



# Logic Elements Technical Information

## Spool Type CP700-3

### OPERATION

The CP700-3 is a 10-size, normally open, pilot-to-close, spring-biased differential-sensing logic element. It will modulate flow from 2 to 1 based on the spring control pressure, outlet pressure at port 1, and pilot pressure at port 3.

### APPLICATION

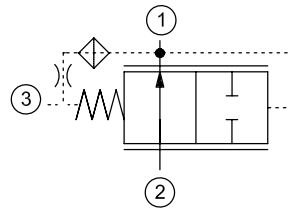
Common applications include: high-flow pressure reducing valve when using a small relief valve (like CP208-1), or a proportional relief valve (like PRV08-DAC) as a pilot element. Effective use of logic elements is a key to designing cost-effective circuits, and is limited only by the imagination of the designer.



### SPECIFICATION

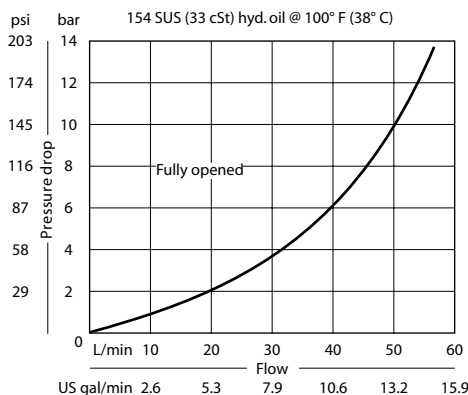
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	40 l/min [11 US gal/min]
Weight	0.13 kg [0.28 lb]
Cavity	SDC10-3

### SCHEMATIC



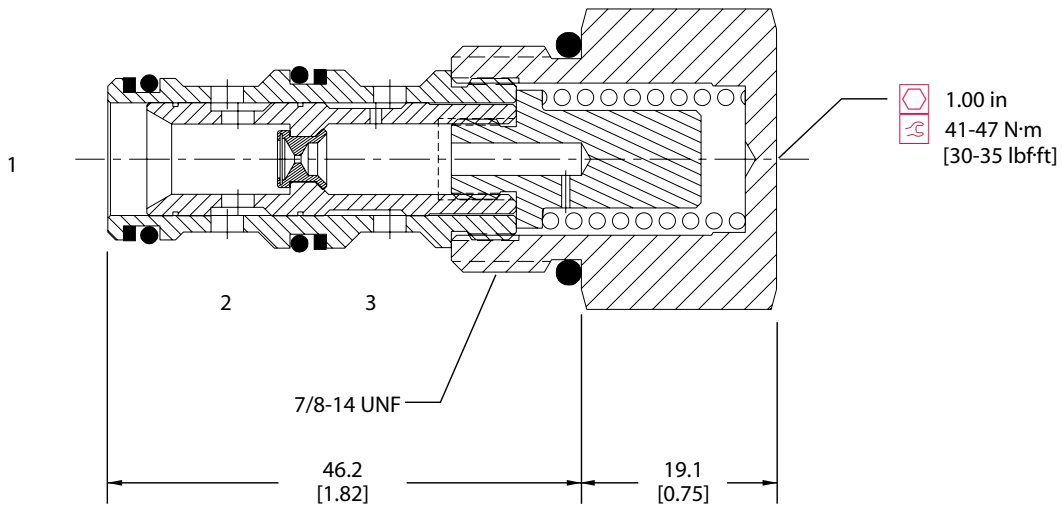
### PERFORMANCE CURVE

#### Theoretical performance



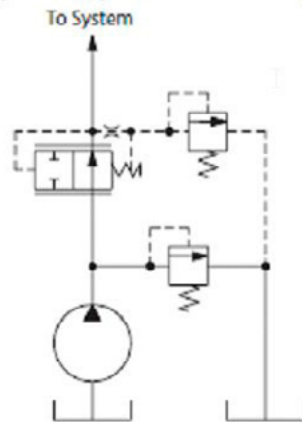
**DIMENSION**  
mm [in]

**Cross-sectional view**



**EXAMPLE CIRCUITS**

**Pilot-operated pressure reducing valve**



**ORDERING INFORMATION**

CP700 - 3 - B - 8S - 080

**Seals**

B = Buna-N  
V = Viton

Seal kit  
120027  
120028

**Housing and ports**

0 = No Housing  
SE3B = AL, 3/8 BSP  
SE4B = AL, 1/2 BSP  
6S = AL, #6 SAE  
8S = AL, #8 SAE  
Other housings available

**Housing P/N**

No Housing  
SDC10-3-SE-3B  
SDC10-3-SE-4B  
CP10-3-6S  
CP10-3-8S

**Differential Control Pressure**

	bar	[psi]
040	= 2.8	[40]
080	= 5.5	[80]
110	= 7.6	[110]
150	= 10.3	[150]
200	= 13.8	[200]