



# Design Concepts

Eaton's Carter product line includes Model 64031 3-inch Valved Unisex Coupling, designed in accordance with A-A-59377 (supersedes MIL-C-53071). Unisex couplings, as the name implies, are designed to mate with each other, allowing for the connection of hose assemblies regardless of the end fitting.

## Features

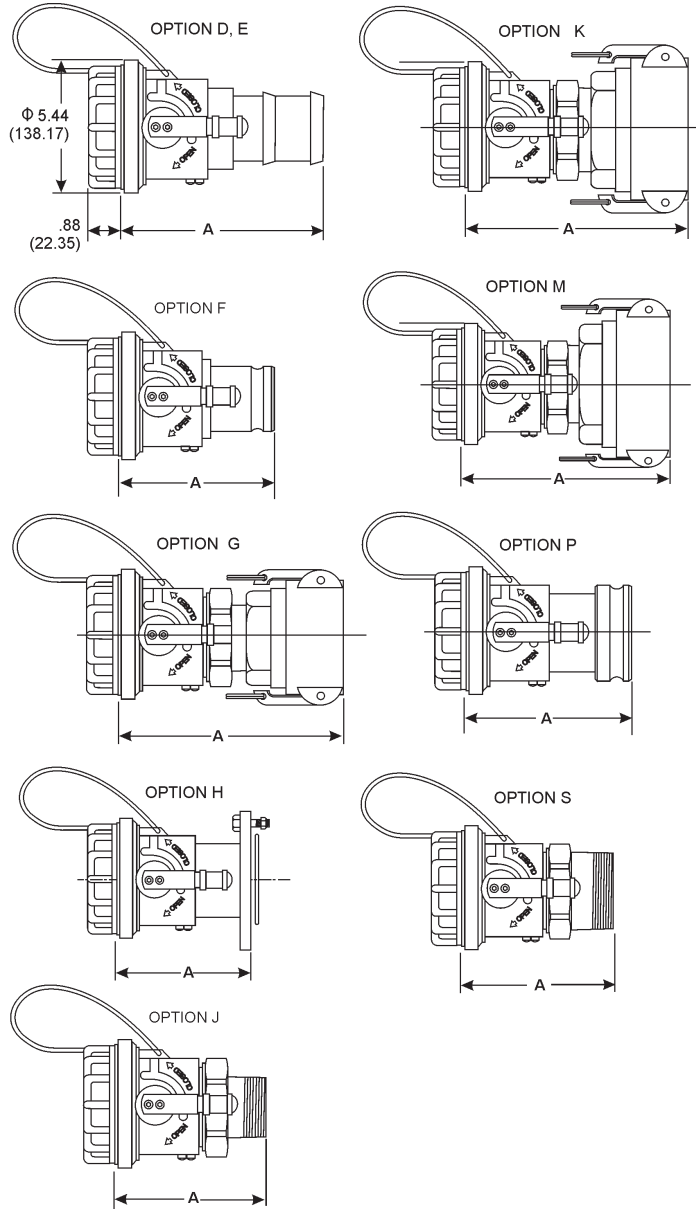
- Unisex connection allows indiscriminate mating
- Manual ball valve included
- Interlock feature prevents disconnection of unit with ball valve open
- Pressure tight dust cap included on all units
- Dust seal incorporated between connected units — protects mating surfaces
- Units are easily repairable
- Variety of inlet fittings options to suit system needs
- Tan color standard, green optional

## Technical Information

- Qualified in accordance with A-A-59377
- Pressure drop — 0.5 psi (.034 bar) max for 3 inch units at 200 USgpm (757 l/min)
- Operating pressure — 100 psi (6.894 bar)
- Burst pressure — 300 psi (20.684 bar)
- Hose swivel torque — 240 in-lb max at 100 psi (6.895 bar)
- Operating temperatures — -25°F to +155°F (-31.66°C to +65.55°C)
- Inlets to mate male or female NPT or BSPP camlocks, D-1/D-2/D-3 nozzle, hose barbs available. Special inlets available on request.
- Hose swivel integral to coupling

## Envelope Dimensions

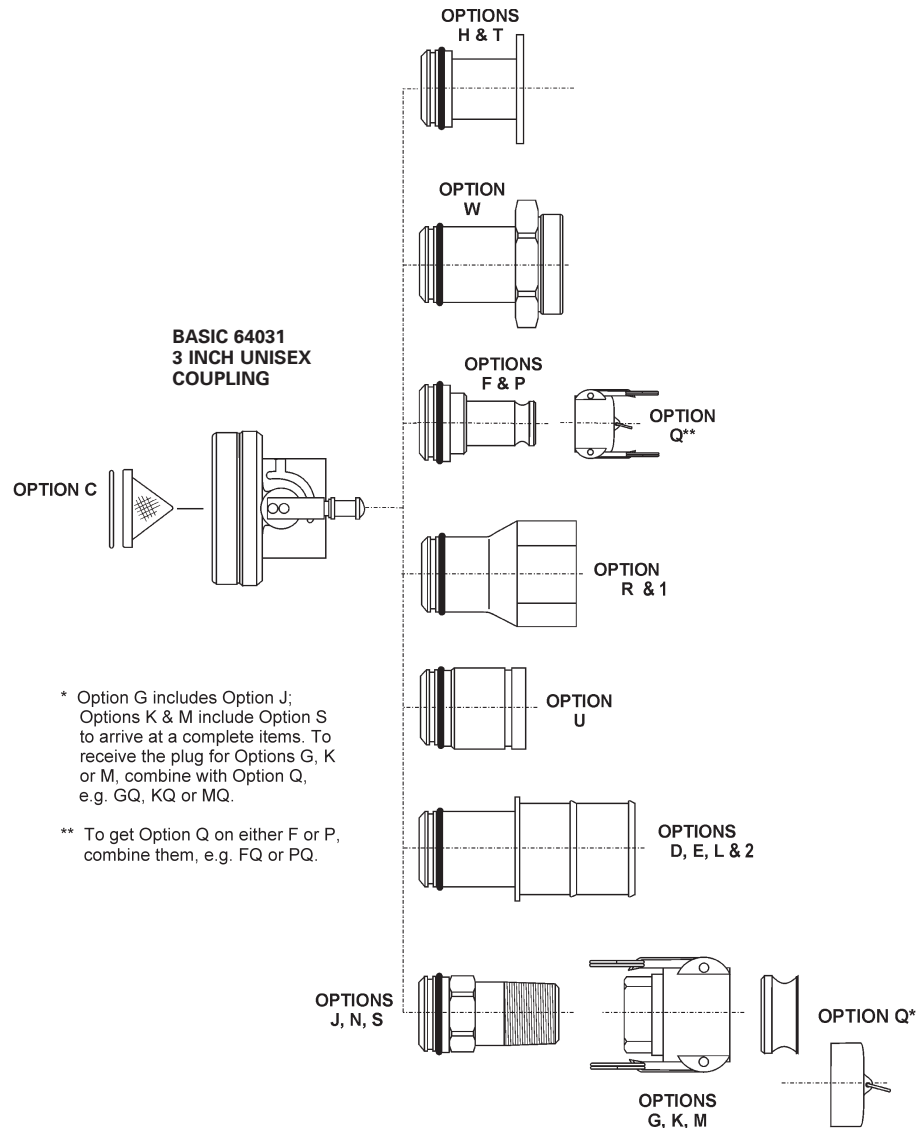
Dimensions shown in inches (millimeters)



| Option | Dim. "A" |          |
|--------|----------|----------|
|        | in       | (mm)     |
| D, E   | 9.35     | (237.49) |
| F      | 6.80     | (172.72) |
| G      | 8.45     | (214.63) |
| H      | 6.03     | (153.16) |
| J      | 6.35     | (161.29) |
| K      | 9.00     | (228.60) |
| M      | 9.40     | (238.76) |
| P      | 7.10     | (180.34) |
| S      | 6.50     | (165.10) |

The basic model may be ordered with various options by adding one or more of the letters as shown in the table, right. The basic unit has no inlet fitting and meets the tan color requirement, hence an option letter must be specified to achieve a completed unit.

| Option Letter | Description                      | Option Letter | Description                                   |
|---------------|----------------------------------|---------------|---|
| C             | Adds 100-mesh screen             | P             | Adds 4-inch male camlock inlet                |
| D             | Adds 3-inch hose barb inlet      | Q             | Adds dust cap/plug, camlock type              |
| E             | Adds 4-inch hose barb inlet      | R             | Adds 3-inch female NPT inlet                  |
| F             | Adds 2-inch male camlock inlet   | S             | Adds 3-inch male NPT inlet                    |
| G             | Adds 2 inch female camlock inlet | T             | Adds 3-inch MS33786-48 flanged inlet          |
| H             | Adds D-1/D-2/D-3 inlet flange    | U             | Adds 3-inch grooved end inlet per MIL-C-10387 |
| J             | Adds 2-inch male NPT inlet       | V             | Changes exterior color to green               |
| K             | Adds 3-inch female camlock inlet | W             | Adds 4-inch male BSPP inlet                   |
| L             | Adds 2-inch hose barb inlet      | Z             | CRES interface locking lugs                   |
| M             | Adds 4-inch female camlock inlet | 1             | Adds 2½-inch female NPT inlet                 |
| N             | Adds 1½-inch male NPT inlet      | 2             | Adds 2½-inch hose barb inlet                  |



**Eaton**  
**Aerospace Group**  
**Fluid & Electrical Distribution Division**  
**9650 Jeronimo Road**  
**Irvine, California 92618**  
**Phone: (949) 452 9500**  
**Fax: (949) 452 9992**  
**E-mail: [groundfueling@eaton.com](mailto:groundfueling@eaton.com)**

Eaton  
Aerospace Group  
9650 Jeronimo Road  
Irvine, California 92618  
Phone: (949) 452 9500  
Fax: (949) 452 9555  
[www.eaton.com/aerospace](http://www.eaton.com/aerospace)

Copyright © 2013 Eaton  
All Rights Reserved  
Form No. TF100-124C  
June 2013