

Group 1 Hydraulic Hoses



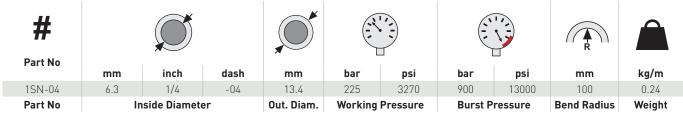
FLUID CONTROL



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Symbol Key





Available for rental

For information on safe hose assembly, see chapter 20

HYDRAULIC HOSES 1SN / 2SN



1



APPLICATIONS:

High-pressure hose for petroleum-based hydraulic oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan.

Hoses and swaged couplings are also available with type approvals from a number of classification societies.

# Part No							
i ur no	mm	inch	dash	mm	bar	psi	bar
1SN-04	6.3	1/4	-04	13.4	225	3260	900
1SN-06	9.5	3/8	-06	17.4	180	2610	720
1SN-08	12.7	1/2	-08	20.7	160	2320	640
1SN-10	15.9	5/8	-10	23.9	130	1880	520
1SN-12	19.0	3/4	-12	27.8	105	1530	420
1SN-16	25.4	1	-16	35.8	88	1270	352
1SN-20	31.8	1.1/4	-20	44.8	63	910	252
1SN-24	38.1	1.1/2	-24	51.1	50	725	200
1SN-32	50.8	2	-32	64.7	40	580	160



APPLICATIONS:

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High-pressure hose for petroleum-based hydraulic oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan.

Hoses and swaged couplings are also available with type approvals from a number of classification societies.

0		
•	mm	
4	6.3	







Type EN853 1SN / ISO 1436 1 Layer Hydraulic Hose

CONSTRUCTION:

Covering: Reinforcement: Internal: Black synthetic rubber 1 layer steel wire braid Nitrile rubber (NBR)

TEMPERATURE RANGE:

-40°C to +100°	C f
-40°C to +85°C	; 1
-40°C to +70°C	: 1

for hydraulic oils for water for air

		R		Fitting
bar	psi	mm	kg/m	Series
900	13000	100	0.24	002SC
720	10400	130	0.34	002AT
640	9280	180	0.43	002AT
520	7500	200	0.49	002AT
420	6100	240	0.63	002AT
352	5100	300	0.94	002AT
252	3650	420	1.19	002AT
200	2900	500	1.49	002AT
160	2300	630	2.23	002AT

Type EN 853 2SN / ISO 1436 2 Layer Hydraulic Hose

CONSTRUCTION:

Covering:	
Reinforcement:	
Internal:	

Black synthetic rubber 2 layers steel wire braid Nitrile rubber (NBR)

TEMPERATURE RANGE

-40°C to +100°C -40°C to +85°C -40°C to +70°C for hydraulic oils for water for air

> Fitting Series

Part No					T	ſ			ĸ		Series
1 art no	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
2SN-04	6.3	1/4	-04	15.0	400	5800	1600	23200	100	0.39	002AT
2SN-06	9.5	3/8	-06	19.0	330	4775	1320	19100	130	0.55	002AT
2SN-08	12.7	1/2	-08	22.2	275	4000	1100	16000	180	0.67	002AT
2SN-10	15.9	5/8	-10	25.4	250	3600	1000	14500	200	0.77	002AT
2SN-12	19.0	3/4	-12	29.3	215	3100	860	12400	240	1.00	002AT
2SN-16	25.4	1	-16	38.1	165	2400	660	9600	300	1.49	002AT
2SN-20	31.8	1.1/4	-20	47.5	125	1800	500	7200	420	1.73	002AT
2SN-24	38.1	1.1/2	-24	55.0	90	1300	360	5200	500	2.14	002AT
2SN-32	50.8	2	-32	67.0	80	1150	320	4600	630	2.96	002AT





APPLICATIONS:

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High-pressure hose for petroleum-based hydraulic oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan.

SUPPLIED WITH TOUGH COVER OUTSIDE COATING ON REQUEST

Type EN857 2SC / ISO 11237 2SC 2 Layer Compact Hose

CONSTRUCTION:

Covering:	Black synthetic rubber				
Reinforcement:	2 layers steel wire braid				
Internal:	Nitrile rubber (NBR)				
TEMPERATURE RANGE:					
-40°C to +100°C	for hydraulic oils				

-40°C to +85°C -40°C to +70°C for water for air

Fittin
Corio

g

Part No					T	Ţ			R		Series
Faitinu	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
2SC-04	6.3	1/4	-04	13.4	425	6160	1700	24640	75	0.30	002SC
2SC-06	9.5	3/8	-06	17.2	350	5075	1400	20300	90	0.42	002SC
2SC-08	12.7	1/2	-08	20.4	310	4495	1240	17980	130	0.52	002SC
2SC-10	15.9	5/8	-10	23.9	280	4060	1120	16240	160	0.66	002SC
2SC-12	19.0	3/4	-12	27.7	280	4060	1120	16240	195	0.86	002SC
2SC-16	25.4	1	-16	35.4	210	3045	840	12180	250	1.17	002SC
2SC-20	31.8	1.1/4	-20	43.0	172	2495	688	9980	335	1.50	002SC



APPLICATIONS:

High-pressure hose for petroleum-based hydraulic oils, biodegradable oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan.

Hydraulic Hose 2 Layer Compact Hose SAE100R16 High-temperature Hose

CONSTRUCTION:

Covering:	Blue synthetic rubber
Reinforcement:	2 layers steel wire braid
Internal:	Synthetic rubber PKR

TEMPERATURE RANGE:

-48°C to +150°C -48°C to +85°C -48°C to +70°C

for hydraulic oils for water for air

rubber

# Part No									R		Fitting Series
	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
2SC-06HT	9.5	3/8	-06	17.0	275	4000	1100	16000	65	0.42	002AT
2SC-08HT	12.7	1/2	-08	20.0	240	3500	960	14000	90	0.51	002AT
2SC-10HT	15.9	5/8	-10	24.0	190	2750	760	11000	100	0.66	002AT
2SC-12HT	19.0	3/4	-12	28.0	155	2250	620	9000	120	0.80	002AT
2SC-16HT	25.4	1	-16	36.0	138	2000	550	8000	150	1.22	002AT



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APPLICATIONS:

High-pressure hose with synthetic, heat-resistant internal rubber, 2 layers steel wire braid, blue synthetic rubber cover, lightweight, very flexible. Synthetic, oil- and weather-resistant covering. Special hose for hot-water high-pressure washers.

The combination of high temperature and high pressure reduces the hose's lifespan.

HIGH PRESSURE HOSE Type Active Wash Compact

CONSTRUCTION:

Covering: B Reinforcement: 2 Internal: Sy TEMPERATURE RANGE:

-40°C to +120°C

Blue synthetic rubber 2 layers steel wire braid Synthetic rubber

# Part No									R		Fitting Series
i ul tito	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
2SC-05W	7.9	5/16	-05	15.0	400	5800	1200	17400	75	0.31	46
2SC-06W	9.5	3/8	-06	17.4	400	5800	1200	17400	90	0.38	002SC
2SC-08W	12.7	1/2	-08	20.6	350	5075	1050	15225	110	0.48	002SC



APPLICATIONS:

High-pressure hose with synthetic, heat-resistant internal rubber, 2 layers steel wire braid, blue synthetic rubber cover, lightweight, very flexible. Synthetic, oil and weather-resistant covering. Special hose for hot-water high-pressure washers.

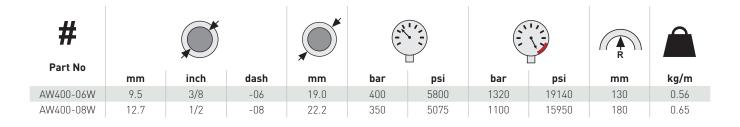
The covering needs to be removed before attaching couplings (skive). The combination of high temperature and high pressure reduces the hose's lifespan.

HIGH PRESSURE HOSE Type Active Wash 400

CONSTRUCTION:

Covering: Reinforcement: Internal: Blue synthetic rubber 2 layers steel wire braid Synthetic rubber

TEMPERATURE RANGE: -40°C to +150°C





HYDRAULIC HOSES 372 / 4SP







APPLICATIONS:

3-wire braid compact hose with 4SP working pressures. General high pressure small bending radii hydraulic applications. No-skive hose construction. Nitrile (NBR) inner tube for extended fluid compability.

RECOMMENDED FLUIDS

Petroleum and water-glycol based fluids, lubricating oils, air and water. For air above 1.7 MPa, the hose cover must be pin-pricked.

3 Layer Hydraulic Hose Type 372 4SP

CONSTRUCTION:

Covering:	Synthetic rubber
Reinforcement:	Three high tensile steel wire braids
Internal:	Nitrile (NBR)

TEMPERATURE RANGE:

-40°C to +100°C
max +85°C
max +70°C

for hydraulic oils for water for air

# Part No								R		Fitting Series	
. ur the	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
372 -06	9.5	3/8	-06	21.4	445	6500	1800	25800	120	0.73	70
372 -08	12.7	1/2	-08	24.6	415	6000	1660	24000	160	0.90	70
372 -10	15.9	5/8	-10	28.2	350	5000	1400	20000	210	1.09	70
372 -12	19.1	3/4	-12	32.2	350	5000	1400	20000	260	1.36	70
372 -16	25.4	1	-16	39.7	280	4000	1220	16000	310	1.78	70



APPLICATIONS:

High-pressure hose for petroleum-based hydraulic oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan. The hose is not suitable for constant immersion in oil. Hoses and couplings are also available with type approvals from a number of classification societies.

SUPPLIED WITH TOUGH COVER OUTSIDE COATING ON REQUEST



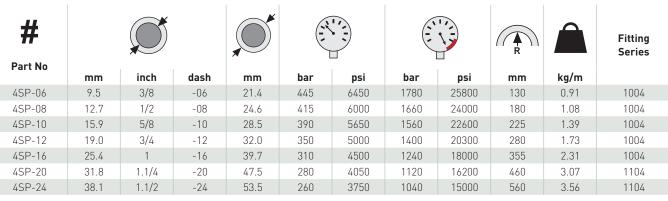
CONSTRUCTION:

Covering:	Black synthetic rubber
Reinforcement:	4 layers steel wire spirals
Internal:	Synthetic rubber

TEMPERATURE RANGE:

-40°C to +100°C
-40°C to +85°C
-40°C to +70°C

E: for hydraulic oils for water for air



HYDRAULIC HOSES 4SH / R13







Type EN856 4SH / ISO 3862-1 4SH 4 Layer Hydraulic Hose

APPLICATIONS:

#

High-pressure hose for petroleum-based hydraulic oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan. The hose is not suitable for constant immersion in oil. Hoses and swaged couplings are also available with type approvals from a number of classification societies.

SUPPLIED WITH TOUGH COVER OUTSIDE COATING ON REQUEST

CONSTRUCTION:

Reinforcement:	4 layers steel wire spirals					
Internal:	Synthetic rubber					
TEMDEDATIIDE DANCE.						

MPERATURE RAN

-40°C to +100°C	
-40°C to +85°C	
-40°C to +70°C	

er for hydraulic oils

for water for air

	Fitting
-	Series

Part No					T	ſ	T		R		Series
Part NO	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
4SH-12	19.0	3/4	-12	32.2	430	6250	1720	25000	280	1.7	1104
4SH-16	25.4	1	-16	38.7	400	5800	1600	23200	340	2.2	1104
4SH-20	31.8	1.1/4	-20	45.5	350	5000	1400	20000	460	2.6	1104
4SH-24	38.1	1.1/2	-24	53.5	310	4500	1240	18000	560	3.4	1104
4SH-32	50.8	2	-32	68.1	280	4050	1120	16200	700	4.8	1104



APPLICATIONS:

High-pressure hose for petroleum-based hydraulic oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan. The hose is not suitable for constant immersion in oil. Hoses and swaged couplings are also available with type approvals from a number of classification societies.

Type EN856 R13 / ISO 3862-1 R13 4/6 Layer Hydraulic Hose

CONSTRUCTION.

Covering:	Black synthetic rubber				
Reinforcement:	4 or 6 layers steel wire spirals				
Internal:	Synthetic rubber				

TEMPERATURE RANGE:

-40°C to +100°C -40°C to +85°C -40°C to +70°C

for hydraulic oils for water for air

# Part No									R		Fitting Series
	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
R13-12	19.1	3/4	-12	32.1	345	5000	1380	20000	220	1.5	1104
R13-16	25.4	1	-16	38.7	345	5000	1380	20000	280	2.2	1104
R13-20	31.8	1.1/4	-20	49.8	345	5000	1380	20000	380	3.7	1306
R13-24	38.1	1.1/2	-24	57.3	345	5000	1380	20000	480	4.8	1306
R13-32	50.8	2	-32	71.1	345	5000	1380	20000	600	6.6	1306



HYDRAULIC HOSES R 13 / R15



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EXTRUDED COVER:

Thermoplastic Polyurethane. Elastomer Extrusion offers:-

- Excellent wear resistance.
- Total assembly encapsulation with the prevention of sea water ingress, particularly from external pressure in deep water operation.
- Corrosion elimination.
- Resistant against microbial attack.
- Withstands repeated flexing.
- Flame proof halogen free.

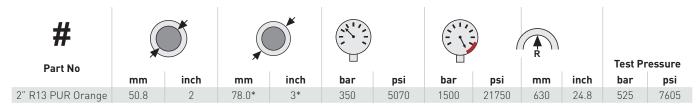
Type R13 PUR ORANGE 4 Layer Hydraulic Hose

CONSTRUCTION:

Covering:Orange environment resistantsynthetic cover rubberReinforcement:Four high tensile steel spiralsInternal:Oil resistant synthetic rubberCover Colour Identification : Orange

A HOSE DEVELOPMENT FOR A SPECIFIC APPLICATION

The hose and fitting that offers extended life, improved performance and total sealing capability.



* Approximate outside diameter – extruded cover thickness – 1.6/2.0mm



APPLICATIONS:

High-pressure hose for petroleum-based hydraulic oils, *water-glycol and *water-oil hydraulic emulsions, grease, lubricants, crude oil, diesel, air and water. The hose must be pin-prickled for air and gas applications over 17 bar (250psi).

The combination of high temperature and high pressure reduces the hose's lifespan. The hose is not suitable for constant immersion in oil. Hoses and swaged couplings are also available with type approvals from a number of classification societies.

Type R15 / ISO 3862-1 R15 4/6 Layer Hydraulic Hose

CONSTRUCTION:

Covering: Reinforcement:	Black synthetic rubber 4 or 6 layers steel wire spirals
Internal:	Synthetic rubber
	GE:

-40°C to +100°C -40°C to +85°C -40°C to +70°C for hydraulic oils for water for air

# Part No								1	R		Fitting Series
i arcito	mm	inch	dash	mm	bar	psi	bar	psi	mm	kg/m	
R15-10	15.9	5/8	-10	28.5	420	6000	1680	24000	225	1.4	1104
R15-12	19.1	3/4	-12	32.0	420	6000	1680	24000	280	1.7	1104
R15-16	25.4	1	-16	39.0	420	6000	1680	24000	300	2.3	1104
R15-20	31.8	1.1/4	-20	50.8	420	6000	1680	24000	400	3.8	1306
R15-24	38.1	1.1/2	-24	57.0	420	6000	1680	24000	500	4.8	1306
R15-32	50.8	2	-32	71.5	420	6000	1680	24000	700	7.0	1306

SEE CHAPTER 3 FOR COUPLINGS FOR THESE HOSES

Flexible Solutions



BLOWOUT PREVENTER Firemaster API 16D Hydraulic Hose System







# Part No		ð					(Ŕ	Ĺ	
i art ito	inch	mm	inch	mm	psi	bar	inch	mm	lbs/ft	kg/m
F5-04	1/4	6.4	1.09	27.80	7250	500	5.91	150	0.67	1.00
F5-06	3/8	9.5	1.12	31.30	6600	460	7.09	180	0.82	1.23
F5-08	1/2	12.7	1.35	34.40	6100	425	9.06	230	0.96	1.43
F5-12	3/4	19	1.65	42.00	6000	420	11.02	280	1.46	2.17
F5-16	1	25.4	1.89	48.10	5500	385	13.39	340	1.89	2.82
F5-20	1.1/4	31.8	2.36	60.00	5000	350	16.50	419	3.08	4.60
F5-24	1.1/2	38.1	2.64	67.20	5000	350	19.69	500	4.00	5.98
F5-32	2	50.8	3.22	81.80	5000	350	24.80	630	5.50	8.20

ASK US ABOUT COUPLING OPTIONS. HOSE AND COUPLINGS ARE ONLY SUPPLIED PREASSEMBLED.

CONSTRUCTION:

Covering: Reinforcement: Internal:

Extruded protective polyurethane (PU) sheath Four or six high tensile steel spirals Synthetic, swelling resistant rubber tube

Fire rated hydraulic hose with permanently attached couplings.

TEMPERATURES:

Service temperature range (°C): -40 to 121 Fire rating: Flame temperature 1,100°C for 5 minutes (API)

APPLICATIONS:

Flexible hose for hydraulic systems using mineral oils, glycols and aqueous emulsion oils in fire safety critical areas and for Blowout Preventer control.

SPECIFIED STANDARDS

• API 16D 1st Edition - Control Systems for Drilling Well Control Equipment • Lloyds Register's Fire Tests for Flexible Hoses on Offshore Installations, OD 1000/499

The Firemaster 16D Hydraulic Hose System is the latest addition to the Hydrasun range of Fire Rated Hose Assemblies.

Developed primarily to address the stringent requirements demanded for Blowout Prevention and well control applications, the Firemaster 16D is also ideally suited for any high pressure hydraulic applications where there is a need for hoses to be Fire Rated and capable of working in extreme heat in the event of an emergency.

In addition to satisfying the requirements of the Lloyds Register Fire Test for Flexible Hoses on Offshore Installations - OD1000/499 which calls for the pressurised Hose Assembly to withstand temperatures of 1000 degrees C for 5 minutes, the Firemaster 16D also conforms with the API16D standard for Control Systems for Drilling Well Control Equipment.

Other key design features of the product include a heavy-duty cover that affords resistance to abrasion an weathering thus maximizing the life expectancy of the product. Additionally our specially designed integral fittings which are available in a range of materials and thread types provide a complete system solution that delivers the highest levels of technical integrity and reliability.



UMBILICALS & BYPOD HOSES®

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We offer fast track turnaround and delivery of finished product due to our extensive stockholding of specialist hydraulic control line hoses, combined with our in-house capability to manufacture bespoke or specialist end connections in both standard and exotic materials such as Monel, Inconel, 6MO, Super Duplex etc. All Hydrasun's manufacturing operations are approved to BS EN ISO 9001:2000 by LRQA.

A particular area in which we specialise is the short-length Umbilical market offering a customengineered service encompassing design, engineering, manufacturing, testing and installation together with back-up support and after-sales service that the medium/large manufacturers can not match.

Our Extrusion and Coatings service encompasses the encapsulation of both single hose and hose bundles with a Polymer or Elastomer cover that significantly increases hose service life whilst assuring operational reliability.



The hose and fitting that offers extended life, improved performance with total sealing capability.

Cover Colour Identification : Blue & Yellow (Green available to special order)

UMBILICALS & BYPOD HOSES®

TYPICAL APPLICATIONS FOR HYDRASUN UMBILICALS AND JUMPERS

- IWOC Work over umbilicals
- Topside control umbilicals
- In field well head jumpers
- ROV fly to place jumpers
- Hydraulic control umbilicals
- Water jetting umbilicals
- Test tree control umbilicalsAbandonment system umbilicals
- Service lines
- Service lines
- Gas umbilicals
- Wire line umbilicals
- Jacket Submergence umbilicals
- Chemical injection lines
- Calm Buoy umbilicals
- Subsea Umbilicals
- Subsea Jumpers
- Hydraulic Flying Leads



SUBSEA BOP HOSE AND FITTINGS A Hose Assembly Development for a Specific Application

CONSTRUCTION:

Tube:	Service compatible resistant synthetic tube.			
Reinforcement:	inforcement: Four high tensile steel spirals.			
Cover:	Synthetic rubber cover.			
Extra Extruded Co	ver: Thermoplastic Polyurethane.			

Elastomer Extrusion - which offers:

- Excellent wear resistance.
- Total assembly encapsulation with the prevention of sea water ingress, particularly from external pressure in deep water operation.
- Corrosion elimination.
- Resistance against microbial attack.
- Withstands repeated flexing.
- Flame-proof halogen free.

# Part No		ð					(R	Test Pr	essure
i art no	inch	mm	inch	mm	psi	bar	inch	mm	psi	bar
7KBP-04-Y\B	1/4	6.3	*0.86	*21.8	7000	480	5.9	150	10 500	724
5KBP-08-Y\B	1/2	12.7	*1.10	*28	6000	414	9.0	230	9000	620
5KBP-12-Y\B	**3/4	19	*1.40	*35.8	5500	380	12.0	300	8250	570
5KBP-16-Y\B	1	25	*1.70	*43	5000	345	15.0	340	7500	518
5KBP-24-Y\B	1 1/2	38	*2.40	*61.0	5000	345	20.0	508	7612	525

*Approximate outside diameter - extruded cover thickness - 1.6/2.0mm

** This size is made to special order due to market demand.

Colour Code:

Part number suffixed with Y = Yellow. Part number suffixed with B = Blue.

ASK US ABOUT COUPLING OPTIONS. HOSE AND COUPLINGS ARE ONLY SUPPLIED PREASSEMBLED.



DRAG CHAIN HOSES



We are able to provide hoses for Drag Chain applications both low- and high pressure covering all services. Over the years we have established good relationships towards international manufactures of hoses and Drag Chains for offshore installations.

Hoses for Drag Chain applications are not standard and are made to order. It is extremely important to avoid elongation when hoses are pressurized and measure accurate length between hose connections. The most standard end connections are flanges or Weco unions. Various materials of hose couplings can be proposed upon request.

MOST FREQUENT SERVICES IN DRAG CHAIN:

- Mud
- Sea Water
- Fresh Water
- Instrument Air
- Heating Water Potable Water
- Cement
- Plant Air
- **Completion Fluid**
- Base Oil
- Hydraulic Oil
- Other services on request



Inspection of hoses in Drag Chain performed by one of our service technicians.





ROTARY DRILLING & ROTARY VIBRATOR HOSES API Grade C API Grade D API Grade F

Construction:	Synthetic rubber inside. Resistant to corrosion, wear and oil-containing drilling mud. Reinforced with several layers textile and steel wire, with high tensile strength. Synthetic rubber covering resistant to oils, ozone and wear and tear.
Temp. range:	Operating temperature ÷ 45°C to + 82°C.
Applications:	Rotary hoses are available in lengths up to 90 feet (27.5 m) over all length with built-in fittings with male API threads as default. Outside diameter of the fittings are virtually the same as the outside diameter of the hose. The inside connection between hose and fittings is plane.
Pressure load: Note:	Hoses installed offshore can not be pressure loaded higher than 1.25 x maximum working pressure. Other fittings available on request.

API Grade C

ID Inch	OD mm		king sure		est ssure	Bend Radius mm	Weight kg/m	Weight kg/fittings pair	API Flange
		PSI	bar	PSI	bar				
2	96	4000	280	8000	560	900	11.0	17	2.1/2
2.1/2	110	4000	280	8000	560	1200	13.5	22	3
3	131	4000	280	8000	560	1200	19.6	48	4
3.1/2	145	4000	280	8000	560	1400	22.0	64	4
4	157	4000	280	8000	560	1400	26.4	53	5

API Grade D

ID Inch	OD mm		king sure		est sure	Bend Radius mm	Weight kg/m	Weight kg/fittings pair	API Flange
		PSI	bar	PSI	bar				
2	96	5000	350	10000	700	900	11.1	21	2.1/2
2.1/2	113	5000	350	10000	700	1200	15.4	26	3
3	145	5000	350	10000	700	1200	28.0	64	4
3.1/2	163	5000	350	10000	700	1400	37.0	92	4
4	175	5000	350	10000	700	1400	42.7	122	5

API Grade F

ID Inch	OD mm	Wor Pres			st sure	Bend Radius mm	Weight kg/m	Weight kg/fittings pair	API Flange
		PSI	bar	PSI	bar				
2	98	10000	890	15000	1035	900	14.1	80	2.1/16
2.1/2	113	10000	890	15000	1035	1200	18.7	105	2.9/16
3	130	10000	890	15000	1035	1200	25.0	126	3.1/8
3.1/2	145	10000	890	15000	1035	1400	28.5	150	3.1/8
4	174	10000	890	15000	1035	1400	48.1	195	4.1/8

Flexible Solutions



PROTECTIVE SPIRALS

Construction:

Spiral made yellow polyethylene HDPE in dimensions 54 mm - 160 mm. Yellow polyethylene MDPE in dimension 32 mm. -30°C to +180°C.

Temperature range: Applications:

Wrap around hoses and cables to protect and keep them together.

Ext. dim mm	Part No	Standard length meter	Spiral thickness mm
32	BOV-6032	6	2.5
54	BOV-6054	6	3.5
75	BOV-6075	6	5.5
110	BOV-6110	6	6.5
160	BOV-6160	6	6.5



Construction: Temperature range: Applications:

-10°C to +60°C.

Spiral made of black tempered PVC, hardness SHORE D. Flame-resistant according to UL 94VO.

Wrap around hoses and cables to protect and keep them together.

Part No	ID/0D mm	Std. length meter	Spiral thickness mm	For OD mm
SSW-16	13 / 16	20	1.6	12 - 18
SSW-20	16/20	20	1.7	16 - 26
SSW-25	20 / 25	20	2.1	20 - 27
SSW-32	27/32	20	2.6	27 - 35
SSW-40	35 / 40	20	2.8	35 - 60
SSW-50	44 / 50	20	3	35 - 75
SSW-75	65 / 75	20	4.3	60 - 120
SSW-90	80 / 90	20	5	75 - 200



HOSE STRAPS "FLUID CONTROL"



Construction:	Sturdy, black polyester with zinc-plated chromated safety lock.
	Width 25 mm. Thickness approx. 1.5 mm.

Tensile strength: 250 kg.

Applications:Used for attachment of hoses and cables etc.Length500 mmPart No REIM-0500Length750 mmPart No REIM-0750Length1000 mmPart No REIM-1000Length1500 mmPart No REIM-1500Length2000 mmPart No REIM-2000

Also available in red and green.



