Flow Control Valves

FR2-10

Flow Control, Partially Adjustable, Pressure Compensated, Restrictive Type 210 bar [3000 psi] • 38 l/min [10 US gpm]

Danfoss

■ DESCRIPTION AND OPERATION

This is a partially adjustable, 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



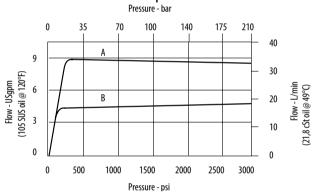
"K" Adjustment **DIMENSIONS** Ø38,1 (1.5) "S" Adjustment mm [in] 4,8 (0.18) hex "F" Adjustment "C" Adjustment "I" Adiustment 19,0 (0,75) hex 80.0 (3.15) 53.0 25,4 (1.00) hex (2.09) 25,4 (1.00)0.875" -14 Thd. 000 2 Installation Torque 47-54 Nm [35-40 ft. lbs] Ø15,82 (0.623)

■ PERFORMANCE DATA

Rated pressure	210 bar [3000 psi]
Rated flow	38 l/min [10 US gpm]
Flow range	0.4-38 l/min [0.1-10 US gpm]
Flow accuracy	0.4–1.9 l/min [0.1–0.49 US gpm] ±20%
	$1.9-7.5 \text{ l/min}[0.5-1.99 \text{ US gpm}] \pm 15\%$
	7.6–37.8 l/min[2.0–10 US gpm] ±10%
Weight	0.22 kg [0.48 lb]
Cavity	SDC10-2

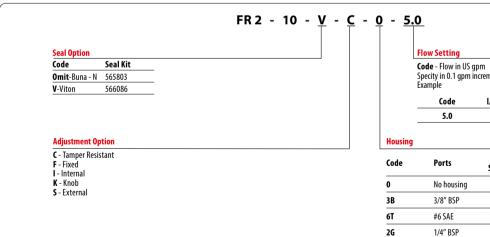
PERFORMANCE CURVES

Flow Compensation



A - 38.0 l/min [10.0 US gpm] • **B** - 19.0 l/min[5.0 US gpm]

MODEL CODE



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

Code	l/min	[US gpm]
5.0	18.9	5.0

Code	Ports	Aluminium Standard duty	Aluminium Heavy duty
0	No housing		
3B	3/8" BSP	02-175462	-
6T	#6 SAE	566151	-
2G	1/4" BSP	-	876702
3 G	3/8" BSP	-	876703
6H	#6 SAE	-	876700
8H	#8 SAE	-	876701

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

^{*} Additional housings available