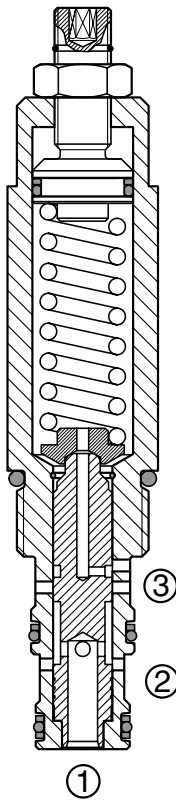
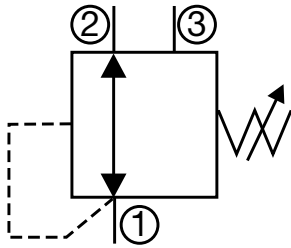


# PRESSURE CONTROL VALVES

## DR10-01

### Pressure Reducing/Relieving, Direct Acting, Spool Type

Up to 16 gpm (60 l/min) • 6000 psi (420 bar)



#### Description

A screw-in cartridge, direct acting, spool type, pressure reducing/relieving valve with internal spring chamber drain, intended for use as a pressure regulating device. This valve maintains a secondary regulated/reduced pressure regardless of pressure variations in the primary system. In addition to the reducing function, this valve also provides a relief function from the reduced pressure port to the tank port, if pressure in the secondary circuit exceeds the set pressure.

#### Operation

The DR10-01 allows bidirectional flow between port 2 and port 1 with the spring chamber drained through port 3. Once the pressure setting is reached at port 1, the spool shifts to restrict the flow at port 2, thereby regulating pressure at port 1. If pressure at port 1 exceeds the setting of the valve, the spool will shift further and relieve excess pressure through port 3. Any pressure at port 3 is directly additive to valve pressure setting.

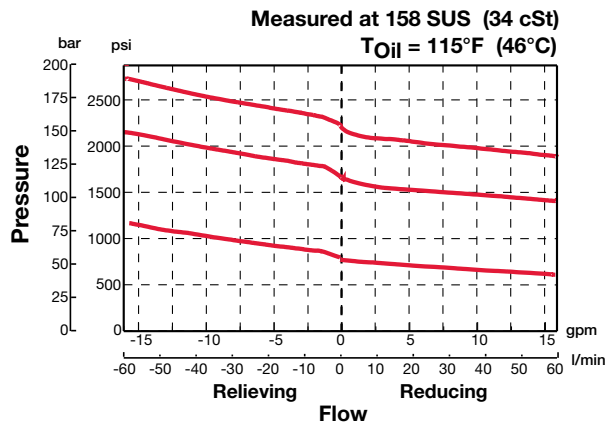
#### Features

- Spring ranges up to 1900 psi (131 bar)
- Positive stop prevents spring from over adjustment (options V,H)
- Adjustable under full pressure
- Stroke limiting device for enhanced safety
- Fast response
- All external surfaces zinc-plated
- Hardened poppet to ensure minimal wear and extend service life
- Industry common cavity

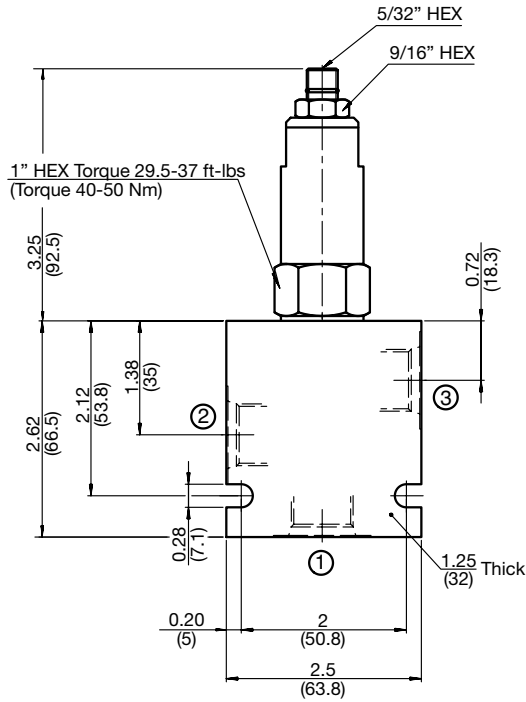
#### Specifications

Operating Pressure	6000 psi (420 bar)
Nominal Flow	16 gpm (60 l/min)
Optional Pressure Ranges	236 to 700 psi (17 to 48 bar) 435 to 1400 psi (30 to 96 bar) 725 to 1900 psi (50 to 131 bar)
% of Spring Pressure Range Actuated at 1 Revolution (Adjustment Type V, H)	14%
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	FC10-3 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580092 Finisher: 02580093
Cartridge Weight	0.58 Lbs. (0.262 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 FS103-N P/N: 03071274 Viton® FS103-V P/N: 03049443

#### Performance

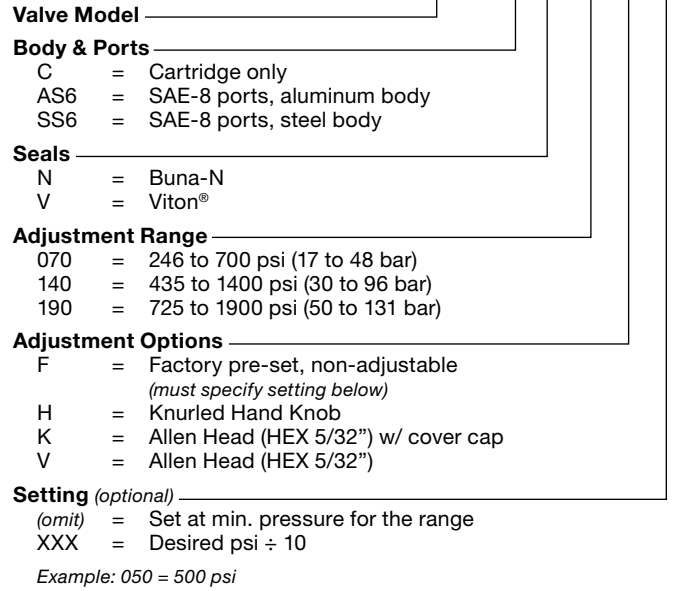


## Dimensions



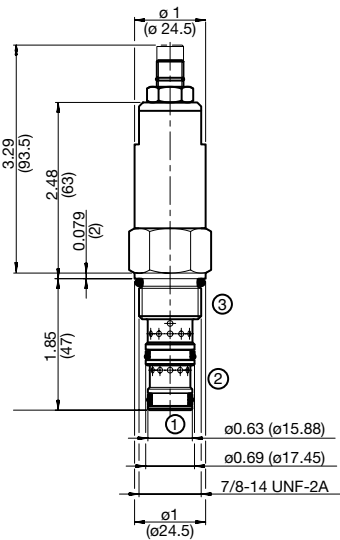
## Model Code

**DR10-01-C-N-070 V 050**

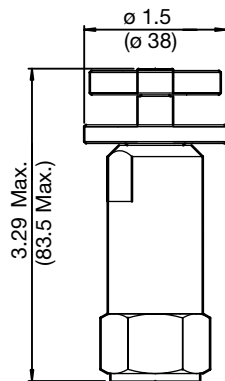


## Adjustment Options

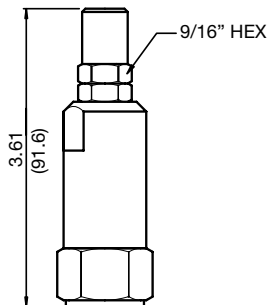
'V' - Allen Head (std)



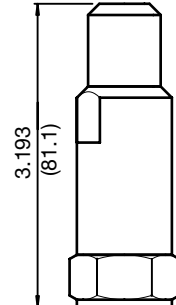
'H' - Hand Knob



'K' - Protective Cap



'F' - Tamper Proof Cap



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

## Standard Line Bodies\*

Code	Part No	Material	Pressure Rating	Weight
FH103-AS8	03038095	Aluminum, anodized	3500 psi (245 bar)	0.60 lb (0.27 kg)
FH103-SS8	03037704	Steel, Zinc plated	6000 psi (420 bar)	1.74 lb (0.79 kg)

\*Please refer to Line Bodies & Cavities section for details