

Flow Control Valves

HFCV10-PT

Flow Control, Fully Adjustable, Pressure Compensated, Priority Type with Reverse Free Flow

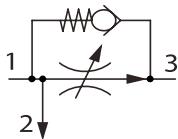
350 bar [5000 psi] • 45 l/min [12 US gpm]



DESCRIPTION AND OPERATION

This is a fully adjustable, priority type, pressure compensated flow control valve, with reverse flow capability from port 3 to 1. 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 an adjustable 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 at port 3. 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

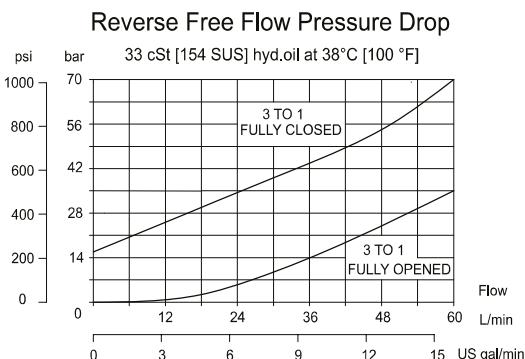


PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	45 l/min [12 US gpm]
Max inlet flow	76 l/min [20 US gpm]
Flow range	4-45 l/min [1-12 US gpm]
Flow accuracy	±12%
Weight	0.16 kg [0.35 lb]
Cavity	SDC10-3

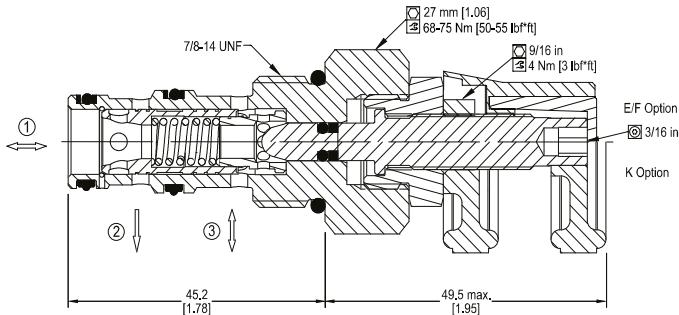
* Inlet flow must be at least 50% above flow setting

PERFORMANCE CURVES

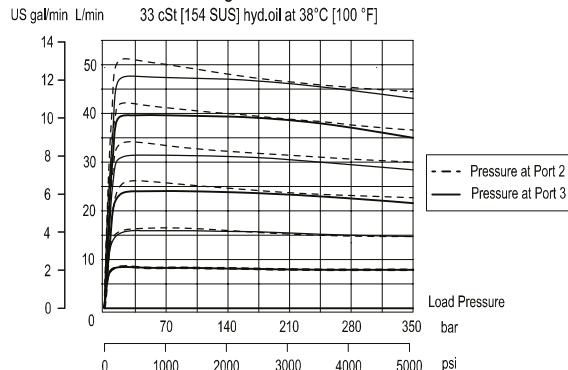


DIMENSIONS

mm [in]



Regulated Flow



MODEL CODE

HFCV10-PT - P - E - 4.0 - 00

Seal Option

Code	Seal Kit
P-Polyurethane	11357050
V-Viton	11357051

Adjustment Option

Code	Kit Number
E - External	
K - Knob	11353452
F - Tamperproof	

Flow Setting

Code - Flow in l/min
Specify in 1 l/min increments within flow range
Example

Code	l/min	[US gpm]
4.0	4.0	1.0

Housing

Code	Ports & Material	Housing Model Code
00	Cartridge Only	No Housing
SE3B	3/8 BSP, AL	SDC10-3-SE3B
SE4B	1/2 BSP, AL	SDC10-3-SE4B
S3B	3/8 BSP, Steel	CP10-3-S3B
S4B	1/2 BSP, Steel	CP10-3-S4B
6S	#6 SAE, AL	CP10-3-6S
8S	#8 SAE, AL	CP10-3-8S
S6S	#6 SAE, Steel	CP10-3-S6S
S8S	#8 SAE, Steel	CP10-3-S8S

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

* Additional housings available