



Logic Elements Technical Information

Spool Type CP700-4

OPERATION

The CP700-4 is a 10-size, normally open, pilot-to-open, 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.



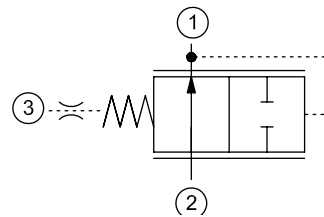
APPLICATION

Common applications include: pre-compensator for proportional directional control or flow controls, as well as a pressure control valve. A common application for this valve is as a pressure compensator when applied with a fixed, or adjustable orifice to create a pressure-compensated flow control. This ensures that flow rate, and resulting actuator speed is maintained regardless of pressure drop across the control orifice. Effective use of logic elements is a key to designing cost-effective circuits, and is limited only by the imagination of the designer.

SPECIFICATION

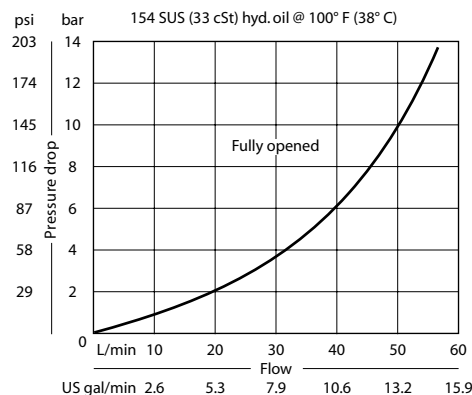
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	40 l/min [11 US gal/min]
Weight	0.13 kg [0.28 lb]
Cavity	SDC10-3

SCHEMATIC



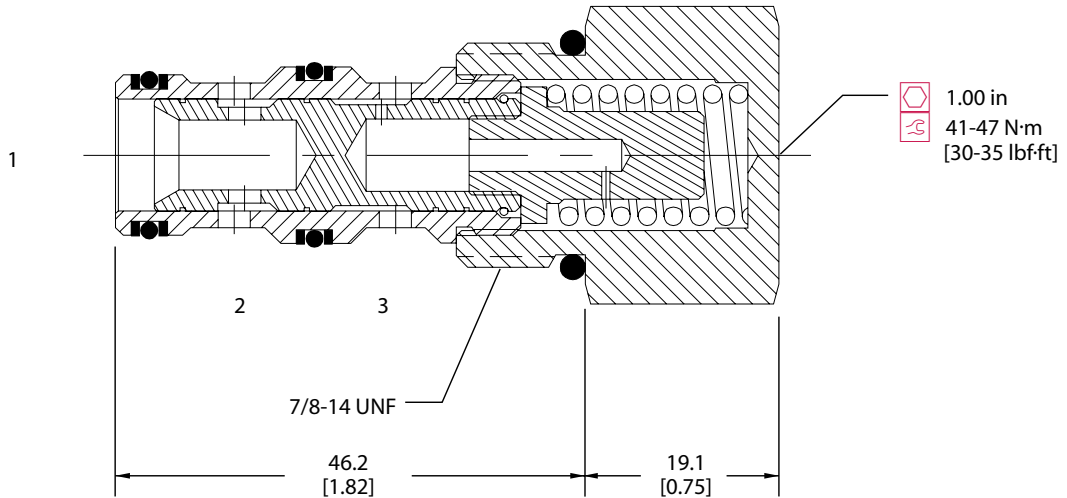
PERFORMANCE CURVE

Theoretical performance



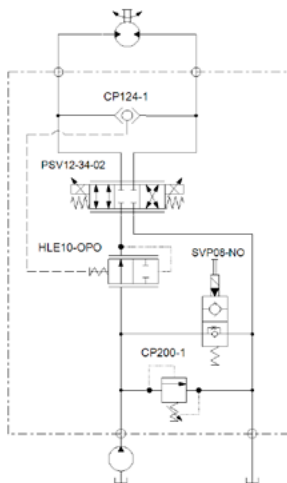
DIMENSION
mm [in]

Cross-sectional view

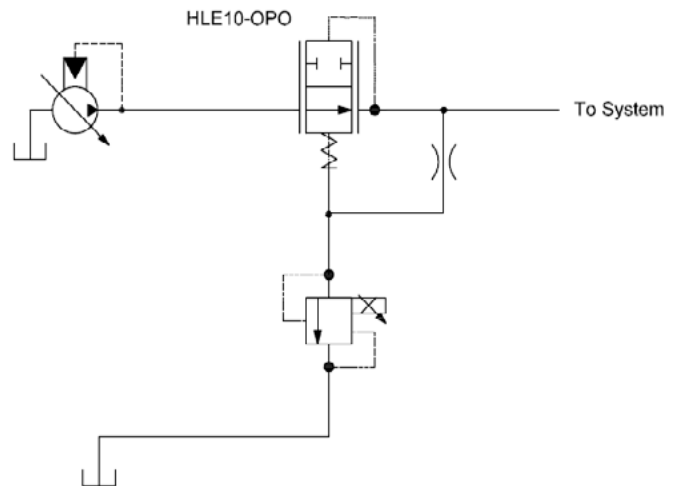


EXAMPLE CIRCUITS

Compensated Circuit



Proportional Pressure Reducing



ORDERING INFORMATION

Seals

B = Buna-N
V = Viton

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

Seal kit
120009
120010

Housing P/N

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

CP700 - 4 - B - 8S - 080

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]