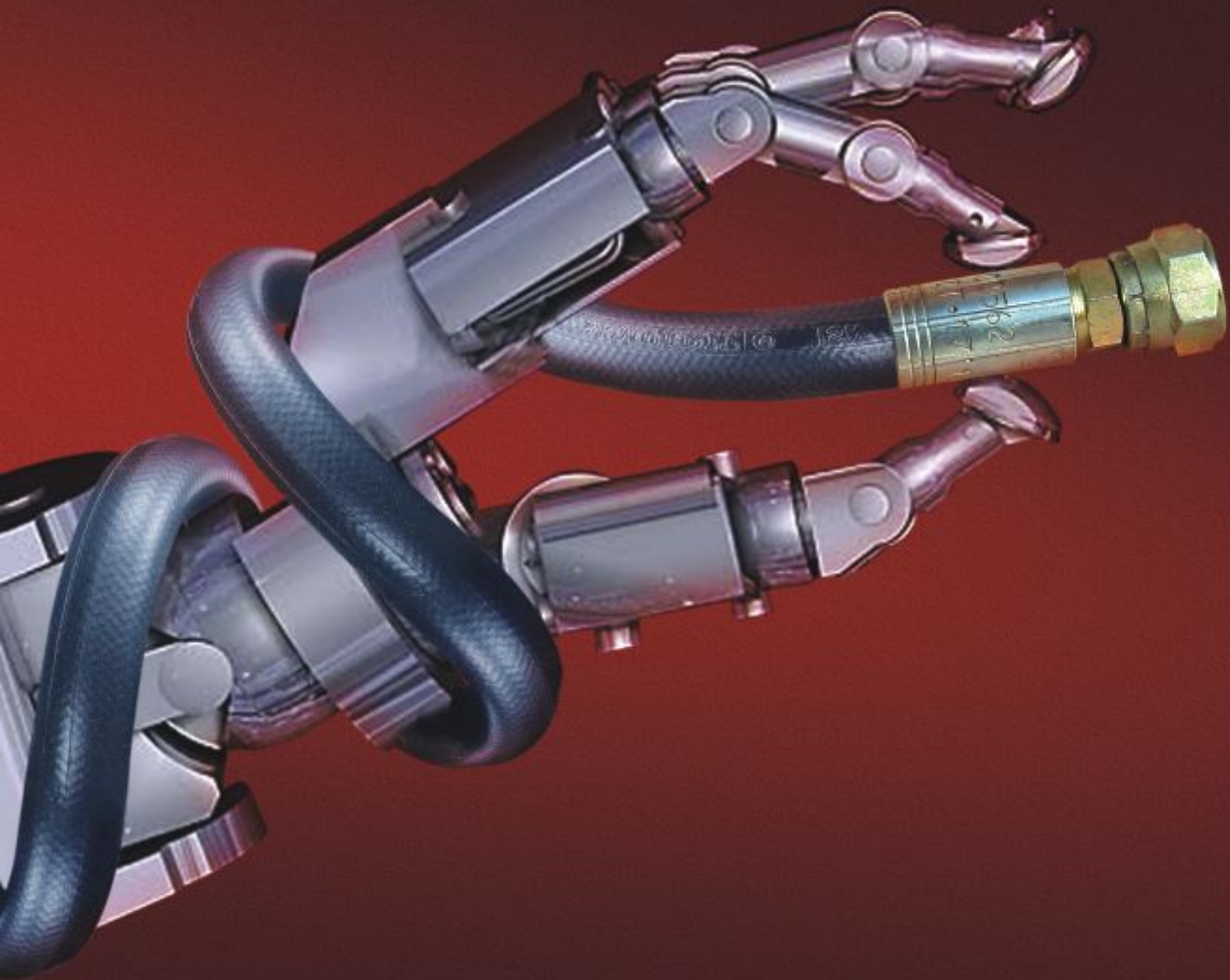


ISMAT

INDUSTRIAL HOSES



WHERE QUALITY SPEAKS BETTER



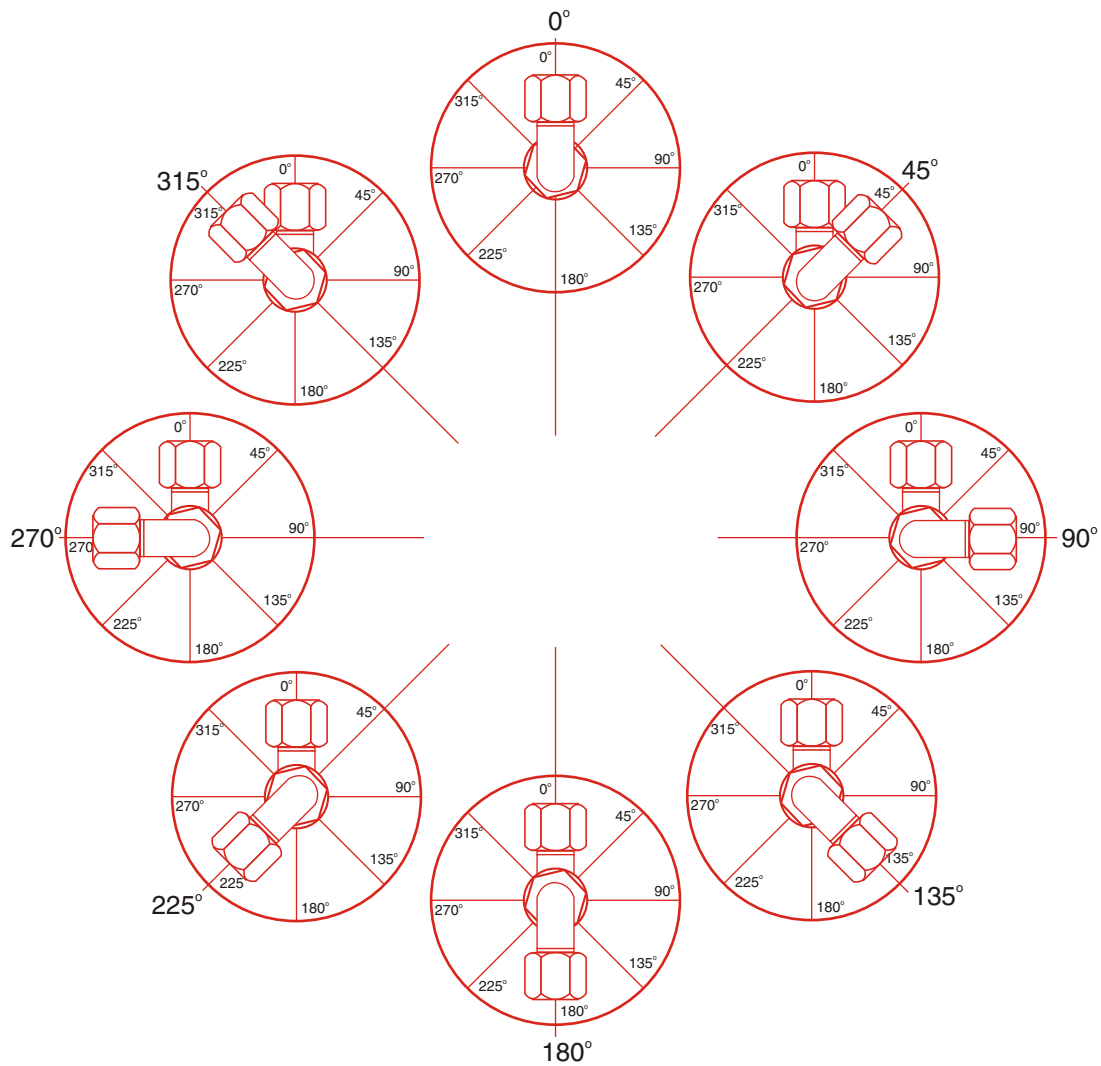
Power transmission, regulation, effective control of engines and brake systems-one cannot do away with hydraulics in any of these platforms. Just why hoses play a decisive role in any industrial application.

ISMAT industrial hoses had a modest beginning in 1983, however it didn't take quite long to emerge into one of the prominent hose traders and manufacturers providing trustworthy hydraulic solutions to a wide network all over. Owing to the excellence displayed in every level of production and control, the products are also in demand abroad.



The angle of hose assemblies with elbow fittings at either end can be determined as follows:

Look along the hose assembly for which a designation is required, with the rear fitting away from the body pointing upwards. Now specify how many degrees the front fitting is rotated through in a clockwise direction. Tolerance $\pm 3^\circ$



Seamless solutions for hydraulics

R1AT



Application High pressure hydraulics oils, air and water

Construction Tube Synthetic oil resistant rubber

Reinforcement 1 high tensile steel wire braid

Cover Synthetic rubber - abrasion, ozone and weather resistant

Temp. Range -40°C to +120°C

Impulse Cycles 150,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
inch	mm	mm	mm	psi	bar	psi	bar	inch	mm		
6	-4	1/4	6.4	11.1	13.4	3265	225	13060	900	3.9	100
8	-5	5/16	7.9	12.7	15.0	3120	215	12480	850	4.5	105
10	-6	3/8	9.5	15.1	17.4	2610	180	10440	720	5.1	130
12	-8	1/2	12.7	18.2	20.3	2320	160	9280	640	7.1	180
16	-10	5/8	15.9	21.4	23.7	1890	130	7560	520	7.9	200
19	-12	3/4	19.0	25.4	27.7	1525	105	6100	420	9.5	240
25	-16	1	25.4	33.3	35.6	1275	88	5100	352	11.8	300
32	-20	1 1/4	31.8	40.0	43.0	915	63	3660	252	16.5	420
38	-24	1 1/2	38.1	46.4	50.4	725	50	2900	200	19.7	500
51	-32	2	50.8	59.5	63.5	580	40	2320	160	24.8	630
*60	-38	2 3/8	60.3	69.0	75.0	362	25	1450	100	30.0	762
*64	-40	2 1/2	63.5	73.0	79.5	362	25	1450	100	30.0	762
*76	-48	3	76.2	86.4	94.4	290	20	1160	80	36.0	915
*90	-56	3 1/2	90.0	98.5	105.5	220	15	880	60	42.0	1067
*100	-64	4	101.6	110.6	117.0	145	10	580	40	43.5	1105

- No under SAE/EN/DIN specifications

R2AT



Application High pressure hydraulics oils, air and water

Construction Tube Synthetic oil resistant rubber

Reinforcement 2 high tensile steel wire braid

Cover Synthetic rubber - abrasion, ozone and weather resistant

Temp. Range -40°C to +120°C

Impulse Cycles 200,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
inch	mm	mm	mm	psi	bar	psi	bar	inch	mm		
6	-4	1/4	6.4	12.7	15.1	5800	400	23200	1600	4.0	100
8	-5	5/16	7.9	14.3	16.7	5100	350	20400	1400	4.5	115
10	-6	3/8	9.5	16.7	19.1	4800	330	19200	1320	5.1	130
12	-8	1/2	12.7	19.8	22.2	4000	276	16000	1103	7.1	180
16	-10	5/8	15.9	23.0	25.4	3600	250	14400	1000	7.9	200
19	-12	3/4	19.0	27.0	29.4	3100	215	12400	860	9.4	240
25	-16	1	25.4	35.0	37.3	2400	165	9600	660	11.8	300
32	-20	1 1/4	31.8	44.5	48.3	1800	125	7200	500	16.5	420
38	-24	1 1/2	38.1	51.0	54.7	1300	90	5200	360	19.7	500
51	-32	2	50.8	63.5	67.4	1160	80	4640	320	24.8	630
*60	-38	2 3/8	60.3	71.5	75.8	1015	70	4060	280	30.0	762
*64	-40	2 1/2	63.5	76.2	82.5	1000	69	4000	276	30.0	762
*76	-48	3	76.2	89.4	96.0	650	45	2600	179	36.0	915
*90	-56	3 1/2	90.0	101.2	107.5	400	28	1600	110	42.0	1067
*100	-64	4	101.6	113.2	118.5	365	25	1460	101	43.5	1105

- No under SAE/EN/DIN specifications

R3



Application Medium pressure hydraulic oils, air and water

Construction Tube Synthetic oil resistant rubber

Reinforcement 2 textile braids

Cover Synthetic rubber - abrasion, ozone and weather resistant

Temp. Range -40°C to +120°C

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
inch	mm	mm	mm	psi	bar	psi	bar	inch	mm		
6	-4	1/4	6.4		14.3	1250	86	5000	345	3.0	76
8	-5	5/16	7.9		17.5	1200	83	4800	331	4.0	102
10	-6	3/8	9.5		19.0	1125	78	4500	310	4.0	102
12	-8	1/2	12.7		23.8	1000	69	4000	276	5.0	127
16	-10	5/8	15.9		27.0	875	60	3500	241	5.5	140
19	-12	3/4	19.0		31.8	750	52	3000	207	6.0	152
25	-16	1	25.4		38.1	565	39	2250	155	8.0	203
32	-20	1 1/4	31.8		44.5	375	26	1500	103	10.0	254
*38	-24	1 1/2	38.1		50.8	250	17	1000	69	12.0	306
*51	-32	2	50.8		64.0	215	15	860	60	16.1	410

* Not under SAE specifications

R6



Application	Low pressure hydraulic oils, air and water
Construction Tube	Synthetic oil resistant rubber
Reinforcement	1 textile braid
Cover	Synthetic rubber - abrasion, ozone and weather resistant
Temp. Range	-40°C to +120°C

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
inch	mm	mm	mm	psi	bar	psi	bar	inch	mm		
6	-4	1/4	6.4		12.7	400	28	1600	110	2.5	64
8	-5	5/16	7.9		14.3	400	28	1600	110	3.0	76
10	-6	3/8	9.5		15.9	400	28	1600	110	3.0	76
12	-8	1/2	12.7		19.8	400	28	1600	110	4.0	102
16	-10	5/8	15.9		23.0	350	24	1400	97	5.0	127
19	-12	3/4	19.0		26.0	300	21	1200	83	6.0	152
25	-16	1	25.4		32.5	190	13	760	52	9.1	230

* Not under SAE specifications

JACK H



Application	Hydraulic jack application used in jacking systems
Construction Tube	Synthetic oil resistant rubber
Reinforcement	2 high tensile steel wire braids
Cover	Synthetic rubber - abrasion, ozone and weather resistant
Temp. Range	-40°C to +50°C

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
inch	mm	mm	mm	psi	bar	psi	bar	inch	mm		
6	-4	1/4	6.4	12.7	14.8	10000	690	20000	1380	4.0	102
10	-6	3/8	9.5	16.7	18.8	10000	690	20000	1380	5.0	127

R5C / R5R



Application	High pressure hydraulic oils, air and water
Construction Tube	Synthetic oil resistant rubber
Reinforcement	1 textile braid and 1 high tensile steel wire braid
Cover	R5C: Oil and mildew resistant rubber impregnated cotton cover R5R: Synthetic rubber - abrasion, ozone and weather resistant
Temp. Range	Upto 7/8 inch - 150,000 1 1/8 inch and above - 100,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
inch	mm	mm	mm	psi	bar	psi	bar	inch	mm		
6	-5	1/4	6.4		14.4	3000	207	12000	828	3.4	86
8	-6	5/16	7.9		17.2	2250	155	9000	621	4.0	102
10	-8	13/32	10.3		19.5	2000	138	8000	552	4.6	117
12	-10	1/2	12.7		23.4	1750	121	7000	483	5.5	140
16	-12	5/8	15.9		27.4	1500	103	6000	414	6.5	165
22	-16	7/8	22.2		31.4	800	55	3200	221	7.4	187
29	-20	1 1/8	28.7		38.1	625	43	2500	172	9.0	229
35	-24	1 3/8	34.9		44.5	500	34	2000	138	10.5	267
46	-32	1 13/16	46.0		57.1	350	24	1400	97	13.2	337
60	-38	2 3/8	60.3		73.0	350	24	1400	97	21.0	610

4SP



Application	Very high pressure hydraulics
Construction Tube	Oil resistant synthetic rubber
Reinforcement	4 high tensile steel wire spirals
Cover	Synthetic rubber - abrasion, ozone and weather resistant
Temp. Range	-40°C to +100°C continuous +125°C intermittent
Impulse Cycles	Minimum 400,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
inch	mm	mm	mm	psi	bar	psi	bar	inch	mm		
10	-6	3/8	9.5	17.5	21.2	6450	445	25800	1780	7.1	180
12	-8	1/2	12.7	20.2	24.4	6020	415	24070	1660	9.0	230
16	-10	5/8	15.9	23.8	28.0	5075	350	20300	1400	9.8	250
19	-12	3/4	19.0	28.2	32.0	5075	350	20300	1400	11.8	300
25	-16	1	25.4	35.3	39.5	4060	280	16240	1120	13.3	340
32	-20	1 1/4	31.8	46.0	50.6	3045	210	12180	840	18.1	460
38	-24	1 1/2	38.1	52.4	57.0	2685	185	10730	740	22.0	560
51	-32	2	50.8	65.3	69.6	2395	165	9570	660	25.9	660

4SH



Application Extra high pressure hydraulics
Construction Tube Oil resistant synthetic rubber
Reinforcement 4 high tensile steel wire spirals
Cover Synthetic rubber - abrasion, ozone and weather resistant

Temp. Range -40°C to +100°C continuous
 +125°C intermitted

Impulse Cycles Minimum 400,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
		inch	mm	mm	mm						
19	-12	3/4	19.0	28.4	32.0	6100	420	24360	1680	11.0	280
25	-16	1	25.4	35.2	38.5	5516	380	22040	1520	13.3	340
32	-20	1 1/4	31.8	41.9	45.3	4720	325	18850	1300	18.1	460
38	-24	1 1/2	38.1	48.8	53.3	4210	290	16820	1160	22.0	560
51	-32	2	50.8	63.2	67.9	3625	250	14500	1000	27.5	700

R12



Application Very high pressure hydraulics
Construction Tube Oil resistant synthetic rubber
Reinforcement 4 high tensile steel wire spirals
Cover Synthetic rubber - abrasion, ozone and weather resistant

Temp. Range -40°C to +100°C continuous
 +121°C intermitted

Impulse Cycles Minimum 500,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
		inch	mm	mm	mm						
10	-6	3/8	9.5	17.2	20.1	4000	276	16000	1100	5.0	127
12	-8	1/2	12.7	20.7	23.6	4000	276	16000	1100	7.0	178
16	-10	5/8	15.9	24.6	27.2	4000	276	16000	1100	8.0	203
19	-12	3/4	19.0	27.65	30.5	4000	276	16000	1100	9.5	241
25	-16	1	25.4	34.9	37.8	4000	276	16000	1100	12.0	305
32	-20	1 1/4	31.8	43.9	46.8	3000	207	12000	825	16.5	419
38	-24	1 1/2	38.1	50.4	53.3	2500	172	10000	685	20.0	508
51	-32	2	50.8	63.65	66.5	2500	172	10000	685	25.0	635

R13



Application Extremely high pressure hydraulics
Construction Tube Oil resistant synthetic rubber
Reinforcement 4 or 6 high tensile steel wire spirals
Cover Synthetic rubber - abrasion, ozone and weather resistant

Temp. Range -40°C to +100°C continuous
 +121°C intermitted

Impulse Cycles Minimum 500,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
		inch	mm	mm	mm						
10	-6**	3/8	9.5	19.4	22.4	10000	690	40000	2760	6.0	152
12	*-8**	1/2	12.7	22.6	25.5	7500	517	30000	2070	8.0	200
19	*-12	3/4	19.0	29.0	31.9	5000	345	20000	1380	9.5	241
25	*-16	1	25.4	35.65	38.5	5000	345	20000	1380	12.0	305
32	-20	1 1/4	31.8	46.8	49.6	5000	345	20000	1380	16.5	419
38	-24	1 1/2	38.1	54.3	57.1	5000	345	20000	1380	20.0	508
51	-32	2	50.8	68.1	70.9	5000	345	20000	1380	25.0	635

* 4 spirals ** Not covered in SAE

R15



Application Extremely high pressure, heavy duty, high impulse hydraulics
Construction Tube Oil resistant synthetic rubber
Reinforcement 4 or 6 high tensile steel wire spirals
Cover Synthetic rubber - abrasion, ozone and weather resistant

Temp. Range -40°C to +100°C continuous
 +121°C intermitted

Impulse Cycles Minimum 500,000

Code		Hose Size				Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius	
		I.D.		R.O.D.	O.D.	psi	bar	psi	bar	inch	mm
		inch	mm	mm	mm						
19	-12	3/4	19.0	28.4	32.0	6000	414	24000	1655	10.5	267
25	-16	1	25.4	35.2	38.5	6000	414	24000	1655	13.0	330
32	-20	1 1/4	31.8	46.8	49.6	6000	414	24000	1655	17.5	445
38	-24	1 1/2	38.1	54.3	57.1	6000	414	24000	1655	21.0	533

- Exceeds DIN 20023 4SH & SAE 100 R13 spec. particularly on impulse test & burst pressure - (3/4" & 1") - 4 high tensile steel spirals, (1 1/4" & 1 1/2") - 6 high tensile steel spirals





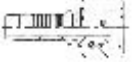
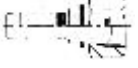


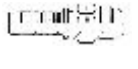


Teflon Hose Plain PTFE tube with single stainless steel wire braid offers great resistance to corrosive chemicals and high temperatures. It is resistant to most known chemicals, acids, alkalis, oils, corrosives and gases. Working pressure is 1/4 of burst.


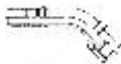


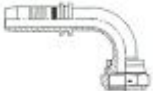
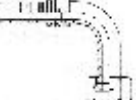

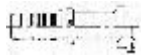

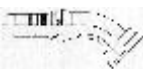
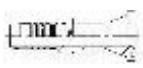
PTEF hose with double wire braid available for high pressure applications and where tight bend radius is required.

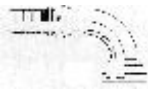
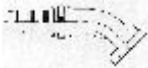
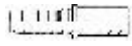
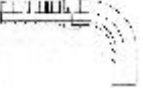
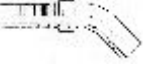
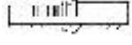
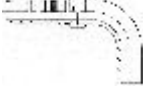


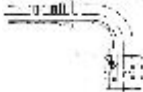

Temperature Range: -70°C to +260°C

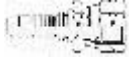
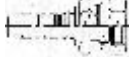
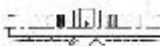



Applications: Steam lines, hot lines, corrosive chemical transfer, conveying gases and refrigerants and food processing.

Code	ID mm	OD mm	Working pressure kg/cm ²	Minimum Bend Radiusmm
TF50	4.8	8	260	50
TF06	6	9.3	205	80
TF08	8	10.3	195	110
TF10	9.5	12	145	130
TF12	12.5	15.5	135	165
TF16	16	18.8	90	205
TF20	19	22.5	65	225
TF25	25	28.5	50	330

Crimp Fittings		1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1.1/4"	1.1/2"	2"
H107100	 BSP MALE TAPERED	1/8" 1/4" 3/8"	3/8"	3/8" 1/2"	1/2"	3/4"	3/4" 1"	1"	1.1/4"	1.1/2"	2"
H105100	 BSP MALE PARALLEL 60° CONE SEAT	1/8" 1/4" 3/8"	3/8"	3/8" 1/2"	3/8" 1/2"	5/8" 3/4"	3/4"	1"	1.1/4"	1.1/2"	2"
H205120	 BSP FEMALE 60° CONE CRIMP NUT	1/8" 1/4"	3/8"	1/4" 3/8" 1/2"	1/2"	5/8"	3/4"	1"			
H205130	 BSP FEMALE 60° CONE SLIP-ON NUT								1.1/4"	1.1/2"	2"
H205920	 90° BSP FEMALE SWEPT ELBOW 60° CONE CRIMP NUT	1/8" 1/4"	3/8"	3/8" 1/2"	1/2"	5/8"	3/4"	1"			
H205420	 45° BSP FEMALE SWEPT ELBOW CRIMP NUT	1/8" 1/4"	3/8"	3/8" 1/2"	1/2"	5/8"	3/4"	1"			
H125100	 JIC MALE 74° CONE	7/16" 1/2" 9/16"	5/8" 9/16"	9/16" 3/4"	3/4" 7/8"	7/8" 1.1/16"	1.1/16"	1.5/16"	1.5/8"	1.7/8"	2.1/2"
H225120	 JIC FEMALE 74° CONE SEAT CRIMP NUT	7/16" 1/2" 9/16"	9/16"	9/16" 3/4"	3/4" 7/8"	7/8" 1.1/16"	1.1/16"	1.5/16"	1.5/8"	1.7/8"	2.1/2"
H225920	 90° JIC FEMALE ELBOW 74° CONE SEAT CRIMP NUT	7/16" 1/2"	5/8" 9/16"	9/16" 3/4"	3/4" 7/8"	7/8" 1.1/16"	1.1/16"	1.5/16"	1.5/8"		

Crimp Fittings			1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1.1/4"	1.1/2"	2"
H247920		90° JIC FEMALE LONG DROP ELBOW 740 CRIMP NUT	7/16"		9/16"	7/8"	1.1/16"	1.1/16"	1.5/16"			
H225420		45° JIC FEMALE 74° CONE SEAT CRIMP NUT	7/16"	9/16"	9/16" 3/4"	3/4" 7/8"	7/8" 1.1/16"	1.1/16"	1.5/16"	1.5/8"		
H124100		ORFS MALE	9/16" 7/16"		9/16"	13/16"	1"	1 3/16"	1 7/16"	1 11/16"	2"	
H224110		ORFS FEMALE CRIMPED BACK NUT	7/16"		9/16"	13/16"	1" 1 3/16"	1.3/16"	1.7/16"	1.11/16"	2"	
H224910		90° ORFS FEMALE CRIMPED BACK NUT	7/16"		9/16"	13/16"	1" 1 3/16"	1.3/16"	1.7/16"	1.11/16"	2"	
H244930		90° ORFS FEMALE LONG DROP CRIMPED BACK NUT						1.3/16"	1.7/16"			
H224410		45° ORFS FEMALE CRIMPED BACK NUT			9/16"	13/16"		1.3/16"	1.7/16"			
H233110		STRAIGHT SAE FLANGE 3000 psi CODE 61				-08	-08 -12	-12	-16	-20	-24	-32
H233910		90° SAE FLANGE 3000 psi CODE 61				-08	-12	-12	-16	-20	-24	-32
H233410		45° SAE FLANGE 3000 psi CODE 61				-08	-12	-12	-16	-20	-24	-32
H236110		STRAIGHT SAE FLANGE 6000 psi CODE 62				-08		-12	-16	-20	-24	-32

Crimp Fittings		1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1.1/4"	1.1/2"	2"
H236910	 90° SAE FLANGE 6000 psi CODE 62				-08		-12	-16	-20	-24	-32
H236410	 45° SAE FLANGE 6000 psi CODE 62				-08		-12	-16	-20	-24	-32
H220100	 METRIC STANDPIPE STRAIGHT L.T.	6 8 10	8 10 12	10 12	12 15	18	22	28	35	42	
H220900	 90° METRIC STANDPIPE L.T.	6 8	8 10	12	15	18	22	28	35	42	
H220400	 45° METRIC STANDPIPE L.T.	6 8	8 10	12	15	18	22	28	35	42	
H221100	 METRIC STANDPIPE STRAIGHT H.T.	6 8 10	8 10	12	16	20	25	25 30	38		
H221900	 90° METRIC STANDPIPE H.T.	6 8	8 10	12	16	20	25	25 30	38		
H221400	 45° METRIC STANDPIPE H.T.	6 8	8 10	12	16	20	25	25 30	38		
H215130	 O RING METRIC FEMALE 24° CRIMP NUT	6 8 10	8 10 12	10 12	12 15 16	18 20 22	20 22 25	25 28 30	30 35 38	38 42	
H215920	 90° METRIC FEMALE 24° CRIMP NUT	6 8 10	8 10 12	10 12	12 15 16	18 20 22	20 22 25	25 28 30	30 35 38	38 42	
H112100	 METRIC MALE 24°	8 10	10 12	12	15 16	18 20	22 25	28 30	35 38	42	

Crimp Fittings			1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1.1/4"	1.1/2"	2"
H240110		JIS METRIC FEMALE 60° CONE SEAT CRIMP NUT	14x1.5	14x1.5	16x1.5	22x1.5	24x1.5	26x1.5 30x1.5	33x1.5	36x1.5		
H238110		JIS BSP 60° CONE SEAT CRIMP NUT	1/4"		3/8"	1/2"		3/4"	1"			
H100500		DOUBLE CONNECTOR	1/4"		3/8"	1/2"		3/4"	1"			
M..IP..		BRAZING TAIL	1/4" -6		3/8" -12	1/2" 15 16	5/8" -18	3/4" -22	1" -28	1.1/4" -35		
O833080		SAT SPLIT FLANGE 3000 PSI CODE 61				-08	-12	-12	-16	-20	-24	-32
O836090		SAE SPLIT FLANGE 6000 PSI CODE 62				-08		-12	-16	-20	-24	-32





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