

Flow Control Valves

VRC 12

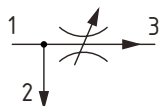
Flow Control, Partially Adjustable, Pressure Compensated, Priority Type

315 bar [4600 psi] • 73 l/min [19 US gpm]

DESCRIPTION AND OPERATION

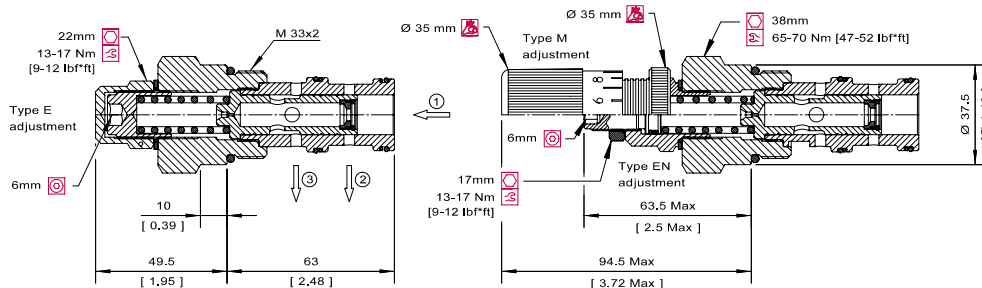
This is a partially adjustable, priority type, pressure compensated flow control valve, where the flow from port 3 will remain constant regardless of the pressure difference across the valve, while excess flow passes from port 1 to 2. Flow enters at port 1 and passes across a fixed orifice in the spool, 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



DIMENSIONS

mm [in]

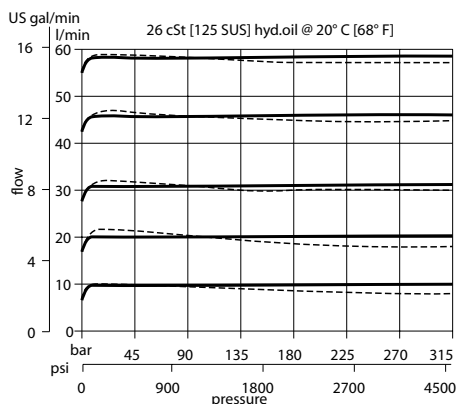


PERFORMANCE DATA

Rated pressure	315 bar [4600 psi]
Rated flow	73 l/min [19 US gpm]
Max inlet flow	100 l/min [26 US gpm]
Flow range	2.5-73 l/min [0.7-19 US gpm]
Weight	0.50 kg [1.10 lb]
Cavity	NCS12/3

PERFORMANCE CURVES

Flow Compensation



MODEL CODE

VRC 12 - EN - 1.5 - SE1/2 - V - 4.0

Adjustment Option

E - Internal
EN - External
M - Calibrated Knob

Orifice Size

Code - Orifice Size in mm

Flow Range

Code	l/min	[US gpm]
1.50	2.5-6.5	[0.7-1.7]
2.50	6-16	[1.6-4.2]
3.50	9-32	[2.4-8.4]
4.00	16-40	[4.2-10.6]
5.00	25-60	[6.6-15.8]
5.75	30-73	[7.9-19.3]

Housing

Code	Ports&Material	Housing Model Code
00	No Housing	No Housing
SE1/2	AL, 1/2 BSP	NCS12/3-SE-1/2
SE3/4	AL, 3/4 BSP	NCS12/3-SE-3/4
SE8S	AL, #8 SAE	NCS12/3-SE-8S
SE12S	AL, #12 SAE	NCS12/3-SE-12S

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

* Additional housings available

Flow Setting

Code - Flow in l/min
Specify in 1.0 lpm increments within flow range
Example

Code	l/min	[US gpm]
4.0	4.0	1.0

Seal Option

Code	Seal Kit
V-Viton	230000360
Omit-Buna-N	230000130