LOW PROFILE PUSH-PULL QUICK DISCONNECT COUPLINGS
1965 and 2055 SERIES

Speeds Maintenance and Provides Safety and Reliability for Aircraft Hydraulic and Coolant Systems

The 1965 and 2055 Series couplings are self-sealing, low profile quick disconnect couplings which offer long, dependable service for both high and low pressure fluid conveyance systems. The 1965 Series coupling is constructed of high strength, fire resistant stainless steel for reliable 3000 PSIG hydraulic service. All coupling sizes have been qualified to the performance requirements of MIL-C-25427A. The 2055 Series coupling is constructed of light weight aluminum and is excellent for low pressure hydraulic, lube oil or coolant systems with operating pressures up to 1000 PSIG. Both coupling styles incorporate an innovative "Arc Latch"™ locking mechanism. The couplings are connected and disconnected with a simple push-pull motion. The self-sealing design practically eliminates fluid loss or air inclusion and minimizes pressure drop. These features provide outstanding reliability and safety in addition to speeding fluid system maintenance.

CONVENTIONAL: Single point (ball bearing) contacts with locking surface

ARC LATCH DESIGN: Broad area contact with locking surface.

* -4 size coupling uses ball latch mechanism due to low profile design size limitations.
The Aeroquip "Arc Latch" locking design provides contact surfaces over a broad surface area. This broad contact area permits low unit loading and helps prevent brinnelling and undue wear of the metal locking surface. The wider surface contact also contributes to a more effective locking action and gives the couplings greater capability to withstand vibration environments.

For added safety, a polarity feature prohibits cross connection of high and low pressure coupling halves. In addition, a green band appears behind the coupling sleeve when securely locked.

**1965 Series**

**3000 PSIG Coupling**

- Basic Material: Stainless Steel
- Packings: Nitrile (Petroleum Based) or EPR (Skydrol* Systems) Teflon† Back-Up Rings
- Temperature Range: -65°F. to +275°F. (-54°C. to +135°C.)
- Pressures: Operating—3000 PSIG Proof—4500 PSIG Minimum Burst—7500 PSIG
- Meets the performance requirements of MIL-C-25427A.

**2055 Series**

**1000 PSIG Coupling**

- Basic Material: Aluminum
- Packings: Nitrile (Petroleum Based) or EPR (Skydrol Systems)
- Temperature Range: -65°F. to +275°F. (-54°C. to +135°C.)
- Operating Pressure: Operating—1000 PSIG Proof—1500 PSIG Minimum Burst—2500 PSIG
- Meets the performance requirements of MIL-C-25427A except operating pressures.

* Skydrol is a Monsanto trademark  † Teflon is a DuPont trademark
Pressure/Flow Chart

Cutaway Showing Fluid Flow

1965 Series
3000 PSIG Coupling

2055 Series
1000 PSIG Coupling

Pressure Flow Chart: To find the net pressure loss (difference between the coupling and an equivalent length of straight tube) for a given coupling size at a given flow rate:

1. Find the flow rate at the bottom of the chart and read up until the line intersects the curve for the coupling size in question.
2. Read across to find pressure loss.
1965 Series 3000 PSIG Low Profile Couplings

Sizes, Applications and Part Numbers

Aeroquip couplings are available with all standard type end fitting combinations. To order, select the style, application, size and corresponding part number for coupling halves or complete coupling assembly from the table below (Example: Style 1, MIL-H-5606, -4 size, complete assembly: AE82302E). Aeroquip couplings for other fluids and end fittings are also available. Contact your nearest Aeroquip distributor, an Aeroquip sales engineer or the Aeroquip sales service engineering department (517) 787-8121.

**Style I**

(MS33657 & MS33656 ends)

<table>
<thead>
<tr>
<th>Size</th>
<th>Operating Pressure (PSIG)</th>
<th>Coupling Assembly</th>
<th>Coupling Half Bulkhead Mounting</th>
<th>Coupling Half Hose Attaching</th>
<th>Coupling Assembly Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>3000</td>
<td>AE82302E</td>
<td>AE82303E</td>
<td>AE82311E</td>
<td>AE82304E AE82312E .242</td>
</tr>
<tr>
<td>-6</td>
<td>3000</td>
<td>AE82302G</td>
<td>AE82303G</td>
<td>AE82311G</td>
<td>AE82304G AE82312G .380</td>
</tr>
<tr>
<td>-8</td>
<td>3000</td>
<td>AE82302H</td>
<td>AE82303H</td>
<td>AE82311H</td>
<td>AE82304H AE82312H .555</td>
</tr>
<tr>
<td>-10</td>
<td>3000</td>
<td>AE82302J</td>
<td>AE82303J</td>
<td>AE82311J</td>
<td>AE82304J AE82312J .947</td>
</tr>
<tr>
<td>-12</td>
<td>3000</td>
<td>AE82302K</td>
<td>AE82303K</td>
<td>AE82311K</td>
<td>AE82304K AE82312K 1.268</td>
</tr>
<tr>
<td>-16</td>
<td>3000</td>
<td>AE82302M</td>
<td>AE82303M</td>
<td>AE82311M</td>
<td>AE82304M AE82312M 1.969</td>
</tr>
</tbody>
</table>

**Style II**

(MS33515 and MS33514 ends)

<table>
<thead>
<tr>
<th>Size</th>
<th>Operating Pressure (PSIG)</th>
<th>Coupling Assembly</th>
<th>Coupling Half Bulkhead Mounting</th>
<th>Coupling Half Hose Attaching</th>
<th>Coupling Assembly Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>3000</td>
<td>AE82306E</td>
<td>AE82307E</td>
<td>AE82315E</td>
<td>AE82308E AE82316E .236</td>
</tr>
<tr>
<td>-6</td>
<td>3000</td>
<td>AE82306G</td>
<td>AE82307G</td>
<td>AE82315G</td>
<td>AE82308G AE82316G .370</td>
</tr>
<tr>
<td>-8</td>
<td>3000</td>
<td>AE82306H</td>
<td>AE82307H</td>
<td>AE82315H</td>
<td>AE82308H AE82316H .537</td>
</tr>
<tr>
<td>-10</td>
<td>3000</td>
<td>AE82306J</td>
<td>AE82307J</td>
<td>AE82315J</td>
<td>AE82308J AE82316J .902</td>
</tr>
<tr>
<td>-12</td>
<td>3000</td>
<td>AE82306K</td>
<td>AE82307K</td>
<td>AE82315K</td>
<td>AE82308K AE82316K 1.221</td>
</tr>
<tr>
<td>-16</td>
<td>3000</td>
<td>AE82306M</td>
<td>AE82307M</td>
<td>AE82315M</td>
<td>AE82308M AE82316M 1.875</td>
</tr>
</tbody>
</table>
## Coupling Dimensions

### Style I

- **Coupled Length**

### Style II

- **Coupled Length**

### Coupling Half, Bulkhead Mounting

#### For Style I

- **B**
- **H**

#### For Style II

- **E**
- **H**

### Coupling Half, Hose Attaching

#### For Style I

- **G**
- **C**

#### For Style II

- **G**
- **C**

---

**Table**

<table>
<thead>
<tr>
<th>Dash Size</th>
<th>-4</th>
<th>-6</th>
<th>-8</th>
<th>-10</th>
<th>-12</th>
<th>-16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Letter Code</strong></td>
<td><strong>E</strong></td>
<td><strong>G</strong></td>
<td><strong>H</strong></td>
<td><strong>J</strong></td>
<td><strong>K</strong></td>
<td><strong>M</strong></td>
</tr>
<tr>
<td><strong>Tube Size</strong></td>
<td>(\frac{1}{4}'')</td>
<td>(\frac{3}{8}'')</td>
<td>(\frac{1}{2}'')</td>
<td>(\frac{3}{8}'')</td>
<td>(\frac{1}{2}'')</td>
<td>1''</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>1.748</td>
<td>1.943</td>
<td>2.159</td>
<td>2.522</td>
<td>2.612</td>
<td>3.017</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>1.047</td>
<td>1.125</td>
<td>1.281</td>
<td>1.422</td>
<td>1.593</td>
<td>1.593</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>.550</td>
<td>.556</td>
<td>.657</td>
<td>.758</td>
<td>.864</td>
<td>.911</td>
</tr>
<tr>
<td><strong>D MAX.</strong></td>
<td>.910</td>
<td>1.130</td>
<td>1.270</td>
<td>1.530</td>
<td>1.740</td>
<td>2.090</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>.969</td>
<td>1.015</td>
<td>1.156</td>
<td>1.297</td>
<td>1.406</td>
<td>1.406</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>.453</td>
<td>.469</td>
<td>.562</td>
<td>.625</td>
<td>.688</td>
<td>.688</td>
</tr>
<tr>
<td><strong>G</strong></td>
<td>1.210</td>
<td>1.320</td>
<td>1.420</td>
<td>1.750</td>
<td>1.906</td>
<td>2.160</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>1.014</td>
<td>1.092</td>
<td>1.261</td>
<td>1.500</td>
<td>1.510</td>
<td>1.760</td>
</tr>
<tr>
<td><strong>THD &quot;T&quot;</strong></td>
<td>.4375-20</td>
<td>.5625-18</td>
<td>.7500-16</td>
<td>.8750-14</td>
<td>1.0625-12</td>
<td>1.3125-12</td>
</tr>
</tbody>
</table>

- **UNJF-3A**

**Uncoupled Length, Max.**

- **2.250**
- **2.440**
- **2.710**
- **3.280**
- **3.430**
- **3.940**

**NOTE:** All dimensions in inches
Sizes, Applications and Part Numbers

Aeroquip couplings are available with all standard type end fitting combinations. To order, select the style, application, size and corresponding part number for coupling halves or complete coupling assembly from the table below (Example: Style 1, MIL-H-5606, -4 size, complete assembly: AE82318E). Aeroquip couplings for other fluids and end fittings are also available. Contact your nearest Aeroquip distributor, an Aeroquip sales engineer or the Aeroquip sales service engineering department (517) 787-8121.

### Style I

(MS33657 & MS33656 ends)

<table>
<thead>
<tr>
<th>Size</th>
<th>Operating Pressure (PSIG)</th>
<th>Coupling Assembly</th>
<th>Coupling Half Bulkhead Mounting</th>
<th>Coupling Half Hose Attaching</th>
<th>Coupling Assembly Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>1000</td>
<td>AE82318E</td>
<td>AE82319E</td>
<td>AE82320E</td>
<td>.097</td>
</tr>
<tr>
<td>-6</td>
<td>1000</td>
<td>AE82318G</td>
<td>AE82319G</td>
<td>AE82320G</td>
<td>.159</td>
</tr>
<tr>
<td>-8</td>
<td>1000</td>
<td>AE82318H</td>
<td>AE82319H</td>
<td>AE82320H</td>
<td>.240</td>
</tr>
<tr>
<td>-10</td>
<td>1000</td>
<td>AE82318J</td>
<td>AE82319J</td>
<td>AE82320J</td>
<td>.412</td>
</tr>
<tr>
<td>-12</td>
<td>1000</td>
<td>AE82318K</td>
<td>AE82319K</td>
<td>AE82320K</td>
<td>.578</td>
</tr>
<tr>
<td>-16</td>
<td>1000</td>
<td>AE82318M</td>
<td>AE82319M</td>
<td>AE82320M</td>
<td>.904</td>
</tr>
</tbody>
</table>

### Style II

(MS33515 & MS33514 ends)

<table>
<thead>
<tr>
<th>Size</th>
<th>Operating Pressure (PSIG)</th>
<th>Coupling Assembly</th>
<th>Coupling Half Bulkhead Mounting</th>
<th>Coupling Half Hose Attaching</th>
<th>Coupling Assembly Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>1000</td>
<td>AE82322E</td>
<td>AE82323E</td>
<td>AE82324E</td>
<td>.095</td>
</tr>
<tr>
<td>-6</td>
<td>1000</td>
<td>AE82322G</td>
<td>AE82323G</td>
<td>AE82324G</td>
<td>.155</td>
</tr>
<tr>
<td>-8</td>
<td>1000</td>
<td>AE82322H</td>
<td>AE82323H</td>
<td>AE82324H</td>
<td>.233</td>
</tr>
<tr>
<td>-10</td>
<td>1000</td>
<td>AE82322J</td>
<td>AE82323J</td>
<td>AE82324J</td>
<td>.397</td>
</tr>
<tr>
<td>-12</td>
<td>1000</td>
<td>AE82322K</td>
<td>AE82323K</td>
<td>AE82324K</td>
<td>.561</td>
</tr>
<tr>
<td>-16</td>
<td>1000</td>
<td>AE82322M</td>
<td>AE82323M</td>
<td>AE82324M</td>
<td>.871</td>
</tr>
</tbody>
</table>
Coupling Dimensions

Style I

Style II

Coupling Half, Bulkhead Mounting
For Style I

Coupling Half, Hose Attaching
For Style I

Dash Size | -4 | -6 | -8 | -10 | -12 | -16
Letter Code | E | G | H | J | K | M
Tube Size | ¼” | ⅜” | ⅝” | ¾” | 1” |
A | 1.748 | 1.943 | 2.159 | 2.522 | 2.612 | 3.017
B | 1.047 | 1.125 | 1.281 | 1.422 | 1.593 | 1.593
C | .550 | .556 | .657 | .758 | .864 | .911
D MAX. | .910 | 1.130 | 1.270 | 1.530 | 1.740 | 2.090
E | .969 | 1.015 | 1.156 | 1.297 | 1.406 | 1.406
F | .453 | .469 | .562 | .625 | .688 | .688
G | 1.244 | 1.320 | 1.420 | 1.750 | 1.906 | 2.160
H | 1.014 | 1.092 | 1.261 | 1.500 | 1.510 | 1.760
THD "T" | .4375-20 | .5625-18 | .7500-16 | .8750-14 | 1.0625-12 | 1.3125-12
UNJF-3A | UNJF-3A | UNJF-3A | UNJF-3A | UNJF-3A | UNJF-3A
Uncoupled Length | 2.290 | 2.440 | 2.710 | 3.280 | 3.430 | 3.940

NOTE: All dimensions in inches
Other Proven Aeroquip Products

Aeroquip also manufactures duct assemblies and components, band clamps, instrument mount clamps, Marman™ V-Band Couplings, check valves, swivel joints, tube fittings, ratchet lock, push-pull and modular self-sealing quick disconnect couplings, Teflon, rubber and thermoplastic hose with both crimp and reusable fittings.

For information on other low profile coupling designs write for: AEB-240A—1800 & 1801 Series Low Profile Ratchet Lock Couplings; Qualified to performance requirements of MIL-C-25427A

Eaton Corporation
Aeroquip Group
Engineered Systems Division
300 South East Avenue
Jackson, Michigan 49203-1972
517/787-8121, Fax: 517/787-5758
www.aeroquip.com

Specifications subject to change without notice.
Aeroquip products are protected by patents internationally.