 268                               |
| <b>400/300</b> | 561       | 478      | 546      | <b>400/300 x 9,1</b>  | 1440                      | 2134                              | 2049                                       | 1719               | 415                                 | 330                               |
| <b>400/300</b> | 561       | 478      | 546      | <b>400/300 x 10,7</b> | 1628                      | 2437                              | 2338                                       | 1999               | 438                                 | 339                               |
| <b>400/300</b> | 561       | 478      | 546      | <b>400/300 x 12,2</b> | 1818                      | 2743                              | 2630                                       | 2280               | 463                                 | 350                               |
| <b>500/400</b> | 681       | 582      | 658      | <b>500/400 x 9,1</b>  | 2054                      | 3165                              | 3029                                       | 2540               | 625                                 | 489                               |
| <b>500/400</b> | 681       | 582      | 658      | <b>500/400 x 10,7</b> | 2323                      | 3619                              | 3461                                       | 2955               | 665                                 | 506                               |
| <b>500/400</b> | 681       | 582      | 658      | <b>500/400 x 12,2</b> | 2596                      | 4078                              | 3897                                       | 3369               | 708                                 | 528                               |
| <b>600/500</b> | 806       | 698      | 775      | <b>600/500 x 9,1</b>  | 2913                      | 4681                              | 4465                                       | 3648               | 1033                                | 817                               |
| <b>600/500</b> | 806       | 698      | 775      | <b>600/500 x 10,7</b> | 3286                      | 5348                              | 5096                                       | 4245               | 1102                                | 851                               |
| <b>600/500</b> | 806       | 698      | 775      | <b>600/500 x 12,2</b> | 3671                      | 6027                              | 5740                                       | 4843               | 1184                                | 897                               |

### Double carcass reducer submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |          |          |                |                           |                                   |                                            |                    |                                     |                                   |
|-------------------------------------------------------------------------------------|-----------|----------|----------|----------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|  |           |          |          |                |                           |                                   |                                            |                    |                                     |                                   |
| Nom. diam.                                                                          | Hose O.D. |          |          | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|                                                                                     | D1<br>mm  | D2<br>mm | D3<br>mm |                |                           |                                   |                                            |                    |                                     |                                   |
| 200/150                                                                             | 383       | 309      | 375      | 200/150 x 9,1  | 704                       | 878                               | 856                                        | 724                | 154                                 | 133                               |
| 200/150                                                                             | 383       | 309      | 375      | 200/150 x 10,7 | 802                       | 1005                              | 980                                        | 841                | 164                                 | 139                               |
| 200/150                                                                             | 383       | 309      | 375      | 200/150 x 12,2 | 902                       | 1133                              | 1105                                       | 958                | 175                                 | 147                               |
| 250/200                                                                             | 448       | 370      | 433      | 250/200 x 9,1  | 892                       | 1202                              | 1164                                       | 1035               | 167                                 | 129                               |
| 250/200                                                                             | 448       | 370      | 433      | 250/200 x 10,7 | 1015                      | 1376                              | 1332                                       | 1203               | 173                                 | 129                               |
| 250/200                                                                             | 448       | 370      | 433      | 250/200 x 12,2 | 1141                      | 1554                              | 1503                                       | 1371               | 183                                 | 133                               |
| 300/250                                                                             | 513       | 428      | 498      | 300/250 x 9,1  | 1217                      | 1703                              | 1644                                       | 1383               | 320                                 | 261                               |
| 300/250                                                                             | 513       | 428      | 498      | 300/250 x 10,7 | 1381                      | 1949                              | 1880                                       | 1607               | 341                                 | 272                               |
| 300/250                                                                             | 513       | 428      | 498      | 300/250 x 12,2 | 1550                      | 2198                              | 2119                                       | 1832               | 366                                 | 287                               |
| 400/300                                                                             | 580       | 488      | 565      | 400/300 x 9,1  | 1550                      | 2244                              | 2159                                       | 1792               | 451                                 | 367                               |
| 400/300                                                                             | 580       | 488      | 565      | 400/300 x 10,7 | 1754                      | 2564                              | 2465                                       | 2084               | 480                                 | 381                               |
| 400/300                                                                             | 580       | 488      | 565      | 400/300 x 12,2 | 1962                      | 2887                              | 2774                                       | 2376               | 511                                 | 398                               |
| 500/400                                                                             | 689       | 590      | 666      | 500/400 x 9,1  | 2134                      | 3245                              | 3109                                       | 2609               | 635                                 | 500                               |
| 500/400                                                                             | 689       | 590      | 666      | 500/400 x 10,7 | 2419                      | 3715                              | 3557                                       | 3036               | 679                                 | 521                               |
| 500/400                                                                             | 689       | 590      | 666      | 500/400 x 12,2 | 2708                      | 4189                              | 4009                                       | 3462               | 727                                 | 546                               |
| 600/500                                                                             | 815       | 707      | 785      | 600/500 x 9,1  | 3095                      | 4863                              | 4647                                       | 3748               | 1114                                | 899                               |
| 600/500                                                                             | 815       | 707      | 785      | 600/500 x 10,7 | 3496                      | 5558                              | 5307                                       | 4362               | 1196                                | 945                               |
| 600/500                                                                             | 815       | 707      | 785      | 600/500 x 12,2 | 3910                      | 6267                              | 5979                                       | 4976               | 1290                                | 1003                              |

# H3232 UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass reducer submarine hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 21                       |
| Min. burst pressure                         | bar          | 105                      |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 4 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS



| Nom. diam.     | Hose O.D. |          |          | Size<br>mm x m        | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|----------------|-----------|----------|----------|-----------------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|                | D1<br>mm  | D2<br>mm | D3<br>mm |                       |                           |                                   |                                            |                    |                                     |                                   |
| <b>200/150</b> | 383       | 309      | 375      | <b>200/150 x 9,1</b>  | 704                       | 878                               | 856                                        | 724                | 154                                 | 133                               |
| <b>200/150</b> | 383       | 309      | 375      | <b>200/150 x 10,7</b> | 802                       | 1005                              | 980                                        | 841                | 164                                 | 139                               |
| <b>200/150</b> | 383       | 309      | 375      | <b>200/150 x 12,2</b> | 902                       | 1133                              | 1105                                       | 958                | 175                                 | 147                               |
| <b>250/200</b> | 448       | 370      | 433      | <b>250/200 x 9,1</b>  | 903                       | 1212                              | 1175                                       | 1035               | 178                                 | 140                               |
| <b>250/200</b> | 448       | 370      | 433      | <b>250/200 x 10,7</b> | 1027                      | 1388                              | 1344                                       | 1203               | 186                                 | 142                               |
| <b>250/200</b> | 448       | 370      | 433      | <b>250/200 x 12,2</b> | 1155                      | 1568                              | 1517                                       | 1371               | 197                                 | 146                               |
| <b>300/250</b> | 513       | 428      | 498      | <b>300/250 x 9,1</b>  | 1216                      | 1702                              | 1643                                       | 1383               | 320                                 | 260                               |
| <b>300/250</b> | 513       | 428      | 498      | <b>300/250 x 10,7</b> | 1380                      | 1948                              | 1879                                       | 1607               | 340                                 | 271                               |
| <b>300/250</b> | 513       | 428      | 498      | <b>300/250 x 12,2</b> | 1549                      | 2197                              | 2118                                       | 1832               | 365                                 | 286                               |
| <b>400/300</b> | 588       | 496      | 573      | <b>400/300 x 9,1</b>  | 1616                      | 2310                              | 2226                                       | 1851               | 459                                 | 375                               |
| <b>400/300</b> | 588       | 496      | 573      | <b>400/300 x 10,7</b> | 1834                      | 2644                              | 2545                                       | 2152               | 491                                 | 392                               |
| <b>400/300</b> | 588       | 496      | 573      | <b>400/300 x 12,2</b> | 2055                      | 2980                              | 2867                                       | 2454               | 526                                 | 413                               |
| <b>500/400</b> | 689       | 590      | 666      | <b>500/400 x 9,1</b>  | 2172                      | 3283                              | 3148                                       | 2609               | 674                                 | 538                               |
| <b>500/400</b> | 689       | 590      | 666      | <b>500/400 x 10,7</b> | 2463                      | 3759                              | 3601                                       | 3036               | 723                                 | 565                               |
| <b>500/400</b> | 689       | 590      | 666      | <b>500/400 x 12,2</b> | 2757                      | 4239                              | 4058                                       | 3462               | 777                                 | 596                               |
| <b>600/500</b> | 815       | 707      | 785      | <b>600/500 x 9,1</b>  | 3095                      | 4863                              | 4647                                       | 3748               | 1114                                | 899                               |
| <b>600/500</b> | 815       | 707      | 785      | <b>600/500 x 10,7</b> | 3496                      | 5558                              | 5307                                       | 4362               | 1196                                | 945                               |
| <b>600/500</b> | 815       | 707      | 785      | <b>600/500 x 12,2</b> | 3910                      | 6267                              | 5979                                       | 4976               | 1290                                | 1003                              |

### Double carcass tail submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 373       | 303 | 373 | 150 x 9,1  | 641                 | 815                         | 793                                  | 697          | 117                           | 96                          |
| 150                                                                                 | 373       | 303 | 373 | 150 x 10,7 | 730                 | 933                         | 908                                  | 810          | 122                           | 98                          |
| 150                                                                                 | 373       | 303 | 373 | 150 x 12,2 | 819                 | 1050                        | 1022                                 | 923          | 128                           | 100                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 9,1  | 872                 | 1181                        | 1143                                 | 1035         | 146                           | 109                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 10,7 | 993                 | 1354                        | 1310                                 | 1203         | 151                           | 107                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 12,2 | 1115                | 1527                        | 1477                                 | 1371         | 156                           | 106                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 9,1  | 1168                | 1654                        | 1595                                 | 1383         | 272                           | 213                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 10,7 | 1329                | 1896                        | 1827                                 | 1607         | 289                           | 220                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 12,2 | 1490                | 2138                        | 2059                                 | 1832         | 306                           | 227                         |
| 300                                                                                 | 548       | 480 | 548 | 300 x 9,1  | 1429                | 2123                        | 2038                                 | 1730         | 393                           | 309                         |
| 300                                                                                 | 548       | 480 | 548 | 300 x 10,7 | 1621                | 2430                        | 2331                                 | 2013         | 417                           | 319                         |
| 300                                                                                 | 548       | 480 | 548 | 300 x 12,2 | 1812                | 2737                        | 2624                                 | 2296         | 441                           | 329                         |
| 400                                                                                 | 653       | 580 | 653 | 400 x 9,1  | 2018                | 3129                        | 2993                                 | 2520         | 609                           | 473                         |
| 400                                                                                 | 653       | 580 | 653 | 400 x 10,7 | 2290                | 3587                        | 3429                                 | 2933         | 653                           | 495                         |
| 400                                                                                 | 653       | 580 | 653 | 400 x 12,2 | 2563                | 4044                        | 3864                                 | 3346         | 698                           | 517                         |
| 500                                                                                 | 781       | 690 | 781 | 500 x 9,1  | 2742                | 4509                        | 4294                                 | 3565         | 944                           | 729                         |
| 500                                                                                 | 781       | 690 | 781 | 500 x 10,7 | 3096                | 5158                        | 4907                                 | 4149         | 1010                          | 758                         |
| 500                                                                                 | 781       | 690 | 781 | 500 x 12,2 | 3450                | 5807                        | 5520                                 | 4732         | 1075                          | 787                         |

# H3030T UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass tail submarine hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 19                       |
| Min. burst pressure                         | bar          | 95                       |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 4 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                           |                                   |                                            |                    |                                     |                                   |
| 150        | 383       | 313      | 383      | 150 x 9,1      | 711                       | 884                               | 863                                        | 742                | 143                                 | 121                               |
| 150        | 383       | 313      | 383      | 150 x 10,7     | 812                       | 1014                              | 989                                        | 861                | 153                                 | 128                               |
| 150        | 383       | 313      | 383      | 150 x 12,2     | 913                       | 1144                              | 1116                                       | 981                | 163                                 | 135                               |
| 200        | 441       | 370      | 441      | 200 x 9,1      | 872                       | 1181                              | 1143                                       | 1035               | 146                                 | 109                               |
| 200        | 441       | 370      | 441      | 200 x 10,7     | 993                       | 1354                              | 1310                                       | 1203               | 151                                 | 107                               |
| 200        | 441       | 370      | 441      | 200 x 12,2     | 1115                      | 1527                              | 1477                                       | 1371               | 156                                 | 106                               |
| 250        | 506       | 428      | 506      | 250 x 9,1      | 1183                      | 1669                              | 1610                                       | 1383               | 287                                 | 227                               |
| 250        | 506       | 428      | 506      | 250 x 10,7     | 1346                      | 1913                              | 1844                                       | 1607               | 305                                 | 236                               |
| 250        | 506       | 428      | 506      | 250 x 12,2     | 1508                      | 2157                              | 2078                                       | 1832               | 324                                 | 245                               |
| 300        | 560       | 490      | 560      | 300 x 9,1      | 1534                      | 2227                              | 2143                                       | 1800               | 428                                 | 343                               |
| 300        | 560       | 490      | 560      | 300 x 10,7     | 1741                      | 2551                              | 2452                                       | 2094               | 456                                 | 358                               |
| 300        | 560       | 490      | 560      | 300 x 12,2     | 1949                      | 2874                              | 2761                                       | 2389               | 485                                 | 373                               |
| 400        | 661       | 588      | 661      | 400 x 9,1      | 2098                      | 3209                              | 3073                                       | 2590               | 619                                 | 484                               |
| 400        | 661       | 588      | 661      | 400 x 10,7     | 2386                      | 3682                              | 3524                                       | 3014               | 668                                 | 510                               |
| 400        | 661       | 588      | 661      | 400 x 12,2     | 2674                      | 4155                              | 3975                                       | 3439               | 716                                 | 536                               |
| 500        | 791       | 699      | 791      | 500 x 9,1      | 2922                      | 4689                              | 4474                                       | 3664               | 1025                                | 810                               |
| 500        | 791       | 699      | 791      | 500 x 10,7     | 3304                      | 5366                              | 5115                                       | 4264               | 1103                                | 851                               |
| 500        | 791       | 699      | 791      | 500 x 12,2     | 3687                      | 6044                              | 5756                                       | 4864               | 1180                                | 892                               |

### Double carcass tail submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 21                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 105                      |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 383       | 313 | 383 | 150 x 9,1  | 711                 | 884                         | 863                                  | 742          | 143                           | 121                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 10,7 | 812                 | 1014                        | 989                                  | 861          | 153                           | 128                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 12,2 | 913                 | 1144                        | 1116                                 | 981          | 163                           | 134                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 9,1  | 882                 | 1192                        | 1154                                 | 1035         | 157                           | 119                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 10,7 | 1005                | 1366                        | 1322                                 | 1203         | 164                           | 120                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 12,2 | 1129                | 1541                        | 1491                                 | 1371         | 170                           | 120                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 9,1  | 1183                | 1669                        | 1610                                 | 1383         | 287                           | 227                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 10,7 | 1346                | 1913                        | 1844                                 | 1607         | 305                           | 236                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 12,2 | 1508                | 2157                        | 2078                                 | 1832         | 324                           | 245                         |
| 300                                                                                 | 568       | 498 | 568 | 300 x 9,1  | 1601                | 2294                        | 2210                                 | 1859         | 436                           | 351                         |
| 300                                                                                 | 568       | 498 | 568 | 300 x 10,7 | 1821                | 2631                        | 2532                                 | 2163         | 468                           | 369                         |
| 300                                                                                 | 568       | 498 | 568 | 300 x 12,2 | 2042                | 2967                        | 2854                                 | 2467         | 500                           | 388                         |
| 400                                                                                 | 661       | 588 | 661 | 400 x 9,1  | 2136                | 3247                        | 3111                                 | 2590         | 657                           | 522                         |
| 400                                                                                 | 661       | 588 | 661 | 400 x 10,7 | 2430                | 3726                        | 3568                                 | 3014         | 712                           | 554                         |
| 400                                                                                 | 661       | 588 | 661 | 400 x 12,2 | 2723                | 4205                        | 4024                                 | 3439         | 766                           | 585                         |
| 500                                                                                 | 791       | 699 | 791 | 500 x 9,1  | 2922                | 4689                        | 4474                                 | 3664         | 1025                          | 810                         |
| 500                                                                                 | 791       | 699 | 791 | 500 x 10,7 | 3304                | 5366                        | 5115                                 | 4264         | 1103                          | 851                         |
| 500                                                                                 | 791       | 699 | 791 | 500 x 12,2 | 3687                | 6044                        | 5756                                 | 4864         | 1180                          | 892                         |



# H3838 UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass tanker rail submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 373       | 303 | 373 | 150 x 9,1  | 655                 | 828                         | 807                                  | 697          | 131                           | 110                         |
| 150                                                                                 | 373       | 303 | 373 | 150 x 10,7 | 746                 | 948                         | 924                                  | 810          | 138                           | 114                         |
| 150                                                                                 | 373       | 303 | 373 | 150 x 12,2 | 837                 | 1069                        | 1040                                 | 923          | 146                           | 118                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 9,1  | 865                 | 1175                        | 1137                                 | 1035         | 140                           | 102                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 10,7 | 986                 | 1347                        | 1303                                 | 1203         | 144                           | 100                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 12,2 | 1106                | 1519                        | 1469                                 | 1371         | 148                           | 98                          |
| 250                                                                                 | 506       | 428 | 506 | 250 x 9,1  | 1161                | 1647                        | 1588                                 | 1383         | 265                           | 205                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 10,7 | 1320                | 1888                        | 1819                                 | 1607         | 280                           | 211                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 12,2 | 1480                | 2128                        | 2049                                 | 1832         | 296                           | 217                         |
| 300                                                                                 | 548       | 480 | 548 | 300 x 9,1  | 1458                | 2152                        | 2067                                 | 1730         | 422                           | 337                         |
| 300                                                                                 | 548       | 480 | 548 | 300 x 10,7 | 1654                | 2463                        | 2365                                 | 2013         | 451                           | 352                         |
| 300                                                                                 | 548       | 480 | 548 | 300 x 12,2 | 1850                | 2775                        | 2662                                 | 2296         | 480                           | 367                         |
| 400                                                                                 | 653       | 580 | 653 | 400 x 9,1  | 2012                | 3123                        | 2987                                 | 2520         | 603                           | 467                         |
| 400                                                                                 | 653       | 580 | 653 | 400 x 10,7 | 2283                | 3580                        | 3422                                 | 2933         | 646                           | 488                         |
| 400                                                                                 | 653       | 580 | 653 | 400 x 12,2 | 2555                | 4036                        | 3856                                 | 3346         | 690                           | 509                         |
| 500                                                                                 | 781       | 690 | 781 | 500 x 9,1  | 2743                | 4511                        | 4295                                 | 3565         | 946                           | 730                         |
| 500                                                                                 | 781       | 690 | 781 | 500 x 10,7 | 3098                | 5160                        | 4909                                 | 4149         | 1011                          | 760                         |
| 500                                                                                 | 781       | 690 | 781 | 500 x 12,2 | 3453                | 5809                        | 5522                                 | 4732         | 1077                          | 790                         |

### Double carcass tanker rail submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 383       | 313 | 383 | 150 x 9,1  | 724                 | 898                         | 877                                  | 742          | 156                           | 135                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 10,7 | 828                 | 1030                        | 1005                                 | 861          | 168                           | 144                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 12,2 | 931                 | 1162                        | 1134                                 | 981          | 181                           | 153                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 9,1  | 865                 | 1175                        | 1137                                 | 1035         | 140                           | 102                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 10,7 | 986                 | 1347                        | 1303                                 | 1203         | 144                           | 100                         |
| 200                                                                                 | 441       | 370 | 441 | 200 x 12,2 | 1106                | 1519                        | 1469                                 | 1371         | 148                           | 98                          |
| 250                                                                                 | 506       | 428 | 506 | 250 x 9,1  | 1176                | 1662                        | 1603                                 | 1383         | 279                           | 220                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 10,7 | 1337                | 1904                        | 1835                                 | 1607         | 297                           | 228                         |
| 250                                                                                 | 506       | 428 | 506 | 250 x 12,2 | 1499                | 2147                        | 2068                                 | 1832         | 314                           | 235                         |
| 300                                                                                 | 560       | 490 | 560 | 300 x 9,1  | 1562                | 2256                        | 2171                                 | 1800         | 456                           | 372                         |
| 300                                                                                 | 560       | 490 | 560 | 300 x 10,7 | 1775                | 2584                        | 2485                                 | 2094         | 490                           | 391                         |
| 300                                                                                 | 560       | 490 | 560 | 300 x 12,2 | 1987                | 2912                        | 2800                                 | 2389         | 524                           | 411                         |
| 400                                                                                 | 661       | 588 | 661 | 400 x 9,1  | 2092                | 3203                        | 3068                                 | 2590         | 614                           | 478                         |
| 400                                                                                 | 661       | 588 | 661 | 400 x 10,7 | 2379                | 3675                        | 3517                                 | 3014         | 661                           | 503                         |
| 400                                                                                 | 661       | 588 | 661 | 400 x 12,2 | 2666                | 4148                        | 3967                                 | 3439         | 709                           | 528                         |
| 500                                                                                 | 791       | 699 | 791 | 500 x 9,1  | 2923                | 4691                        | 4475                                 | 3664         | 1027                          | 811                         |
| 500                                                                                 | 791       | 699 | 791 | 500 x 10,7 | 3306                | 5368                        | 5117                                 | 4264         | 1104                          | 853                         |
| 500                                                                                 | 791       | 699 | 791 | 500 x 12,2 | 3689                | 6046                        | 5759                                 | 4864         | 1182                          | 895                         |

# H3838 UF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass tanker rail submarine hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 21                       |
| Min. burst pressure                         | bar          | 105                      |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 4 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |          |          | Size<br>mm x m | Weight in air empty<br>kg | Weight in air full of water<br>kg | Weight in air full of oil s.g. = 0,9<br>kg | Displacement<br>kg | Submerg. weight full of water<br>kg | Submerg. weight full of oil<br>kg |
|------------|-----------|----------|----------|----------------|---------------------------|-----------------------------------|--------------------------------------------|--------------------|-------------------------------------|-----------------------------------|
|            | D1<br>mm  | D2<br>mm | D3<br>mm |                |                           |                                   |                                            |                    |                                     |                                   |
| 150        | 383       | 313      | 383      | 150 x 9,1      | 724                       | 898                               | 877                                        | 742                | 156                                 | 135                               |
| 150        | 383       | 313      | 383      | 150 x 10,7     | 828                       | 1030                              | 1005                                       | 861                | 168                                 | 144                               |
| 150        | 383       | 313      | 383      | 150 x 12,2     | 931                       | 1162                              | 1134                                       | 981                | 181                                 | 153                               |
| 200        | 441       | 370      | 441      | 200 x 9,1      | 876                       | 1185                              | 1148                                       | 1035               | 151                                 | 113                               |
| 200        | 441       | 370      | 441      | 200 x 10,7     | 998                       | 1359                              | 1315                                       | 1203               | 156                                 | 112                               |
| 200        | 441       | 370      | 441      | 200 x 12,2     | 1120                      | 1533                              | 1482                                       | 1371               | 162                                 | 112                               |
| 250        | 506       | 428      | 506      | 250 x 9,1      | 1176                      | 1662                              | 1603                                       | 1383               | 279                                 | 220                               |
| 250        | 506       | 428      | 506      | 250 x 10,7     | 1337                      | 1904                              | 1835                                       | 1607               | 297                                 | 228                               |
| 250        | 506       | 428      | 506      | 250 x 12,2     | 1499                      | 2147                              | 2068                                       | 1832               | 314                                 | 235                               |
| 300        | 568       | 498      | 568      | 300 x 9,1      | 1630                      | 2324                              | 2239                                       | 1859               | 465                                 | 381                               |
| 300        | 568       | 498      | 568      | 300 x 10,7     | 1856                      | 2665                              | 2566                                       | 2163               | 503                                 | 404                               |
| 300        | 568       | 498      | 568      | 300 x 12,2     | 2081                      | 3007                              | 2894                                       | 2467               | 540                                 | 427                               |
| 400        | 661       | 588      | 661      | 400 x 9,1      | 2130                      | 3241                              | 3106                                       | 2590               | 652                                 | 516                               |
| 400        | 661       | 588      | 661      | 400 x 10,7     | 2423                      | 3719                              | 3561                                       | 3014               | 705                                 | 547                               |
| 400        | 661       | 588      | 661      | 400 x 12,2     | 2716                      | 4197                              | 4017                                       | 3439               | 758                                 | 578                               |
| 500        | 791       | 699      | 791      | 500 x 9,1      | 2923                      | 4691                              | 4475                                       | 3664               | 1027                                | 811                               |
| 500        | 791       | 699      | 791      | 500 x 10,7     | 3306                      | 5368                              | 5117                                       | 4264               | 1104                                | 853                               |
| 500        | 791       | 699      | 791      | 500 x 12,2     | 3689                      | 6046                              | 5759                                       | 4864               | 1182                                | 895                               |

### Double carcass fully reinforced submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 373       | 303 | 373 | 150 x 9,1  | 641                 | 815                         | 793                                  | 697          | 117                           | 96                          |
| 150                                                                                 | 373       | 303 | 373 | 150 x 10,7 | 730                 | 933                         | 908                                  | 810          | 122                           | 98                          |
| 150                                                                                 | 373       | 303 | 373 | 150 x 12,2 | 819                 | 1050                        | 1022                                 | 923          | 128                           | 100                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 9,1  | 916                 | 1226                        | 1188                                 | 1077         | 149                           | 111                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 10,7 | 1046                | 1407                        | 1362                                 | 1252         | 154                           | 110                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 12,2 | 1175                | 1587                        | 1537                                 | 1427         | 160                           | 110                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 9,1  | 1222                | 1708                        | 1649                                 | 1431         | 277                           | 217                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 10,7 | 1392                | 1959                        | 1890                                 | 1664         | 295                           | 226                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 12,2 | 1562                | 2210                        | 2131                                 | 1897         | 313                           | 234                         |
| 300                                                                                 | 554       | 486 | 554 | 300 x 9,1  | 1466                | 2160                        | 2075                                 | 1770         | 390                           | 305                         |
| 300                                                                                 | 554       | 486 | 554 | 300 x 10,7 | 1664                | 2473                        | 2374                                 | 2059         | 414                           | 315                         |
| 300                                                                                 | 554       | 486 | 554 | 300 x 12,2 | 1861                | 2786                        | 2674                                 | 2349         | 437                           | 325                         |
| 400                                                                                 | 670       | 593 | 670 | 400 x 9,1  | 2117                | 3228                        | 3092                                 | 2630         | 598                           | 462                         |
| 400                                                                                 | 670       | 593 | 670 | 400 x 10,7 | 2406                | 3702                        | 3544                                 | 3060         | 642                           | 484                         |
| 400                                                                                 | 670       | 593 | 670 | 400 x 12,2 | 2696                | 4177                        | 3996                                 | 3491         | 686                           | 505                         |
| 500                                                                                 | 804       | 713 | 804 | 500 x 9,1  | 3027                | 4794                        | 4578                                 | 3802         | 992                           | 776                         |
| 500                                                                                 | 804       | 713 | 804 | 500 x 10,7 | 3430                | 5492                        | 5241                                 | 4425         | 1067                          | 815                         |
| 500                                                                                 | 804       | 713 | 804 | 500 x 12,2 | 3833                | 6190                        | 5903                                 | 5048         | 1142                          | 854                         |
| 600                                                                                 | 933       | 835 | 933 | 600 x 9,1  | 4192                | 6771                        | 6457                                 | 5211         | 1561                          | 1246                        |
| 600                                                                                 | 933       | 835 | 933 | 600 x 10,7 | 4743                | 7753                        | 7386                                 | 6066         | 1687                          | 1320                        |
| 600                                                                                 | 933       | 835 | 933 | 600 x 12,2 | 5294                | 8734                        | 8314                                 | 6920         | 1813                          | 1394                        |

# H3737 UF DASH POSEIDON

## DOUBLE CARCASS

Double carcass fully reinforced submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 383       | 313 | 383 | 150 x 9,1  | 711                 | 884                         | 863                                  | 742          | 143                           | 121                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 10,7 | 812                 | 1014                        | 989                                  | 861          | 153                           | 128                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 12,2 | 913                 | 1144                        | 1116                                 | 981          | 163                           | 134                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 9,1  | 916                 | 1226                        | 1188                                 | 1077         | 149                           | 111                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 10,7 | 1046                | 1407                        | 1362                                 | 1252         | 154                           | 110                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 12,2 | 1175                | 1587                        | 1537                                 | 1427         | 160                           | 110                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 9,1  | 1237                | 1723                        | 1664                                 | 1431         | 291                           | 232                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 10,7 | 1409                | 1976                        | 1907                                 | 1664         | 311                           | 242                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 12,2 | 1580                | 2229                        | 2150                                 | 1897         | 331                           | 252                         |
| 300                                                                                 | 566       | 495 | 566 | 300 x 9,1  | 1571                | 2265                        | 2180                                 | 1841         | 424                           | 339                         |
| 300                                                                                 | 566       | 495 | 566 | 300 x 10,7 | 1785                | 2594                        | 2496                                 | 2142         | 452                           | 354                         |
| 300                                                                                 | 566       | 495 | 566 | 300 x 12,2 | 1999                | 2924                        | 2811                                 | 2443         | 481                           | 368                         |
| 400                                                                                 | 678       | 601 | 678 | 400 x 9,1  | 2197                | 3308                        | 3172                                 | 2701         | 607                           | 472                         |
| 400                                                                                 | 678       | 601 | 678 | 400 x 10,7 | 2502                | 3798                        | 3640                                 | 3143         | 655                           | 497                         |
| 400                                                                                 | 678       | 601 | 678 | 400 x 12,2 | 2807                | 4288                        | 4108                                 | 3585         | 703                           | 522                         |
| 500                                                                                 | 814       | 722 | 814 | 500 x 9,1  | 3208                | 4976                        | 4760                                 | 3904         | 1071                          | 856                         |
| 500                                                                                 | 814       | 722 | 814 | 500 x 10,7 | 3640                | 5702                        | 5451                                 | 4544         | 1158                          | 906                         |
| 500                                                                                 | 814       | 722 | 814 | 500 x 12,2 | 4072                | 6429                        | 6141                                 | 5184         | 1245                          | 957                         |
| 600                                                                                 | 933       | 835 | 933 | 600 x 9,1  | 4269                | 6849                        | 6534                                 | 5211         | 1638                          | 1323                        |
| 600                                                                                 | 933       | 835 | 933 | 600 x 10,7 | 4829                | 7839                        | 7472                                 | 6066         | 1774                          | 1407                        |
| 600                                                                                 | 933       | 835 | 933 | 600 x 12,2 | 5390                | 8830                        | 8410                                 | 6920         | 1909                          | 1490                        |

### Double carcass fully reinforced submarine hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 21                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 105                      |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      | 4 x id       |                          |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |     |            |                     |                             |                                      |              |                               |                             |
|-------------------------------------------------------------------------------------|-----------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|-------------------------------|-----------------------------|
|  |           |     |     |            |                     |                             |                                      |              |                               |                             |
| Nom. diam.                                                                          | Hose O.D. |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Submerg. weight full of water | Submerg. weight full of oil |
|                                                                                     | D1        | D2  | D3  |            |                     |                             |                                      |              |                               |                             |
|                                                                                     | mm        | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                            | kg                          |
| 150                                                                                 | 383       | 313 | 383 | 150 x 9,1  | 711                 | 884                         | 863                                  | 742          | 143                           | 121                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 10,7 | 812                 | 1014                        | 989                                  | 861          | 153                           | 128                         |
| 150                                                                                 | 383       | 313 | 383 | 150 x 12,2 | 913                 | 1144                        | 1116                                 | 981          | 163                           | 134                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 9,1  | 927                 | 1236                        | 1199                                 | 1077         | 159                           | 122                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 10,7 | 1058                | 1419                        | 1375                                 | 1252         | 167                           | 123                         |
| 200                                                                                 | 448       | 378 | 448 | 200 x 12,2 | 1189                | 1601                        | 1551                                 | 1427         | 174                           | 124                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 9,1  | 1237                | 1723                        | 1664                                 | 1431         | 291                           | 232                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 10,7 | 1409                | 1976                        | 1907                                 | 1664         | 311                           | 242                         |
| 250                                                                                 | 513       | 436 | 513 | 250 x 12,2 | 1580                | 2229                        | 2150                                 | 1897         | 331                           | 252                         |
| 300                                                                                 | 574       | 503 | 574 | 300 x 9,1  | 1638                | 2332                        | 2247                                 | 1900         | 432                           | 347                         |
| 300                                                                                 | 574       | 503 | 574 | 300 x 10,7 | 1865                | 2674                        | 2576                                 | 2211         | 463                           | 365                         |
| 300                                                                                 | 574       | 503 | 574 | 300 x 12,2 | 2092                | 3017                        | 2904                                 | 2522         | 495                           | 382                         |
| 400                                                                                 | 678       | 601 | 678 | 400 x 9,1  | 2235                | 3346                        | 3211                                 | 2701         | 645                           | 510                         |
| 400                                                                                 | 678       | 601 | 678 | 400 x 10,7 | 2546                | 3842                        | 3684                                 | 3143         | 699                           | 541                         |
| 400                                                                                 | 678       | 601 | 678 | 400 x 12,2 | 2857                | 4338                        | 4157                                 | 3585         | 753                           | 572                         |
| 500                                                                                 | 814       | 722 | 814 | 500 x 9,1  | 3208                | 4976                        | 4760                                 | 3904         | 1071                          | 856                         |
| 500                                                                                 | 814       | 722 | 814 | 500 x 10,7 | 3640                | 5702                        | 5451                                 | 4544         | 1158                          | 906                         |
| 500                                                                                 | 814       | 722 | 814 | 500 x 12,2 | 4072                | 6429                        | 6141                                 | 5184         | 1245                          | 957                         |
| 600                                                                                 | 968       | 852 | 968 | 600 x 9,1  | 4592                | 7172                        | 6857                                 | 5446         | 1726                          | 1411                        |
| 600                                                                                 | 968       | 852 | 968 | 600 x 10,7 | 5207                | 8217                        | 7850                                 | 6337         | 1879                          | 1512                        |
| 600                                                                                 | 968       | 852 | 968 | 600 x 12,2 | 5822                | 9262                        | 8842                                 | 7229         | 2033                          | 1614                        |



# H3006 HF DASH POSEIDON

## DOUBLE CARCASS

Double carcass one end reinforced half floating hose (first of buoy)

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                     |                   |
|-------------------------------------------------------------------------------------|-----------|------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|  |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                     |                   |
| Nom. diam.                                                                          | Hose O.D. |      |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|                                                                                     | D1        | D2   | D3  | D4  |            |                     |                             |                                      |              |                            |                          |                     |                   |
|                                                                                     | mm        | mm   | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150                                                                                 | 453       | 384  | 313 | 383 | 150 x 9,1  | 735                 | 908                         | 887                                  | 908          | 0                          | 21                       | 0,0                 | 2,4               |
| 150                                                                                 | 453       | 384  | 313 | 383 | 150 x 10,7 | 839                 | 1041                        | 1016                                 | 1059         | 18                         | 42                       | 1,7                 | 4,1               |
| 150                                                                                 | 453       | 384  | 313 | 383 | 150 x 12,2 | 944                 | 1174                        | 1146                                 | 1209         | 35                         | 63                       | 3,0                 | 5,5               |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 9,1  | 1011                | 1319                        | 1282                                 | 1311         | -8                         | 30                       | -0,6                | 2,3               |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 10,7 | 1155                | 1514                        | 1470                                 | 1528         | 14                         | 58                       | 0,9                 | 3,9               |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 12,2 | 1302                | 1712                        | 1662                                 | 1745         | 33                         | 83                       | 1,9                 | 5,0               |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 9,1  | 1349                | 1833                        | 1774                                 | 1843         | 10                         | 69                       | 0,6                 | 3,9               |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 10,7 | 1539                | 2103                        | 2034                                 | 2148         | 45                         | 114                      | 2,1                 | 5,6               |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 12,2 | 1732                | 2377                        | 2299                                 | 2453         | 75                         | 154                      | 3,2                 | 6,7               |
| 300                                                                                 | 671       | 596  | 496 | 571 | 300 x 9,1  | 1591                | 2284                        | 2199                                 | 2230         | -53                        | 31                       | -2,3                | 1,4               |
| 300                                                                                 | 671       | 596  | 496 | 571 | 300 x 10,7 | 1808                | 2616                        | 2517                                 | 2599         | -17                        | 81                       | -0,7                | 3,2               |
| 300                                                                                 | 671       | 596  | 496 | 571 | 300 x 12,2 | 2028                | 2951                        | 2838                                 | 2967         | 16                         | 129                      | 0,5                 | 4,5               |
| 400                                                                                 | 819       | 731  | 603 | 691 | 400 x 9,1  | 2246                | 3361                        | 3225                                 | 3352         | -9                         | 127                      | -0,3                | 3,9               |
| 400                                                                                 | 819       | 731  | 603 | 691 | 400 x 10,7 | 2553                | 3854                        | 3695                                 | 3903         | 50                         | 208                      | 1,3                 | 5,6               |
| 400                                                                                 | 819       | 731  | 603 | 691 | 400 x 12,2 | 2865                | 4351                        | 4170                                 | 4454         | 103                        | 284                      | 2,4                 | 6,8               |
| 500                                                                                 | 973       | 880  | 723 | 816 | 500 x 9,1  | 3165                | 4938                        | 4722                                 | 4846         | -92                        | 124                      | -1,9                | 2,6               |
| 500                                                                                 | 973       | 880  | 723 | 816 | 500 x 10,7 | 3585                | 5653                        | 5401                                 | 5642         | -11                        | 241                      | -0,2                | 4,5               |
| 500                                                                                 | 973       | 880  | 723 | 816 | 500 x 12,2 | 4019                | 6382                        | 6094                                 | 6438         | 56                         | 345                      | 0,9                 | 5,7               |
| 600                                                                                 | 1130      | 1032 | 845 | 944 | 600 x 9,1  | 4275                | 6861                        | 6546                                 | 6674         | -187                       | 128                      | -2,7                | 2,0               |
| 600                                                                                 | 1130      | 1032 | 845 | 944 | 600 x 10,7 | 4832                | 7849                        | 7481                                 | 7765         | -84                        | 284                      | -1,1                | 3,8               |
| 600                                                                                 | 1130      | 1032 | 845 | 944 | 600 x 12,2 | 5406                | 8854                        | 8434                                 | 8856         | 2                          | 422                      | 0,0                 | 5,0               |

### Double carcass one end reinforced half floating hose (first of buoy)

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |      |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2   | D3  | D4  |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm   | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 463       | 393  | 323 | 393 | 150 x 9,1  | 807                 | 980                         | 959                                  | 958          | -23                        | -2                       | -2,3                  | -0,2                |
| 150                                                                                 | 463       | 393  | 323 | 393 | 150 x 10,7 | 924                 | 1126                        | 1102                                 | 1116         | -10                        | 15                       | -0,9                  | 1,3                 |
| 150                                                                                 | 463       | 393  | 323 | 393 | 150 x 12,2 | 1041                | 1272                        | 1244                                 | 1275         | 3                          | 31                       | 0,2                   | 2,5                 |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 9,1  | 1012                | 1320                        | 1282                                 | 1312         | -8                         | 30                       | -0,6                  | 2,3                 |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 10,7 | 1155                | 1515                        | 1471                                 | 1529         | 14                         | 58                       | 0,9                   | 3,9                 |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 12,2 | 1302                | 1712                        | 1662                                 | 1746         | 33                         | 83                       | 1,9                   | 5,0                 |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 9,1  | 1364                | 1848                        | 1789                                 | 1843         | -5                         | 54                       | -0,3                  | 3,0                 |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 10,7 | 1556                | 2120                        | 2051                                 | 2148         | 28                         | 97                       | 1,3                   | 4,7                 |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 12,2 | 1751                | 2396                        | 2318                                 | 2453         | 56                         | 135                      | 2,3                   | 5,8                 |
| 300                                                                                 | 726       | 641  | 505 | 590 | 300 x 9,1  | 1725                | 2418                        | 2333                                 | 2468         | 50                         | 134                      | 2,1                   | 5,8                 |
| 300                                                                                 | 726       | 641  | 505 | 590 | 300 x 10,7 | 1963                | 2771                        | 2673                                 | 2876         | 105                        | 204                      | 3,8                   | 7,6                 |
| 300                                                                                 | 726       | 641  | 505 | 590 | 300 x 12,2 | 2204                | 3128                        | 3015                                 | 3285         | 157                        | 270                      | 5,0                   | 9,0                 |
| 400                                                                                 | 864       | 776  | 584 | 699 | 400 x 9,1  | 2353                | 3468                        | 3332                                 | 3523         | 56                         | 192                      | 1,6                   | 5,8                 |
| 400                                                                                 | 864       | 776  | 584 | 699 | 400 x 10,7 | 2680                | 3981                        | 3822                                 | 4102         | 121                        | 279                      | 3,0                   | 7,3                 |
| 400                                                                                 | 864       | 776  | 584 | 699 | 400 x 12,2 | 3012                | 4498                        | 4317                                 | 4680         | 182                        | 363                      | 4,0                   | 8,4                 |
| 500                                                                                 | 1019      | 927  | 733 | 825 | 500 x 9,1  | 3378                | 5151                        | 4934                                 | 5197         | 46                         | 263                      | 0,9                   | 5,3                 |
| 500                                                                                 | 1019      | 927  | 733 | 825 | 500 x 10,7 | 3833                | 5901                        | 5648                                 | 6053         | 152                        | 405                      | 2,6                   | 7,2                 |
| 500                                                                                 | 1019      | 927  | 733 | 825 | 500 x 12,2 | 4300                | 6664                        | 6375                                 | 6909         | 245                        | 534                      | 3,7                   | 8,4                 |
| 600                                                                                 | 1167      | 1068 | 845 | 944 | 600 x 9,1  | 4384                | 6970                        | 6654                                 | 6952         | -18                        | 298                      | -0,3                  | 4,5                 |
| 600                                                                                 | 1167      | 1068 | 845 | 944 | 600 x 10,7 | 4956                | 7973                        | 7605                                 | 8090         | 117                        | 485                      | 1,5                   | 6,4                 |
| 600                                                                                 | 1167      | 1068 | 845 | 944 | 600 x 12,2 | 5544                | 8992                        | 8572                                 | 9228         | 236                        | 656                      | 2,6                   | 7,7                 |

# H3006 HF DASH POSEIDON

## DOUBLE CARCASS

Double carcass one end reinforced half floating hose (first of buoy)

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 21                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 105                      |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                     |                   |
|-------------------------------------------------------------------------------------|-----------|------|-----|-----|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|  |           |      |     |     |            |                     |                             |                                      |              |                            |                          |                     |                   |
| Nom. diam.                                                                          | Hose O.D. |      |     |     | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|                                                                                     | D1        | D2   | D3  | D4  |            |                     |                             |                                      |              |                            |                          |                     |                   |
|                                                                                     | mm        | mm   | mm  | mm  | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150                                                                                 | 463       | 393  | 323 | 393 | 150 x 9,1  | 807                 | 980                         | 959                                  | 958          | -23                        | -2                       | -2,3                | -0,2              |
| 150                                                                                 | 463       | 393  | 323 | 393 | 150 x 10,7 | 924                 | 1126                        | 1102                                 | 1116         | -10                        | 15                       | -0,9                | 1,3               |
| 150                                                                                 | 463       | 393  | 323 | 393 | 150 x 12,2 | 1041                | 1272                        | 1244                                 | 1275         | 3                          | 31                       | 0,2                 | 2,5               |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 9,1  | 1022                | 1330                        | 1293                                 | 1311         | -19                        | 19                       | -1,4                | 1,4               |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 10,7 | 1167                | 1526                        | 1482                                 | 1528         | 2                          | 46                       | 0,1                 | 3,1               |
| 200                                                                                 | 521       | 451  | 388 | 458 | 200 x 12,2 | 1316                | 1726                        | 1676                                 | 1745         | 19                         | 69                       | 1,1                 | 4,1               |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 9,1  | 1363                | 1847                        | 1788                                 | 1843         | -4                         | 55                       | -0,2                | 3,1               |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 10,7 | 1555                | 2119                        | 2050                                 | 2148         | 29                         | 98                       | 1,4                 | 4,8               |
| 250                                                                                 | 623       | 546  | 446 | 523 | 250 x 12,2 | 1750                | 2395                        | 2317                                 | 2453         | 57                         | 136                      | 2,4                 | 5,9               |
| 300                                                                                 | 734       | 649  | 513 | 598 | 300 x 9,1  | 1795                | 2487                        | 2403                                 | 2536         | 49                         | 133                      | 2,0                 | 5,5               |
| 300                                                                                 | 734       | 649  | 513 | 598 | 300 x 10,7 | 2046                | 2854                        | 2756                                 | 2956         | 102                        | 200                      | 3,6                 | 7,3               |
| 300                                                                                 | 734       | 649  | 513 | 598 | 300 x 12,2 | 2301                | 3224                        | 3112                                 | 3376         | 151                        | 264                      | 4,7                 | 8,5               |
| 400                                                                                 | 864       | 776  | 584 | 699 | 400 x 9,1  | 2391                | 3506                        | 3370                                 | 3523         | 18                         | 154                      | 0,5                 | 4,6               |
| 400                                                                                 | 864       | 776  | 584 | 699 | 400 x 10,7 | 2724                | 4025                        | 3866                                 | 4102         | 77                         | 235                      | 1,9                 | 6,1               |
| 400                                                                                 | 864       | 776  | 584 | 699 | 400 x 12,2 | 3062                | 4548                        | 4367                                 | 4680         | 132                        | 313                      | 2,9                 | 7,2               |
| 500                                                                                 | 1019      | 927  | 733 | 825 | 500 x 9,1  | 3378                | 5151                        | 4934                                 | 5197         | 46                         | 263                      | 0,9                 | 5,3               |
| 500                                                                                 | 1019      | 927  | 733 | 825 | 500 x 10,7 | 3833                | 5901                        | 5648                                 | 6053         | 152                        | 405                      | 2,6                 | 7,2               |
| 500                                                                                 | 1019      | 927  | 733 | 825 | 500 x 12,2 | 4300                | 6664                        | 6375                                 | 6909         | 245                        | 534                      | 3,7                 | 8,4               |
| 600                                                                                 | 1203      | 1086 | 863 | 980 | 600 x 9,1  | 4700                | 7286                        | 6971                                 | 7220         | -66                        | 249                      | -0,9                | 3,6               |
| 600                                                                                 | 1203      | 1086 | 863 | 980 | 600 x 10,7 | 5325                | 8342                        | 7974                                 | 8400         | 58                         | 426                      | 0,7                 | 5,3               |
| 600                                                                                 | 1203      | 1086 | 863 | 980 | 600 x 12,2 | 5966                | 9414                        | 8994                                 | 9580         | 165                        | 586                      | 1,8                 | 6,5               |

## Double carcass mainline full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 6 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |      |            |                     |                             |                                      |              |                            |                          |                     |                   |
|-------------------------------------------------------------------------------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|  |           |      |      |            |                     |                             |                                      |              |                            |                          |                     |                   |
| Nom. diam.                                                                          | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|                                                                                     | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                     |                   |
|                                                                                     | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150                                                                                 | 482       | 412  | 482  | 150 x 9,1  | 749                 | 922                         | 901                                  | 1232         | 310                        | 331                      | 34                  | 37                |
| 150                                                                                 | 482       | 412  | 482  | 150 x 10,7 | 857                 | 1059                        | 1035                                 | 1441         | 381                        | 406                      | 36                  | 39                |
| 150                                                                                 | 482       | 412  | 482  | 150 x 12,2 | 964                 | 1195                        | 1167                                 | 1649         | 454                        | 482                      | 38                  | 41                |
| 200                                                                                 | 549       | 479  | 549  | 200 x 9,1  | 993                 | 1301                        | 1264                                 | 1667         | 366                        | 403                      | 28                  | 32                |
| 200                                                                                 | 549       | 479  | 549  | 200 x 10,7 | 1138                | 1497                        | 1453                                 | 1949         | 452                        | 496                      | 30                  | 34                |
| 200                                                                                 | 549       | 479  | 549  | 200 x 12,2 | 1279                | 1689                        | 1639                                 | 2230         | 540                        | 590                      | 32                  | 36                |
| 250                                                                                 | 651       | 573  | 651  | 250 x 9,1  | 1336                | 1820                        | 1761                                 | 2375         | 554                        | 614                      | 30                  | 35                |
| 250                                                                                 | 651       | 573  | 651  | 250 x 10,7 | 1527                | 2091                        | 2023                                 | 2777         | 685                        | 754                      | 33                  | 37                |
| 250                                                                                 | 651       | 573  | 651  | 250 x 12,2 | 1716                | 2361                        | 2282                                 | 3179         | 818                        | 897                      | 35                  | 39                |
| 300                                                                                 | 691       | 623  | 691  | 300 x 9,1  | 1584                | 2277                        | 2192                                 | 2793         | 516                        | 600                      | 23                  | 27                |
| 300                                                                                 | 691       | 623  | 691  | 300 x 10,7 | 1803                | 2611                        | 2512                                 | 3268         | 657                        | 756                      | 25                  | 30                |
| 300                                                                                 | 691       | 623  | 691  | 300 x 12,2 | 2020                | 2943                        | 2831                                 | 3744         | 801                        | 913                      | 27                  | 32                |
| 400                                                                                 | 839       | 757  | 839  | 400 x 9,1  | 2181                | 3296                        | 3160                                 | 4121         | 824                        | 960                      | 25                  | 30                |
| 400                                                                                 | 839       | 757  | 839  | 400 x 10,7 | 2485                | 3786                        | 3627                                 | 4825         | 1039                       | 1197                     | 27                  | 33                |
| 400                                                                                 | 839       | 757  | 839  | 400 x 12,2 | 2784                | 4271                        | 4089                                 | 5529         | 1258                       | 1439                     | 29                  | 35                |
| 500                                                                                 | 997       | 906  | 997  | 500 x 9,1  | 3034                | 4807                        | 4591                                 | 5879         | 1072                       | 1288                     | 22                  | 28                |
| 500                                                                                 | 997       | 906  | 997  | 500 x 10,7 | 3442                | 5510                        | 5258                                 | 6886         | 1376                       | 1628                     | 25                  | 31                |
| 500                                                                                 | 997       | 906  | 997  | 500 x 12,2 | 3845                | 6209                        | 5920                                 | 7892         | 1684                       | 1972                     | 27                  | 33                |
| 600                                                                                 | 1144      | 1057 | 1144 | 600 x 9,1  | 4032                | 6618                        | 6303                                 | 7959         | 1341                       | 1656                     | 20                  | 26                |
| 600                                                                                 | 1144      | 1057 | 1144 | 600 x 10,7 | 4561                | 7578                        | 7210                                 | 9330         | 1752                       | 2120                     | 23                  | 29                |
| 600                                                                                 | 1144      | 1057 | 1144 | 600 x 12,2 | 5084                | 8532                        | 8112                                 | 10701        | 2169                       | 2590                     | 25                  | 32                |

# H3030 FF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass mainline full floating hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 19                       |
| Min. burst pressure                         | bar          | 95                       |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 6 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |
| Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|            | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                     |                   |
|            | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150        | 492       | 422  | 492  | 150 x 9,1  | 822                 | 995                         | 974                                  | 1293         | 299                        | 320                      | 30                  | 33                |
| 150        | 492       | 422  | 492  | 150 x 10,7 | 942                 | 1144                        | 1119                                 | 1512         | 368                        | 393                      | 32                  | 35                |
| 150        | 492       | 422  | 492  | 150 x 12,2 | 1061                | 1292                        | 1264                                 | 1730         | 438                        | 466                      | 34                  | 37                |
| 200        | 549       | 479  | 549  | 200 x 9,1  | 993                 | 1301                        | 1264                                 | 1667         | 366                        | 403                      | 28                  | 32                |
| 200        | 549       | 479  | 549  | 200 x 10,7 | 1138                | 1497                        | 1453                                 | 1949         | 452                        | 496                      | 30                  | 34                |
| 200        | 549       | 479  | 549  | 200 x 12,2 | 1279                | 1689                        | 1639                                 | 2230         | 540                        | 590                      | 32                  | 36                |
| 250        | 651       | 573  | 651  | 250 x 9,1  | 1351                | 1835                        | 1776                                 | 2375         | 539                        | 599                      | 29                  | 34                |
| 250        | 651       | 573  | 651  | 250 x 10,7 | 1544                | 2108                        | 2040                                 | 2777         | 668                        | 737                      | 32                  | 36                |
| 250        | 651       | 573  | 651  | 250 x 12,2 | 1735                | 2380                        | 2301                                 | 3179         | 799                        | 878                      | 34                  | 38                |
| 300        | 714       | 630  | 714  | 300 x 9,1  | 1695                | 2387                        | 2303                                 | 2871         | 484                        | 568                      | 20                  | 25                |
| 300        | 714       | 630  | 714  | 300 x 10,7 | 1932                | 2740                        | 2641                                 | 3357         | 617                        | 716                      | 23                  | 27                |
| 300        | 714       | 630  | 714  | 300 x 12,2 | 2166                | 3089                        | 2976                                 | 3843         | 755                        | 867                      | 24                  | 29                |
| 400        | 847       | 765  | 847  | 400 x 9,1  | 2262                | 3378                        | 3242                                 | 4209         | 832                        | 968                      | 25                  | 30                |
| 400        | 847       | 765  | 847  | 400 x 10,7 | 2581                | 3882                        | 3723                                 | 4928         | 1046                       | 1205                     | 27                  | 32                |
| 400        | 847       | 765  | 847  | 400 x 12,2 | 2898                | 4384                        | 4203                                 | 5647         | 1262                       | 1444                     | 29                  | 34                |
| 500        | 1007      | 915  | 1007 | 500 x 9,1  | 3219                | 4991                        | 4775                                 | 6006         | 1014                       | 1231                     | 20                  | 26                |
| 500        | 1007      | 915  | 1007 | 500 x 10,7 | 3656                | 5723                        | 5471                                 | 7034         | 1310                       | 1563                     | 23                  | 29                |
| 500        | 1007      | 915  | 1007 | 500 x 12,2 | 4088                | 6451                        | 6163                                 | 8062         | 1611                       | 1899                     | 25                  | 31                |
| 600        | 1180      | 1093 | 1180 | 600 x 9,1  | 4164                | 6750                        | 6434                                 | 8450         | 1700                       | 2016                     | 25                  | 31                |
| 600        | 1180      | 1093 | 1180 | 600 x 10,7 | 4711                | 7728                        | 7360                                 | 9916         | 2188                       | 2556                     | 28                  | 35                |
| 600        | 1180      | 1093 | 1180 | 600 x 12,2 | 5253                | 8701                        | 8281                                 | 11381        | 2680                       | 3101                     | 31                  | 37                |

### Double carcass mainline full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 21                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 105                      |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      | 6 x id       |                          |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |      |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 492       | 422  | 492  | 150 x 9,1  | 822                 | 995                         | 974                                  | 1293         | 299                        | 320                      | 30                    | 33                  |
| 150                                                                                 | 492       | 422  | 492  | 150 x 10,7 | 942                 | 1144                        | 1119                                 | 1512         | 368                        | 393                      | 32                    | 35                  |
| 150                                                                                 | 492       | 422  | 492  | 150 x 12,2 | 1061                | 1292                        | 1264                                 | 1730         | 438                        | 466                      | 34                    | 37                  |
| 200                                                                                 | 549       | 479  | 549  | 200 x 9,1  | 1004                | 1312                        | 1275                                 | 1667         | 355                        | 392                      | 27                    | 31                  |
| 200                                                                                 | 549       | 479  | 549  | 200 x 10,7 | 1150                | 1509                        | 1465                                 | 1949         | 440                        | 484                      | 29                    | 33                  |
| 200                                                                                 | 549       | 479  | 549  | 200 x 12,2 | 1293                | 1703                        | 1653                                 | 2230         | 526                        | 576                      | 31                    | 35                  |
| 250                                                                                 | 651       | 573  | 651  | 250 x 9,1  | 1351                | 1835                        | 1776                                 | 2375         | 539                        | 599                      | 29                    | 34                  |
| 250                                                                                 | 651       | 573  | 651  | 250 x 10,7 | 1544                | 2108                        | 2040                                 | 2777         | 668                        | 737                      | 32                    | 36                  |
| 250                                                                                 | 651       | 573  | 651  | 250 x 12,2 | 1735                | 2380                        | 2301                                 | 3179         | 799                        | 878                      | 34                    | 38                  |
| 300                                                                                 | 711       | 641  | 711  | 300 x 9,1  | 1760                | 2453                        | 2368                                 | 2960         | 507                        | 592                      | 21                    | 25                  |
| 300                                                                                 | 711       | 641  | 711  | 300 x 10,7 | 2010                | 2818                        | 2720                                 | 3463         | 645                        | 744                      | 23                    | 27                  |
| 300                                                                                 | 711       | 641  | 711  | 300 x 12,2 | 2258                | 3181                        | 3068                                 | 3967         | 786                        | 898                      | 25                    | 29                  |
| 400                                                                                 | 847       | 765  | 847  | 400 x 9,1  | 2300                | 3416                        | 3280                                 | 4209         | 794                        | 930                      | 23                    | 28                  |
| 400                                                                                 | 847       | 765  | 847  | 400 x 10,7 | 2625                | 3926                        | 3767                                 | 4928         | 1002                       | 1161                     | 26                    | 31                  |
| 400                                                                                 | 847       | 765  | 847  | 400 x 12,2 | 2946                | 4432                        | 4251                                 | 5647         | 1214                       | 1396                     | 27                    | 33                  |
| 500                                                                                 | 1007      | 915  | 1007 | 500 x 9,1  | 3219                | 4991                        | 4775                                 | 6006         | 1014                       | 1231                     | 20                    | 26                  |
| 500                                                                                 | 1007      | 915  | 1007 | 500 x 10,7 | 3656                | 5723                        | 5471                                 | 7034         | 1310                       | 1563                     | 23                    | 29                  |
| 500                                                                                 | 1007      | 915  | 1007 | 500 x 12,2 | 4088                | 6451                        | 6163                                 | 8062         | 1611                       | 1899                     | 25                    | 31                  |
| 600                                                                                 | 1215      | 1111 | 1215 | 600 x 9,1  | 4474                | 7060                        | 6745                                 | 8770         | 1710                       | 2025                     | 24                    | 30                  |
| 600                                                                                 | 1215      | 1111 | 1215 | 600 x 10,7 | 5073                | 8090                        | 7722                                 | 10283        | 2193                       | 2561                     | 27                    | 33                  |
| 600                                                                                 | 1215      | 1111 | 1215 | 600 x 12,2 | 5668                | 9116                        | 8695                                 | 11796        | 2681                       | 3101                     | 29                    | 36                  |



# H3232 FF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass reducer full floating hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 15                       |
| Min. burst pressure                         | bar          | 75                       |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 6 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |
| Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |      | Size           | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|------------|-----------|-----|------|----------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|            | D1        | D2  | D3   |                |                     |                             |                                      |              |                            |                          |                       |                     |
|            | mm        | mm  | mm   | mm x m         | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 200/150    | 491       | 421 | 491  | 200/150 x 9,1  | 807                 | 980                         | 959                                  | 1290         | 310                        | 331                      | 32                    | 34                  |
| 200/150    | 491       | 421 | 491  | 200/150 x 10,7 | 923                 | 1125                        | 1101                                 | 1508         | 383                        | 407                      | 34                    | 37                  |
| 200/150    | 491       | 421 | 491  | 200/150 x 12,2 | 1040                | 1271                        | 1243                                 | 1726         | 455                        | 483                      | 36                    | 39                  |
| 250/200    | 562       | 492 | 562  | 250/200 x 9,1  | 1093                | 1400                        | 1363                                 | 1763         | 363                        | 400                      | 26                    | 29                  |
| 250/200    | 562       | 492 | 562  | 250/200 x 10,7 | 1252                | 1611                        | 1567                                 | 2060         | 450                        | 493                      | 28                    | 31                  |
| 250/200    | 562       | 492 | 562  | 250/200 x 12,2 | 1411                | 1822                        | 1772                                 | 2358         | 536                        | 586                      | 29                    | 33                  |
| 300/250    | 663       | 587 | 663  | 300/250 x 9,1  | 1465                | 1949                        | 1890                                 | 2492         | 543                        | 602                      | 28                    | 32                  |
| 300/250    | 663       | 587 | 663  | 300/250 x 10,7 | 1674                | 2239                        | 2170                                 | 2914         | 676                        | 744                      | 30                    | 34                  |
| 300/250    | 663       | 587 | 663  | 300/250 x 12,2 | 1885                | 2530                        | 2451                                 | 3336         | 806                        | 885                      | 32                    | 36                  |
| 400/300    | 711       | 636 | 711  | 400/300 x 9,1  | 1723                | 2415                        | 2331                                 | 2923         | 507                        | 592                      | 21                    | 25                  |
| 400/300    | 711       | 636 | 711  | 400/300 x 10,7 | 1961                | 2769                        | 2670                                 | 3419         | 650                        | 749                      | 23                    | 28                  |
| 400/300    | 711       | 636 | 711  | 400/300 x 12,2 | 2199                | 3122                        | 3010                                 | 3915         | 793                        | 906                      | 25                    | 30                  |
| 500/400    | 863       | 775 | 863  | 500/400 x 9,1  | 2444                | 3560                        | 3424                                 | 4322         | 763                        | 899                      | 21                    | 26                  |
| 500/400    | 863       | 775 | 863  | 500/400 x 10,7 | 2761                | 4062                        | 3903                                 | 5059         | 997                        | 1156                     | 25                    | 30                  |
| 500/400    | 863       | 775 | 863  | 500/400 x 12,2 | 3096                | 4583                        | 4402                                 | 5796         | 1213                       | 1394                     | 26                    | 32                  |
| 600/500    | 1055      | 963 | 1055 | 600/500 x 9,1  | 3433                | 5205                        | 4989                                 | 6602         | 1397                       | 1613                     | 27                    | 32                  |
| 600/500    | 1055      | 963 | 1055 | 600/500 x 10,7 | 3898                | 5966                        | 5713                                 | 7739         | 1774                       | 2026                     | 30                    | 35                  |
| 600/500    | 1055      | 963 | 1055 | 600/500 x 12,2 | 4370                | 6734                        | 6446                                 | 8877         | 2143                       | 2431                     | 32                    | 38                  |

## Double carcass reducer full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 6 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |      |                |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|----------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |                |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size           | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |                |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m         | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 200/150                                                                             | 501       | 431 | 501  | 200/150 x 9,1  | 881                 | 1054                        | 1033                                 | 1350         | 296                        | 317                      | 28                    | 31                  |
| 200/150                                                                             | 501       | 431 | 501  | 200/150 x 10,7 | 1010                | 1211                        | 1187                                 | 1577         | 366                        | 390                      | 30                    | 33                  |
| 200/150                                                                             | 501       | 431 | 501  | 200/150 x 12,2 | 1139                | 1370                        | 1341                                 | 1805         | 435                        | 463                      | 32                    | 35                  |
| 250/200                                                                             | 562       | 492 | 562  | 250/200 x 9,1  | 1093                | 1400                        | 1363                                 | 1763         | 363                        | 400                      | 26                    | 29                  |
| 250/200                                                                             | 562       | 492 | 562  | 250/200 x 10,7 | 1252                | 1611                        | 1567                                 | 2060         | 450                        | 493                      | 28                    | 31                  |
| 250/200                                                                             | 562       | 492 | 562  | 250/200 x 12,2 | 1411                | 1822                        | 1772                                 | 2358         | 536                        | 586                      | 29                    | 33                  |
| 300/250                                                                             | 663       | 587 | 663  | 300/250 x 9,1  | 1479                | 1963                        | 1904                                 | 2492         | 529                        | 588                      | 27                    | 31                  |
| 300/250                                                                             | 663       | 587 | 663  | 300/250 x 10,7 | 1690                | 2255                        | 2186                                 | 2914         | 660                        | 728                      | 29                    | 33                  |
| 300/250                                                                             | 663       | 587 | 663  | 300/250 x 12,2 | 1903                | 2548                        | 2469                                 | 3336         | 788                        | 867                      | 31                    | 35                  |
| 400/300                                                                             | 730       | 646 | 730  | 400/300 x 9,1  | 1837                | 2529                        | 2445                                 | 3020         | 491                        | 576                      | 19                    | 24                  |
| 400/300                                                                             | 730       | 646 | 730  | 400/300 x 10,7 | 2092                | 2900                        | 2802                                 | 3532         | 631                        | 730                      | 22                    | 26                  |
| 400/300                                                                             | 730       | 646 | 730  | 400/300 x 12,2 | 2348                | 3271                        | 3159                                 | 4043         | 772                        | 884                      | 24                    | 28                  |
| 500/400                                                                             | 907       | 805 | 907  | 500/400 x 9,1  | 2544                | 3659                        | 3523                                 | 4650         | 990                        | 1126                     | 27                    | 32                  |
| 500/400                                                                             | 907       | 805 | 907  | 500/400 x 10,7 | 2903                | 4203                        | 4045                                 | 5445         | 1242                       | 1400                     | 30                    | 35                  |
| 500/400                                                                             | 907       | 805 | 907  | 500/400 x 12,2 | 3261                | 4748                        | 4566                                 | 6240         | 1493                       | 1674                     | 31                    | 37                  |
| 600/500                                                                             | 1065      | 972 | 1065 | 600/500 x 9,1  | 3619                | 5392                        | 5176                                 | 6736         | 1345                       | 1561                     | 25                    | 30                  |
| 600/500                                                                             | 1065      | 972 | 1065 | 600/500 x 10,7 | 4114                | 6182                        | 5929                                 | 7896         | 1715                       | 1967                     | 28                    | 33                  |
| 600/500                                                                             | 1065      | 972 | 1065 | 600/500 x 12,2 | 4616                | 6980                        | 6691                                 | 9057         | 2077                       | 2365                     | 30                    | 35                  |

# H3232 FF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass reducer full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar 21                   |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar 105                  |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi 550                  |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      | 6 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | % 2,5                    |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | % 0,7                    |
|                                               |                                          | Aromatic resistance up to                   | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C -20; +82              |
|                                               |                                          | Ambient temp. range                         | °C -29; +52              |
|                                               |                                          | Flow velocity up to                         | m/s 21                   |
|                                               |                                          | Electrically as requested                   | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy min.                       | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |      |                |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|----------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |                |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size           | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |                |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m         | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 200/150                                                                             | 501       | 431 | 501  | 200/150 x 9,1  | 881                 | 1054                        | 1033                                 | 1350         | 296                        | 317                      | 28                    | 31                  |
| 200/150                                                                             | 501       | 431 | 501  | 200/150 x 10,7 | 1010                | 1211                        | 1187                                 | 1577         | 366                        | 390                      | 30                    | 33                  |
| 200/150                                                                             | 501       | 431 | 501  | 200/150 x 12,2 | 1139                | 1370                        | 1341                                 | 1805         | 435                        | 463                      | 32                    | 35                  |
| 250/200                                                                             | 562       | 492 | 562  | 250/200 x 9,1  | 1104                | 1411                        | 1374                                 | 1763         | 352                        | 389                      | 25                    | 28                  |
| 250/200                                                                             | 562       | 492 | 562  | 250/200 x 10,7 | 1264                | 1623                        | 1579                                 | 2060         | 438                        | 481                      | 27                    | 30                  |
| 250/200                                                                             | 562       | 492 | 562  | 250/200 x 12,2 | 1425                | 1836                        | 1786                                 | 2358         | 522                        | 572                      | 28                    | 32                  |
| 300/250                                                                             | 663       | 587 | 663  | 300/250 x 9,1  | 1479                | 1963                        | 1904                                 | 2492         | 529                        | 588                      | 27                    | 31                  |
| 300/250                                                                             | 663       | 587 | 663  | 300/250 x 10,7 | 1690                | 2255                        | 2186                                 | 2914         | 660                        | 728                      | 29                    | 33                  |
| 300/250                                                                             | 663       | 587 | 663  | 300/250 x 12,2 | 1903                | 2548                        | 2469                                 | 3336         | 788                        | 867                      | 31                    | 35                  |
| 400/300                                                                             | 738       | 654 | 738  | 400/300 x 9,1  | 1907                | 2599                        | 2515                                 | 3096         | 497                        | 581                      | 19                    | 23                  |
| 400/300                                                                             | 738       | 654 | 738  | 400/300 x 10,7 | 2176                | 2984                        | 2885                                 | 3620         | 636                        | 735                      | 21                    | 25                  |
| 400/300                                                                             | 738       | 654 | 738  | 400/300 x 12,2 | 2444                | 3368                        | 3255                                 | 4144         | 777                        | 889                      | 23                    | 27                  |
| 500/400                                                                             | 871       | 783 | 871  | 500/400 x 9,1  | 2547                | 3662                        | 3526                                 | 4413         | 751                        | 887                      | 21                    | 25                  |
| 500/400                                                                             | 871       | 783 | 871  | 500/400 x 10,7 | 2905                | 4206                        | 4047                                 | 5165         | 959                        | 1118                     | 23                    | 28                  |
| 500/400                                                                             | 871       | 783 | 871  | 500/400 x 12,2 | 3262                | 4749                        | 4568                                 | 5917         | 1168                       | 1349                     | 25                    | 30                  |
| 600/500                                                                             | 1065      | 972 | 1065 | 600/500 x 9,1  | 3619                | 5392                        | 5176                                 | 6736         | 1345                       | 1561                     | 25                    | 30                  |
| 600/500                                                                             | 1065      | 972 | 1065 | 600/500 x 10,7 | 4114                | 6182                        | 5929                                 | 7896         | 1715                       | 1967                     | 28                    | 33                  |
| 600/500                                                                             | 1065      | 972 | 1065 | 600/500 x 12,2 | 4616                | 6980                        | 6691                                 | 9057         | 2077                       | 2365                     | 30                    | 35                  |

### Double carcass tail full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 6 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 490       | 420 | 490  | 150 x 9,1  | 785                 | 958                         | 937                                  | 1281         | 323                        | 344                      | 34                    | 37                  |
| 150                                                                                 | 490       | 420 | 490  | 150 x 10,7 | 899                 | 1100                        | 1076                                 | 1497         | 397                        | 421                      | 36                    | 39                  |
| 150                                                                                 | 490       | 420 | 490  | 150 x 12,2 | 1011                | 1242                        | 1214                                 | 1714         | 472                        | 500                      | 38                    | 41                  |
| 200                                                                                 | 557       | 487 | 557  | 200 x 9,1  | 1040                | 1348                        | 1310                                 | 1724         | 376                        | 413                      | 28                    | 32                  |
| 200                                                                                 | 557       | 487 | 557  | 200 x 10,7 | 1191                | 1550                        | 1506                                 | 2014         | 465                        | 508                      | 30                    | 34                  |
| 200                                                                                 | 557       | 487 | 557  | 200 x 12,2 | 1341                | 1751                        | 1701                                 | 2305         | 554                        | 604                      | 32                    | 36                  |
| 250                                                                                 | 658       | 581 | 658  | 250 x 9,1  | 1391                | 1875                        | 1816                                 | 2441         | 566                        | 625                      | 30                    | 34                  |
| 250                                                                                 | 658       | 581 | 658  | 250 x 10,7 | 1592                | 2156                        | 2087                                 | 2855         | 699                        | 768                      | 32                    | 37                  |
| 250                                                                                 | 658       | 581 | 658  | 250 x 12,2 | 1790                | 2435                        | 2356                                 | 3268         | 833                        | 912                      | 34                    | 39                  |
| 300                                                                                 | 701       | 633 | 701  | 300 x 9,1  | 1668                | 2361                        | 2276                                 | 2884         | 523                        | 608                      | 22                    | 27                  |
| 300                                                                                 | 701       | 633 | 701  | 300 x 10,7 | 1903                | 2711                        | 2612                                 | 3375         | 664                        | 763                      | 25                    | 29                  |
| 300                                                                                 | 701       | 633 | 701  | 300 x 12,2 | 2134                | 3057                        | 2944                                 | 3866         | 809                        | 922                      | 26                    | 31                  |
| 400                                                                                 | 850       | 768 | 850  | 400 x 9,1  | 2335                | 3450                        | 3314                                 | 4238         | 788                        | 924                      | 23                    | 28                  |
| 400                                                                                 | 850       | 768 | 850  | 400 x 10,7 | 2665                | 3965                        | 3807                                 | 4962         | 997                        | 1155                     | 25                    | 30                  |
| 400                                                                                 | 850       | 768 | 850  | 400 x 12,2 | 2991                | 4477                        | 4296                                 | 5686         | 1208                       | 1390                     | 27                    | 32                  |
| 500                                                                                 | 1005      | 913 | 1005 | 500 x 9,1  | 3145                | 4917                        | 4701                                 | 5979         | 1062                       | 1278                     | 22                    | 27                  |
| 500                                                                                 | 1005      | 913 | 1005 | 500 x 10,7 | 3572                | 5640                        | 5388                                 | 7003         | 1363                       | 1615                     | 24                    | 30                  |
| 500                                                                                 | 1005      | 913 | 1005 | 500 x 12,2 | 3994                | 6357                        | 6069                                 | 8027         | 1669                       | 1957                     | 26                    | 32                  |

# H3030T FF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass tail full floating hose

#### CONSTRUCTION

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Oil resistant liner                           | NBR                                      |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      |
| Wire helix                                    | Embedded in synthetic rubber             |
| Reinforcing fabric plies                      | Polyester                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene |
| Fitting                                       | Built-in                                 |

#### PERFORMANCE

|                                             |              |                          |
|---------------------------------------------|--------------|--------------------------|
| Rated Working Pressure                      | bar          | 19                       |
| Min. burst pressure                         | bar          | 95                       |
| Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Minimum Bending Radius                      |              | 6 x id                   |
| Max. temp. elong.                           | %            | 2,5                      |
| Max. perm. elong.                           | %            | 0,7                      |
| Aromatic resistance                         | up to        | % 80                     |
| Fluid temp. range                           | °C           | -20; +82                 |
| Ambient temp. range                         | °C           | -29; +52                 |
| Flow velocity                               | up to        | m/s 21                   |
| Electrically                                | as requested | continuous/discontinuous |
| Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

#### CHARACTERISTICS



| Nom. diam. | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|            | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                     |                   |
|            | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150        | 499       | 429 | 499  | 150 x 9,1  | 857                 | 1030                        | 1009                                 | 1337         | 307                        | 328                      | 30                  | 33                |
| 150        | 499       | 429 | 499  | 150 x 10,7 | 984                 | 1186                        | 1162                                 | 1563         | 376                        | 401                      | 32                  | 35                |
| 150        | 499       | 429 | 499  | 150 x 12,2 | 1110                | 1340                        | 1312                                 | 1788         | 448                        | 476                      | 33                  | 36                |
| 200        | 557       | 487 | 557  | 200 x 9,1  | 1040                | 1348                        | 1310                                 | 1724         | 376                        | 413                      | 28                  | 32                |
| 200        | 557       | 487 | 557  | 200 x 10,7 | 1191                | 1550                        | 1506                                 | 2014         | 465                        | 508                      | 30                  | 34                |
| 200        | 557       | 487 | 557  | 200 x 12,2 | 1341                | 1751                        | 1701                                 | 2305         | 554                        | 604                      | 32                  | 36                |
| 250        | 658       | 581 | 658  | 250 x 9,1  | 1406                | 1890                        | 1831                                 | 2441         | 551                        | 610                      | 29                  | 33                |
| 250        | 658       | 581 | 658  | 250 x 10,7 | 1609                | 2173                        | 2104                                 | 2855         | 682                        | 751                      | 31                  | 36                |
| 250        | 658       | 581 | 658  | 250 x 12,2 | 1808                | 2453                        | 2374                                 | 3268         | 815                        | 894                      | 33                  | 38                |
| 300        | 712       | 642 | 712  | 300 x 9,1  | 1776                | 2468                        | 2384                                 | 2969         | 501                        | 586                      | 20                  | 25                |
| 300        | 712       | 642 | 712  | 300 x 10,7 | 2027                | 2835                        | 2736                                 | 3474         | 639                        | 738                      | 23                  | 27                |
| 300        | 712       | 642 | 712  | 300 x 12,2 | 2275                | 3199                        | 3086                                 | 3979         | 781                        | 893                      | 24                  | 29                |
| 400        | 858       | 776 | 858  | 400 x 9,1  | 2418                | 3533                        | 3397                                 | 4328         | 795                        | 931                      | 22                  | 27                |
| 400        | 858       | 776 | 858  | 400 x 10,7 | 2765                | 4065                        | 3907                                 | 5067         | 1001                       | 1160                     | 25                  | 30                |
| 400        | 858       | 776 | 858  | 400 x 12,2 | 3106                | 4593                        | 4412                                 | 5806         | 1213                       | 1394                     | 26                  | 32                |
| 500        | 1050      | 959 | 1050 | 500 x 9,1  | 3378                | 5151                        | 4934                                 | 6543         | 1393                       | 1609                     | 27                  | 33                |
| 500        | 1050      | 959 | 1050 | 500 x 10,7 | 3843                | 5911                        | 5659                                 | 7671         | 1760                       | 2012                     | 30                  | 36                |
| 500        | 1050      | 959 | 1050 | 500 x 12,2 | 4303                | 6666                        | 6378                                 | 8798         | 2132                       | 2420                     | 32                  | 38                |

### Double carcass tail full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |    |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|----|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 21                       |    |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 105                      |    |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |    |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 6 x id                   |    |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |    |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |    |
|                                               |                                          | Aromatic resistance                         | up to        | %                        | 80 |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |    |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |    |
|                                               |                                          | Flow velocity                               | up to        | m/s                      | 21 |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |    |
|                                               |                                          | Reserve buoyancy                            | min.         | %                        | 20 |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 499       | 429 | 499  | 150 x 9,1  | 857                 | 1030                        | 1009                                 | 1337         | 307                        | 328                      | 30                    | 33                  |
| 150                                                                                 | 499       | 429 | 499  | 150 x 10,7 | 984                 | 1186                        | 1162                                 | 1563         | 376                        | 401                      | 32                    | 35                  |
| 150                                                                                 | 499       | 429 | 499  | 150 x 12,2 | 1110                | 1340                        | 1312                                 | 1788         | 448                        | 476                      | 33                    | 36                  |
| 200                                                                                 | 557       | 487 | 557  | 200 x 9,1  | 1050                | 1358                        | 1320                                 | 1724         | 366                        | 403                      | 27                    | 31                  |
| 200                                                                                 | 557       | 487 | 557  | 200 x 10,7 | 1203                | 1562                        | 1518                                 | 2014         | 453                        | 496                      | 29                    | 33                  |
| 200                                                                                 | 557       | 487 | 557  | 200 x 12,2 | 1354                | 1764                        | 1714                                 | 2305         | 541                        | 591                      | 31                    | 34                  |
| 250                                                                                 | 658       | 581 | 658  | 250 x 9,1  | 1406                | 1890                        | 1831                                 | 2441         | 551                        | 610                      | 29                    | 33                  |
| 250                                                                                 | 658       | 581 | 658  | 250 x 10,7 | 1609                | 2173                        | 2104                                 | 2855         | 682                        | 751                      | 31                    | 36                  |
| 250                                                                                 | 658       | 581 | 658  | 250 x 12,2 | 1808                | 2453                        | 2374                                 | 3268         | 815                        | 894                      | 33                    | 38                  |
| 300                                                                                 | 720       | 650 | 720  | 300 x 9,1  | 1846                | 2538                        | 2454                                 | 3044         | 506                        | 591                      | 20                    | 24                  |
| 300                                                                                 | 720       | 650 | 720  | 300 x 10,7 | 2111                | 2919                        | 2820                                 | 3562         | 644                        | 742                      | 22                    | 26                  |
| 300                                                                                 | 720       | 650 | 720  | 300 x 12,2 | 2373                | 3296                        | 3183                                 | 4080         | 784                        | 896                      | 24                    | 28                  |
| 400                                                                                 | 858       | 776 | 858  | 400 x 9,1  | 2456                | 3571                        | 3435                                 | 4328         | 757                        | 893                      | 21                    | 26                  |
| 400                                                                                 | 858       | 776 | 858  | 400 x 10,7 | 2808                | 4108                        | 3950                                 | 5067         | 958                        | 1117                     | 23                    | 28                  |
| 400                                                                                 | 858       | 776 | 858  | 400 x 12,2 | 3155                | 4642                        | 4461                                 | 5806         | 1164                       | 1345                     | 25                    | 30                  |
| 500                                                                                 | 1050      | 959 | 1050 | 500 x 9,1  | 3378                | 5151                        | 4934                                 | 6544         | 1394                       | 1610                     | 27                    | 33                  |
| 500                                                                                 | 1050      | 959 | 1050 | 500 x 10,7 | 3843                | 5911                        | 5659                                 | 7672         | 1761                       | 2014                     | 30                    | 36                  |
| 500                                                                                 | 1050      | 959 | 1050 | 500 x 12,2 | 4303                | 6666                        | 6378                                 | 8800         | 2134                       | 2422                     | 32                    | 38                  |



# H3838 DF DASH POSEIDON

## DOUBLE CARCASS

### Double carcass tanker rail dumbel floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar 15                   |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar 75                   |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi 550                  |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | % 2,5                    |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | % 0,7                    |
|                                               |                                          | Aromatic resistance up to                   | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C -20; +82              |
|                                               |                                          | Ambient temp. range                         | °C -29; +52              |
|                                               |                                          | Flow velocity up to                         | m/s 21                   |
|                                               |                                          | Electrically as requested                   | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy min.                       | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 532       | 423 | 496  | 150 x 9,1  | 871                 | 1044                        | 1023                                 | 1610         | 566                        | 587                      | 54                    | 57                  |
| 150                                                                                 | 532       | 423 | 496  | 150 x 10,7 | 1001                | 1203                        | 1178                                 | 1871         | 669                        | 693                      | 56                    | 59                  |
| 150                                                                                 | 532       | 423 | 496  | 150 x 12,2 | 1132                | 1362                        | 1334                                 | 2117         | 755                        | 783                      | 55                    | 59                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 9,1  | 1134                | 1442                        | 1405                                 | 2177         | 735                        | 773                      | 51                    | 55                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 10,7 | 1308                | 1667                        | 1623                                 | 2538         | 871                        | 915                      | 52                    | 56                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 12,2 | 1481                | 1891                        | 1841                                 | 2863         | 971                        | 1021                     | 51                    | 55                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 9,1  | 1475                | 1959                        | 1900                                 | 2825         | 865                        | 924                      | 44                    | 49                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 10,7 | 1699                | 2264                        | 2195                                 | 3287         | 1023                       | 1092                     | 45                    | 50                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 12,2 | 1923                | 2568                        | 2490                                 | 3708         | 1140                       | 1218                     | 44                    | 49                  |
| 300                                                                                 | 929       | 600 | 856  | 300 x 9,1  | 1876                | 2569                        | 2484                                 | 3901         | 1333                       | 1417                     | 52                    | 57                  |
| 300                                                                                 | 929       | 600 | 856  | 300 x 10,7 | 2172                | 2980                        | 2881                                 | 4545         | 1565                       | 1664                     | 53                    | 58                  |
| 300                                                                                 | 929       | 600 | 856  | 300 x 12,2 | 2467                | 3391                        | 3278                                 | 5136         | 1745                       | 1858                     | 51                    | 57                  |
| 400                                                                                 | 1138      | 699 | 1029 | 400 x 9,1  | 2571                | 3686                        | 3550                                 | 5699         | 2013                       | 2149                     | 55                    | 61                  |
| 400                                                                                 | 1138      | 699 | 1029 | 400 x 10,7 | 2984                | 4285                        | 4127                                 | 6299         | 2014                       | 2173                     | 47                    | 52                  |
| 400                                                                                 | 1138      | 699 | 1029 | 400 x 12,2 | 3399                | 4885                        | 4704                                 | 7128         | 2243                       | 2424                     | 46                    | 52                  |
| 500                                                                                 | 1321      | 809 | 1248 | 500 x 9,1  | 3406                | 5178                        | 4962                                 | 7564         | 2386                       | 2602                     | 46                    | 52                  |
| 500                                                                                 | 1321      | 809 | 1248 | 500 x 10,7 | 3939                | 6007                        | 5755                                 | 8367         | 2360                       | 2612                     | 39                    | 45                  |
| 500                                                                                 | 1321      | 809 | 1248 | 500 x 12,2 | 4472                | 6836                        | 6548                                 | 9533         | 2697                       | 2985                     | 39                    | 46                  |

### Double carcass tanker rail dumbel floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 578       | 432 | 505  | 150 x 9,1  | 963                 | 1136                        | 1115                                 | 1746         | 610                        | 631                      | 54                    | 57                  |
| 150                                                                                 | 578       | 432 | 505  | 150 x 10,7 | 1113                | 1315                        | 1290                                 | 2034         | 719                        | 744                      | 55                    | 58                  |
| 150                                                                                 | 578       | 432 | 505  | 150 x 12,2 | 1263                | 1494                        | 1466                                 | 2290         | 796                        | 824                      | 53                    | 56                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 9,1  | 1134                | 1442                        | 1405                                 | 2177         | 735                        | 773                      | 51                    | 55                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 10,7 | 1308                | 1667                        | 1623                                 | 2538         | 871                        | 915                      | 52                    | 56                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 12,2 | 1481                | 1891                        | 1841                                 | 2863         | 971                        | 1021                     | 51                    | 55                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 9,1  | 1490                | 1974                        | 1915                                 | 2825         | 850                        | 909                      | 43                    | 47                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 10,7 | 1715                | 2280                        | 2211                                 | 3287         | 1007                       | 1076                     | 44                    | 49                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 12,2 | 1941                | 2586                        | 2508                                 | 3708         | 1122                       | 1200                     | 43                    | 48                  |
| 300                                                                                 | 938       | 609 | 865  | 300 x 9,1  | 1986                | 2678                        | 2594                                 | 3999         | 1320                       | 1405                     | 49                    | 54                  |
| 300                                                                                 | 938       | 609 | 865  | 300 x 10,7 | 2299                | 3106                        | 3008                                 | 4658         | 1552                       | 1650                     | 50                    | 55                  |
| 300                                                                                 | 938       | 609 | 865  | 300 x 12,2 | 2611                | 3535                        | 3422                                 | 5264         | 1730                       | 1842                     | 49                    | 54                  |
| 400                                                                                 | 1146      | 707 | 1037 | 400 x 9,1  | 2656                | 3771                        | 3635                                 | 5801         | 2031                       | 2167                     | 54                    | 60                  |
| 400                                                                                 | 1146      | 707 | 1037 | 400 x 10,7 | 3086                | 4387                        | 4228                                 | 6415         | 2028                       | 2187                     | 46                    | 51                  |
| 400                                                                                 | 1146      | 707 | 1037 | 400 x 12,2 | 3516                | 5003                        | 4822                                 | 7260         | 2257                       | 2438                     | 45                    | 51                  |
| 500                                                                                 | 1331      | 818 | 1258 | 500 x 9,1  | 3591                | 5364                        | 5148                                 | 7706         | 2342                       | 2558                     | 44                    | 50                  |
| 500                                                                                 | 1331      | 818 | 1258 | 500 x 10,7 | 4154                | 6222                        | 5970                                 | 8528         | 2306                       | 2558                     | 37                    | 43                  |
| 500                                                                                 | 1331      | 818 | 1258 | 500 x 12,2 | 4717                | 7081                        | 6793                                 | 9717         | 2636                       | 2925                     | 37                    | 43                  |

# H3838 DF DASH POSEIDON

## DOUBLE CARCASS

Double carcass tanker rail dumbel floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar 21                   |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar 105                  |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi 550                  |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      | 4 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | % 2,5                    |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | % 0,7                    |
|                                               |                                          | Aromatic resistance up to                   | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C -20; +82              |
|                                               |                                          | Ambient temp. range                         | °C -29; +52              |
|                                               |                                          | Flow velocity up to                         | m/s 21                   |
|                                               |                                          | Electrically as requested                   | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy min.                       | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|-----|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |     |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |     |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2  | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm  | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 578       | 432 | 505  | 150 x 9,1  | 963                 | 1136                        | 1115                                 | 1746         | 610                        | 631                      | 54                    | 57                  |
| 150                                                                                 | 578       | 432 | 505  | 150 x 10,7 | 1113                | 1315                        | 1290                                 | 2034         | 719                        | 744                      | 55                    | 58                  |
| 150                                                                                 | 578       | 432 | 505  | 150 x 12,2 | 1263                | 1494                        | 1466                                 | 2290         | 796                        | 824                      | 53                    | 56                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 9,1  | 1145                | 1453                        | 1416                                 | 2177         | 724                        | 762                      | 50                    | 54                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 10,7 | 1320                | 1679                        | 1635                                 | 2538         | 859                        | 903                      | 51                    | 55                  |
| 200                                                                                 | 636       | 490 | 563  | 200 x 12,2 | 1494                | 1904                        | 1854                                 | 2863         | 958                        | 1008                     | 50                    | 54                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 9,1  | 1490                | 1974                        | 1915                                 | 2825         | 850                        | 909                      | 43                    | 47                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 10,7 | 1715                | 2280                        | 2211                                 | 3287         | 1007                       | 1076                     | 44                    | 49                  |
| 250                                                                                 | 731       | 548 | 657  | 250 x 12,2 | 1941                | 2586                        | 2508                                 | 3708         | 1122                       | 1200                     | 43                    | 48                  |
| 300                                                                                 | 946       | 617 | 873  | 300 x 9,1  | 2057                | 2749                        | 2665                                 | 4084         | 1335                       | 1420                     | 49                    | 53                  |
| 300                                                                                 | 946       | 617 | 873  | 300 x 10,7 | 2384                | 3191                        | 3093                                 | 4758         | 1566                       | 1665                     | 49                    | 54                  |
| 300                                                                                 | 946       | 617 | 873  | 300 x 12,2 | 2712                | 3635                        | 3522                                 | 5378         | 1743                       | 1856                     | 48                    | 53                  |
| 400                                                                                 | 1146      | 707 | 1037 | 400 x 9,1  | 2694                | 3809                        | 3673                                 | 5801         | 1993                       | 2129                     | 52                    | 58                  |
| 400                                                                                 | 1146      | 707 | 1037 | 400 x 10,7 | 3130                | 4431                        | 4272                                 | 6415         | 1984                       | 2143                     | 45                    | 49                  |
| 400                                                                                 | 1146      | 707 | 1037 | 400 x 12,2 | 3565                | 5052                        | 4871                                 | 7260         | 2208                       | 2389                     | 44                    | 49                  |
| 500                                                                                 | 1331      | 818 | 1258 | 500 x 9,1  | 3591                | 5364                        | 5148                                 | 7706         | 2342                       | 2558                     | 44                    | 50                  |
| 500                                                                                 | 1331      | 818 | 1258 | 500 x 10,7 | 4154                | 6222                        | 5970                                 | 8528         | 2306                       | 2558                     | 37                    | 43                  |
| 500                                                                                 | 1331      | 818 | 1258 | 500 x 12,2 | 4717                | 7081                        | 6793                                 | 9717         | 2636                       | 2925                     | 37                    | 43                  |

## Double carcass fully reinforced full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 15                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 75                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 6 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |      |            |                     |                             |                                      |              |                            |                          |                     |                   |
|-------------------------------------------------------------------------------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|  |           |      |      |            |                     |                             |                                      |              |                            |                          |                     |                   |
| Nom. diam.                                                                          | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|                                                                                     | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                     |                   |
|                                                                                     | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150                                                                                 | 495       | 425  | 495  | 150 x 9,1  | 816                 | 989                         | 968                                  | 1312         | 323                        | 344                      | 33                  | 36                |
| 150                                                                                 | 495       | 425  | 495  | 150 x 10,7 | 935                 | 1137                        | 1113                                 | 1533         | 396                        | 421                      | 35                  | 38                |
| 150                                                                                 | 495       | 425  | 495  | 150 x 12,2 | 1054                | 1285                        | 1257                                 | 1755         | 470                        | 498                      | 37                  | 40                |
| 200                                                                                 | 570       | 500  | 570  | 200 x 9,1  | 1121                | 1429                        | 1391                                 | 1818         | 389                        | 426                      | 27                  | 31                |
| 200                                                                                 | 570       | 500  | 570  | 200 x 10,7 | 1286                | 1645                        | 1601                                 | 2124         | 479                        | 523                      | 29                  | 33                |
| 200                                                                                 | 570       | 500  | 570  | 200 x 12,2 | 1449                | 1859                        | 1809                                 | 2431         | 571                        | 621                      | 31                  | 34                |
| 250                                                                                 | 671       | 594  | 671  | 250 x 9,1  | 1489                | 1973                        | 1914                                 | 2553         | 580                        | 639                      | 29                  | 33                |
| 250                                                                                 | 671       | 594  | 671  | 250 x 10,7 | 1705                | 2270                        | 2201                                 | 2985         | 715                        | 784                      | 32                  | 36                |
| 250                                                                                 | 671       | 594  | 671  | 250 x 12,2 | 1921                | 2566                        | 2487                                 | 3417         | 851                        | 930                      | 33                  | 37                |
| 300                                                                                 | 712       | 644  | 712  | 300 x 9,1  | 1753                | 2445                        | 2361                                 | 2986         | 541                        | 625                      | 22                  | 26                |
| 300                                                                                 | 712       | 644  | 712  | 300 x 10,7 | 2001                | 2809                        | 2711                                 | 3494         | 685                        | 784                      | 24                  | 29                |
| 300                                                                                 | 712       | 644  | 712  | 300 x 12,2 | 2247                | 3170                        | 3057                                 | 4003         | 832                        | 945                      | 26                  | 31                |
| 400                                                                                 | 868       | 786  | 868  | 400 x 9,1  | 2493                | 3608                        | 3472                                 | 4439         | 831                        | 967                      | 23                  | 28                |
| 400                                                                                 | 868       | 786  | 868  | 400 x 10,7 | 2851                | 4152                        | 3993                                 | 5197         | 1045                       | 1204                     | 25                  | 30                |
| 400                                                                                 | 868       | 786  | 868  | 400 x 12,2 | 3204                | 4691                        | 4510                                 | 5955         | 1263                       | 1445                     | 27                  | 32                |
| 500                                                                                 | 1033      | 942  | 1033 | 500 x 9,1  | 3505                | 5277                        | 5061                                 | 6362         | 1085                       | 1301                     | 21                  | 26                |
| 500                                                                                 | 1033      | 942  | 1033 | 500 x 10,7 | 3994                | 6062                        | 5810                                 | 7450         | 1388                       | 1640                     | 23                  | 28                |
| 500                                                                                 | 1033      | 942  | 1033 | 500 x 12,2 | 4479                | 6842                        | 6554                                 | 8538         | 1696                       | 1984                     | 25                  | 30                |
| 600                                                                                 | 1234      | 1136 | 1234 | 600 x 9,1  | 4849                | 7435                        | 7120                                 | 9160         | 1725                       | 2040                     | 23                  | 29                |
| 600                                                                                 | 1234      | 1136 | 1234 | 600 x 10,7 | 5517                | 8534                        | 8166                                 | 10742        | 2208                       | 2576                     | 26                  | 32                |
| 600                                                                                 | 1234      | 1136 | 1234 | 600 x 12,2 | 6181                | 9629                        | 9208                                 | 12324        | 2696                       | 3116                     | 28                  | 34                |

# H3737 FF DASH POSEIDON

## DOUBLE CARCASS

Double carcass fully reinforced full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |              |                          |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|--------------|--------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar          | 19                       |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar          | 95                       |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | psi          | 550                      |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      |              | 6 x id                   |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | %            | 2,5                      |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | %            | 0,7                      |
|                                               |                                          | Aromatic resistance                         | up to        | % 80                     |
|                                               |                                          | Fluid temp. range                           | °C           | -20; +82                 |
|                                               |                                          | Ambient temp. range                         | °C           | -29; +52                 |
|                                               |                                          | Flow velocity                               | up to        | m/s 21                   |
|                                               |                                          | Electrically                                | as requested | continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min.         | % 20                     |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |      |            |                     |                             |                                      |              |                            |                          |                     |                   |
|-------------------------------------------------------------------------------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|---------------------|-------------------|
|  |           |      |      |            |                     |                             |                                      |              |                            |                          |                     |                   |
| Nom. diam.                                                                          | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water | R.B. fully of oil |
|                                                                                     | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                     |                   |
|                                                                                     | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                   | %                 |
| 150                                                                                 | 505       | 435  | 505  | 150 x 9,1  | 890                 | 1063                        | 1042                                 | 1375         | 312                        | 333                      | 29                  | 32                |
| 150                                                                                 | 505       | 435  | 505  | 150 x 10,7 | 1022                | 1224                        | 1199                                 | 1607         | 383                        | 408                      | 31                  | 34                |
| 150                                                                                 | 505       | 435  | 505  | 150 x 12,2 | 1152                | 1383                        | 1355                                 | 1839         | 456                        | 484                      | 33                  | 36                |
| 200                                                                                 | 570       | 500  | 570  | 200 x 9,1  | 1121                | 1429                        | 1391                                 | 1818         | 389                        | 426                      | 27                  | 31                |
| 200                                                                                 | 570       | 500  | 570  | 200 x 10,7 | 1286                | 1645                        | 1601                                 | 2124         | 479                        | 523                      | 29                  | 33                |
| 200                                                                                 | 570       | 500  | 570  | 200 x 12,2 | 1449                | 1859                        | 1809                                 | 2431         | 571                        | 621                      | 31                  | 34                |
| 250                                                                                 | 671       | 594  | 671  | 250 x 9,1  | 1504                | 1988                        | 1929                                 | 2553         | 565                        | 624                      | 28                  | 32                |
| 250                                                                                 | 671       | 594  | 671  | 250 x 10,7 | 1722                | 2287                        | 2218                                 | 2985         | 698                        | 767                      | 31                  | 35                |
| 250                                                                                 | 671       | 594  | 671  | 250 x 12,2 | 1939                | 2584                        | 2505                                 | 3417         | 833                        | 912                      | 32                  | 36                |
| 300                                                                                 | 724       | 653  | 724  | 300 x 9,1  | 1861                | 2554                        | 2469                                 | 3074         | 520                        | 605                      | 20                  | 24                |
| 300                                                                                 | 724       | 653  | 724  | 300 x 10,7 | 2126                | 2934                        | 2836                                 | 3596         | 662                        | 761                      | 23                  | 27                |
| 300                                                                                 | 724       | 653  | 724  | 300 x 12,2 | 2390                | 3313                        | 3200                                 | 4119         | 806                        | 918                      | 24                  | 29                |
| 400                                                                                 | 876       | 794  | 876  | 400 x 9,1  | 2578                | 3693                        | 3557                                 | 4531         | 838                        | 974                      | 23                  | 27                |
| 400                                                                                 | 876       | 794  | 876  | 400 x 10,7 | 2951                | 4252                        | 4093                                 | 5304         | 1052                       | 1211                     | 25                  | 30                |
| 400                                                                                 | 876       | 794  | 876  | 400 x 12,2 | 3320                | 4807                        | 4626                                 | 6077         | 1271                       | 1452                     | 26                  | 31                |
| 500                                                                                 | 1079      | 987  | 1079 | 500 x 9,1  | 3741                | 5514                        | 5298                                 | 6944         | 1430                       | 1646                     | 26                  | 31                |
| 500                                                                                 | 1079      | 987  | 1079 | 500 x 10,7 | 4268                | 6336                        | 6084                                 | 8140         | 1803                       | 2056                     | 28                  | 34                |
| 500                                                                                 | 1079      | 987  | 1079 | 500 x 12,2 | 4790                | 7154                        | 6865                                 | 9335         | 2182                       | 2470                     | 30                  | 36                |
| 600                                                                                 | 1234      | 1136 | 1234 | 600 x 9,1  | 4926                | 7512                        | 7197                                 | 9160         | 1648                       | 1963                     | 22                  | 27                |
| 600                                                                                 | 1234      | 1136 | 1234 | 600 x 10,7 | 5604                | 8621                        | 8253                                 | 10742        | 2121                       | 2489                     | 25                  | 30                |
| 600                                                                                 | 1234      | 1136 | 1234 | 600 x 12,2 | 6277                | 9725                        | 9304                                 | 12324        | 2600                       | 3020                     | 27                  | 32                |

### Double carcass fully reinforced full floating hose

| CONSTRUCTION                                  |                                          | PERFORMANCE                                 |                                       |
|-----------------------------------------------|------------------------------------------|---------------------------------------------|---------------------------------------|
| Oil resistant liner                           | NBR                                      | Rated Working Pressure                      | bar 21                                |
| Main reinforcement of 1 <sup>st</sup> carcass | Steel wire cord skimmed with rubber      | Min. burst pressure                         | bar 105                               |
| Wire helix                                    | Embedded in synthetic rubber             | Min. burst pressure 2 <sup>nd</sup> carcass | bar 550                               |
| Reinforcing fabric plies                      | Polyester                                | Minimum Bending Radius                      | 6 x id                                |
| Cover                                         | Abrasion resistant rubber in Chloroprene | Max. temp. elong.                           | % 2,5                                 |
| Fitting                                       | Built-in                                 | Max. perm. elong.                           | % 0,7                                 |
|                                               |                                          | Aromatic resistance                         | up to % 80                            |
|                                               |                                          | Fluid temp. range                           | °C -20; +82                           |
|                                               |                                          | Ambient temp. range                         | °C -29; +52                           |
|                                               |                                          | Flow velocity                               | up to m/s 21                          |
|                                               |                                          | Electrically                                | as requested continuous/discontinuous |
|                                               |                                          | Reserve buoyancy                            | min. % 20                             |

Main reinf. of 2<sup>nd</sup> carcass: nylon cord skimmed with rubber

| CHARACTERISTICS                                                                     |           |      |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
|-------------------------------------------------------------------------------------|-----------|------|------|------------|---------------------|-----------------------------|--------------------------------------|--------------|----------------------------|--------------------------|-----------------------|---------------------|
|  |           |      |      |            |                     |                             |                                      |              |                            |                          |                       |                     |
| Nom. diam.                                                                          | Hose O.D. |      |      | Size       | Weight in air empty | Weight in air full of water | Weight in air full of oil s.g. = 0,9 | Displacement | Net buoyancy full of water | Net buoyancy full of oil | R.B. fully of water % | R.B. fully of oil % |
|                                                                                     | D1        | D2   | D3   |            |                     |                             |                                      |              |                            |                          |                       |                     |
|                                                                                     | mm        | mm   | mm   | mm x m     | kg                  | kg                          | kg                                   | kg           | kg                         | kg                       | %                     | %                   |
| 150                                                                                 | 505       | 435  | 505  | 150 x 9,1  | 890                 | 1063                        | 1042                                 | 1375         | 312                        | 333                      | 29                    | 32                  |
| 150                                                                                 | 505       | 435  | 505  | 150 x 10,7 | 1022                | 1224                        | 1199                                 | 1607         | 383                        | 408                      | 31                    | 34                  |
| 150                                                                                 | 505       | 435  | 505  | 150 x 12,2 | 1152                | 1383                        | 1355                                 | 1839         | 456                        | 484                      | 33                    | 36                  |
| 200                                                                                 | 570       | 500  | 570  | 200 x 9,1  | 1131                | 1439                        | 1401                                 | 1818         | 379                        | 416                      | 26                    | 30                  |
| 200                                                                                 | 570       | 500  | 570  | 200 x 10,7 | 1298                | 1657                        | 1613                                 | 2124         | 467                        | 511                      | 28                    | 32                  |
| 200                                                                                 | 570       | 500  | 570  | 200 x 12,2 | 1463                | 1873                        | 1823                                 | 2431         | 557                        | 607                      | 30                    | 33                  |
| 250                                                                                 | 671       | 594  | 671  | 250 x 9,1  | 1504                | 1988                        | 1929                                 | 2553         | 565                        | 624                      | 28                    | 32                  |
| 250                                                                                 | 671       | 594  | 671  | 250 x 10,7 | 1722                | 2287                        | 2218                                 | 2985         | 698                        | 767                      | 31                    | 35                  |
| 250                                                                                 | 671       | 594  | 671  | 250 x 12,2 | 1939                | 2584                        | 2505                                 | 3417         | 833                        | 912                      | 32                    | 36                  |
| 300                                                                                 | 732       | 661  | 732  | 300 x 9,1  | 1931                | 2624                        | 2539                                 | 3150         | 527                        | 611                      | 20                    | 24                  |
| 300                                                                                 | 732       | 661  | 732  | 300 x 10,7 | 2211                | 3019                        | 2920                                 | 3686         | 667                        | 765                      | 22                    | 26                  |
| 300                                                                                 | 732       | 661  | 732  | 300 x 12,2 | 2487                | 3410                        | 3298                                 | 4221         | 811                        | 923                      | 24                    | 28                  |
| 400                                                                                 | 876       | 794  | 876  | 400 x 9,1  | 2616                | 3731                        | 3595                                 | 4531         | 800                        | 936                      | 21                    | 26                  |
| 400                                                                                 | 876       | 794  | 876  | 400 x 10,7 | 2995                | 4296                        | 4137                                 | 5304         | 1008                       | 1167                     | 23                    | 28                  |
| 400                                                                                 | 876       | 794  | 876  | 400 x 12,2 | 3370                | 4857                        | 4676                                 | 6077         | 1221                       | 1402                     | 25                    | 30                  |
| 500                                                                                 | 1079      | 987  | 1079 | 500 x 9,1  | 3741                | 5514                        | 5298                                 | 6944         | 1430                       | 1646                     | 26                    | 31                  |
| 500                                                                                 | 1079      | 987  | 1079 | 500 x 10,7 | 4268                | 6336                        | 6084                                 | 8140         | 1803                       | 2056                     | 28                    | 34                  |
| 500                                                                                 | 1079      | 987  | 1079 | 500 x 12,2 | 4790                | 7154                        | 6865                                 | 9335         | 2182                       | 2470                     | 30                    | 36                  |
| 600                                                                                 | 1269      | 1153 | 1269 | 600 x 9,1  | 5259                | 7845                        | 7529                                 | 9493         | 1649                       | 1964                     | 21                    | 26                  |
| 600                                                                                 | 1269      | 1153 | 1269 | 600 x 10,7 | 5994                | 9011                        | 8643                                 | 11125        | 2114                       | 2482                     | 23                    | 29                  |
| 600                                                                                 | 1269      | 1153 | 1269 | 600 x 12,2 | 6722                | 10170                       | 9750                                 | 12757        | 2587                       | 3007                     | 25                    | 31                  |



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