# **Swivel Joints**

# **FS65**

FS65 Balanced-Pressure Series Swivel Joints answer customer requests for a more cost competitive, compact product.

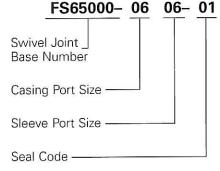
FS65 Series Swivel Joints feature compact forged casings. Their balanced-pressure design distributes pressure evenly through the body of the joints, eliminating axial loading of the sleeve. This allows the swivel joints to rotate with very low torque—even up to their fully rated operating pressure.

The FS65 is available in sizes 1/4 - inch to 1 - inch. The swivel joints have pressure capabilities up to 5,000 psi for the 1/4-inch and 3/8-inch sizes; 3,500 psi for the 1/2-inch, 5/8-inch, and 3/4-inch sizes; and 3,000 psi for the 1-inch size.

### How to Order

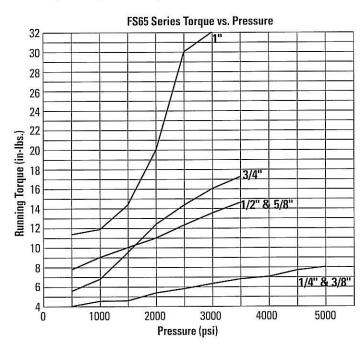
When ordering a swivel joint, follow these steps:

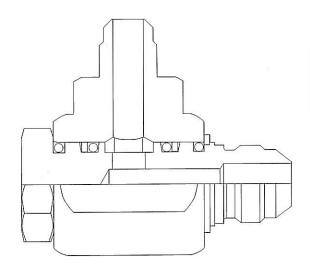
- State the base part number, casing and sleeve port size, as shown.
- 2. Add the suffix code which indicates the seal required, as shown in the seal chart at right.



Torque vs. Pressure

FS65 Series Swivel Joints perform best in class when it comes to side-load testing, while impulsing at 133 percent of maximum operating pressure—and rotating through a 120-degree angular sweep forward and in reverse.





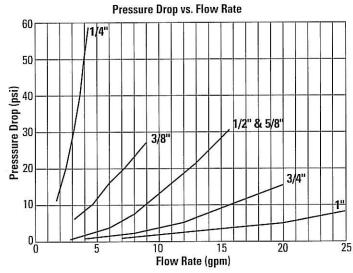
## **Seal Material Options**

SEAL CODE	MATERIAL	DESCRIPTION	APPLICATION
-01	Buna-N	O-Ring Seal	Hydraulic Oils, Water Glycol
-04	EPR	O-Ring Seal	Brake Fluids, Water, Phosphate Ester, Alcohols
-06	Viton™	O-Ring Seal	Chemicals, Gasoline, Aromatic Solvents

Viton is a registered trademark of E.I. DuPont.

#### Pressure Drop vs Flow

FS65 Series Swivel Joints passed the minimum requirements of 150,000 cycles for the 1/4-inch and 3/8-inch nominal sizes, and 200,000 cycles for the 1/2-inch through 1-inch sizes, while measuring zero leakage per SAE J1176.



### Pressure Rating for FS65 Series

SWIVEL SIZE	OPERATING PRESSURE (PSI)	
1/4"	5000	
3/8"	5000	
1/2"	3500	

SWIVEL SIZE	OPERATING PRESSURE (PSI)	
5/8"	3500	
3/4"	3500	
1"	3000	