

**OPERATION**

The CP701-1 is a 12-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.

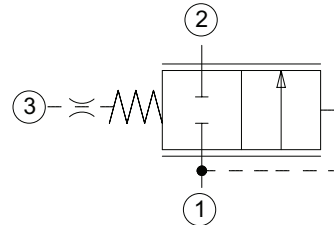
**APPLICATION**

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**

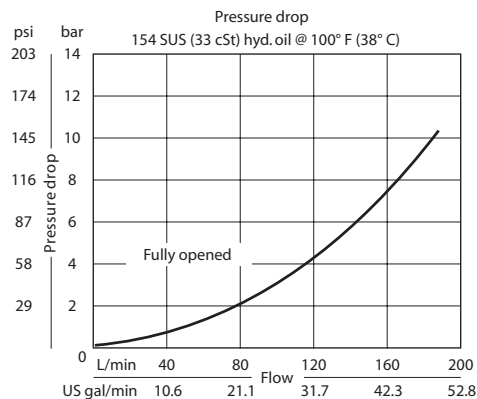
Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	150 l/min [40 US gal/min]
Weight	0.26 kg [0.57 lb]
Cavity	CP12-3S

**SCHEMATIC**

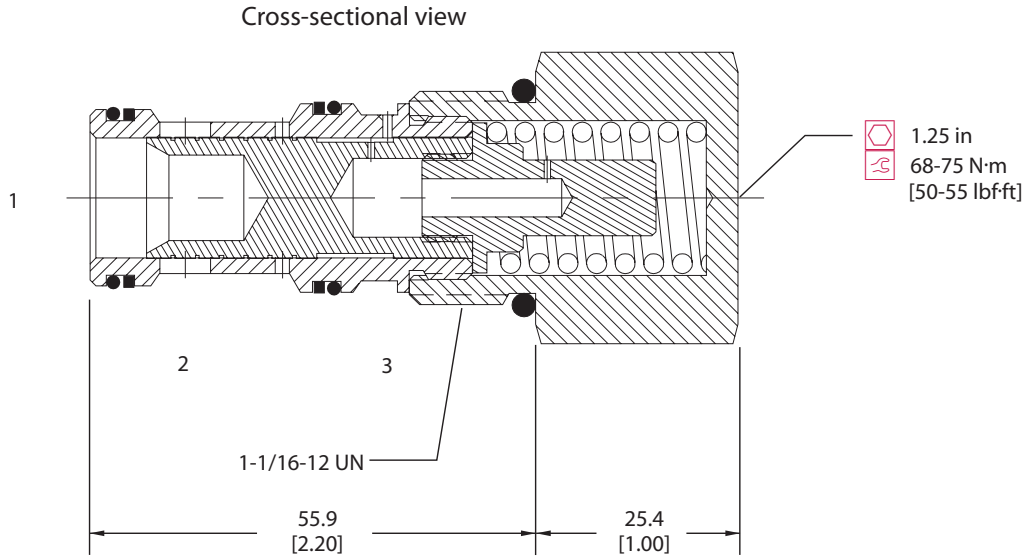


**PERFORMANCE CURVE**

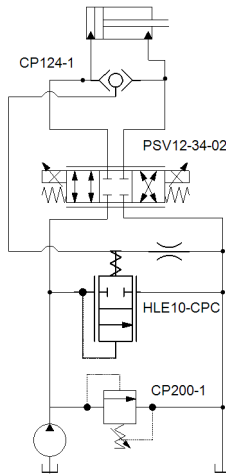
Theoretical performance



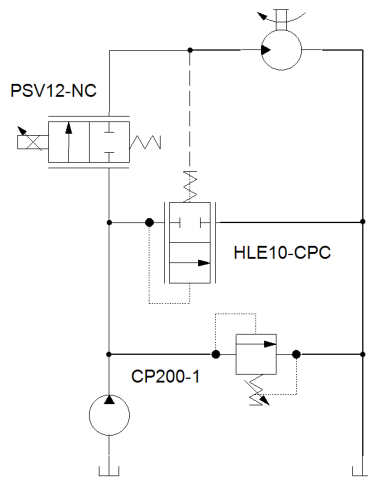
**DIMENSION**  
 [ni] mm



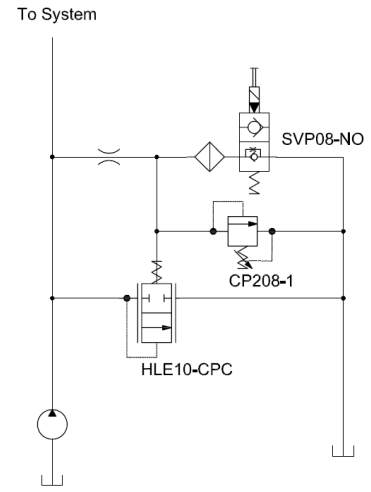
**EXAMPLE CIRCUITS**



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**

CP701 - 1 - B - 12S - 080

<b>Seals</b>	Seal kit 120335 120336	<b>Differential Control Pressure</b>
B = Buna-N		030 = 2.1 [30]
V = Viton		050 = 3.5 [50]
		080 = 5.5 [80]
		100 = 6.9 [100]
		150 = 10.3 [150]
		170 = 11.7 [170]
<b>Housing and ports</b>	<b>Housing P/N</b>	<b>Pilot port</b>
0 = No housing	No housing	
4B = AL, 1/2 BSP	CP12-3S-4B/2B = 1/4 BSP	
6B = AL, 3/4 BSP	CP12-3S-6B/2B = 1/4 BSP	
10S = AL, #10 SAE	CP12-3S-10S/4S = #4 SAE	
12S = AL, #12 SAE	CP12-3S-12S/4S = #4 SAE	