

Code 61 & 62 Flange Specifications

Flange ports have a smooth machined surface with four threaded holes around the port. The threads provide a clamping force for the flange against the port. An O-ring seal is trapped in the flange fitting around the port. *(Figure 12)*

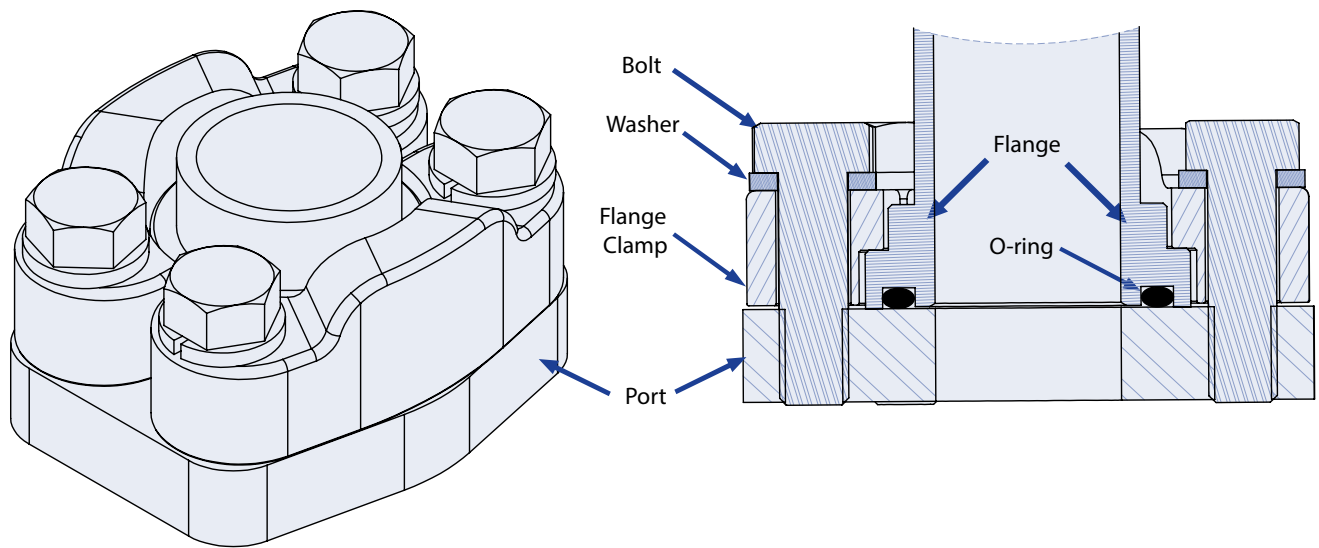


Figure 12 : Flange Port Assembly (Left) Cross Section Flange Port Assembly (Right)

The flange may be a single piece or an assembly (single piece flange is not shown). A single flange piece has four holes that mate with the clamping holes. The assembly flange is a cylindrical shape and is clamped with a full circle flange clamp containing four bolt holes, or with two split flange clamps containing two bolt holes each. *(Figure 12)*

There are two pressure-rated standards:

- Code 61 (Standard Pressure)
- Code 62 (High Pressure)

Each style and size has a unique bolt pattern. The high pressure Code 62 assembly flanges have a larger diameter and thickness than the standard pressure Code 61 flanges.

Code 61 (Standard Pressure) Flanges

The following table lists the specifications for Code 61 flanges.

Flange Code 61 Specifications				
Dash Size	Tube Size	Working Pressure	Torque*	Torque**
		(psi)	+10%- 0% (ft-lbs)	+10%- 0% (ft-lbs)
08	1/2	5000	18	24
12	3/4	5000	32	44
16	1	5000	32	44
20	1 1/4	4000	52	68
24	1 1/2	3000	77	111
32	2	3000	77	111
40	2 1/2	2500	77	111
48	3	2000	155	217
56	3 1/2	500	155	217
64	4	500	155	217

Torque values are per SAE J2593 and for wet installation of steel components. Reduce torque values for softer material components.

* Torque for SAE Grade 5 Screws
 ** Torque for SAE Grade 8 Screws

Table 5: Flange Code 61 Specifications

The following table lists the dimensions for Code 61 flanges.

Flange Code 61 Dimensions								
Dash Size	Tube Size	C	E	Q	GG	A	Z INCH Threads	Z METRIC Threads
08	1/2	1.188	0.265	1.5	0.688	0.50	5/16-18	M8 x 1.25
12	3/4	1.500	0.265	1.875	0.875	0.75	3/8-16	M10 x 1.5
16	1	1.750	0.315	2.082	1.031	1.00	3/8-16	M10 x 1.5
20	1 1/4	2.000	0.315	2.312	1.188	1.25	7/16-14	M10 x 1.5
24	1 1/2	2.375	0.315	2.750	1.406	1.50	1/2-13	M12 x 1.75
32	2	2.812	0.375	3.062	1.688	2.00	1/2-13	M12 x 1.75
40	2 1/2	3.312	0.375	3.500	2.000	2.50	1/2-13	M12 x 1.75
48	3	4.000	0.375	4.188	2.438	3.00	5/8-11	M16 x 2
56	3 1/2	4.500	0.422	4.750	2.750	3.50	5/8-11	M16 x 2
64	4	5.000	0.442	5.125	3.062	4.00	5/8-11	M16 x 2

Hex head bolts are grade 5 and socket head cap bolts are grade 8.

Table 6: Flange Code 61 Dimensions

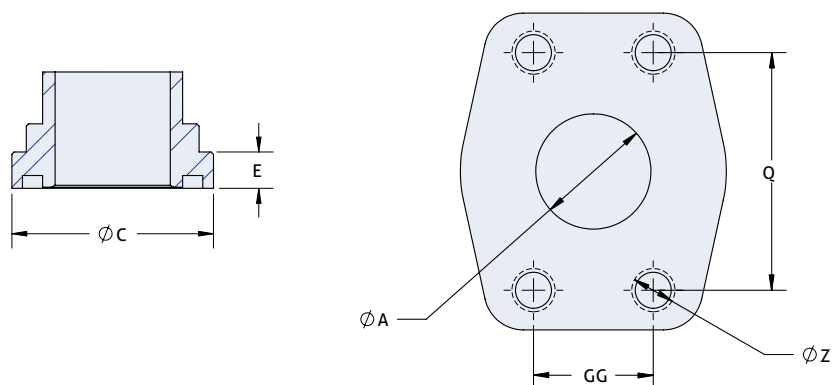


Figure 13 : Code 61 and 62 Figures of the flange (Left) and bolt pattern (Right)

Code 62 (High Pressure) Flanges

The following table lists the specifications for Code 62 flanges.

Flange Code 62 Specifications					
Dash Size	Tube Size	Working Pressure	Torque Range*	Average Torque*	Torque**
		(psi)	(in-lbs)	(ft-lbs)	+10% - 0% (ft-lbs)
08	1/2	6000	175-225	17	24
12	3/4	6000	300-400	29	44
16	1	6000	500-600	46	68
20	1 1/4	6000	750-900	69	111
24	1 1/2	6000	1400-1600	125	217
32	2	6000	2400-2600	208	332
Standards per SAE J2593 & J518					
*Torque for SAE Grade 5 Screws					
**Torque for SAE Grade 8 Screws					

Table 7: Flange Code 62 Specifications

The following table lists the dimensions for Code 62 flanges.

Flange Code 62 Dimensions								
Dash Size	Tube Size	C	E	Q	GG	A	Z INCH Threads	Z METRIC Threads
08	1/2	1.250	0.305	1.594	0.718	0.50	5/16-18	M8 x 1.25
12	3/4	1.625	0.345	2.00	0.937	0.75	3/8-16	M10 x 1.5
16	1	1.875	0.375	2.250	1.093	1.00	7/16-14	M12 x 1.75
20	1 1/4	2.125	0.405	2.625	1.250	1.25	1/2-13	M14 x 2.0
24	1 1/2	2.500	0.495	3.125	1.437	1.50	5/8-11	M16 x 2.0
32	2	3.125	0.495	3.812	1.750	2.00	3/4-10	M20 x 2.5
Note: Hex head bolts are grade 5 and socket head cap bolts are grade 8.								

Table 8: Flange Code 62 Dimensions

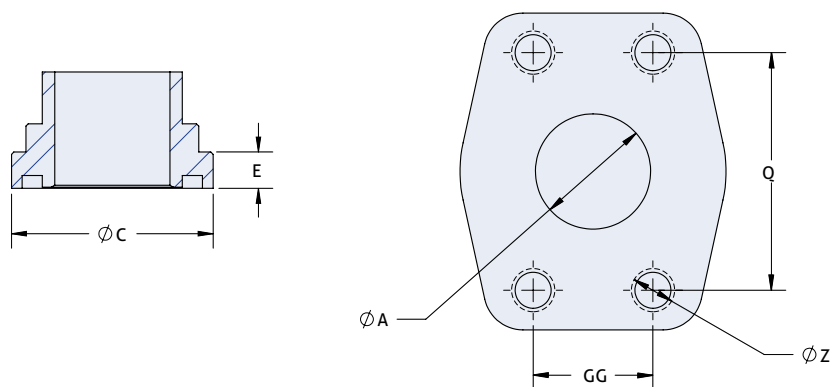


Figure 13 : Code 61 and 62 Figures of the flange (Left) and bolt pattern (Right)