Flow Control Valves

CP301-1

Flow Control, Fixed, Pressure Compensated, Restrictive Type

210 bar [3000 psi] • 57 l/min [15 US gpm]

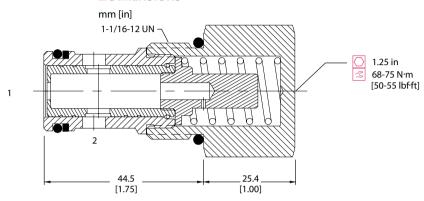
■ DESCRIPTION AND OPERATION

This is a fixed, restrictive type, pressure compensated flow control valve, where the flow from port 2 will remain constant regardless of the pressure difference across the valve. 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.

■ SCHEMATIC



DIMENSIONS



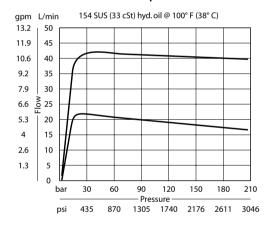
PERFORMANCE DATA

| Rated pressure | 210 bar [3000 psi] |
|----------------|---------------------------------------|
| Rated flow | 57 l/min [15 US gpm] |
| Flow range | 1.9-56.8 l/min [0.5-15 US gpm] |
| Flow Accuracy | 1.9-7.5 l/min [0.5-1.99 US gpm] ± 20% |
| | 7.6-56.8 I/min [2-15 US gpm] ± 15% |
| Weight | 0.24 kg [0.52 lb] |
| Cavity | CP12-2 |

PERFORMANCE CURVES

Flow Compensation

Danfoss



■ MODEL CODE

CP301 - 1 - <u>B</u> - <u>12S</u> - <u>10.0</u>

Seal Option

| Code | Seal Kit |
|--------------------|----------|
| B -Buna - N | 120017 |
| V -Viton | 120018 |

Flow Setting

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

| Code | l/min | [US gpm] |
|------|-------|----------|
| 10.0 | 38.0 | 10.0 |
| | | |

Housing

| Code | Ports & Material | Housing Model Code |
|------|------------------|---------------------------|
| 0 | No Housing | No Housing |
| 4B | AL, 1/2 BSP | CP-12-2-4B |
| 6B | AL, 3/4 BSP | CP-12-2-6B |
| 105 | AL, #10 SAE | CP-12-2-10S |
| 125 | AL, #12 SAE | CP-12-2-12S |

^{*} Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

^{*} Additional housings available