

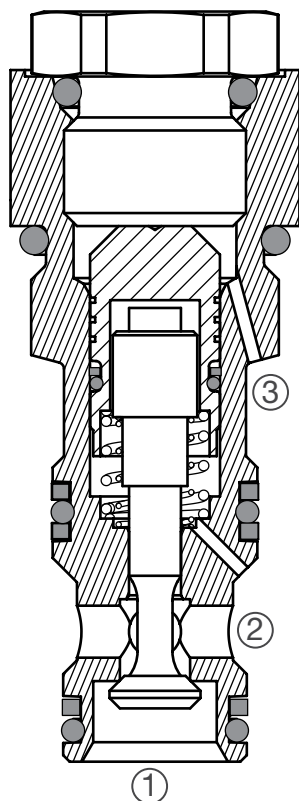
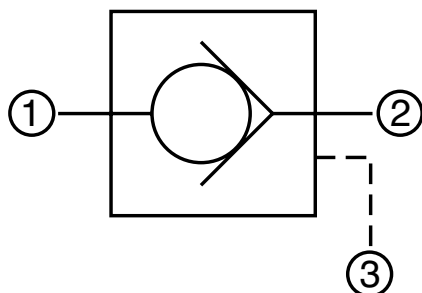
CHECK & LOAD CONTROL VALVES

RP08A-01

Check Valve, Pilot-to-Open, Poppet Type

Up to 10 gpm (38 l/min) • 6000 psi (420 bar)

Hydraulic Symbol



Description

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

Operation

The RP08A allows flow from port 2 to port 1, while normally blocking flow from port 1 to port 2. The valve remains closed by bias spring until sufficient pressure is applied at pilot port 3. The cartridge has 3:1 and 4:1 optional pilot ratios, meaning that at least one-third or one-fourth (respectively) of the load pressure held at port 1 is required at port 3 to open the valve. A sealed pilot piston option is available.

Features

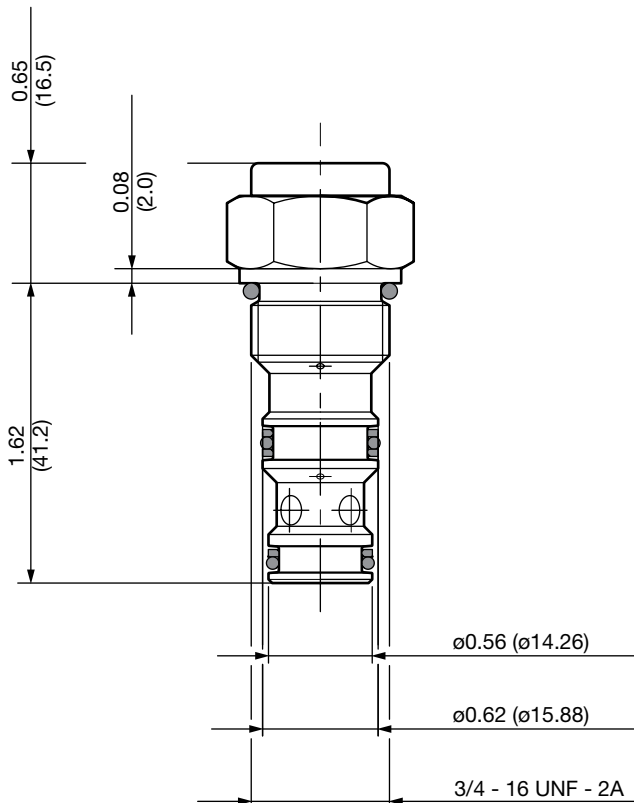
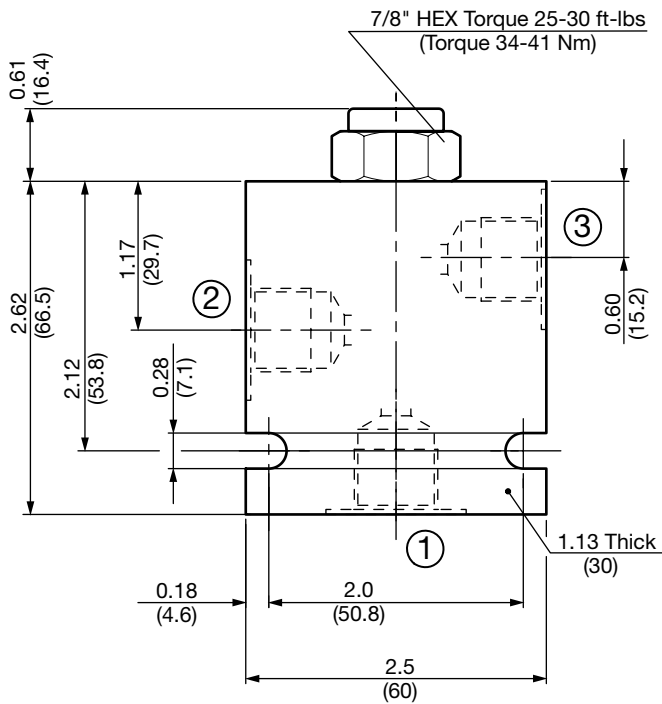
- Hardened poppet to ensure extended service life and low leakage
- Additional reseating spring for fast and reliable closing
- Optional sealed pilot piston
- Higher flow rating and low pressure drop due to pilot port at 3.
- Same cavity as counterbalance valve RS08.
- All external surfaces zinc-plated or specifically treated
- Industry common cavity

Specifications

Operating Pressure	6000 psi (420 bar)
Nominal Flow	10 gpm (38 l/min)
Internal Leakage	2 drops/min. at 6000 psi (0.10 cc/min at 420 bar)
Pilot Ratio	3:1, 4:1
Standard Check Bias Spring	15 psi (1.0 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	FC08-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580086 Finisher: 02580087
Cartridge Weight	0.19 Lbs. (0.09 kg)
Cartridge Material	Steel with hardened work surfaces. Buna N or Viton® o-rings. PTFE back-up rings.
Seal Kits	Buna-N P/N: 03054795 Viton® P/N: 02591059

CHECK & LOAD CONTROL VALVES

Dimensions



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

Model Code

RP08A-01-C-N-15-3

Valve Model

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum Body
- SS6 = SAE-6 Ports, steel Body

Seals

- N = Buna-N
- NS = Buna-N with Sealed Piston
- V = Viton®
- VS = Viton® with Sealed Piston

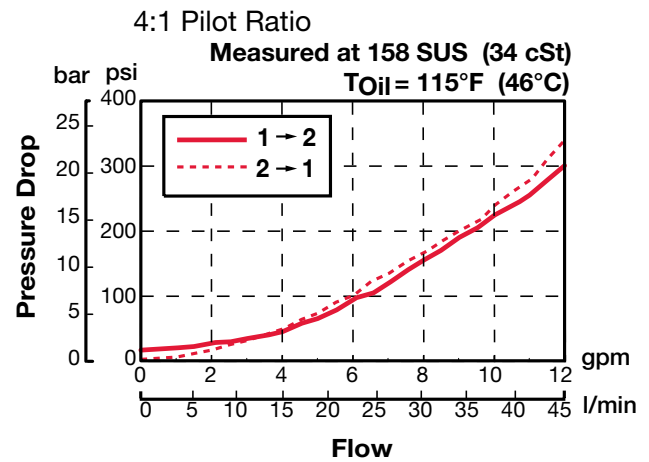
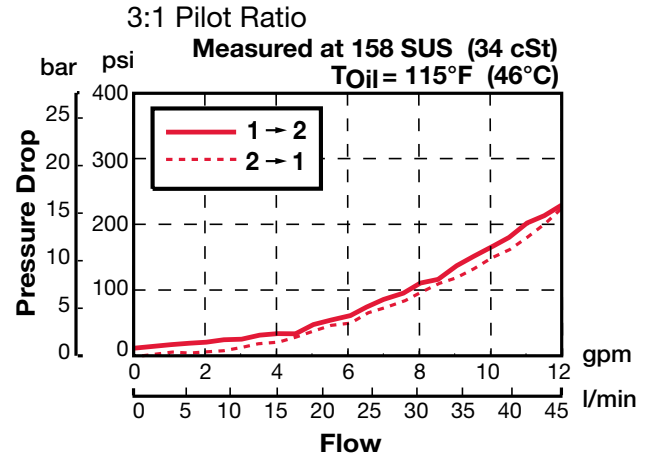
Cracking Pressure

- 15 = 15 psi (1.00 bar)

Pilot Ratio

- 3 = 3:1
- 4 = 4:1

Performance



Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH083-AS6	03011424	Aluminum, anodized	3500 psi (245 bar)	0.58 lb (0.26 kg)
FH083-SS6	00560920	Steel, Zinc plated	6000 psi (420 bar)	1.70 lb (0.77 kg)

*Please refer to Line Bodies & Cavities section for details