



Logic Elements Technical Information

Pressure Compensator CP300-4

OPERATION

The CP300-4 is a 10-size, flow control, restrictive type pressure compensator. Restrictive-type pressure compensators are three-ported valves that work in series with a fixed or variable control orifice. The pressure compensator is located downstream of the orifice and is spring-biased to an open position as shown in the example circuit. The spool “senses” the pressure on either side of the control orifice and will vary its restriction in order to maintain a constant pressure differential across the control orifice, hence maintaining a constant flow rate.

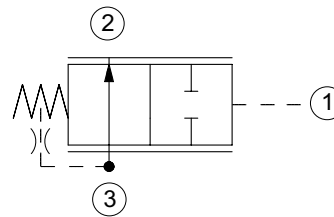
APPLICATION

Common applications include any circuit that requires compensated flow control going to one actuator or circuit. Pressure compensators offer the circuit designer capability to add pressure compensation to any fixed or variable orifice. This ensures that flow, and resulting actuator speed, are maintained regardless of system and working pressures

SPECIFICATION

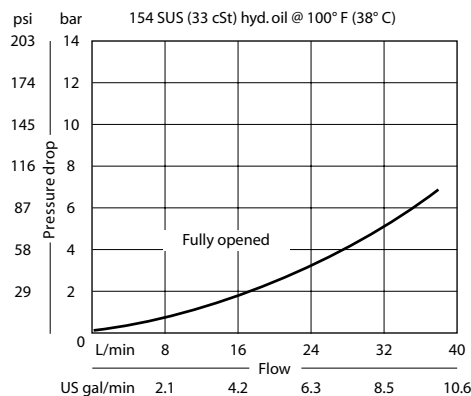
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	40 l/min [10.6 US gal/min]
Weight	0.13 kg [0.29 lb]
Cavity	SDC10-3

SCHEMATIC



PERFORMANCE CURVE

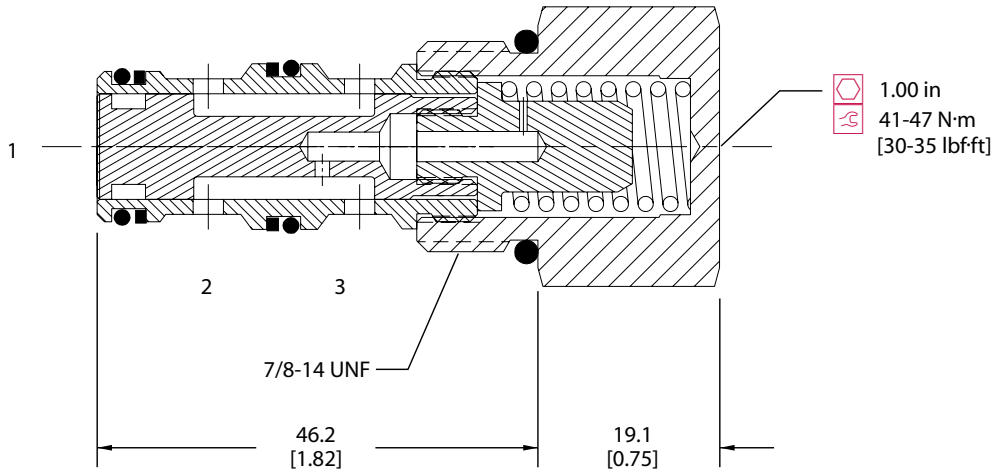
Theoretical performance



DIMENSION

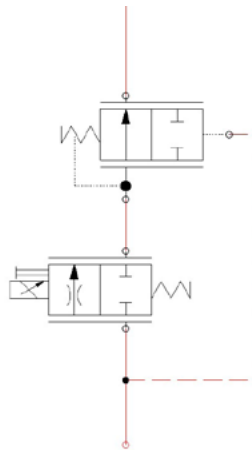
mm [in]

Cross-sectional view



EXAMPLE CIRCUITS

Post-Compensated Proportional Flow Control



ORDERING INFORMATION

CP300 - 4 - B - 8S - 0 - 080

Seals

B = Buna-N
V = Viton

Seal kit
120027
120028

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

Housing P/N

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

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]