

# Hydraulic Quick Couplings

General Purpose

## SM Series High Pressure

Manual Sleeve, Poppet Valve



SM Series double shut-off couplings are versatile for use across a spectrum of hydraulic applications where fluid lines require connection and disconnection. Couplers and nipples are steel with nitrile seals and are available in 1/4 through 3/4 inch sizes.



### Features:

- Rated pressures up to 6000 psi
- Poppet valves have captive seals to minimize seal washout
- Steel material with standard nitrile seals
- Standard end configurations include female pipe, straight thread ORB, and British pipe
- Alternative seal materials available

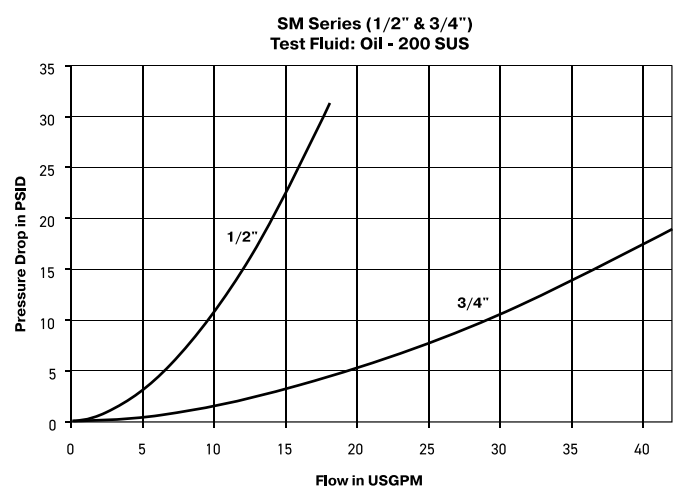
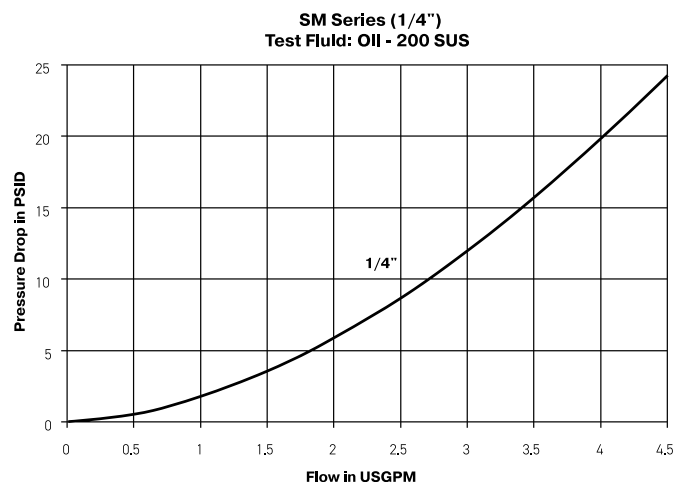
### Applications include:

- Industrial hydraulic lines
- Mobile equipment

### SM Series Specification

| Body Size                         | 1/4            | 1/2   | 3/4   |
|-----------------------------------|----------------|-------|-------|
| Rated Pressure (psi)              | 6,000          | 6,000 | 4,500 |
| Rated Flow (gpm)                  | 3              | 12    | 28    |
| Temperature Range (Nitrile Seals) | -40° to +250°F |       |       |

### Performance



### Optional Materials and Features:

(add code to part number)

Contact QCD for availability and additional options.

To select proper seal materials, see Fluid Compatibility Chart or contact QCD.

| Code               | Description                            | Part Number Example |
|--------------------|----------------------------------------|---------------------|
| suffix <b>-SL</b>  | Sleeve-Lok (Couplers)                  | SM-501-8FP-SL       |
| suffix <b>-E5</b>  | Ethylene Propylene seal material (EPR) | SM-501-8FP-E5       |
| suffix <b>-E4</b>  | Fluorocarbon seal material             | SM-501-8FP-E4       |
| suffix <b>-E12</b> | Neoprene seal material                 | SM-501-8FP-E12      |

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### SM Series Couplers - Female Thread



| Body Size (in.) | Part Number Steel | Thread Size     | Length (in.) | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------------|-------------------|-----------------|--------------|------------------|--------------|---------------|
| 1/4             | SM-251-4FP        | 1/4-18 NPTF     | 2.09         | 1.06             | 0.75         | 0.24          |
| 1/4             | SM-251-4FB        | G1/4 BSPP       | 2.24         | 1.06             | 0.75         | 0.26          |
| 1/4             | SM-251-6FP        | 3/8-18 NPTF     | 2.24         | 1.06             | 0.94         | 0.28          |
| 1/4             | SM-251-6FB        | G3/8 BSPP       | 2.24         | 1.06             | 0.94         | 0.26          |
| 1/4             | SM-251-6FO        | 9/16-18 ORB     | 2.24         | 1.06             | 0.75         | 0.25          |
| 1/2             | SM-501-8FP        | 1/2-14 NPTF     | 3.00         | 1.56             | 1.25         | 0.70          |
| 1/2             | SM-501-8FB        | G1/2 BSPP       | 3.00         | 1.56             | 1.25         | 0.74          |
| 1/2             | SM-501-8FO        | 3/4-16 ORB      | 3.16         | 1.56             | 1.25         | 0.70          |
| 1/2             | SM-501-12FP       | 3/4-14 NPTF     | 3.07         | 1.56             | 1.37         | 0.81          |
| 1/2             | SM-501-12FB       | G3/4 BSPP       | 3.16         | 1.56             | 1.37         | 0.85          |
| 3/4             | SM-751-12FO       | 1 1/16-12 ORB   | 3.89         | 2.22             | 1.62         | 1.78          |
| 3/4             | SM-751-12FP       | 3/4-14 NPTF     | 3.77         | 2.22             | 1.62         | 1.83          |
| 3/4             | SM-751-12FB       | G3/4 BSPP       | 3.89         | 2.22             | 1.62         | 1.88          |
| 3/4             | SM-751-16FP       | 1-11 1/2 NPTF   | 3.98         | 2.22             | 1.62         | 1.84          |
| 3/4             | SM-751-16FB       | G 1 BSPP        | 3.98         | 2.22             | 1.62         | 1.89          |
| 3/4             | SM-751-16FO       | 1-5/16 - 12 ORB | 3.98         | 2.22             | 1.62         | 1.89          |



#### WARNING

This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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### SM Series Nipples - Female Thread



| Body Size (in.) | Part Number Steel | Thread Size     | Length (in.) | Exposed Length* | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------------|-------------------|-----------------|--------------|-----------------|------------------|--------------|---------------|
| 1/4             | SM-252-4FP        | 1/4-18 NPTF     | 1.49         | 0.50            | 0.87             | 0.75         | 0.08          |
| 1/4             | SM-252-4FB        | G1/4 BSPP       | 1.64         | 0.65            | 0.87             | 0.75         | 0.09          |
| 1/4             | SM-252-6FP        | 3/8-18 NPTF     | 1.64         | 0.81            | 1.08             | 0.94         | 0.14          |
| 1/4             | SM-252-6FB        | G3/8 BSPP       | 1.64         | 0.81            | 1.08             | 0.94         | 0.14          |
| 1/4             | SM-252-6FO        | 9/16-18 ORB     | 1.64         | 0.55            | 0.87             | 0.75         | 0.08          |
| 1/2             | SM-502-8FO        | 3/4-16 ORB      | 2.14         | 0.72            | 1.23             | 1.06         | 0.16          |
| 1/2             | SM-502-8FP        | 1/2-14 NPTF     | 2.01         | 0.45            | 1.23             | 1.06         | 0.15          |
| 1/2             | SM-502-8FB        | G1/2 BSPP       | 2.01         | 0.60            | 1.23             | 1.06         | 0.18          |
| 1/2             | SM-502-12FP       | 3/4-14 NPTF     | 2.31         | 0.90            | 1.59             | 1.37         | 0.30          |
| 1/2             | SM-502-12FB       | G3/4 BSPP       | 2.63         | 1.07            | 1.59             | 1.37         | 0.34          |
| 3/4             | SM-752-12FO       | 1 1/16-12 ORB   | 2.60         | 0.39            | 1.73             | 1.50         | 0.48          |
| 3/4             | SM-752-12FP       | 3/4-14 NPTF     | 2.48         | 0.39            | 1.73             | 1.50         | 0.52          |
| 3/4             | SM-752-12FB       | G3/4 BSPP       | 2.60         | 0.53            | 1.73             | 1.50         | 0.56          |
| 3/4             | SM-752-16FP       | 1-11 1/2 NPTF   | 2.69         | 0.67            | 1.88             | 1.62         | 0.56          |
| 3/4             | SM-752-16FB       | G 1 BSPP        | 2.69         | 0.67            | 1.88             | 1.62         | 0.68          |
| 3/4             | SM-752-16FO       | 1-5/16 - 12 ORB | 2.69         | 0.67            | 1.88             | 1.62         | 0.68          |

\* This dimension represents the portion that is exposed when the nipple is inserted into the mating Parker Coupler.

### SM Series Dust Plugs and Caps



| Body Size (in.) | Nipple Dust Cap | Color/Material | Coupler Dust Plug |
|-----------------|-----------------|----------------|-------------------|
| 1/4             | N/A             | Plastic        | PL-25             |
| 1/4             | CR-25           | Black Rubber   | PR-25             |
| 1/4             | C-25            | Aluminum       | P-25              |
| 1/2             | DC-50           | Black Rubber   | P-25              |
| 1/2             | C-50            | Aluminum       | P-50              |
| 3/4             | C-75            | Aluminum       | P-75              |

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