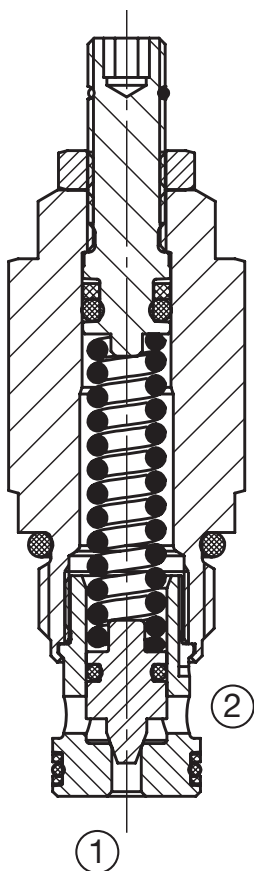
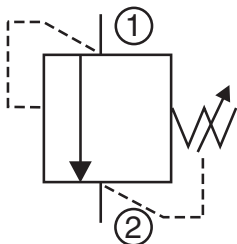


PRESSURE CONTROL VALVES

DB06C-01

Pressure Relief, Direct Acting, Poppet Type

Up to 5 gpm (19 l/min) • 5000 psi (350 bar)



Description

A screw-in cartridge, direct acting, poppet type relief valve intended for use as pressure limiting device in hydraulic circuits requiring low internal leakage and fast response.

Operation

The DB06C blocks flow from 1 to 2 until the predetermined pressure setting is reached at port 1 to lift the spring opposed poppet from its seat, allowing flow from port 1 to port 2. Pressure at port 2 is directly additive to valve pressure setting. Flow from port 2 to port 1 is checked.

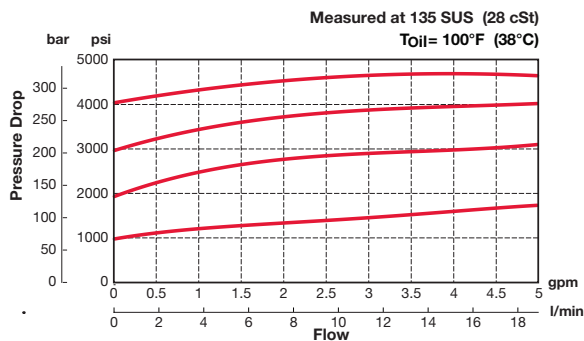
Features

- Spring ranges up to 5000 psi (350 bar)
- Positive stop prevents spring from over adjustment
- Adjustment screw cannot be backed out of the valve
- Adjustable under full pressure
- Fast response
- All external surfaces zinc-plated
- Hardened poppet to ensure minimal wear and extend service life

Specifications

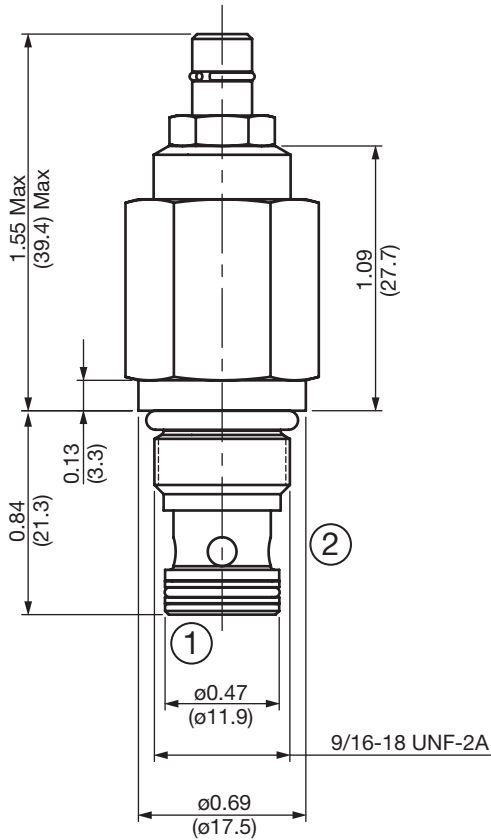
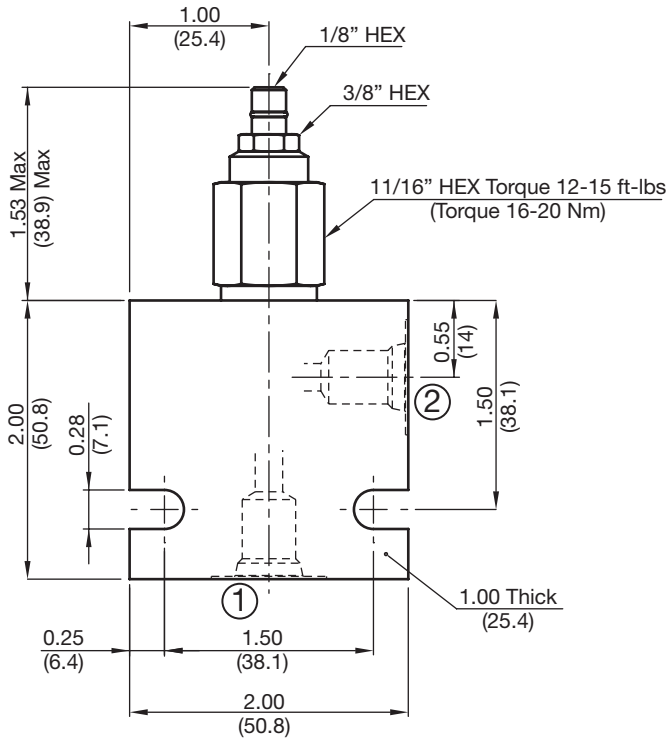
Operating Pressure	5000 psi (350 bar)
Maximum Flow Rate	5 gpm (19 l/min)
Internal Leakage	5 drops/min maximum to 75% of nominal setting
Optional Pressure Ranges	0 to 1800 psi (0 to 124 bar) 0 to 3000 psi (0 to 207 bar) 1500 to 5000 psi (103 to 350 bar)
Reseat Pressure (Nominal)	80% of crack pressure
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	FC06-2 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02582046 Finisher: 02582047
Cartridge Weight	0.15 lb (68 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: 02610184 Viton® P/N: 02610185

Performance



PRESSURE CONTROL VALVES

Dimensions



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

Model Code

DB06C-01-C-N-180 V 100

Valve Model	_____
Body & Ports	_____
C	= Cartridge only
Seals	_____
N	= Buna-N
V	= Viton®
Adjustment Range	_____
180	= 350 to 1800 psi (24 to 124 bar)
300	= 750 to 3000 psi (52 to 207 bar)
500	= 1500 to 5000 psi (103 to 350 bar)
Adjustment Options	_____
V	= Allen Head (Hex 1/8")
Setting	_____
blank	= Set at 50% maximum pressure for the range
XXX	= Desired psi ÷ 10
<i>Example: 100 = 1000 psi</i>	

Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH062-AS4	02600491	Aluminum, anodized	3500 psi (245 bar)	0.34 lbs (0.15 kg)
FH062-SS4	02600490	Steel, Zinc plated	6000 psi (420 bar)	1.0 lbs (0.45 kg)

*Please refer to Line Bodies & Cavities section for details