

# TECHNICAL INFORMATION

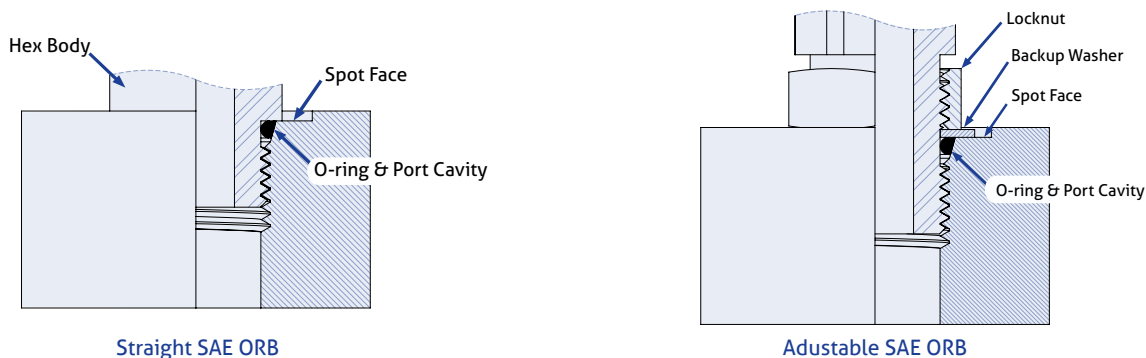
## HYDRAULIC ADAPTERS

### SAE O-Ring Boss Port Specifications

O-ring Boss ports (ORB) provide a seal by trapping the fitting's O-ring inside a port cavity. When a fitting is installed into the port, the O-ring is trapped between the fitting body hex or washer and port cavity.

Straight fittings include a hex, and sometimes an additional cylindrical shoulder below the hex and above the threads, to trap the O-ring in the port cavity.

Elbow and Tee fittings require a backup washer and a locknut above the O-ring on the threaded stud to permit a 360° orientation of the fitting around the port.



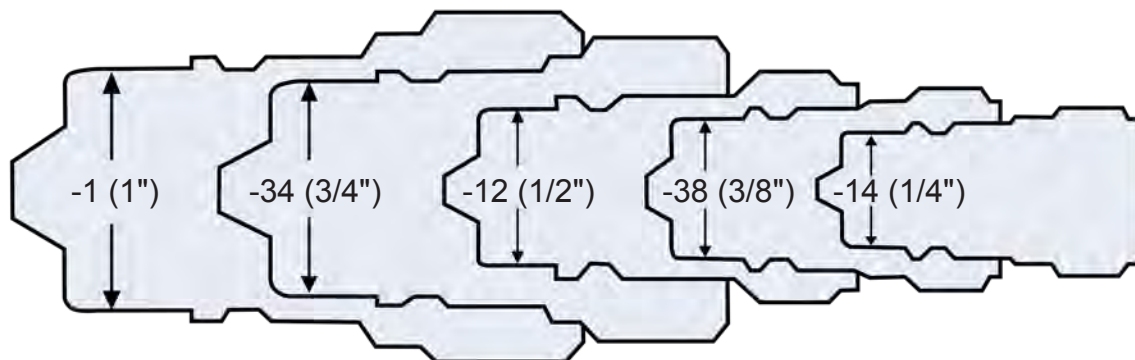
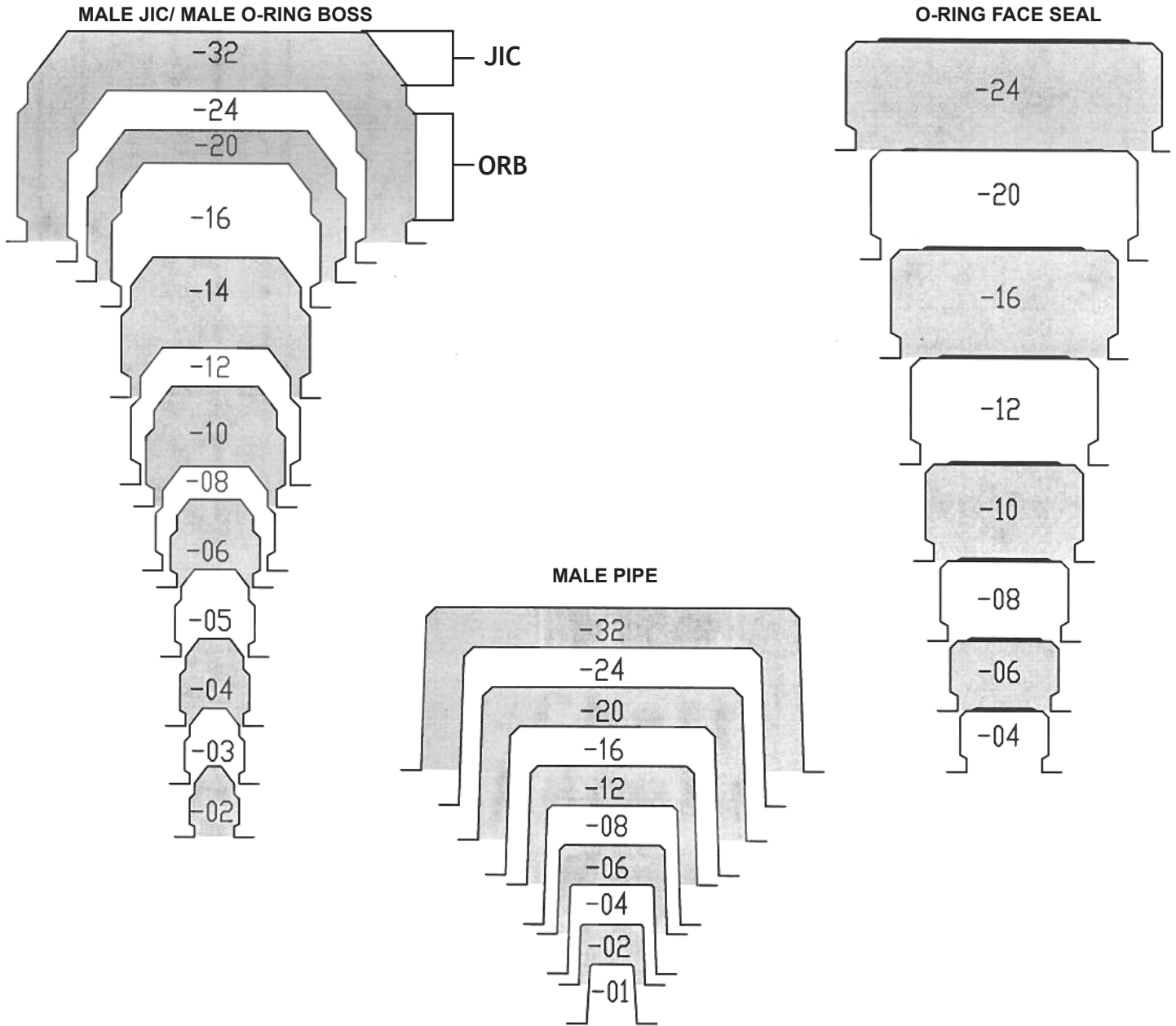
The following table lists the specifications for SAE O-Ring Boss Ports.

SAE O-Ring Boss Specifications								
Dash Size	Tube Size	Thread	SAE-ORB to JIC and Pipe Fittings*			SAE-ORB to ORFS Fittings**		
			Torque	Working Pressure		Torque	Working Pressure	
			Adjustable & Non-Adjustable	Adjustable	Non-Adjustable	Adjustable & Non-Adjustable	Adjustable	Non-Adjustable
			(ft-lbs) +25% -0%	(psi)	(psi)	(ft-lbs) +25% -0%	(psi)	(psi)
02	1/8	5/16-24	6	4500	4500	-	-	-
03	3/16	3/8-24	7	4500	4500	7	5800	9100
04	1/4	7/16-20	13	4500	4500	15	5800	9100
05	5/16	1/2-20	18	4500	4500	18	5800	9100
06	3/8	9/16-18	22	3600	4500	26	5800	9100
08	1/2	3/4-16	37	3600	4500	52	5800	9100
10	5/8	7/8-14	44	2900	3600	74	5800	9100
12	3/4	1-1/16-12	70	2900	3600	125	5800	5800
14	7/8	1-3/16-12	92	2300	2900	158	5800	5800
16	1	1-5/16-12	111	2300	2900	199	4500	5800
20	1 1/4	1-5/8-12	147	1800	2300	210	3600	3600
24	1 1/2	1-7/8-12	155	1800	2300	273	2900	3600
32	2	2-1/2-12	221	1450	1800	-	-	-

\* = Light duty studs included on JIC, NPTF and NPSM fittings per SAE J1926/3 & J514  
 \*\* = Heavy duty studs included on ORFS fittings per SAE J1926/2 & J1453

Note: Torque values are for wet torque and are allowed up to 25% the listed value according to SAE J2593.

**PROFILE SIZE CHART**



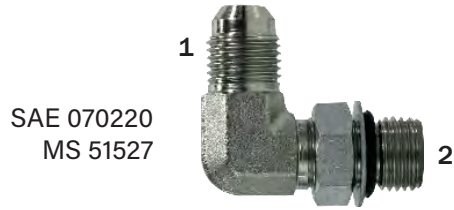
AG INTERCHANGE - NV SERIES



# STEEL O-RING ADAPTERS

## HYDRAULIC ADAPTERS

### JIC TO O-RING ELBOW CONNECTOR

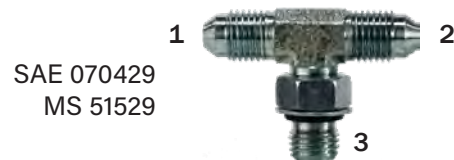


SAE 070220  
MS 51527

PART #	JIC THREAD SIZE 1	O-RING THREAD SIZE 2	
6801NWO4	7/16-20	7/16-20	----
6801NWO46	7/16-20	9/16-18	----
6801NWO48	7/16-20	3/4-16	----
6801NWO6	9/16-18	9/16-18	----
6801NWO64	9/16-18	7/16-20	----
6801NWO68	9/16-18	3/4-16	----
6801NWO612	9/16-18	1-1/16-12	----
6801NWO8	3/4-16	3/4-16	----
6801NWO86	3/4-16	9/16-18	----
6801NWO810	3/4-16	7/8-14	----
6801NWO812	3/4-16	1-1/16-12	----
6801NWO816	3/4-16	1-5/16-12	----
6801NWO10	7/8-14	7/8-14	----
6801NWO106	7/8-14	9/16-18	----
6801NWO108	7/8-14	3/4-16	----
6801NWO1016	7/8-14	1-5/16-12	----
6801NWO12	1-1/16-12	1-1/16-12	----
6801NWO128	1-1/16-12	3/4-16	----
6801NWO1210	1-1/16-12	7/8-14	----
6801NWO1216	1-1/16-12	1-5/16-12	----
6801NWO16	1-5/16-12	1-5/16-12	----
6801NWO1612	1-5/16-12	1-1/16-12	----
6801NWO1620	1-5/16-12	1-5/8-12	----
6801NWO20	1-5/8-12	1-5/8-12	----
6801NWO2016	1-5/8-12	1-5/16-12	----
6801NWO2024	1-5/8-12	1-7/8-12	----
6801NWO24	1-7/8-12	1-7/8-12	----
6801NWO32	2-1/2-12	2-1/2-12	----

6801 2062R C50X 1238L C5515

### JIC TO O-RING - BRANCH TEE



SAE 070429  
MS 51529

PART #	JIC THREAD SIZE 1 & 2	O-RING THREAD SIZE 3	
6803NWO4	7/16-20	7/16-20	----
6803NWO6	9/16-18	9/16-18	----
6803NWO8	3/4-16	3/4-16	----
6803NWO10	7/8-14	7/8-14	----
6803NWO12	1-1/16-12	1-1/16-12	----
6803NWO16	1-5/16-12	1-5/16-12	----

6803 203003X S50X 1265R C5715

### JIC TO O-RING 45° ELBOW



SAE 070320  
MS 51528

PART #	JIC THREAD SIZE 1	O-RING THREAD SIZE 2	
6802NWO2	5/16-24	5/16-24	----
6802NWO4	7/16-20	7/16-20	----
6802NWO46	7/16-20	9/16-18	----
6802NWO6	9/16-18	9/16-18	----
6802NWO68	9/16-18	3/4-16	----
6802NWO8	3/4-16	3/4-16	----
6802NWO86	3/4-16	9/16-18	----
6802NWO810	3/4-16	7/8-14	----
6802NWO812	3/4-16	1-1/16-12	----
6802NWO10	7/8-14	7/8-14	----
6802NWO108	7/8-14	3/4-16	----
6802NWO1012	7/8-14	1-1/16-12	----
6802NWO12	1-1/16-12	1-1/16-12	----
6802NWO1216	1-1/16-12	1-5/16-12	----
6802NWO16	1-5/16-12	1-5/16-12	----
6802NWO1612	1-5/16-12	1-1/16-12	----
6802NWO1620	1-5/16-12	1-5/8-12	----
6802NWO20	1-5/8-12	1-5/8-12	----
6802NWO2016	1-5/8-12	1-5/16-12	----
6802NWO24	1-7/8-12	1-7/8-12	----
6802NWO32	2-1/2-12	2-1/2-12	----

6802 2061 V50X 1240R C5365

### O-RING TO - FEMALE PIPE ELBOW



PART #	O-RING THREAD SIZE 1	PIPE THREAD SIZE 2	
6805NWO42	7/16-20	1/8	----
6805NWO44	7/16-20	1/4	----
6805NWO64	9/16-18	1/4	----
6805NWO66	9/16-18	3/8	----
6805NWO86	3/4-16	3/8	----
6805NWO88	3/4-16	1/2	----
6805NWO108	7/8-14	1/2	----
6805NWO128	1-1/16-12	1/2	----
6805NWO1212	1-1/16-12	3/4	----
6805NWO1616	1-5/16-12	1	----
6805NWO2020	1-5/8-12	1-1/4	----
6805NWO2424	1-7/8-12	1-1/2	----

6805 206801R AE0G 1264 C3459

# STEEL O-RINGS

## HYDRAULIC ADAPTERS

### O-RING TO MALE PIPE ELBOW



PART #	O-RING THREAD SIZE 1	PIPE THREAD SIZE 2	
6806NWO44	7/16-20	1/4	----
6806NWO66	9/16-18	3/8	----
6806NWO88	3/4-16	1/2	----
6806NWO1212	1-1/16-12	3/4	----
6806NWO1616	1-5/16-12	1	----

6806 1263 TF3569

### O-RING TO 37° JIC SWIVEL NUT TO O-RING ELBOW



PART #	O-RING THREAD SIZE 1	JIC THREAD SIZE 2	
6809NWO44	7/16-20	7/16-20	----
6809NWO66	9/16-18	9/16-18	----
6809NWO88	3/4-16	3/4-16	----
6809NWO1212	1-1/16-12	1-1/16-12	----

### FEMALE O-RING TO MALE O-RING ELBOW



PART #	O-RING THREAD SIZE 1	O-RING THREAD SIZE 2	
6815NWO44	7/16-20	7/16-20	----
6815NWO66	9/16-18	9/16-18	----
6815NWO88	3/4-16	3/4-16	----
6815NWO1010	7/8-14	7/8-14	----
6815NWO1212	1-1/16-12	1-1/16-12	----

### MALE O-RING SWIVEL ADAPTER

SAE 140157



PART #	O-RING THREAD SIZE 1	FEMALE NPSM SIZE 2	
6900O42	7/16-20	1/8	----
6900O44	7/16-20	1/4	----
6900O46	7/16-20	3/8	----
6900O48	7/16-20	1/2	----
6900O64	9/16-18	1/4	----
6900O66	9/16-18	3/8	----
6900O68	9/16-18	1/2	----
6900O84	3/4-16	1/4	----
6900O86	3/4-16	3/8	----
6900O88	3/4-16	1/2	----
6900O812	3/4-16	3/4	----
6900O104	7/8-14	1/4	----
6900O106	7/8-14	3/8	----
6900O108	7/8-14	1/2	----
6900O1012	7/8-14	3/4	----
6900O128	1-1/16-12	1/2	----
6900O1212	1-1/16-12	3/4	----
6900O1612	1-5/16-12	3/4	----
6900O1616	1-5/16-12	1	----

6900 2066R 1235 9315

**WARNING:** This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.  
 For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



6401 2068R 1271 9515

# STEEL SAE O-RING

## HYDRAULIC ADAPTERS

### 90° O-RING SWIVEL ADAPTER



PART #	O-RING THREAD SIZE 1	FEMALE NPSM SIZE 2	
6901NWO42	7/16-20	1/8	----
6901NWO44	7/16-20	1/4	----
6901NWO64	9/16-18	1/4	----
6901NWO66	9/16-18	3/8	----
6901NWO68	9/16-18	1/2	----
6901NWO84	3/4-16	1/4	----
6901NWO86	3/4-16	3/8	----
6901NWO88	3/4-16	1/2	----
6901NWO812	3/4-16	3/4	----
6901NWO104	7/8-14	1/4	----
6901NWO106	7/8-14	3/8	----
6901NWO108	7/8-14	1/2	----
6901NWO126	1-1/16-12	3/8	----
6901NWO128	1-1/16-12	1/2	----
6901NWO1212	1-1/16-12	3/4	----
6901NWO1612	1-5/16-12	3/4	----
6901NWO1616	1-5/16-12	1	----
6901NWO2016	1-5/8-12	1	----
6901NWO2020	1-5/8-12	1-1/4	----
6901NWO2424	1-7/8-12	1-1/2	----
6901NWO3232	2-1/2-12	2	----

### 45° O-RING SWIVEL ADAPTER

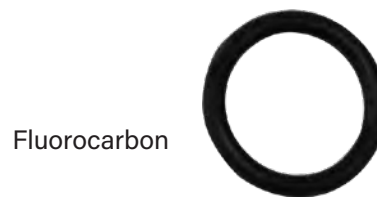


PART #	O-RING THREAD SIZE 1	FEMALE NPSM SIZE 2	
6902NWO42	7/16-20	1/8	----
6902NWO44	7/16-20	1/4	----
6902NWO46	7/16-20	3/8	----
6902NWO64	9/16-18	1/4	----
6902NWO66	9/16-18	3/8	----
6902NWO68	9/16-18	1/2	----
6902NWO84	3/4-16	1/4	----
6902NWO86	3/4-16	3/8	----
6902NWO88	3/4-16	1/2	----
6902NWO108	7/8-14	1/2	----
6902NWO128	1-1/16-12	1/2	----
6902NWO1212	1-1/16-12	3/4	----
6902NWO1616	1-5/16-12	1	----

6902 2067R 1272 9365

## O-RINGS

### VITON 75 SAE BOSS O-RING



PART #	O-RING THREAD	
400122	5/16-24	----
400144	7/16-20	----
400166	9/16-18	----
400188	3/4-16	----
400110	7/8-14	----
400112	1-1/16-12	----
400116	1-5/16-12	----
400120	1-5/8-12	----
400124	1-7/8-12	----
400132	2-1/2-12	----

### NITRILE 90 SAE BOSS O-RING



PART #	O-RING THREAD	
400022	5/16-24	----
400044	7/16-20	----
400066	9/16-18	----
400088	3/4-16	----
400010	7/8-14	----
400012	1-1/16-12	----
400014	1-3/16-12	----
400016	1-5/16-12	----
400020	1-5/8-12	----
400024	1-7/8-12	----
400032	2-1/2-12	----

### BRAZE TUBE NUT (SLEEVE REQUIRED)



PART #	TUBE O.D.	BRAZE TUBE O.D.	
FSO3184	1/4	.25	----
FSO3186	3/8	.38	----
FSO3188	1/2	.50	----
FSO31810	5/8	.62	----
FSO31812	3/4	.72	----
FSO31816	1	1.00	----
FSO31820	1 1/4	1.25	----
FSO31824	1 1/2	1.50	----

FF318 FF1311