

Gas-Mate Series



Eaton's Gas-Mate™ Series quick disconnect couplings are a one-way shut-off safety couplings designed for the connection of gas fired devices or applications.

Product Features

- Connect and disconnect without the need for wrenches
- Automatic shut off when plug is removed from socket
- In case of fire, heat sensitive plug allows socket valve to close, stopping gas flow
- Tested to meet operating temperatures -40°F to 200°F (-40°C to 93°C) in sizes 3/8", 1/2", 3/4", and 1" when used in accordance with the CSA standard ANSI Z21.41b-2010/CSA 6.9b-2010 in both indoor and outdoor applications. Please note that the 1 1/4" size coupling is rated for indoor use only.
- Standard body material: Brass

Physical Characteristics

| Sizes | Max. Operating Pressure | | Min. Burst Pressure | | Rated Flow | |
|-----------|-------------------------|-------|---------------------|-------|------------|-----------|
| | (bar) | (psi) | (bar) | (psi) | (lpm) | (gpm) |
| All sizes | 0.03 | 0.5 | 68 | 1,000 | See Chart | See Chart |

Applications & Markets

- Industrial
- Fuel Gas Systems
- Food & Beverage



CANADIAN
STANDARDS
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Complies with the requirements of
ANSI Z21.41B-2010/CSA 6.96-2010.

*CSA design certified, in both the United States and Canada, for natural gas, manufactured gas, liquified petroleum and LP gas-air mixtures at pressures not in excess of 1/2 psig (3.5 kPa).

Capacities

| Body Size (in) | Socket/Female P/N | Plug/Male P/N | Capacity (btu/hr) |
|----------------|-------------------|---------------|-------------------|
| 3/8 | 100006E | 100506 | 60,000 |
| 1/2 | 100008 | 100508 | 90,000 |
| 3/4 | 100010 | 100510 | 245,000 |
| 1 | 100012E | 100512 | 310,000 |
| 1 1/4 | GMS1250FH | GMP1250F | 500,000 |

*Capacity is based on natural gas having a specific gravity of 0.64 and heat capacity of 1,000 BTU per cubic foot. Inlet pressure is 12 inches water column and the pressure drop is 0.3 inch water column.

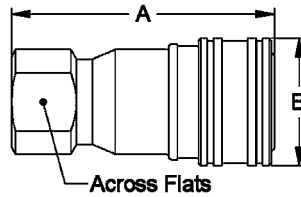


Figure 1

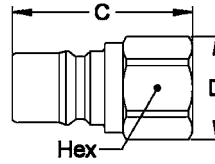


Figure 2

Sockets/Females

| Part Number | Coupling Type | Body Size | Port Size | Thread | Type | Fig. | Dimensions | | | A | B | Across Flats |
|-------------|---------------|-----------|-----------|----------|------|------|------------|------|--------------|-------|------|--------------|
| | | | | | | | A | B | Across Flats | | | |
| | | | | | | | (in) | (in) | (in) | (mm) | (mm) | (mm) |
| 100006E | Socket/Female | 3/8 | 3/8 | 3/8-18 | NPTF | 1 | 2.44 | 1.13 | 0.87 | 62.0 | 28.7 | 22.1 |
| 100008 | Socket/Female | 1/2 | 1/2 | 1/2-14 | NPTF | 1 | 2.84 | 1.38 | 1.00 | 72.1 | 35.1 | 25.4 |
| 100010 | Socket/Female | 3/4 | 3/4 | 3/4-14 | NPTF | 1 | 3.17 | 1.75 | 1.31 | 80.5 | 44.5 | 33.3 |
| 100012E | Socket/Female | 1 | 1 | 1-11 1/2 | NPTF | 1 | 3.94 | 2.13 | 1.50 | 100.1 | 54.1 | 38.1 |

| Part Number | Coupling Type | Body Size | Port Size | Thread | Type | Fig. | Dimensions | | | A | B | Hex |
|-------------|---------------|-----------|-----------|--------------|------|------|------------|------|------|-------|------|------|
| | | | | | | | A | B | Hex | | | |
| | | | | | | | (in) | (in) | (in) | (mm) | (mm) | (mm) |
| GMS1250FH* | Socket/Female | 1 1/4 | 1 1/4 | 1 1/4-11 1/2 | NPTF | 3 | 4.15 | 2.28 | 2.00 | 105.4 | 57.9 | 50.8 |

*For indoor use only

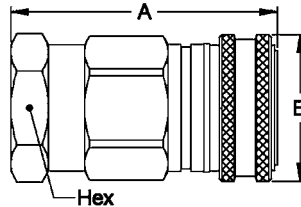


Figure 3

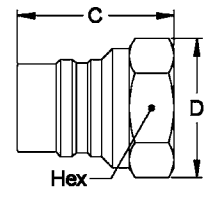


Figure 4

Plugs/Males

| Part Number | Coupling Type | Body Size | Port Size | Thread | Type | Fig. | Dimensions | | | C | D | Hex |
|-------------|---------------|-----------|-----------|--------------|------|------|------------|------|------|------|------|------|
| | | | | | | | C | D | Hex | | | |
| | | | | | | | (in) | (in) | (in) | (mm) | (mm) | (mm) |
| 100506 | Plug/Male | 3/8 | 3/8 | 3/8-18 | NPTF | 2 | 1.59 | 0.94 | 0.81 | 40.4 | 23.9 | 20.6 |
| 100508 | Plug/Male | 1/2 | 1/2 | 1/2-14 | NPTF | 2 | 1.94 | 1.15 | 1.00 | 49.3 | 29.2 | 25.4 |
| 100510 | Plug/Male | 3/4 | 3/4 | 3/4-14 | NPTF | 2 | 2.06 | 1.51 | 1.31 | 52.3 | 38.4 | 33.3 |
| 100512 | Plug/Male | 1 | 1 | 1-11 1/2 | NPTF | 2 | 2.47 | 1.73 | 1.50 | 62.7 | 43.9 | 38.1 |
| GMP1250F* | Plug/Male | 1 1/4 | 1 1/4 | 1 1/4-11 1/2 | NPTF | 4 | 2.44 | 2.17 | 1.88 | 62.0 | 55.1 | 47.8 |

*For indoor use only

Dust Caps and Dust Plugs

| Series | Dust Cap | | Dust Plug | |
|--------|----------|---------|-----------|---------|
| | Metal | Vinyl | Metal | Vinyl |
| 3/8 | PDC2HK* | PPDC2HK | PDC2HK* | PPDC2HK |
| 1/2 | PDC3HK* | PPDC3HK | PDC3HK* | PPDC3HK |
| 3/4 | PDC4HK** | PPDC4HK | PDC4HK** | PPDC4HK |
| 1 | PDC6HK** | PPDC6HK | PDC6HK** | PPDC6HK |

*Brass

**Aluminum



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