

TECHNICAL INFORMATION

HYDRAULIC ADAPTERS

BSPT, BSPP and Metric Adapter Specifications

BSPT and Metric tapered threads install and work in the same manner as NPT and NPTF.

Male BSPP fittings include an inverted 60° cone inside an internally threaded swivel union nut. Male BSPP fittings that have a 30° internal chamfer that make a 60° inverted cone, will mate with Female BSPP swivel unions.

NOTE: THE MATING MALE THREADS MUST INCLUDE AN INSIDE CHAMFER ON THE END OF THE FITTING THAT MATES WITH THE INVERTED CONE. THREADS ARE FOR CLAMPING FORCE ONLY AND THE SEALING OCCURS ON A SMALL RADIAL SECTION BETWEEN THE MALE FITTING INTERNAL CHAMFER AND THE SWIVEL UNION INVERTED CONE.

DIN swivel unions have a 24° inverted cone and may be installed into DIN bite-ring compression fittings. To provide enhanced performance, an O-ring is sometimes included in the cone of some DIN swivel unions.

British Standard Pipe Parallel (BSPP) and Metric Parallel threaded ports do not include a port cavity like the O-ring Boss or ISO 6149 port. Instead, an O-ring sits on top of the spot face or external surface and is surrounded by a metal retaining ring or other retaining component to trap the O-ring between the fitting hex, body, and spot face.

Elbow and Tee fittings have a locknut, backup washer, O-ring and retaining washer to permit 360° orientation around the axis of the port.

The following table lists the specifications for **BSPP & BSPT Adapters**

BSPP & BSPT Specifications				
Dash Size	BSPT & BSPP		Torque	
	THREAD SIZE	MAJOR OD ^o (inch)	BSPP Swivel Union	BSPT
02	1/8-28	0.383	2	2-3
04	1/4-19	0.518	2	2-3
06	3/8-19	0.656	2	2-3
08	1/2-14	0.825	2	2-3
10	5/8-14	0.929	2	2-3
12	3/4-14	1.041	2	2-3
16	1-11	1.309	1 1/2	1 1/2 - 2 1/2
20	1 1/4-11	1.650	1 1/2	1 1/2 - 2 1/2
24	1 1/2-11	1.882	1 1/2	1 1/2 - 2 1/2
32	2-11	2.347	1 1/2	1 1/2 - 2 1/2

The following table lists the specifications for **Metric Adapters**

Metric DIN 3852-1 Threads	
Dash Size	THREAD SIZE (mm)
08	8 x 1.0
10	10 x 1.0
12	12 x 1.5
14	14 x 1.5
16	16 x 1.5
18	18 x 1.5
20	20 x 1.5
22	22 x 1.5
24	24 x 1.5
26	26 x 1.5
27	27 x 2.0
30	30 x 2.0
33	33 x 2.0
39	39 x 2.0
42	42 x 2.0
48	48 x 2.0
60	60 X 2.0

Values are from DIN 3852-1

STEEL BSPP ADAPTERS

HYDRAULIC ADAPTERS

JIC TO BSPP STRAIGHT SWIVEL



PART #	JIC THREAD SIZE 1	MALE BSPP 2	
702242	7/16-20	1/8-28	----
702244	7/16-20	1/4-19	----
702266	9/16-18	3/8-19	----
702288	3/4-16	1/2-14	----
7022108	7/8-14	1/2-14	----
70221212	1-1/16-12	3/4-14	----
70221616	1-5/16-12	1-11	----

3402 3055

HEX HEAD PLUG BSPP



PART #	MALE BSPP	
9522P2	1/8-28	----
9522P4	1/4-19	----
9522P6	3/8-19	----
9522P8	1/2-14	----
9522P12	3/4-14	----
9522P16	1-11	----

3408

HOLLOW HEX PLUG BSPP



PART #	MALE BSPP	
9522H2	1/8-28	----
9522H4	1/4-19	----
9522H6	3/8-19	----
9522H8	1/2-14	----
9522H12	3/4-14	----
9522H16	1-11	----

3408 HHP

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FEMALE ADAPTER BSPP



PART #	FEMALE PIPE 1	MALE BSPP 2	
704222	1/8	1/8-28	----
704242	1/4	1/8-28	----
704244	1/4	1/4-19	----
704266	3/8	3/8-19	----
704288	1/2	1/2-14	----
70421212	3/4	3/4-14	----
70421616	1	1-11	----

3455 MMFP

STEEL METRIC ADAPTERS

MALE CONNECTOR



PART #	JIC THREAD SIZE 1	METRIC THREAD 2	
7005410	7/16-20	10x1.0	----
7005412	7/16-20	12x1.5	----
7005414	7/16-20	14x1.5	----
7005418	7/16-20	18x1.5	----
7005512	1/2-20	12x1.5	----
7005514	1/2-20	14x1.5	----
7005614	9/16-18	14x1.5	----
7005616	9/16-18	16x1.5	----
7005618	9/16-18	18x1.5	----
7005816	3/4-16	16x1.5	----
7005818	3/4-16	18x1.5	----
7005822	3/4-16	22x1.5	----
70051018	7/8-14	18x1.5	----
70051020	7/8-14	20x1.5	----
70051022	7/8-14	22x1.5	----
70051222	1-1/16-12	22x1.5	----

Port-seal crush washer and O-ring included

7400 30J (R) 7011

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STEEL METRIC ADAPTERS

HYDRAULIC ADAPTERS

MALE ELBOW



PART #	JIC THREAD SIZE 1	METRIC THREAD 2	
7205NWO410	7/16-20	10x1.0	----
7205NWO412	7/16-20	12x1.5	----
7205NWO414	7/16-20	14x1.5	----
7205NWO512	1/2-20	12x1.5	----
7205NWO614	9/16-18	14x1.5	----
7205NWO616	9/16-18	16x1.5	----
7205NWO816	3/4-16	16x1.5	----
7205NWO818	3/4-16	18x1.5	----
7205NWO822	3/4-16	22x1.5	----
7205NWO1018	7/8-14	18x1.5	----

Port-seal crush washer and O-ring included

7801 315 (R)



PART #	JIC THREAD SIZE 1	METRIC THREAD 2	
7025410	7/16-20	10x1.0	----
7025412	7/16-20	12x1.5	----
7025512	1/2-20	12x1.5	----
7025614	9/16-18	14x1.5	----
7025616	9/16-18	16x1.5	----
7025816	3/4-16	16x1.5	----
70251022	7/8-14	22x1.5	----
70251227	1-1/16-12	27x2.0	----
70251633	1-5/16-12	33x2.0	----

7402 30JS (R)

HEX HEAD PLUG METRIC PARALLEL



PART #	METRIC THREAD	
8555P10	10x1.0	----
8555P12	12x1.5	----
8555P14	14x1.5	----
8555P16	16x1.5	----
8555P18	18x1.5	----
8555P20	20x1.5	----
8555P22	22x1.5	----
8555P26	26x1.5	----
8555P30	30x1.5	----

7408

HOLLOW HEX HEAD PLUG



PART #	METRIC THREAD	
8555H10	10x1.0	----
8555H12	12x1.5	----
8555H14	14x1.5	----
8555H16	16x1.5	----
8555H18	18x1.5	----
8555H20	20x1.5	----
8555H22	22x1.5	----
8555H26	26x1.5	----
8555H30	30x1.5	----

7408 HHP

FEMALE ADAPTER



PART #	FEMALE PIPE THREAD 1	METRIC THREAD 2	
7045210	1/8	10x1.0	----
7045412	1/4	12x1.5	----
7045414	1/4	14x1.5	----
7045612	3/8	12x1.5	----
7045616	3/8	16x1.5	----
7045618	3/8	18x1.5	----
7045816	1/2	16x1.5	----
7045818	1/2	18x1.5	----
7045822	1/2	22x1.5	----
70451227	3/4	27x2.0	----
70451633	1	33x2.0	----

MMFP (R)

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