

FLOW CONTROL VALVES

SR10-01

Flow Regulator, Pressure Compensated, Restrictive Type

Up to 10 gpm (38 l/min) • 5000 psi (350 bar)

Description

A screw-in cartridge, adjustable, pressure compensated, hydraulic flow regulating valve (restrictive type).

Operation

The SR10-01 maintains a constant flow from port 1 to port 2 based on the setting adjustment, regardless of pressure changes downstream of port 2. The flow rate is determined by a fixed control orifice and could be adjusted within a limited range. Reverse flow from port 2 to port 1 is at the value of the fixed control orifice and is non-pressure compensated.

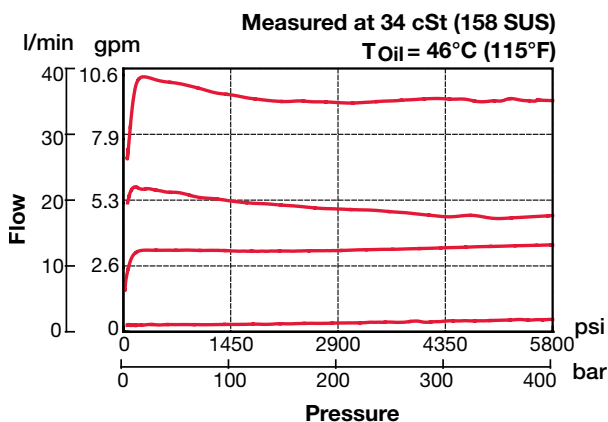
Features

- Excellent stability throughout flow range
- Reverse flow capability
- Desired setting may be locked down
- Adjustment screw cannot be backed out of the valve
- All external surfaces zinc-plated
- Aluminum knob option for ease of adjustment
- Hardened parts to ensure minimal wear and extend service life
- One-piece body maximizes reliability and minimizes the effect of eccentricity
- Industry common cavity

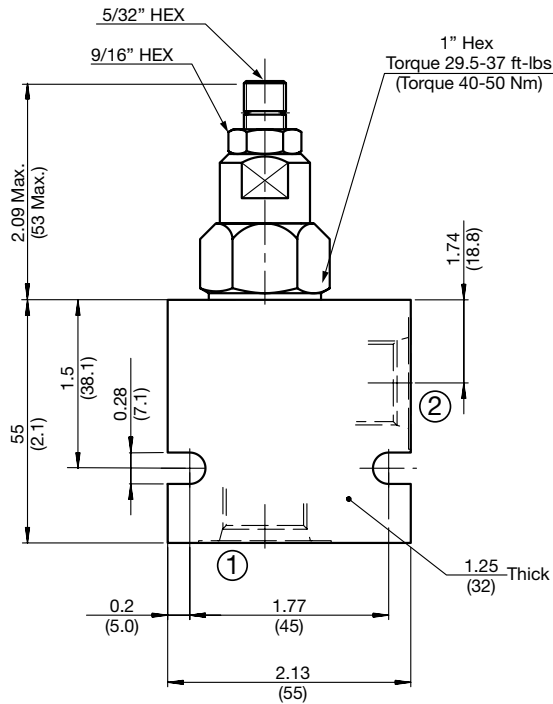
Specifications

Operating Pressure	5000 psi (350 bar)
Max. Operating Pressure, Port 2	3000 psi (210 bar)
Nominal Flow	10 gpm (38 l/min)
Adjustment Torque Required	1.25 lbf.ft at 3000 psi (1.7Nm at 210 bar) 2.21lbf.ft at 5000 psi (3.0 Nm at 350 bar)
Flow Ranges and Accuracy	1.0 - 3.5 gpm (4 - 13 l/min) $\pm 10\%$ 3.5 - 10.0 gpm (13 - 38 l/min) $\pm 10\%$
Fluid Operating Temp. Range	-4° to 248°F (-20° to +120°C) (Consult factory for usage at temp. outside range.)
Fluid Compatibility	Mineral-based or synthetics with lubricating properties
Viscosity	50 to 2000 SUS (7.4 to 420 cSt)
Filtration	21/19/16 or cleaner (per ISO 4406). Use with filter rated $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-2 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580274 Finisher: 02580247
Cartridge Weight	0.35 Lbs. (0.16 kg)
Cartridge Material	Steel with hardened work surfaces. Zinc-plated exposed surfaces. Anodized aluminum knobs. (option H) Buna N or Viton® o-rings, and PTFE back-up rings.
Seal Kits	Buna-N P/N: 03033872 Viton® P/N: 03051757

Performance

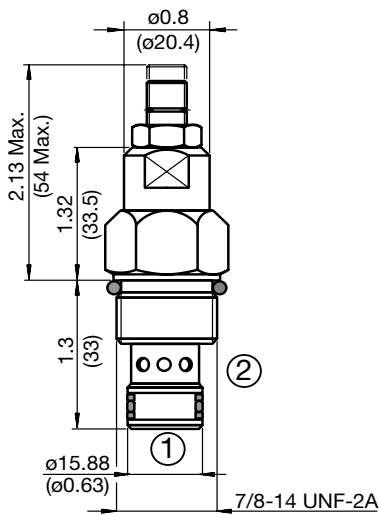


Dimensions

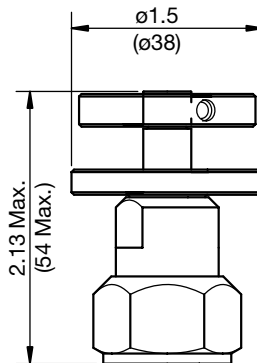


Adjustment Options

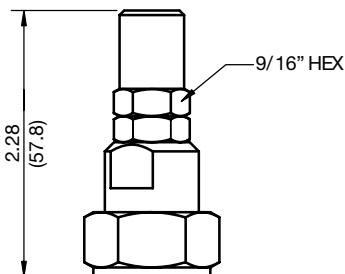
'V' - Allen Head (std)



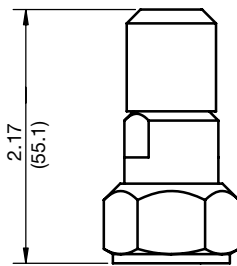
'H' - Hand Knob



'K' - Protective Cap



'F' - Tamper Proof Cap



All measurements in inches (mm).
Subject to technical modifications

Model Code

SR10-01-C-N-3.5 V 1.8

Valve Model

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 ports, aluminum body
- SS8 = SAE-8 ports, steel body

Seals

- N = Buna-N
- V = Viton®

Flow Rate

- 3.5 = 1.0 to 3.5 gpm (4 to 13 l/min)
- 10.0 = 3.5 to 10.0 gpm (13 to 38 l/min)

Adjustment Options

- F = Factory pre-set, non-adjustable
(must specify setting below)
- H = Knurled Hand Knob
- K = Allen Head (HEX 5/32") w/ cover cap
- V = Allen Head (HEX 5/32")

Setting

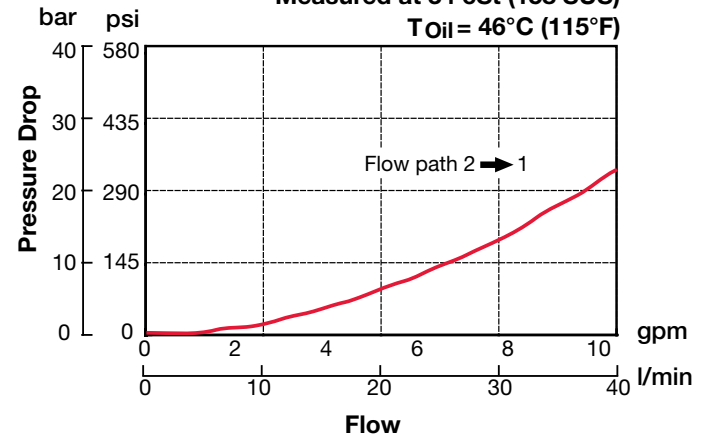
- blank = Set at 50% of maximum flow for the range
- xxx = flow rate in gpm

Example: 1.8 = 1.8 psi

Performance

Measured at 34 cSt (158 SUS)

T_{Oil} = 46°C (115°F)



Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH102-AS8	03037778	Aluminum, anodized	3500 psi (245 bar)	0.40 lb (0.18 kg)
FH102-SS8	03037612	Steel, Zinc plated	6000 psi (420 bar)	1.16 lb (0.53 kg)

*Please refer to Line Bodies & Cavities section for details