

www.herberaircraft.com

- The Ultimate in Push-Pull Couplings
- Self-Seal, Self-Locking Couplings
- Automatic Pull-Home Valve Sleeve
- Tactile Locking Pins
- Vacuum to 5000 psi





# **Table of Contents**

#### Contents

| Ultra-Mate Couplings   | 4  |
|--|----|
| Introduction/Applications  | 4  |
| Design Features  | 4  |
| Key Components   | 5  |
| Dimensions   | 5  |
| Table: Letter Codes and Tube Sizes                                 | 5  |
| Table: Coupling Dimensions   | 5  |
| Basic Operation & Technical Data                                   | 6  |
| Reliability  | 6  |
| Weight and Performance Characteristics                             | 7  |
| Materials  | 7  |
| Part Numbers (Tables)  | 7  |
| High Pressure 5000 psi, (345 bar) Series Coupling Halves, Bulkhead | 7  |
| Coupling Halves, Hose Attaching With Tactile/Locking Pins          | 8  |
| With Visual Indicator Only   | 8  |
| Low Pressure 1500 psi, (103 bar) Series Coupling Halves, Bulkhead  | 8  |
| Coupling Halves, Hose Attaching                                    | g  |
| Cap & Plugs  | 10 |
| Metal Dust Caps & Plugs  | 10 |
| Rubber Dust Caps & Plugs   | 11 |
|  | ·  |

## **Ultra-Mate Couplings**

#### Introduction

Eaton's Aeroquip Ultra-Mate couplings are a new generation of self-seal, self-locking, push-pull couplings. They allow quick and easy connection and disconnection of fuel, lube oil, coolant and hydraulic lines for civil and military aircraft as well as ground vehicle applications.

The innovative Ultra-Mate automatic pull-home valve sleeve, features a soft seal tubular valve. This valve provides leak-free operation — a critical advantage for personal and environmental safety.

Ball bearings inside the hose half coupling sleeve fit into grooves located in the mating coupling half which, in turn, mechanically pulls the sleeve toward the closed position. It effectively prevents fluid spillage and leakage due to valve sleeve sticking or binding.

Tactile locking pins "pop out" when the connector is securely mated. These locking pins, located on the outer diameter, serve as a secondary locking system. They also provide visual and tactile proof of secure couplings — a valuable asset when coupling access is restricted.

Ultra-Mate couplings are available in corrosion resistant steel, titanium, or aluminum for applications with operating pressures up to 5,000 psi (345 bar).

#### Ultra-Mate features include:

- · A leak-free seal during connection and disconnection
- Locking pins located on the outer diameter that provide a tactile and visual confirmation of full connection and act as a secondary locking system
- A low pressure drop across the connector up to 45% improvement over current coupling models on the market
- Minimal air inclusion during connection and disconnection
- A small envelope design
- Lighter weight up to 36% lighter compared to previous push-pull couplings

Every Ultra-Mate coupling design and manufacture has undergone rigorous quality and performance testing. This dedication to detail and excellence is what has made the Eaton a leader in the aerospace industry.

## **Applications**

The Ultra-Mate coupling has a zero-leakage, ultra low design for use in hydraulic, fuel, lube oil and coolant systems on a variety of civil aircraft, military aircraft and ground defense vehicles. The design of the coupling is essentially the same for all fluid applications; however, the O-ring material varies to accommodate the different fluids and their respective properties. For low-pressure applications, aluminum components are typically selected over stainless steel due to their lower cost and weight. In addition, for low-pressure systems or systems which do not experience high vibration, customers can select an Ultra-Mate coupling without tactile locking pins and consequently gain a smaller profile coupling and reduce system weight.

#### **Design Features**

The Ultra-Mate coupling is a self-sealing, self-locking coupling that allows for quick and easy connection and disconnection of fluid lines. The patented push-pull design features a positive pull-home sleeve, tactile locking pins, and a soft seal tubular valve.

The Ultra-Mate coupling has a zero-leakage, low air-inclusion and fluid loss design, which features a flat-faced valve that eliminates air trapped between the two halves during connection.

The unique one-piece design also eliminates a seal and a potential leak path found in older, two-piece designs. The use of a bonded, elastomeric seal on the hose half valve provides a more reliable, leak-free seal when compared to both metal-to-metal or PTFE seals.

The pull-home sleeve is an important design feature aimed at reducing leakage. As the user begins to disconnect the two coupling halves, small bearings mechanically pull the valve sleeve towards the closed position to seal off all fluid flow, and release the valve sleeve just before the coupling assembly is fully disconnected.

This revolutionary design has been tested in field applications and in Eaton test facilities to simulate a broad range of working environments. All sizes are qualified to SAE AS1709 and AS7413 requirements for fluid conveyance applications. Ultra-Mate couplings can operate at pressures ranging from vacuum to 5,000psi (345 bar) and temperatures ranging from -65°F to +275°F (-54°C to +135°C), giving it unsurpassed versatility for a push-pull coupling.

The Ultra-Mate coupling is available in many different end-fitting configurations, and each coupling is leak-tested after assembly to ensure quality.



Ultra-Mate couplings have been selected for the Lockheed Martin, Northrop Grumman F-16 Block 60 in the radar coolant system.



Ultra-Mate couplings have been selected for the Lockheed Martin F-35 Joint Strike Fighter for all hydraulic, fuel, and coolant applications.

#### Valve

The valve is a flush face design engineered to minimize air inclusion during connection and disconnection. A bonded seal provides additional leak protection. The valve sleeve first forms a primary seal with the molded O-ring before ending in a metal-to-metal seal.

## **Ball Bearings**

Ball bearings resting in channels in the hose half coupling's internal diameter mechanically pull the valve sleeve towards the closed position and release just before the coupling has been completely disconnected. This is a key feature, which virtually eliminates fluid loss during connection and disconnection.

#### Indicator

Indicator pins serve as the tactile and visual indication that the two

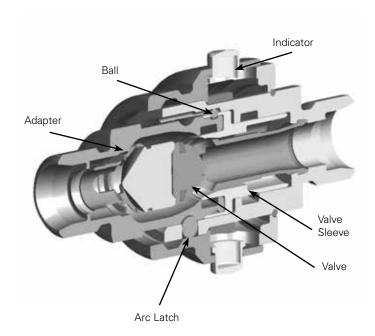
coupling halves are fully connected. Indicator pins also serve as a secondary locking device that must be pushed in to allow coupling disconnection. Pins are located on opposite sides of the hose half outer diameter.

#### **Arc Latch**

Eaton's Aeroquip "Arc Latch" locking design provides contact over a broad surface area. This permits low unit loading and helps prevent undue wear of the locking surface. In addition, the wider surface contact contributes to a more effective locking action and provides the coupling with greater capability to withstand high vibration-born environments.

#### Adapter

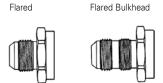
application and customer specification.



There are several possible endfitting configurations based on

**Table: Letter Code & Tube Size** 

| Dash Size      | -4  | -6  | -8  | -10 | -12 | -16 |  |
|----------------|-----|-----|-----|-----|-----|-----|--|
| Tube Size (in) | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 1   |  |
| Letter Code    | E   | G   | Н   | J   | K   | М   |  |

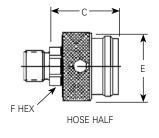


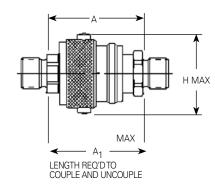
AS4396

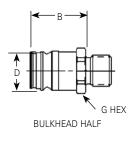
AS4395

AS33515 AS33514 Flareless Bulkhead Flareless

\*Arcseal™ end-fitting style also available







**Table: Coupling Dimensions** 

| Dash<br>Size | "A" DIM<br>(IN) | "A1"MAX<br>(IN) | "B" DIM<br>(IN) | "C" DIM<br>(IN) | "D" DIM<br>(IN) | "E" DIM<br>(IN) | "F" HEX<br>(IN) | "G" HEX<br>(IN) | "H" MAX<br>(IN) |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| -4           | 1.695           | 2.150           | 1.015           | 1.120           | 0.552           | 1.050           | 0.438           | 0.625           | 1.240           |
| -6           | 1.770           | 2.310           | 1.030           | 1.269           | 0.687           | 1.250           | 0.625           | 0.750           | 1.460           |
| -8           | 2.000           | 2.530           | 1.100           | 1.418           | 0.843           | 1.400           | 0.750           | 0.938           | 1.620           |
| -10          | 2.280           | 2.820           | 1.310           | 1.620           | 1.048           | 1.600           | 0.938           | 1.063           | 1.790           |
| -12          | 2.600           | 3.400           | 1.490           | 1.893           | 1.227           | 1.760           | 1.063           | 1.313           | 1.980           |
| -16          | 3.000           | 3.910           | 1.765           | 2.130           | 1.493           | 2.140           | 1.375           | 1.563           | 2.360           |

# Basic Operation and Technical Data

The Ultra-Mate coupling, when connected, allows fluid to flow freely from one half to the other. It can provide power or can transfer resources such as coolant or fuel safely and efficiently throughout a system.

The design of the Ultra-Mate coupling allows for easy connection and disconnection using only one hand. To connect, simply push the two mating halves together until they click. Both the "clicking" sound as well as the visual and tangible presence of the indicator pins signal that the coupling is secure.

To disconnect the Ultra-Mate coupling halves, depress the locking pins and pull straight back. Pulling back on the outer sleeve during disconnection will also aid in this process.



As the user begins to disconnect the two coupling halves, the small bearings mechanically pull the valve sleeve towards the closed position. This feature virtually eliminates the common problem of valves sticking in the open position.



Once the two coupling halves have been disconnected, the tactile locking pins will lie flush with the outer diameter of the coupling. This indicates that the coupling is no longer securely coupled.

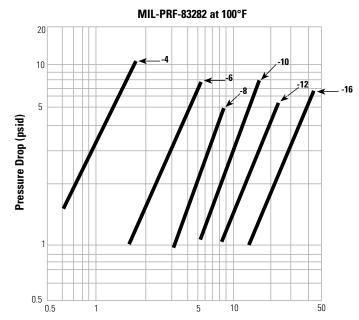


### Reliability

Each coupling has been tested at Eaton's state-of-the-art facility. These tests have been designed to simulate all possible working conditions to certify the superior performance of the couplings. The Ultra-Mate couplings have been tested to meet or exceed SAE AS1709 specifications for hydraulic push-pull couplings and AS7413 for fuel push-pull couplings. These requirements include:

- Ability to operate within a temperature range of -65°F (-54°C) to +275°F (135°C).
- Capable of enduring 200 connect/disconnect cycles without evidence of malfunction, leakage or damage.
- Ability to tolerate a oneminute proof pressure test equal to 150% of the perating pressure and a burst test equal to 250% of the rated operating pressure without rupture or loss of fluid.
- Ability to withstand a 20g impact test without indication of disconnection, leakage or malfunction.

## **Ultra-Mate Pressure Drop Curves**



Flow Rate (gpm)

# Flow Coefficient ( $C_V$ Factor) (Flow rate in GPM of water 60°F (15.5°C) with psig pressure drop)

| Size | -4   | -6  | -8  | -10 | -12  | -16  |  |
|------|------|-----|-----|-----|------|------|--|
| Co.  | 0.53 | 1.6 | 4.1 | 6.2 | 10.3 | 15.9 |  |

## **Ultra-Mate Bulletin Weights**

| Weight - Aluminum (1,500 psig)<br>AS4395 Ends |                     |                 | Weight - Cres (5, AS4395 Ends | ,000 psig)      | Weight -Titanium (4,000 psig)<br>AS4207B Arcseal™ Ends |                 |  |
|---|---------------------|-----------------|-------------------------------|-----------------|--|-----------------|--|
| Dash Size                                     | Bulkhead Half (lbs) | Hose Half (lbs) | Bulkhead Half (lbs)           | Hose Half (lbs) | Bulkhead Half (lbs)                                    | Hose Half (lbs) |  |
| -4  | .022                | .057            | .055                          | .113            | .031   | .090            |  |
| -6  | .035                | .098            | .087                          | .180            | .049   | .140            |  |
| -8  | .054                | .143            | .131                          | .278            | .067   | .204            |  |
| -10   | .092                | .232            | .225                          | .439            | .119   | .296            |  |
| -12   | .134                | .290            | .348                          | .634            | .176   | .439            |  |
| -16   | .206                | .454            | .527                          | 1.033           | .296   | .725            |  |

#### **Weight and Performance Characteristics**

Eaton's Ultra-Mate couplings have been developed to deliver unsurpassed value to every specific application to which it is used. Every coupling is subjected to 100% inspection for critical dimensions as well as leakage and performance. Eaton's statistical process control procedures track these measures, ensuring that quality is part of every step.

#### **Materials**

#### **High Pressure Series**

Primary Component Material:

Stainless Steel (consult Eaton for Titanium) Media: MIL-PRF-83282 Oil,

and Phosphate Ester Base Fluids (Skydrol®)

Packings: Nitrile, EPR

Temperature Range\*: -65°F (-54°C) to +275°F (135°C)

Operating Pressure: 5,000psi (345 bar) Proof Pressure: 7,500psi (517 bar) Burst Pressure (min): 12,500psi (862 bar)

#### **Low Pressure Series**

Primary Component Material: Aluminum

Media: Fuel, MIL-PRF-83282 Oil, Phosphate Ester Base Fluids

(Skydrol), PAO

Packings: Nitrile, EPR, Fluorosilicone, Fluorocarbon Temperature Range\*:- 65°F (-54°C) to +275°F (135°C)

Operating Pressure: 1,500psi (103 bar) Proof Pressure: 2,250psi (155 bar)

Minimum Burst Pressure (min): 3,750psi (258 bar)

\*With appropriate change in materials and packings, coupling may be

adapted to a wide range of fluids and temperatures.

#### **Part Numbers**

Eaton is dedicated to helping you choose the right coupling and the best materials for the intended application. Our technical service representatives can assist you in part selection. This catalog features standard coupling models; however, Eaton will provide custom designed couplings upon request.

## High Pressure 5,000 psi Series Coupling Part Numbers

Coupling Halves, Bulkhead

| AS33514 Ends Fluid |                   |            | AS43 | 95 Ends Fluid     |           | AS42 | AS4207B (Arcseal™) Ends Fluid |          |  |
|--------------------|-------------------|------------|------|-------------------|-----------|------|-------------------------------|----------|--|
| Size               | MIL-PRF-83282 Oil | Skydrol    | Size | MIL-PRF-83282 Oil | Skydrol   | Size | MIL-PRF-83282 Oil             | Skydrol  |  |
| -4                 | AE73535E          | AE73609E   | -4   | AE73611E          | AE73613E  | -4   | AE73615E                      | AE73617  |  |
|                    | A EZOEGE C        | A E 700000 |      | A F700110         | A F700100 |      | A E7001E0                     | A F70017 |  |

| Size | MIL-PRF-83282 Uil | Skydrol  | Size | MIL-PRF-83282 Uil | Skydrol  | Size | MIL-PKF-83282 UII | Skydrol  |
|------|-------------------|----------|------|-------------------|----------|------|-------------------|----------|
| -4   | AE73535E          | AE73609E | -4   | AE73611E          | AE73613E | -4   | AE73615E          | AE73617E |
| -6   | AE73535G          | AE73609G | -6   | AE73611G          | AE73613G | -6   | AE73615G          | AE73617G |
| -8   | AE73535H          | AE73609H | -8   | AE73611H          | AE73613H | -8   | AE73615H          | AE73617H |
| -10  | AE73535J          | AE73609J | -10  | AE73611J          | AE73613J | -10  | AE73615J          | AE73617J |
| -12  | AE73535K          | AE73609K | -12  | AE73611K          | AE73613K | -12  | AE73615K          | AE73617K |
| -16  | AE73535M          | AE73609M | -16  | AE73611M          | AE73613M | -16  | AE73615M          | AE73617M |

| AS33515 Ends Fluid |                   |          | AS43    | AS4396 Ends Fluid |          |         | AS4208B (Arcseal™) Ends Fluid |          |  |
|--------------------|-------------------|----------|---------|-------------------|----------|---------|-------------------------------|----------|--|
| Size               | MIL-PRF-83282 Oil | Skydrol  | Size    | MIL-PRF-83282 Oil | Skydrol  | Size    | MIL-PRF-83282 Oil             | Skydrol  |  |
| -4                 | AE73619E          | AE73620E | -4      | AE73621E          | AE73622E | -4      | AE73623E                      | AE73624E |  |
| -6                 | AE73619G          | AE73620G | <br>-6  | AE73621G          | AE73622G | 6       | AE73623G                      | AE73624G |  |
| -8                 | AE73619H          | AE73620H | -8      | AE73621H          | AE73622H |         | AE73623H                      | AE73624H |  |
| -10                | AE73619J          | AE73620J | -10     | AE73621J          | AE73622J | <br>-10 | AE73623J                      | AE73624J |  |
| -12                | AE73619K          | AE73620K | <br>-12 | AE73621K          | AE73622K | 12      | AE73623K                      | AE73624K |  |
| -16                | AE73619M          | AE73620M | -16     | AE73621M          | AE73622M | <br>-16 | AE73623M                      | AE73624M |  |

## High Pressure 5,000 psi Series Coupling Part Numbers

Coupling Halves, Hose Attaching

With Tactile/Locking Pins (Not for O'Ring Use)

| AS33514 Ends Fluid |                   |          | <u>AS43</u> | AS4395 Ends Fluid |          |      | AS4207B (Arcseal™) Ends Fluid |          |  |
|--------------------|-------------------|----------|-------------|-------------------|----------|------|-------------------------------|----------|--|
| Size               | MIL-PRF-83282 Oil | Skydrol  | Size        | MIL-PRF-83282 Oil | Skydrol  | Size | MIL-PRF-83282 Oil             | Skydrol  |  |
| -4                 | AE73534E          | AE73610E | -4          | AE73612E          | AE73614E | -4   | AE73616E                      | AE73618E |  |
| -6                 | AE73534G          | AE73610G | -6          | AE73612G          | AE73614G | -6   | AE73616G                      | AE73618G |  |
| -8                 | AE73534H          | AE73610H | -8          | AE73612H          | AE73614H | -8   | AE73616H                      | AE73618H |  |
| -10                | AE73534J          | AE73610J | -10         | AE73612J          | AE73614J | -10  | AE73616J                      | AE73618J |  |
| -12                | AE73534K          | AE73610K | -12         | AE73612K          | AE73614K | -12  | AE73616K                      | AE73618K |  |
| -16                | AE73534M          | AE73610M | -16         | AE73612M          | AE73614M | -16  | AE73616M                      | AE73617M |  |

With Visual Indicator Only (For O'Ring Use)

| AS33514 Ends Fluid |                   |          | AS43    | AS4395 Ends Fluid |          |         | AS4207B (Arcseal™) Ends Fluid |          |  |
|--------------------|-------------------|----------|---------|-------------------|----------|---------|-------------------------------|----------|--|
| Size               | MIL-PRF-83282 Oil | Skydrol  | Size    | MIL-PRF-83282 Oil | Skydrol  | Size    | MIL-PRF-83282 Oil             | Skydrol  |  |
| -4                 | AE73625E          | AE73626E |         | AE73627E          | AE73628E | -4      | AE73629E                      | AE73630E |  |
| -6                 | AE73625G          | AE73626G |         | AE73627G          | AE73628G |         | AE73629G                      | AE73630G |  |
| 8                  | AE73625H          | AE73626H |         | AE73627H          | AE73628H | -8      | AE73629H                      | AE73630H |  |
| 10                 | AE73625J          | AE73626J | 10      | AE73627J          | AE73628J | <br>-10 | AE73629J                      | AE73630J |  |
| 12                 | AE73625K          | AE73626K | 12      | AE73627K          | AE73628K | -12     | AE73629K                      | AE73630K |  |
| -16                | AE73625M          | AE73626M | <br>-16 | AE73627M          | AE73628M | <br>-16 | AE73629M                      | AE73630M |  |

## Low Pressure 1,500 psi Series Coupling Part Numbers (Fuel QD's 90 psi)

Coupling Halves, Bulkhead

| AS3 | 251 | 4 E | ind. | e El | id |
|-----|-----|-----|------|------|----|

| Size | MIL-PRF-83282 Oil | Phosphate Ester | MIL-PRF-87252 | Fuel     |
|------|-------------------|-----------------|---------------|----------|
| -4   | AE73639E          | AE73641E        | AE74534E      | AE74542E |
| -6   | AE73639G          | AE73641G        | AE74534G      | AE74542G |
| -8   | AE73639H          | AE73641H        | AE74534H      | AE74542H |
| -10  | AE73639J          | AE73641J        | AE74534J      | AE74542J |
| -12  | AE73639K          | AE73641K        | AE74534K      | AE74542K |
| -16  | AE73639M          | AE73641M        | AE74534M      | AE74542M |
| -24  | AE73639P          |                 |               |          |

## **AS4395 Ends Fluid**

| MIL-PRF-83282 0il | Phosphate Ester  | MIL-PRF-87252   | Fuel   |
|-------------------|--|---|--|
| AE73643E          | AE73645E   | AE75246E  | AE75247E   |
| AE73643G          | AE73645G   | AE75246G  | AE75247G   |
| AE73643H          | AE73645H   | AE75246H  | AE75247H   |
| AE73643J          | AE73645J   | AE75246J  | AE75247J   |
| AE73643K          | AE73645K   | AE75246K  | AE75247K   |
| AE73643M          | AE73645M   | AE75246M  | AE75247M   |
|                   | AE73643E<br>AE73643G<br>AE73643H<br>AE73643J<br>AE73643K | AE73643E AE73645E AE73643G AE73645G AE73643H AE73645H AE73643J AE73645J AE73643K AE73645K | AE73643E AE73645E AE75246E AE73643G AE73645G AE75246G AE73643H AE73645H AE75246H AE73643J AE73645J AE75246J AE73643K AE73645K AE75246K |

## AS33515 Ends Fluid

| Size | MIL-PRF-83282 Oil | Phosphate Ester | MIL-PRF-87252 | Fuel     |
|------|-------------------|-----------------|---------------|----------|
| -4   | AE73651E          | AE73652E        | AE74540E      | AE74548E |
| -6   | AE73651G          | AE73652G        | AE74540G      | AE74548G |
| -8   | AE73651H          | AE73652H        | AE74540H      | AE74548H |
| -10  | AE73651J          | AE73652J        | AE74540J      | AE74548J |
| -12  | AE73651K          | AE73652K        | AE74540K      | AE74548K |
| -16  | AE73651M          | AE73652M        | AE74540M      | AE74548M |
|      |                   |                 |               |          |

## AS4396 Ends Fluid

| Size | MIL-PRF-83282 0il | Phosphate Ester | MIL-PRF-87252 | Fuel     |
|------|-------------------|-----------------|---------------|----------|
| -4   | AE73653E          | AE73654E        | AE74541E      | AE74549E |
| -6   | AE73653G          | AE73654G        | AE74541G      | AE74549G |
| -8   | AE73653H          | AE73654H        | AE74541H      | AE74549H |
| -10  | AE73653J          | AE73654J        | AE74541J      | AE74549J |
| -12  | AE73653K          | AE73654K        | AE74541K      | AE74549K |
| -16  | AE73653M          | AE73654M        | AE74541M      | AE74549M |

#### Low Pressure 1,500 psi Series Coupling Part Numbers (Fuel QD's 90 psi)

Coupling Halves, Hose Attaching

With Tactile Indicator Pins (Not for O'Ring Use)

#### AS33514 Ends Fluid

| 7000 | A0000 14 Elius I luiu |                 |               |          |  |  |
|------|-----------------------|-----------------|---------------|----------|--|--|
| Size | MIL-PRF-83282 Oil     | Phosphate Ester | MIL-PRF-87252 | Fuel     |  |  |
| -4   | AE73640E              | AE73642E        | AE74536E      | AE74544E |  |  |
| -6   | AE73640G              | AE73642G        | AE74536G      | AE74544G |  |  |
| -8   | AE73640H              | AE73642H        | AE74536H      | AE74544H |  |  |
| -10  | AE73640J              | AE73642J        | AE74536J      | AE74544J |  |  |
| -12  | AE73640K              | AE73642K        | AE74536K      | AE74544K |  |  |
| -16  | AE73640M              | AE73642M        | AE74536M      | AE74544M |  |  |
| -24  | AE73640P              |                 |               |          |  |  |

#### **AS4395 Ends Fluid**

| Size | MIL-PRF-83282 Oil | Phosphate Ester | MIL-PRF-87252 | Fuel     |
|------|-------------------|-----------------|---------------|----------|
| -4   | AE73644E          | AE73646E        | AE74539E      | AE74547E |
| -6   | AE73644G          | AE73646G        | AE74539G      | AE74547G |
| -8   | AE73644H          | AE73646H        | AE74539H      | AE74547H |
| -10  | AE73644J          | AE73646J        | AE74539J      | AE74547J |
| -12  | AE73644K          | AE73646K        | AE74539K      | AE74547K |
| -16  | AE73644M          | AE73646M        | AE74539M      | AE74547M |
|      |                   |                 |               |          |

With visual indicator only. (For O'Ring Use)

#### AS33514 Ends Fluid

| Size | MIL-PRF-83282 Oil | Phosphate Ester | MIL-PRF-87252 | Fuel     |
|------|-------------------|-----------------|---------------|----------|
| -4   | AE73647E          | AE73648E        | AE74535E      | AE74543E |
| -6   | AE73647G          | AE73648G        | AE74535G      | AE74543G |
| -8   | AE73647H          | AE73648H        | AE74535H      | AE74543H |
| -10  | AE73647J          | AE73648J        | AE74535J      | AE74543J |
| -12  | AE73647K          | AE73648K        | AE74535K      | AE74543K |
| -16  | AE73647M          | AE73648M        | AE74535M      | AE74543M |

#### **AS4395 Ends Fluid**

| Size | MIL-PRF-83282 Oil | Phosphate Ester | MIL-PRF-87252 | Fuel     |
|------|-------------------|-----------------|---------------|----------|
| -4   | AE73649E          | AE73650E        | AE75244E      | AE75245E |
| -6   | AE73649G          | AE73650G        | AE75244G      | AE75245G |
| -8   | AE73649H          | AE73650H        | AE75244H      | AE75245H |
| -10  | AE73649J          | AE73650J        | AE75244J      | AE75245J |
| -12  | AE73649K          | AE73650K        | AE75244K      | AE75245K |
| -16  | AE73649M          | AE73650M        | AE75244M      | AE75245M |

The user should carefully observe the precautions listed in this catalog or brochure, including the recommendations on the selection of couplings on the relevant pages and the pages on fluid compatibility. Maximum application operating pressure should not exceed operating pressure listed.

## **WARNING:**

Application considerations must be observed in selecting appropriate components for the application of these products contained herein. The failure to follow the recommendations set forth in this catalog may result in an unstable application, which may result in serious personal injury or property damage.

EATON OR ANY OF ITS AFFILIATES OR SUBSIDIARIES SHALL NOT BE SUBJECT TO AND DISCLAIMS ANY OBLIGATIONS OR LIABILITIES (INCLUDING BUT NOT LIMITED TO ALL CONSEQUENTIAL INCIDENTAL AND CONTINGENT DAMAGES) ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY OR ARISING FROM TORT CLAIMS (INCLUDING WITHOUT LIMITATION NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW WITH RESPECT TO ANY COUPLING ASSEMBLY NOT PRODUCED FROM GENUINE EATON COMPONENTS AND ASSEMBLED IN CONFORMANCE USING GENUINE EATON COMPONENTS WITH THE PROCESS AND PRODUCT INSTRUCTIONS SET FORTH HEREIN.

# **Dust Caps & Plugs**





Metal Dust Cap Metal Dust Plug

## Metal Dust Caps (Protection Against Dust & Moisture Only)

| Size | Material | MIL-PRF-83282 | "Phosphate-Ester (Skydrol)" | "MIL-PRF-87252 (PAO)" | EGW/PGW  | FUEL     |
|------|----------|---------------|-----------------------------|-----------------------|----------|----------|
| -4   | Aluminum | AE74725E      | AE73743E                    | AE73742E              | AE77425E | AE75383E |
|      | CRES     | AE73738E      | AE73739E                    | NA                    | NA       | NA       |
| -6   | Aluminum | AE74725G      | AE73743G                    | AE73742G              | AE77425G | AE75383G |
|      | CRES     | AE73738G      | AE73739G                    | NA                    | NA       | NA       |
| -8   | Aluminum | AE74725H      | AE73743H                    | AE73742H              | AE77425H | AE75383H |
|      | CRES     | AE73738H      | AE73739H                    | NA                    | NA       | NA       |
| -10  | Aluminum | AE74725J      | AE73743J                    | AE73742J              | AE77425J | AE75383J |
|      | CRES     | AE73738J      | AE73739J                    | NA                    | NA       | NA       |
| -12  | Aluminum | AE74725K      | AE73743K                    | AE73742K              | AE77425K | AE75383K |
|      | CRES     | AE73738K      | AE73739K                    | NA                    | NA       | NA       |
| -16  | Aluminum | AE74725M      | AE73743M                    | AE73742M              | AE77425M | AE75383M |
|      | CRES     | AE73738M      | AE73739M                    | NA                    | NA       | NA       |

## Metal Plugs, Pressure Sealing

| Size | Material | MIL-PRF-83282 | "Phosphate-Ester (Skydrol)" | "MIL-PRF-87252 (PAO)" | EGW/PGW  | FUEL     |
|------|----------|---------------|-----------------------------|-----------------------|----------|----------|
| -4   | Aluminum | AE73736E      | AE73737E                    | AE75936E              | AE77426E | AE75955E |
|      | CRES     | AE73733E      | AE73734E                    | NA                    | NA       | NA       |
| -6   | Aluminum | AE73736G      | AE73737G                    | AE75936G              | AE77426G | AE75955G |
|      | CRES     | AE73733G      | AE73734G                    | NA                    | NA       | NA       |
| -8   | Aluminum | AE73736H      | AE73737H                    | AE75936H              | AE77426H | AE75955H |
|      | CRES     | AE73733H      | AE73734H                    | NA                    | NA       | NA       |
| -10  | Aluminum | AE73736J      | AE73737J                    | AE75936J              | AE77426J | AE75955J |
|      | CRES     | AE73733J      | AE73734J                    | NA                    | NA       | NA       |
| -12  | Aluminum | AE73736K      | AE73737K                    | AE75936K              | AE77426K | AE75955K |
|      | CRES     | AE73733K      | AE73734K                    | NA                    | NA       | NA       |
| -16  | Aluminum | AE73736M      | AE73737M                    | AE75936M              | AE77426M | AE75955M |
|      | CRES     | AE73733M      | AE73734M                    | NA                    | NA       | NA       |





Rubber Dust Cap (Male QD)

Rubber Dust Cap (Female QD)

## Rubber Caps, For use with Male QD's (Protection Against Dust & Moisture Only)

| Size | MIL-PRF-83282 | "Phosphate-Ester (Skydrol)" | "MIL-PRF-87252 (PAO)" | EGW/PGW  | FUEL |
|------|---------------|-----------------------------|-----------------------|----------|------|
| -4   | AE73744E      | AE73745E                    | AE73744E              | AE77429E | NA   |
| -6   | AE73744G      | AE73745G                    | AE73744G              | AE77429G | NA   |
| -8   | AE73744H      | AE73745H                    | AE73744H              | AE77429H | NA   |
| -10  | AE73744J      | AE73745J                    | AE73744J              | AE77429J | NA   |
| -12  | AE73744K      | AE73745K                    | AE73744K              | AE77429K | NA   |
| -16  | AE73744M      | AE73745M                    | AE73744M              | AE77429M | NA   |

## Rubber Caps, For use with Female QD's (Protection Against Dust & Moisture Only)

| Size | MIL-PRF-83282 | "Phosphate-Ester (Skydrol)" | "MIL-PRF-87252 (PAO)" | EGW/PGW  | FUEL |
|------|---------------|-----------------------------|-----------------------|----------|------|
| -4   | AE73740E      | AE73741E                    | AE73740E              | AE77428E | NA   |
| -6   | AE73740G      | AE73741G                    | AE73740G              | AE77428G | NA   |
| -8   | AE73740H      | AE73741H                    | AE73740H              | AE77428H | NA   |
| -10  | AE73740J      | AE73741J                    | AE73740J              | AE77428J | NA   |
| -12  | AE73740K      | AE73741K                    | AE73740K              | AE77428K | NA   |
| -16  | AE73740M      | AE73741M                    | AE73740M              | AE77428M | NA   |

Eaton
Aerospace Group
Fluid & Electrical Distribution Division
300 South East Avenue
Jackson, Michigan 49203-1972
Phone: (517) 787 8121
Fax: (517) 789 2947



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