Logic Elements Catalog
Spool Type
CP703-4

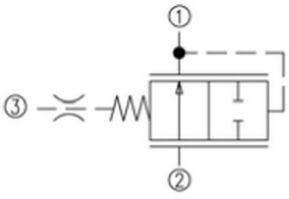
OPERATION
The CP703-4 is a 20-size, normally open, pilot-to-open, spring-biased differential-sensing logic element. It will modulate flow from 2 to 1 based on the spring control pressure, inlet pressure at port 1, and outlet pressure at port 3.

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.

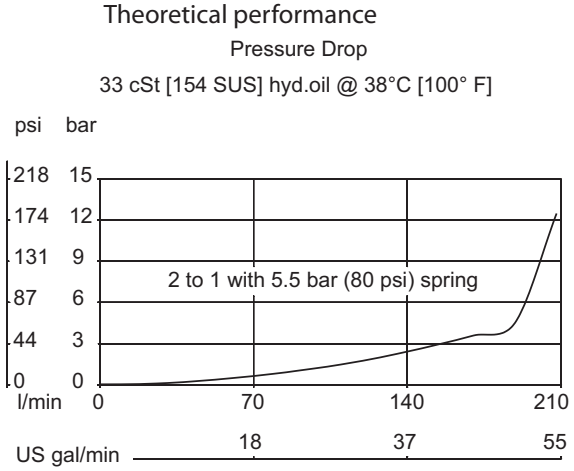
SPECIFICATION

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	200 l/min [53 US gal/min]
Weight	1.18 kg [2.60 lb]
Cavity	CP20-3S

SCHEMATIC



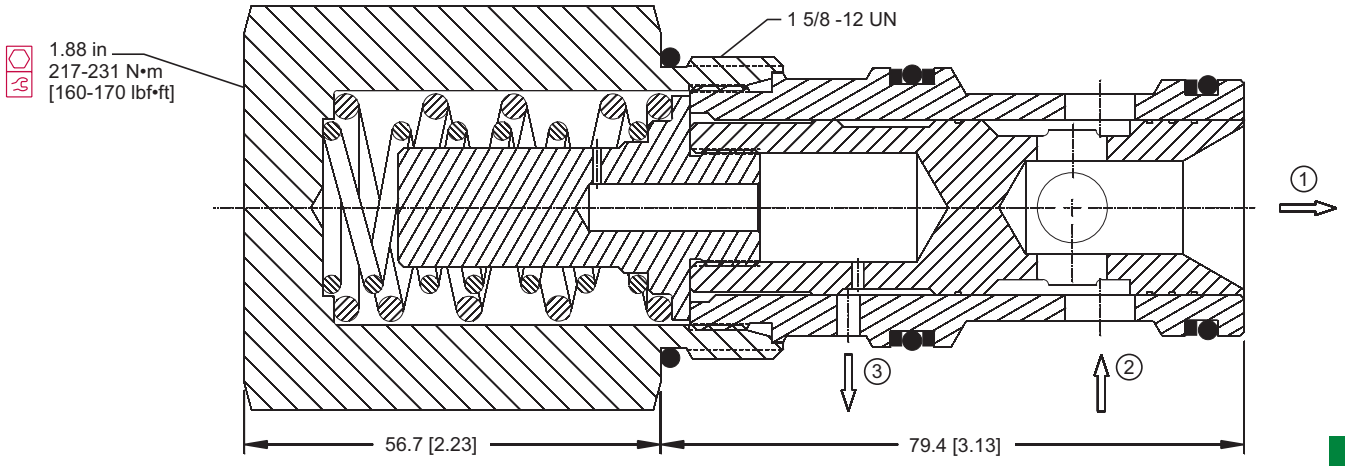
PERFORMANCE CURVE



DIMENSION

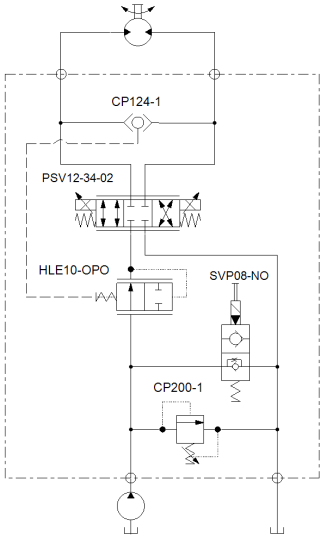
mm [in]

Cross-sectional view

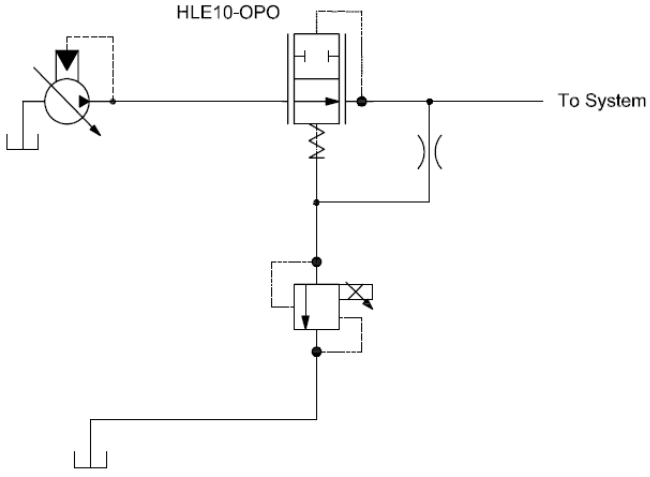


EXAMPLE CIRCUITS

Compensated Circuit



Proportional Pressure Reducing



ORDERING INFORMATION

CP703-4-B-8B-050

Seals

	Seal kit
B = Buna-N	120380
V = Viton	120381

Housing and ports

0	= No housing
8B	= AL, 1 BSP
10B	= AL, 1-1/4 BSP
16S	= AL, #16 SAE
20S	= AL, #20 SAE

other housings available

Housing P/N	Pilot port
No houisng	
CP20-3S-8B/2B	= 1/4 BSP
CP20-3S-10B/2B	= 1/4 BSP
CP20-3S-16S/4S	= #4 SAE
CP20-3S-20S/4S	= #4 SAE

Differential Control Pressure

	bar	[psi]
050	= 3.5	[50]
080	= 5.5	[80]
100	= 6.9	[100]
130	= 9.0	[130]
150	= 10.3	[150]