



FEM Series couplings meet or exceed ISO 16028 design and performance requirements. The flush valves eliminate spillage and air inclusion when connecting and disconnecting. Coupler and nipple bodies have a modular design with increased flexibility for end port options. FEC nipples provide a connect-under-pressure option for trapped residual pressure.

Features

- Flush, non-spill valving
- Global interchangeability with other ISO 16028 compliant couplings
- Hardened steel sleeves and nipple bodies
- Optional locking sleeve
- Blow-out resistant seal
- Connect-under-pressure nipple option
- Protective zinc plating with clear trivalent chromate finish

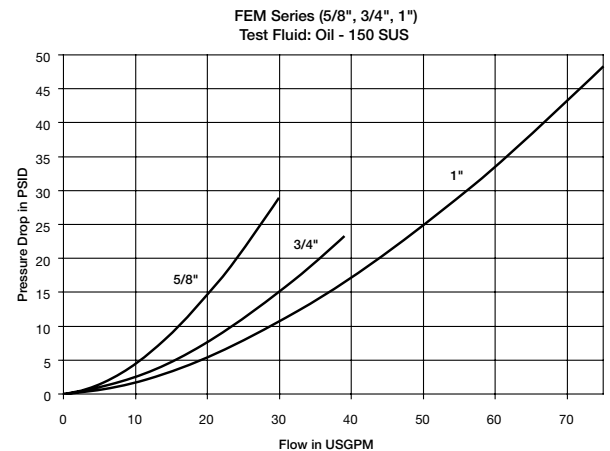
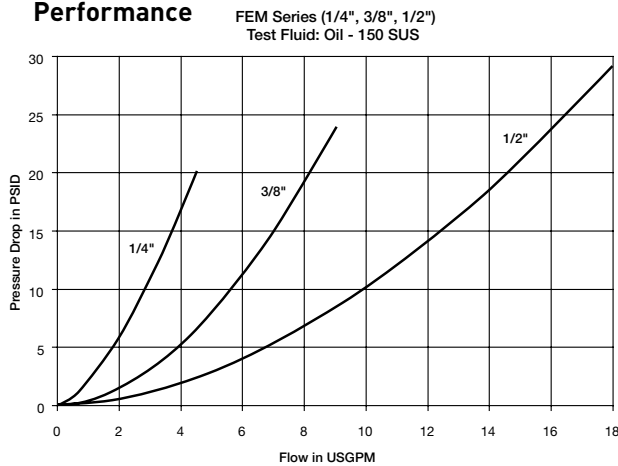
Applications include:

- Skid loader attachments
- Hydraulic tools

Materials of Construction

- Body:** Steel
Finish: Chromium-6 Free plating
Valve: Flush face valving
Seal: Polyurethane or Nitrite; size dependant

Performance



FEM Series Specifications

| Body Size | Rated Pressure (psi) | Rated Flow (gpm) | Temperature Range | Spillage (ml) max. per disconnect | Air Inclusion (ml) max. per connect | Body Material | Sleeve Type | Seal Material |
|-----------|----------------------|------------------|-------------------|-----------------------------------|-------------------------------------|---------------|-----------------|---------------|
| 1/4 | 4568 | 3 | -40° to +250°F | .015 | .020 | Steel | Push to Connect | Nitrile |
| 3/8 | 3625 | 6 | | .015 | .020 | | | |
| 1/2 | 3625 | 12 | | .020 | .070 | | | |
| 5/8 | 3625 | 20 | | .030 | .070 | | | |
| 3/4 | 3625 | 28 | | .150 | .100 | | | |
| 1 | 2900 | 50 | | .200 | .150 | | | |





FEM Series Couplers



| Body Size | Coupler Part Number | Port End | Length | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------|---------------------|---------------|--------|------------------|--------------|---------------|
| 1/4 | FEM-251-4FP-NL | 1/4-18 NPSF | 1.96 | 1.16 | 27mm | 0.52 |
| 1/4 | FEM-251-6FO-NL | 9/16-18 UNF | 2.08 | 1.16 | 27mm | 0.51 |
| 3/8 | FEM-371-6FP-NL | 3/8-18 NPSF | 2.89 | 1.26 | 30mm | 0.68 |
| 3/8 | FEM-371-8FO-NL | 3/4-16 UNF | 2.89 | 1.26 | 30mm | 0.68 |
| 1/2 | FEM-501-8FP-NL | 1/2-14 NPSF | 2.96 | 1.54 | 1.25 | 0.93 |
| 1/2 | FEM-501-8FO-NL | 3/4-16 UNF | 2.96 | 1.54 | 1.25 | 0.93 |
| 1/2 | FEM-501-10FO-NL | 7/8-14 UNF | 2.96 | 1.54 | 1.25 | 0.93 |
| 1/2 | FEM-501-12FO-NL | 1 1/16-12 UNF | 3.21 | 1.54 | 1.25 | 0.93 |
| 5/8 | FEM-621-12FO-NL | 1 1/16-12 UNF | 3.70 | 1.69 | 40mm | 1.34 |
| 3/4 | FEM-751-12FP-NL | 3/4-14 NPSF | 3.95 | 1.97 | 46mm | 1.98 |
| 3/4 | FEM-751-12FO-NL | 1 1/16-12 UNF | 3.95 | 1.97 | 46mm | 2.00 |
| 1 | FEM-1001-16FP-NL | 1-11 1/2-NPSF | 4.21 | 2.36 | 55mm | 3.08 |
| 1 | FEM-1001-16FO-NL | 1 5/16-12 UNF | 4.21 | 2.36 | 55mm | 3.03 |

FEM Series Couplers (Bulkhead)



| Body Size | Coupler Part Number | Port End | Length | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------|---------------------|------------|--------|------------------|--------------|---------------|
| 1/2 | FEM-501-10BMF-NL | 7/8-14 UNF | 4.04 | 1.54 | 1.25 | 1.13 |
| 1/2 | FEM-501-10BMS-NL | 1-14 UNS | 4.04 | 1.548 | 1.25 | 1.13 |





FEM Series Nipples



| Body Size | Nipple Part Number | Port End | Length | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------|--------------------|---------------|--------|------------------|--------------|---------------|
| 1/4 | FEM-252-4FP | 1/4-18 NPSF | 1.71 | 0.96 | 22mm | 0.20 |
| 1/4 | FEM-252-6FO | 9/16-18 NPSF | 1.95 | 0.96 | 22mm | 0.19 |
| 3/8 | FEM-372-6FP | 3/8-18 NPSF | 2.48 | 1.26 | 30mm | 0.40 |
| 3/8 | FEM-372-8FO | 3/4-16 UNF | 2.48 | 1.26 | 30mm | 0.41 |
| 1/2 | FEM-502-8FP | 1/2-14 NPSF | 2.77 | 1.38 | 1.25 | 0.54 |
| 1/2 | FEM-502-8FO | 3/4-16 UNF | 2.77 | 1.38 | 1.25 | 0.54 |
| 1/2 | FEM-502-10FO | 7/8-14 UNF | 2.77 | 1.38 | 1.25 | 0.54 |
| 1/2 | FEM-502-12FO | 1 1/16-12 UN | 3.02 | 1.38 | 1.25 | 0.54 |
| 5/8 | FEM-622-12FO | 1 1/16-12 UN | 3.09 | 1.57 | 36mm | 0.72 |
| 3/4 | FEM-752-12FP | 3/4-14 NPSF | 3.38 | 1.97 | 46mm | 1.17 |
| 3/4 | FEM-752-12FO | 1-1/16 12 UN | 3.38 | 1.97 | 46mm | 1.20 |
| 1 | FEM-1002-16FP | 1-11 1/2 NPSF | 3.85 | 2.36 | 55mm | 1.94 |
| 1 | FEM-1002-16FO | 1-5/16 12 UN | 3.85 | 2.36 | 55mm | 1.90 |

FEM Series Nipples (Bulkhead)



| Body Size | Nipple Part Number | Port End | Length | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------|--------------------|------------|--------|------------------|--------------|---------------|
| 1/2 | FEM-502-10BMF | 7/8-14 UNF | 3.85 | 1.38 | 1.25 | 0.84 |
| 1/2 | FEM-502-10BMS | 1-14 UNS | 3.85 | 1.38 | 1.25 | 0.84 |

Standard Port Configurations: **FP** - Female Pipe Thread **FO** - Female Straight Thread **BMF** - Bulkhead Flare **BMS** - Bulkhead Face Seal

Other Fitting Port Configurations available upon request.

Dust Caps - FEM Series



| Body Size | Nipple Dust Cap | Coupler Dust Cap | Material |
|-----------|-----------------|------------------|----------|
| 1/4 | CFE-252-PN | PFE-251-PN | PVC |
| 3/8 | CFE-372-PN | PFE-371-PN | PVC |
| 1/2 | CFE-502-PN | PFE-501-PN | PVC |
| 5/8 | CFE-622-PN | PFE-621-PN | PVC |
| 3/4 | CFE-7252-PN | PFE-751-PN | PVC |
| 1 | CFE-1002-PN | PFE-1001-PN | PVC |





Applications

Parker FEC Series nipple provide connect-under-pressure capability with up to 3000 PSI of trapped pressure in the nipple and are ideal for applications where residual pressure makes reconnect difficult. Utilized primarily in the construction equipment market, FEC Series products are commonly found on hydraulic attachments used in skid steer applications. The FEC Series mates with the FEM Series interface ISO 16028 couplers.

Features:

- Connect-Under-Pressure nipple
- Hardened locking surface
- Steel construction, Chromium-6 Free plating for corrosion resistance
- Anti blowout Nitrile/PTFE bonded nipple seal
- Flush face valving

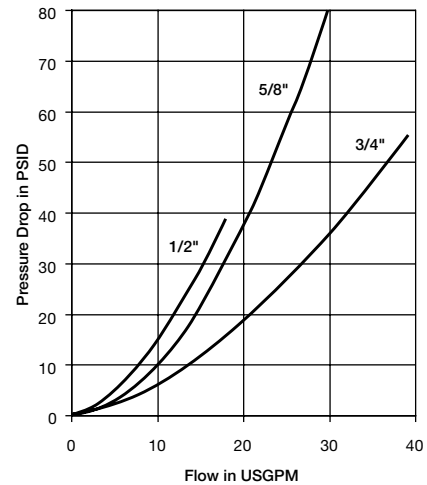
Connect Under Pressure Operation

FEC Series products operate slightly different from traditional non-spill couplings. With no pressure in the coupler and up to 3000 PSI of trapped pressure in the nipple, begin to couple the mating halves. Delay momentarily during connection to allow trapped pressure to equalize with the mating half before completing the connection.

| FEC Series Specifications | | | | | |
|---------------------------|---------------------|---|------------------|-----------------------------------|-------------------------------------|
| Body Size | Rate Pressure (psi) | Rated Connect-Under-Pressure Capability | Rated Flow (gpm) | Spillage (ml) max. per disconnect | Air Inclusion (ml) max. per connect |
| 1/2 | 3625 | 3000 | 12 | .020 | .070 |
| 5/8 | 3625 | 1700 | 20 | .003 | .070 |
| 3/4 | 3625 | 1500 | 26 | .150 | .100 |

Performance

FEC Series (1/2", 5/8", 3/4")
Test Fluid: Oil - 200 SUS



FEC Series Connect Under Pressure Nipples



| Body Size | Part Number | Mating Half | Port End | Length | Largest Diameter | Wrench Flats | Weight (lbs.) |
|-----------|--------------|-------------|---------------|--------|------------------|--------------|---------------|
| 1/2 | FEC-502-8FP | FEM-501 | 1/2-14 NPSF | 3.50 | 1.22 | 1.125 | - |
| 1/2 | FEC-502-10FO | FEM-501 | 7/8-14 UNF | 3.50 | 1.22 | 1.125 | - |
| 1/2 | FEC-502-12FO | FEM-501 | 1 1/16-12 UNF | 3.79 | 1.65 | 1.500 | - |
| 5/8 | FEC-622-12FO | FEM-621 | 1 1/16-12 UN | 3.39 | 1.65 | 1.500 | - |
| 3/4 | FEC-752-12FO | FEM-751 | 1 1/16-12 UN | 4.84 | 1.65 | 1.500 | - |

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



Pioneer Non-Spill Adapters were designed to accommodate the widespread use of several coupling types in mobile equipment. These adapters allow the user to adapt between poppet style, (ISO 7241-A), 6600 series couplings and non-spill type, (ISO 16028), FEM/FF series couplings. They are useful where multiple hydraulic attachments are being utilized.

Features:

- Adapts flush, non-spill valving to / from poppet style
- Global interchangeability with other ISO 16028 and ISO 7241-A compliant couplings
- Protective zinc plating with clear trivalent chromate finish

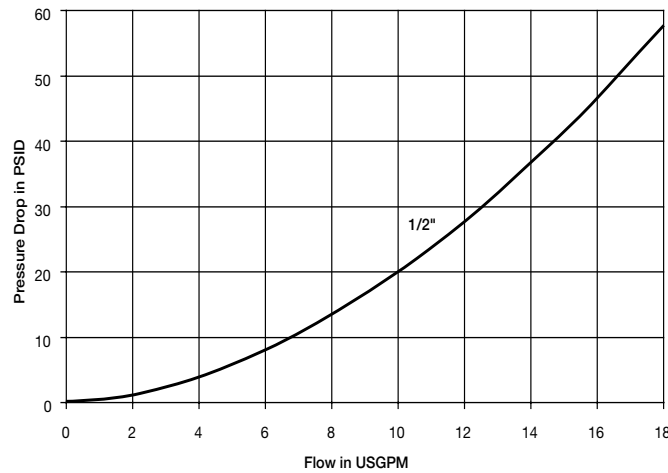
Applications include:

- Skid loader attachments

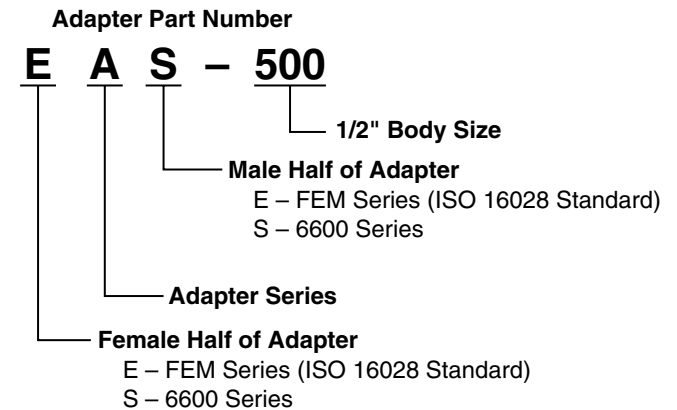


Performance

FEM/FF to 6600 Adapter (1/2")
Test Fluid: Oil - 200 SUS



How To Order



Specifications

| Body Size | Rate Pressure (psi) | Rated Flow (gpm) | Temperature Range | Spillage (ml) max. per disconnect | Air Inclusion (ml) max. per connect |
|-----------|---------------------|------------------|-------------------|-----------------------------------|-------------------------------------|
| 1/2 | 3625 | 12 | -40° to +250° F | .020 | .070 |

Adapters



| Body Size | Part Number | Thread Size | Length | Wrench Flats | Largest Diameter |
|-----------|-------------|-------------|--------|--------------|------------------|
| 1/2 | EAS-500 | N/A | 3.36 | 1.38 | 1.50 |
| 1/2 | SAE-500 | N/A | 3.00 | 1.25 | 1.48 |

