

FLANGE ADAPTERS

HYDRAULIC ADAPTERS

STEEL FLANGE ADAPTERS**CONFORMANCE**

- SAE J518

MATERIALS

- Steel per SAE J518 with either black phosphate finish or plated zinc finish or iridite dip. Stainless Steel available upon request.

WORKING PRESSURES

The following table lists the recommended working pressures for steel Four-bolt Solid and Split Flange Fittings and Hose Ends manufactured in accordance with SAE standards J518 and J517. SAE recommends sufficient testing to be conducted to assure that performance levels will be safe and satisfactory, especially if installed in systems operating at elevated pressures or in severe conditions. When using Flanged Fittings that have a threaded connection on one end, use the lower pressure rating of the two.

Caution: Although many Four-bolt Flanged Fittings have sufficient structural integrity to support the weight of many components, we recommend consulting with our technical support department for guidance in selection of parts for this purpose.

**SAE J518 FOUR-BOLT CODE 61
FLANGE PRESSURE RATINGS**

Dash Size	Flange Head OD Inches	4 TO 1 Minimum Burst PSI
-8	1-3/16 - 1.188	5000
-12	1-1/2 - 1.500	5000
-16	1-3/4 - 1.750	5000
-20	2 - 2.000	4000
-24	2-3/8 - 2.375	3000
-32	2-13/16 - 2.812	3000
-40	3-5/16 - 3.312	2500
-48	4 - 4.000	2000
-56	4-1/2 - 4.500	500
-64	5 - 5.000	500
-80	6 - 6.000	500

**SAE J518 FOUR-BOLT CODE 62
FLANGE PRESSURE RATINGS**

Dash Size	Flange Head OD Inches	4 TO 1 Minimum Burst PSI
-8	1-1/4 - 1.250	6000
-12	1-5/8 - 1.625	6000
-16	1-7/8 - 1.875	6000
-20	2-1/8 - 2.125	6000
-24	2-1/2 - 2.500	6000
-32	3-1/8 - 3.125	6000

**STEEL FLANGE ADAPTERS
ASSEMBLY INSTRUCTIONS****RECOMMENDED SOLID FOUR-BOLT**

- Step 1.** Inspect port area to be smooth and free of nicks, burrs, scratches, or contaminants.
- Step 2.** Lubricate the o-ring and place in flange head groove.
- Step 3.** Lubricate screw threads, slip lock washers onto screws, and insert screws into flange
- Step 4.** Position flange on port and finger tighten all screws.
- Step 5.** Torque the screws in a figure eight sequence, incrementally until the appropriate torque value in the following table is achieved.

**J518 CODE 61 AND CODE 62
FLANGE MINIMUM TORQUE VALUES**

Dash Size	Port Size	Code 61 Foot/Lbs.	Code 62 Foot/Lbs.
-8	1/2"	15-19	15-19
-12	3/4"	20-29	25-33
-16	1"	27-35	41-50
-20	1-1/4"	35-46	62-75
-24	1-1/2"	46-58	116-133
-32	2"	53-67	200-217
-40	2-1/2"	79	NA
-48	3"	137	NA
-56	3-1/2"	116	NA
-64	4"	116	NA
-80	5"	116	NA

RECOMMENDED SPLIT FOUR-BOLT

- Step 1.** Follow steps 1 through 3 above, then proceed to the following steps.
- Step 2.** Position both flanges on port and turn one screw in each flange about three turns.
- Step 3.** Rotate each flange away from the port for sufficient clearance to position hose or fitting flange head on port.
- Step 4.** Close each flange until it properly captures flange head. Insert remaining screws and finger tighten.
- Step 5.** Torque the screws in a figure eight sequence incrementally until the appropriate torque value in the preceding table is achieved.

WHY WET TORQUE?

Due to the difference in plating types and thickness, materials, and thread quality of different components, the coefficient of friction varies greatly on any given assembly. Lubrication not only produces a more consistent coefficient of friction, it increases clamping force on sealing area with less torque on the threads. Overtightening causes threads to yield, deform and lose their ability to maintain an adequate load or clamping force on the seating area. Extended operation and severe conditions cause further yielding which results in leaks. Overtightening is the single greatest cause for leaks in metal to metal seat hydraulic connections. It is our firm position, that to not wet torque, is to compromise consistency and quality for convenience.

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JIC FLANGE ADAPTER

CODE 61

6840
503



3000 PSI

PART #	JIC THREAD SIZE 1	FLANGE SIZE 2	
170088	3/4-16	1/2	----
1700812	3/4-16	3/4	----
17001212	1-1/16-12	3/4	----
17001216	1-1/16-12	1	----
17001616	1-5/16-12	1	----
17001620	1-5/16-12	1-1/4	----
17001624	1-5/16-12	1-1/2	----
17002016	1-5/8-12	1	----
17002020	1-5/8-12	1-1/4	----
17002032	1-5/8-12	2	----
17002424	1-7/8-12	1-1/2	----
17003232	2-1/2-12	2	----
17002024	1-5/8-12	1-1/2	----
17002420	1-7/8-12	1-1/4	----
17001612	1-5/16-12	3/4	----
17002432	1-7/8-12	2	----

6840 503

JIC FLANGE 450 ADAPTER

CODE 61

6845
505



3000 PSI

Part #	JIC Thread Size 1	Flange Size 2	
170388	3/4-16	1/2	----
1703812	3/4-16	3/4	----
17031212	1-1/16-12	3/4	----
17031216	1-1/16-12	1	----
17031616	1-5/16-12	1	----
17031620	1-5/16-12	1-1/4	----
17032016	1-5/8-12	1	----
17032020	1-5/8-12	1-1/4	----
17032024	1-5/8-12	1-1/2	----
17033232	2-1/2-12	2	----
17032420	1-7/8-12	1-1/4	----
17032424	1-7/8-12	1-1/2	----
17032432	1-7/8-12	2	----
17031612	1-5/16-12	3/4	----

6845 505

JIC FLANGE 90° ADAPTER

CODE 61



3000 PSI

Part #	JIC Thread Size 1	Flange Size 2	
170488	3/4-16	1/2	----
1704812	3/4-16	3/4	----
17041016	7/8-14	1	----
17041212	1-1/16-12	3/4	----
17041216	1-1/16-12	1	----
17041220	1-1/16-12	1-1/4	----
17041612	1-5/16-12	3/4	----
17041616	1-5/16-12	1	----
17041620	1-5/16-12	1-1/4	----
17041624	1-5/16-12	1-1/2	----
17042016	1-5/8-12	1	----
17042020	1-5/8-12	1-1/4	----
17042024	1-5/8-12	1-1/2	----
17042420	1-7/8-12	1-1/4	----
17042432	1-7/8-12	2	----
17043232	2-1/2-12	2	----
17042032	1-5/8-12	2	----
17042424	1-7/8-12	1-1/2	----

6890 504

JIC FLANGE ADAPTER

CODE 62



6000 PSI

Part #	JIC Thread Size 1	Flange Size 2	
180088	3/4-16	1/2	----
18001212	1-1/16-12	3/4	----
18001216	1-1/16-12	1	----
18001616	1-5/16-12	1	----
18001620	1-5/16-12	1-1/4	----
18002016	1-5/8-12	1	----
18002020	1-5/8-12	1-1/4	----
18002024	1-5/8-12	1-1/2	----
18002424	1-7/8-12	1-1/2	----
18003232	2-1/2-12	2	----
18001612	1-5/16-12	3/4	----
18001624	1-5/16-12	1-1/2	----
18002420	1-7/8-12	1-1/4	----

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FLANGE ADAPTERS

HYDRAULIC ADAPTERS

JIC FLANGE 45° ADAPTER CODE 62



PART #	JIC THREAD SIZE 1	FLANGE SIZE 2	
18031212	1-1/16-12	3/4	----
18031216	1-1/16-12	1	----
18031616	1-5/16-12	1	----
18031620	1-5/16-12	1-1/4	----
18032016	1-5/8-12	1	----
18032020	1-5/8-12	1-1/4	----
18032024	1-5/8-12	1-1/2	----
18032424	1-7/8-12	1-1/2	----
18033232	2-1/2-12	2	----
18031612	1-5/16-12	3/4	----
18031624	1-5/16-12	1-1/2	----
18032420	1-7/8-12	1-1/4	----

6847 508

JIC FLANGE 90° ADAPTER - CODE 62



PART #	JIC THREAD SIZE 1	FLANGE SIZE 2	
18041212	1-1/16-12	3/4	----
18041216	1-1/16-12	1	----
18041616	1-5/16-12	1	----
18041620	1-5/16-12	1-1/4	----
18042016	1-5/8-12	1	----
18042020	1-5/8-12	1-1/4	----
18042024	1-5/8-12	1-1/2	----
18042424	1-7/8-12	1-1/2	----
18043232	2-1/2-12	2	----
18041612	1-5/16-12	3/4	----
18041624	1-5/16-12	1-1/2	----
18042420	1-7/8-12	1-1/4	----

6842

SPLIT FLANGE PLUG - CODE 61



PART #	FLANGE SIZE	
196112	3/4	----
196116	1	----
196120	1-1/4	----
196124	1-1/2	----
196132	2	----

6861P

SPLIT FLANGE PLUG CODE 62



6000 PSI

PART #	FLANGE SIZE	
196212	3/4	----
196216	1	----
196220	1-1/4	----
196224	1-1/2	----
196232	2	----

6862P

SPLIT FLANGE KIT CODE 61

SFK



3000 PSI

PART #	FLANGE SIZE	FLANGE HEAD DIA.	
190112	3/4	1.50	----
190116	1	1.75	----
190120	1-1/4	2.00	----
190124	1-1/2	2.38	----
190132	2	2.81	----

SPLIT FLANGE KIT CODE 62

SFXK



6000 PSI

PART #	FLANGE SIZE	FLANGE HEAD DIAMETER	
190212	3/4	1.63	----
190216	1	1.88	----
190220	1-1/4	2.12	----
190224	1-1/2	2.50	----
190232	2	3.12	----

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SPLIT FLANGE HALF CODE 61

SF



3000 PSI

PART #	FLANGE SIZE	FLANGE HEAD DIAMETER	
206112	3/4	1.50	----
206116	1	1.75	----
206120	1-1/4	2.00	----
206124	1-1/2	2.38	----
206132	2	2.81	----

SPLIT FLANGE HALF CODE 62

SFX



6000 PSI

PART #	FLANGE SIZE	FLANGE HEAD DIAMETER	
206212	3/4	1.63	----
206216	1	1.88	----
206220	1-1/4	2.12	----
206224	1-1/2	2.50	----
206232	2	3.12	----

PIPE THREAD FLANGE PAD CODE 61

W43



3000 PSI

PART #	PIPE SIZE	
226188	1/2	----
22611212	3/4	----
22611616	1	----
22612020	1-1/4	----
22612424	1-1/2	----
22613232	2	----

PIPE THREAD FLANGE PAD CODE 62

W44



6000 PSI

PART #	PIPE SIZE	
22621212	3/4	----
22621616	1	----
22622020	1-1/4	----
22622424	1-1/2	----
22623232	2	----

O-RING FLANGE PAD CODE 61

W46



3000 PSI

PART #	O-RING THREAD SIZE	PAD SIZE	
23611212	1-1/16-12	3/4	----
23611616	1-5/16-12	1	----
23612020	1-5/8-12	1-1/4	----
23612424	1-7/8-12	1-1/2	----

O-RING FLANGE PAD CODE 62

W48



6000 PSI

PART #	O-RING THREAD SIZE	PAD SIZE	
23621212	1-1/16-12	3/4	----
23621616	1-5/16-12	1	----
23622020	1-5/8-12	1-1/4	----
23622424	1-7/8-12	1-1/2	----