



polyflex[®]
Thermoplastic Hoses
for Water-Jetting
Technology

Catalogue 4462-UK
May 2005



Polyflex hose Facilities



Hüttenfeld / Germany



Wissembourg / France



Almelo / Netherlands



Buxton / Great Britain



Chomutov / Czech Republic

For Your Safety

The hose assemblies listed in this catalogue are all special constructions with the hose having up to eight spiral layers of steel wire. Due to this construction, pressures are achieved which far exceed German and international standards. These hose types are manufactured and tested according to the Polyflex standards which have proved to be effective over many years.

Polyflex hose assemblies are used at considerable working pressures. The critical area of a hose assembly is the connection between flexible hose and rigid fitting (crimping area). Only the use of original Polyflex components (hose, fittings and tooling) and full compliance with the Polyflex assembly instructions can guarantee safety and conformity with standards. It is essential that training be given to customers in the hose assembly process in order to make high quality Polyflex maximum pressure hose assemblies.

For the production and testing of the hose assemblies relevant to the applications, the guidelines and technical regulations as well as the protection and hazard prevention rulings must be adhered to.

You as the manufacturer of Polyflex hose assemblies are obliged to mark these hose assemblies according to the regulations and to verify their safety by a final pressure test.

Non-compliance with these rules can lead to the premature failure of the hose assembly and the loss of warranty.

A - Sewer Cleaning Hose			
ESH250 - Sewer Cleaning Hose	A1	A	
B - High Pressure Tube Cleaning Hose and Fittings			
2240D - High Pressure Tube Cleaning Hose	B1	B	
Fittings AX/TX Series	B2,B3		
C - High Pressure Water Jetting Hose and Fittings			
2380N - High Pressure Water Jetting Hose	C1	C	
2244N - High Pressure Water Jetting Hose	C1		
Fittings KX Series	C2,C3		
D - High Pressure Water Jetting Hose and Fittings			
2388N - High Pressure Water Jetting Hose	D1	D	
2580N - High Pressure Water Jetting Hose	D4		
Fittings BS/BL Series	D2,D5		
E - Ultra-High Pressure Water Jetting Hose and Fittings			
2440D/2440N - Ultra-High Pressure Water Jetting Hose	E1	E	
Fittings LX Series	E2,E3		
F - Ultra-High Pressure Water Jetting Hose and Fittings			
2640D/2640N - Ultra-High Pressure Water Jetting Hose	F1	F	
Fittings HX/5X Series	F2,F3		
G - Ultra-High Pressure Water Jetting Hose and Fittings			
2740D - Ultra-High Pressure Water Jetting Hose	G1	G	
Fittings HX Series	G2		
H - Ultra-High Pressure Hose and Fittings for Ultra High Water Pressure Equipment			
2840D - Ultra-High Pressure Hose for Ultra High Water Pressure Equipment	H1	H	
Fittings WX Series	H2		
I - Accessories			
D2D2 - Metric Adapter	I1	I	
D9D9 - Straight Adapter	I1		
AZAZ - UNF Adapter	I1		
PVC-S - Anti-Abrasion Sleeve	I2		
HS - Containment Strips	I2		
UHPLABEL - Precautions for Ultra-High Pressure Applications	I2		
J - High Pressure Components			
Locking Nut/Collar Standard	J1	J	
Locking Nut/Collar Anti-Vibration	J1		
Hand Valve	J2		
Filter Type 3	J2		
Straight, Elbow, and Tee Unions	J3		
Cross Union, Bulkhead Coupling	J4		
Reducer	J4		
HP Connections, Assembly Instructions	J5		
K - Technical Information			
Flow Capacity Nomogram	K1	K	
Chemical Resistance, Precautions	K2		

Fitting Selection Chart

Code	Description	Fitting Series									
		RS	BS	BL	AX	BX	HX	5X	WX	KX	TX
01	NPT Male	•	•	•							
92	Sealing Head – BSP Swivel Nut	•	•	•						•	
C9	Sealing Cone/O-Ring – Metric Swivel Nut	•	•	•	•	•	•			•	•
AY	Sealing Head – UNF Swivel Nut						•	•		•	
YA	High Pressure Connection – 59° UNF Cone									•	
Y4	High Pressure Connection – 59° UNF Cone						•	•	•		
YB	High Pressure BSP Male				•						•
YM	High Pressure Connection – 59° Metric Cone						•		•	•	
YZ	High Pressure Metric Male										•

For Your Safety:

All fittings listed in this catalogue as well as their allocation to the appropriate hose types have been factory tested for integrity and safety. Due to the use of special materials we are able to reach pressures which are much higher than defined by international standards.
 Fitting end connections are pressure limited. The working pressure of the hose assembly is the lower value from the hose and fitting working pressures.

Ordering Example

Example for the POLYFLEX Hose and Fittings KEY



2440 N - 16 V37

Hose type ← 2440
 Core tube material ← N
 Design code ← V37
 Hose ID in 1/16" ← 16



6 Y4 HX - 9 - 3 C

Manufacturing location ← 6
 Connection code ← Y4
 Fitting series ← HX
 Material ← C
 Hose ID in 1/16" ← 9
 Connection size ← 3

ESH250 – Sewer Cleaning Hose

A



Construction:

Core Tube:

Thermoplastic Elastomere

Pressure Reinforcement:

2 braided layers of high tensile synthetic fiber, homogenous compound

Cover:

Polyurethane, red, extreme abrasive and cut resistance

Applications:

Hydrodynamic cleaning of sewers

Part No. #	DN size			mm	Max. Working Pressure		Min. Burst Pressure		Min. Bend Radius	Weight
	inch				MPa / psi	MPa / psi	mm	kg/m		
ESH250-08	12	-08	1/2	20.7	25	3,625	62.5	9,060	100	0.24
ESH250-12	20	-12	3/4	28.6	25	3,625	62.5	9,060	125	0.40
ESH250-16	25	-16	1	36.5	25	3,625	62.5	9,060	175	0.60
ESH250-20	32	-20	1 1/4	46.0	25	3,625	62.5	9,060	225	1.00

Temperature range: -10 °C up to + 50 °C

Change in length: ± 2% at working pressure

Standard available hose assemblies

Note:

Factory made assemblies only.

Ordering example:

ESH250-08-80

Part No. #	Length (m)						End Fittings	
	Standard					max.	BSP Female Swivel	BSP Male
	80	100	120	160	180			
ESH250-08	•	•	•	•	•	350	G 1/2	G 1/2
ESH250-12	•	•	•	•	•	350	G 3/4	G 3/4
ESH250-16	•	•	•	•	•	350	G 1	G 1
ESH250-20	•	•	•	•	•	350	G 1 1/4	G 1 1/4

2240D – High Pressure Tube Cleaning Hose



B

Construction:

Core Tube:

Polyoxymethylene

Pressure Reinforcement:

Two spiral layers of high tensile steel wire

Cover:

Polyamide, blue

Applications:

High pressure service for tube cleaning applications such as heat exchangers in the chemical and oil refining industries. Application as flexible lance at working pressures of 75 MPa and higher.

Special type hose:

Available with an additional protective stainless steel wire braid.

Fittings:

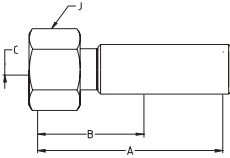
AX, TX series

See pages B2/B3

Part No. #	DN size mm inch				mm	Max. Working Pressure MPa / psi		Min. Burst Pressure MPa / psi		Min. Bend Radius mm	Weight kg/m
	3	-02	3.0	1/8		7.0	110	15,950	275		
2240D-02V32	3	-02	3.0	1/8	7.0	110	15,950	275	39,875	60	0.07
2240D-025V32	4	-025	4.0	5/32	7.7	120	17,400	300	43,500	75	0.10
2240D-03V32	5	-03	4.7	3/16	9.5	100	14,500	250	36,250	95	0.13
2240D-04V32	6	-04	6.3	1/4	11.5	100	14,500	250	36,250	110	0.20
2240D-05V32	8	-05	8.0	5/16	13.3	90	13,050	225	32,625	120	0.25

Temperature range: -10°C up to +70°C

1C9AX/1C9TX – Sealing Cone / O-Ring Metric Swivel Nut

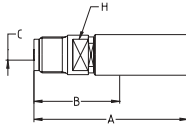


AX/TX Series

Part No. #	DN size		mm		inch		Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure	
	mm	inch	mm	inch	Thread Size	Tube OD	MPa	psi						
1C9TX-16-02W	3	-02	3.0	1/8	M24x1.5	16	59.5	38.5	30	1.7	110	15,950		
1C9TX-16-025W	4	-025	4.0	5/32	M24x1.5	16	65.5	34.5	30	3.0	120	17,400		
1C9TX-16-03W	5	-03	4.8	3/16	M24x1.5	16	73.5	42.0	30	3.0	100	14,500		
1C9AX-16-04W	6	-04	6.4	1/4	M24x1.5	16	76.5	43.5	30	4.5	100	14,500		
1C9AX-16-05W *	8	-05	7.9	5/16	M24x1.5	16	71.0	38.0	30	5.5	90	13,050		

Fittings: Special materials
 * DN4-6 with support ferrule
 * DN8 without support ferrule

1YZTX – High Pressure Metric Male



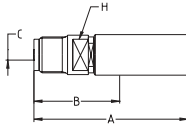
B

TX Series

Part No. #	DN size		mm		inch		Connection Type	A	B	H	C	Max. Working Pressure	
	mm	inch	mm	inch	Thread Size	mm	mm	mm	mm	ID	MPa	psi	
1YZTX-1-02WS	3	-02	3.0	1/8	M5	48.5	27.5	6	1.7	110	15,950		
1YZTX-2-02W	3	-02	3.0	1/8	M7	48.5	27.5	7	1.7	110	15,950		
1YZTX-2-025W	4	-025	4.0	5/32	M7	51.0	28.5	8	2.5	120	17,400		
1YZTX-4-025W	4	-025	4.0	5/32	M8	52.5	30.0	8	2.5	120	17,400		
1YZTX-4-03W	5	-03	4.8	3/16	M8	53.0	27.5	10	3.0	100	14,500		
1YZTX-5-04W	6	-04	6.4	1/4	M10x1	59.0	32.5	13	3.0	100	14,500		

Fittings: Special materials

1YBAX/1YBTX – High Pressure BSP Male



AX/TX Series

Part No. #	DN size		mm		inch		Connection Type	A	B	H	C	Max. Working Pressure	
	mm	inch	mm	inch	Thread Size	mm	mm	mm	mm	ID	MPa	psi	
1YBTX-2-025W	4	-025	4.0	5/32	G 1/8	52.5	30.0	8	2.5	120	17,400		
1YBTX-2-03W5	5	-03	4.8	3/16	G 1/8	52.5	27.0	10	3.0	100	14,500		
1YBTX-4-04W	6	-04	6.4	1/4	G 1/4	62.0	35.5	13	4.0	100	14,500		
1YBAX-4-05W	8	-05	7.9	5/16	G 1/4	68.0	35.0	14	5.5	90	13,050		

Fittings: Special materials

2380N – High Pressure Water Jetting Hose



Construction:

Core Tube:
Polyamide

Pressure Reinforcement:

Two spiral layers and two open spiral layers of high tensile steel wire.

Cover:

Polyurethane, black

Applications:

High pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. Mainly used to remove different kinds of dirt accumulation, or materials from various surfaces, such as those in tanks, from concrete, asphalt, etc.

Fittings:

KX series

See page C2/C3

Part No. #	DN size mm inch				mm	Max. Working Pressure MPa / psi		Min. Burst Pressure MPa / psi		Min. Bend Radius mm	Weight kg/m
	6	-04	6.3	1/4		13.3	110	15,950	280		
2380N-04V00W	6	-04	6.3	1/4	13.3	110	15,950	280	40,600	70	0.28
2380N-05V00W	8	-05	8.2	5/16	15.7	100	14,500	250	36,250	90	0.35

Temperature range: -10°C up to + 70°C

2244N – High Pressure Water Jetting Hose



Construction:

Core Tube:
Polyamide

Pressure Reinforcement:

Two spiral layers, one braided layer of high tensile steel wire

Cover:

Polyurethane, black

Applications:

High pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. Mainly used to remove different kinds of dirt accumulation, or materials from various surfaces, such as those in tanks, from concrete, asphalt, etc.

Fittings:

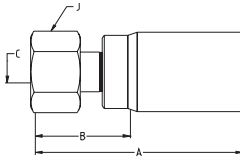
KX series

See page C2/C3

Part No. #	DN size mm inch				mm	Max. Working Pressure MPa / psi		Min. Burst Pressure MPa / psi		Min. Bend Radius mm	Weight kg/m
	10	-06	9.7	3/8		18.0	86	12,470	215		
2244N-06V10W	10	-06	9.7	3/8	18.0	86	12,470	215	31,175	120	0.50
2244N-08V10W	12	-08	12.8	1/2	22.7	88	12,760	220	31,900	150	0.80

Temperature range: -10°C up to + 70°C

1C9KX – Sealing Cone / Metric Swivel Nut and O-Ring

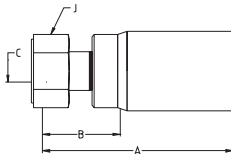


KX Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
	mm	inch	Thread Size	Tube OD	Thread Size	Tube OD					ID	MPa
1C9KX-10-04W	6	-04	6.4	1/4	M18x1.5	10	68.0	36.0	22	4.2	110	15,950
1C9KX-16-05W	8	-05	7.9	5/16	M24x1.5	16	76.5	37.5	30	5.5	100	14,500
1C9KX-14-06W	10	-06	9.5	3/8	M22x1.5	14	79.0	36.5	27	7.2	86	12,470
1C9KX-16-08W	12	-08	12.7	1/2	M24x1.5	16	88.0	40.5	30	9.5	88	12,760

Fittings: Special materials

192KX – Sealing Head / BSP Swivel Nut

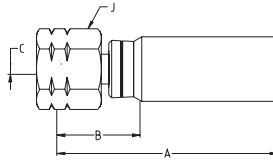


KX Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
	mm	inch	Thread Size	Thread Size	Thread Size	Thread Size					ID	MPa
192KX-4-04W	6	-04	6.4	1/4	G1/4	56.2	24.5	19	4.2	110	15,950	
192KX-6-05W	8	-05	7.9	5/16	G3/8	64.2	25.0	27	5.5	100	14,500	
192KX-6-06W	10	-06	9.5	3/8	G3/8	71.5	29.0	22	7.2	86	12,470	
192KX-8-08W	12	-08	12.7	1/2	G1/2	80.5	33.0	27	9.5	88	12,760	

Fittings: Special materials

1AYKX – Sealing Head / UNF Swivel Nut



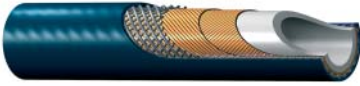
C

KX Series

Part No. #	DN size mm inch				Connection Type	A	B	J	C	Max. Working Pressure	
	mm	inch	mm	inch	Thread Size	mm	mm	mm	mm	MPa	psi
1AYKX-6-04W	6	-04	6.4	1/4	9/16 - 18UNF	61.2	29.5	22	4.2	110	15,950
1AYKX-8-05W	8	-05	7.9	5/16	3/4 - 16UNF	70.2	31.0	27	5.5	100	14,500
1AYKX-8-06W	10	-06	9.5	3/8	3/4 - 16UNF	74.0	31.5	27	7.2	86	12,470
1AYKX-11-08W	12	-08	12.7	1/2	1 - 12UNF	81.5	34.0	32	9.5	88	12,760

Fittings: Special materials

2388N – High Pressure Water Jetting Hose



Construction:

Core Tube:

Polyamide

Pressure Reinforcement:

Two spiral layers and two open spiral layers of high tensile steel wire.

Cover:

Polyurethane, RAL 5001

Applications:

High pressure service for the construction, ship maintenance and general water blast cleaning applications. Particularly well suited for the removal of dirt, rust and paint for surface preparation of ship decks, tanks, concrete and asphalt.

Fittings:

BS series

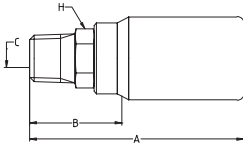
See page D2/D3

Part No.	DN size				mm	Max. Working Pressure		Min. Burst Pressure		Min. Bend Radius	Weight
	mm	inch	mm	inch		MPa	psi	MPa	psi		
2388N-04V12W	6	-04	6.3	1/4	13.3	128.0	18,560	320.0	46,400	80	0.30
2388N-08V12W	12	-08	12.9	1/2	23.0	110.0	15,950	275.0	39,875	80	0.80

Temperature range: -10 °C up to +70 °C

D

101BS – Male NPT

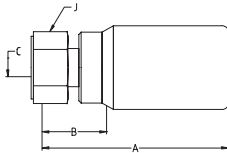


BS Series

Part No. #	DN size mm inch		Connection Type				Max. Working Pressure MPa / psi					
			Thread Size	Tube OD	A mm	B mm			H mm	C mm		
101BS-8-08	12	-08	12.7	1/2	1/2 x 14 NPT	8	93	40	22	8.0	104	15,080

Fittings: Special materials

192BS – 60° cone with BSP Swivel Nut

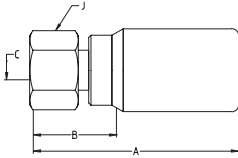


BS Series

Part No. #	DN size mm inch		Connection Type				Max. Working Pressure MPa / psi					
			Thread Size	Tube OD	A mm	B mm			J mm	C mm		
192BS-8-08	12	-08	12.7	1/2	G1/2	8	81	28	27	8.0	104	15,080

Fittings: Special materials

1C9BS – Sealing cone with swivel nut and O-ring heavy series ISO 12151-2



D

BS Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
	6	-04	6.3	1/4	Thread Size	Tube OD					ID	
1C9BS-10-04	6	-04	6.3	1/4	M18x1.5	10	63	32	22	3.8	128	18,560
1C9BS-16-04	6	-04	6.3	1/4	M24x1.5	10	65	34	30	3.8	128	18,560
1C9BS-16-08	12	-08	12.7	1/2	M24x1.5	16	89	36	30	8.0	104	15,080

Fittings: Special materials

2580N – High Pressure Water Jetting Hose



Construction:

Core Tube:

Polyamide

Pressure Reinforcement:

Four spiral layers and two open spiral layers of high tensile steel wire.

Cover:

Polyurethane, blue

Applications:

High pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. Mainly used to remove different kinds of dirt accumulation, or materials from various surfaces, such as those in tanks, from concrete, asphalt, etc.

Fittings:

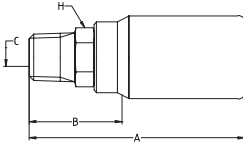
BL series

See page D5/D6

Part No. #	DN size mm inch				mm	Max. Working Pressure MPa / psi		Min. Burst Pressure MPa / psi		Min. Bend Radius mm	Weight kg/m
	mm	inch	mm	inch		MPa	psi	MPa	psi		
2580N-06V12	10	-06	9.8	3/8	21.6	160	23,200	400	58,000	95	0.94
2580N-08V12	12	-08	12.9	1/2	25.0	140	20,300	350	50,750	110	1.19
2580N-12V12	20	-12	19.6	3/4	32.6	120	17,400	300	43,500	170	1.76

Temperature range: -10 °C up to +70 °C

101BL – Male NPT

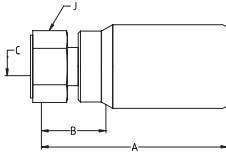


BL Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	H mm	C mm	Max. Working Pressure MPa / psi	
	Thread Size	Tube OD	mm	inch	mm	inch					mm	inch
101BL-6-06	10	-06	9.8	3/8	3/8 x 14NPT	6	80	35	22	6	160	23,200
101BL-8-08	12	-08	12.7	1/2	1/2 x 14NPT	8	90	45	22	8	140	20,300
101BL-12-12	20	-12	19.6	3/4	3/4 x 14NPT	12	98	45	30	13	120	17,400

Fittings: Special materials

192BL – 60° cone with BSP Swivel Nut

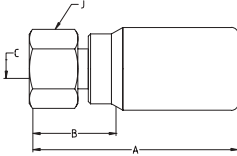


BL Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
	Thread Size	Tube OD	mm	inch	mm	inch					mm	inch
192BL-6-06	10	-06	9.8	3/8	G3/8	6	68	24	22	6	160	23,200
192BL-8-08	12	-08	12.7	1/2	G1/2	8	71	26	27	8	140	20,300
192BL-16-12	20	-12	19.6	3/4	G1	16	82	28	41	13	120	17,400

Fittings: Special materials

1C9BL – Sealing cone with swivel nut and O-ring heavy series ISO 12151-2



BL Series

Part No. #	DN size mm inch				Connection Type				Max. Working Pressure MPa / psi			
					Thread Size	Tube OD	A mm	B mm			J mm	C mm
1C9BL-14-06	10	-06	9.8	3/8	M22 x 1.5	14	80	36	30	6	160	23,200
1C9BL-16-06	10	-06	9.8	3/8	M24 x 1.5	16	84	36	30	6	160	23,200
1C9BL-16-08	12	-08	12.7	1/2	M24 x 1.5	16	80	36	30	8	140	20,300
1C9BL-25-12	20	-12	19.6	3/4	M36 x 2.0	25	97	44	46	13	120	17,400

Fittings: Special materials

2440D – Ultra-High Pressure Water Jetting Hose 2440N



Construction:

Core Tube:

DN 6-8: Polyoxymethylene
DN 10-25: Polyamide

Pressure Reinforcement:

Four spiral layers of maximum
tensile steel wire

Cover:

DN 6-8: Polyamide, blue
DN 10-25: Polyamide, black

Applications:

Ultra-high pressure service for the
construction and shipbuilding
industries and for general industrial
cleaning applications. Mainly used
for hydrodemolition and removal of
accumulated dirt and materials from
surfaces such as concrete, asphalt
and tanks.

Fittings:

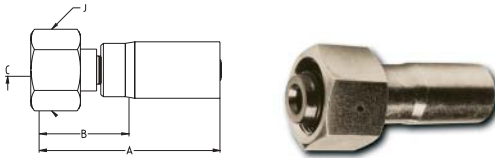
LX series
See pages E2/E3

Part No. #	DN size mm inch				mm	Max. Working Pressure MPa / psi		Min. Burst Pressure MPa / psi		Min. Bend Radius mm	Weight kg/m
	4	-025	3.9	5/32		10.4	220	31,900	550		
2440D-025V32	4	-025	3.9	5/32	10.4	220	31,900	550	79,750	100	0.21
2440D-03V32	5	-03	4.7	3/16	11.5	180	26,100	450	65,250	130	0.28
2440D-04V32	6	-04	6.3	1/4	12.5	164	23,780	410	59,450	155	0.33
2440D-05V32	8	-05	8.0	5/16	15.1	150	21,750	375	54,375	175	0.44
2440N-06V30	10	-06	9.7	3/8	19.4	140	20,300	350	50,750	190	0.70
2440N-08V30	12	-08	12.8	1/2	22.5	130	18,850	325	47,125	200	0.94
2440N-12V30	20	-12	19.6	3/4	30.0	100	14,500	250	36,250	250	1.39
2440N-16V30	25	-16	25.0	1	37.0	90	13,050	225	32,625	300	1.90

Temperature range: -10°C up to +70°C

E

1C9LX – Sealing Cone / Metric Swivel Nut and O-Ring

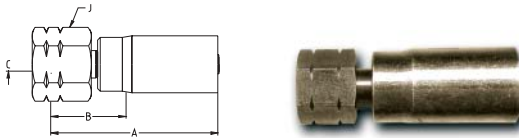


LX Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
	mm		inch		Thread Size	Tube OD					ID	MPa
1C9LX-16-04W	6	-04	6.4	1/4	M24x1.5	16	70.5	39.0	30	4.2	164	23,780
1C9LX-16-05W	8	-05	7.9	5/16	M24x1.5	16	76.5	37.5	30	5.5	150	21,750
1C9LX-14-06W	10	-06	9.5	3/8	M22x1.5	14	76.0	30.5	30	7.2	140	20,300
1C9LX-16-08W	12	-08	12.7	1/2	M24x1.5	16	87.5	34.0	32	9.5	130	18,850
1C9LX-25-12W	20	-12	19.0	3/4	M36x2	25	92.0	39.0	46	13.0	100	14,500
1C9LX-30-16W	25	-16	25.4	1	M42x2	30	98.0	45.0	55	17.5	90	13,050

Fittings: Special materials

1AYLX – Sealing Head / UNF Swivel Nut

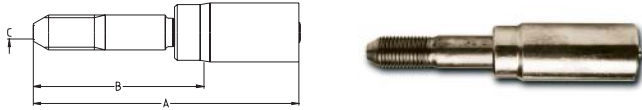


LX Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
	mm		inch		Thread Size	ID					MPa	psi
1AYLX-6-03W	5	-03	4.8	3/16	9/16 - 18UNF	67.5	26.0	22	2.4	180	26,100	
1AYLX-6-04W	6	-04	6.4	1/4	9/16 - 18UNF	61.2	29.5	22	4.2	164	23,780	
1AYLX-8-05W	8	-05	7.9	5/16	3/4 - 16UNF	70.2	31.0	27	5.5	150	21,750	
1AYLX-8-06W	10	-06	9.5	3/8	3/4 - 16UNF	70.0	25.5	27	5.5	140	20,300	
1AYLX-11-08W	12	-08	12.7	1/2	1 - 12UNF	81.0	27.5	32	7.5	130	18,850	
1AYLX-16-12W	20	-12	19.0	3/4	1 5/16-12UNF	82.0	29.0	41	13.0	100	14,500	

Fittings: Special materials

1YMLX – High Pressure Connection 59° Metric Cone

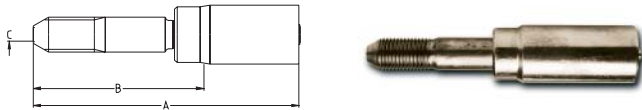


LX Series

Part No. #	DN size mm inch				Connection Type Thread Size	A mm	B mm	C mm	Max. Working Pressure MPa / psi	
								ID		
1YMLX-6-05W	8	-05	7.9	5/16	M14x1.5-LH	110	66	5.5	150	21,750

Fittings: Special materials

1YALX – High Pressure Connection 59° UNF Cone



LX Series

Part No. #	DN size mm inch				Connection Type Thread Size	A mm	B mm	C mm	Max. Working Pressure MPa / psi	
								ID		
1YALX-1-025W	4	-025	4.0	5/32	1/4 - 28UNF-LH	89	50	1.6	220	31,900
1YALX-3-03W	5	-03	4.8	3/16	3/8 - 24UNF-LH	99	57	2.4	180	26,100
1YALX-3-04W	6	-04	6.4	1/4	3/8 - 24UNF-LH	102	58	4.2	164	23,780
1YALX-6-05W	8	-05	7.9	5/16	9/16 - 18UNF-LH	110	66	5.5	150	21,750

Fittings: Special materials

2640D – Ultra High Pressure Water Jetting Hose 2640N



Construction:

Core Tube:
DN 4-8: Polyoxymethylene
DN 12-25: Polyamide

Pressure Reinforcement:

Six spiral layers of maximum tensile steel wire

Cover:

Polyamide, blue

Applications:

Ultra-high pressure service for the construction and shipbuilding industries and for general industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

Fittings:

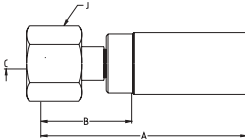
HX, 5X series
See pages F2/F3

Part No. #	DN size mm inch				mm	Max. Working Pressure MPa / psi		Min. Burst Pressure MPa / psi		Min. Bend Radius mm	Weight kg/m
	4	-025	3.9	5/32		12.0	280	40,600	700		
2640D-025V32	4	-025	3.9	5/32	12.0	280	40,600	700	101,500	140	0.29
2640D-03V32	5	-03	4.7	3/16	13.0	250	36,250	625	90,625	175	0.41
2640D-05V32	8	-05	8.0	5/16	16.9	210	30,450	525	76,125	225	0.68
2640N-08V32	12	-08	12.8	1/2	24.5	180	26,100	450	65,250	290	1.36
2640N-12V32	20	-12	19.6	3/4	33.0	140	20,300	350	50,750	350	2.10
2640N-16V32	25	-16	25.0	1	40.0	120	17,400	300	43,500	400	2.90

Temperature range: -10 °C up to +70 °C

F

6C9HX/6C95X – Sealing Cone / O-Ring Metric Swivel Nut

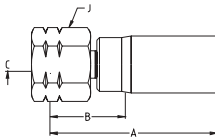


HX/5X Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
					Thread Size	Tube OD						
6C95X-16-8C	12	-08	12.7	1/2	M24x1.5	16	96	39.5	32	7.0	180	26,100
6C95X-25-12C	20	-12	19.0	3/4	M36x2	25	108	49.5	46	13.0	140	20,300
6C9HX-30-16C	25	-16	25.4	1	M42x2	30	121	55.5	50	17.5	120	17,400

Fittings: Special materials

6AYHX/6AY5X – Sealing Head / UNF Swivel Nut

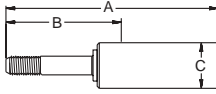


HX/5X Series

Part No. #	DN size mm inch				Connection Type		A mm	B mm	J mm	C mm	Max. Working Pressure MPa / psi	
					Thread Size	Tube OD						
6AYHX-6-2AC	4	-025	4.0	5/32	9/16-18UNF	79	34	18	1.6	280	40,600	
6AY5X-6-3C	5	-03	4.8	3/16	9/16-18UNF	79	36	18	2.5	250	36,250	
6AY5X-8-5C	8	-05	7.9	5/16	3/4-16UNF	75	31	25	4.0	210	30,450	
6AY5X-11-8C	12	-08	12.7	1/2	1-12UNF	108	44	32	7.0	180	26,100	
6AY5X-16-12C	20	-12	19.0	3/4	1 5/16-12UNF	108	39	38	13.0	140	20,300	

Fittings: Special materials

6YM5X – High Pressure Connection 59° Metric Cone



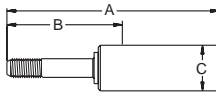
5X Series

Part No. #	DN size mm inch				Connection Type	A mm	B mm	C mm	Max. Working Pressure MPa / psi	
								OD		
6YM5X-6-3C	5	-03	4.8	3/16	M14x1.5-LH	116.0	65.5	19	250	36,250
6YM5X-6-5C	8	-05	7.9	5/16	M14x1.5-LH	125.5	72.0	25	210	30,450

Fittings: Special materials

F

6Y4HX/6Y45X – High Pressure Connection 59° UNF Cone



HX/5X Series

Part No. #	DN size mm inch				Connection Type	A mm	B mm	R mm	Max. Working Pressure MPa / psi	
								OD		
6Y4HX-4-2AC	4	-025	4.0	5/32	1/4 - 28UNF-LH	89	44	17	280	40,600
6Y4HX-6-2AC	4	-025	4.0	5/32	3/8 - 24UNF-LH	100	56	17	280	40,600
6Y45X-6-3C	5	-03	4.8	3/16	3/8 - 24UNF-LH	103	60	19	250	36,250
6Y45X-9-3C	5	-03	4.8	3/16	9/16 - 18UNF-LH	112	69	19	250	36,250
6Y45X-9-5C	8	-05	7.9	5/16	9/16 - 18UNF-LH	105	64	25	210	30,450

Fittings: Special materials

2740D – Ultra-High Pressure Water Jetting Hose



Construction:

Core Tube:

Polyoxymethylene

Pressure Reinforcement:

Six spiral layers of maximum tensile steel wire

Cover:

Polyamide, yellow, red

Applications:

For very-high pressure lances with working pressures up to 300 MPa for the construction and shipbuilding industries or for common industrial cleaning applications. Mainly used for hydrodemolition and removal of accumulated dirt and materials from surfaces such as concrete, asphalt and tanks.

Fittings:

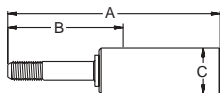
HX series

See page G2

Part No. #	DN size mm inch				mm	Max. Working Pressure MPa / psi		Min. Burst Pressure MPa / psi		Min. Bend Radius mm	Weight kg/m
2740D-025V16	4	-025	4.0	5/32	12.0	300	43,500	780	113,100	120	0.40
2740D-03V34	5	-03	4.7	3/16	13.2	280	40,600	700	101,500	200	0.47
2740D-05V34	8	-05	7.7	5/16	17.2	250	36,250	625	90,625	200	0.70
2740D-08V30	12	-08	12.7	1/2	27.0	200	29,000	500	72,500	300	1.85

Temperature range: -10 °C up to +70 °C

6YMHX – High Pressure Connection 59° Metric Cone

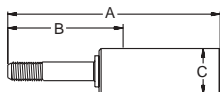


HX Series

Part No. #	DN size mm inch				Connection Type	A mm	B mm	C mm	Max. Working Pressure MPa / psi	
					Thread Size 			OD		
6YMHX-6-3C	5	-03	4.8	3/16	M14x1.5-LH	118.0	64.5	21	280	40,600
6YMHX-6-5C	8	-05	7.9	5/16	M14x1.5-LH	125.5	72.0	25	250	36,250
6YMHX-12-8C	12	-08	12.8	1/2	M20x1.5-LH	189.5	125.0	35	200	29,000

Fittings: Special materials

6Y4HX – High Pressure Connection 59° UNF Cone



HX Series

Part No. #	DN size mm inch				Connection Type	A mm	B mm	C mm	Max. Working Pressure MPa / psi	
					Thread Size 			OD		
6Y4HX-4-2AC	4	-025	4.0	5/32	1/4 - 28UNF-LH	89	44.0	17	300	43,500
6Y4HX-6-3C	5	-03	4.8	3/16	3/8 - 24UNF-LH	103	60.0	21	280	40,600
6Y4HX-9-3C	5	-03	4.8	3/16	9/16 - 18UNF-LH	112	69.0	21	280	40,600
6Y4HX-9-5C	8	-05	7.9	5/16	9/16 - 18UNF-LH	105	64.0	25	250	36,250
6Y4HX-16-8C	12	-08	12.7	1/2	1 - 12UNF-LH	147	76.5	35	200	29,000

Fittings: Special materials

2840D – Ultra-High Pressure Hose for Ultra High Pressure Water Jetting



Construction:

Core Tube:

Polyoxymethylene

Pressure Reinforcement:

Eight spiral layers of maximum tensile steel wire

Cover:

Polyamide

Applications:

Ultra-high pressure service for water jet cutting equipment with water only or with abrasive additives. Replaces steel pipe where flexibility is important. Compression forming (hydroforming): A manufacturing procedure applying water pressure to produce complex hollow parts made from pipe-like basic materials.

Fittings:

WX series

See page H2

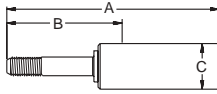
Part No. #	DN size				mm	Max. Working Pressure		Min. Burst Pressure		Min. Bend Radius	Weight
	mm	inch	mm	inch		MPa	psi	MPa	psi		
2840D-03V34	5	-03	4.5	3/16	15.0	400	58,000	800	116,000	200	0.66
2840D-05V36	8	-05	7.7	5/16	19.5	300	43,500	700	101,500	250	1.10
2840D-08V30	12	-08	12.7	1/2	29.8	250	36,250	625	90,625	350	2.50

Temperature range: -10 °C up to +70 °C

Note:

The safety factor of burst pressure over working pressure can be adjusted to the specific application but must not be reduced below a ratio of 1:2.

6YMWX – High Pressure Connection 59° Metric Cone



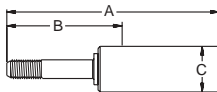
WX Series

Part No. #	DN size mm inch				Connection Type	A mm	B mm	C mm	Max. Working Pressure MPa / psi	
								OD		
6YMWX-6-5C	8	-05	7.9	5/16	M14x1.5-LH	125.5	72.0	28.0	300	43,500
6YMWX-12-8C *	12	-08	12.8	1/2	M20x1.5-LH	147.0	76.5	37.6	250	36,250

Fittings: Special materials

* coming soon
 expected in June 2005

6Y4WX – High Pressure Connection 59° UNF Cone



WX Series

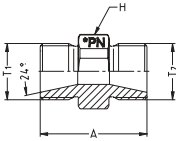
Part No. #	DN size mm inch				Connection Type	A mm	B mm	C mm	Max. Working Pressure MPa / psi	
								OD		
6Y4WX-6-3C	5	-03	4.8	3/16	3/8 - 24UNF-LH	109	60.0	22.0	400	58,000
6Y4WX-9-3C	5	-03	4.8	3/16	9/16 - 18UNF-LH	112	64.0	22.0	400	58,000
6Y4WX-9-5C	8	-05	7.9	5/16	9/16 - 18UNF-LH	130	63.0	28.0	300	43,500
6Y4WX-16-8C *	12	-08	12.7	1/2	1 - 12UNF-LH	147	76.5	37.6	250	36,250

Fittings: Special materials

* coming soon
 expected in June 2005

D2D2 – Metric Adapter

24° Flare

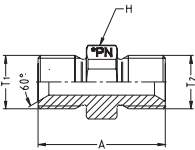


Part No. #	Connection Type		A mm	H mm	Max. Working Pressure MPa / psi
	Thread Size T1	Thread Size T2			
D2D2-16-16W	M24x1.5	M24x1.5	50.0	27	180 26,100
D2D2-16-25W	M24x1.5	M36x2	60.5	41	140 20,300
D2D2-25-25W	M36x2	M36x2	65.0	41	140 20,300
D2D2-30-30W	M42x2	M42x2	75.0	46	120 17,400

Material: Stainless steel

D9D9 – Straight Adapter

60° Flare

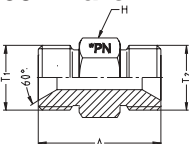


Part No. #	Connection Type		A mm	H mm	Max. Working Pressure MPa / psi
	Thread Size T1	Thread Size T2			
D9D9-8-8W	G 1/2"	G 1/2"	50	27	180 26,100
D9D9-12-12W	G 3/4"	G 3/4"	65	41	140 20,300
D9D9-16-16W	G 1"	G 1"	65	41	120 17,400

Material: Stainless steel

AZAZ – UNF Adapter

60° Flare



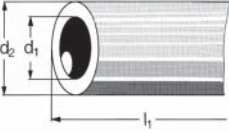
Part No. #	Connection Type		A mm	H mm	Max. Working Pressure MPa / psi
	Thread Size T1	Thread Size T2			
AZAZ-6-6W	9/16-18UNF	9/16-18UNF	36	24	280 40,600
AZAZ-8-8W	3/4-16UNF	3/4-16UNF	44	24	250 36,250
AZAZ-11-11W	1-12UNF	1-12UNF	48	27	180 26,100
AZAZ-16-16W	1 5/16-12UNF	1 5/16-12UNF	54	41	140 20,300

Material: Stainless steel

* According to the guidelines for jetting equipment, adapters are marked with the maximum permissible pressure (PN).

PVC-S - Anti-Abrasion Sleeve

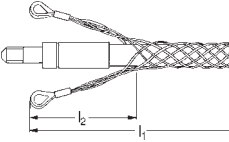
Colour: yellow



Part No. #	Clamp Ferrule	For Tubing				Diameter in mm		For Hose	Mountable Length in m l1
		DN	size	mm	inch	d1	d2		
PVC-S-03	KL-03	5	-03	4.8	3/16	22	28	2640D-03	20/40
PVC-S-05	KL-05	8	-05	7.9	5/16	27	33	2640D-05	20/40
PVC-S-08	KL-08	12	-08	12.7	1/2	35	45	2640N-08	20
PVC-S-12	KL-12	20	-12	19.0	3/4	45	55	2640N-12	20
PVC-S-16	KL-16	25	-16	25.4	1	55	65	2640N-16	20

As an alternative, rubber anti-abrasion sleeves are available,
 colour: black

HS - Containment Grips



Part No. #	For Tubing						Total Length		Length of Loops in mm l2
	DN	size	mm	inch	Ø mm	F-KN*	l1		
HS-03	5	-03	4.8	3/16	9-15	3/9	600	200	
HS-05	8	-05	7.9	5/16	12-20	6/18	600	200	
HS-08	12	-08	12.7	1/2	20-30	11/33	600	200	
HS-12	20	-12	19.0	3/4	30-40	11/33	600	200	
HS-16	25	-16	25.4	1	40-50	16/48	600	200	

Material: electrogalvanized steel wire

* F-KN 3/9: working load 3 KN, breaking load 9 KN, e.g. DN5

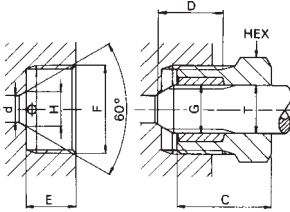
UHPLABEL – Precautions for Ultra-High Pressure Applications



Part No. #	Dimensions
UHPLABEL	60 x 250 mm

Werkstoff: self-adhesive PE sticker

Locking Nut/Collar Standard



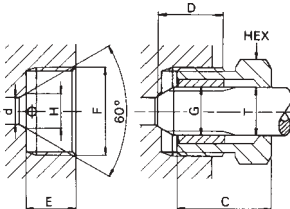
Part No. #		d	HP Tube OD		Max. Working Pressure		Dimensions in mm						
Locking Nut	Collar	mm	inch	mm	MPa	psi	C	D	E	F	G	H	HEX
720.0110	720.0120	8	9/16HP	14.30	200	29,000	28	19.0	15	M26x1.5	9/16-18UNF LH	11	27
720.0110	720.0120	5	9/16HP	14.30	500	72,500	28	21.5	15	M26x1.5	9/16-18UNF LH	11	27
720.0210	720.0220	5	3/8HP	9.52	200	29,000	25	15.0	12	M20x1.5	3/8-24UNF LH	7	22
720.0210	720.0220	3	3/8HP	9.52	500	72,500	25	17.0	12	M20x1.5	3/8-24UNF LH	7	22
720.0310	720.0320	3	1/4HP	6.35	440	63,800	22	12.5	11	M16x1.5	1/4-28UNF LH	5	17
720.0110	720.0420	8	—	14.00	200	29,000	28	19.0	15	M26x1.5	M14x1.5 LH	11	27
720.0110	720.0420	5	—	14.00	500	72,500	28	21.5	15	M26x1.5	M14x1.5 LH	11	27

Material: Collars: Stainless steel (1.4104 / AISI 430 F)
 Locking nuts: Stainless steel (1.4305 / AISI 303)

Assembly of HP connections:

- Push locking nut onto pipe end
- Unscrew locking nut till end of thread is reached
- Insert the unit into the body connection
- Fasten locking nut to recommended torque

Locking Nut/Collar Anti-Vibration



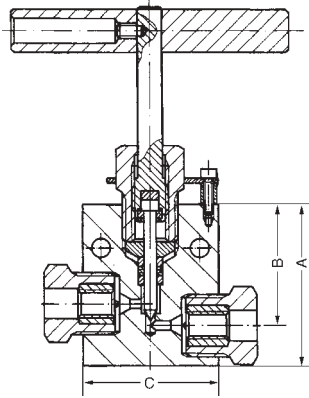
Part No. #		HP Tube OD		Dimensions in mm		
Locking Nut	Collar	inch	mm	G	H	HEX
720.0311	720.0321	1/4HP	6.35	1/4-28UNF LH	5	17

Material: Collars: Stainless steel (1.4104 / AISI 430 F)
 Locking nuts: Stainless steel (1.4305 / AISI 303)

J

Hand Valve

Working Pressure 400 MPa / 58,000 psi



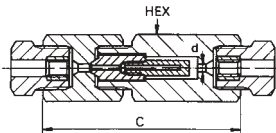
Part No. #	d		HP Tube OD		Body Thickn.	Dimensions in mm		
	mm	inch	mm			A	B	C
710.5110	3	9/16	14.30	30	58	42	50	
710.5210	3	3/8	9.52	24	55	42	44	
710.5310	3	1/4	6.35	24	54	42	44	

Material: Stainless steel (1.4571 / AISI 316 Ti)

- Advantages:**
- Reliability and safety at maximum pressures
 - Tight sealing under extreme operating conditions
 - Stem backlash problems eliminated
 - Easy operation – minimum closing force required
 - Quality and approval regulations. Material certificates
 - Connections for imperial or metric HP pipes
 - Operating temperature 200 °C maximum

Filter Type 3

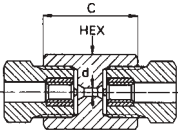
Working Pressure 400 MPa / 58,000 psi



Part No. #	d		HP Tube OD		Dimensions in mm	
	mm	inch	mm	C	HEX	
720.6523	3	3/8	9.52	88	27	

Material: Stainless steel (1.4571 / AISI 316 Ti)

Straight Union

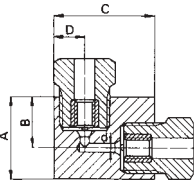


Part No. #	d		HP Tube OD	Max. Working Pressure		Dimensions in mm	
	mm	inch		MPa	psi	C	HEX
720.1410	8	9/16	14.30	200	29,000	46	32
720.1510	5	9/16	14.30	400	58,000	46	32
720.1520	3	3/8	9.52	400	58,000	42	24
720.1530	3	1/4	6.35	400	58,000	40	24

Material: Stainless steel (1.4571 / AISI 316 TI)

Elbow Union

Working Pressure 400 MPa / 58,000 psi

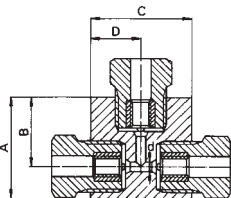


Part No. #	d		HP Tube OD	Dimensions in mm				
	mm	inch		Body Thickn.	A	B	C	D
720.1512	5	9/16	14.30	30	40	24	50	16
720.1522	3	3/8	9.52	24	31	19	44	12
720.1532	3	1/4	6.35	20	26	16	32	10

Material: Stainless steel (1.4571 / AISI 316 TI)

Tee Union

Working Pressure 400 MPa / 58,000 psi

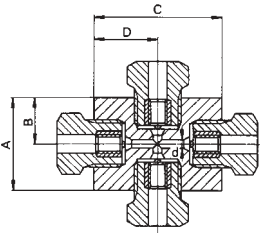


Part No. #	d		HP Tube OD	Dimensions in mm				
	mm	inch		Body Thickn.	A	B	C	D
720.1513	5	9/16	14.30	30	47	31	50	25
720.1523	3	3/8	9.52	24	36	24	44	22
720.1533	3	1/4	6.35	20	32	22	32	16

Material: Stainless steel (1.4571 / AISI 316 TI)

Cross Union

Working Pressure 400 MPa / 58,000 psi

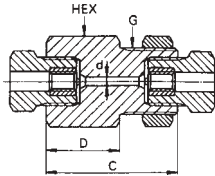


Part No. #	d		HP Tube OD		Dimensions in mm			
	mm	inch	mm	inch	Body Thickn.	A	B	C
720.1514	5	9/16	14.30	30	50	25	62	31
720.1524	3	3/8	9.52	24	44	22	48	24
720.1534	3	1/4	6.35	20	32	16	44	22

Material: Stainless steel (1.4571 / AISI 316 TI)

Bulkhead Coupling

Working Pressure 400 MPa / 58,000 psi

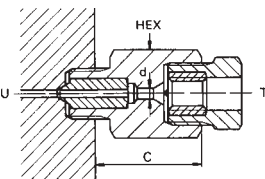


Part No. #	d		HP Tube OD		Dimensions in mm			
	mm	inch	mm	inch	C	D	G	HEX
720.1511	5	9/16	14.30	45	25	M36x1.5	41	
720.1521	3	3/8	9.52	45	25	M27x2.0	32	
720.1531	3	1/4	6.35	45	25	M22x1.5	27	

Material: Stainless steel (1.4571 / AISI 316 TI)

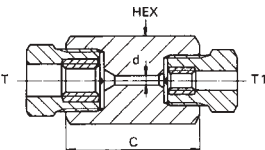
Reducer

Working Pressure 400 MPa / 58,000 psi



Part No. #	DN	STD Connection U		HP Tube OD T		Dimensions in mm	
		inch	mm	inch	mm	C	HEX
720.2121	3	9/16HP	14.30	3/8	9.52	32	27
720.2131	3	9/16HP	14.30	3/8	6.35	32	27
720.2231	3	3/8HP	9.52	1/4	6.35	30	24

Material: Stainless steel (1.4571 / AISI 316 TI)



Part No. #	DN	HP Tube OD T		HP Tube OD T1		Dimensions in mm	
		inch	mm	inch	mm	C	HEX
720.2120	3	9/16	14.30	3/8	9.52	46	32
720.2230	3	3/8	9.52	1/4	6.35	42	24

Material: Stainless steel (1.4571 / AISI 316 TI)

HP Connections/Assembly Instructions

Working Pressures: 100 up to 1,000 MPa

Material:

Stainless steel (1.4104 / AISI 430 F)
Stainless steel (1.4305 / AISI 303)

Assembly of HP connections:

- Push locking nut onto pipe end
- Unscrew locking nut till end of thread is reached
- Insert the unit into the body connection
- Fasten locking nut to recommended torque

Standard

HP Connection	DN Ø	Body Opening				Product Code #				HP Tubing					Torque	
		d	F	H	E	Locking Nut	Collar	Plug	HEX	G Left	i	K	C	max. bar (20)		Md Nm
inch	mm	mm	mm	mm	mm				mm		mm	mm	mm			
11/16 HP	17.5	12	M30 x 2.0	16	19	720.0010	720.0020	720.0030	32	M18 x 1.5	LH	12	13.5	21	1,200	120
9/16 HP	14.3	8	M26 x 1.5	11	15	720.0110	720.0120	720.0130	27	9/16"-18 UNF	LH	8	8.8	19	2,000	100
		5										4.8	6.0	21.5	5,000	160
3/8 HP	9.25	5	M20 x 1.5	7	12	720.0210	720.0220	720.0232	22	3/8"-24 UNF	LH	5.2	6.0	15	2,000	40
		720.0230						3.2				4.0	17	5,000	70	
		1.6						25				720.0217	720.0227	720.0237	1.6	2.5
1/4 HP	6.35	3	M16 x 1.5	5	11	720.0310	720.0320	720.0330	17	1/4"-28 UNF	LH	2.4	3.4	12.5	4,400	30
		1.6						720.0332				1.6	2.5	13	7,000	40
1/8 HP	3.20	1.0	M16 x 1.5	3	11	720.0310	720.0322	720.0332	17	5-40 UNC	LH	1.0	1.8	7.5	5,000	10
18 mm HP	18.0	12	M30 x 2.0	16	19	720.0010	720.0020	720.0030	32	M18 x 1.5	LH	12	13.5	21	2,000	120
14 mm HP	14.0	8	M26 x 1.5	11	15	720.0110	720.0420	720.0430	27	M14 x 1.5	LH	8	8.8	19	2,000	100
		5										5	6.0	21.5	5,000	160
10 mm HP	10.0	3	M20 x 1.5	7	12	720.0210	720.0520	720.0530	22	M10 x 1	LH	3.6	4.5	16.5	4,000	60
6 mm HP	6.0	3	M16 x 1.5	5	11	720.0310	720.0620	720.0630	17	M6	LH	2.2	3.4	12.5	4,000	35

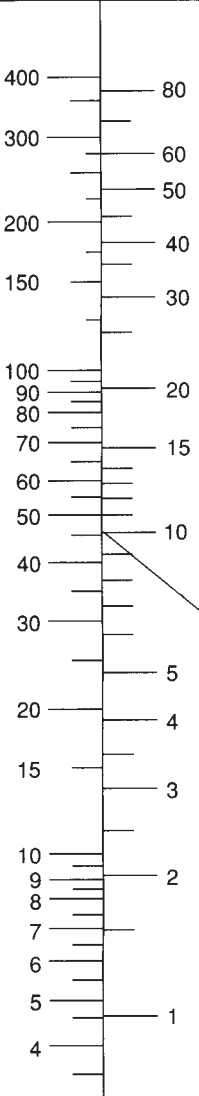
Anti-Vibration

For Tubing	d	F	H	E	Locking Nut	Collar	Plug	HEX	G Left	i	K	C	max. bar (20)	Md Nm
inch	mm	mm	mm	mm				mm		mm	mm	mm		
11/16 HP	17.5		M30 x 2.0	16	19	720.0011	720.0021	720.0030	32	M18 x 1.5	LH			180
9/16 HP	14.3		M26 x 1.5	11	15	720.0111	720.0121	720.0130	27	9/16"-18 UNF	LH			150
3/8 HP	9.25		M20 x 1.5	7	12	720.0211	720.0221	720.0230	22	3/8"-24 UNF	LH			100
1/4 HP	6.35		M16 x 1.5	5	11	720.0311	720.0321	720.0330	17	1/4"-28 UNF	LH			60
18 mm HP	18.0		M30 x 2.0	16	19	720.0011	720.0021	720.0030	32	M18 x 1.5	LH			180
14 mm HP	14.0		M26 x 1.5	11	15	720.0111	720.0421	720.0430	27	M14 x 1.5	LH			150
10 mm HP	10.0		M20 x 1.5	7	12	720.0211	720.0521	720.0530	22	M10 x 1	LH			100
6 mm HP	6.0		M16 x 1.5	5	11	720.0311	720.0621	720.0630	17	M6	LH			60

Dimensions
see Standard
Connections

Flow Capacity Nomogram

Volumetric flow Q
 (l/min) Gal/min*



Flow capacities of Parker hose at recommended flow velocities

The chart below is provided as an aid in the determination of the correct hose size.

Example:

at 10 gallons per minute (gal/min), what is the proper hose size within the recommended velocity range for pressure lines?

Locate 10 gallons per minute in the left-hand column and 25 feet per second in the right-hand column (the maximum recommended velocity range for pressure lines). Lay a straight line across these two points. The inside diameter shown in the centre column is above -6 so we have to use -8 (1/2").

For suction hose, follow the same procedure except use recommended velocity range for intake lines in the right-hand column.

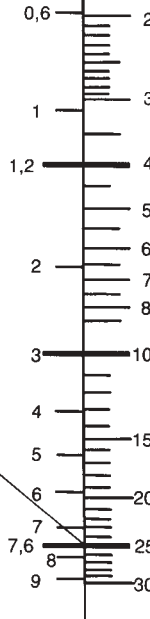
where: Q = flow in gallons per minute (gal/min & l/min)
 V = velocity in feet per second (f/s & m/s)
 d = hose inside diameter (mm & dash size)

Hose inner diameter d

mm dash sizes

50,8	-32
38,1	-24
31,8	-20
25,4	-16
19,1	-12
15,9	-10
12,7	-8
9,5	-6
7,9	-5
6,3	-4
4,8	-3

Flow velocity v
 (m/s) feet/s



Recommended maximum velocity for suction lines

Recommended maximum velocity for return lines

Recommended maximum velocity for pressure lines

* gallons are UK gallons

Conversion factors: gal/min x 4.546 = l/min
 feet/s x 0.3948 = m/s

* Recommended velocities are according to hydraulic fluids of maximum viscosity 315 S.S.U. at 38 °C working at roomtemperature within 18 ° and 68 °C.

Chemical Resistance

Ratings Code

G - Good to excellent. Little or no swelling, tensile or surface changes. Preferred choice.

L - Marginal or conditional. Noticeable effects but not necessarily indicating lack of safety. Further testing suggested for specific application.

P - Poor or unsatisfactory. Not recommended without extensive and realistic testing.

-- Indicates that this was not tested.

Material Code for Hose Core Tubes		polyflex® / Parflex® Part Numbers
H	Polyester elastomer	2040H, 2370H, 515H, 518B, 518C, 550H, 558H, 55LT, 560, 590, 593, 1202LT, ESH250
N	Polyamide	2010N, 2020N, 2X20N, 2040N, 2244N, 2245N, 2370N, 2440N, 2380N, 2640N, 520N, 540N, 573X, 573XL, 575X, 580N, 588N, HP, HP8, 2X90N, 2388N, 2580N
PV	Polyvinylchloride (PVC)	GPH
NC	Nylon co polymer	510A, 515A
TFE	Polytetrafluorethylene (PTFE)	2030T, 2033T, 919, 929, 939/939B, 919U
POM	Polyoxymethylene	2440D, 2640D, 2240D, 2740D, 2840D
Material Code for Hose Covers		
U	Polyurethane	2010N, 2040N, 2040H, 2244N, 2245N, 2370H, 2370N, 2380N, 510, 830, 838, 515A, 515H, 510A, 518B, 540N, 550H, 558H, 560, 520N, 580N, 588N, 590, 593, HP, HP8, 919U, 2X90N, 2388N, 2580N, ESH250
HF	Special elastomer	55LT, 1202LT
PV	Polyvinylchloride (PVC)	GPH
H	Polyester elastomer	2040N
PFX	Special elastomer	518C
N	Polyamide	2010N, 2020N, 2X20N, 2440D, 2440N, 2640D, 2245N, 2244N, 2240D, 2740D, 2840D
Material Code for Sealing Components		
V	FKM O-rings	

Notes on the Chemical Resistance Table

- (1) The fluid resistance tables are simplified rating tabulations based on immersion tests at 24° C. Higher temperatures tend to reduce ratings. Since final selection depends on pressure, fluid and ambient temperature and other factors not known to Parker Hannifin, no performance guarantee is expressed or implied. The indications do not imply any compliance with standards and regulations and do not refer to possible changes of colour, taste or smell. For food and drinking water specially approved materials have to be used. For fluids not listed or for advice on particular applications, please consult Parker Hannifin GmbH, Polyflex Division in Hüttenfeld, Germany.
- (2) Hose applications for these fluids must take into account legal and insurance regulations. The chemical resistance indicated does not express or imply approval by certain institutions.
- (3) Satisfactory at some concentrations and temperatures, unsatisfactory at others.
- (4) For gas applications, the cover should be pin-pricked and the pressure must not be released quickly. Special safety guard accessories are to be used to prevent damage or personal injury in the event of failure..
- (5) Chemical resistance does not imply low permeation rates. Please consult Parker Hannifin for a recommendation for your specific requirements.
- (6) The indication of chemical resistance does not imply any special food compatibility; it refers only to the chemical resistance of the material.
- (7) Chemical resistance does not imply acceptability for use in airless paintspray applications. These applications require a special, electrically conductive hose.

Technical Information
Chemical Resistance

Chemical	H	N	U/HF	V	NC	O	OC	PFX	HFR	FEP	TFE	POM
Acetaldehyde	G	L	L	P	-	L	P	L	G	G	G	-
Acetic Acid Glacial	L	L	L	G	P	G	L	L	L	L	G	-
Acetone	L	G	P	P	G	P	P	L	L	G	G	L
Acetylene	-	-	-	-	-	-	-	-	-	-	-	-
Air (4)	G	G	G	G	G	G	G	G	G	G	G	G
Ammonium Chloride	G	P	G	G	P	G	G	G	G	L	G	-
Ammonium Hydroxyde	L	G	P	L	-	G	G	P	L	G	G	-
Anhydrous Ammonia	P	P	P	P	P	P	P	P	P	-	P	-
Aniline	P	P	P	P	P	L	P	P	P	G	G	-
Animal Oils (6)	G	G	G	G	G	P	P	G	G	-	G	-
Aromatic Hydrocarbons	L	G	L	P	G	P	-	L	L	-	G	-
Asphalt	G	G	G	G	G	L	L	G	G	L	G	-
Baygon (insecticide)	L	G	P	-	-	-	-	P	L	-	G	-
Beer	G	G	G	G	-	G	G	G	G	G	G	-
Benzene	L	G	L	P	L	P	P	L	L	G	G	-
Brake Fluid (DOT #3)	-	G	P	P	-	P	P	P	-	-	G	L
Butane (2) (4)	G	G	L	L	P	L	P	L	G	-	-	-
Butter (6)	G	G	G	G	-	G	G	G	G	-	G	-
Calcium Chloride	G	-	G	L	-	G	G	G	G	G	G	-
Carbon Dioxide (4)	G	G	G	G	G	G	G	G	G	-	-	-
Carbon Monoxide (4)	G	-	G	G	-	L	-	G	G	-	-	-
Carbon Tetrachloride	L	G	P	L	G	P	P	P	L	G	G	-
Castor Oil	G	L	L	G	L	P	P	L	G	-	G	-
Chlordane (insecticide)	L	G	P	-	-	-	-	P	L	-	-	-
Chlorinated Hydrocarbon Base Fluids	L	G	L	P	-	-	-	L	L	-	G	-
Chlorinated Petroleum Oil	G	G	L	-	L	-	-	L	G	-	-	-
Chlorinated Solvents	P	-	P	L	-	L	L	P	P	-	G	-
Chlorine, Gaseous, Dry	P	P	P	G	P	L	P	P	P	-	-	-
Chloroform	P	P	P	P	P	P	P	P	P	G	G	-
Chromic Acid	P	-	P	G	P	-	L	P	P	L	G	-
Citric Acid Solutions	G	G	L	G	G	G	G	L	G	G	G	-
Crude Petroleum Oil	G	G	G	G	G	P	P	G	G	-	G	G
Cyclohexane (2)	G	G	G	-	-	P	P	G	G	G	G	-
Cygon (insecticide)	L	G	P	-	-	-	-	P	L	-	-	-
Diazion (insecticide)	L	G	P	-	-	-	-	P	L	-	-	-
Diesel Fuel (2)	G	G	G	L	G	P	P	G	G	-	G	G
Diester Oils	L	G	P	P	-	P	P	P	L	-	G	-
Enamels	G	G	G	L	-	L	L	G	G	-	G	-
Ethanol (6)	G	G	L	L	L	G	G	L	G	-	G	G
Ethers	L	G	P	L	G	L	P	P	L	G	G	P
Ethylene Glycol	G	G	L	G	G	G	L	G	G	G	G	G
Ethylene Oxide	G	G	L	P	-	L	L	L	G	-	-	-
Fatty Acids	G	G	-	G	G	L	L	-	G	G	G	-
Formaldehyde	L	L	P	L	L	G	L	P	L	G	G	-
Formic Acid	P	P	P	G	P	G	G	P	P	G	G	-

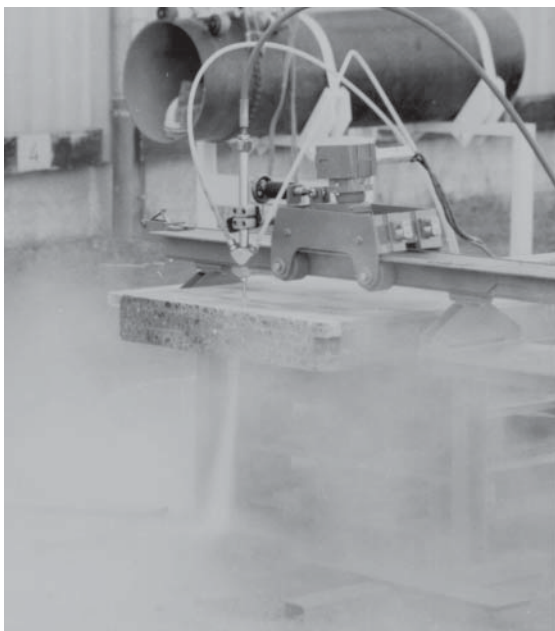
Chemical	H	N	U/HF	V	NC	O	OC	PFX	HFR	FEP	TFE	POM
Freon 12 (5)	P	G	L	G	G	L	-	L	P	-	-	-
Freon 22 (5)	P	G	L	G	G	L	-	L	P	-	-	-
Fruit Juices	G	G	G	G	-	G	G	G	G	-	G	-
Fuel Oil (2)	G	G	L	L	G	P	P	L	G	G	G	G
Gas (Oil) (2)	G	G	G	G	G	P	P	G	G	-	G	-
Gasoline	G	G	-	P	G	P	P	-	G	G	G	-
Glue	-	-	-	-	-	-	-	-	-	-	-	-
Glycerine	G	G	L	G	G	G	G	L	G	G	G	-
Glycols (to 1350 °F)	G	G	L	G	G	-	-	L	G	G	G	G
Grease (petroleum base)	G	G	G	G	G	L	L	G	G	-	G	G
Heptachlor (insecticide)	L	G	P	L	-	P	P	P	L	-	G	-
Hexane (2)	G	G	G	L	G	P	P	G	G	G	G	-
Houghto Safe-1000 Series (phosphate esters)	L	G	P	G	G	P	P	P	L	-	G	-
Houghto Safe-600 Series (hydraulic fluid)	G	G	L	G	G	G	L	L	G	-	G	-
Hydraulic Fluid (petroleum base)	G	G	G	G	G	L	L	G	G	L	G	G
Hydraulic Fluid (phosphate ester base)	L	G	L	L	G	P	P	P	L	-	G	-
Hydraulic Fluid (water glycol base)	G	G	G	L	G	-	-	G	G	-	G	-
Hydraulic Oil (petroleum base)	G	G	G	G	G	L	P	G	G	L	G	G
Hydrochloric Acid	P	L	P	L	P	L	P	P	P	G	G	-
Hydrofluoric Acid	P	P	P	L	P	L	P	P	P	G	G	-
Hydrogen, Gaseous (2) (4) (5)	G	G	G	G	G	G	G	G	G	-	-	-
Hydrolube (hydraulic fluid/water glycol base)	G	G	L	G	G	G	G	L	G	-	G	-
IRUS 902 (hydraulic fluid/water-oil emulsion)	G	G	G	G	G	L	P	G	G	-	G	-
Isocyanates (2)	L	L	L	P	-	L	P	L	L	-	G	-
Isooctane (2)	G	G	G	L	G	L	P	L	G	G	G	-
Isopropyl Alcohol	G	G	L	L	G	G	L	L	G	G	G	-
Kerosene (2)	G	G	L	L	G	L	P	P	G	G	G	-
Ketones	L	G	P	P	G	G	P	P	L	G	G	-
Lacquer Solvents	L	G	P	P	-	L	-	P	L	L	G	-
Lactic Acid	P	G	P	G	G	G	G	P	P	G	G	-
Lime (calcium oxide)	G	G	G	G	-	G	G	G	G	G	G	-
Lindol (hydraulic fluid/phosphate esters)	L	G	P	-	-	-	-	P	L	-	G	-
Linseed Oil	G	G	G	L	G	L	P	G	G	G	G	G
LP-Gas	-	-	-	-	-	-	-	-	-	-	-	-
Lubricating Oils (diester base)	L	G	P	-	G	-	-	P	L	-	G	-
Lubricating Oils (petroleum base)	G	G	G	G	G	L	P	G	G	G	G	G
Magnesium Hydroxide	L	G	L	G	-	G	G	L	L	G	G	-
Magnesium Salts	-	G	G	G	-	G	-	G	-	-	G	-
Malathion (insecticide)	L	G	P	-	-	-	-	P	L	-	G	-
Mercury	G	G	G	G	G	G	G	G	G	G	G	-
Meropa Oil (sulphur base)	G	G	-	-	-	-	-	-	-	-	G	-



Technical Information
Chemical Resistance

Chemical	H	N	U/HF	V	NC	O	OC	PFX	HFR	FEP	TFE	POM
Methane	-	-	-	-	-	-	-	-	-	-	-	-
Methanol	G	G	P	P	G	L	P	P	G	-	G	-
Methoxychlor (insecticide)	L	G	P	-	-	-	-	P	L	-	G	-
Methyl Alcohol (6)	G	G	P	P	G	L	P	P	G	G	G	G
Methyl Ethyl Ketone (MEK)	L	G	P	P	G	G	L	P	L	G	G	L
Methyl Ethyl Ketone Peroxide (MEKP)	-	L	P	-	-	-	-	P	-	-	G	-
Methyl Isobutyl Ketone (MIBK)	L	G	P	P	G	L	P	P	L	G	G	-
Methylene Chloride	P	L	P	L	P	L	P	P	P	G	G	P
Milk (6)	G	G	G	G	-	G	G	G	G	G	G	-
Mineral Oil	G	G	G	G	G	L	P	G	G	G	G	G
Mineral Spirits	P	-	L	P	-	-	-	L	P	-	G	-
Motor Oils	G	G	G	G	G	-	-	G	G	G	G	-
Naphta	L	G	P	P	G	P	P	P	L	G	G	G
Natural Gas (4)	-	-	-	-	-	-	-	-	-	-	-	-
Nitric Acid	P	P	P	L	P	P	P	P	P	L	G	-
Nitrobenzene	P	G	P	P	G	P	P	P	P	G	G	-
Nitrogen, Gaseous (4) (5)	G	G	G	G	G	G	G	G	G	G	G	-
Nitrous Oxide	-	L	-	G	-	L	-	G	-	-	-	-
Oil (SAE)	G	G	G	G	G	L	L	G	G	-	G	G
Oil of Turpentine	G	G	P	G	G	P	P	P	G	-	G	-
Oleic Acid	G	G	G	L	G	L	L	G	G	G	G	-
OS 45 Type 3 Hydraulic Fluid (silicate esters)	L	G	L	P	-	P	P	L	L	-	-	-
Oxygen, Gaseous (4) (5) (6)	G	G	G	G	G	G	G	G	G	G	G	-
Ozone	L	P	L	G	P	L	G	P	L	G	G	-
Paint (Oil Base) (7)	G	G	G	P	-	L	P	G	G	-	G	-
Paint Solvents (Oil base)	L	G	L	P	-	P	P	L	L	-	G	-
Pentane (2)	G	G	L	L	-	P	P	L	G	G	G	-
Perchloric Acid	P	P	P	L	P	P	P	P	P	L	G	-
Perchloroethylene	P	P	P	L	P	P	P	P	P	-	G	L
Petroleum Ether	-	-	-	P	-	P	P	-	-	-	-	-
Petroleum Oils	G	G	G	G	G	L	P	G	G	-	G	-
Phenols	P	P	P	L	P	P	P	P	P	-	G	-
Phosphate Esters (above 135 °F)	P	G	P	P	-	P	P	P	L	-	G	-
Phosphate Esters (to 135 °F)	G	G	P	P	G	P	P	P	G	-	G	-
Polyol Esters	L	G	P	P	-	-	-	P	L	-	G	-
Potassium Hydroxide, 50%	P	P	P	L	-	L	L	P	P	G	G	-
Propane (4) (5)	-	-	-	-	-	-	-	-	-	-	-	-
Propylene Glycol	-	-	G	G	-	G	L	-	-	G	G	-
Pydraul 312C, 625 (to 135 °F)	P	G	P	P	G	P	P	P	G	-	G	-
Pydraul F-9, 150, 160 (to 135 °F)	G	G	P	P	G	P	P	P	G	-	G	-
Quintolubric 822 Fluid	-	G	G	-	-	-	-	-	-	-	G	-
Salt Water	-	-	-	-	-	-	-	-	-	G	G	-
Sevin (insecticides in water)	G	G	G	-	-	-	-	G	G	-	G	-
Silicone Greases	G	G	G	G	G	-	-	G	G	-	G	-

Chemical	H	N	U/HF	V	NC	O	OC	PFX	HFR	FEP	TFE	POM
Silicone Oils	G	G	G	G	G	-	-	G	G	-	G	-
Skydrol 500 & 7000	L	G	P	P	G	P	P	P	L	G	G	-
Soap Solutions	G	G	G	G	G	G	G	G	G	G	G	-
Soda Water	G	G	G	G	G	-	-	G	G	-	G	-
Sodium Borate	G	G	G	G	G	G	G	G	G	G	G	-
Sodium Carbonate	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Chloride Solutions	G	G	G	G	-	G	-	G	G	G	G	-
Sodium Hydroxide, 50%	L	P	P	L	P	L	L	P	L	G	G	-
Sodium Hypochloride	L	P	P	L	-	-	-	P	L	G	G	-
Steam	P	P	P	P	P	P	P	P	P	G	G	-
Stoddard Solvent	P	G	P	L	G	P	P	P	P	G	G	-
Straight Synthetic Oils (phosphate esters)	L	G	P	P	G	-	-	P	L	-	G	-
Sulphur	G	G	G	G	-	L	G	G	G	G	G	-
Sulphur Dioxide	P	L	L	L	-	P	-	L	P	G	G	-
Sulphur Hexafluoride Gas (4) (5)	G	G	G	G	-	G	-	G	G	-	G	-
Sulphuric Acid	P	P	P	-	P	P	P	P	P	-	G	-
Toluol, Toluene	L	G	L	P	G	P	P	P	L	G	G	G
Transmission Fluid	G	G	G	P	G	-	-	G	G	-	G	-
Trichlorethylene	P	L	P	L	G	P	P	P	P	G	G	L
Trisodium Phosphate Solutions	L	G	P	G	G	G	G	P	L	G	G	-
Turpentine	G	G	L	L	G	P	P	P	G	G	G	-
Ucon (hydraulic fluid/water glycol base)	G	G	L	G	G	-	-	L	G	-	G	-
Varnish	G	G	G	P	G	G	L	G	G	-	G	G
Vinegar (6)	L	G	L	G	G	G	G	L	L	G	G	-
Water (above 60 °C) (6)	P	G	P	L	-	P	P	P	P	L	G	-
Water (to 60 °C) (6)	G	G	G	G	G	G	G	L	G	G	G	G
Water Glycols (above 60 °C)	P	G	P	L	-	P	P	P	P	-	G	-
Water Glycols (to 60 °C)	G	G	L	G	G	L	L	L	G	-	G	-
Water in oil Emulsions (above 60 °C)	P	G	P	L	-	-	-	P	P	-	G	-
Water in oil Emulsions (to 60 °C)	G	G	L	G	G	-	-	L	G	-	G	G
Whiskey, Wines (6)	G	G	L	G	G	G	G	G	G	G	G	-
Wood Oils	G	G	L	G	G	-	-	G	G	-	G	G
Xylene	L	G	P	P	G	P	P	P	L	G	G	G
Zinc Chloride	G	G	G	G	P	G	G	G	G	G	G	-





DO'S

- ☞ Treat high pressure hose with extreme caution. Parker Hannifin hoses are ultra high pressure hoses, not garden hoses and should be treated like a high pressure vessel
- ☞ Always visually inspect for frayed, damaged or wear spots before using
- ☞ Check the end connections for wear, rust, cracks or other deterioration which could produce a dangerous projectile
- ☞ Know the working pressures and burst pressures of all hoses before using them
- ☞ Always use clean, filtered medium to prolong hose life. Do not use media which are high in sulfur because they may attack stainless steel
- ☞ Always clean, drain and coil hoses after use
- ☞ Use only hoses assembled by an authorized Parker distributor



DON'TS

- ☞ Never fix a hose at the sleeves
- ☞ Never use a hose with cuts or wire showing through the outer cover
- ☞ Never use a hose with bubbles, blisters or kinks o Don't exceed the bend radius and pressure rating for each hose
- ☞ Don't run over or crush the hose with vehicles o Hoses with corroded or leaking end connections should be avoided
- ☞ Avoid using a dirty medium or medium with sulfur compounds in it or don't bend the hose over scaffolding or pull heavy equipment with the hose
- ☞ Don't let hose support its own weight off towers or buildings
- ☞ Never use hose without hose arrestors (containment grips)
- ☞ Don't expect water jetting or hydraulic hose to last forever
- ☞ Don't change or repair a hose without instructions from the manufacturer
- ☞ Never disconnect a hose under pressure



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Parker Europe Sales Offices

Parker Hannifin Ges. mbH

A - 2700 Wiener Neustadt
Tel: +43 (0) (26 22) 23 501
Fax: +43 (0) (26 22) 66 212

Parker Hannifin Corporation

AE - Abu Dhabi
Tel: +971 2 6788587
Fax: +971 2 6793812

Parker Hannifin Corporation AZPAR

AZ - 370 000 Baku
Tel/Fax: +994 129 83 966

Parker Hannifin S.A.-N.V.

B - 1400 Nivelles
Tel: +32 (0) 67 280 900
Fax: +32 (0) 67 280 999

Parker Hannifin s.r.o.

CZ - 184 00 Prague 8
Tel: +420 283 085 224
Fax: +420 283 085 360

Parker Hannifin GmbH & Co. KG

DK - 41564 Kaarst
Tel: +49 (0) 2131 5130
Fax: +49 (0) 2131 513 230

Parker Hannifin Danmark A/S

DK - 2750 Ballerup
Tel: +45 43 56 04 00
Fax: +45 43 73 31 07

Parker Hannifin España S.A

E - 28850 Torrejón de Ardoz (Madrid)
Tel: +34 91 675 73 00
Fax: +34 91 675 77 11

Parker Hannifin Corporation

EG - Cairo
Tel: +20 2 519 4018
Fax: +20 2 519 0605

Parker Hannifin France SAS

F - 74130 Contamine-sur-Arve
Tel: +33 (0) 4 50 25 80 25
Fax: +33 (0) 4 50 97 86 60

Parker Hannifin Oy

FI - 01520 Vantaa
Tel: +358 (0) 9 476 731
Fax: +358 (0) 9 476 732 00

Parker Hannifin plc

GB - Warwick CV34 6TU
Tel: +44 (0) 1926 833700
Fax: +44 (0) 1926 889172

Parker Hannifin Corporation

GR - 171 21 Athina
Tel: +30 (210) 933-6450
Fax: +30 (210) 933-6451

Parker Hannifin Corporation

HU - 1149 Budapest
Tel: +36 (1) 220-4155
Fax: +36 (1) 422-1525

Parker Hannifin S.p.A.

I - 20094 Corsico (MI)
Tel: +39 02 451921
Fax: +39 02 4479340

Parker Sales Ireland Ltd

IE - Blackrock, Co. Dublin
Tel: +353 (0) 1 293 9999
Fax: +353 (0) 1 293 9900

Parker Hannifin Corporation

Gateway Ventures Ca Ltd.
KZ - 480100 Almaty
Tel: +7 327 2 543 081
Fax: +7 327 2 541 100

Parker Hannifin A/S

N - 1402 Ski
Tel: +47 64 91 10 00
Fax: +47 64 91 10 90

Parker Hannifin B.V.

NL - 7570 AT Oldenzaal
Tel: +31 (0) 541 585000
Fax: +31 (0) 541 585459

Parker Hannifin Sp.z.o.o.

PL - 02-235 Warszawa
Tel: +48 (0) (22) 863 49 42
Fax: +48 (0) (22) 863 49 44

Parker Hannifin Portugal Lda

PT - 4450-625 Leça da Palmeira
Tel: +351 22 9997360
Fax: +351 22 9961527

Parker Hannifin Corporation

Hidro Consulting Impex Srl
RO - 00001 Bucharest
Tel: +40 (21) 252-1382
Fax: +40 (21) 252-3381

Parker Hannifin Corporation

RU - 123001 Moscow
Tel: +7 (095) 234 0054
Fax: +7 (095) 234 0528

Parker Hannifin Corporation

RU - 693000 Yuzhno-Sakhalinsk
Tel/Fax: + 7 4242 727 242

Parker Hannifin AB

SE - 163 08 Spånga
Tel: +46 (0) 8 5979 5000
Fax: +46 (0) 8 5979 5110

Parker Hannifin Corporation

SI - 8000 Novo Mesto
Tel: +386 (7) 337-6650
Fax: +386 (7) 337-6651

Parker Hannifin Corporation

TR - 34067 Merter/Istanbul
Tel: +90 212 482 91 06/07
Fax: +90 212 482 91 10

Parker Hannifin Corporation

UA - 01004 Kiev
Tel: +380 (0) (44) 2207 432
Fax: +380 (0) (44) 2206 534

Parker Hannifin Africa

ZA - Kempton Park
Tel: +27 11 961-0700
Fax: +27 11 392-7213

Internet: <http://www.parker.com/europe>

For further information on other Parker Products, call the European Product Information Centre free of charge on 00800 27 27 5374.



Parker Hannifin plc
Haydock Park Road
GB - Derby DE24 8JA
Tel: (+44) (0) 1332 36 56 31
Fax: (+44) (0) 1332 36 80 38

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