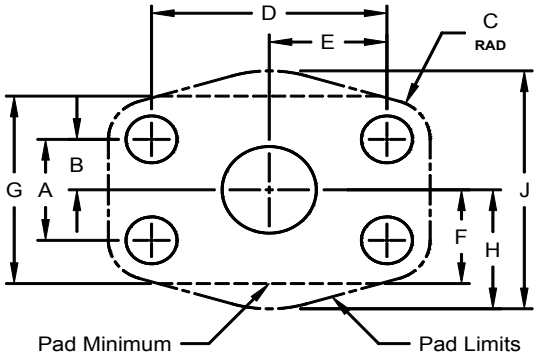
ISO 6162 (SAE) Flange Pattern Specifications

2.5 to 35 Mpa Series (SAE Code 61)				
Nominal Flange Size		Maximum Recommended Working Press.	O-Ring Size	O-Ring O.D.
1/2"	13 mm	5000 psi	210	1.000
3/4"	19 mm	5000 psi	214	1.250
1"	25 mm	5000 psi	219	1.562
1 1/4"	32 mm	3625 psi	222	1.750
1 1/2"	38 mm	2900 psi	225	2.125
2"	51 mm	2900 psi	228	2.500
2 1/2"	64mm	2320 psi	232	3.000
3"	76mm	1450 psi	237	3.625
3 1/2"	89mm	360 psi	241	4.125
4"	102mm	360 psi	245	4.625
5"	127mm	360 psi	253	5.625



40 Mpa Series (SAE Code 62)				
Nominal Flange Size		Maximum Recommended Working Press.	O-Ring Size	O-Ring O.D.
1/2"	13 mm	5800 psi	210	1.000
3/4"	19 mm	5800 psi	214	1.250
1"	25 mm	5800 psi	219	1.562
1 1/4"	32 mm	5800 psi	222	1.750
1 1/2"	38 mm	5800 psi	225	2.125
2"	51 mm	5800 psi	228	2.500
2 1/2"(+)	64mm	Contact Mfr	232	3.000
3" (+)	76mm	Contact Mfr	237	3.625

NOTE:
(+) = NOT A RECOMMENDED PORT since this is an Industry Standard not an ISO or SAE Standard

This specification permits operation of the port up to the pressures noted. Some flanges that match these ports may be rated for lower operating pressures or limited by the mating materials.

Please consult the data from the flange manufacturers for specific operational pressures allowed.

2.5 to 34.5 Mpa Series (SAE Code 61)

Four-Bolt Flange Pattern

Nominal Size	A +/-.010	B	C	D +/-.010	E	F	G	H	J +/-.010
0.50	0.688	0.344	0.312	1.500	0.750	0.656	1.312	0.906	1.812
0.75	0.875	0.438	0.344	1.875	0.938	0.813	1.625	1.031	2.062
1.00	1.031	0.516	0.344	2.062	1.031	0.938	1.875	1.156	2.312
1.25	1.188	0.594	0.406	2.312	1.156	1.063	2.125	1.438	2.875
1.50	1.406	0.703	0.469	2.750	1.375	1.250	2.500	1.625	3.250
2.00	1.688	0.844	0.469	3.062	1.531	1.500	3.000	1.906	3.812
2.50	2.000	1.000	0.500	3.500	1.750	1.750	3.500	2.109	4.218
3.00	2.438	1.219	0.562	4.188	2.094	2.094	4.188	2.578	5.156
3.50	2.750	1.375	0.625	4.750	2.375	2.344	4.688	2.750	5.500
4.00	3.062	1.531	0.625	5.125	2.563	2.594	5.188	3.000	6.000
5.00	3.625	1.813	0.625	6.000	3.000	3.094	6.188	3.563	7.125

ISO 6162 Type I - Metric Mounting Dimensions

Nominal Size	Thru Hole Diameter	Mounting Thread	Mtg. Thread Depth (min)*	Counterbore Diameter
0.50	0.344	M 8x1.25-6H	0.938 / (0.492)	0.562
0.75	0.422	M10x1.50-6H	0.875 / (0.650)	0.688
1.00	0.422	M10x1.50-6H	0.875 / (0.571)	0.688
1.25	0.422	M10x1.50-6H	1.125 / (0.650)	0.688
1.50	0.500	M12x1.75-6H	1.062 / (0.768)	0.750
2.00	0.500	M12x1.75-6H	1.062 / (0.768)	0.750
2.50	0.500	M12x1.75-6H	1.188 / (0.846)	0.750
3.00	0.656	M16x2.00-6H	1.188 / (1.122)	1.000
3.50	0.656	M16x2.00-6H	1.312 / (1.122)	1.000
4.00	0.656	M16x2.00-6H	1.188 / (1.004)	1.000
5.00	0.656	M16x2.00-6H	1.312 / (1.083)	1.000

* = Design Depth per SAE J518 / (ISO 6162 Depth)

SAE J518 / ISO 6162 Type II - Inch Mounting Dimensions

Nominal Size	Thru Hole Diameter	Mounting Thread	Mtg. Thread Depth	Counterbore Diameter
0.50	0.344	5/16-18 UNC-2B	0.938	0.500
0.75	0.406	3/8-16 UNC-2B	0.875	0.594
1.00	0.406	3/8-16 UNC-2B	0.875	0.594
1.25	0.469	7/16-14 UNC-2B	1.125	0.688
1.50	0.531	1/2-13 UNC-2B	1.062	0.781
2.00	0.531	1/2-13 UNC-2B	1.062	0.781
2.50	0.531	1/2-13 UNC-2B	1.188	0.781
3.00	0.656	5/8-11 UNC-2B	1.188	0.969
3.50	0.656	5/8-11 UNC-2B	1.312	0.969
4.00	0.656	5/8-11 UNC-2B	1.188	0.969
5.00	0.656	5/8-11 UNC-2B	1.312	0.969

40 Mpa Series (SAE Code 62)

Four-Bolt Flange Pattern

Nominal Size	A +/-.010	B	C	D +/-.010	E	F	G	H	J +/-.010
0.50	0.719	0.360	0.312	1.594	0.797	0.750	1.500	0.938	1.875
0.75	0.938	0.469	0.406	2.000	1.000	0.938	1.875	1.188	2.375
1.00	1.094	0.547	0.469	2.250	1.125	1.062	2.125	1.375	2.750
1.25	1.250	0.625	0.562	2.625	1.312	1.188	2.375	1.531	3.062
1.50	1.438	0.719	0.656	3.125	1.562	1.375	2.750	1.875	3.750
2.00	1.750	0.875	0.719	3.812	1.906	1.688	3.375	2.250	4.500
2.50 (+)	2.312	1.156	1.000	4.875	2.438	2.188	4.375	2.938	5.875
3.00 (+)	2.812	1.406	1.250	6.000	3.000	2.688	5.375	3.500	7.000

ISO 6162 Type I - Metric Mounting Dimensions

Nominal Size	Thru Hole Diameter	Mounting Thread	Mtg. Thread Depth (min)*	Counterbore Diameter
0.50	0.344	M 8x1.25-6H	0.812 / (0.571)	0.562
0.75	0.422	M10x1.50-6H	0.938 / (0.650)	0.688
1.00	0.500	M12x1.75-6H	1.062 / (0.846)	0.750
1.25	0.500	M12x1.75-6H	1.000 / (0.728)	0.750
1.50	0.656	M16x2.00-6H	1.375 / (1.004)	1.000
2.00	0.812	M20x2.50-6H	1.500 / (1.319)	1.250
2.50				
3.00				

* = Design Depth per SAE J518 / (ISO 6162 Depth)

SAE J518 / ISO 6162 Type II - Inch Mounting Dimensions

Nominal Size	Thru Hole Diameter	Mounting Thread	Mtg. Thread Depth	Counterbore Diameter
0.50	0.344	5/16-18 UNC-2B	0.812	0.500
0.75	0.406	3/8-16 UNC-2B	0.938	0.590
1.00	0.469	7/16-14 UNC-2B	1.062	0.688
1.25	0.531	1/2-13 UNC-2B	1.000	0.781
1.50	0.656	5/8-11 UNC-2B	1.375	0.969
2.00	0.781	3/4-10 UNC-2B	1.500	1.188
2.50 (+)	0.906	7/8 - 9 UNC-2B	1.812	1.375
3.00 (+)	1.188	1 1/8-7 UNC-2B	2.312	1.750

THIS DATA IS FOR REFERENCE ONLY. CONSULT THE APPROPRIATE STANDARDS AND FLANGE MANUFACTURERS FOR CRITICAL DIMENSIONS AND RATINGS.

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