

Series 600 Aircraft Fueling Control Valve Accessories

DESCRIPTION

Reducing ground time and keeping the newest generation of super jets in the air means fueling that is unprec-edented in speed and safety. Today's ground fueling equipment must be capable of delivering fuel into wing tanks at flow rates up to 1200 gpm (4536 lpm), while protecting the aircraft fuel system from excessive hy-draulic shock.

Daniel offers a complete line of valves specifically designed for safe and economical control when fueling all jet aircraft, including the newest supersonic transports. These 600 Series valves are hydraulically operated and suitable for fueler trucks, hydrants and service carts. They will control a maximum peak surge with slower closure and lower maximum pressure on its inlet side than any other type valve.

Complimenting this line of equipment is a selection of pilots and accessories designed to complete applica-tion requirements.

ACCESSORIES

Venturis

A venturi is used in fueling lines to compensate for pressure loss in long fueling hoses. The appropriate control valve senses fuel pressure at the throat of the venturi.

Materials Of Construction: Aluminum
Vicialic End Connections, Sizes: 3", 4" and 6"



Size	Max. Compensation	Flow Rate
3"	43 psi (296 kPa)	280 gpm (1058 lpm)
3"	35 psi (241 kPa)	300 gpm (1134 lpm)
3"	53 psi (365 kPa)	440 gpm (1663 lpm)
4"	35 psi (241 Kpa)	600 gpm (2268 lpm)
6"	32 psi (221 kPa)	1000 gpm (3780 lpm)

Three-Way Pilot

This pilot is available for deadman control, water drain on the filter-separator, or any application requiring a remote controlled small, three-way directional valve. A minimum pressure of 15 psi (1034 kPa) is required to hydraulically or pneumatically open or close the pilot.



Available in normally open or normally closed designs.

Body and End Covers: Bronze
All Internal Parts: Stainless Steel
Connection Size: 1/2" NPT

Model 410 Bottom Loading Pilot

When used in conjunction with the Model 601 control valve. This pilot automatically shuts off flow into a fueling truck when the preset fuel level has been reached.



Float Pilots

Float pilots differentiate between fuel and water to control slug valves. They are available in normally open or normally closed versions for bottom or side mounting.



Float Chamber and Pilot Body: Aluminum
All Internal Parts: Stainless Steel

Model 1612 On-Off Electrical Pilot

This normally closed solenoid pilot operates at a pressure differential of 125 psi (862 kPa) and is available in all standard AC or DC voltages.



Body and Internal Parts: Stainless Steel
Connection Size: 3/8" NPT
Orifice: 3/8"

Pressure Control Pilots

Model 1650 - Standard on Model 650 Valve

Model 1660 - Standard on Model 660 and 660P660 Valves

These pilots are designed to maintain a constant pressure within ± 2 psi (13.8 kPa) at the selected point in the main flowing stream. Pilots are pressure balanced, piston operated and single seated. Adjustable pilot spring available in ranges of 0 to 40, 30 to 80 or 70 to 180 psi (0 to 276, 207 to 552, or 483 to 1241 kPa).



Body and Cover: Aluminum
All Internal Parts: Stainless Steel
Connections: 3/8" NPT

Model G Hydraulic or Pneumatic On-Off Pilot

The Model G is a pressure balanced, diaphragm operated, normally open pilot used with a 600 Series valve to provide deadman control and water slug shutoff. It may be used separately as a water drain on the filter separator. Hydraulic or pneumatic pressure equal to the line pressure closes the valve.



Body and Internal Parts: Aluminum
Flow Connections: 3/8" NPT
Control Connection 1/8" NPT

Model 1654 Flow Control Pilot

This pilot is designed for use in applications requiring maximum fueling rate control. When two of these pilots are piped in parallel, and a selector control employed, two different fueling rates can be controlled with a single basic valve.



The Model 1654 pilot is pressure balanced, single seated and spring set for ease of adjustment. The adjustable pilot spring is available in pressure ranges of 0 to 20, 0 to 40, 30 to 80, and 70 to 180 psi (0 to 138, 0 to 276, 207 to 552, and 483 to 1241 kPa).

Body and Cover: Aluminum
All Internal Parts: Stainless Steel
Connections: 3/8" NPT

On-Off Hydraulic or Pneumatic Pilots

Model 1620 Normally Closed

- Standard on Model 620 valve

Model 1621 Normally Open

- Standard on Model 621 valve

These pilots are pressure balanced, piston operated and single seated. A minimum pressure of 15 psi (103 kPa) is required to open the Model 1620 or close the Model 1621. Bubble tight shutoff is provided by a positive O-Ring seat.



Body and Cover: Aluminum
All Internal Parts: Stainless Steel
Connections: 3/8" NPT

For complete Aircraft Fueling Control Valve Information reference Bulletin Numbers:

DS1600: Models 601, 610, 611, 620, 621 and 650
DS1660: Models 660 and 660P660
DS1695: Model 695
DS1699: Model 699

DANIEL®

Daniel Division Headquarters - Houston, Texas, USA, Tel: (713) 467-6000, Fax: (713) 827-3880

USA Toll Free 1-888-FLOW-001

Calgary, Alberta, Canada, Tel: (403) 279-1879, Fax: (403) 236-1337

Stirling, Scotland - UK, Mid-East & Africa, Tel: +44 1653-638300, Fax: +44 1653-600425

Singapore - Asia Pacific Tel: +65- 777-8211, Fax: +65 -770-8001

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