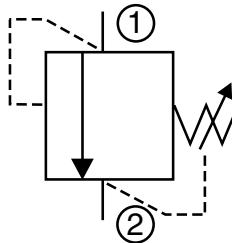


# PRESSURE CONTROL VALVES

## DB06A-01

### Pressure Relief, Direct Acting, Ball Type

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

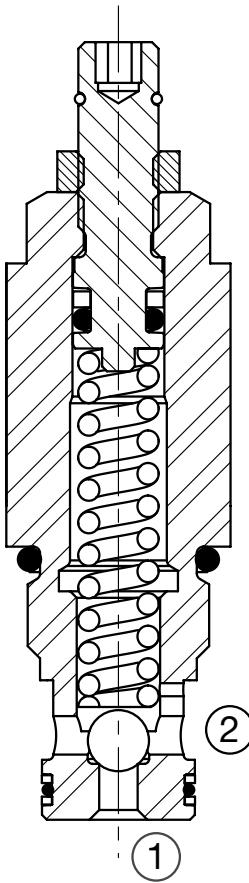


#### Description

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

#### Operation

The DB06A blocks flow from 1 to 2 until the predetermined pressure setting is reached at port 1 to lift the spring opposed ball 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.



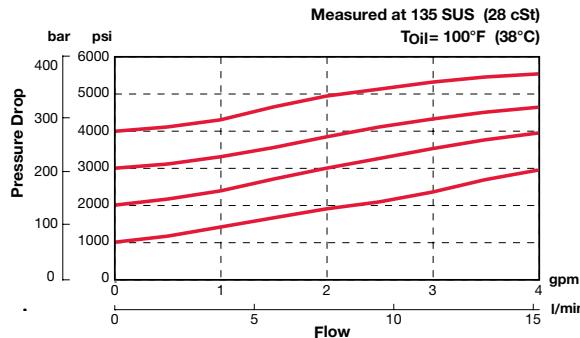
#### Features

- 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 ball to ensure minimal wear and extend service life

#### Specifications

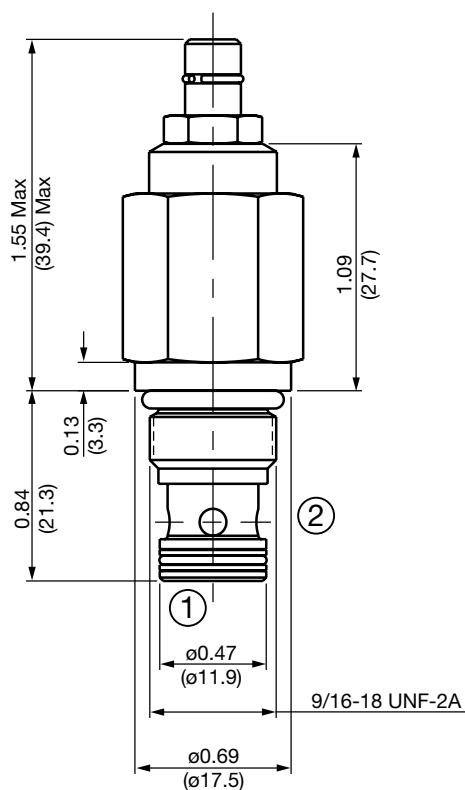
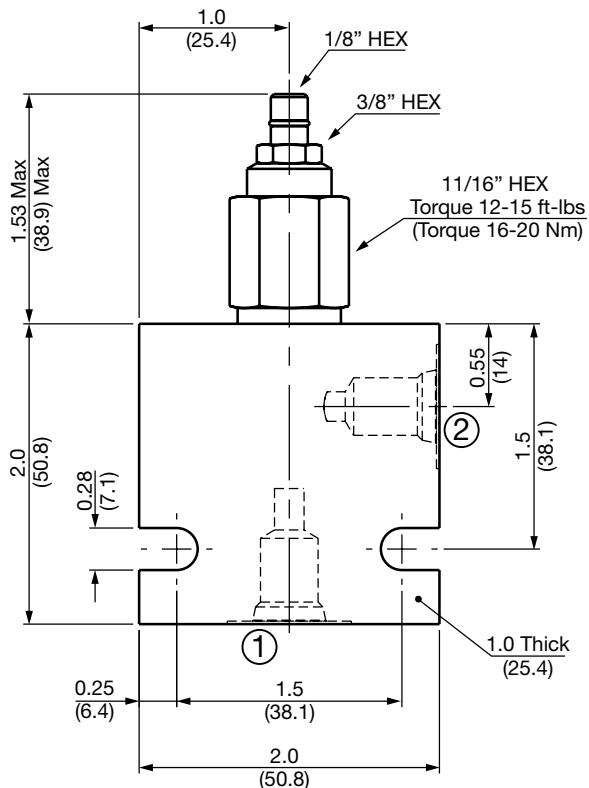
|                            |  |
|----------------------------|--|
| Operating Pressure         | 5000 psi (350 bar)   |
| Maximum Flow Rate          | 4 gpm (15 l/min)   |
| Internal Leakage           | 5 drops/min maximum to 75% of nominal setting  |
| Optional Pressure Ranges   | 0 to 3000 psi (0 to 207 bar)<br>0 to 5000 psi (0 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 Line Bodies & Cavities section)  |
| Cavity Tools               | Rougher: 02582046<br>Finisher: 02582047  |
| Cartridge Weight           | 0.15 lb (68 g)   |
| Cartridge Material         | Steel with hardened work surfaces.<br>Zinc plated exposed surfaces.<br>Buna N or Viton® o-rings.<br>Solid Thermoplastic Polyester back-up rings. |
| Seal Kits Buna-N<br>Viton® | FS062-N P/N: 02610184<br>FS062-V P/N: 02610185   |

#### Performance



# PRESSURE CONTROL VALVES

## Dimensions



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

## Model Code

**DB06A-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®

### Adjustment Range

180 = 0 to 1800 psi (0 to 124 bar)  
300 = 0 to 3000 psi (0 to 207 bar)  
500 = 0 to 5000 psi (0 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  
Example: 100 = 1000 psi

## 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