



# SAE FLANGES

## SAE J518 Split Flanges

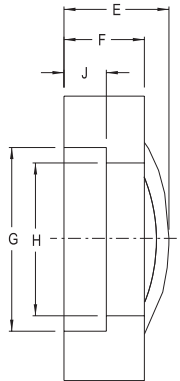
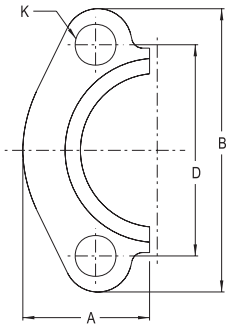


Figure 1

See below for metric mounting options

Part No.	Flange Size	Code 61 Split Flange—Fig.1										Mounting Hardware	
		A ±.030	B ±.030	D ±.010	E ±.030	F ±.016	G ±.010	H ±.010	J ±.005	K ±.010	O'Ring	HHCS	
8 SF-0	.50	.86	2.12	1.50	0.75	.50	1.219	.955	.245	.344	210	<sup>5</sup> / <sub>16</sub> -18x1.25	
12 SF-0	.75	.98	2.56	1.875	.88	.56	1.531	1.265	.245	.406	214	<sup>3</sup> / <sub>8</sub> -16x1.25	
16 SF-0	1.00	1.11	2.75	2.062	.94	.62	1.781	1.515	.295	.406	219	<sup>3</sup> / <sub>8</sub> -16x1.25	
20 SF-0	1.25	1.39	3.12	2.312	.88	.56	2.031	1.720	.295	.469	222	<sup>7</sup> / <sub>16</sub> -14x1.50	
24 SF-0	1.50	1.58	3.69	2.750	1.00	.62	2.406	2.000	.295	.531	225	<sup>1</sup> / <sub>2</sub> -13x1.50	
32 SF-0	2.00	1.86	4.00	3.062	1.03	.62	2.844	2.470	.355	.531	228	<sup>1</sup> / <sub>2</sub> -13x1.50	
40 SF-0	2.50	2.09	4.50	3.500	1.50	.75	3.344	2.950	.355	.531	232	<sup>1</sup> / <sub>2</sub> -13x1.75	
48 SF-0	3.00	2.53	5.31	4.188	1.62	.88	4.031	3.580	.355	.656	237	<sup>5</sup> / <sub>8</sub> -11x2.00	
56 SF-0	3.50	2.70	6.00	4.750	1.12	.88	4.531	4.030	.422	.656	241	<sup>5</sup> / <sub>8</sub> -11x2.00	

Part No.	Flange Size	Code 62 Split Flange—Fig.1										Mounting Hardware	
		A ±.030	B ±.030	D ±.010	E ±.030	F ±.016	G ±.010	H ±.010	J ±.005	K ±.010	O'Ring	HHCS	
12SFX-0	.75	1.14	2.81	2.00	1.12	.75	1.656	1.280	.325	.406	214	<sup>3</sup> / <sub>8</sub> -16x1.50	
16SFX-0	1.00	1.33	3.19	2.250	1.31	.94	1.906	1.530	.355	.469	219	<sup>7</sup> / <sub>16</sub> -14x1.75	
20SFX-0	1.25	1.48	3.75	2.625	1.50	1.06	2.156	1.750	.385	.531	222	<sup>1</sup> / <sub>2</sub> -13x1.75	
24SFX-0	1.50	1.83	4.44	3.125	1.69	1.19	2.531	2.030	.475	.656	225	<sup>5</sup> / <sub>8</sub> -11x2.25	
32SFX-0	2.00	2.20	5.25	3.812	2.06	1.44	3.156	2.660	.475	.781	228	<sup>3</sup> / <sub>4</sub> -10x2.75	

Each Kit Includes: (2) split flanges halves, (4) hex head bolt and lock washers, (1) buna-n o'ring

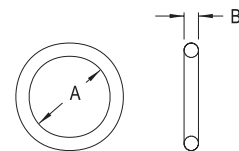
## Metric Mounting Options

Code 61 Metric Mounting Option		
Pad Size	Metric Drilled Bolt Holes	Metric Tapped Bolt Holes
8	8.5 mm	M8 x 1.25
12	10.5 mm	M10 x 1.50
16	10.5 mm	M10 x 1.50
20	10.5 mm	M10 x 1.50
24	12.5 mm	M12 x 1.75
32	12.5 mm	M12 x 1.75
40	12.5 mm	M12 x 1.75
48	16.5 mm	M16 x 2.00
56	16.5 mm	M16 x 2.00
64	16.5 mm	M16 x 2.00

Code 62 Metric Mounting Option		
Pad Size	Metric Drilled Bolt Holes	Metric Tapped Bolt Holes
8	8.5 mm	M8 x 1.25
12	10.5 mm	M10 x 1.50
16	12.5 mm	M12 x 1.75
20	14.5 mm	M14 x 2.00
24	16.5 mm	M16 x 2.00
32	21.0 mm	M20 x 2.50

All items in our SAE Flange line are available with Metric Mounting options. Listed here are the standard metric drilled hole diameters and metric tapped holes which are provided both for Code 61 and Code 62 applications.

## O'Ring Information



90 Durometer Buna-N O'Ring for Split Clamp Heads			
O'Ring	Size	A(in.)	B(in.)
210	0.50	0.75	0.139
214	0.75	1.00	0.139
219	1.00	1.31	0.139
222	1.25	1.60	0.139
228	2.00	2.25	0.139
232	2.50	2.75	0.139
237	3.00	3.38	0.139
241	3.50	3.88	0.139
245	4.00	4.38	0.139

Also available in viton



# 4 BOLT FLANGE FITTINGS

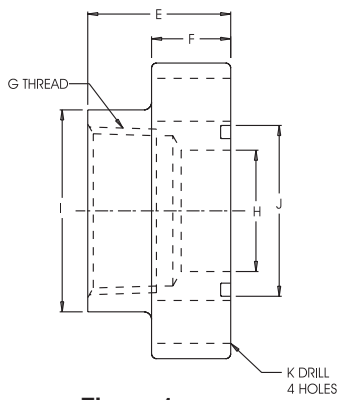


Figure 1

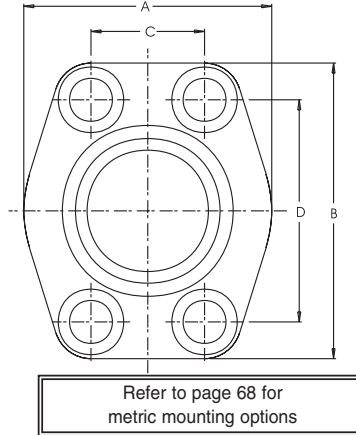


Figure 2

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. .2	Pipe Size	Pad Size	A	B	C	D	E	F	G Thread NPTF	H	I	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 61 3000 PSI NPTF THREAD</b>																	
W43-8-8-U	W104-8-8	.50	.50	1.81	2.13	.688	1.500	1.42	.63	.50	.50	1.25	1.000	.344	5/16-18	210	5/16-18x1.25
W43-12-12-U	W104-12-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	.75	.75	1.54	1.250	.406	3/8-16	214	3/8-16x1.50
W43-16-16-U	W104-16-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.00	1.00	1.81	1.560	.406	3/8-16	219	3/8-16x1.50
W43-20-20-U	W104-20-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.25	1.25	2.22	1.750	.469	7/16-14	222	7/16-14x1.75
W43-24-24-U	W104-24-24	1.50	1.50	3.07	3.66	1.406	2.750	1.77	.98	1.50	1.50	2.50	2.115	.531	1/2-13	225	1/2-13x1.75
W43-32-32-U	W104-32-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.00	2.00	3.12	2.490	.531	1/2-13	228	1/2-13x1.75
W43-40-40-U	W104-40-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.50	2.50	3.62	2.995	.531	1/2-13	232	1/2-13x1.75
W43-48-48-U	W104-48-48	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.00	3.00	4.47	3.615	.656	5/8-11	237	5/8-11x2.00

Part Numbers with "U" Suffix include Bolt Kit and O-Ring

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. .2	Pipe Size	Pad Size	A	B	C	D	E	F	G Straight Thread	H	I	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 61 3000 PSI SAE STRAIGHT THREAD</b>																	
W46-12-12-U	-	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1 1/16-12	.75	1.54	1.250	.406	-	214	3/8-16x1.50
W46-16-16-U	-	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1 5/16-12	1.00	1.81	1.560	.406	-	219	3/8-16x1.50
W46-20-20-U	-	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1 7/8-12	1.25	2.22	1.750	.469	-	222	7/16-14x1.75
W46-24-24-U	-	1.50	1.50	3.07	3.66	1.406	2.750	1.77	.98	1 7/8-12	1.50	2.50	2.115	.531	-	225	1/2-13x1.75

Part Numbers with "U" Suffix include Bolt Kit and O-Ring

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. .2	Pipe Size	Pad Size	A	B	C	D	E	F	G Thread NPTF	H	I	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 61 3000 PSI NPTF THREAD REDUCING</b>																	
W43-12-16-U	-	.75	1.00	2.17	2.75	1.031	2.062	1.50	.71	.75	.750	1.81	1.560	.406	-	219	3/8-16x1.50
W43-16-20-U	-	1.00	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.00	1.00	2.22	1.750	.469	-	222	7/16-14x1.75
W43-20-24-U	-	1.25	1.50	3.07	3.66	1.406	2.750	1.77	.98	1.25	1.25	2.50	2.115	.531	-	225	1/2-13x1.75
W43-24-32-U	-	1.50	2.00	3.54	4.00	1.688	3.062	1.77	.98	1.50	1.50	3.12	2.490	.531	-	228	1/2-13x1.75

Part Numbers with "U" Suffix include Bolt Kit and O-Ring



# 4 BOLT FLANGE FITTINGS

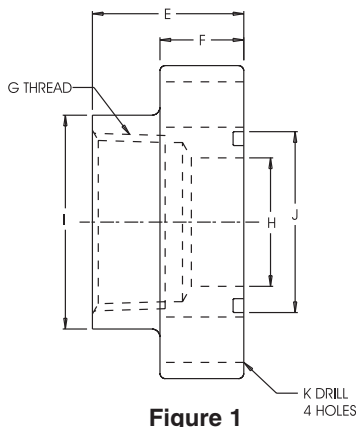


Figure 1

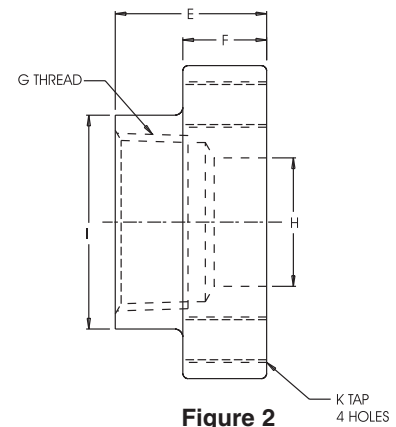
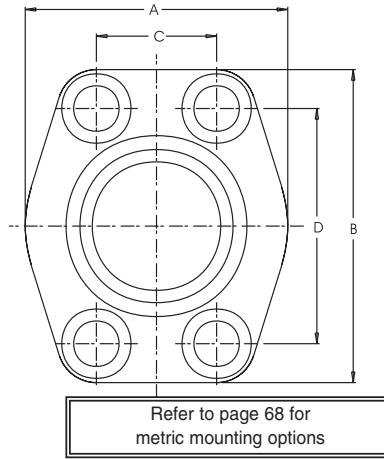


Figure 2

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. .2	Pipe Size	Pad Size	A	B	C	D	E	F	G Thread NPTF	H	I	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 62</b>				<b>6000 PSI NPTF THREAD</b>													
W44-8-8-U	W45-8-8	.50	.50	1.81	2.21	.718	1.594	1.25	.63	.500	.50	1.33	1.000	.344	5/16-18	210	5/16-18x1.25
W44-12-12-U	W45-12-12	.75	.75	2.17	2.80	.937	2.000	1.25	.83	.750	.75	1.65	1.250	.406	3/8-16	214	3/8-16x1.50
W44-16-16-U	W45-16-16	1.00	1.00	2.56	3.19	1.093	2.250	1.50	.98	1.000	1.00	1.98	1.560	.492	7/16-14	219	7/16-14x1.75
W44-20-20-U	W45-20-20	1.25	1.25	3.07	3.75	1.250	2.625	1.50	1.06	1.250	1.25	2.36	1.750	.531	1/2-13	222	1/2-13x1.75
W44-24-24-U	W45-24-24	1.50	1.50	3.70	4.41	1.437	3.125	1.75	1.18	1.500	1.50	2.68	2.115	.656	5/8-11	225	5/8-11x2.25
W44-32-32-U	W45-32-32	2.00	2.00	4.50	5.28	1.750	3.812	1.75	1.46	2.000	2.00	3.38	2.490	.781	3/4-10	228	3/4-10x2.75

Part Numbers with "U" Suffix include Bolt Kit and O'Ring

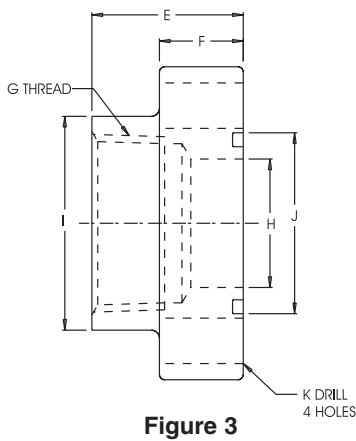


Figure 3

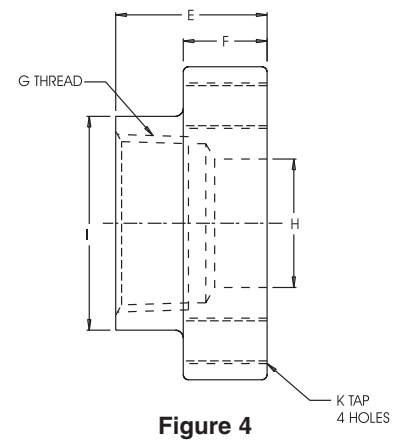
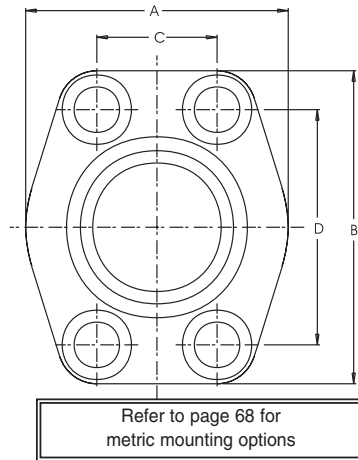


Figure 4

O'Ring Part No. Fig. 3	Flat Face Part No. Fig. .4	Pipe Size	Pad Size	A	B	C	D	E	F	G Straight Thread	H	I	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 62</b>				<b>6000 PSI SAE STRAIGHT THREAD</b>													
W48-12-12-U	W49-12-12	.75	.75	2.17	2.80	.937	2.000	1.25	.83	1 1/16-12	.75	1.65	1.250	.406	3/8-16	214	3/8-16x1.50
W48-16-16-U	W49-16-16	1.00	1.00	2.56	3.19	1.093	2.250	1.50	.98	1 5/16-12	1.00	1.98	1.560	.492	7/16-14	219	7/16-14x1.75
W48-20-20-U	W49-20-20	1.25	1.25	3.07	3.75	1.250	2.625	1.50	1.06	1 5/8-12	1.25	2.36	1.750	.531	1/2-13	222	1/2-13x1.75
W48-24-24-U	W49-24-24	1.50	1.50	3.70	4.41	1.437	3.125	1.75	1.18	1 7/8-12	1.50	2.68	2.1155	.656	5/8-11	225	5/8-11x2.25
W48-32-32-U	W49-32-32	2.00	2.00	4.50	5.28	1.750	3.812	1.75	1.46	2 1/2-12	2.00	3.38	2.490	.781	3/4-10	228	3/4-10x2.75

Part Numbers with "U" Suffix include Bolt Kit and O'Ring

NOTE: WITH VESCORS' POLICY OF CONSTANTLY IMPROVING ITS PRODUCTS, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



# 4 BOLT FLANGE FITTINGS

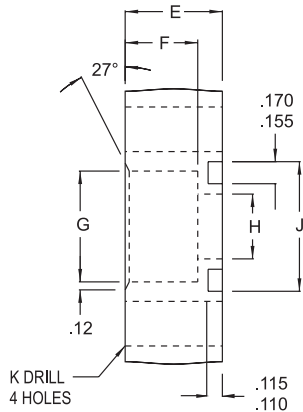
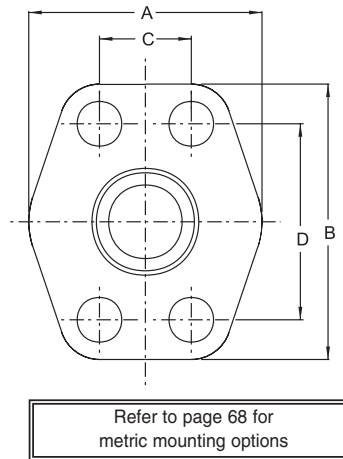


Figure 1



Refer to page 68 for metric mounting options

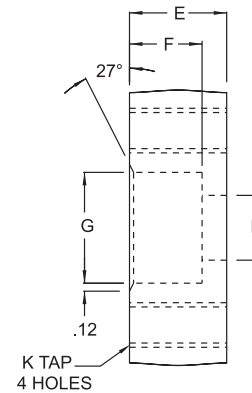


Figure 2

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. 2	Pipe Size	Pad Size	A	B	C	D	E	F	G Dia.	H Dia.	J Dia. Min.	J Dia. Max.	K Drill Dia.	K Tap UN-2B	O'Ring	SHCS
<b>CODE 61 3000 PSI FLAT SOCKET-PIPE</b>																	
W4-8-8-U	W61-8-8	.50	.50	1.813	2.125	.688	1.500	.75	.560	.855	.50	1.000	1.005	.344	5/16-18	210	5/16-18x1.50
W4-12-12-U	W61-12-12	.75	.75	2.063	2.563	.875	1.875	.75	.560	1.062	.75	1.250	1.255	.406	3/8-16	214	3/8-16x1.50
W4-16-16-U	W61-16-16	1.00	1.00	2.313	2.750	1.031	2.063	.88	.630	1.326	1.00	1.560	1.565	.406	3/8-16	219	3/8-16x1.75
W4-20-20-U	W61-20-20	1.25	1.25	2.875	3.125	1.188	2.313	.94	.690	1.672	1.25	1.750	1.755	.469	7/16-14	222	7/16-14x1.75
W4-24-24-U	W61-24-24	1.50	1.50	3.250	3.688	1.406	2.750	1.19	.750	1.922	1.50	2.115	2.125	.531	1/2-13	225	1/2-13x2.25
W4-32-32-U	W61-32-32	2.00	2.00	3.813	4.000	1.688	3.063	1.38	.875	2.406	2.00	2.490	2.500	.531	1/2-13	228	1/2-13x2.50
W4-40-40-U	W61-40-40	2.50	2.50	4.281	4.500	2.000	3.500	1.75	1.00	2.906	2.50	2.995	3.005	.531	1/2-13	232	1/2-13x2.75
W4-48-48-U	W61-48-48	3.00	3.00	5.156	5.313	2.438	4.188	2.12	1.25	3.547	3.00	3.615	3.625	.656	5/8-11	237	5/8-11x3.50

Part Numbers with "U" Suffix include Bolt Kit and O'Ring

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. 2	Pipe Size	Pad Size	A	B	C	D	E	F	G Dia.	H	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	O'Ring	SHCS
<b>CODE 61 3000 PSI FLAT SOCKET-PIPE REDUCING FLANGES</b>																	
W4-8-12-U	-	.50	.75	2.063	2.563	.875	1.875	.75	.560	.855	.75	1.250	1.255	.406	-	214	3/8-16x1.50
W4-12-16-U	-	.75	1.00	2.313	2.750	1.031	2.063	.88	.630	1.062	1.00	1.560	.565	.406	-	219	3/8-16x1.75
W4-16-20-U	-	1.00	1.25	2.875	3.125	1.188	2.313	.94	.690	1.326	1.25	1.750	1.755	.469	-	222	7/16-14x1.75
W4-20-24-U	-	1.25	1.50	3.250	3.688	1.406	2.750	1.19	.750	1.672	1.50	2.115	2.125	.531	-	225	1/2-13x2.25
W4-24-32-U	-	1.50	2.00	3.813	4.000	1.688	3.063	1.38	.875	1.922	2.00	2.490	2.500	.531	-	228	1/2-13x2.50

Part Numbers with "U" Suffix include Bolt Kit and O'Ring

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. 2	Pipe Size	Pad Size	A	B	C	D	E	F	G	H	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	O'Ring	SHCS
<b>500 PSI FLAT SOCKET-PIPE</b>																	
W72-48-48-U	-	3.00	3.00	5.12	5.31	2.438	4.188	1.38	1.12	3.547	3.00	3.615	3.625	.656	-	237	5/8-11x2.50
W72-56-56-U	-	3.50	3.50	5.50	6.00	2.750	4.750	1.44	1.19	4.047	3.50	4.095	4.115	.656	-	241	5/8-11x2.75
W72-64-64-U	-	4.00	4.00	6.00	6.38	3.062	5.125	1.50	1.25	4.578	4.00	4.595	4.615	.656	-	245	5/8-11x2.75

Part Numbers with "U" Suffix include Bolt Kit and O'Ring



# 4 BOLT FLANGE FITTINGS

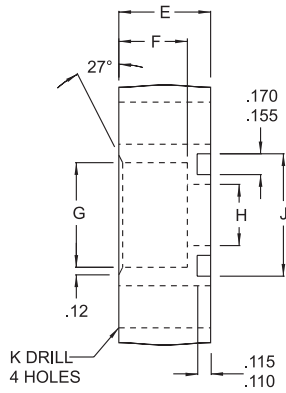
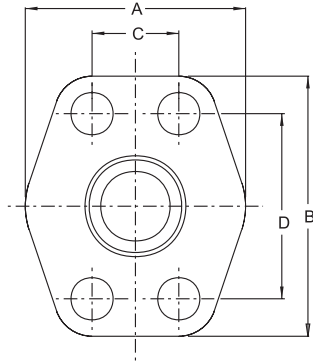


Figure 1



Refer to page 68 for metric mounting options

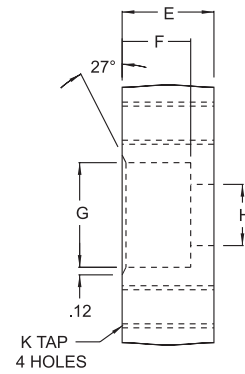


Figure 2

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. 2	Pipe Size	Pad Size	A	B	C	D	E	F	G Dia.	H Dia.	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 62 6000 PSI FLAT SOCKET PIPE</b>																	
W59-8-8-U	W60-8-8	.50	.50	1.94	2.30	.718	1.594	1.25	.560	.855	.50	1.000	1.005	.344	5/16-18	210	5/16-18x2.00
W59-12-12-U	W60-12-12	.75	.75	2.50	2.95	.937	2.000	1.25	.560	1.063	.75	1.250	1.255	.406	3/8-16	214	3/8-16x2.00
W59-16-16-U	W60-16-16	1.00	1.00	2.75	3.19	1.093	2.250	1.50	.630	1.328	1.00	1.560	1.565	.469	7/16-14	219	7/16-14x2.50
W59-20-20-U	W60-20-20	1.25	1.25	3.06	3.75	1.250	2.625	1.50	.690	1.672	1.25	1.750	1.755	.531	1/2-13	222	1/2-13x2.50
W59-24-24-U	W60-24-24	1.50	1.50	3.75	4.44	1.437	3.125	1.75	.750	1.922	1.50	2.115	2.125	.656	5/8-11	225	5/8-11x3.00
W59-32-32-U	W60-32-32	2.00	2.00	4.50	5.25	1.750	3.812	1.75	.875	2.406	2.00	2.490	2.500	.781	3/4-10	228	3/4-10x3.00

Part Numbers with "U" Suffix include Bolt Kit and O-Ring

Part No. Fig. 3	Pad Size	A	B	C	D	E	H	J Dia. Min.	J Dia. Max.	K Dia.
<b>CODE 62 O-RING SPACER</b>										
ASX-12-GP	0.750	2.50	2.95	0.937	2.000	1.250	0.750	1.250	1.256	0.406
ASX-16-GP	1.000	2.75	3.19	1.093	2.250	1.500	1.000	1.560	1.565	0.469
ASX-20-GP	1.250	3.06	3.75	1.250	2.625	1.500	1.250	1.750	1.755	0.531
ASX-24-GP	1.500	3.75	4.44	1.437	3.125	1.750	1.500	2.115	2.125	0.656
ASX-32-GP	2.000	4.50	5.25	1.750	3.812	1.750	2.000	2.490	2.500	0.781
<b>CODE 61 O-RING SPACER</b>										
AS-8-GP	0.500	1.813	2.125	0.688	1.500	0.88	0.500	1.000	1.005	0.344
AS-12-GP	0.750	2.063	2.563	0.875	1.875	0.88	0.750	1.250	1.255	0.406
AS-16-GP	1.000	2.313	2.750	1.031	2.063	0.88	1.000	1.560	1.565	0.406
AS-20-GP	1.250	2.875	3.125	1.188	2.313	0.94	1.250	1.750	1.755	0.469
AS-24-GP	1.500	3.250	3.688	1.406	2.750	1.19	1.500	2.115	2.125	0.531
AS-32-GP	2.000	3.813	4.000	1.688	3.063	1.38	2.000	2.490	2.500	0.531

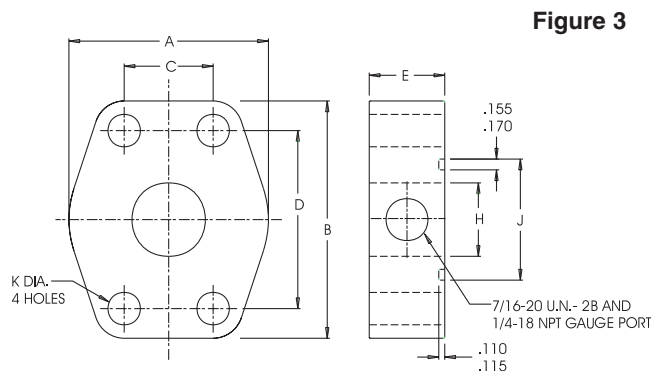


Figure 3



# 4 BOLT FLANGE FITTINGS

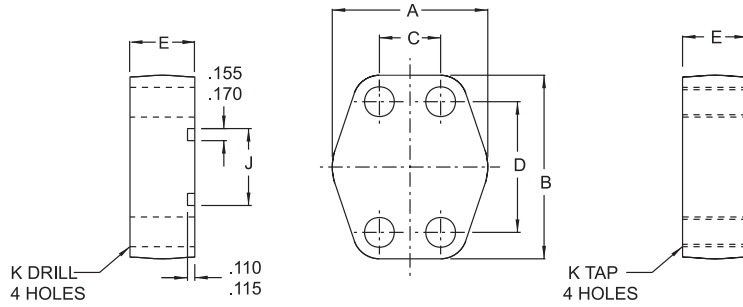


Figure 1

Refer to page 68 for metric mounting options

Figure 2

O'Ring Part No. Fig. 1	Flat Face Part Fig. 2	Pad Size	A	B	C	D	E	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	O'Ring	SHCS
<b>CODE 61</b>													
<b>3000 PSI BLANKING</b>													
W36-8-8-U	W37-8-8	.50	1.813	2.125	.688	1.500	.750	1.000	1.005	.344	<sup>5</sup> / <sub>16</sub> -18	210	<sup>5</sup> / <sub>16</sub> -18x1.50
W36-12-12-U	W37-12-12	.75	2.063	2.563	.875	1.875	.750	1.250	1.255	.406	<sup>3</sup> / <sub>8</sub> -16	214	<sup>3</sup> / <sub>8</sub> -16x1.50
W36-16-16-U	W37-16-16	1.00	2.313	2.750	1.031	2.063	.880	1.560	1.565	.406	<sup>3</sup> / <sub>8</sub> -16	219	<sup>3</sup> / <sub>8</sub> -16x1.75
W36-20-20-U	W37-20-20	1.25	2.875	3.125	1.188	2.313	.940	1.750	1.755	.469	<sup>7</sup> / <sub>16</sub> -14	222	<sup>7</sup> / <sub>16</sub> -14x1.75
W36-24-24-U	W37-24-24	1.50	3.250	3.688	1.406	2.750	1.190	2.115	2.125	.531	<sup>1</sup> / <sub>2</sub> -13	225	<sup>1</sup> / <sub>2</sub> -13x2.25
W36-32-32-U	W37-32-32	2.00	3.813	4.000	1.688	3.063	1.440	2.490	2.500	.531	<sup>1</sup> / <sub>2</sub> -13	228	<sup>1</sup> / <sub>2</sub> -13x2.50
W36-40-40-U	W37-40-40	2.50	4.281	4.500	2.000	3.500	1.815	2.995	3.005	.531	<sup>1</sup> / <sub>2</sub> -13	232	<sup>1</sup> / <sub>2</sub> -13x2.75
W36-48-48-U	W37-48-48	3.00	5.156	5.313	2.438	4.188	2.190	3.615	3.625	.656	<sup>5</sup> / <sub>8</sub> -11	237	<sup>5</sup> / <sub>8</sub> -11x3.50

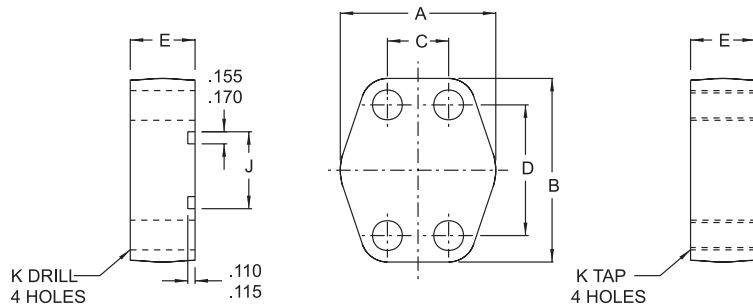


Figure 3

Refer to page 68 for metric mounting options

Figure 4

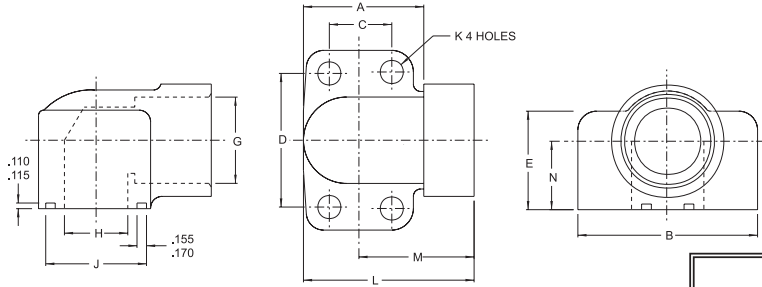
O'Ring Part No. Fig. 3	Flat Face Part Fig. 4	Pad Size	A	B	C	D	E	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	O'Ring	SHCS
<b>CODE 62</b>													
<b>6000 PSI BLANKING</b>													
W38-8-8-U	W39-8-8	.50	1.94	2.30	.718	1.594	.870	1.000	1.005	.344	<sup>5</sup> / <sub>16</sub> -18	210	<sup>5</sup> / <sub>16</sub> -18x1.50
W38-12-12-U	W39-12-12	.75	2.50	2.95	.937	2.000	1.250	1.250	1.255	.406	<sup>3</sup> / <sub>8</sub> -16	214	<sup>3</sup> / <sub>8</sub> -16x1.50
W38-16-16-U	W39-16-16	1.00	2.75	3.19	1.093	2.250	1.500	1.560	1.565	.469	<sup>7</sup> / <sub>16</sub> -14	219	<sup>7</sup> / <sub>16</sub> -14x1.75
W38-20-20-U	W39-20-20	1.25	3.06	3.75	1.250	2.625	1.565	1.750	1.755	.531	<sup>1</sup> / <sub>2</sub> -13	222	<sup>1</sup> / <sub>2</sub> -13x1.75
W38-24-24-U	W39-24-24	1.50	3.75	4.44	1.437	3.125	1.815	2.115	2.125	.656	<sup>5</sup> / <sub>8</sub> -11	225	<sup>5</sup> / <sub>8</sub> -11x2.25
W38-32-32-U	W39-32-32	2.00	4.50	5.25	1.750	3.812	1.815	2.490	2.500	.781	<sup>3</sup> / <sub>4</sub> -10	228	<sup>3</sup> / <sub>4</sub> -10x2.00
W38-40-40-U	W39-40-40	2.50	5.87	6.87	2.312	4.875	2.060	2.995	3.005	.906	<sup>7</sup> / <sub>8</sub> -9	232	<sup>7</sup> / <sub>8</sub> -9x3.50
W38-48-48-U	W39-48-48	3.00	7.00	8.50	2.812	6.000	2.620	3.615	3.625	1.156	<sup>1</sup> / <sub>8</sub> -7	237	<sup>1</sup> / <sub>8</sub> -7x4.50

Part Numbers with "U" Suffix include Bolt Kit and O'Ring



# 4 BOLT FLANGE FITTINGS

Figure 1



Refer to page 68 for metric mounting options

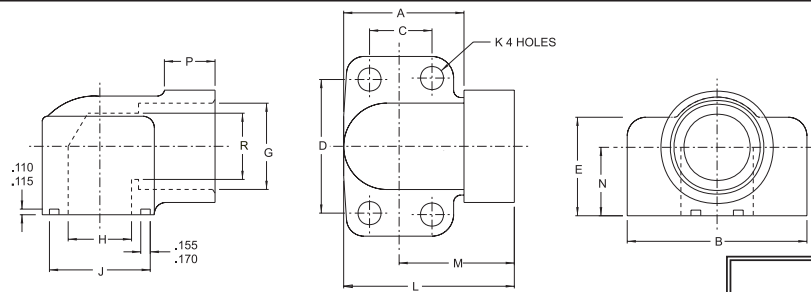
O'Ring Part No. Fig.1	Pad Size	A	B	C	D	E	G Thread NPT	H	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	L	M	N	Mounting Hardware O'Rings	SHCS
<b>CODE 61 3000 PSI ELBOW SAE STRAIGHT THREAD</b>																	
W164-12-12-U	.75	1.69	2.56	.875	1.875	1.25	1 <sup>1</sup> / <sub>16</sub> -12	.75	1.250	1.255	.406	-	2.28	1.44	.875	214	<sup>3</sup> / <sub>8</sub> -16x2.00
W164-16-16-U	1.00	1.94	2.75	1.031	2.062	1.50	1 <sup>5</sup> / <sub>16</sub> -12	1.00	1.560	1.565	.406	-	2.62	1.66	1.062	219	<sup>3</sup> / <sub>8</sub> -16x2.25
W164-20-20-U	1.25	2.19	3.12	1.188	2.312	1.81	1 <sup>7</sup> / <sub>8</sub> -12	1.25	1.750	1.755	.469	-	3.00	1.91	1.188	222	<sup>7</sup> / <sub>16</sub> -16x2.75
W164-24-24-U	1.50	2.56	3.69	1.406	2.750	2.00	1 <sup>7</sup> / <sub>8</sub> -12	1.50	2.115	2.125	.531	-	3.33	2.05	1.312	225	<sup>1</sup> / <sub>2</sub> -13x3.00
W164-32-32-U	2.00	3.06	4.33	1.688	3.062	2.50	2 <sup>1</sup> / <sub>2</sub> -12	2.00	2.490	2.500	.531	-	3.81	2.28	1.656	228	<sup>1</sup> / <sub>2</sub> -13x3.50

Part Numbers with "U" Suffix include Bolt Kit and O'Ring

O'Ring Part No. Fig.1	Pad Size	A	B	C	D	E	G Straight Thread	H	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	L	M	N	Mounting Hardware O'Rings	SHCS
<b>CODE 61 3000 PSI ELBOW NPTF THREAD</b>																	
W168-12-12-U	.75	1.69	2.56	.875	1.875	1.25	.75	.75	1.250	1.255	.406	-	2.28	1.44	.875	214	<sup>3</sup> / <sub>8</sub> -16x2.00
W168-16-16-U	1.00	1.94	2.75	1.031	2.062	1.50	1.00	1.00	1.560	1.565	.406	-	2.62	1.66	1.062	219	<sup>3</sup> / <sub>8</sub> -16x2.25
W168-20-20-U	1.25	2.19	3.12	1.188	2.312	1.81	1.25	1.25	1.750	1.755	.469	-	3.00	1.91	1.188	222	<sup>7</sup> / <sub>16</sub> -14x2.75
W168-24-24-U	1.50	2.56	3.69	1.406	2.750	2.00	1.50	1.50	2.115	2.125	.531	-	3.33	2.05	1.312	225	<sup>1</sup> / <sub>2</sub> -13x3.00
W168-32-32-U	2.00	3.06	4.33	1.688	3.062	2.50	2.00	2.00	2.490	2.500	.531	-	3.81	2.28	1.656	228	<sup>5</sup> / <sub>8</sub> -11x3.50

Part Numbers with "U" Suffix include Bolt Kit and O'Ring

Figure 1



Refer to page 68 for metric mounting options

O'Ring Part No. Fig.1	Pad Size	A	B	C	D	E	G	H	J Min.	J Max.	K Drill Dia.	K Tap UN-2B	L	M	N	P	R	Mounting Hardware O'Rings	SHCS
<b>CODE 61 3000 PSI ELBOW SOCKET WELD</b>																			
W176-12-12-U	.75	1.69	2.56	.875	1.875	1.25	1.062	.75	1.250	1.255	.406	-	2.28	1.44	.875	0.56	0.75	214	<sup>3</sup> / <sub>8</sub> -16x2.00
W176-16-16-U	1.00	1.94	2.75	1.031	2.062	1.50	1.328	1.00	1.560	1.565	.406	-	2.62	1.66	1.062	0.56	1.00	219	<sup>3</sup> / <sub>8</sub> -16x2.25
W176-20-20-U	1.25	2.19	3.12	1.188	2.312	1.81	1.672	1.25	1.750	1.755	.469	-	3.00	1.91	1.188	0.62	1.25	222	<sup>7</sup> / <sub>16</sub> -14x2.75
W176-24-24-U	1.50	2.56	3.69	1.406	2.750	2.00	1.922	1.50	2.115	2.125	.531	-	3.28	2.05	1.312	0.69	1.50	225	<sup>1</sup> / <sub>2</sub> -13x3.00
W176-32-32-U	2.00	3.06	4.33	1.688	3.062	2.50	2.406	2.00	2.490	2.500	.531	-	3.81	2.28	1.656	.075	2.00	228	<sup>1</sup> / <sub>2</sub> -13x3.50

Part Numbers with "U" Suffix include Bolt Kit and O'Ring



# 4 BOLT FLANGE FITTINGS

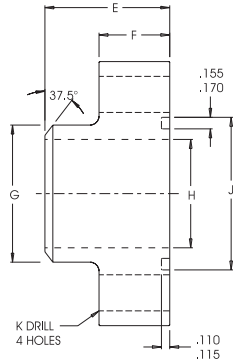


Figure 1

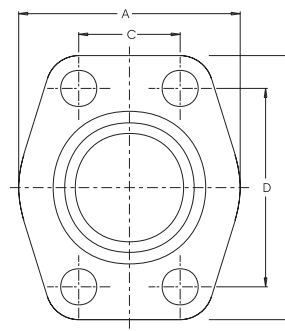


Figure 2

Refer to page 68 for metric mounting options

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. 2	Pipe Size	Pad Size	A	B	C	D	E	F	G Pipe O.D.	H Pipe I.D.	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 61 BUTT WELD-SCHED 40 PIPE</b>																
W35-12-U	W34-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.050	.82	1.250	.406	3/8-16	214	3/8-16 x 1.50
W35-16-U	W34-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.315	1.04	1.560	.406	3/8-16	219	3/8-16 x 1.50
W35-20-U	W34-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.660	1.38	1.750	.469	7/16-14	222	7/16-14 x 1.75
W35-24-U	W34-24	1.50	1.50	3.07	3.66	1.406	2.750	1.73	.98	1.900	1.61	2.115	.531	1/2-13	225	1/2-13 x 1.75
W35-32-U	W34-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.375	2.06	2.490	.531	1/2-13	228	1/2-13 x 1.75
W35-40-U	W34-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.875	2.46	2.995	.531	1/2-13	232	1/2-13 x 1.75
W35-48-U*	W34-48 *	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.500	3.06	3.615	.656	5/8-11	237	5/8-11 x 2.00
<b>CODE 61 BUTT WELD-SCHED 80 PIPE</b>																
W24-12-U	W23-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.050	.742	1.250	.406	3/8-16	214	3/8-16 x 1.50
W24-16-U	W23-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.315	.957	1.560	.406	3/8-16	219	3/8-16 x 1.50
W24-20-U	W23-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.660	1.278	1.750	.469	7/16-14	222	7/16-14 x 1.75
W24-24-U	W23-24	1.50	1.50	3.07	3.66	1.406	2.750	1.73	.98	1.900	1.500	2.115	.531	1/2-13	225	1/2-13 x 1.75
W24-32-U	W23-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.375	1.939	2.490	.531	1/2-13	228	1/2-13 x 1.75
W24-40-U	W23-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.875	2.323	2.995	.531	1/2-13	232	1/2-13 x 1.75
W24-48-U*	W23-48 *	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.500	2.900	3.615	.656	5/8-11	237	5/8-11 x 2.00
<b>CODE 61 BUTT WELD-SCHED 160 PIPE</b>																
W27-12-U	W25-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.050	.614	1.250	.406	3/8-16	214	3/8-16 x 1.50
W27-16-U	W25-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.315	.815	1.560	.406	3/8-16	219	3/8-16 x 1.50
W27-20-U	W25-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.660	1.160	1.750	.469	7/16-14	222	7/16-14 x 1.75
W27-24-U	W25-24	1.50	1.50	3.07	3.66	1.406	2.750	1.73	.98	1.900	1.337	2.115	.531	1/2-13	225	1/2-13 x 1.75
W27-32-U	W25-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.375	1.689	2.490	.531	1/2-13	228	1/2-13 x 1.75
W27-40-U	W25-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.875	2.125	2.995	.531	1/2-13	232	1/2-13 x 1.75
W27-48-U*	W25-48 *	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.500	2.624	3.615	.656	5/8-11	237	5/8-11 x 2.00

\*note-bar stock material Part Numbers with "U" Suffix include Bolt Kit and O'Ring



# 4 BOLT FLANGE FITTINGS

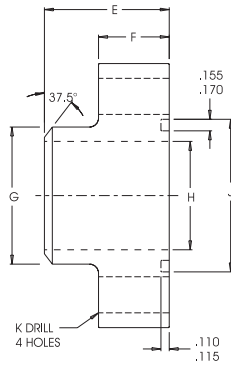
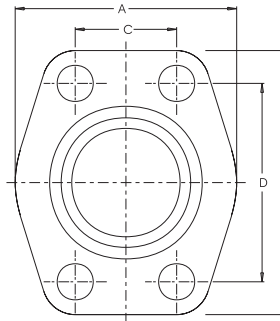


Figure 1



Refer to page 68 for metric mounting options

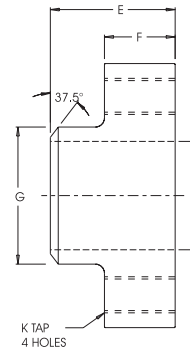


Figure 2

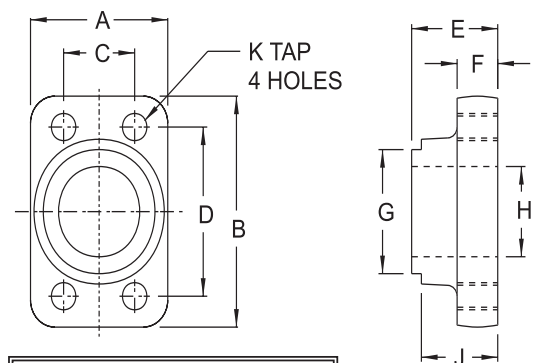
O'Ring Part No. Fig. 1	Flat Face Part No. Fig. 2	Pipe Size	Pad Size	A	B	C	D	E	F	G Pipe O.D.	H Pipe I.D.	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 62 BUTT WELD-SCHED 80 PIPE</b>																
W28-12-U	-	.75	.75	2.17	2.80	.937	2.000	1.39	0.83	1.050	0.742	1.250	0.406	3/8-16	214	3/8-16 x 1.50
W28-16-U	-	1.00	1.00	2.56	3.19	1.093	2.250	1.61	0.83	1.315	0.957	1.560	0.469	7/16-14	219	7/16-14 x 1.75
W28-20-U	-	1.25	1.25	3.07	3.75	1.250	2.625	1.73	0.98	1.660	1.278	1.750	0.531	1/2-13	222	1/2-13 x 1.75
W28-24-U	-	1.50	1.50	3.70	4.41	1.437	3.125	2.17	1.18	1.900	1.500	2.115	0.656	5/8-11	225	5/8-11 x 2.25
W28-32-U	-	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.45	2.375	1.939	2.490	0.781	3/4-10	228	3/4-10 x 2.75
W28-40-U*	-	2.50	2.50	5.00	6.88	2.312	4.875	2.37	1.50	2.875	2.323	2.995	0.940	7/8-9	232	7/8-9 x 3.00
W28-48-U*	-	3.00	3.00	6.00	8.50	2.812	6.000	2.96	2.00	3.500	2.900	3.615	1.190	1 1/8-7	237	1 1/8-7 x 4.00

Part Numbers with "U" Suffix include Bolt Kit and O'Ring

O'Ring Part No. Fig. 1	Flat Face Part No. Fig. 2	Pipe Size	Pad Size	A	B	C	D	E	F	G Pipe O.D.	H Pipe I.D.	J	K Drill Dia.	K Tap UN-2B	Mounting Hardware O'Ring	SHCS
<b>CODE 62 BUTT WELD-SCHED 160 PIPE</b>																
-	W29-12	0.75	0.75	2.17	2.80	0.937	2.000	1.38	0.83	1.050	0.614	1.250	.406	3/8-16	214	3/8-16 x 1.50
-	W29-16	1.00	1.00	2.56	3.19	1.093	2.250	1.61	0.83	1.315	0.815	1.560	.469	7/16-14	219	7/16-14 x 1.75
-	W29-20	1.25	1.25	3.07	3.75	1.250	2.625	1.73	0.98	1.660	1.160	1.750	.531	1/2-13	222	1/2-13 x 1.75
-	W29-24	1.50	1.50	3.70	4.41	1.437	3.125	2.17	1.18	1.900	1.337	2.115	.656	5/8-11	225	5/8-11 x 2.25
-	W29-32	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.46	2.375	1.689	2.490	.781	3/4-10	228	3/4-10 x 2.75
-	W29-40*	2.50	2.50	5.00	6.88	2.312	4.875	2.37	1.50	2.875	2.125	2.995	.940	7/8-9	232	7/8-9 x 3.00
-	W29-48*	3.00	3.00	6.00	8.50	2.812	6.000	2.96	2.00	3.500	2.624	3.615	1.190	1 1/8-7	237	1 1/8-7 x 4.00

\*note-bar stock material

Part No. Fig. 1	Pad Size	A	B	C	D	E	F	G	H	J	K Tap UNC-2B
<b>CODE 61 3000 PSI TANK PILOT</b>											
W22-12	.75	1.69	2.56	.875	1.875	1.18	.62	1.375	.75	1.06	3/8-16
W22-16	1.00	1.94	2.75	1.031	2.062	1.25	.56	1.500	1.00	1.12	3/8-16
W22-20	1.25	2.19	3.12	1.188	2.312	1.44	.62	1.750	1.25	1.20	7/16-14
W22-24	1.50	2.56	3.69	1.406	2.750	1.75	.81	2.125	1.50	1.62	1/2-13
W22-32	2.00	3.06	4.00	1.688	3.062	2.00	1.06	2.500	2.00	1.88	1/2-13
W22-40	2.50	3.56	4.50	2.000	3.500	2.31	1.12	3.250	2.50	2.19	1/2-13



Refer to page 68 for metric mounting options

Figure 1

NOTE: WITH VESCORS' POLICY OF CONSTANTLY IMPROVING ITS PRODUCTS, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.