

IFI NOTES:

1. *IFI-115 is a standard developed through the procedures of Industrial Fasteners Institute. IFI-115 was first published in 1970 and revised and reissued in 1986, 2002 and 2014.*
2. *Screws made to IFI-115 are interchangeable with parts made to SAE J58.*

1. Dimensions.

All dimensions are in inches unless otherwise stated.

2. Top of Head.

Top of head may be full form or indented at option of the manufacturer. If full form, the top of head shall be chamfered or rounded with the diameter of chamfer circle or start of rounding being equal to the max width across flats, within a tolerance of minus 15 percent. If the top of head is indented, the periphery may be rounded.

3. Corner Fill.

The rounding due to lack of fill on all 12 corners shall be such that when a sharp ring having an inside diameter equal to the specified T dimension is placed on the top of the head and normal to the screw axis, the screw head shall enter, but not protrude through the gage.

4. Wrenching Height, J.

Wrenching height is a distance measured from the top of the flange up the side of the head to the top of the head.

5. True Position of Head.

The axis of the head shall be located at true position with respect to the axis of the body (determined over a distance under the head equal to one diameter) within a tolerance zone whose diameter is equivalent to 6 percent of the maximum width across flats, regardless of feature size.

6. Bearing Surface.

Runout of the bearing surface with respect to the axis of the body shall be within the FIM limits specified. Measurement of FIM shall be made as close to the periphery of the bearing surface as possible while the screw is held in a collet or other gripping device at a distance of one screw diameter from the underside of the head.

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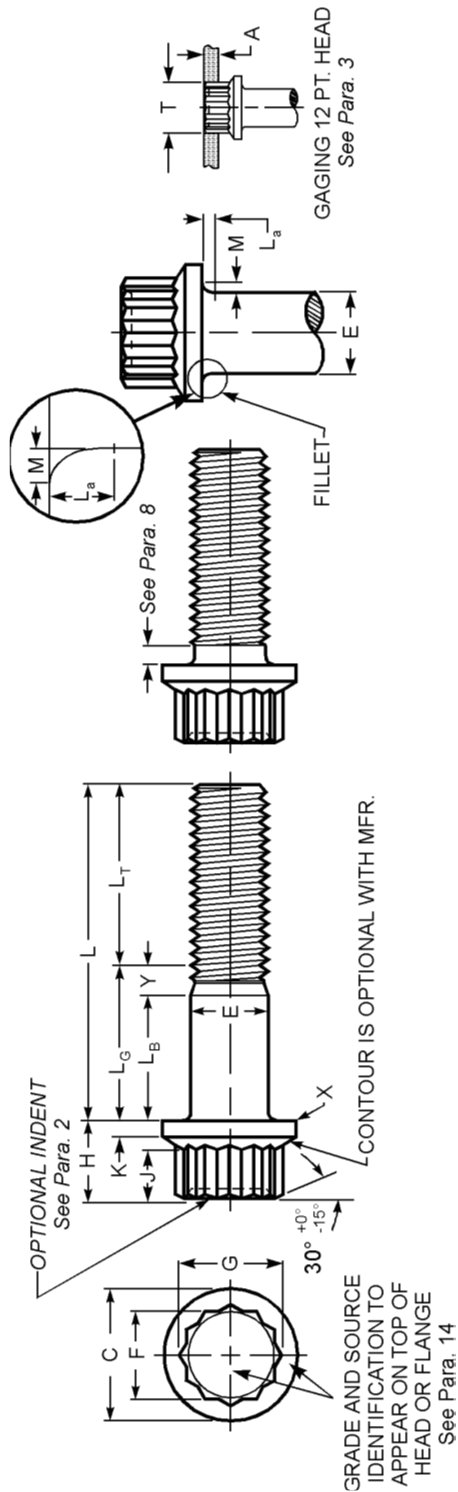


Table 1 Dimensions of Flange 12-Point Screws

Nominal Size or Basic Major Dia of Thread	E Body Dia Min (Max Equal to Nom Size)	C Flange Dia		F Width Across Flats		G Width Across Corners	H Head Height	J Wrenching Height	K Runout of Bearing Surface FIM		M Fillet Extension		L _a Fillet Length		X Chamfer or Radius		A Gaging Ring Thickness		T Gaging Ring Dia		L _T Thread Length	Y Transi- tion Thread Length
		Max	Min	Max	Min	Max	Min	Max	Max	Min	Max	Min	Max	Min	Max	Max	Min	Max	Max	Min	Basic	Max
1/4 0.2500	0.2435	0.375	0.365	0.252	0.244	0.278	0.260	0.15	0.07	0.058	0.014	0.009	0.087	0.007	0.020	0.020	0.0525	0.0522	0.2783	0.2780	1.000	0.25
5/16 0.3125	0.3053	0.469	0.457	0.315	0.306	0.348	0.312	0.18	0.08	0.074	0.017	0.012	0.087	0.009	0.020	0.020	0.0600	0.0597	0.3483	0.3480	1.125	0.28
3/8 0.3750	0.3678	0.562	0.550	0.377	0.368	0.420	0.375	0.21	0.10	0.095	0.020	0.015	0.087	0.012	0.020	0.020	0.0711	0.0708	0.4203	0.4200	1.250	0.31
7/16 0.4375	0.4294	0.656	0.642	0.438	0.429	0.489	0.438	0.26	0.11	0.109	0.023	0.018	0.087	0.014	0.030	0.030	0.0840	0.0837	0.4893	0.4890	1.375	0.36
1/2 0.5000	0.4919	0.750	0.735	0.502	0.493	0.562	0.500	0.29	0.13	0.129	0.026	0.020	0.087	0.016	0.030	0.030	0.0948	0.0945	0.5623	0.5620	1.500	0.38
9/16 0.5625	0.5538	0.844	0.828	0.564	0.555	0.633	0.563	0.33	0.15	0.145	0.029	0.022	0.157	0.018	0.030	0.030	0.1071	0.1068	0.6333	0.6330	1.625	0.42
5/8 0.6250	0.6163	0.938	0.921	0.627	0.618	0.705	0.625	0.36	0.16	0.166	0.032	0.024	0.157	0.021	0.040	0.040	0.1179	0.1176	0.7053	0.7050	1.750	0.46
3/4 0.7500	0.7406	1.125	1.107	0.752	0.743	0.847	0.750	0.44	0.20	0.200	0.039	0.030	0.157	0.025	0.040	0.040	0.1416	0.1413	0.8473	0.8470	2.000	0.50
7/8 0.8750	0.8647	1.312	1.293	0.877	0.866	0.987	0.875	0.51	0.23	0.234	0.044	0.034	0.227	0.031	0.040	0.040	0.1656	0.1653	0.9873	0.9870	2.250	0.56
1 1.0000	0.9886	1.500	1.479	1.003	0.991	1.130	1.000	0.60	0.26	0.268	0.050	0.040	0.332	0.034	0.040	0.040	0.1893	0.1890	1.1303	1.1300	2.500	0.62
1-1/8 1.1250	1.1086	1.688	1.665	1.128	1.115	1.271	1.125	0.66	0.29	0.310	0.055	0.045	0.332	0.039	0.050	0.050	0.2109	0.2106	1.2713	1.2710	2.750	0.71
1-1/4 1.2500	1.2336	1.875	1.852	1.253	1.240	1.414	1.250	0.73	0.33	0.350	0.060	0.050	0.332	0.044	0.050	0.050	0.2331	0.2328	1.4143	1.4140	3.000	0.71
1-3/8 1.3750	1.3588	2.062	2.038	1.378	1.365	1.566	1.375	0.80	0.36	0.392	0.065	0.055	0.332	0.048	0.050	0.050	0.2544	0.2541	1.5663	1.5660	3.250	0.83
1-1/2 1.5000	1.4818	2.250	2.224	1.503	1.489	1.697	1.500	0.87	0.39	0.433	0.070	0.060	0.332	0.052	0.050	0.050	0.2763	0.2760	1.6973	1.6970	3.500	0.83
See Para. 16		5		5				4	6		7						3				9, 10	

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