Logic Elements

DPS2-16-F

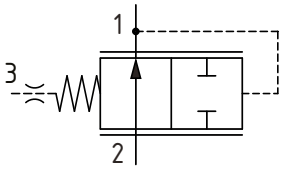
Logic Element, Normally Open, Spool Type, Pilot to Open

290 bar [4200 psi] • 189 l/min [50 US gpm]

DESCRIPTION AND OPERATION

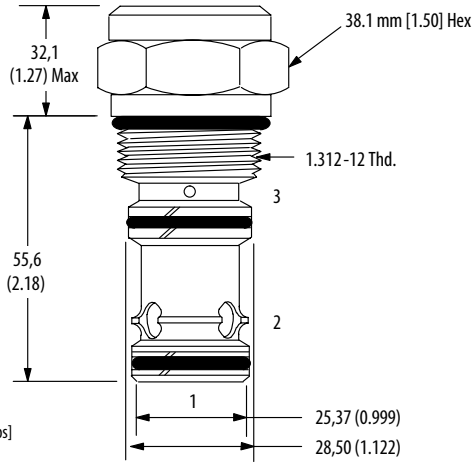
This is a 3-ported, normally open, pilot to open, spool type logic element. Flow is open from port 2 to port 1, until pressure in port 1 is sufficient to overcome the spring set pressure plus any pressure in port 3. The pressure in port 3 can be controlled remotely making the valve ideal for use as a normally open on/off element in a pressure reducing function. This valve is most commonly used as a pressure compensator in conjunction with a proportional directional valve.

SCHEMATIC



DIMENSIONS

mm [in]

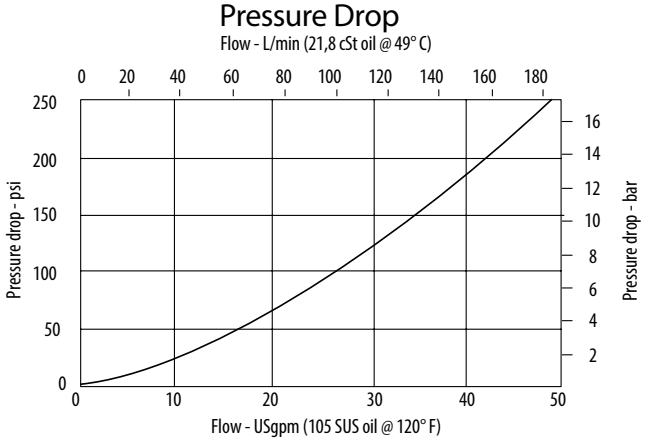


Installation torque
A-108-122 Nm [80-90 ft. lbs]
S-136-149 Nm [100-110 ft. lbs]

PERFORMANCE DATA

Rated pressure	**290 bar [4200 psi]**
Rated flow	**189 l/min [50 US gpm]**
Leakage	82 ml/min [5 in3/min] @ 290 bar [4200 psi]
Weight	0.35 kg [0.78 lb]
Cavity	SDC16-3S

PERFORMANCE CURVES



MODEL CODE

DPS2 - 16 - V - F - A - 4G - F - 005

Seal Option

Code	Seal kit
Omit-Buna - N	889659
V-Viton	02-165871

Housing Material

Omit-No housing
A-Aluminum
S-Steel

Housing

Code	Ports 1 & 2	Port 3	Aluminum Heavy Duty	Steel
0	No Housing			
4G	1/2" BSP	3/8" BSP	02-160676	02–175118
6G	3/4" BSP	3/8" BSP	876726	02–175119
10H	#10 SAE	#6 SAE	876725	
12H	#12 SAE	#6 SAE	786727	
10T	#10 SAE	#6 SAE		02–175116
12T	#12 SAE	#6 SAE		02–175117

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

Differential Pressure

Code	Bar	Psi
005	0.35	[5] *
020	1.40	[20] *
040	2.80	[40]
080	5.5	[80]
160	11.0	[160]

* The operating back pressure at port 3 should never be less than 1.3 times the spring set pressure.

Adjustment Option

F- Fixed