Flow Control Valves

FCH10-BD



Flow Control, Fixed, Pressure Compensated, Restrictive Type, Bi-directional 350 bar [5000 psi] • 23 I/min [6 US qpm]

■ DESCRIPTION AND OPERATION

This is a fixed, restrictive type, bi-directional pressure compensated flow control valve, where the outlet flow will remain constant regardless of the direction of flow. Flow enters at port 2 or port 3 and passes across a fixed orifice in the spool creating a pressure drop. This causes the spool to move back against a spring, which then restricts the outlet flow at port 3 or port 2 respectively. Port 1 must be blocked for proper operation.

SCHEMATIC



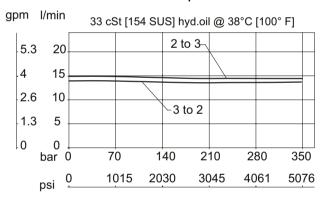
■ DIMENSIONS mm [in] 7/8-14-UNF 2 1.00 in. ■ 41-47 Nm [30-35 lbf-ft] 2 3 46.29 [1.82]

PERFORMANCE DATA

| Rated pressure | 350 bar [5000 psi] |
|----------------|---|
| Rated flow | 23 l/min [6 US gpm] |
| Flow range | 0.4-22.7 l/min [0.1-6 US gpm] |
| Flow accuracy | 0.4 -1.88 l/min [0.1-0.49 US gpm] \pm 20% |
| | 1.89-23 l/min [0.49-6 US gpm] ± 15% |
| Weight | 0.14 kg [0.34 lb] |
| Cavity | SDC10-3 |

PERFORMANCE CURVES

Flow Compensation



■ MODEL CODE

FCH10 - BD - <u>0.4</u> - <u>U</u> - <u>00</u>

Flow Setting

Code - Flow in I/min

Specity in 1.0 lpm increments within flow range Example

 Code
 I/min
 [US gpm]

 0.4
 0.4
 [0.1]

Seal Option

| Code | Seal Kit |
|--------------------|----------|
| U -Urethane | 120726 |

Housing

| Code | Ports&Material | Housing Model Code |
|-------|----------------|---------------------------|
| 00 | No Housing | No Housing |
| DG-3B | AL, 3/8 BSP | SDC10-3-DG-3B |
| DG-4B | AL, 1/2 BSP | SDC10-3-DG-4B |
| 65 | AL, #6 SAE | CP10-3-6S |
| 85 | AL, #8 SAE | CP10-3-8S |

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

^{*} Additional housings available