



Logic Elements Technical Information

Pressure Compensator CP302-4

OPERATION

The CP302-4 is a 16-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 it’s restriction in order to maintain a constant pressure differential across the control orifice, hence maintaining a constant flow rate.

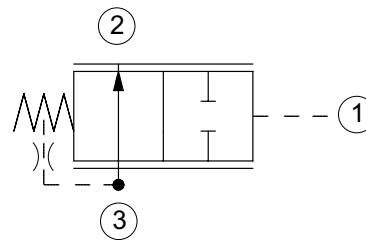
APPLICATION

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

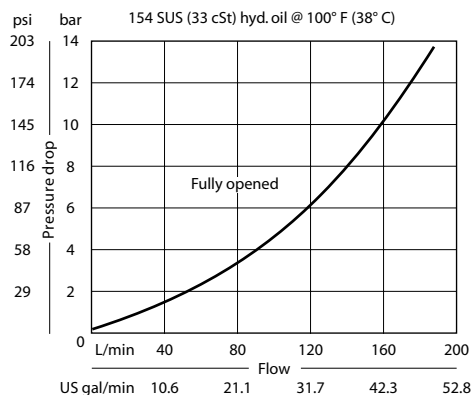
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	130 l/min [34 US gal/min]
Weight	0.56 kg [1.24 lb]
Cavity	SDC16-3

SCHEMATIC



PERFORMANCE CURVE

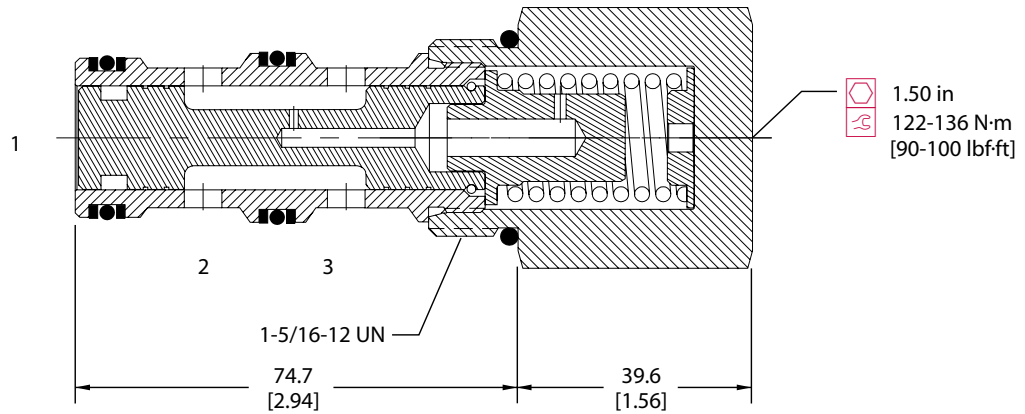
Theoretical performance



DIMENSION

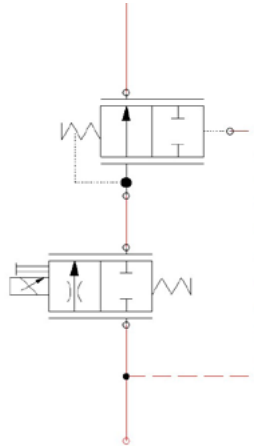
mm [in]

Cross-sectional view



EXAMPLE CIRCUITS

Post-Compensated Proportional Flow Control



ORDERING INFORMATION

		CP302 - 4 - B - 16S - 0 - 080		
Seals				Differential Control Pressure
B = Buna-N	Seal kit 120202		bar [psi]	
V = Viton	Seal kit 120203		040 = 2.8 [40]	
Housing and ports			080 = 5.5 [80]	
0 = No housing	Housing P/N		100 = 6.9 [100]	
SE6B = AL, 3/4 BSP	No housing		150 = 10.3 [150]	
SE8B = AL, 1 BSP	SDC16-3-SE-6B		230 = 15.9 [230]	
12S = AL, #12 SAE	SDC16-3-SE-8B			
16S = AL, #16 SAE	CP16-3-12S			
Other housings available	CP16-3-16S			