PFR2-10 - Flow regulator

Priority flow regulator, adjustable

Description

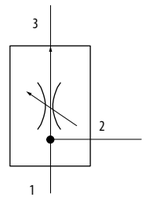
The PFR2-10 is a limited range adjustable*, pressure compensated, priority type, flow regulator screw-in cartridge valve.

*The flow adjustment is from the factory set maximum flow rate down to 50% of that factory set flow rate.

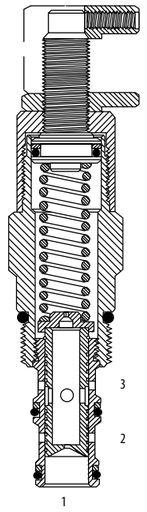
Operation

This valve maintains a constant, factory-set, priority flow from port 1 to port 3 based on the setting adjustment, regardless of pressure changes downstream on port 3. Flow in excess of the priority setting is directed to port 2. If the priority flow at port 3 is blocked, the spool will shift to satisfy the priority flow requirement, thereby closing off flow to port 2.

Functional symbol



Sectional view



Ratings and specifications

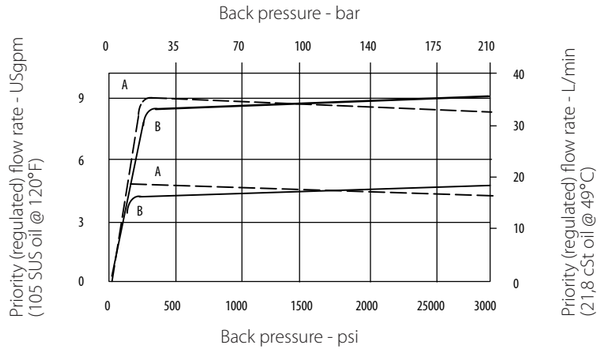
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)	
Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	Maximum inlet flow 60 L/min (15 USgpm) Maximum regulated flow 38 L/min (10 USgpm)
Flow regulation accuracy	0,4–1,9 L/min (0.1–0.49 USgpm) ±20% 1,9–7,5 L/min (0.5–1.99 USgpm) ±15% 7,6–37,8 L/min (2.0–10.0 USgpm) ±10% Factory set maximum priority flow rate accuracy under standard test conditions and within the above ranges
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C–10–3
Fluids	All general purpose hydraulic fluids such as: MIL–H–5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness code 18/16/13
Standard housing materials	Aluminum
Weight cartridge only	0,25 kg (0.54 lb.)
Seal kits	565804 Buna-N 889599 Viton® Viton is a registered trademark of E.I. DuPont

Typical flow regulation

Cartridge only

A - Port 3, priority (regulated) outlet pressurized

B - Port 2, bypass outlet pressurized



PFR2-10 - Flow regulator

Priority flow regulator, adjustable

Model code

PFR2 – **10** **(V)** – * – ** – *.* – **00**

1 2 3 4 5 6 7

1 Function

PFR2 - Priority flow regulator

2 Size

10 - 10 Size

3 Seals

Blank - Buna-N
V - Viton®

4 Adjustment

C - Cap
K - Knob
S - Screw

5 Port size

0 - Cartridge only

Code	Port size	Housing number	
		Aluminium light duty	Aluminium fatigue rated
3B	3/8" BSPP	02–173358	–
6T	SAE 6	566162	–
2G	1/4" BSPP	–	876705
3G	3/8" BSPP	–	876714
6H	SAE 6	–	876704
8H	SAE 8	–	876711

See section J for housing details.

6 Factory set flow rate, nominal

(Specify in USgpm) Range
0,38–37,8 L/min (0.1–10.0 USgpm)

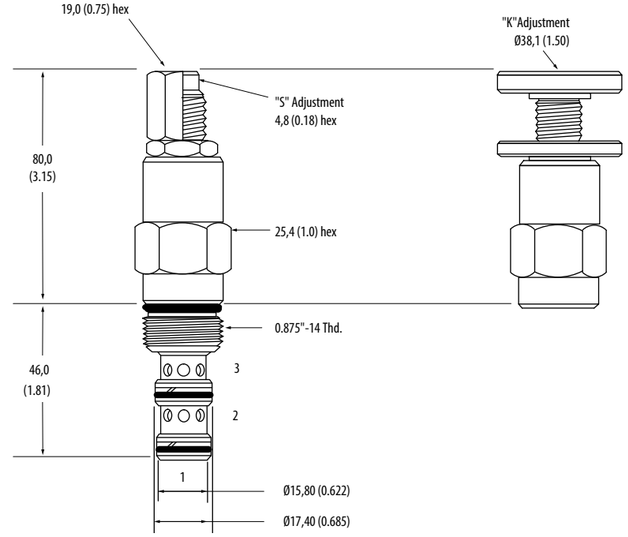
7 Special features

00 – None
(Only required if valve has special features, omitted if "00".)

Dimensions

mm (inch)

Torque cartridge in aluminum housing to 47–54 Nm (35–40 ft.lbs)



H

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.