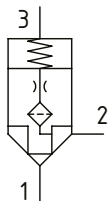# Logic Elements
DPS2-20-S

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

350 bar [5000 psi] • 303 l/min [80 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 (AA option only)	350 bar [5000 psi]
Rated pressure (standard)	210 bar [3000 psi]
Rated flow	303 l/min [80 US gpm]
Pilot Ratio	2:1
Leakage	5 drops/min @ 350 bar [5000 psi]
Weight	0.81 kg [1.78 lb]
Cavity	C-20-3S

■ DIMENSIONS

mm [in]

Installation torque
A-130-155 Nm [95-115 ft. lbs]
S-160-180 Nm [120-135 ft. lbs]

■ PERFORMANCE CURVES

Pressure Drop

■ MODEL CODE

DPS2 - 20 - **V** - **S** - **A** - **8G** - **F** - **040** - **AA**

Seal Option

Code	Seal kit
Omit-Buna - N	02-113153
V-Viton	02-112969

Housing Material

Omit - No Housing
A - Aluminum
S - Steel

Housing

Code	Ports 1 & 2	Port 3	Aluminum Heavy Duty	Steel
0	No Housing			
6G	3/4" BSP	3/8" BSP	876740	02–175122
8G	1" BSP	3/8" BSP	876742	02–175123
12H	#12 SAE	#6 SAE	876741	
16H	#16 SAE	#6 SAE	876743	
12T	#12 SAE	#6 SAE		02–175120
16T	#16 SAE	#6 SAE		02–175121

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

Rated Pressure

Omit - 210 bar [3000 psi]
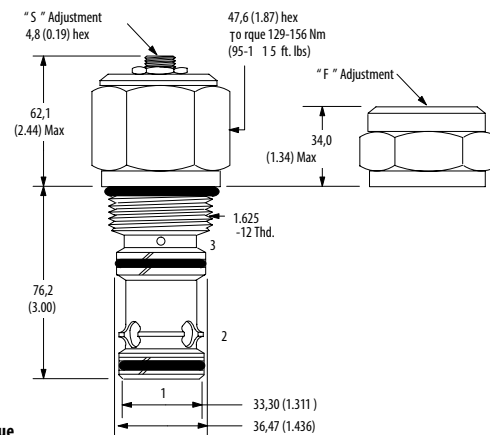**AA** - 350 bar [5000 psi]

Differential Pressure

Code	Bar	Psi
040	2.80	[40]
080	5.5	[80]
160	11.0	[160]

Adjustment Option

F- Fixed
S- Stroke Adjustment