

# **Technical Information**

#### **Adapter Sizing Chart**

NPTF, BSPT and BSPP measure 1/4" larger than their actual size. For example, a 1/4" NPTF, BSPT or BSPP will actually measure 1/2" on the O. D. of the threads. JIC, SAE O-ring & Flat Face threads measure as listed below. The first number listed is the size of thread, the second number is the threads per inch.

Size	NPTF (Pipe)	JIC (37°)	SAE	Face Seal	BSPP	BSPT
			(O-Ring)	(Flat Face)	(Parallel)	(Tapered)
-2	1/8 - 27	5/16 - 24	5/16 - 24	-	1/8 - 28	1/8 - 28
-3	-	3/8 - 24	3/8 - 24	-	-	-
-4	1/4 - 18	7/16 - 20	7/16 - 20	9/16 - 18	1/4 - 19	1/4 - 19
-5	-	1/2 - 20	1/2 - 20	-	-	-
-6	3/8 - 18	9/16 - 18	9/16 - 18	11/16 - 16	3/8 - 19	3/8 -19
-8	1/2 - 14	3/4 - 16	3/4 - 16	13/16 - 16	1/2 - 14	1/2 - 14
-10	-	7/8 - 14	7/8 - 14	1 - 14	-	-
-12	3/4 - 14	1-1/16 - 12	1-1/16 - 12	1 3/16 - 12	3/4 - 14	3/4 - 14
-14	-	1-3/16 - 12	1-3/16 - 12	1 5/16 - 12	-	-
-16	1 - 11-1/2	1-5/16 - 12	1-5/16 - 12	1 7/16 - 12	1 - 11	1 - 11
-20	1-1/4 - 11-1/2	1-5/8 - 12	1-5/8 - 12	1 11/16 - 12	1-1/4 - 11	1-1/4 - 11
-24	1-1/2 - 11-1/2	1-7/8 - 12	1-7/8 - 12	2 - 12	1-1/2 - 11	1-1/2 - 11
-32	2 - 11-1/2	2-1/2 - 12	2-1/2 - 12	2 1/2 - 12	2 - 11	2 - 11

### **Thread Sizing Kit**

Allows the user to properly identify threads of all hydraulic types. This handy kit includes a fractional thread pitch gauge, a metric thread pitch gauge, inside & outside caliper (inches and millimeters), a seat angle gauge (24 degree/30 degree/37 degree/45 degree), 27-page fluid ports & connections identification guid. A carrying case is standard for easy and convenient storage.

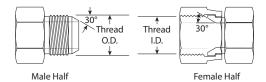




Stock Number	Ship Wt.	
1706410	1	

### Komatsu 30° Flare (JIS Metric)

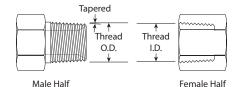
Used primarily on Komatsu equipment, this connection has a 30° seat and parallel metric threads. It is also referred to as JIS Metric. Komatsu fittings are sometimes confused with JIS 30° flare which has BSPP thread dimensions.



Dash Size	Metric Size Equivalent	Nominal Thread Size	Male Thread O.D.	Female Thread I.D.
06	9	M18 X 1.5	18 mm	16.5 mm
08	12	M22 X 1.5	22 mm	20.5 mm
10	16	M24 X 1.5	24 mm	22.5 mm
12	19	M30 X 1.5	30 mm	28.5 mm
16	25	M33 X 1.5	33 mm	31.5 mm
20	32	M36 X 1.5	36 mm	34.5 mm
24	38	M42 X 1.5	42 mm	40.5 mm

## British Standard Pipe Tapered (BSPT) & JIS Tapered Pipe (PT)

The BSPT (tapered) connection is similar to North American NPTF, except that the thread pitches are different in most sizes. The thread form and O.D.'s are close but not the identical. Sealing is accomplished by distorting the threads. A properly chamferred BSPT male will also seal with a BSPP female swivel. A thread seal-ant is recommended.



Note: British Standard Pipe Tapered threads are sometimes preceded by the letter "R." For example, BSPT 1/2 - 14 may be expressed as R1/2.

Inch Size	Dash Size	Nominal Thread Size	Male Thread O.D.	Female Thread I.D.
1/8	02	1/8 - 28	3/8 (.38)	11/32 (.35)
1/4	04	1/4 - 19	33/64 (.52)	15/32 (.47)
3/8	06	3/8 - 19	21/32 (.65)	19/32 (.60)
1/2	08	1/2 - 14	13/16 (.82)	3/4 (.75)
5/8	10	5/8 - 14	7/8 (.88)	13/16 (.80)
3/4	12	3/4 - 14	1 1/32 (1.04)	31/32 (.97)
1	16	1 - 11	1 5/16 (1.30)	1 7/32 (1.22)
1 1/4	20	1 1/4 - 11	1 21/32 (1.65)	1 9/16 (1.56)
1 1/2	24	1 1/2 - 11	1 7/8 (1.88)	1 25/32 (1.79)
2	32	2 - 11	2 11/32 (2.35)	2 1/4 (2.26)

