

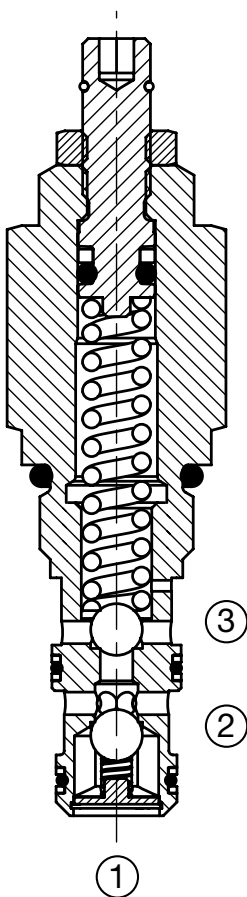
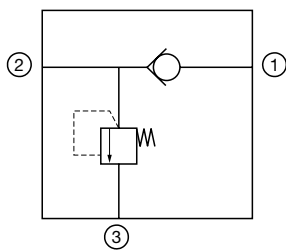
CHECK & LOAD CONTROL VALVES

RV06B-01

Check Valve, Integral Relief, Ball Type

Up to 4 gpm (15 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, ball type check valve and direct acting, ball type relief valve combined in a single cartridge intended for use as load holding and pressure limiting device in hydraulic circuits to reduce manifold size.

Operation

The RV06B allows flow from port 2 to port 1 once the sufficient pressure is applied at port 2 to overcome the bias spring pressure of 5 psi (0.34 bar). It normally blocks flow in the opposite direction.

The relief portion of the valve would remain closed until the predetermined pressure setting is reached at port 2 to lift the spring opposed ball from its seat, allowing flow from port 2 to port 3. Pressure at port 3 is directly additive to relief pressure setting.

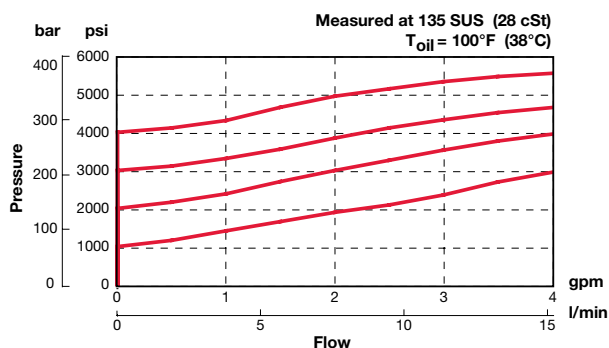
Features

- Combination of two functions in one cartridge
- Relief setting up to 5000 psi (350 bar)
- Relief setting adjustment screw cannot be backed out of the valve
- Adjustable under full pressure
- Fast closing and seating
- Hardened closing elements to ensure minimal wear and extend service life
- All external surfaces zinc-plated

Specifications

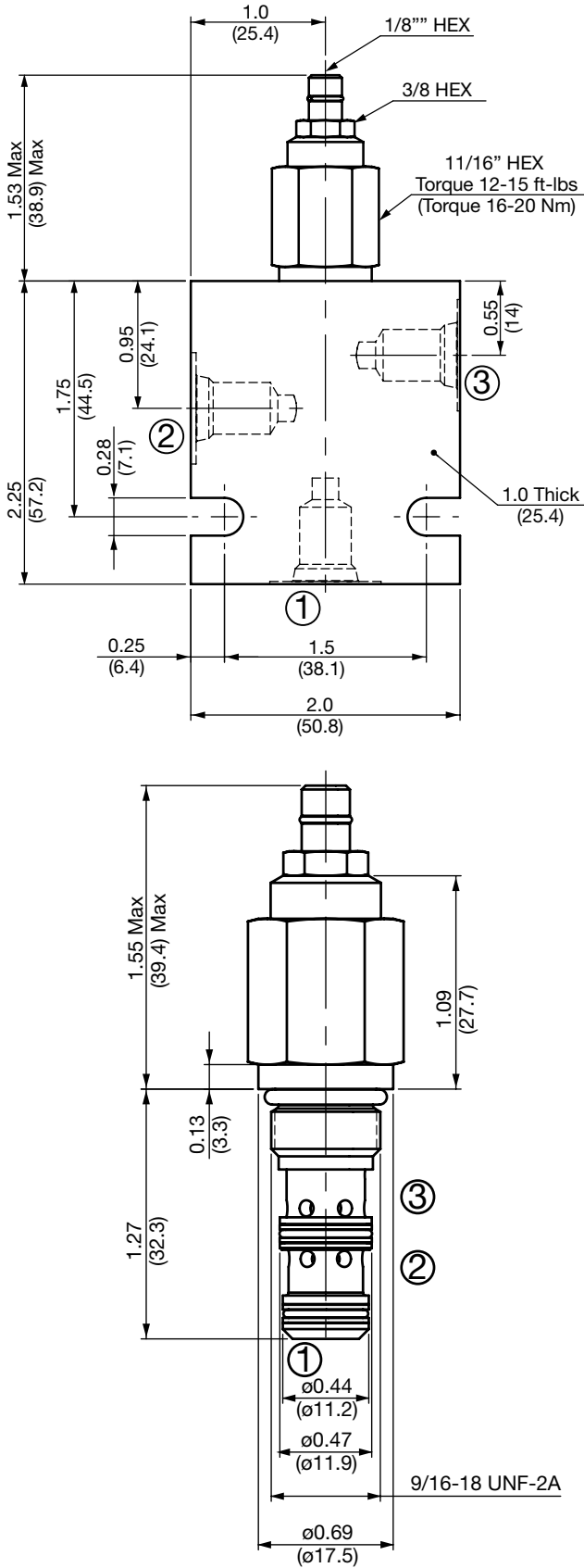
Operating Pressure	5000 psi (350 bar)
Maximum Flow Rate	4 gpm (15 l/min)
Internal Leakage	5 drops/min maximum to 75% of nominal setting.
Relief Pressure Ranges	0 to 3000 psi (0 to 207 bar) 0 to 5000 psi (0 to 350 bar)
Reseat Pressure	80% of crack pressure
Check Valve Bias Spring Cracking Pressure	5 psi (0.34 bar)
Fluid Operating Temp. Range	-20° to 248°F (-29° to 120°C)
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)
Installation	No Orientation Restrictions
Cavity	FC06-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02582050 Finisher: 02582051
Cartridge Weight	0.06 lb (27 g)
Cartridge Material	Steel with hardened work surfaces. Zinc plated exposed surfaces. Buna N or Viton® o-rings. Solid Thermoplastic Polyester back-up rings.
Seal Kits	Buna-N P/N: 02610186 Viton® P/N: 02610187

Performance – Relief



CHECK & LOAD CONTROL VALVES

Dimensions



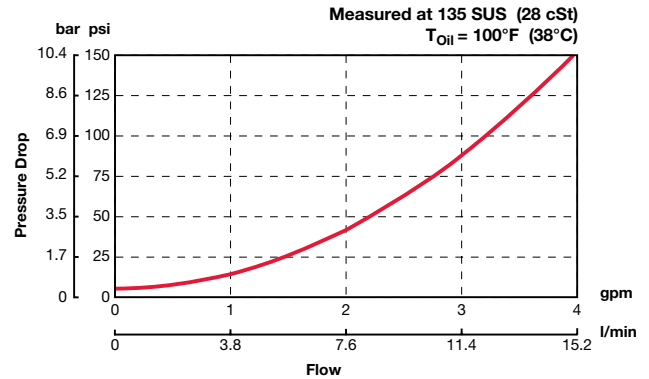
All measurements in inches (mm).
Subject to technical modifications

Model Code

RV06B-01-AS4-N-300 V 100

- Valve Model** _____
- Body & Ports** _____
- C = Cartridge only
 - AS4 = SAE-4 Ports, aluminum Body
 - SS4 = SAE-4 Ports, steel Body
- Seals** _____
- N = Buna-N
 - V = Viton®
- Relief Adjustment Range** _____
- 300 = 0 to 3000 psi (0 to 207 bar)
 - 500 = 0 to 5000 psi (0 to 350 bar)
- Relief Adjustment Options** _____
- V = Allen Head (Hex 1/8")
- Setting** _____
- blank = Set at 50% maximum pressure for the range
 - XXX = Desired psi ÷ 10
- Example: 100 = 1000 psi*

Performance – Check Valve



Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH063-AS4	02600492	Aluminum, anodized	3500 psi (245 bar)	0.36 lbs (0.16 kg)
FH063-SS4	02600493	Steel, Zinc plated	6000 psi (420 bar)	1.1 lbs (0.50 kg)

*Please refer to Line Bodies & Cavities section for details