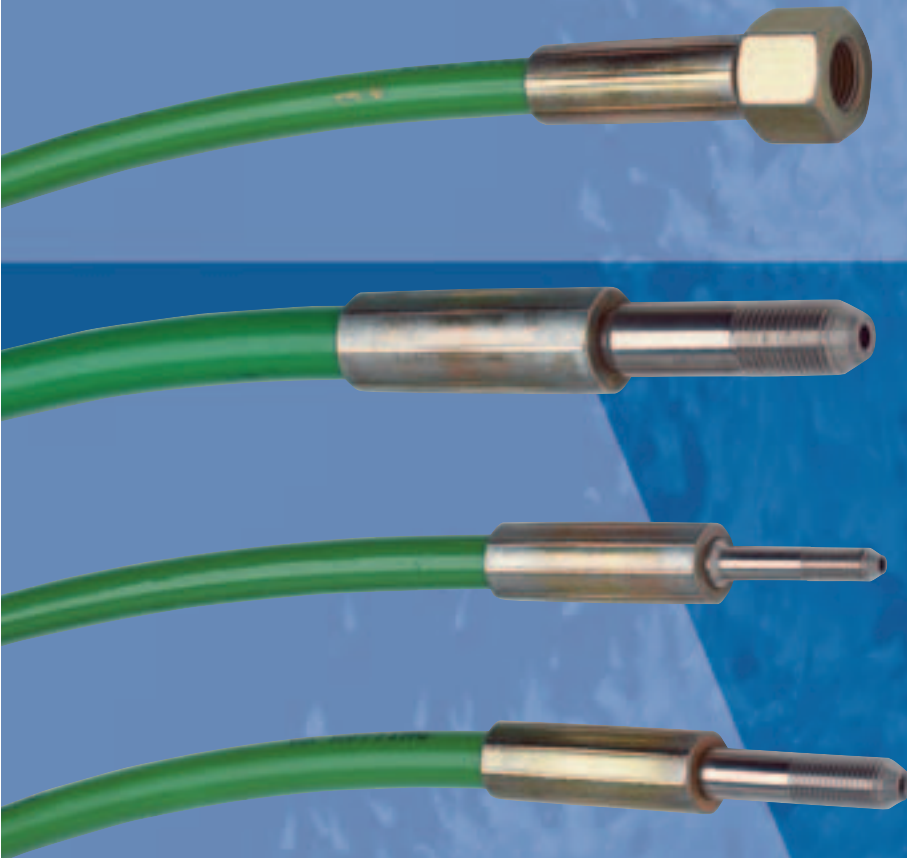


Resato

HIGH PRESSURE TECHNOLOGY



HIGH-PRESSURE HOSES

Working pressures up to 2800 bar (40,000 psi)
Low volumetric expansion
Small outside diameter
Low weight



DESCRIPTION

Resato supplies a complete range of high-pressure hoses for fluids and gases up to working pressures of 2800 bar (40,000 psi).

The inside diameter of the hoses varies from 4, 5, 8, 10 to 13 mm. This diameter, in combination with 4 or 6 layers of high tensile steel wires, make the hoses suitable for the high pressures listed in the hose type table.

The high-pressure hoses are available with metric and BSP bi-chromized swivel connections, or stainless steel high-pressure UNF type end fittings. See end fittings table for the right choice of connections.

For safety reasons a lower working pressure is calculated when using oil and gas instead of water as a medium. Safety factors for working pressure against burst pressure are 2.5 for water, 4 for oil and 6 for gases. The maximum working pressures mentioned in the hose type table are calculated with a safety factor 2.5 for water. When using gas as a medium, the polyamide cover of the hose will be perforated.

Furthermore, every hose is pressure-tested before delivery. A test certificate can be ordered optionally. For safe operation a hose guard and safety grips can be ordered as options. For detailed information see the type tables.

Materials:

Inner core	POM: Polyoxymethylene or Polyamide PA: Nylon 11/12
Pressure support	4 or 6 layers of specially treated, high-tensile steel wires. See hose type table.
Outer cover	Polyamide PA: Nylon 11/12
Working temperature*	-30° C to + 60° C / -22° F to 140° F

HOSE TYPE TABLE (6 LAYERS)

Hose type H		4/6	5/6	5/6H	8/6	8/6H	10/6	13/6
Inside diameter	mm	4.0	5.0	5.0	8.0	8.0	9.8	12.8
Outside diameter	mm	11.5	13.4	13.5	16.4	17.5	20.4	23.4
Maximum working pressure*	bar	2800	2620	2800	2100	2500	1920	1800
	psi	40,600	38,000	40,600	30,450	36,250	27,840	26,100
Maximum burst pressure	bar	7000	6550	7000	5250	6250	4800	4500
	psi	101,500	95,000	101,500	76,125	90,625	69,600	65,250
Minimum bend radius	mm	175	200	220	250	260	260	300
Weight	kg/m	0.36	0.45	0.52	0.64	0.83	1.00	1.16

* Safety factor for burst pressure and working pressure, as well as test pressure, depends on operating conditions.

HOSE TYPE TABLE (4 LAYERS)

Hose type H		4/4	5/4	6/4	8/4	10/4	13/4
Inside diameter	mm	4.0	5.0	6.3	8.0	9.8	12.8
Outside diameter	mm	10.2	11.2	12.6	14.6	18.4	21.4
Maximum working pressure*	bar	2160	1800	1520	1520	1520	1280
	psi	31,320	26,100	22,040	22,040	22,040	18,560
Maximum burst pressure	bar	5400	4500	3800	3800	3800	3200
	psi	78,300	65,250	55,100	55,100	55,100	46,400
Minimum bend radius	mm	130	150	180	200	200	200
Weight	kg/m	0.20	0.26	0.30	0.39	0.69	0.84

* Safety factor for burst pressure and working pressure, as well as test pressure, depends on operating conditions

Test time for hoses is 3 minutes



OPTIONS

Test Certificate

Every hose is tested before delivery. A test certificate has to be ordered separately. The certificate contains information such as serial number of the hose, test pressure, working pressure, test medium used, test date and order number.

Ordering Code : C

Hose Guard

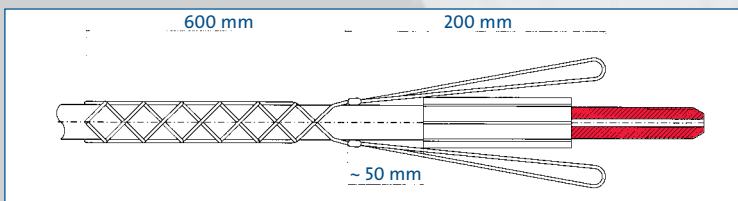
The outside of the high-pressure hose can be protected against damage by means of a hose guard.

Ordering code : H

Safety grips

Safety grips will reduce the first impact in case a connection blows out under pressure. The zinc plated safety grips are mounted on each hose-end and have to be firmly connected to the unit, object or construction part. For dimensions see drawing of the safety grips.

Ordering code : S

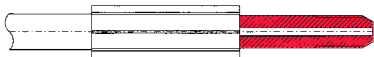
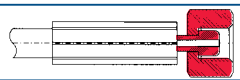


END FITTINGS

Hoses can be supplied with several end fittings.

The end fittings table shows the fittings that are available for the different hose types.

END FITTINGS TYPE TABLE

Available fitting types					
					
Hose type H	1/4"- 28 UNF-LH male	3/8"-24 UNF-LH male	9/16"-18 UNF-LH male	BSP 1/4"	Metric M14x1.5
4/6	A	B			
5/6	A	B	C		
5/6H	A	B	C		
8/6			C		
8/6H			C		
10/6			C		
13/6			C		
4/4	A	B			
5/4	A	B	C	D	E
6/4		B	C	D	E
8/4			C		
10/4			C		
13/4	Stainless steel high-pressure coned and threaded tubing connection. Rated for maximum hose operating pressure. Collar and gland are not included. The choice of collar is determined by the selected end fitting. The gland can be delivered with a Metric or UNF male thread connection.			Bi-chromized Metric and BSP swivel connection (M14x1.5 and 1/4" BSP), uses a male cone and female nut, rated for maximum hose operating pressure.	



GENERAL ORDERING CODE HIGH-PRESSURE HOSES TYPE H

Example: H-5/6-2000-A-B-S-H-C

H	=	High pressure hose type H.
5	=	Inside diameter 5 mm.
6	=	6 layers.
2000	=	Length 2000 mm.
A	=	1 st hose end provided with 1/4"-28 UNF-LH-Male.
B	=	2nd hose end provided with 3/8"-24 UNF-LH-Male.
S	=	Safety grip at both hose ends.
H	=	Hose guard.
C	=	Test certificate.

GLANDS AND COLLARS

For the UNF hose end fittings, glands and collars have to be ordered separately. The collar fits the UNF thread type corresponding with the hose-end fitting. The gland can be ordered in UNF or Metric style.

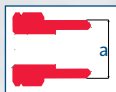
Ordering code: See glands and collars type tables below.

COLLAR



For fitting type A	For fitting type B	For fitting type C
1/4"-28 UNF-LH (b)	3/8"-24 UNF-LH (b)	9/16"-18 UNF-LH (b)
Ordering code	Ordering code	Ordering code
MU1-11	MU2-11	MU3-11

GLANDS



For fitting type A	For fitting type A	For fitting type B	For fitting type B	For fitting type C	For fitting type C
M16x1.5 (a)	9/16"-18 UNF (a)	M20x1.5 (a)	3/4"-16 UNF (a)	M30x2 (a)	1 1/8"-12" UNF (a)
ordering code	ordering code	ordering code	ordering code	ordering code	ordering code
M1-10	MU1-10	M2-10	MU2-10	M3-10	MU3-10

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Please note that general data and specifications given in this brochure are subject to change without notice. Feel free to contact our sales department if you need more definite information.