# Slide-Lok Quick-Disconnect Couplings

Slide-LokTM couplings provide quick connect/disconnect capability with self-sealing action and superior performance during operation and maintenance of fluid systems. The Slide-Lok design is a push-to-connect, pull-to-disconnect style coupling. The Slide-Lok series are compatible with a range of system fluids currently used in today's high-technology aerospace andground, plus under-sea systems and are available in a variety of temperature and pressure ranges.

Slide-Lok couplings are the ideal selection for a quick disconnect where size, weight, performance, and reliability are important application criteria and are deal for use in cooling, fuel, hydraulic, and pneumatic system applications. Series sizes range from -02 (1/8 inch) up to -20 (1 <sup>1</sup>/<sub>4</sub> inch) line sizes.

The basic Slide-Lok design incorporates Stratoflex efficient self-sealing valving that permits fluid flow with minimum pressure loss and turbulence. Our valving design has proven reliability and is used extensively on a wide range of aerospace platforms in service today along with high-performance, ground-based applications. A flush-faced valve design provides minimal air inclusion or spillage during the connect and disconnect operation, while one-piece housing designs offer few potential seal leak paths and high reliability.

The primary function of the Slide-Lok quick disconnect coupling is to allow the user with simple, one-hand operation to connect (push) and disconnect (pull) the coupling halves during installation and maintenance of the fluid system. As the coupling halves are pushed together, the fluid flow path opens, and when in the fully open position, the coupling halves are locked together using Parker Aerospace's reliable and high-strength collet-style locking mechanism. This style of locking mechanism features significant surface contact and load-carrying capability compared with most push-to-connect quick-disconnect designs, which use some form of ball locking with limited point contact.

Typical installations use the coupler half with latching mechanism on the hose or tube side and the nipple half installed on a panel or in a manifold. The Slide-Lok quick disconnect requires linear movement to connect and disconnect along with room to access the outer, or actuating ring by hand in order to pull back the ring and disconnect the two halves.

Standard QD end fittings include:

- SAE AS33656, AS33657 male flared fitting
- SAE AS33514, AS33515 male flareless fitting



### **Product Features**

- Small and very efficient size and flow-rate combination, ideal for cooling system applications
- Light-weight design
- · Low pressure drop based on streamline valve design
- Simple, one-hand connect and disconnect operation for ease of use
- Range of end-fitting styles and fluid compatibility options available
- Stainless steel construction meets typical electrical bonding requirements

## **Applications**

The Parker Aerospace Slide-Lok quick disconnect couplings are used on a variety of aerospace and related applications where small size, light weight, and high reliability are important for systems in service today. Programs include commercial and military programs such as: F-15, F-16, F/A-18, F-22, C-17, a wide range of cooling system fluids (PAO, EGW, PGW), and applications including the Patriot missile launcher. Parker Aerospace's Slide-Lok quick disconnects are also used by many top Formula One race teams based on their small size and high reliability.



# Slide-Lok Quick-Disconnect Couplings

### Product Choice Considerations

The Slide-Lok quick disconnect has an extensive service history across many aircraft platforms with proven reliability. The baseline qualification for this product is based on the applicable requirements of industry standard SAE AS1709 specification. In some cases, qualification is based on or may be required for specific platform installation and performance requirements. Contact the Stratoflex Products Division with interface and performance requirements to determine if this product is the best choice for your installation and application.

For specific applications where high vibration, shock, and impulse load environments exist, Parker Aerospace recommends the Thread-Lok quick disconnect coupling series. The mechanical advantage of connecting the coupling halves with a thread-together design, often provides the most robust performance in systems including engines, landing gear, and brake systems.

### **Optional Features**

Standard configuration is available in stainless steel body construction. Component materials include stainless steel and other materials compatible with specific fluid applications. Contact the Stratoflex Products Division for any other specific material information.

### **Contact Information**

Parker Hannifin Corporation Parker Aerospace **Stratoflex Products Division** 220 Roberts Cut-Off Road Fort Worth, Texas 76114-0398 Phone: (817) 738-6543 Fax: (817) 738-9920 *www.parker.com* 

