Fuelling products

Swivel disconnects

F582 - F584 - F596 - F597

F584 C, L F582AE F582AG F597A

Meggitt nozzles, swivels and disconnects, are designed to provide an ability to custom build a nozzle system to meet a customer's requirements. The swivel assemblies used on the F116 and F117 nozzles are available in two basic sizes with various inlet configurations. The F582 series swivels supersede Meggitt series F501, F506, F577, F578 and F580. All Meggitt swivels utilize a ball-lock concept that has proven successful through many years of service. Each swivel assembly consists of a body with its inlet thread and ball cage; locking sleeve and screws; safety lock ring; balls; retaining ring; aluminum coupling with replaceable CRES wire races; seal and bearing. All swivel assemblies of current manufacture are equipped with a newly designed heavy duty coupling and sleeve.

The F597 swivel is designed to mate with the F239 and F240 hydrant couplers. Optional outlet configurations allow the use of various threads and hose sizes.

The F596 underwing nozzle self-sealing quick disconnect swivel and strainer assembly was designed specifically for use with Meggitt Military Standard (MS29520), and competitors' underwing refueling nozzles to allow ready access to the strainer with minimum spillage. The snap action valve automatically closes if the quick disconnect is manually actuated or becomes accidentally disconnected, preventing loss of fuel from the delivery hose. The lightweight assembly is compact and ruggedly constructed for heavy duty service. Flow characteristics result in extremely low pressure loss to 1000 USGPM.

The F596 is available in two to three-inch NPT or BSP pipe female hose end sizes, and utilizes the same three-inch coupling with replaceable ORES wire races and strainer as the F584 swivel.

Additional features

- Optional outlets for use with 2, 3 and 4-inch NPT or BSP and 4-inch ASSPT threaded hose
- Secondary locking rings to prevent inadvertent disconnection from coupler
- Operating pressure - 0 to 200PSIG

Key Features

- Lightweight, rugged construction
- Easily swivels under pressures to 100 PSIG. (6.90 BAR)
- Readily disconnects by moving safety lockring, loosening two self-locking screws, allowing push-pull action of two halves
- Minimum outside diameter with no projecting parts to break off
- Heavy duty couplings made of heat-treated aluminum alloy with replaceable CRES wire races
- Ready seal and bearing replacement
- Unobstructed flow path resulting in low pressure loss
- Bearing strip prevents galling
- Hardened CRES ring in locking sleeve to further extend swivel life and reduce friction
- NPT and BSP female pipe threads available in sizes two to 4-inch; outlet flanges to mate Meggitt F116 and F117, military D1 and competitors' nozzles
- Swivel capable of handling extra bending moment loads because of 24 ball bearing design (F597)

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Swivel disconnects

F582 - F584 - F596 - F597

Key Dimensions

- Lightweight 3.6 lbs (1.63). Compact rugged construction
- Minimum OD with no projecting parts to break off
- Easy swivel rotation to 100 PSI (.69)
- A redundant locking ring is provided for additional safety
- Ready access to the strainer for cleaning with a minimum of spillage
- Capable of flows up to 1000 USGPM (3800) in either direction
- Maintains integrity of fuel system with accidental disconnect under flow conditions (see performance data)
- Exceptionally low pressure drop

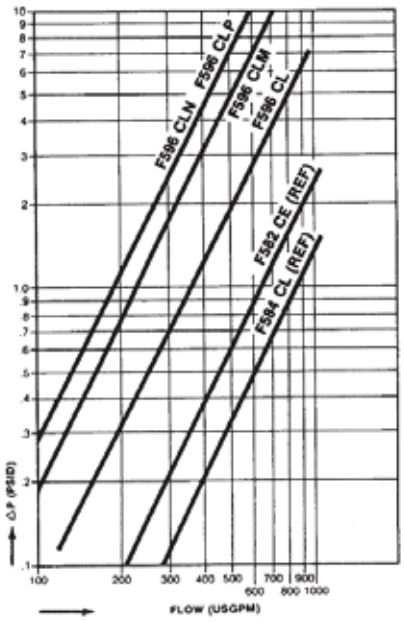
F596

NOTE: Data in parenthesis is metric. Weights in KG, pressures in bar, and flow rate in liters per minute.

Performance data

- Maximum (non-shock) working pressure - 275 PSI (19.0)
- Proof pressure - 425 PSI (29.3)
- Maximum leakage (valve closed on hose at 50 PSIG (3.5) inlet - 2cc/min
- Maximum leakage (after accidental closure of up to 400 USGPM (1500) flow at 50 PSIG (3.5) inlet - 120 cc/min

Flow characteristics
F596 dry disconnect



Warning - An accidental disconnect of this type will require that the unit be removed and rebuilt with any damaged or distorted parts replaced prior to being returned to service.

Contact

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Meggitt Control Systems

Our product competencies & services:
Aerospace valves | Thermal management solutions | Environmental control systems | Electro-mechanical products
Ground fuelling products | Energy products | Aftermarket services

MEGGITT
smart engineering for
extreme environments