

**SPECIFICATION FOR STRAIGHT THREAD
O-RING BOSS PORT**

1. SCOPE:

This standard is intended to document the dimensional specifications for straight thread O-ring bosses. For specifications on O-rings used in conjunction with this port, see SAE J515.

(For Swivel and Adjustable Style Fittings)

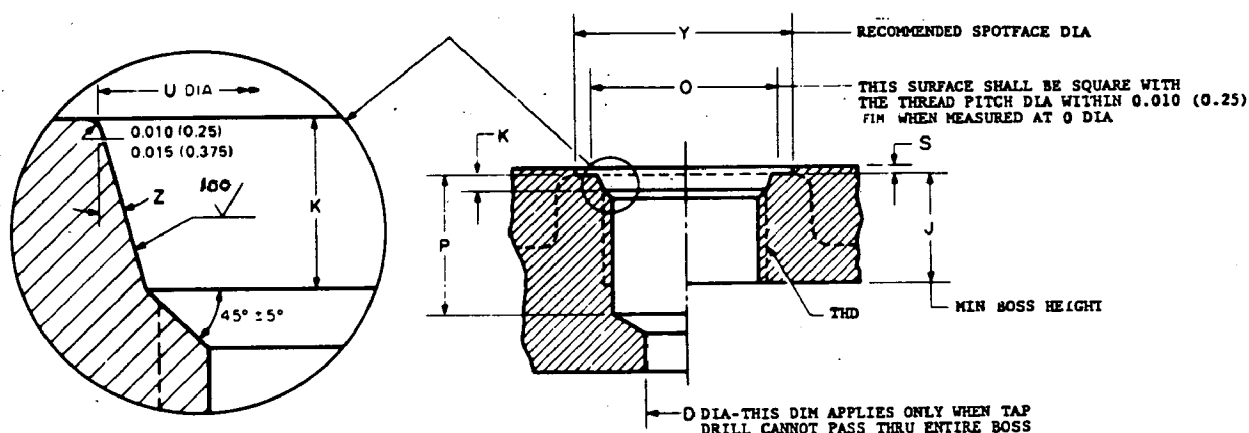


FIGURE 1 - Straight Thread O-Ring Boss

Instructions for assembling adjustable and swivel style hydraulic fittings in straight thread O-ring boss are given in SAE J514 immediately following "Table of Dimensions of O-ring Boss Plugs."

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TABLE 1 - Straight Thread O-Ring Boss Dimensions (Fig. 1)

Nominal Tube ODe			Millimeter		Thread Size ANSI B1.1 (ISO 263) in	D Min Dia Full Thread Depth, Min				K	
Nom ^f SAE Dash Size	Inch		mm	Decimal Equiv. in		in	mm	in	mm	+0.015 -0.000 in	+0.4 -0.0 mm
	Nominal	Decimal									
-2	1/8	0.125	--	--	5/16-24UNF-2B	0.062	1.6	0.390	10.0	0.074	1.9
-3	3/16	0.1875	4	0.1575	3/8-24UNF-2B	0.125	3.2	0.390	10.0	0.074	1.9
-4	1/4	0.250	5	0.1968	7/16-20UNF-2B	0.172	4.4	0.454	11.5	0.093	2.4
-5	5/16	0.3125	6	0.2362	1/2-20UNF-2B	0.234	6.0	0.454	11.5	0.093	2.4
-6	3/8	0.375	8	0.3150	9/16-18UNF-2B	0.297	7.5	0.500	12.7	0.097	2.5
-8	1/2	0.500	10	0.3937	3/4-16UNF-2B	0.391	10.0	0.562	14.3	0.100	2.5
-10	5/8	0.625	12	0.4724	7/8-14UNF-2B	0.484	12.5	0.656	16.7	0.100	2.5
-12	3/4	0.750	16	0.6299	1-1/16-12UN-2B	0.609	16.0	0.750	19.0	0.130	3.3
-14	7/8	0.875	20	0.7874	1-3/16-12UN-2B	0.719	18.0	0.750	19.0	0.130	3.3
-16	1	1.000	25	0.9842	1-5/16-12UN-2B	0.844	21.0	0.750	19.0	0.130	3.3
-20	1-1/4	1.250	32	1.2598	1-5/8-12UN-2B	1.078	27.0	0.750	19.0	0.132	3.3
-24	1-1/2	1.500	40	1.5748	1-7/8-12UN-2B	1.312	33.0	0.750	19.0	0.132	3.3
-32	2	2.000	50	1.9685	2-1/2-12UN-2B	1.781	45.0	0.750	19.0	0.132	3.3

- a Diameter U shall be concentric with thread pitch diameter within 0.005 in (0.13 mm) FIM, and shall be free from longitudinal and spiral tool marks. Annular tool marks up to 100 μ m (2.5 μ m) max shall be permissible.
- b Maximum recommended spotface depth to permit sufficient wrench grip for proper tightening of the fitting or locknut.
- c If face of boss is on a machined surface, dimensions Y and S need not apply.
- d Tap drill depths given require use of bottoming taps to produce the specified full thread lengths. Where standard taps are used, the tap drill depths must be increased accordingly.
- e Nominal tube OD is shown for the standard inch sizes and the conversion to equivalent millimeter sizes. Figures are for reference only, as any boss can be used for a tubing size depending upon other design criteria.
- f See SAE J846 for more information.