# Flexible hose solutions

## Air conditioning and refrigeration hose

Powering Business Worldwide

# Air conditioning and refrigeration hose



E

# Air conditioning and refrigeration

E

## GH001

## EverCool™ A/C and refrigeration

Exceeds: SAE J2064 Type E, Class 1


| Part number | Hose I.D. | | | Hose O.D. | | Maximum operating pressure | | Minimum burst pressure | | Minimum bend radius | | Weight | | Vacuum service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft | kPa | in |
| GH001-4 | 5 | 4,8 | 0.19 | 11,6 | 0.46 | 35 | 500 | 140 | 2000 | 38,1 | 1.50 | 0,100 | 0.07 | 94,8 | 28 |
| GH001-6 | 8 | 7,9 | 0.31 | 14,7 | 0.58 | 35 | 500 | 140 | 2000 | 50,0 | 2.00 | 0,135 | 0.09 | 94,8 | 28 |
| GH001-8 | 10 | 10,3 | 0.41 | 17,8 | 0.70 | 35 | 500 | 140 | 2000 | 63,0 | 2.50 | 0,177 | 0.12 | 94,8 | 28 |
| GH001-10 | 12 | 12,7 | 0.50 | 19,8 | 0.78 | 35 | 500 | 140 | 2000 | 76,2 | 3.00 | 0,223 | 0.15 | 94,8 | 28 |
| GH001-12 | 16 | 15,9 | 0.63 | 24,9 | 0.98 | 35 | 500 | 140 | 2000 | 101,6 | 4.00 | 0,269 | 0.18 | 94,8 | 28 |
| GH001-16 | 19 | 22,4 | 0.88 | 31,2 | 1.23 | 35 | 500 | 140 | 2000 | 127,0 | 7.00 | 0,430 | 0.22 | 94,8 | 28 |

### Construction

**Tube:** New dual extrusion technology polyamide Type E veneer

**Reinforcement:** Polyester braid

**Cover:** Blended EPDM

### Operating parameters

-40°C to +140°C
(-40°F to +284°F)

**R1234yf effusion**
<1kg/m$^2$/yr at 80°C

**R134a effusion**
<1.5kg/m$^2$/yr at 80°C

**Oils**
POE, PAG, Mineral oil, Alkybenzene

**Moisture ingression**
Class I

### Benefits

- Extremely low permeation
- Excellent heat resistance offering a higher functional temperature range than SAE J2064 Type C or E hoses.
- Ozone and UV resistant
- Easy to install – significant reduction in potential hose damage. GH001 has maximum kink resistance, temperature resistance
- SAE J2064 Type E veneer tube offers excellent oil and refrigerant compatibility

### Application

- A/C systems for truck, bus, agriculture, construction equipment and refrigeration systems

For more information refer to E-HOAC-BB001-E.

**Fitting reference**

Factory Crimp – contact Eaton technical support.

E-Z Clip fittings – refer to A-HOAC-MC001-E, A/C and Refrigeration hose and fittings.

E

## GH134

### A/C and refrigeration hose

Exceeds: SAE J2064 Type E Class 1


| Part number | Hose I.D. | | | Hose O.D. | | Maximum operating pressure | | E-Z Clip minimum burst pressure | | Minimum bend radius | | Weight | | Vacuum service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft | kPa | in |
| GH134-6 | 8 | 7,9 | 0.31 | 14,7 | 0.58 | 35 | 500 | 140 | 2000 | 50,0 | 2.00 | 0,13 | 0.09 | 94,8 | 28 |
| GH134-8 | 10 | 10,3 | 0.41 | 17,8 | 0.70 | 35 | 500 | 140 | 2000 | 63,5 | 2.50 | 0,18 | 0.12 | 94,8 | 28 |
| GH134-10 | 13 | 12,7 | 0.50 | 19,8 | 0.78 | 35 | 500 | 140 | 2000 | 76,2 | 3.00 | 0,22 | 0.15 | 94,8 | 28 |
| GH134-12 | 16 | 15,9 | 0.63 | 24,9 | 0.98 | 35 | 500 | 140 | 2000 | 101,6 | 4.00 | 0,27 | 0.18 | 94,8 | 28 |
| GH134-16 | 19 | 22,4 | 0.88 | 31,2 | 1.23 | 35 | 500 | 140 | 2000 | 127,0 | 7.00 | 0,43 | 0.22 | 94,8 | 28 |

#### Construction

**Tube:** Polyamide veneer

**Reinforcement:** Polyester braid

**Cover:** CR

#### Operating parameters

-40°C to +135°C
(-40°F to +275°F)

**R-134a effusion**

<2.4 kg/m²/yr. at 80°C
(.50 lbs./ft²/yr. at 176°F)

**Moisture ingression**

.013/cm2/yr. (.08 gm./in2/yr.)

#### Benefits

- Excellent effusion resistance
- Extended service life
- Superior abrasion resistance
- Field attachable fittings

#### Application

- Mobile A/C
- Refrigeration and A/C system

**Fitting reference**

Factory Crimp – contact Eaton technical support.

E-Z Clip fittings – refer to A-HOAC-MC001-E, A/C and Refrigeration hose and fittings.

## FC802

### Multi-refrigerant A/C and refrigeration hose

Meets: SAE J51


| Part number | Hose I.D. | | | Hose O.D. | | Maximum operating pressure | | Minimum burst pressure | | Minimum bend radius | | Weight | | Vacuum service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft | kPa | in |
| FC802-04 | 4 | 5,1 | 0.20 | 13,2 | 0.52 | 35 | 500 | 175 | 2500 | 50,8 | 2.0 | 0,16 | 0.11 | 94,8 | 28 |
| FC802-06 | 6 | 8,38 | 0.33 | 17,3 | 0.68 | 35 | 500 | 175 | 2500 | 63,5 | 2.5 | 0,24 | 0.16 | 94,8 | 28 |
| FC802-08 | 8 | 10,67 | 0.42 | 19,6 | 0.77 | 35 | 500 | 175 | 2500 | 76,2 | 3.0 | 0,27 | 0.18 | 94,8 | 28 |
| FC802-10 | 10 | 13,2 | 0.52 | 23,4 | 0.92 | 35 | 500 | 175 | 2500 | 88,9 | 3.5 | 0,42 | 0.28 | 94,8 | 28 |
| FC802-12 | 12 | 16,51 | 0.65 | 27,4 | 1.08 | 35 | 500 | 175 | 2500 | 114,3 | 4.5 | 0,51 | 0.34 | 94,8 | 28 |

#### Construction

**Tube:** Polyamide veneer

**Reinforcement:** Single polyester braid

**Cover:** Bromobutyl

#### Operating parameters

-40°C to +250°C
(-40°F to +121°F)

**HFC 134a effusion**

.25 lbs/ft²/yr at 176°F
(1.21 kg/m²/yr at 80°C)

**Moisture ingression**

.08 gm/in²/yr (.013/cm2/yr)
(Class1)

#### Benefits

- Excellent flexibility and heat resistance
- Excellent noise and kink resistance
- Ease of installation and routing

#### Application

- Mobile A/C
- Stationary A/C system and refrigeration

For more information refer to the E-Z Clip A-HOAC-MC001-E A/C and Refrigeration hose and fittings.

| Fitting reference | Page |
|---|---|
| **Reusable** | |
| 100R5 Fitting | I-4-16 |

## FC800
## EverCool™ A/C hose

Meets: SAE J2064


| Part number | Hose I.D. | | | Hose O.D. | | Maximum operating pressure | | Minimum burst pressure | | Minimum bend radius | | Weight | | Vacuum service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft | kPa | in |
| FC800-12 | 12 | 16,4 | 0.65 | 27,2 | 1.07 | 35 | 500 | 140 | 2000 | 70 | 3.0 | 0,67 | 0.45 | 94,8 | 28 |
| FC800-16 | 16 | 22,8 | 0.90 | 31,5 | 1.24 | 35 | 500 | 140 | 2000 | 80 | 3.5 | 0,71 | 0.48 | 94,8 | 28 |
| FC800-20 | 20 | 29,3 | 1.15 | 38,6 | 1.52 | 35 | 500 | 140 | 2000 | 100 | 4.0 | 0,92 | 0.62 | 94,8 | 28 |
| FC800-24 | 24 | 35,5 | 1.40 | 45,6 | 1.80 | 35 | 500 | 140 | 2000 | 160 | 6.5 | 1,16 | 0.78 | 94,8 | 28 |

### Construction

**Tube:** Chloroprene (CR)

**Barrier Layer:**
Polyamide (PA)

**Reinforcement:**
1 wire braid

**Cover:** EPDM

### Operating parameters

-40°C to +125°C
(-40°F to +257°F)

**Permeation rate**
<1,0 kg/m$^2$/year
(for R134a at 80°C)

**Moisture ingression**
<0.039 g/cm$^2$/year
according to SAE J2064,
Class 1

**Refrigerant use**
R134a, R407C, HF1234yf.
Additional refrigerants and
refrigerant oils upon request.

### Benefits

- FC800 EverCool exceeds the requirements of the SAE J2064
- FC800 has an excellent bend radius, virtually 1/2 of the radius of comparable large bore hoses

### Applications

- Metro, large bus and rail
- Overhead cranes and stationary equipment

For more information refer to A-HOAC-MR003-E, EverCool New Large Bore A/C Hose.

**Fitting reference**

Refer to A-HOAC-MR003-E catalog FC800 EverCool™ New Large Bore A/C Hose.

E

## FC555

## Multi-refrigerant A/C and refrigeration hose

Meets: SAE J2064


| Part number | Hose I.D. | | | Hose O.D. | | Maximum operating pressure | | Minimum burst pressure | | Minimum bend radius | | Weight | | Vacuum service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN | mm | in | mm | in | bar | psi | bar | psi | mm | in | kg/m | lbs/ft | kPa | in |
| FC555-12 | 12 | 15.9 | 0.62 | 28,5 | 1.2 | 35 | 500 | 175 | 2500 | 63.5 | 2.50 | 0,30 | 0.20 | 94,8 | 28 |
| FC555-16 | 16 | 22.4 | 0.88 | 35,1 | 1.38 | 35 | 500 | 175 | 2500 | 76.2 | 3.00 | 0,40 | 0.27 | 94,8 | 28 |
| FC555-20 | 25 | 28.4 | 1.2 | 41,9 | 1.65 | 35 | 500 | 175 | 2500 | 101.6. | 4.00 | 0,49 | 0.33 | 94,8 | 28 |

### Construction

**Tube:** Corrugated polyamide

**Reinforcement:**
Polyester braid

**Cover:** Abrasion resistant polyester braided cover

### Operating parameters

-40°C to +125°C
(-40°F to +257°F)

**R134a effusion**
.97 kg/m$^2$/yr at 80°C
(.20 lbs/ft$^2$/yr at 180°F)

**Moisture ingression**
Class I

### Features

- Machined hose nipple with two o-rings
- O-ring material - HNBR
- 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

For more information refer to A-HOAC-MR001-E Multi-Refrigerant Hose and Fittings.

**Fitting reference**

Factory crimp fittings available. For more information, refer to A-HOAC-MR001-E, FC800 EverCool™ New Large Bore A/C Hose.