ENGINEERING TOMORROW

Logic Elements Technical Information
Spool Type
CP700-1

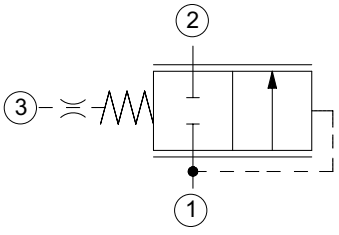
OPERATION
The CP700-1 is a 10-size, normally-closed, pilot-to-close, spool-type, spring biased differential-sensing logic element. It will modulate flow from 1 to 2 based on the spring control pressure, inlet pressure at port 1, and pilot pressure at port 3.

APPLICATION
Common applications include load-sensing bypass compensator for a fixed displacement pump with single or multiple actuators as well as bypass-type pressure-compensated flow control. Effective use of logic elements is a key to designing cost-effective circuits, and is limited only by the imagination of the designer.

SPECIFICATION

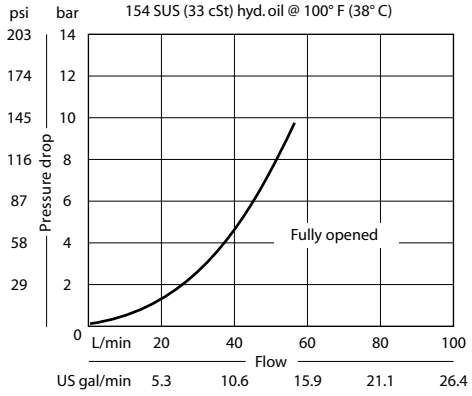
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	50 l/min [13 US gal/min]
Weight	0.12 kg [0.27 lb]
Cavity	**SDC10-3**

SCHEMATIC



PERFORMANCE CURVE

Theoretical performance



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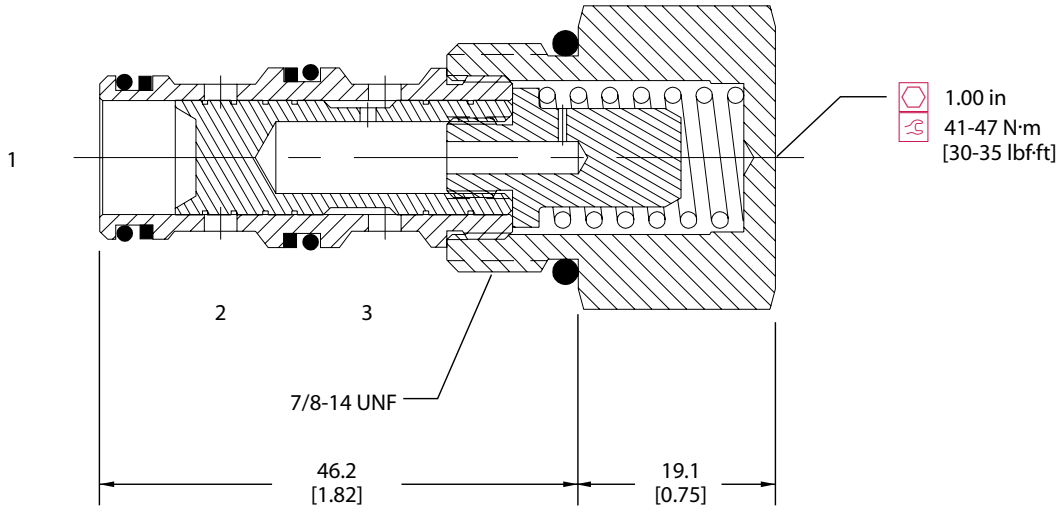
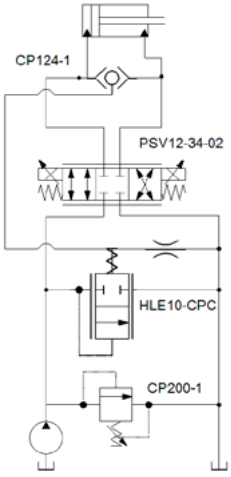
DIMENSION
mm [in]

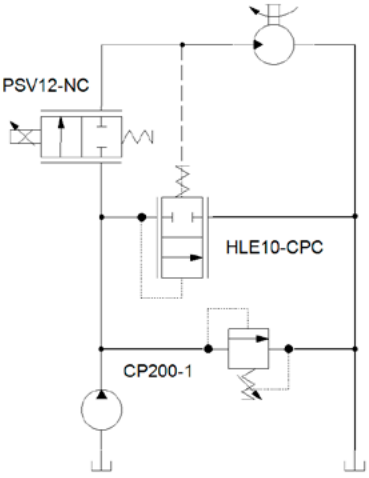
Cross-sectional view



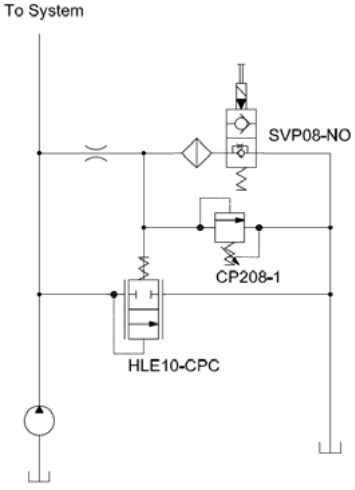
EXAMPLE CIRCUITS



Double Acting Cylinder with Proportional Speed Control, Unloading Valve and Circuit Relief



Proportional Bypass Flow Control



Dump and Relief Valve for a Fixed Pump

ORDERING INFORMATION

CP700 - 1 - B - 8S - 080

Seals

	Seal kit
B = Buna-N	120027
V = Viton	120028

Housing and ports

	Housing P/N
0 = No Housing	No Housing
SE3B = AL,3/8 BSP	SDC10-3-SE-3B
SE4B = AL, 1/2 BSP	SDC10-3-SE-4B
6S = AL, #6 SAE	CP10-3-6S
8S = AL, #8 SAE	CP10-3-8S

Other housings available

Differential Control Pressure

	bar	[psi]
040 =	2.8	[40]
080 =	5.5	[80]
110 =	7.6	[110]
150 =	10.3	[150]
190 =	13.1	[190]