



Logic Elements Technical Information

Spool Type CP702-4

OPERATION

The CP702-4 is a 16-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.

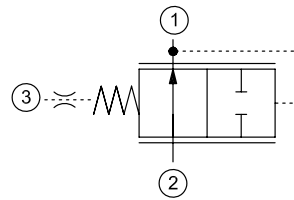
APPLICATION

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

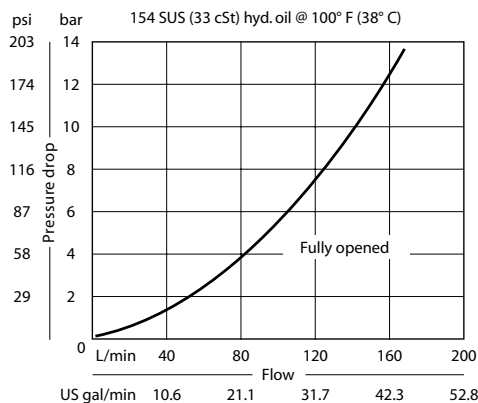
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	114 l/min [30 US gal/min]
Weight	0.38 kg [0.83 lb]
Cavity	SDC16-3S

SCHEMATIC



PERFORMANCE CURVE

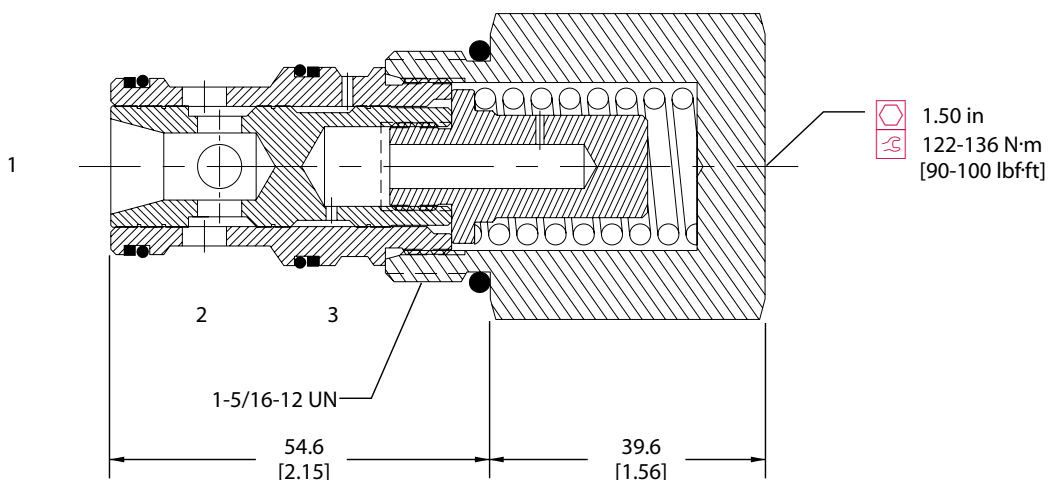
Theoretical performance



DIMENSION

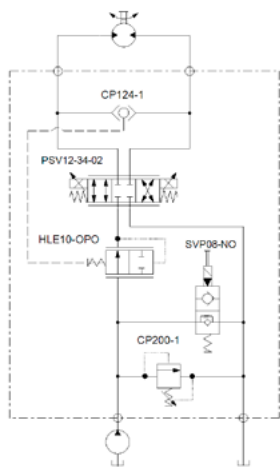
mm [in]

Cross-sectional view

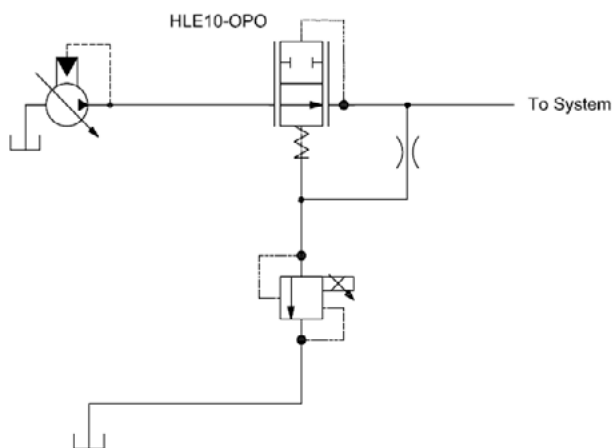


EXAMPLE CIRCUITS

Compensated Circuit



Proportional Pressure Reducing



ORDERING INFORMATION

CP702-4-B-16S-080

Seal Option

Code	Seal Material	Seal kit
B	Buna	120033
V	Viton	120034

Housings & Ports	Housing P/N	Pilot port
0: Cartridge Only	No Housing	
6B: 3/4 BSP, AL	CP16-3S-6B/2B	1/4 BSP
8B: 1 BSP, AL	CP16-3S-8B/2B	1/4 BSP
12S: #12 SAE, AL	CP16-3S-12S/4S	#4 SAE
16S: #16 SAE, AL	CP16-3S-16S/4S	#4 SAE

Other Housings available

Differential Control Pressure

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