# **Logic Elements**

# **DPS2-12-S**

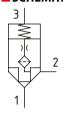
Logic Element, Normally Closed, Poppet Type, Vent to Open 350 bar [5000 psi] • 114 l/min [30 US gpm]

# **■ DESCRIPTION AND OPERATION**

This is a 3-ported, vent to open, poppet type logic element with port 2 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 2 to port 1, but flow can still take place from port 1 to port 2. The area ratio between port 1 and 3 is 1:2 and the ratio between port 1 to 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.

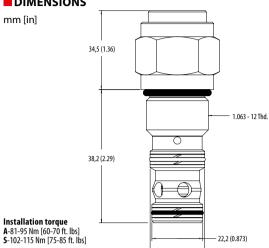
## **SCHEMATIC**



## **PERFORMANCE DATA**

| Rated pressure | 350 bar [5000 psi]               |  |  |
|----------------|----------------------------------|--|--|
| Rated flow     | 114 l/min [30 US gpm]            |  |  |
| Pilot Ratio    | 2:1                              |  |  |
| Leakage        | 5 drops/min @ 350 bar [5000 psi] |  |  |
| Weight         | 0.31 kg [0.68 lb]                |  |  |
| Cavity         | C-12-3S                          |  |  |

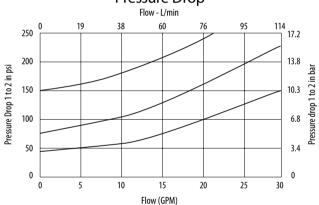
# **DIMENSIONS**



Danfoss

## **PERFORMANCE CURVES**

# **Pressure Drop**



23,7 (0.935)

# **MODEL CODE**

# DPS2 - 12 - V - S - F - A - 10T - 040

# **Seal Option**

| Code            | Seal Kit  |  |
|-----------------|-----------|--|
| Omit-Buna - N   | 02-165872 |  |
| <b>V</b> -Viton | 02-165886 |  |

#### **Adjustment Option**

F- Fixed

## **Housing Material**

Omit- No housing

S-Steel

### **Differential Pressure**

| Code            | Bar  | Psi   |  |
|-----------------|------|-------|--|
| 040             | 2.80 | [40]  |  |
| 080             | 5.50 | [80]  |  |
| <b>160</b> 11.0 |      | [160] |  |

# Housing

| Code | Port 1 & 2 | Port 3   | Aluminium<br>Heavy duty | Steel     |
|------|------------|----------|-------------------------|-----------|
| 0    | No housing |          |                         |           |
| 10T  | #10 SAE    | #6 SAE   | 02-178268               | 02-160996 |
| 12T  | #12 SAE    | #6 SAE   | 02-178269               | 02-160997 |
| 4G   | 1/2" BSP   | 3/8" BSP | 02-178270               | 02-160994 |
| 6G   | 3/4" BSP   | 3/8" BSP | 02-178271               | 02-160995 |

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

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