



EATON

Aeroquip

FC555 Multi-Refrigerant Hose and Fittings

Marketing Brochure



General Information



Eaton continues to expand the success of its double o-ring fitting design for air conditioning and refrigeration applications. FC555 is a hose known globally as a solution for the most difficult hose routings, particularly in articulated passenger bus systems. Eaton's unique o-ring sealing has now been incorporated into the FC555 family of fittings. FC555 hose assemblies significantly exceed SAE J2064 performance specifications.

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General Information



Operating Temperature Range:
-40°C to +125°C
(-40°F to +257°F)

R134a effusion:
.97 kg/m²/yr at 80°C
(.20 lbs/ft²/yr at 180°F)

R12 Effusion:
5.82 kg/m²/yr at 100°C
(1.2 lbs/ft²/yr at 210°F)

R502 Effusion:
5.77 kg/m²/yr at 100°C
(1.19 lbs/ft²/yr at 210°F)

R22 Effusion:
43.65 kg/m²/yr at 80°C
(9 lbs/ft²/yr at 180°F)

Moisture Ingression:
.021 gm/cm²/yr
(13 gm/in²/yr)

Fittings:
Factory crimp only (contact Eaton)

Features:

- Machined hose nipple with two o-rings
- O-ring material - HNBR
- Designed and tested to SAE J2064
- One-piece fitting design - Factory Crimp
- Abrasion resistant

Benefits:

- Optimum sealing at the hose nipple interface
- Multi-refrigerant compatible
- Significantly exceeds industry standards for refrigerant loss
- Simplifies inventory

Applications:

- Large and medium buses
- Rail
- Applications where extreme flexibility is required for a large-size hose.

| PART NUMBER | HOSE I.D. | HOSE O.D. | MAXIMUM OPERATING PRESSURE | MAXIMUM BURST PRESSURE | MINIMUM BEND RADIUS |
|-------------|-----------|-----------|----------------------------|------------------------|---------------------|
| | mm/inches | mm/inches | bar/psi | bar/psi | mm/inches |
| FC555-12 | 15.9/.62 | 28.5/1.2 | 35/500 | 175/2500 | 63.5/2.5 |
| FC555-16 | 22.4/.88 | 35.1/1.38 | 35/500 | 175/2500 | 76.2/3.0 |
| FC555-20 | 28.4/1.2 | 41.9/1.65 | 35/500 | 175/2500 | 101.6/4.0 |



Fitting Assembly

ORS Female Swivel Fitting Assembly



| PART NUMBER | THREAD SIZE | HOSE SIZE | A REF | D REF | E REF | H REF | 1 REF |
|--------------|-------------|-----------|-------|-------|-------|-------|-------|
| FJ3898-1212S | 1 3/16-12 | 12 | 2.67 | 1.71 | 0.42 | - | 1 3/8 |
| FJ3898-1616S | 1 7/16-12 | 16 | 2.81 | 1.79 | 0.61 | - | 1 5/8 |
| FJ3898-2020S | 1 11/16-12 | 20 | 3.09 | 1.98 | 0.82 | - | 1 7/8 |

Part No. FJ3898

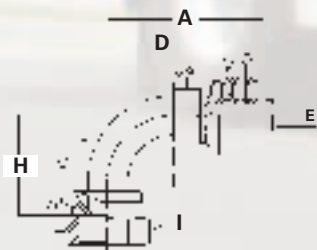
45° ORS Female Swivel Fitting Assembly



| PART NUMBER | THREAD SIZE | HOSE SIZE | A REF | D REF | E REF | H REF | 1 REF |
|--------------|-------------|-----------|-------|-------|-------|-------|-------|
| FJ3899-1212S | 1 3/16-12 | 12 | 3.03 | 2.07 | 0.42 | .83 | 1 3/8 |
| FJ3899-1616S | 1 7/16-12 | 16 | 3.24 | 2.22 | 0.61 | .95 | 1 5/8 |
| FJ3899-2020S | 1 11/16-12 | 20 | 3.68 | 2.57 | 0.81 | .97 | 1 7/8 |

Part No. FJ3899

90° ORS



| PART NUMBER | THREAD SIZE | HOSE SIZE | A REF | D REF | E REF | H REF | 1 REF |
|--------------|-------------|-----------|-------|-------|-------|-------|-------|
| FJ3900-1212S | 1 3/16-12 | 12 | 2.93 | 1.97 | 0.42 | 1.90 | 1 3/8 |
| FJ3900-1616S | 1 7/16-12 | 16 | 3.17 | 2.15 | 0.61 | 2.22 | 1 5/8 |
| FJ3900-2020S | 1 11/16-12 | 20 | 3.62 | 2.51 | 0.81 | 2.50 | 1 7/8 |

Part No. FJ3900

Fitting Assembly

S.A.E. 37° Female Swivel Fitting Assembly



Part No. FJ3901

| PART NUMBER | THREAD SIZE | HOSE SIZE | A REF | D REF | E REF | H REF | 1 REF |
|--------------|-------------|-----------|-------|-------|-------|-------|-------|
| FJ3901-1212S | 1 1/16-12 | 12 | 2.53 | 1.57 | 0.42 | - | 1 1/4 |
| FJ3901-1616S | 1 5/16-12 | 16 | 2.81 | 1.79 | 0.61 | - | 1 1/2 |
| FJ3901-2020S | 1 5/8-12 | 20 | 3.15 | 2.04 | 0.81 | - | 2.0 |

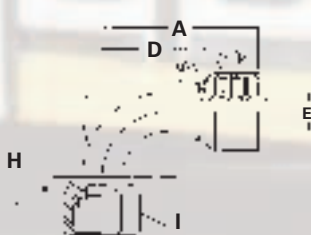
45° S.A.E. 37° Female Swivel Fitting Assembly



Part No. FJ3902

| PART NUMBER | THREAD SIZE | HOSE SIZE | A REF | D REF | E REF | H REF | 1 REF |
|--------------|-------------|-----------|-------|-------|-------|-------|-------|
| FJ3902-1212S | 1 1/16-12 | 12 | 3.34 | 2.37 | .42 | .79 | 1 1/4 |
| FJ3902-1616S | 1 5/16-12 | 16 | 3.36 | 2.34 | .61 | 1.07 | 1 1/2 |
| FJ3902-2020S | 1 5/8-12 | 20 | 3.81 | 2.70 | .81 | 1.22 | 2.0 |

90° S.A.E. 37° Female Swivel Fitting Assembly



Part No. FJ3903

| PART NUMBER | THREAD SIZE | HOSE SIZE | A REF | D REF | E REF | H REF | 1 REF |
|--------------|-------------|-----------|--------|-------|-------|-------|-------|
| FJ3903-1212S | 1 1/16-12 | 12 | 2.93 | 1.97 | 0.42 | 1.82 | 1 1/4 |
| FJ3903-1616S | 1 5/16-12 | 16 | 3.17 | 2.15 | 0.61 | 2.39 | 1 1/2 |
| FJ3903-2020S | 1 5/8-12 | 20 | Mar-61 | 2.51 | 0.81 | 2.75 | 2.0 |

Accessories

Steel protective coil spring



Part No. 900564

Protects hose cover and reinforcement from abrasion and accidental damage.

Construction: steel wire, rust resistant.

This coil should fit snugly to the hose O.D. Expanding the coil I.D. (unwind the coil) may be necessary for proper installation.

| SPRING DASH NO. | SPRING I.D. (INCHES) | FOR FC555 HOSE SIZE |
|-----------------|----------------------|---------------------|
| -6S | 1.34 | -12 |
| -7S | 1.66 | -16 |
| -9S | 1.87 | -20 |

Steel protective coil sleeve



Part No. 900705

Recommended for use where hose lines are subjected to excessive abrasion, kinking or accidental damage.

Construction: spring steel, rust resistant.

This coil should fit snugly to the hose O.D. Expanding the coil I.D. (unwind the coil) may be necessary for proper installation.

| SLEEVE DASH NO. | SLEEVE I.D. (INCHES) | FOR FC555 HOSE SIZE |
|-----------------|----------------------|---------------------|
| -6S | 1.22 | -12 |
| -7S | 1.47 | -16 |
| -9S | 1.69 | -20 |

Plastic protective coil sleeve



Part No. 900952

Recommended to protect hose from abrasion. This light weight plastic sleeve is unaffected by air, water, oil,

gasoline, hydraulic and most other fluids.

Temperature range of 0°F to +180°F.

This coil can also be used for group bundling of hose lines.

| SLEEVE DASH NO. | SLEEVE I.D. (INCHES) | FOR FC555 HOSE SIZE |
|-----------------|----------------------|---------------------|
| -22 | 1.38 | -12, -16 |
| -30 | 1.88 | -20 |

Nylon abrasion sleeve



Part No. FC425

Nylon sleeve protects hose from abrasion and allows bundling of hose lines.

Meets MSHA requirements.

| SLEEVE PART NUMBER | NOMINAL SLEEVE I.D.* "B" (INCHES) | FOR FC555 HOSE SIZE |
|--------------------|-----------------------------------|---------------------|
| FC425-20 | 1.25 | -12 |
| FC425-24 | 1.59 | -12, -16 |
| FC425-28 | 1.75 | -16, -20 |
| FC425-32 | 2.07 | -20 |

* If fittings are to be covered, the maximum O.D. of hose fittings must be allowed.

Hose Assembly Matrix

Common Hose Assembly Base Numbers for FC555

| | FJ3898 ORS Female Swivel Fitting Assembly | FJ3899 45° ORS Female Swivel Fitting Assembly | FJ3900 90° ORS | FJ3901 S.A.E. 37° Female Swivel Fitting Assembly | FJ3902 45° S.A.E. 37° Female Swivel Fitting Assembly | FJ3902 90° S.A.E. 37° Female Swivel Fitting Assembly |
|--------------------------------------|---|---|--------------------------|--|--|--|
| FJ3898 Straight ORS | FK4195* | FK2102 | FK2824 | | | FK2896 |
| FJ3899 - 45° ORS | | FZ118 | FU881 | | FU895 | |
| FJ3900 - 90° ORS | | | FU905 | FK2241 | | |
| FJ3901 - Straight JIC | | | | FK2009 | FK3825 | FK2010 |
| FJ3902 - 45° JIC | | | | | FU858 | FU904 |
| FJ3903 - 90° JIC | | | | | | FU897 |
| FJ3898 with 900952 Coil | FK3331 | | | | | |
| FJ3899 with 900952 Coil | | FK3332 | | FK3196 | | |
| FJ3900 with 900952 Coil | | | | | | |
| FJ3901 with 900952 Coil | | | | FK2071 | FK3333 | FK3334 |
| FJ3902 with 900952 Coil | | | | | | |
| FJ3903 with 900952 Coil | | | | | | |
| FJ3901 with 900705 Coil | FK4185 | | | FK4197 | | FK3693 |
| FJ3898 with FC425 Cordura | FK2905 | FK2954 | FK3848 | | | |
| FJ3899 with FC425 Cordura | | FZ280 | FZ256 | | | |
| FJ3898 with 900564 Steel Coil | FK3590 | | | | | |

NOTE: For h/a with coil and cordura, the coil and cordura are supplied as full length.

*Part number for size 12 only is FK2101

Size notation Size 12 - KKK Size 16 - MMM Size 20 - NNN

To establish a hose assembly number: FK4195 KKK 0484

Select base hose number from chart above _____

Hose size (i.e. size 12) _____

OAL in inches _____

Last digit is in 1/8 increments.

Example - 0484 = 48 1/2 inches

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