# **Logic Elements**

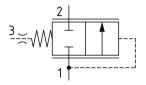
## **DPS2-10-P**

Logic Element, Normally Closed, Spool Type, Pilot to Close 290 bar [4200 psi] • 60 l/min [16 US gpm]

### **■ DESCRIPTION AND OPERATION**

This is a 3-ported, normally closed, pilot to close spool type logic element. By opening port 3 to tank, flow can pass from port 1 to port 2. Flow is blocked from port 1 to port 2 unless the pressure is high enough in port 1 to overcome the spring set pressure. Applying pressure to port 3 will increase the pressure required in port 1 to open the valve by a factor of 1 to 1. This valve is ideal for use as a pressure compensator, bypass valve, or a pilot to close valve in regenerative circuits.

#### **SCHEMATIC**

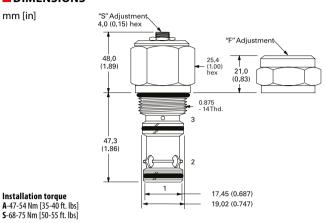


#### **PERFORMANCE DATA**

| Rated pressure | 290 bar [4200 psi]                         |  |
|----------------|--|--|
| Rated flow     | 60 l/min [16 US gpm]                       |  |
| Leakage        | 82 ml/min [5 in3/min] @ 290 bar [4200 psi] |  |
| Weight         | 0.14 kg [0.30 lb]                          |  |
| Cavity         | SDC10-3S                                   |  |

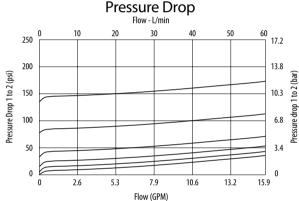
## DIMENSIONS

mm [in]



Danfoss

## PERFORMANCE CURVES



## **MODEL CODE**

## DPS2 - 10 -**Seal Option** Code Seal kit Omit-Buna - N 889650 V-Viton 889652 **Adjustment Option** F- Fixed S- Stroke Adjustment **Housing Material** Omit - No Housing A - Aluminum S - Steel

| <u>3G</u> | - | <u>005</u>            |
|-----------|---|-----------------------|
|           |   | 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] |

 $<sup>\</sup>mbox{\ensuremath{^{\ast}}}$  The operating back pressure at port 3 should never be less than 1.3 times the spring set pressure.

#### Housing

| Code       | Ports 1 & 2 | Port 3   | Aluminum<br>Heavy Duty | Steel     |
|------------|-------------|----------|------------------------|-----------|
| 0          | No Housing  |          |                        |           |
| 2G         | 1/4" BSP    | 1/4" BSP | 876707                 |           |
| 3 <b>G</b> | 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 |

<sup>\*</sup> Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

<sup>\*</sup> Additional housings available