



Logic Elements Technical Information

Pressure Compensator CP303-4

OPERATION

The CP303-4 is a 20-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

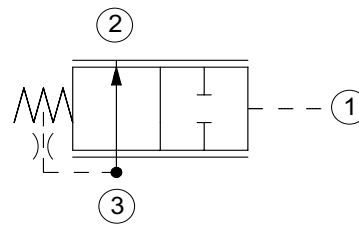
Common applications include any circuit that requires compensated flow control going to one actuator or circuit. Pressure compensators offer the circuit designer capability to add pressure compensation to any fixed or variable orifice. This ensures that flow, and resulting actuator speed, are maintained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



SPECIFICATION

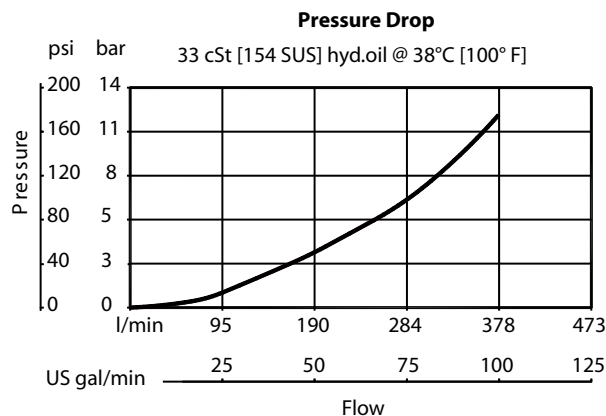
Rated pressure	210 bar [3045 psi]
Rated flow at 7 bar [100 psi]	284 l/min [75 US gal/min]
Weight	1.11 kg [2.45 lb]
Cavity	SDC20-3

SCHEMATIC



PERFORMANCE CURVE

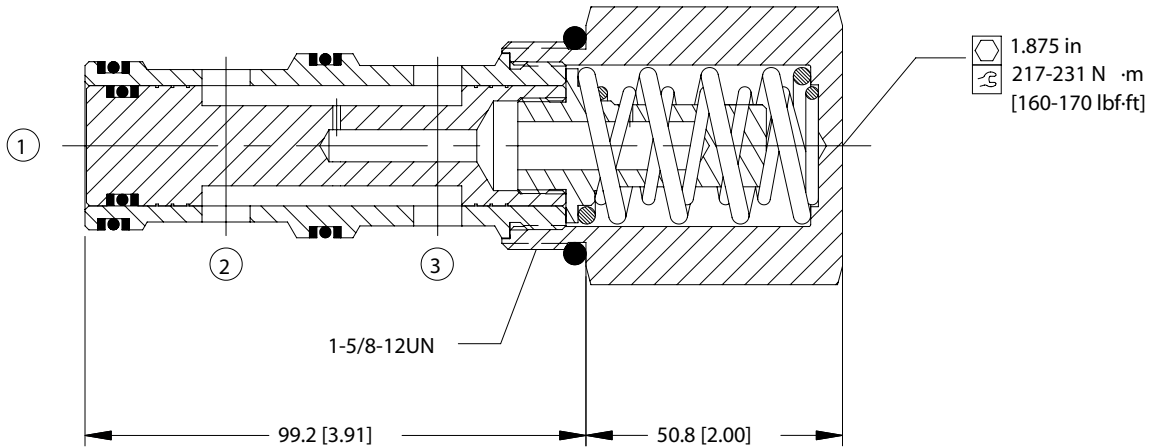
Theoretical performance



DIMENSION

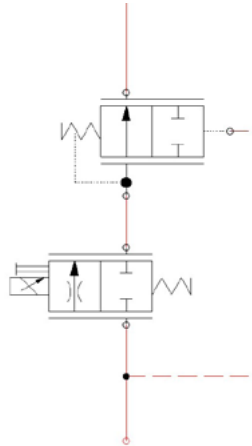
mm [in]

Cross-sectional view



EXAMPLE CIRCUITS

Post-Compensated Proportional Flow Control



ORDERING INFORMATION

		CP303-4-B-16S-0-150			
Seals				Differential Control Pressure	
B = BUNA-N	Seal kit	120200		bar	[psi]
V = VITON		120201		050 = 3.4	[50]
				080 = 5.5	[80]
Housing and ports	Housing P/N			100 = 6.9	[100]
0 = Cartridge only	No Body			130 = 9.0	[130]
16S = AL, #16 SAE	CP20-3-16S			150 = 10.3	[150]
20S = AL, #20 SAE	CP20-3-20S				
8B = AL, 1 BSP	CP20-3-3B				
10B = AL, 1-1/4 BSP	CP20-3-4B				
other housings available					