

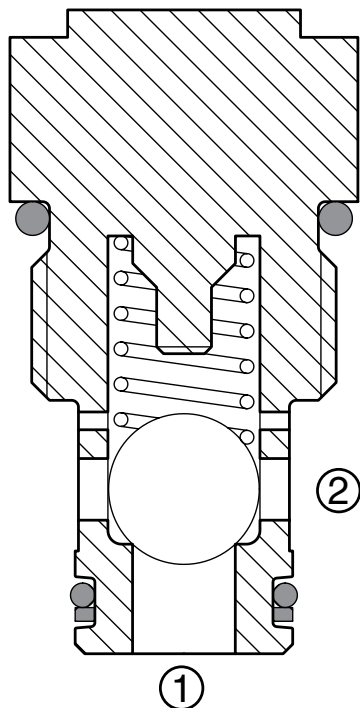
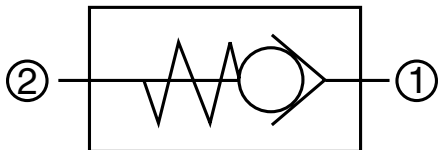
CHECK & LOAD CONTROL VALVES

RV10A-01

Check Valve, Ball Type

Up to 21 gpm (80 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, ball type check valve for use as a blocking or load holding device.

Operation

The RV10A allows flow from port 1 to port 2, while normally blocking flow in the opposite direction. The valve remains closed by bias spring until sufficient pressure is applied at port 1 at which time the ball lifts off the seat and allows flow from port 1 to port 2.

Features

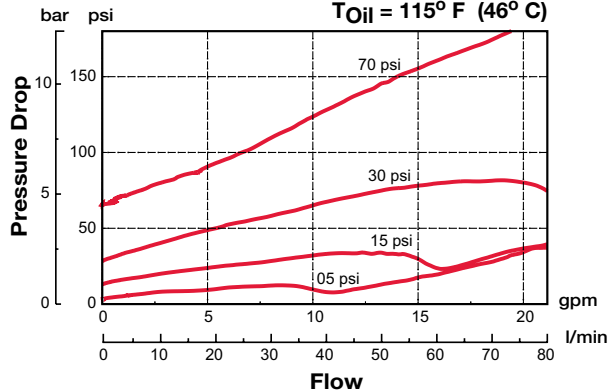
- Hardened closing element to ensure extended service life and low leakage
- Multiple bias spring options for back pressure application flexibility
- Fast closing and seating
- Low pressure drop
- All external surfaces zinc-plated
- Industry common cavity

Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	21 gpm (80 l/min)
Internal Leakage	<2 drops/min. at 6000 psi (0.10 cc/min at 420 bar)
Standard Cracking Pressures	5 psi (0.35 bar) 15 psi (1.00 bar) 30 psi (2.00 bar) 70 psi (5.00 bar)
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 Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580274 Finisher: 02580247
Cartridge Weight	0.22 Lbs. (0.10 kg)
Cartridge Material	Steel with hardened work surfaces. Zinc-plated exposed surfaces. Anodized aluminum knobs. (option H) Buna N or Viton® o-rings. PTFE back-up rings.
Seal Kits	Buna-N P/N: 03033872 Viton® P/N: 03051757

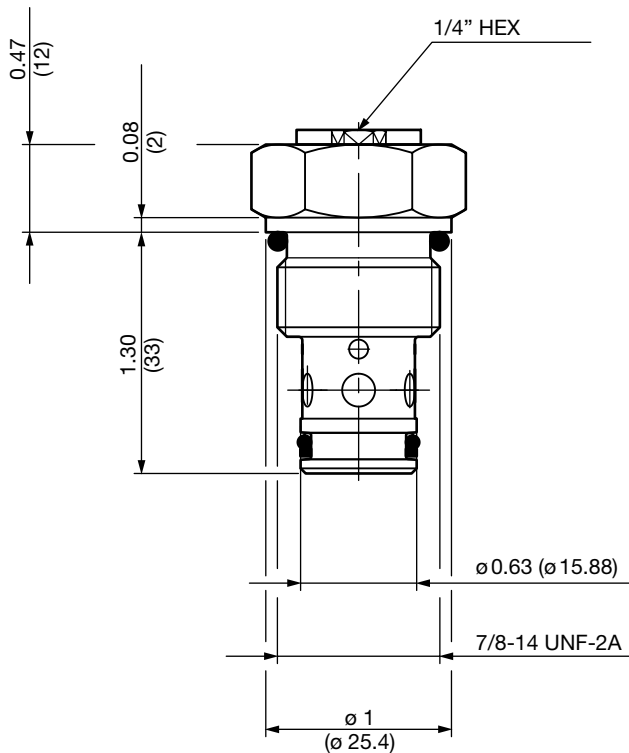
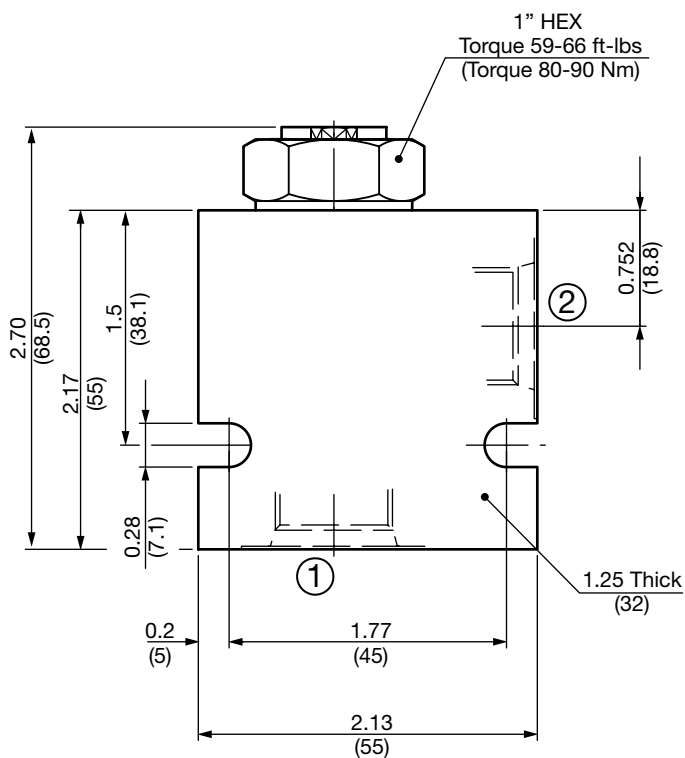
Performance

Measured at 158 SUS (34 cSt)
T_{Oil} = 115° F (46° C)



CHECK & LOAD CONTROL VALVES

Dimensions



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

Model Code

RV10A-01-C-N-05

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®

Cracking Pressure

- 05 = 5 psi (0.35 bar)
- 15 = 15 psi (1.00 bar)
- 30 = 30 psi (2.00 bar)
- 70 = 70 psi (5.00 bar)

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