

# **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
Size			(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.

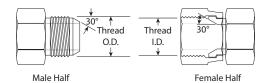




Stock Number	Ship Wt.
1706410	1

#### Komatsu 30° Flare (JIS Metric)

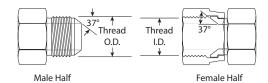
Used primarily on Komatsu equipment, this connection has a 30° seat and parallel metric threads. It is also referred to as JIS Metric. Komatsu fittings are sometimes confused with JIS 30° flare which has BSPP thread dimensions.



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

## JIC 37° Flare (SAE J514)

The 37° JIC (Joint Industrial Council) is a reliable, straight thread, single-flare design that is used across the world. It is very popular in many applications and environments because it's compact and easy to assemble. It also features high holding power with low torque requirements. The 37° JIC connection consists of three pieces: the nut, the sleeve, and the fitting in a range of sizes from 1/8" up to 2". The sleeve not only absorbs vibration, but acts as a support to the flare during assembly and helps reduce the risk of twisting the tube. Since the 37° JIC is a metal-to-metal seal, it can be connected and reconnected multiple times.



	Inch Size	Dash Size	Nominal Thread Size	Male Thread O.D.	Female Thread I.D.
	1/8	02	5/16 - 24	5/16 (.31)	9/32 (.27)
	3/16	03	3/8 - 24	3/8 (.38)	11/32 (.34)
	1/4	04	7/16 - 20	7/16 (.44)	13/32 (.39)
	5/16	05	1/2 - 20	1/2 (.50)	15/32 (.45)
	3/8	06	9/16 - 18	9/16 (.56)	17/32 (.51)
	1/2	08	3/4 - 16	3/4 (.75)	11/16 (.69)
	5/8	10	7/8 - 14	7/8 (.88)	13/16 (.81)
	3/4	12	1 1/16 - 12	1 1/16 (1.06)	1 (.98)
	7/8	14	1 3/16 - 12	1 3/16 (1.19)	1 1/8 (1.10)
	1	16	1 5/16 - 12	1 5/16 (1.31)	1 1/4 (1.23)
	1 1/4	20	1 5/8 - 12	1 5/8 (1.63)	1 9/16 (1.54)
	1 1/2	24	1 7/8 - 12	1 7/8 (1.88)	1 13/16 (1.79)
	2	32	2-1/2 -12	2-1/2 (2.50)	2 7/16 (2.42)

