



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 (O-Ring)	Face Seal (Flat Face)	BSPP (Parallel)	BSPT (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	13/16 - 12	3/4 - 14	3/4 - 14
-14	-	1-3/16 - 12	1-3/16 - 12	15/16 - 12	-	-
-16	1 - 11-1/2	1-5/16 - 12	1-5/16 - 12	17/16 - 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

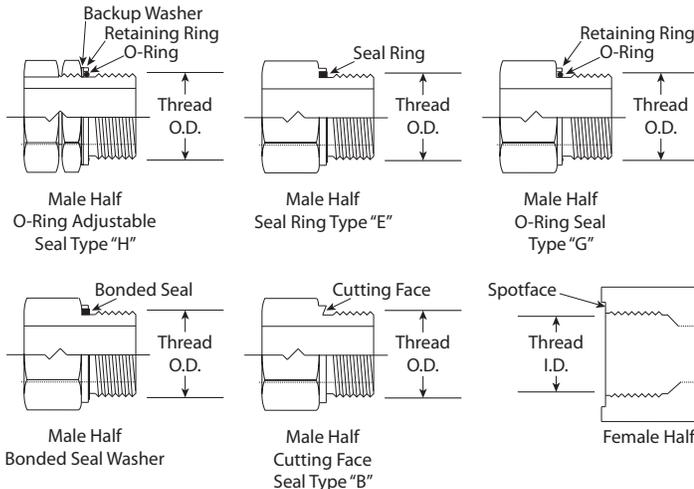
Allows the user to properly identify threads of all hydraulic types. This handy kit includes a fractional thread pitch gauge, a metric thread pitch gauge, inside & outside caliper (inches and millimeters), a seat angle gauge (24 degree/30 degree/37 degree/45 degree), 27-page fluid ports & connections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



Stock Number	Ship Wt.
1706410	1

Flat Face Port with BSPP Threads (ISO 1179-1, DIN 3852 Part 2)

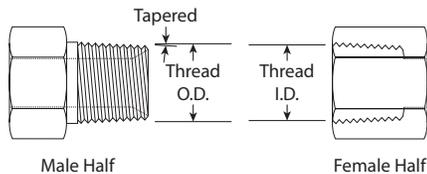
Parallel threads seal utilizing various sealing methods such as rings, washers, o-rings, bonded seals or metal to metal seals. The female port has a machined spot-face or flat surface which the male seals against.



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)

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 chamfered BSPT male will also seal with a BSPP female swivel. A thread sealant 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)

