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)*

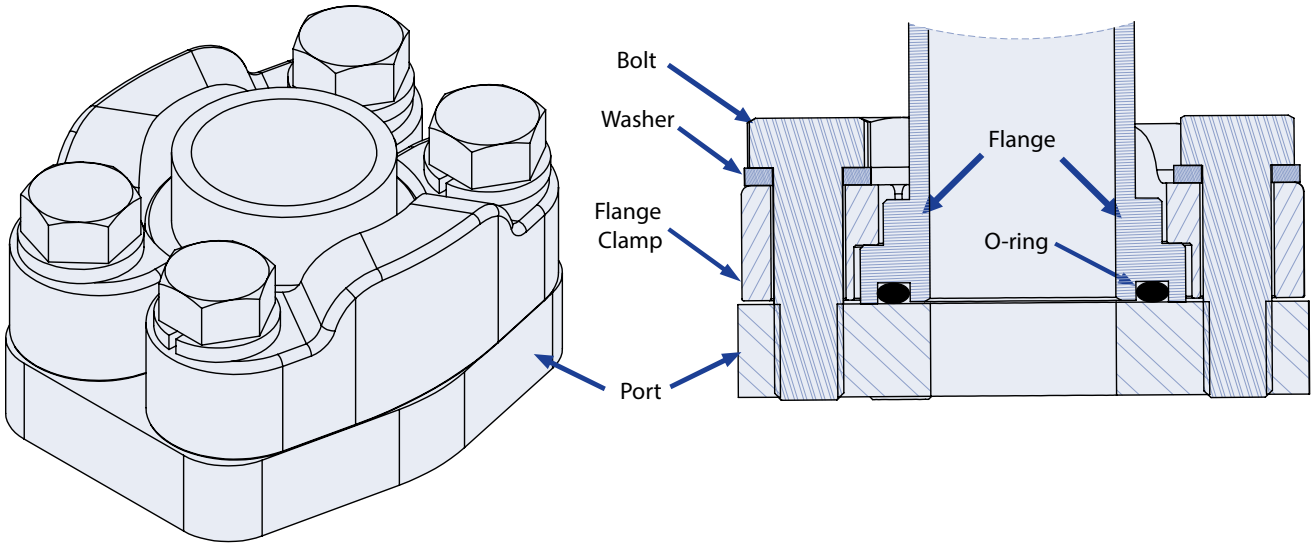

Figure 12 : Flange Port Assembly (Left) Cross Section Flange Port Assembly (Right)

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

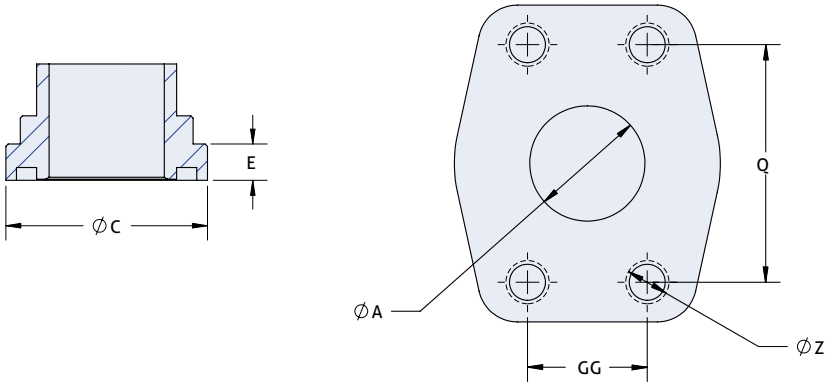

Figure 13 : Code 61 and 62 Figures of the flange (Left) and bolt pattern (Right)

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

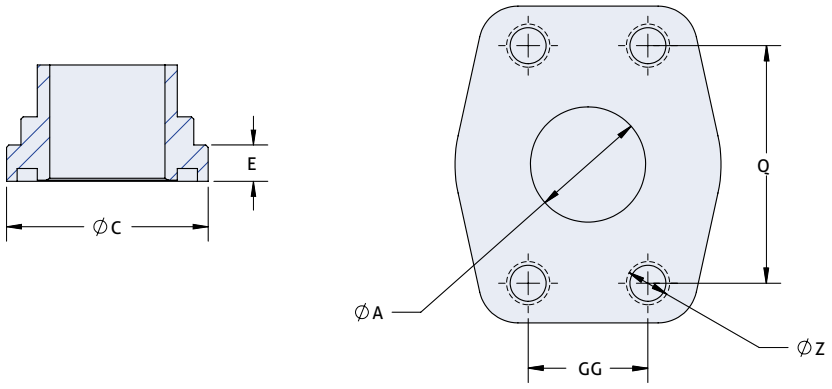

Figure 13 : Code 61 and 62 Figures of the flange (Left) and bolt pattern (Right)