

# Logic Elements

## DPS2-10-B

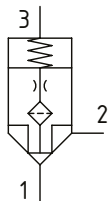
Logic Element, Normally Closed, Poppet Type, Vent to Open

350 bar [5000 psi] • 60 l/min [16 US gpm]

### DESCRIPTION AND OPERATION

This is a 3-ported, vent to open, poppet type logic element with port 1 connected to port 3 through an orifice. By opening port 3 to tank, flow can pass from port 1 to port 2 or from port 2 to port 1. Closing port 3 will prevent the valve from opening from port 1 to port 2, but flow can still take place from port 2 to port 1. The area ratio between port 1 and 3 is 1:2 and the ratio between port 1 and 2 is also 1:2. By controlling the flow or pressure out of port 3, the valve can be used as an on/off valve or in a pressure control function.

### SCHEMATIC

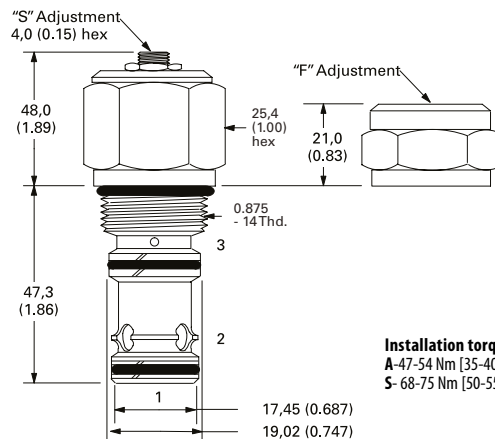


### PERFORMANCE DATA

|                |                                  |
|----------------|----------------------------------|
| Rated pressure | 350 bar [5000 psi]               |
| Rated flow     | 60 l/min [16 US gpm]             |
| Pilot Ratio    | 2:1                              |
| Leakage        | 5 drops/min @ 350 bar [5000 psi] |
| Weight         | 0.14 kg [0.30 lb]                |
| Cavity         | SDC10-3S                         |

### DIMENSIONS

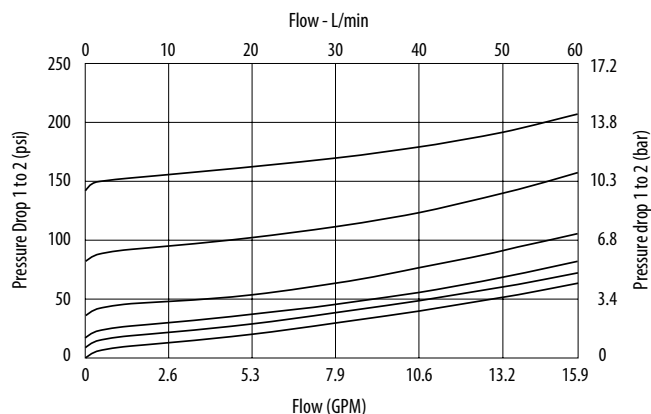
mm [in]



**Installation torque**  
**A** - 47-54 Nm [35-40 ft. lbs]  
**S** - 68-75 Nm [50-55 ft. lbs]

### PERFORMANCE CURVES

#### Pressure Drop



### MODEL CODE

**DPS2 - 10 - V - B - F - A - 3G - 040**

#### Seal Option

| Code          | Seal kit |
|---------------|----------|
| Omit-Buna - N | 889650   |
| V-Viton       | 889652   |

#### Adjustment Option

F - Fixed  
 S - Stroke Adjustments

#### Housing Material

Omit - No Housing  
 A - Aluminum  
 S - Steel

#### Housing

| Code | Ports 1 & 2 | Port 3   | Aluminum Heavy Duty | Steel     |
|------|-------------|----------|---------------------|-----------|
| 0    |             |          | No Housing          |           |
| 2G   | 1/4" BSP    | 1/4" BSP | 876707              |           |
| 3G   | 3/8" BSP    | 1/4" BSP | 876710              | 02-163313 |
| 4G   | 1/2" BSP    | 1/4" BSP |                     | 02-163324 |
| 6H   | #6 SAE      | #6 SAE   | 876706              |           |
| 8H   | #8 SAE      | #6 SAE   | 876712              |           |
| 6T   | #6 SAE      | #6 SAE   |                     | 02-171961 |
| 8T   | #8 SAE      | #6 SAE   |                     | 02-163322 |
| 10T  | #10 SAE     | #6 SAE   |                     | 02-163323 |

#### Differential Pressure

| Code | Bar  | Psi   |
|------|------|-------|
| 005  | 0.35 | [5]   |
| 010  | 0.7  | [10]  |
| 020  | 1.40 | [20]  |
| 040  | 2.80 | [40]  |
| 080  | 5.50 | [80]  |
| 160  | 11.0 | [160] |

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].  
 \* Additional housings available