Thread Identification Guide

Code 61 Flange

TRAUSCH DYNAMICS

Technical Information

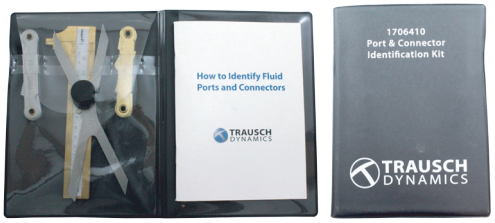
Adapter Sizing Chart

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	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.

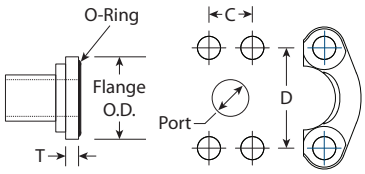


Stock Number	Ship Wt.
1706410	1

Code 61 4-Bolt Flange (SAE J518*)

This connection is commonly used in fluid power systems. The Code 61 is referred to as the "standard" series of flanges. The female (port) is an unthreaded hole with four bolt holes in a rectangular pattern around the port. The male consists of a flanged head, grooved for an o-ring, and either a captive flange or split flange halves with bolt holes to match the port. The seal takes place on the o-ring. The o-ring is compressed between the flange head and the flat surface surrounding the port. The threaded bolts hold the connection together.

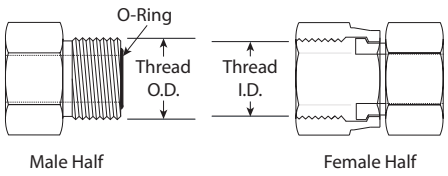
**SAE J518 is interchangeable with ISO 6162, JIS B 8363, and DIN 20066 except for the bolt sizes.*



Port/ Inch Size	Dash Size	C	D	Flange O.D.	T	Bolt Thread	O-Ring
1/2	08	0.688	1.500	1.188	0.265	5/16 - 18	210N90
3/4	12	0.875	1.875	1.500	0.265	3/8 - 16	214N90
1	16	1.031	2.062	1.750	0.315	3/8 - 16	219N90
1 1/4	20	1.188	2.312	2.000	0.315	7/16 - 14	222N90
1 1/2	24	1.406	2.750	2.375	0.315	1/2 - 13	225N90
2	32	1.688	3.062	2.812	0.375	1/2 - 13	228N90
2 1/2	40	2.000	3.500	3.310	0.375	1/2 - 13	232N90
3	48	2.438	4.188	4.000	0.375	5/8 - 11	237N90

O-Ring Face Seal (ORFS)

This connection offers the very best leakage control available today. The male connector has a straight thread and o-ring in the face. The female has a straight thread and a machined flat face. The seal takes place by compressing the o-ring onto the flat face of the female, similar to a flange type fitting. The threads hold the connection mechanically.



Inch Size	Dash Size	Nominal Thread Size	Male Thread O.D.	Female Thread I.D.	O-Ring
1/4"	04	9/16 - 18	9/16 (.56)	17/32 (.51)	011N90
3/8"	06	11/16 - 16	11/16 (.69)	5/8 (.63)	012N90
1/2"	08	13/16 - 16	13/16 (.82)	3/4 (.75)	014N90
5/8"	10	1 - 14	1 (1.00)	15/16 (.93)	016N90
3/4"	12	1 3/16 - 12	1 3/16 (1.19)	1 1/8 (1.11)	018N90
1"	16	1 7/16 - 12	1 7/16 (1.44)	1 3/4 (1.36)	021N90
1 1/4"	20	1 11/16 - 12	1 11/16 (1.69)	1 5/8 (1.61)	025N90
1 1/2"	24	2- 12	2 (2.00)	1 15/16 (1.92)	029N90

TRAUSCH DYNAMICS

3727 Westgate Rd. • Grand Island, NE 68803 • Phone: 800-323-5749 • Fax: 308-382-0253