

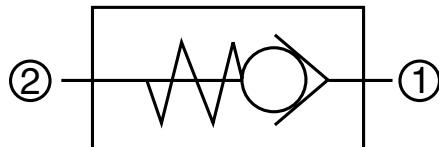
# CHECK & LOAD CONTROL VALVES

## RV10A-01

### Check Valve, Ball Type

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

#### Hydraulic Symbol



#### Description

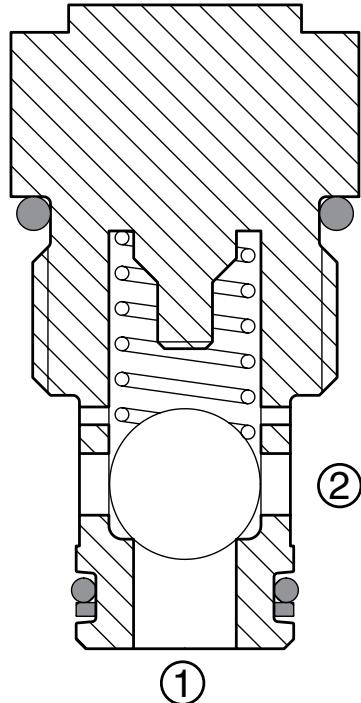
A screw-in cartridge, ball type check valve for use as a blocking or load holding device.

#### 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

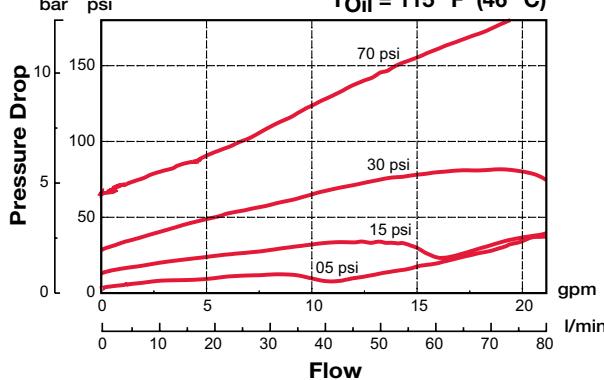


#### Specifications

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) <i>(Consult factory for usage at temp. outside range.)</i>
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 Viton®	FS102-N P/N: 03033872 FS102-V P/N: 03051757

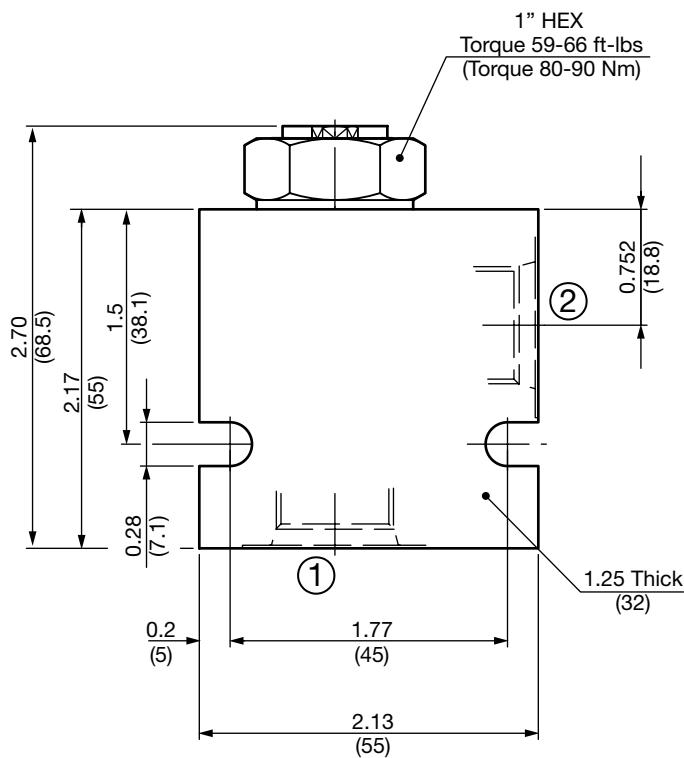
#### Performance

Measured at 158 SUS (34 cSt)  
 $T_{Oil} = 115^\circ F (46^\circ C)$



# CHECK & LOAD CONTROL VALVES

## Dimensions



## Model Code

RV10A-01-C-N-05

### Valve Model

#### Body & Ports

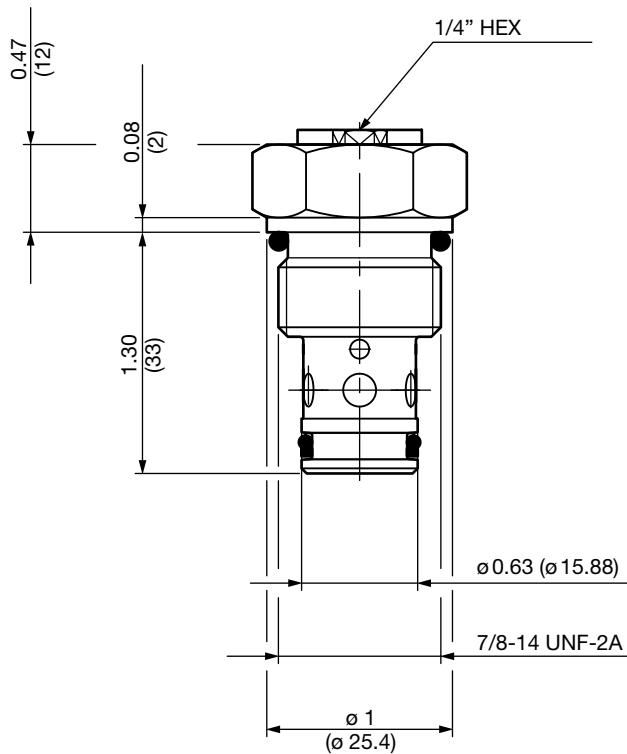
- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum Body
- SS8 = SAE-8 Ports, steel Body

#### 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

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