



FS Series dry disconnect couplings are ideal for closed system transfer and dispensing of chemicals and other fluids. The flush valves eliminate spillage and air inclusion when connecting and disconnecting to result in minimal environmental contamination.

Features:

- Flush, non-spill valves enable ease of cleaning
- 316 stainless steel material for chemical compatibility
- Push to connect operation
- Fluorocarbon standard seal material with options available

Applications include:

- Chemical dispensing systems
- Chemical processing
- Food processing
- Corrosive media transfer

Materials of Construction

- Machined Parts:** Stainless Steel, AISI type 316
Springs: Stainless Steel, AISI type 316.
Locking Balls: 1/4 - 3/8": 302 SS;
 1/2 - 3/4": 316 SS
 1": 440 SS
Backup Washers: PTFE
Elastomer Seals: Fluorocarbon is standard.
 Wide range is available.

| Specifications | | | | | |
|----------------|----------------------|------------------|-----------------------------------|-------------------------------------|------|
| Body Size | Rated Pressure (psi) | Rated Flow (gpm) | Spillage (ml) max. per disconnect | Air Inclusion (ml) max. per connect | CV |
| 1/4 | 2000 | 3 | .015 | .010 | 0.90 |
| 3/8 | 2000 | 6 | .015 | .020 | 1.80 |
| 1/2 | 2000 | 12 | .020 | .070 | 3.00 |
| 3/4 | 2000 | 28 | .150 | .100 | 7.00 |
| 1 | 2000 | 50 | .250 | .182 | 10.1 |

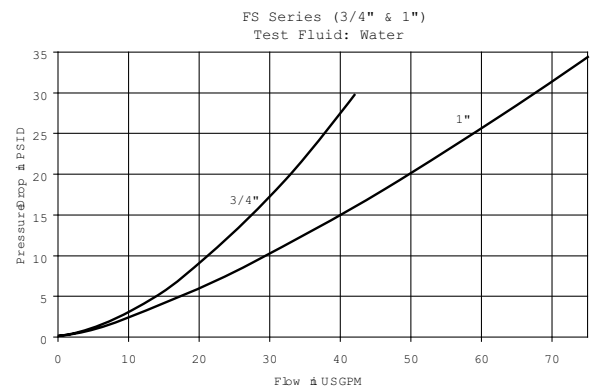
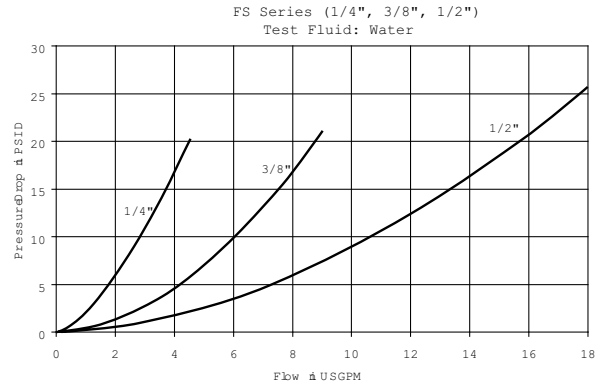
| Temperature Range (continuous) | | |
|--------------------------------|----------------------------------|----------------|
| Part No. Seal Suffix | Seal Compound | Temp° F Rating |
| None* | Fluorocarbon | -15 to 400 |
| E5 | Ethylene Propylene (EPR) | -65 to 300 |
| E1 | Nitrile | -40 to 250 |
| E35 | Perfluoroelastomer (Contact QCD) | -20 to 600 |

*Fluorocarbon is standard seal.
 Contact QCD for availability and additional options.
 To select proper seal materials, see Fluid Compatibility Chart or contact QCD.

Optional Seal Materials:

| Code | Description | Part Number Example |
|-------------|--|---------------------|
| suffix -E5 | Ethylene Propylene seal material- EPR) | FS-371-6FP-E5 |
| suffix -E12 | Neoprene seal material | FS-371-6FP-E12 |

Performance Flow Data





FS Series Couplers - Female Thread



| Body Size | Coupler Part Number | Port End | Length | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------|---------------------|---------------|--------|------------------|--------------|---------------|
| 1/4 | FS-251-4FP | 1/4-18 NPT | 1.79 | 1.06 | 1.00 | 0.25 |
| 1/4 | FS-251-4MP | 1/4-18 NPTF | 2.00 | 1.06 | 1.00 | 0.25 |
| 1/4 | FS-251-6FO | 9/16-18UNF | 1.92 | 1.06 | 1.00 | 0.24 |
| 3/8 | FS-371-6FP | 3/8-18 NPT | 2.52 | 1.30 | 1.06 | 0.58 |
| 3/8 | FS-371-8FO | 3/4-16 UNF | 2.83 | 1.30 | 1.06 | 0.63 |
| 1/2 | FS-501-8FP | 1/2-14 NPT | 2.74 | 1.58 | 1.38 | 0.92 |
| 1/2 | FS-501-10FO | 7/8-14 UNF | 2.86 | 1.58 | 1.38 | 0.96 |
| 3/4 | FS-751-12FP | 3/4-14 NPT | 3.63 | 1.99 | 1.75 | 2.00 |
| 3/4 | FS-751-12FO | 1-1/16-12 UNF | 3.73 | 1.99 | 1.75 | 2.04 |
| 1 | FS-1001-16FP | 1-11 1/2 NPT | 4.14 | 2.25 | 1.87 | 2.76 |
| 1 | FS-1001-16FO | 1-5/16-12 UNF | 4.24 | 2.25 | 1.87 | 2.80 |

FS Series Nipples - Female Thread



| Body Size | Coupler Part Number | Port End | Overall Length | Exposed Length* | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------|---------------------|---------------|----------------|-----------------|------------------|--------------|---------------|
| 1/4 | FS-252-4FP | 1/4-18 NPT | 1.66 | 1.14 | 1.06 | 1.00 | 0.18 |
| 1/4 | FS-252-4MP | 1/4-18 NPTF | 1.87 | 1.34 | 1.06 | 1.00 | 0.18 |
| 1/4 | FS-252-6FO | 9/16-18 UNF | 1.78 | 1.26 | 1.06 | 1.00 | 0.17 |
| 3/8 | FS-372-6FP | 3/8-18 NPT | 2.31 | 1.71 | 1.08 | 0.94 | 0.26 |
| 3/8 | FS-372-8FO | 3/4-16 UNF | 2.45 | 1.71 | 1.19 | 1.06 | 0.30 |
| 1/2 | FS-502-8FP | 1/2-14 NPT | 2.75 | 2.03 | 1.30 | 1.12 | 0.44 |
| 1/2 | FS-502-10FO | 7/8-14 UNF | 2.85 | 2.11 | 1.30 | 1.12 | 0.48 |
| 3/4 | FS-752-12FP | 3/4-14 NPT | 3.38 | 2.37 | 1.65 | 1.50 | 1.02 |
| 3/4 | FS-752-12FO | 1-1/16-12 UNF | 3.38 | 2.37 | 1.65 | 1.50 | 1.02 |
| 1 | FS-1002-16FP | 1-11 1/2 NPT | 3.89 | 2.60 | 2.17 | 1.87 | 1.60 |
| 1 | FS-1002-16FO | 1-5/16 12 UNF | 3.89 | 2.51 | 2.17 | 1.87 | 1.64 |

Standard Port Configurations: **FP** - Female Pipe Thread **MP** - Male Pipe Thread **FO** - Female Straight Thread

* This dimension represents the portion of the nipple that is exposed when the nipple and coupler are connected.

Dust Caps - FS Series



| Body Size | Dust Plug Part No. Rubber | Dust Cap Part No. Rubber |
|-----------|---------------------------|--------------------------|
| 1/4 | FR-25 | FR-25 |
| 3/8 | NR-50 | NR-37 |
| 1/2 | FR-501 | FR-502 |
| 3/4 | FR-751 | FR-752 |
| 1 | FR-1001 | FR-1002 |



FS Series Repair Kits

Repair kits are available for both coupler and nipple half of FS coupling. Kits include replacement elastomer seals, valve assembly and instructions to perform rebuild. Spline tool must be ordered separately to accomplish coupler half repair. Other tools required: Vise, Allen Wrench and Open End Wrench.

| FS Repair Kits | | |
|--|-------------------|--|
| TOOL Spline tool for Coupler Repair | Replacement Seals | |
| | No Suffix | Fluorocarbon Seals |
| | E5 | Ethylene Propylene (EPR) |
| | E35 | Perfluoroelastomer (Contact Factory for Seal Options). |

| Nipple Repair Kits | | |
|--------------------|-------------|----------------|
| 1/4 | FS-252-KIT | FS-252-KIT-E5 |
| 3/8 | FS-372-KIT | FS-372-KIT-E5 |
| 1/2 | FS-502-KIT | FS-502-KIT-E5 |
| 3/4 | FS-752-KIT | FS-752-KIT-E5 |
| 1 | FS-1002-KIT | FS-1002-KIT-E5 |

| Coupler Repair Kits | | | Spline Tool |
|---------------------|-------------|----------------|----------------|
| 1/4 | N/A | N/A | N/A |
| 3/8 | FS-371-KIT | FS-371-E5 | FF/FS-371-TOOL |
| 1/2 | FS-501-KIT | FS-501-KIT-E5 | FS-501-TOOL |
| 3/4 | FS-751-KIT | FS-751-KIT-E5 | FF/FS-751-TOOL |
| 1 | FS-1001-KIT | FS-1001-KIT-E5 | FF/FS-751-TOOL |