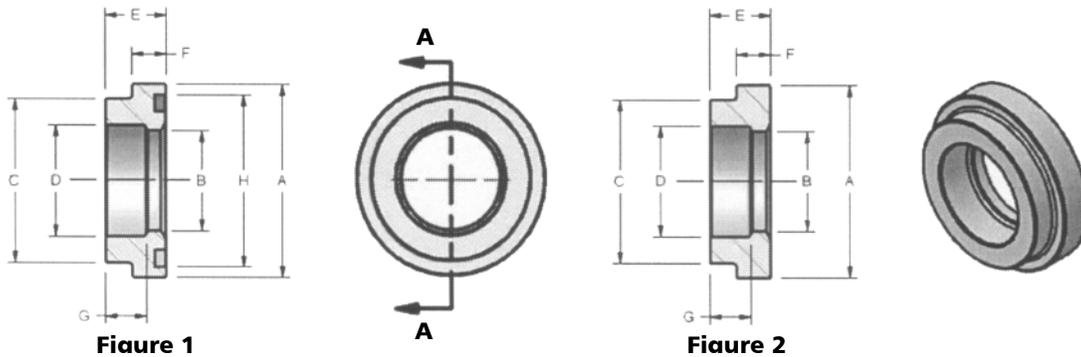




Tube Flange Head Fitting



CODE 61 TUBE FLANGE HEAD FITTING											
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	TUBE SIZE	FLANGE SIZE	A	B	C	D	E	F	G	H
8T-8SF	8T-8SFN	.50	.50	1.188	.406	.924	.502	.50	.265	.312	1.000
10T-8SF	10T-8SFN	.63	.50	1.188	.500	.924	.627	.50	.265	.312	1.000
12T-12SF	12T-12SFN	.75	.75	1.500	.656	1.234	.752	.56	.265	.375	1.250
16T-12SF	16T-12SFN	1.00	.75	1.500	.750	1.234	1.002	.56	.265	.375	1.250
16T-16SF	16T-16SFN	1.00	1.00	1.750	.906	1.484	1.002	.56	.315	.375	1.560
20T-16SF	20T-16SFN	1.25	1.00	1.750	1.000	1.484	1.252	.56	.315	.375	1.560
20T-20SF	20T-20SFN	1.25	1.25	2.000	1.125	1.684	1.252	.56	.315	.375	1.750
24T-20SF	24T-20SFN	1.50	1.25	2.000	1.250	1.684	1.502	.56	.315	.375	1.750
24T-24SF	24T-24SFN	1.50	1.50	2.375	1.375	1.964	1.502	.62	.315	.438	2.115
28T-24SF	28T-24SFN	1.75	1.50	2.375	1.500	1.964	1.752	.62	.315	.438	2.115
32T-32SF	32T-32SFN	2.00	2.00	2.812	1.875	2.434	2.002	.62	.375	.500	2.490
36T-32SF	36T-32SFN	2.25	2.00	2.812	2.000	2.434	2.252	.62	.375	.500	2.490
40T-40SF	40T-40SFN	2.50	2.50	3.312	2.375	2.904	2.502	.68	.375	.562	2.995
44T-40SF	44T-40SFN	2.75	2.50	3.312	2.500	2.904	2.752	.68	.375	.500	2.995
48T-48SF	48T-48SFN	3.00	3.00	4.000	2.875	3.534	3.002	.75	.375	.562	3.615

CODE 62 TUBE FLANGE HEAD FITTING											
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	TUBE SIZE	FLANGE SIZE	A	B	C	D	E	F	G	H
12T-12SFX	12T-12SFXN	.75	.75	1.625	.656	1.234	.752	.69	.345	.500	1.250
16T-12SFX	16T-12SFXN	1.00	.75	1.625	.750	1.234	1.002	.69	.345	.500	1.250
16T-16SFX	16T-16SFXN	1.00	1.00	1.875	.810	1.484	1.002	.81	.375	.625	1.560
20T-16SFX	20T-16SFXN	1.25	1.00	1.875	1.000	1.484	1.252	.81	.375	.625	1.560
20T-20SFX	20T-20SFXN	1.25	1.25	2.125	1.010	1.704	1.252	1.00	.405	.812	1.750
24T-20SFX	24T-20SFXN	1.50	1.25	2.125	1.250	1.704	1.502	1.00	.405	.812	1.750
24T-24SFX	24T-24SFXN	1.50	1.50	2.500	1.250	1.984	1.502	1.19	.495	1.000	2.115
28T-24SFX	28T-24SFXN	1.75	1.50	2.500	1.500	1.984	1.757	1.19	.495	1.000	2.115
32T-32SFX	32T-32SFXN	2.00	2.00	3.125	1.750	2.604	2.002	1.50	.495	1.375	2.490
36T-32SFX	36T-32SFXN	2.25	2.00	3.125	2.000	2.604	2.252	1.50	.495	1.312	2.490

Hydraulic
Adapters





Flange Plug

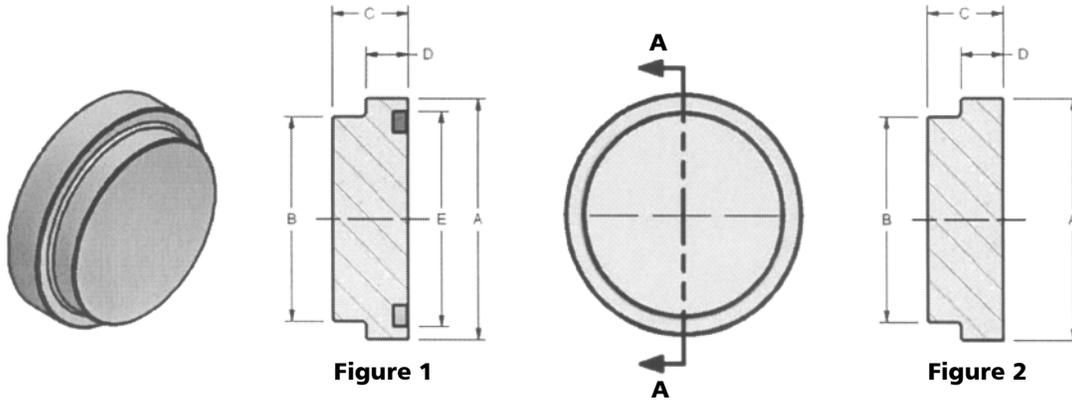


Figure 1

Figure 2

CODE 61 FLANGE PLUG							
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	FLANGE SIZE	A	B	C	D	E
8-FOP	8-FP	.50	1.188	.924	.50	.265	1.000
12-FOP	12-FP	.75	1.500	1.234	.56	.265	1.250
16-FOP	16-FP	1.00	1.750	1.484	.56	.315	1.560
20-FOP	20-FP	1.25	2.000	1.684	.56	.315	1.750
24-FOP	24-FP	1.50	2.375	1.964	.62	.315	2.115
32-FOP	32-FP	2.00	2.810	2.434	.62	.375	2.490
40-FOP	40-FP	2.50	3.312	2.904	.68	.375	2.995
48-FOP	48-FP	3.00	4.000	3.534	.75	.375	3.615

CODE 62 FLANGE PLUG							
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	FLANGE SIZE	A	B	C	D	E
12-FOPX	12-FPX	.75	1.625	1.234	.690	.345	1.250
16-FOPX	16-FPX	1.00	1.875	1.484	.810	.375	1.560
20-FOPX	20-FPX	1.25	2.125	1.704	1.000	.405	1.750
24-FOPX	24-FPX	1.50	2.500	1.984	1.190	.495	2.115
32-FOPX	32-FPX	2.00	3.125	2.604	1.500	.495	2.490

Hydraulic
Adapters

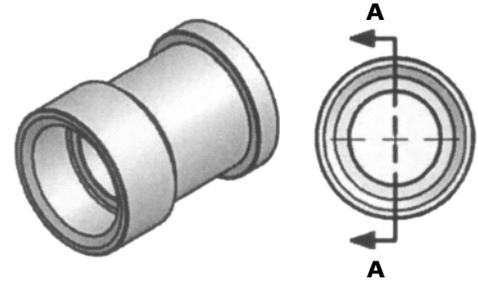


Female Flange Head Adapter



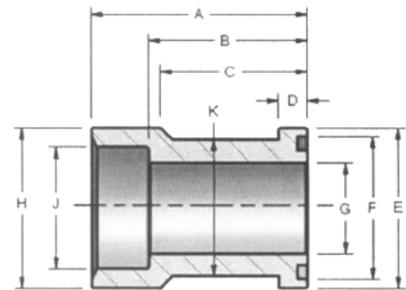
CODE 61 SOCKET WELD TO FLANGE HEAD FOR PIPE

PART NO.	PIPE SIZE	CLAMP SIZE	A	B	C	D	E	F	G	H	J	K
8P-8WSF	.50	.50	2.34	1.78	1.62	.265	1.187	1.000	.500	1.25	.855	.924
12P-12WSF	.75	.75	2.34	1.78	1.62	.265	1.500	1.250	.750	1.50	1.062	1.234
16P-16WSF	1.00	1.00	2.38	1.75	1.62	.315	1.750	1.560	1.000	1.75	1.328	1.484
20P-20WSF	1.25	1.25	2.62	1.94	1.81	.315	2.000	1.750	1.250	2.00	1.672	1.684
24P-24WSF	1.50	1.50	2.88	2.12	2.00	.315	2.375	2.115	1.500	2.38	1.922	1.964
32P-32WSF	2.00	2.00	3.00	2.12	2.00	.375	2.812	2.490	2.000	2.81	2.406	2.434
40P-40WSF	2.50	2.50	3.06	2.06	1.91	.375	3.312	2.995	2.500	3.31	2.906	2.920
48P-48WSF	3.00	3.00	3.88	2.63	2.47	.375	4.000	3.615	2.875	4.00	3.547	3.534

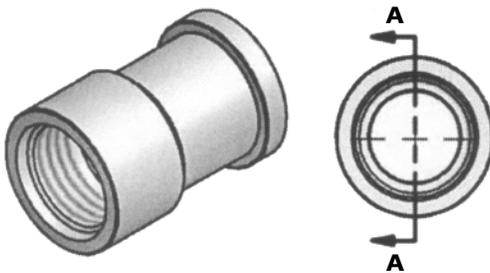


CODE 62 SOCKET WELD TO FLANGE HEAD FOR PIPE

PART NO.	PIPE SIZE	CLAMP SIZE	A	B	C	D	E	F	G	H	J	K
W53-12-12	.75	.75	2.75	2.12	1.95	.345	1.625	1.250	.750	1.750	1.062	1.234
W53-16-16	1.00	1.00	3.06	2.43	2.34	.375	1.875	1.560	1.000	2.000	1.328	1.484
W53-20-20	1.25	1.25	3.31	2.62	2.50	.405	2.125	1.750	1.125	3.312	1.672	1.704
W53-24-24	1.50	1.50	3.93	3.18	3.06	.495	2.500	2.115	1.375	2.750	1.922	1.984
W53-32-32	2.00	2.00	4.06	3.18	3.18	.495	3.125	2.490	1.875	3.125	2.406	2.604

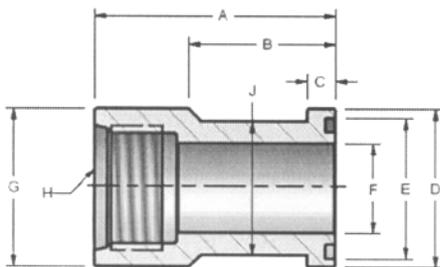


Hydraulic Adapters



CODE 61 NPTF THREAD TO FLANGE HEAD

PART NO.	PIPE SIZE	CLAMP SIZE	A	B	C	D	E	F	G	H NPTF	J
12F-12FO	.75	.75	2.47	1.62	.265	1.500	1.250	.75	1.50	.75	1.234
16F-16FO	1.00	1.00	2.66	1.62	.315	1.750	1.560	1.00	1.75	1.00	1.484
20F-20FO	1.25	1.25	2.84	1.81	.315	2.000	1.750	1.25	2.00	1.25	1.684
24F-24FO	1.50	1.50	3.00	2.00	.315	2.375	2.115	1.50	2.38	1.50	1.964
32F-32FO	2.00	2.00	3.00	2.00	.375	2.812	2.490	2.00	2.81	2.00	2.434



CODE 61 SAE THREAD TO FLANGE HEAD

PART NO.	TUBE SIZE	CLAMP SIZE	A	B	C	D	E	F	G	H UN-2B	J
12S-12FO	.75	.75	2.47	1.62	.265	1.500	1.250	.75	1.50	1 1/16-12	1.234
16S-16FO	1.00	1.00	2.66	1.62	.315	1.750	1.560	1.00	1.75	1 5/16-12	1.484
20S-20FO	1.25	1.25	2.84	1.81	.315	2.000	1.750	1.25	2.00	1 5/8-12	1.684
24S-24FO	1.50	1.50	3.00	2.00	.315	2.375	2.115	1.50	2.38	1 7/8-12	1.964
32S-32FO	2.00	2.00	3.00	2.00	.375	2.812	2.490	2.00	2.81	2 1/2-12	2.434



Butt Weld Pipe

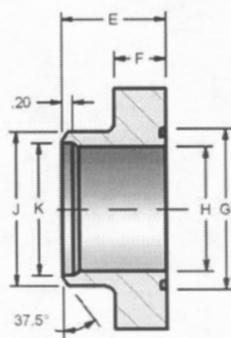
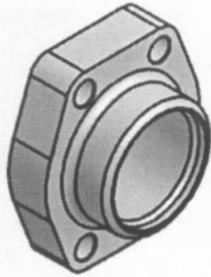


Figure 1

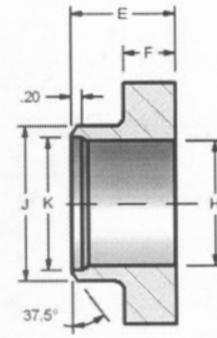
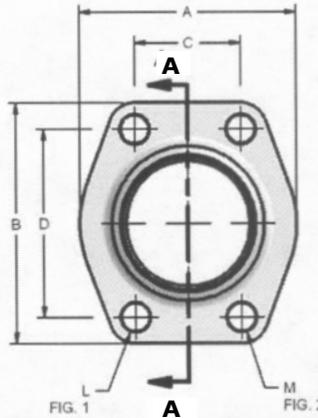


Figure 2

CODE 61 BUTT WELD - SCHEDULE 40 PIPE																	
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L	M UNC-2B	MOUNTING HARDWARE	
																O-RING	SHCS
W35-8	W34-8	.50	.50	1.81	2.13	.688	1.500	1.42	.63	1.000	.548	.840	.624	.344	5/16-18	210	5/16-18X1.25
W35-12	W34-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.250	.744	1.050	.846	.406	3/8-16	214	3/8-16X1.50
W35-16	W34-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.560	.959	1.315	1.051	.406	3/8-16	219	3/8-16X1.50
W35-20	W34-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.750	1.280	1.660	1.382	.469	7/16-14	222	7/16-14X1.75
W35-24	W34-24	1.50	1.50	3.07	3.66	1.406	2.750	1.73	.98	2.115	1.502	1.900	1.612	.531	1/2-13	225	1/2-13X1.75
W35-32	W34-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.490	1.941	2.375	2.069	.531	1/2-13	228	1/2-13X1.75
W35-40	W34-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.995	2.325	2.875	2.471	.531	1/2-13	232	1/2-13X1.75
W35-48	W34-48	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.615	2.902	3.500	3.070	.656	5/8-11	237	5/8-11X2.00

CODE 61 BUTT WELD - SCHEDULE 80 PIPE																	
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L	M UNC-2B	MOUNTING HARDWARE	
																O-RING	SHCS
W24-8	W23-8	.50	.50	1.81	2.13	.688	1.500	1.42	.63	1.000	.548	.840	SCHEDULE 40 ONLY	.344	5/16-18	210	5/16-18X1.25
W24-12	W23-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.250	.744	1.050		.406	3/8-16	214	3/8-16X1.50
W24-16	W23-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.560	.959	1.315		.406	3/8-16	219	3/8-16X1.50
W24-20	W23-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.750	1.280	1.660		.469	7/16-14	222	7/16-14X1.75
W24-24	W23-24	1.50	1.50	3.07	3.66	1.406	2.750	1.73	.98	2.115	1.502	1.900		.531	1/2-13	225	1/2-13X1.75
W24-32	W23-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.490	1.941	2.375		.531	1/2-13	228	1/2-13X1.75
W24-40	W23-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.995	2.325	2.875		.531	1/2-13	232	1/2-13X1.75
W24-48	W23-48	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.615	2.902	3.500		.656	5/8-11	237	5/8-11X2.00

CODE 61 BUTT WELD - SCHEDULE 160 PIPE																	
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L	M UNC-2B	MOUNTING HARDWARE	
																O-RING	SHCS
W27-8	W25-8	.50	.50	1.81	2.13	.688	1.500	1.42	.63	1.000	.466	.840	SCHEDULE 40 ONLY	.344	5/16-18	210	5/16-18X1.25
W27-12	W25-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.250	.614	1.050		.406	3/8-16	214	3/8-16X1.50
W27-16	W25-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.560	.817	1.315		.406	3/8-16	219	3/8-16X1.50
W27-20	W25-20	1.25	1.25	2.68	3.12	1.188	2.132	1.61	.83	1.750	1.162	1.660		.469	7/16-14	222	7/16-14X1.75
W27-24	W25-24	1.50	1.50	3.07	3.66	1.406	2.750	1.73	.98	2.115	1.340	1.900		.531	1/2-13	225	1/2-13X1.75
W27-32	W25-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.490	1.689	2.375		.531	1/2-13	228	1/2-13X1.75
W27-40	W25-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.995	2.127	2.875		.531	1/2-13	232	1/2-13X1.75
W27-48	W25-48	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.615	2.626	3.500		.656	5/8-11	237	5/8-11X2.00



Butt Weld Pipe

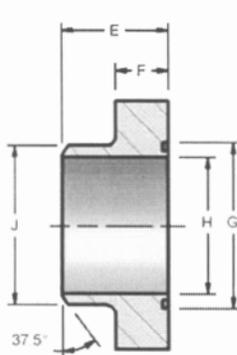


Figure 1

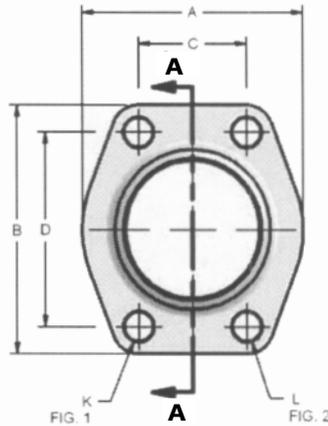
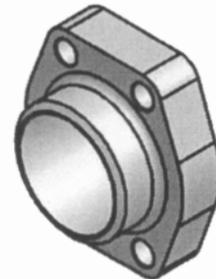


Figure 2



Hydraulic
Adapters

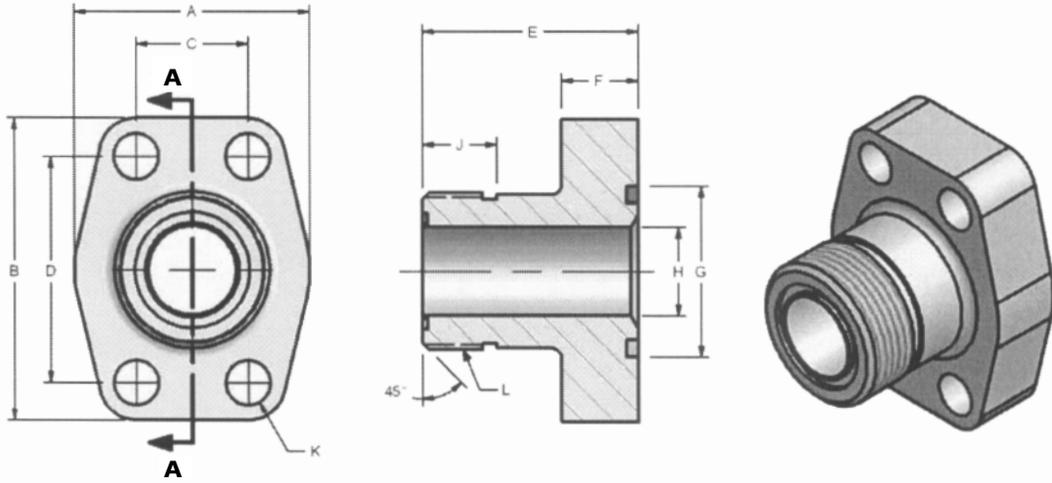
CODE 62 BUTT WELD - SCHEDULE 80 PIPE																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W28-8	W26-8	.50	.50	1.81	2.21	.718	1.594	1.42	.63	1.000	.548	.840	.344	5/16-18	210	5/16-18X1.25
W28-12	W26-12	.75	.75	2.17	2.80	.937	2.000	1.38	.83	1.250	.744	1.050	.406	3/8-16	214	3/8-16X1.50
W28-16	W26-16	1.00	1.00	2.56	3.19	1.093	2.250	1.61	.83	1.560	.959	1.315	.492	7/16-14	219	7/16-14X1.75
W28-20	W26-20	1.25	1.25	3.07	3.75	1.250	2.625	1.73	.98	1.750	1.280	1.660	.531	1/2-13	222	1/2-13X1.75
W28-24	W26-24	1.50	1.50	3.70	4.41	1.437	3.125	2.17	1.18	2.115	1.502	1.900	.656	5/8-11	225	5/8-11X2.25
W28-32	W26-32	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.46	2.490	1.941	2.375	.781	3/4-10	228	3/4-10X2.75

CODE 62 BUTT WELD - SCHEDULE 160 PIPE																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W30-8	W29-8	.50	.50	1.81	2.21	.718	1.594	1.42	.63	1.000	.466	.840	.344	5/16-18	210	5/16-18X1.25
W30-12	W29-12	.75	.75	2.17	2.80	.937	2.000	1.38	.83	1.250	.614	1.050	.406	3/8-16	214	3/8-16X1.50
W30-16	W29-16	1.00	1.00	2.56	3.19	1.093	2.250	1.61	.83	1.560	.817	1.315	.492	7/16-14	219	7/16-14X1.75
W30-20	W29-20	1.25	1.25	3.07	3.75	1.250	2.625	1.73	.98	1.750	1.162	1.660	.531	1/2-13	222	1/2-13X1.75
W30-24	W29-24	1.50	1.50	3.70	4.41	1.437	3.125	2.17	1.18	2.115	1.340	1.900	.656	5/8-11	225	5/8-11X2.25
W30-32	W29-32	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.46	2.490	1.689	2.375	.781	3/4-10	228	3/4-10X2.75

CODE 62 BUTT WELD - SCHEDULE XXS PIPE																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W33-8	W32-8	.50	.50	1.81	2.21	.718	1.594	1.42	.63	1.000	.254	.840	.344	5/16-18	210	5/16-18X1.25
W33-12	W32-12	.75	.75	2.17	2.80	.937	2.000	1.38	.83	1.250	.436	1.050	.406	3/8-16	214	3/8-16X1.50
W33-16	W32-16	1.00	1.00	2.56	3.19	1.093	2.250	1.61	.83	1.560	.601	1.315	.492	7/16-14	219	7/16-14X1.75
W33-20	W32-20	1.25	1.25	3.07	3.75	1.250	2.625	1.73	.98	1.750	.898	1.660	.531	1/2-13	222	1/2-13X1.75
W33-24	W32-24	1.50	1.50	3.70	4.41	1.437	3.125	2.17	1.18	2.115	1.102	1.900	.656	5/8-11	225	5/8-11X2.25
W33-32	W32-32	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.46	2.490	1.505	2.375	.781	3/4-10	228	3/4-10X2.75



Male Thread



Hydraulic Adapters

CODE 61 MALE ORFS														
PART NO.	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UN-2A	MOUNTING HARDWARE	
													O-RING	SHCS
W304-8-8	.50	1.81	2.13	.688	1.500	1.75	.630	1.000	.394	.504	.344	13/16-16	210	5/16-18X1.25
W304-12-12	.75	1.97	2.56	.875	1.875	2.00	.710	1.250	.611	.670	.413	1 3/16-12	214	3/8-16X1.50
W304-16-16	1.00	2.17	2.75	1.031	2.062	2.00	.710	1.560	.811	.689	.413	1 7/16-12	219	3/8-16X1.50
W304-20-20	1.25	2.68	3.12	1.188	2.312	2.25	.830	1.750	1.024	.689	.469	1 11/16-12	222	7/16-14X1.75
W304-24-24	1.50	3.07	3.66	1.406	2.750	2.50	.980	2.115	1.260	.689	.531	2-12	225	1/2-13X2.00

CODE 62 MALE ORFS														
PART NO.	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UN-2A	MOUNTING HARDWARE	
													O-RING	SHCS
W604-8-8	.50	1.81	2.21	.719	1.594	1.75	.630	1.000	.394	.504	.344	13/16-16	210	5/16-18X1.25
W604-12-12	.75	2.17	2.80	.937	2.000	2.25	.830	1.250	.611	.670	.413	1 3/16-12	214	3/8-16X1.50
W604-16-16	1.00	2.56	3.19	1.093	2.250	2.50	.980	1.560	.811	.689	.492	1 7/16-12	219	7/16-14X1.75
W604-20-20	1.25	3.07	3.75	1.250	2.625	2.62	1.060	1.750	1.024	.689	.531	1 11/16-12	222	1/2-13X1.75
W604-24-24	1.50	3.70	4.41	1.437	3.125	2.88	1.180	2.115	1.260	.689	.656	2-12	225	5/8-11X2.25



Flat Socket Weld Pipe

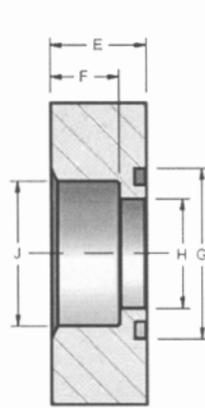
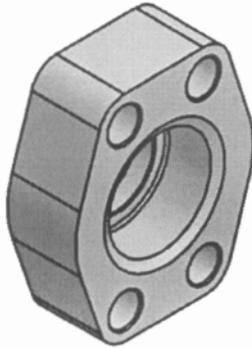


Figure 1

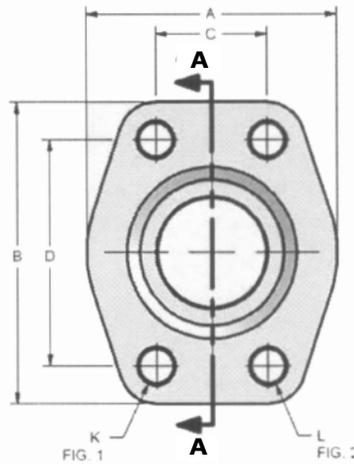


FIG. 1 A FIG. 2

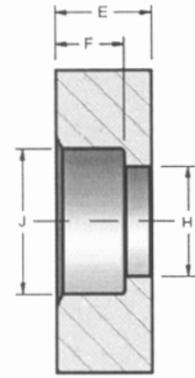


Figure 2

Hydraulic
Adapters

CODE 61 FLAT SOCKET WELD - PIPE																
PART NO. O-RING FIG. 1.	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W4-8-8	W61-8-8	.50	.50	1.813	2.125	.688	1.500	.750	.560	1.000	.502	.855	.344	5/16-18	210	5/16-18X1.50
W4-12-12	W61-12-12	.75	.75	2.063	2.563	.875	1.875	.750	.560	1.250	.752	1.062	.406	3/8-16	214	3/8-16X1.50
W4-16-16	W61-16-16	1.00	1.00	2.313	2.75	1.031	2.063	.880	.630	1.560	1.002	1.328	.406	3/8-16	219	3/8-16X1.75
W4-20-20	W61-20-20	1.25	1.25	2.875	3.125	1.188	2.313	.940	.690	1.750	1.252	1.672	.469	7/16-14	222	7/16-14X1.75
W4-24-24	W61-24-24	1.50	1.50	3.25	3.688	1.406	2.75	1.190	.750	2.115	1.502	1.922	.531	1/2-13	225	1/2-13X2.25
W4-32-32	W61-32-32	2.00	2.00	3.813	4.00	1.688	3.063	1.380	.875	2.490	2.002	2.406	.531	1/2-13	228	1/2-13X2.50
W4-40-40	W61-40-40	2.50	2.50	4.281	4.50	2.000	3.500	1.750	1.00	2.995	2.502	2.906	.531	1/2-13	232	1/2-13X2.75
W4-48-48	W61-48-48	3.00	3.00	5.156	5.313	2.438	4.188	2.120	1.250	3.615	3.002	3.547	.656	5/8-11	237	5/8-11X3.50

CODE 62 FLAT SOCKET WELD - PIPE																
PART NO. O-RING FIG. 1.	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W59-8-8	W60-8-8	.50	.50	1.94	2.30	.718	1.594	1.25	.560	1.000	.502	.855	.344	5/16-18	210	5/16-18X2.00
W59-12-12	W60-12-12	.75	.75	2.50	2.95	.937	2.000	1.250	.560	1.250	.752	1.062	.406	3/8-16	214	3/8-16X2.00
W59-16-16	W60-16-16	1.00	1.00	2.75	3.19	1.093	2.250	1.500	.630	1.560	1.002	1.328	.492	7/16-14	219	7/16-14X2.50
W59-20-20	W60-20-20	1.25	1.25	3.06	3.75	1.250	2.625	1.500	.690	1.750	1.252	1.672	.531	1/2-13	222	1/2-13X2.50
W59-24-24	W60-24-24	1.50	1.50	3.75	4.44	1.437	3.125	1.750	.750	2.115	1.502	1.922	.656	5/8-11	225	5/8-11X3.00
W59-32-32	W60-32-32	2.00	2.00	4.50	5.25	1.750	3.812	1.750	.875	2.490	2.002	2.406	.781	3/4-10	228	3/4-10X3.00
W59-40-40	W60-40-40	2.50	2.50	5.87	6.87	2.312	4.875	2.060	1.000	2.995	2.502	2.906	.906	7/8-9	232	7/8-9X3.50
W59-48-48	W60-48-48	3.00	3.00	7.00	8.50	2.812	6.000	2.620	1.250	3.615	3.002	3.547	1.190	1-1/8-7	237	1 1/8-7X4.50

CODE 61 FLAT SOCKET WELD - PIPE																
PART NO. O-RING FIG. 1.	PART NO. FLAT FACE FIG. 2	PIPE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
*W72-48-48	*W91-48-48	3.00	3.00	5.12	5.31	2.438	4.188	1.380	1.120	3.615	3.002	3.547	.656	5/8-11	237	5/8-11X2.50
W72-56-56	W91-56-56	3.50	3.50	5.50	6.00	2.750	4.750	1.440	1.190	4.095	3.502	4.047	.656	5/8-11	241	5/8-11X2.75
W72-64-64	W91-64-64	4.00	4.00	6.00	6.38	3.062	5.125	1.500	1.250	4.595	4.002	4.578	.656	5/8-11	245	5/8-11X2.75
W72-80-80	W91-80-80	5.00	5.00	7.12	7.25	3.625	6.000	1.750	1.380	5.595	5.002	5.641	.656	5/8-11	253	5/8-11X3.00

*NOTE: 500 PSI max for W72-48-48 & W91-48-48.





Flat Socket Weld Tube

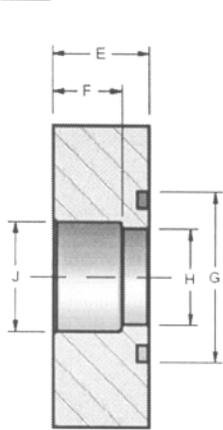


Figure 1

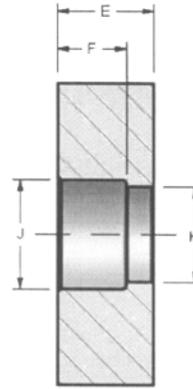
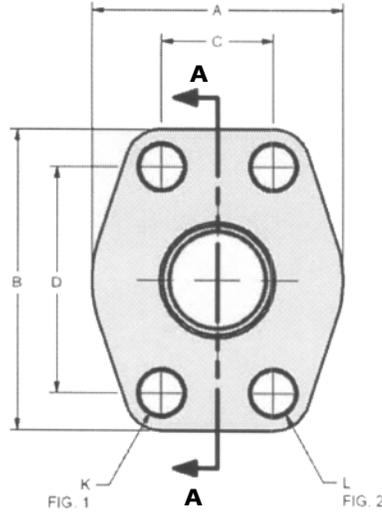
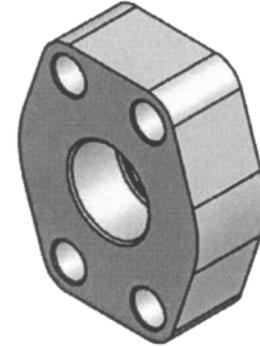


Figure 2



CODE 61 FLAT SOCKET WELD - TUBE																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	TUBE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W6-12-12	W62-12-12	.75	.75	2.060	2.560	.875	1.875	.750	.560	1.250	.625	.752	.406	3/8-16	214	3/8-16X1.50
W6-16-12	W62-16-12	1.00	.75	2.060	2.560	.875	1.875	.750	.560	1.250	.750	1.002	.406	3/8-16	214	3/8-16X1.50
W6-16-16	W62-16-16	1.00	1.00	2.310	2.750	1.031	2.062	.880	.630	1.560	.875	1.002	.406	3/8-16	219	3/8-16X1.75
W6-20-16	W62-20-16	1.25	1.00	2.310	2.750	1.031	2.062	.880	.630	1.560	1.000	1.252	.406	3/8-16	219	3/8-16X1.75
W6-20-20	W62-20-20	1.25	1.25	2.880	3.120	1.188	2.312	.940	.690	1.750	1.125	1.252	.469	7/16-14	222	7/16-14X1.75
W6-24-20	W62-24-20	1.50	1.25	2.880	3.120	1.188	2.312	.940	.690	1.750	1.250	1.502	.469	7/16-14	222	7/16-14X1.75
W6-24-24	W62-24-24	1.50	1.50	3.250	3.690	1.406	2.750	1.190	.750	2.115	1.375	1.502	.531	1/2-13	225	1/2-13X2.25
W6-28-24	W62-28-24	1.75	1.50	3.250	3.690	1.406	2.750	1.190	.750	2.115	1.500	1.752	.531	1/2-13	225	1/2-13X2.25
W6-32-32	W62-32-32	2.00	2.00	3.810	4.000	1.688	3.062	1.380	.875	2.490	1.875	2.002	.531	1/2-13	228	1/2-13X2.50
W6-36-32	W62-36-32	2.25	2.00	3.810	4.000	1.688	3.062	1.380	.875	2.490	2.000	2.252	.531	1/2-13	228	1/2-13X2.50

CODE 62 FLAT SOCKET WELD - TUBE																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	TUBE SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W58-12-12	W63-12-12	.75	.75	2.50	2.95	.937	2.000	1.250	.560	1.250	.625	.752	.406	3/8-16	214	3/8-16X2.00
W58-16-12	W63-16-12	1.00	.75	2.50	2.95	.937	2.000	1.250	.560	1.250	.750	1.002	.406	3/8-16	214	3/8-16X2.00
W58-16-16	W63-16-16	1.00	1.00	2.75	3.19	1.093	2.250	1.500	.630	1.560	.875	1.002	.492	7/16-14	219	7/16-14X2.50
W58-20-16	W63-20-16	1.25	1.00	2.75	3.19	1.093	2.250	1.500	.630	1.560	1.000	1.252	.492	7/16-14	219	7/16-14X2.50
W58-20-20	W63-20-20	1.25	1.25	3.06	3.75	1.250	2.625	1.500	.690	1.750	1.125	1.252	.531	1/2-13	222	1/2-13X2.50
W58-24-20	W63-24-20	1.50	1.25	3.06	3.75	1.250	2.625	1.500	.690	1.750	1.250	1.502	.531	1/2-13	222	1/2-13X2.50
W58-24-24	W63-24-24	1.50	1.50	3.75	4.44	1.437	3.125	1.750	.750	2.115	1.375	1.502	.656	5/8-11	225	5/8-11X3.00
W58-28-24	W63-28-24	1.75	1.50	3.75	4.44	1.437	3.125	1.750	.750	2.115	1.500	1.752	.656	5/8-11	225	5/8-11X3.00
W58-32-32	W63-32-32	2.00	2.00	4.50	5.25	1.750	3.812	1.750	.875	2.490	1.875	2.002	.781	3/4-10	228	3/4-10X3.00
W58-36-32	W63-36-32	2.25	2.00	4.50	5.25	1.750	3.812	1.750	.875	2.490	2.000	2.252	.781	3/4-10	228	3/4-10X3.00

Hydraulic
Adapters





NPTF Thread

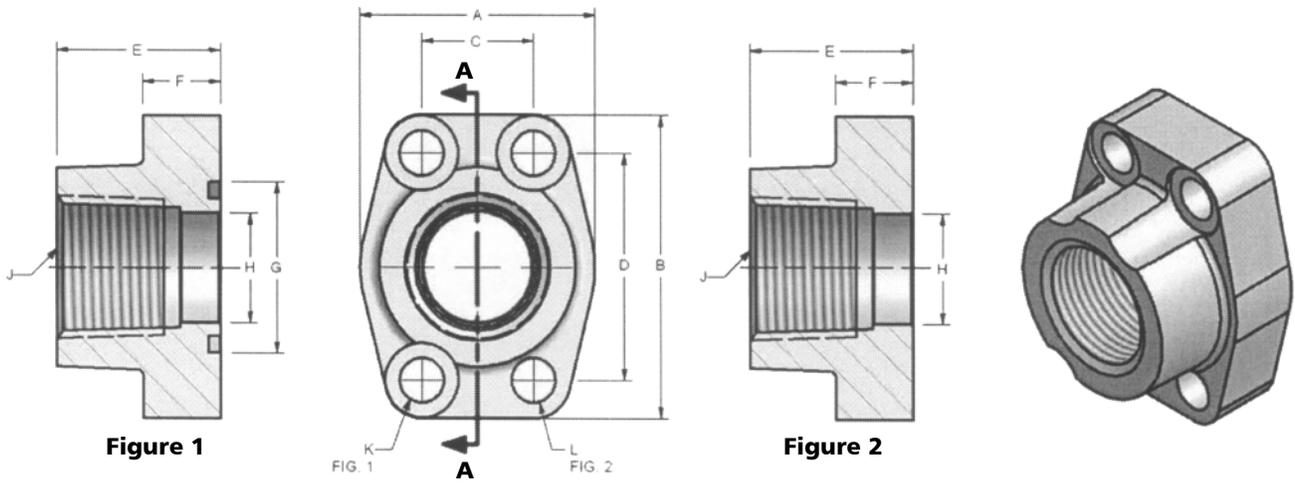


Figure 1

Figure 2

Hydraulic Adapters

CODE 61 NPTF THREAD																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PORT SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J NPTF	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W43-8-8	W104-8-8	.50	.50	1.81	2.13	.688	1.500	1.42	.63	1.000	.502	1/2-14	.344	5/16-18	210	5/16-18X1.25
W43-12-12	W104-12-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.250	.752	3/4-14	.406	3/8-16	214	3/8-16X1.50
W43-16-16	W104-16-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.560	1.002	1-11.5	.406	3/8-16	219	3/8-16X1.50
W43-20-20	W104-20-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.750	1.252	1 1/4-11.5	.469	7/16-14	222	7/16-14X1.75
W43-24-24	W104-24-24	1.50	1.50	3.07	3.66	1.406	2.750	1.77	.98	2.115	1.502	1 1/2-11.5	.531	1/2-13	225	1/2-13X1.75
W43-32-32	W104-32-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.490	2.002	2-11.5	.531	1/2-13	228	1/2-13X1.75
W43-40-40	W104-40-40	2.50	2.50	4.09	4.49	2.000	3.500	1.97	.98	2.995	2.502	2 1/2-8	.531	1/2-13	232	1/2-13X1.75
W43-48-48	W104-48-48	3.00	3.00	4.88	5.28	2.438	4.188	1.97	1.06	3.615	3.002	3-8	.656	5/8-11	237	5/8-11X2.00

CODE 62 NPTF THREAD																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PORT SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J NPTF	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W44-8-8	W45-8-8	.50	.50	1.81	2.21	.718	1.594	1.42	.63	1.000	.502	1/2-14	.344	5/16-18	210	5/16-18X1.25
W44-12-12	W45-12-12	.75	.75	2.17	2.80	.937	2.000	1.38	.83	1.250	.752	3/4-14	.406	3/8-16	214	3/8-16X1.50
W44-16-16	W45-16-16	1.00	1.00	2.56	3.19	1.093	2.250	1.65	.98	1.560	1.002	1-11.5	.492	7/16-14	219	7/16-14X1.75
W44-20-20	W45-20-20	1.25	1.25	3.07	3.75	1.250	2.625	1.77	1.06	1.750	1.252	1 1/4-11.5	.531	1/2-13	222	1/2-13X1.75
W44-24-24	W45-24-24	1.50	1.50	3.70	4.41	1.437	3.125	1.97	1.18	2.115	1.502	1 1/2-11.5	.656	5/8-11	225	5/8-11X2.25
W44-32-32	W45-32-32	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.46	2.490	2.002	2-11.5	.781	3/4-10	228	3/4-10X2.75



SAE Thread

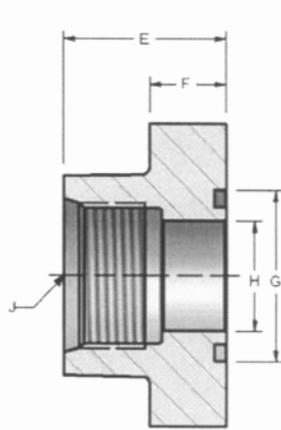
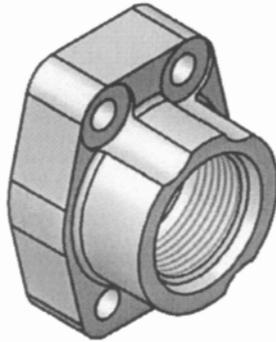


Figure 1

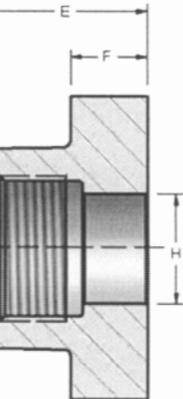
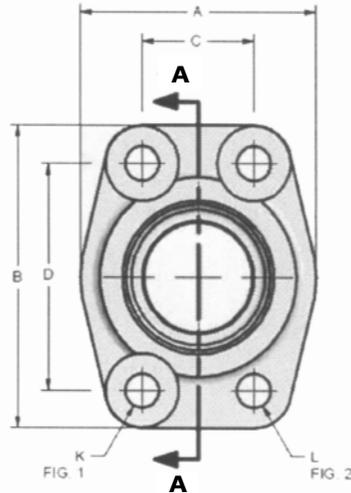


Figure 2

CODE 61 SAE STRAIGHT THREAD																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PORT SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J UN/ UNF-2B	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W46-8-8	W106-8-8	.50	.50	1.81	2.13	.688	1.500	1.42	.63	1.000	.502	3/4-16	.344	5/16-18	210	5/16-18X1.25
W46-12-12	W106-12-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.250	.752	1 1/16-12	.406	3/8-16	214	3/8-16X1.50
W46-16-16	W106-16-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.560	1.002	1 5/16-12	.406	3/8-16	219	3/8-16X1.50
W46-20-20	W106-20-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.750	1.252	1 5/8-12	.469	7/16-14	222	7/16-14X1.75
W46-24-24	W106-24-24	1.50	1.50	3.07	3.66	1.406	2.750	1.77	.98	2.115	1.502	1 7/8-12	.531	1/2-13	225	1/2-13X1.75
*W46-32-32	W106-32-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.490	2.002	2 1/2-12	.531	1/2-13	228	1/2-13X1.75

*NOTE: 500 PSI max for W46-32-32

CODE 62 SAE STRAIGHT THREAD																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PORT SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J UN/ UNF-2B	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W48-8-8	W49-8-8	.50	.50	1.81	2.21	.718	1.594	1.42	.63	1.000	.502	3/4-16	.344	5/16-18	210	5/16-18X1.25
W48-12-12	W49-12-12	.75	.75	2.17	2.80	.937	2.000	1.38	.83	1.250	.752	1 1/8-12	.406	3/8-16	214	3/8-16X1.50
W48-16-16	W49-16-16	1.00	1.00	2.56	3.19	1.093	2.250	1.65	.98	1.560	1.002	1 5/16-12	.492	7/16-14	219	7/16-14X1.75
W48-20-20	W49-20-20	1.25	1.25	3.07	3.75	1.250	2.625	1.77	1.06	1.750	1.252	1 5/8-12	.531	1/2-13	222	1/2-13X1.75
W48-24-24	W49-24-24	1.50	1.50	3.70	4.41	1.437	3.125	1.97	1.18	2.115	1.502	1 7/8-12	.656	5/8-11	225	5/8-11X2.25
W48-32-32	W49-32-32	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.46	2.490	2.002	2 1/2-12	.781	3/4-10	228	3/4-10X2.75

Hydraulic
Adapters



BSPP Thread

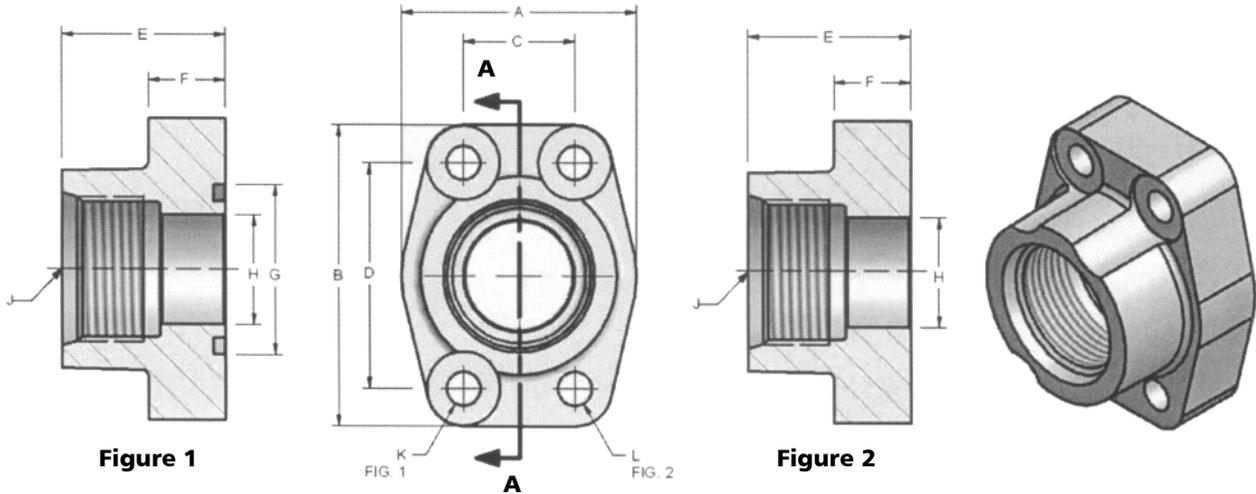


Figure 1

FIG. 1 FIG. 2

Figure 2

Hydraulic
Adapters

CODE 61 BSPP THREAD																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PORT SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J BSPP	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W192-8-8	W193-8-8	.50	.50	1.81	2.13	.688	1.500	1.42	.63	1.000	.502	.50-14	.344	5/16-18	210	5/16-18X1.25
W192-12-12	W193-12-12	.75	.75	1.97	2.56	.875	1.875	1.42	.71	1.250	.752	.75-14	.406	3/8-16	214	3/8-16X1.50
W192-16-16	W193-16-16	1.00	1.00	2.17	2.75	1.031	2.062	1.50	.71	1.560	1.002	1.00-11	.406	3/8-16	219	3/8-16X1.50
W192-20-20	W193-20-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	.83	1.750	1.252	1.25-11	.469	7/16-14	222	7/16-14X1.75
W192-24-24	W193-24-24	1.50	1.50	3.07	3.66	1.406	2.750	1.77	.98	2.115	1.502	1.50-11	.531	1/2-13	225	1/2-13X1.75
W192-32-32	W193-32-32	2.00	2.00	3.54	4.00	1.688	3.062	1.77	.98	2.490	2.002	2.00-11	.531	1/2-13	228	1/2-13X1.75

CODE 62 BSPP THREAD																
PART NO. O-RING FIG. 1	PART NO. FLAT FACE FIG. 2	PORT SIZE	PAD SIZE	A	B	C	D	E	F	G	H	J BSPP	K	L UNC-2B	MOUNTING HARDWARE	
															O-RING	SHCS
W194-8-8	W195-8-8	.50	.50	1.81	2.21	.718	1.594	1.42	.63	1.000	.502	.50-14	.344	5/16-18	210	5/16-18X1.25
W194-12-12	W195-12-12	.75	.75	2.17	2.80	.937	2.000	1.38	.83	1.250	.752	.75-14	.406	3/8-16	214	3/8-16X1.50
W194-16-16	W195-16-16	1.00	1.00	2.56	3.19	1.093	2.250	1.65	.98	1.560	1.002	1.00-11	.492	7/16-14	219	7/16-14X1.75
W194-20-20	W195-20-20	1.25	1.25	3.07	3.75	1.250	2.625	1.77	1.06	1.750	1.252	1.25-11	.531	1/2-13	222	1/2-13X1.50
W194-24-24	W195-24-24	1.50	1.50	3.70	4.41	1.437	3.125	1.97	1.18	2.115	1.502	1.50-11	.656	5/8-11	225	5/8-11X2.00
W194-32-32	W195-32-32	2.00	2.00	4.50	5.28	1.750	3.812	2.56	1.46	2.490	2.002	2.00-11	.781	3/4-10	228	3/4-10X2.75

