

## Models 660 and 660P660 Aircraft Fueling Control Valves Pump By-Pass Pressure Control

### DESCRIPTION

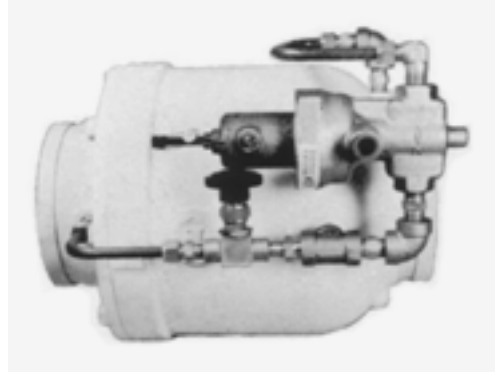
Daniel offers a complete line of valves specifically designed for safe and economical control when fueling all jet aircraft, including the newest supersonic transports. These 600 Series valves are hydraulically operated and suitable for fueling trucks, hydrants and service carts. They will control a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

The Model 660 Aircraft Refueling Valve is located in the pump by-pass line. It will maintain a constant pressure at the wing manifold by sensing main line pressure at a venturi or will limit maximum system pressure by sensing at pump discharge. Pressure is regulated within  $\pm 2$  psi (13.8 kPa) regardless of variations in flow rate or incoming pressure. Excess pressure or surge is dissipated through the valve to pump suction or the fuel tank. This spring adjusted pilot is available in spring ranges from 0 to 180 psi (0 to 1241 kPa).

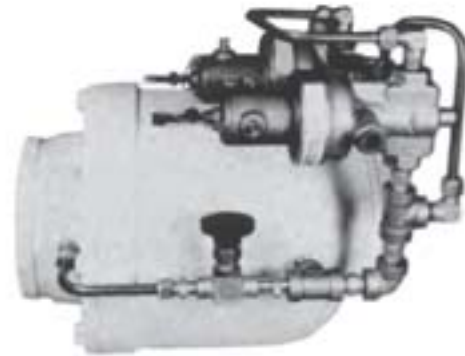
The Model 660P660 is located in the pump by-pass line and has dual pressure control pilots in parallel. Both pilots may be piped to the venturi for primary and secondary control of wing manifold pressure, or one pilot may be piped to control wing manifold pressure and the second pilot piped to pump discharge to limit maximum system pressure.

### DESIGN FEATURES

- Victaulic connections for ease of installation
- All Aluminum and Stainless Steel Construction
- Compact, lightweight in-line design
- Multiple function control pilots for pressure surge and deadman control
- Adjustable opening speed control
- Positive check against reverse flow
- Linear valve action
- Uniform speed of response
- Positive, bubble tight shutoff



Model 660



Model 660P660

### ! WARNING

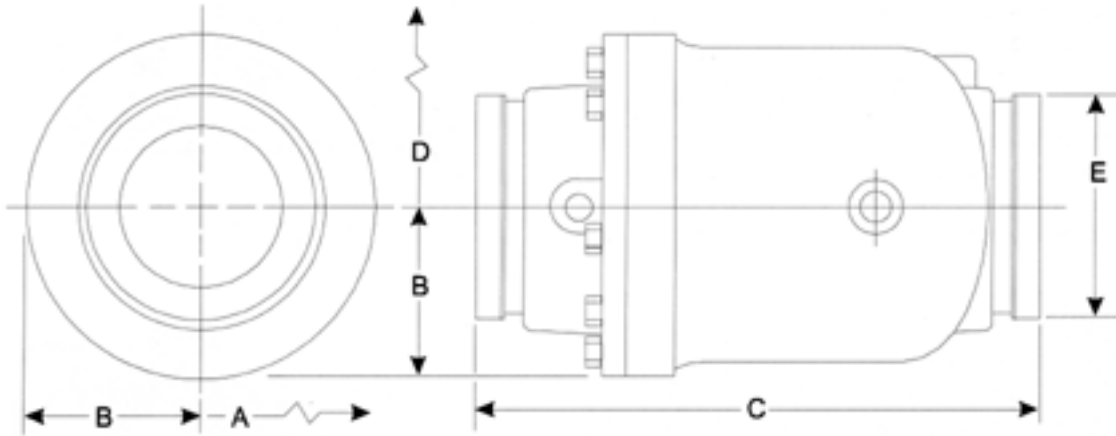
**Do not operate this instrument in excess of the specifications listed. Failure to heed this warning could result in serious injury and/or damage to the equipment.**

### MATERIALS OF CONSTRUCTION

Main Valve Body and Cover: Anodized Aluminum  
Piston: Anodized Aluminum  
All other internal parts: Stainless Steel

### SPECIFICATIONS

Connections: Victaulic  
Sizes: 2", 3", 4", and 6"  
Working Pressure: 200 psi (1378 kPa) at 100°F (38°C)  
Flow Rates: Up to 1200 gpm (4536 lpm)



NOTE; Dimencions "A" and "B" are approximate to remotest point with on pilot

Dimensions - Base Model, Series 600 Aircraft Fueling Control Valves

| Valve Size | A              | B              | C                | D              | E              |
|------------|----------------|----------------|------------------|----------------|----------------|
| 2"         | 6-1/2" (165mm) | 2-5/8" (67mm)  | 7-15/16" (211mm) | 5" (127mm)     | 2-3/8" (60mm)  |
| 3"         | 7-1/2" (191mm) | 3-3/8" (89mm)  | 11" (279mm)      | 5" (127mm)     | 3-1/2" (89mm)  |
| 4"         | 8-7/9" (225mm) | 3-7/8" (98mm)  | 11-5/16" (287mm) | 5" (127mm)     | 4-1/2" (114mm) |
| 6"         | 10" (254mm)    | 5-1/2" (140mm) | 14-3/4" (375mm)  | 6-7/8" (175mm) | 6-5/8" (168mm) |

For accessory information reference Bulletin DS1600AC.

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