Flow Control Valves

PFR2-10

Flow Control, Partially Adjustable, Pressure Compensated, Priority Type

210 bar [3000 psi] • 38 l/min [10 US gpm]

■ DESCRIPTION AND OPERATION

This is a partially adjustable, 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.

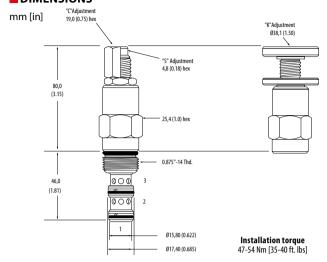
■ SCHEMATIC



■ PERFORMANCE DATA

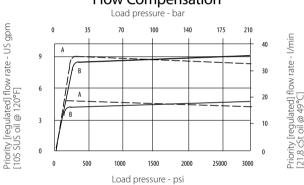
Rated pressure	210 bar [3000 psi]
Rated flow	38 l/min [10 US gpm]
Max inlet flow	60 l/min [15 US gpm]
Flow range	0.4-37.8 l/min
Flow accuracy	0.4–1.9 l/min [0.1–0.49 US gpm] ±20%
	1.9–7.5 l/min [0.5–1.99 US gpm] ±15%
	$7.6-37.8 \text{ l/min} [2.0-10.0 \text{ US gpm}] \pm 10\%$
Weight	0.25 kg [0.54 lb]
Cavity	SDC10-3

DIMENSIONS



PERFORMANCE CURVES

Flow Compensation



A - Port 3, priority (regulated) outlet pressurized
B - Port 2, bypass outlet pressurized

■ MODEL CODE

