Flow Control Valves

CP310-1

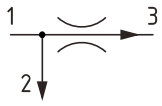
Flow Control, Fixed, Pressure Compensated, Priority Type

210 bar [3000 psi] • 23 l/min [6 US gpm]

DESCRIPTION AND OPERATION

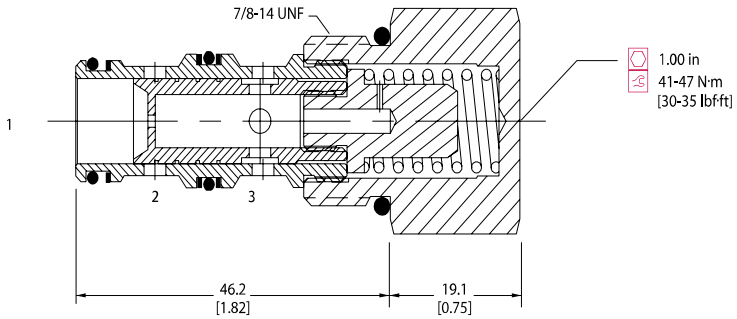
This is a fixed, priority type, pressure compensated flow control valve, where the flow from port 3 will remain constant regardless of the pressure difference across the valve, while excess flow passes from port 1 to 2. Flow enters at port 1 and passes across a fixed orifice in the spool, which creates a pressure drop. This causes the spool to move back against the spring, which then restricts the outlet flow. Port 1 then opens to port 2 to allow excess flow to pass. The regulated flow will always take priority and remains constant if the working pressure is higher in either port 2 or port 3.

SCHEMATIC



DIMENSIONS

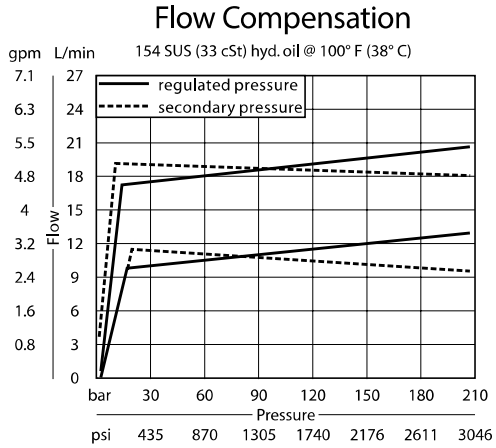
mm [in]



PERFORMANCE DATA

Rated pressure	**210 bar [3000 psi]**
Rated flow	**23 l/min [6 US gpm]**
Max inlet flow	38 l/min [10 US gpm]
Flow range	0.4 - 23 l/min [0.1- 6 US gpm]
Flow accuracy	0.4-1.88 l/min [0.1-0.49 US gpm] ± 20% 1.89-5.67 l/min [0.5-1.49 US gpm] ± 15% 5.68-22.7 l/min [1.5-6 US gpm] ± 10%
Weight	0.13 kg [0.29 lb]
Cavity	SDC10-3

PERFORMANCE CURVES



MODEL CODE

CP310 - 1 - B - 8S - 6.0

Seal Option

Code	Seal Kit
B-Buna-N	120240
V-Viton	11043064

Housing

Code	Ports&Material	Housing Model Code
0	No Housing	No Housing
SE3B	AL, 3/8 BSP	SDC10-3-SE3B
SE4B	AL, 1/2 BSP	SDC10-3-SE4B
6S	AL, #6 SAE	CP10-3-6S
8S	AL, #8 SAE	CP10-3-8S

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available

Flow Setting

Code - Flow in US gpm
Specity in 0.1 gpm increments within flow range

Example

Code	l/min	[US gpm]
0.1	0.4	0.1
6.0	23	6.0