

Hydraulic Adapter Type Fittings



Hydraulic Adapter Fittings ISO 8434-1 2 3 4 5 6

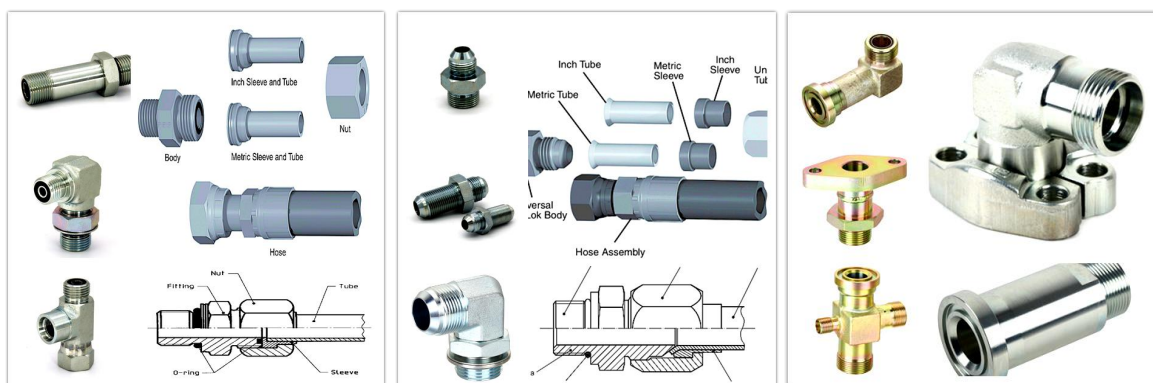
SAE J514, SAE J518, SAE J1453, DIN 2353, JIS B8363 etc

Types of Hydraulic Adapter Fittings

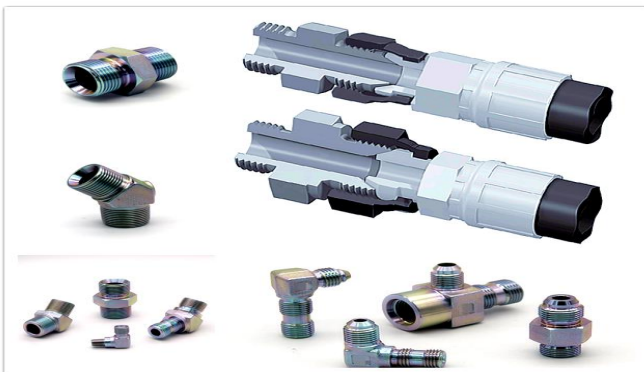
Hydraulic adapters is one type of hydraulic fittings, to connect the hydraulic tubing, hydraulic hose assembly and tube fittings. There are different names such as hydraulic adaptors(UK), hydraulic fittings(most popular), hydraulic connectors etc.

Hydraulic adapter types with different standards as follows:

America SAE standards such as SAE J514, SAE J1453, SAE J518 etc, SAE thread hydraulic tube fittings, pipe adapters, flange adapters, pipe fittings.



Japanese JIS standard JIS B2351 inch thread and JIS B8363 metric thread end fittings and adapters for hydraulic hose assemblies.

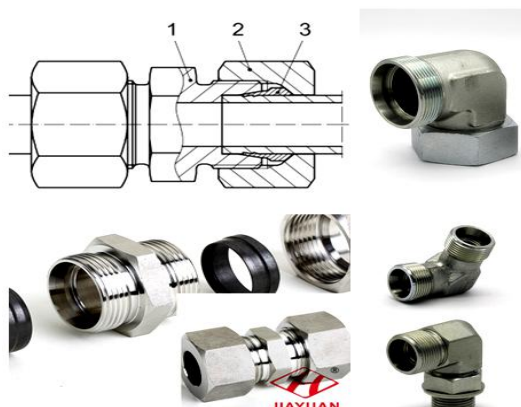


British standards BS 5200, BSP thread hydraulic adaptors and connectors.



Hydraulic Adapter Types fittings DIN, BS, JIC, SAE, ISO, JIS etc international standards

Germany standard DIN 2353, Metric thread compression tube fittings with cutting ring, flareless metric fittings and couplings.



Jiayuan is a leading, professional manufacturer of hydraulic adapter fittings, we offer various standards and custom sizes such as hydraulic hose adapters, metric hydraulic adapters, sae hydraulic adapters, sae flange adapters, conversion adapters to each other types JIC, metric, npt, orfs, male to female etc.



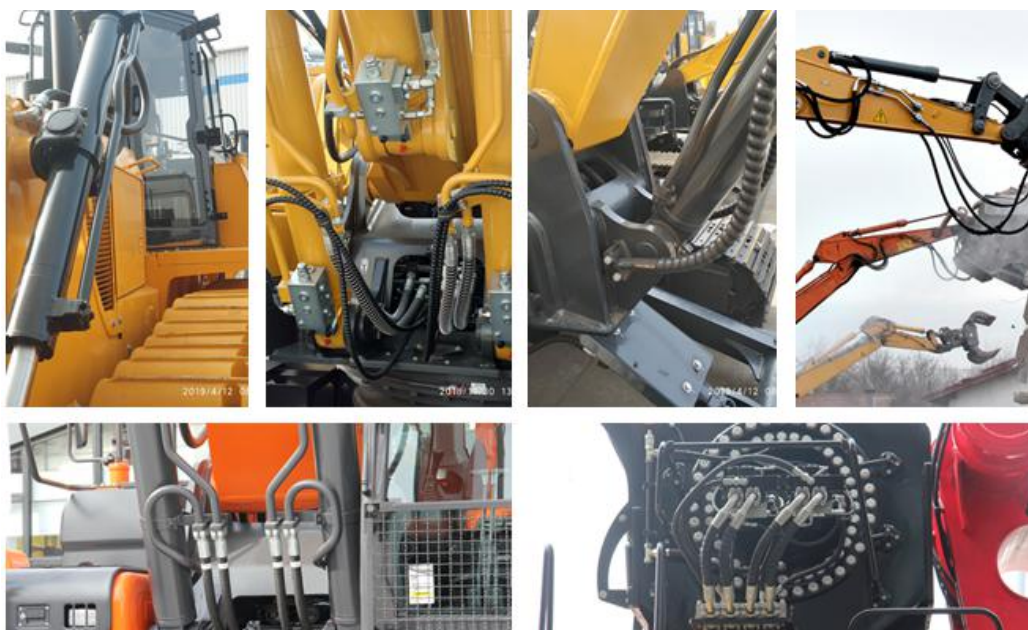
Jiayuan is making good progress in quality control management and automation production technology, strive to take a lead in the field of hydraulic fittings. We control strictly product quality from material to finished products according to ISO 9001, PPAP report including material chemical composition report, dimension inspection, salt spray test, pressure testing, torque test and cleanliness report etc.



Hydraulic Adapter Types fittings DIN, BS, JIC, SAE, ISO, JIS etc international standards

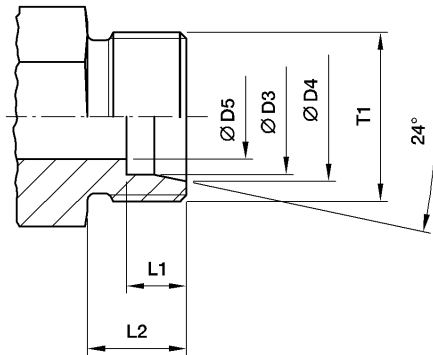


Our product is used in various industrial equipment such as engineering construction machinery, agricultural equipment, commercial vehicles, petrochemical equipment, maritime shipbuilding etc. Our products exported to Germany, Japan, UK, Italy, Canada, Russia, Brazil etc.



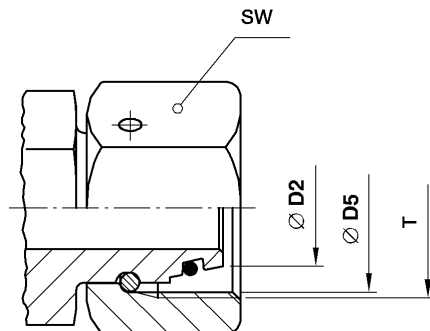
Various standard size of hydraulic adapter JIC, ORFS, SAE flange, DIN, JIS as follows:

DIN 2353 24° cone end (DIN 3861/ISO 8434-1) dimension of compression tube fittings



Tube O.D. Size	T1	Ø D3 mm	Ø D4 mm	Ø D5 mm	L1 mm	L2 mm
04-LL	M 08×1.0	04	5.0	3.0	4.1	8
06-LL	M 10×1.0	06	7.5	4.5	5.6	8
08-LL	M 12×1.0	08	9.5	6.0	5.6	9
10-LL	M 14×1.0	10	11.5	8.0	5.6	9
12-LL	M 16×1.0	12	13.5	10.0	6.1	9
06-L	M 12×1.5	06	8.1	4.0	7.1	10
08-L	M 14×1.5	08	10.1	6.0	7.1	10
10-L	M 16×1.5	10	12.3	8.0	7.1	11
12-L	M 18×1.5	12	14.3	10.0	7.1	11
15-L	M 22×1.5	15	17.3	12.0	7.1	12
18-L	M 26×1.5	18	20.3	15.0	7.6	12
22-L	M 30×2.0	22	24.3	19.0	7.6	14
28-L	M 36×2.0	28	30.3	24.0	7.6	14
35-L	M 45×2.0	35	38.0	30.0	10.6	16
42-L	M 52×2.0	42	45.0	36.0	11.1	16
06-S	M 14×1.5	06	8.1	4.0	7.1	12
08-S	M 16×1.5	08	10.1	5.0	7.1	12
10-S	M 18×1.5	10	12.3	7.0	7.6	12
12-S	M 20×1.5	12	14.3	8.0	7.6	12
14-S	M 22×1.5	14	16.3	10.0	8.1	14
16-S	M 24×1.5	16	18.3	12.0	8.6	14
20-S	M 30×2.0	20	22.9	16.0	10.6	16
25-S	M 36×2.0	25	27.9	20.0	12.1	18
30-S	M 42×2.0	30	33.0	25.0	13.6	20
38-S	M 52×2.0	38	41.0	32.0	16.1	22

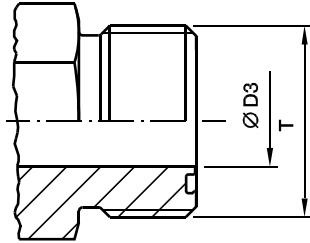
24°DKO swivel connector (DIN 3865/DIN EN ISO 8434-4) dimension of compression tube fittings



Tube O.D. Size	T	Ø D2 mm	Ø D5 mm Thread core diameter	SW mm
06-L	M 12×1.5	5.5	10.38	14
08-L	M 14×1.5	7.5	12.38	17
10-L	M 16×1.5	9.7	14.38	19
12-L	M 18×1.5	11.7	16.38	22
15-L	M 22×1.5	14.7	20.38	27
18-L	M 26×1.5	17.7	24.38	32
22-L	M 30×2.0	21.7	27.84	36
28-L	M 36×2.0	27.7	33.84	41
35-L	M 45×2.0	34.5	42.84	50
42-L	M 52×2.0	41.5	49.84	60
06-S	M 14×1.5	5.5	12.38	17
08-S	M 16×1.5	7.5	14.38	19
10-S	M 18×1.5	9.7	16.38	22
12-S	M 20×1.5	11.7	18.38	24
14-S	M 22×1.5	13.5	20.38	27
16-S	M 24×1.5	15.5	22.38	30
20-S	M 30×2.0	19.5	29.84	36
25-S	M 36×2.0	24.5	33.84	46
30-S	M 42×2.0	29.5	39.84	50
38-S	M 52×2.0	37.5	49.84	60

Hydraulic Adapter Types fittings DIN, BS, JIC, SAE, ISO, JIS etc international standards

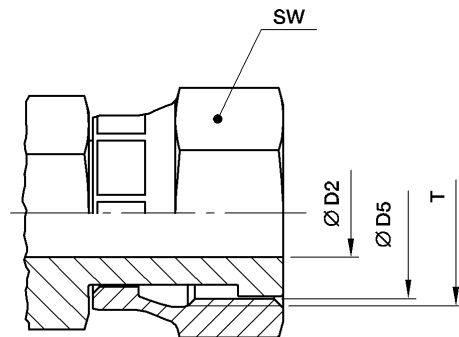
Male ORFS hydraulic tube fittings end (ISO 8434-3/SAE J1453)/dimensions



Ø D5 Size	Tube O.D.		T	T	Ø D3 mm
	inch	mm	UN/UNF	Major thread Ø mm	
4	1/4	6	9/16-18	14.0	5.0
6	5/16, 3/8	8, 10	11/16-16	17.0	6.5
8	1/2	12	13/16-16	20.5	9.5
10	5/8	14, 15, 16	1-14	25.0	12.5
12	3/4	18, 20	1 3/16-12	30.0	15.5
16	7/8, 1	22, 25	1 7/16-12	36.0	20.5
20	1 1/4	28, 30, 32	1 11/16-12	42.5	26.0
24	1 1/2	35, 38	2-12	50.5	32.0
32	2	50	2 1/2-12	63.0	45.0

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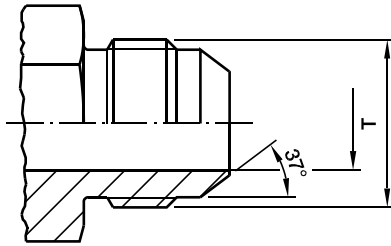
Female ORFS hydraulic fittings swivel connector (ISO 8434-3/SAE J1453) dimensions



Size	Tube O.D.		T UN/UNF	Ø D5		Ø D2 mm
	inch	mm		Thread core diameter mm	SW mm	
4	1/4	6	9/16-18	12.5	17	4.0
6	5/16, 3/8	8, 10	11/16-16	16.0	22	6.5
8	1/2	12	13/16-16	19.0	24	9.0
10	5/8	14, 15, 16	1-14	23.0	30	11.5
12	3/4	18, 20	1 3/16-12	28.0	36	14.0
16	7/8, 1	22, 25	1 7/16-12	34.0	41	20.0
20	1 1/4	28, 30, 32	1 11/16-12	40.5	50	26.0
24	1 1/2	35, 38	2-12	48.0	60	32.0

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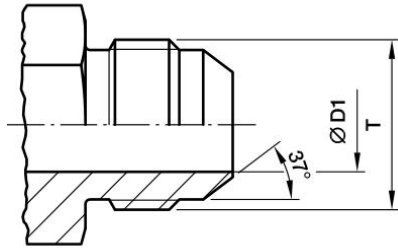
Male JIC hydraulic fittings flare tube end (ISO 8434-2/SAE J514) dimensions



Size	Tube O.D.		T	T	Ø D1 mm
	inch	mm	UN/UNF	Major thread Ø mm	
4	1/4	6	7/16-20	11.0	4.5
5	5/16	8	1/2-20	12.5	6.0
6	3/8	10	9/16-18	14.0	7.5
8	1/2	12	3/4-16	19.0	10.0
10	5/8	14, 15, 16	7/8-14	22.0	12.5
12	3/4	18, 20	1 1/16-12	27.0	15.5
14	7/8	22	1 3/16-12	30.0	18.0
16	1	25	1 5/16-12	33.0	21.5
20	1 1/4	28, 30, 32	1 5/8-12	41.0	27.5
24	1 1/2	35, 38	1 7/8-12	47.5	33.0
28*	1 3/4	42	2 1/4-12	57.0	39.0
32	2	—	2 1/2-12	63.5	45.0

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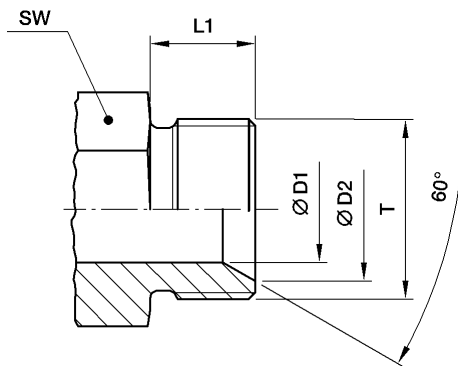
Female JIC hydraulic fittings swivel connector (ISO 8434-2/SAE J514) dimensions



Size	Tube O.D.		T UN/UNF	SW mm	Ø D5	
	inch	mm			Thread core diameter mm	Ø D2 mm
4	1/4	6	7/16-20	17	10.0	4.4
5	5/16	8	1/2-20	17	11.5	6.0
6	3/8	10	9/16-18	19	13.0	7.5
8	1/2	12	3/4-16	22	17.5	9.9
10	5/8	14, 15, 16	7/8-14	27	20.5	12.3
12	3/4	18, 20	1 1/16-12	32	25.0	15.5
14	7/8	22	1 3/16-12	35	28.0	18.0
16	1	25	1 5/16-12	38	31.0	21.5
20	1 1/4	28, 30, 32	1 5/8-12	50	39.0	27.5
24	1 1/2	35, 38	1 7/8-12	60	45.5	33.0
32	2	—	2 1/2-12	75	61.5	45.0

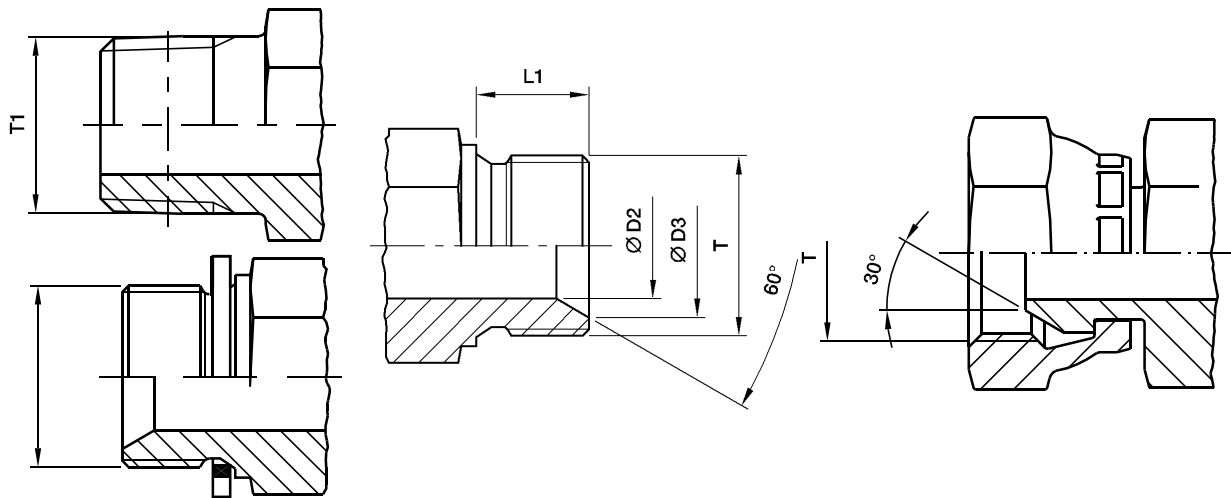
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DIN 60° cone end (DIN 7631) dimensions



Tube O.D. mm	T	Ø D1 mm	Ø D2 mm	L1 mm	SW m m
4-5	M 10×1.5	3	8.0	8	11
06	M 12×1.5	4	9.0	10	12
08	M 14×1.5	6	11.0	10	14
10	M 16×1.5	8	13.0	11	17
12	M 18×1.5	10	15.0	11	19
15	M 22×1.5	12	19.0	12	24
18	M 26×1.5	15	22.0	12	27
22	M 30×1.5	19	26.0	14	32
28	M 38×1.5	25	33.0	14	41
35	M 45×1.5	32	40.0	16	46
42	M 52×1.5	39	47.0	16	55

Male Hydraulic Adapter 60° cone end (ISO/DIS 8434-6) dimensions



Size	T	D2	D3	L1 mm	BSPT	T1	NPT(F)	T2
02	G 1/8 A	3.5	7.5	8	1/8		1/8	1/8
04	G 1/4 A	4.7	10.4	11	1/4		1/4	1/4
					1/8		1/8	1/8
06	G 3/8 A	7.9	14.0	12	3/8		3/8	3/8
					1/4		1/4	1/4
08	G 1/2 A	11.1	17.5	14	1/2		1/2	1/2
					3/8		3/8	1/4
10	G 5/8 A	14.3	19.3	16	1/2			1/2
12	G 3/4 A	16.7	22.9	16	3/4		3/4	3/4
					1/2		1/2	1/4
					1		1	3/8
16	G 1 A	22.2	28.7	19	1		1	1
					3/4		3/4	1/2
20	G 1 1/4 A	28.6	36.8	22	1 1/4			3/4
								1
24	G 1 1/2 A	33.3	42.7	22	1 1/2			1
								1 1/4
32	G 2 A	46.0	54.6	25				1 1/2

Hydraulic Adapter Types fittings DIN, BS, JIC, SAE, ISO, JIS etc international standards

The related standards of Hydraulic adapter fittings as follows:

ASTM A269 Seamless and welded type 316 Stainless Steel tubing
ASTM B633 Zinc plating
ASTM F1387 Mechanically attached fittings
DIN 2353 24° cone compression (bite-type) fitting range (configurations)
DIN 3852-1 Metric parallel thread port (ISO 9974-1)
DIN 3852-2 BSPP parallel thread port (ISO 1179-1)
DIN 3852-3 Metric O-ring port (ISO 6149-1)
DIN 3861 24° cone machining and sleeve for compression (bite-type) fittings
DIN 3865 24° cone nipple with O-ring
DIN 3859 Technical delivery conditions for compression fittings
DIN 1630 Seamless steel tube
DIN 2391 Seamless precision steel tubes
DIN 17458 Stainless steel tubes
ISO 1179 BSPP, flat face port and stud ends – same as DIN 3852 - Part 2
ISO 3304 Seamless precision steel tubes
ISO 3305 Welded precision steel tubes
ISO 6149 Metric straight thread O-ring port and stud ends – same as SAE J2244 and DIN 3852, Part 3
ISO 6162 Four bolt split flange connections – inch and metric bolts (inch bolt, Part II – same as SAEJ518)
ISO 8434-1 24° cone bite type fittings
ISO 8434-2 Metric 37° flare fittings
ISO 8434-3 Metric face seal fitting with ISO 6149 port end
ISO 8434-4 24° cone bite type fittings with weld nipple
ISO 19879 Test methods for threaded fluid connectors
SIO 8434-6 60° cone connectors with BSPP threads
ISO 9974 Metric flat face port and stud ends – same as DIN 3852 - Part 1
JIS B8363 60° cone (male and female) hose adapters
MIL-16142 UN/UNF straight thread O-ring port – same as SAE J1926-1
MIL-F-18866 37° flare and flareless tube fittings dimension similar to SAE J514
MIL-33649 Straight thread O-ring port – different from SAE J1926-1
NFPA T3.8.3 2) Test methods for steel separable tube fittings
SAE J343 Tests and procedures for hose and hose assemblies (impulse test applies to fittings)
SAE J356 Welded and flash controlled low carbon steel tubing
SAE J512 Automotive tube fittings - 45° flare type- Inverted flare type- Tapered sleeve compression type
SAE J514 Hydraulic tube fittings - 37° flare - Flareless – 24° bite type- O-ring plugs- Pipe fittings- Adapter unions (pipe swivel – “07” adapters)
SAE J515 Hydraulic O-rings (SAE straight thread, face seal, four-bolt split flange, and metric O-ring port)
SAE J518 Code 61 and 62 four-bolt split flange connections – (same as ISO 6162 Type II flange

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connection)

- SAE J524 Seamless low carbon steel tubing
- SAE J525 Welded and cold drawn low carbon steel tubing
- SAE J527 Brazed double wall steel tubing
- SAE J528 Seamless copper tube
- SAE J531 Automotive pipe, filler and drain plugs (HP and HHP plugs)
- SAE J533 Flares for tubing – 37° and 45° single and double flares
- SAE J846 Coding system for identification of fluid connectors
- SAE J1065 Pressure ratings for hydraulic tubing
- SAE J1231 Beaded tube hose fittings
- SAE J1453 O-ring face seal fitting with SAE port end
- SAE J1644 Test methods for fluid connectors
- SAE J1926 SAE straight thread O-ring port and stud ends – same as ISO 11926
- SAE J2244 Metric straight thread O-ring port and stud ends – same as ISO 6149
- SAE J2435 Welded and flash controlled C-1021 tubing
- SAE J2467 Welded and cold drawn, C-1021 tubing
- SAE J2613 Welded and flash controlled high strength low alloy (HSLA) tubing
- SAE J2614 Welded and cold drawn HSLA tubing

Thread Designations and Standards for Threads Used in Fluid Connectors

Metric Threads

M: Metric Screw Threads — M profile ISO 261 ANSI B1.13M FED-STD-H28/21

M — Keg: Metric Taper Threads (mainly used in Germany) DIN 158

British Standard Pipe Threads

R (BSPT) British Standard Taper Pipe Threads, External BS 21 ISO 7/1

Rc (BSPT) British Standard Taper Pipe Threads, Internal BS 21 ISO 7/1

Rp or G (BSPP) British Standard Pipe (Parallel) Threads BS 2779 ISO 228/1

Japanese Standard Pipe Threads

PF JIS Parallel Pipe Threads JIS B202 ISO 228/1

PT JIS Taper Pipe Threads JIS B203 ISO 7/1

PS JIS Parallel Internal Pipe Threads (to mate with PT threads) JIS B203

PF and PT threads are functionally interchangeable with BSPP and BSPT threads, respectively.

These are old designations. They are being replaced with G (for PF) and R and Rc (for PT) as documents are revised.

Unified Threads

Unified Constant Pitch Threads (standard series: 4, 6, 8, 12, 16, 20, 28, 32)

UNF Unified Fine Threads UNC Unified Coarse Threads ANSI B1.1 FED-STD-H28/2

Taper Pipe

NPT American Standard Taper Pipe Threads for General Use ANSI B1.20.1 FED-STD-H28/7

NPTF Dryseal American Standard Taper Pipe Threads (used in all of our steel and SAE J476 brass fittings) SAE J476 brass fittings) ANSI B1.20.3 FED-STD-H28/8

Straight Pipe

NPSM American Standard Straight Pipe Threads for Free-Fitting Mechanical Joints for Fixtures (these threads fit freely over NPTF threads. ANSI B1.20.1