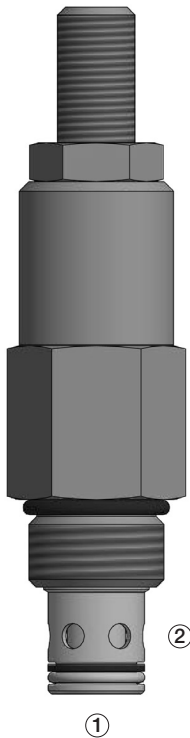
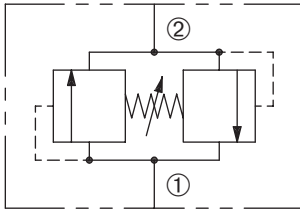


# DBRV-100

Adjustable, Bi-Directional  
Relief Valve

## SERIES 10



## DESCRIPTION

An adjustable, bi-directional poppet type cartridge valve designed to limit pressure in hydraulic circuits.

## OPERATION

The DBRV-100 is comprised of two relief valves which prevent flow from ① to ② or ② to ① until the set crack pressure is achieved at either port ① or ②. When the set crack pressure is reached, the poppet unseats allowing flow from ① to ② or ② to ① protecting the circuit from over pressurization.

## FEATURES and BENEFITS

- Rapid response to pressure surges.
- Low pressure rise.
- Hardened poppet and seat for long life.
- Hidden adjustment (tamper resistant) option.
- Aluminum knob and disc nut option.
- Adjustment may be locked in place.
- Industry common cavity.

## SPECIFICATIONS

**Operating Pressure:** 3600 psi (248 bar)

**Flow:** See PRESSURE DROP VS. FLOW graph.

Nominal Flow 15 gpm (56.8 lpm)

**Internal Leakage:** 5 in<sup>3</sup>/min (82cc/min) max. at reseal.

**Crack Pressure Defined:** Determined at .25 gpm (0.9 lpm)

**Reseat Pressure:** Nominal 80% of crack pressure.

**Spring Range:** 100 to 3600 psi (7 to 248 bar)

Preset (See HOW TO ORDER)

**Temperature:** -30°F to +250°F (-35°C to +120°C).

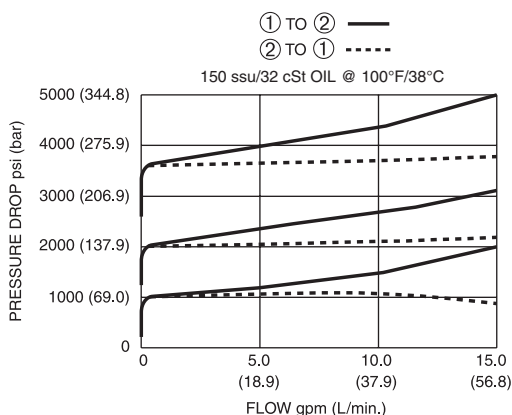
**Recommended Filtration:** ISO 20/18/14

**Fluids:** Mineral-based fluids. For other fluid compatibility, consult factory.

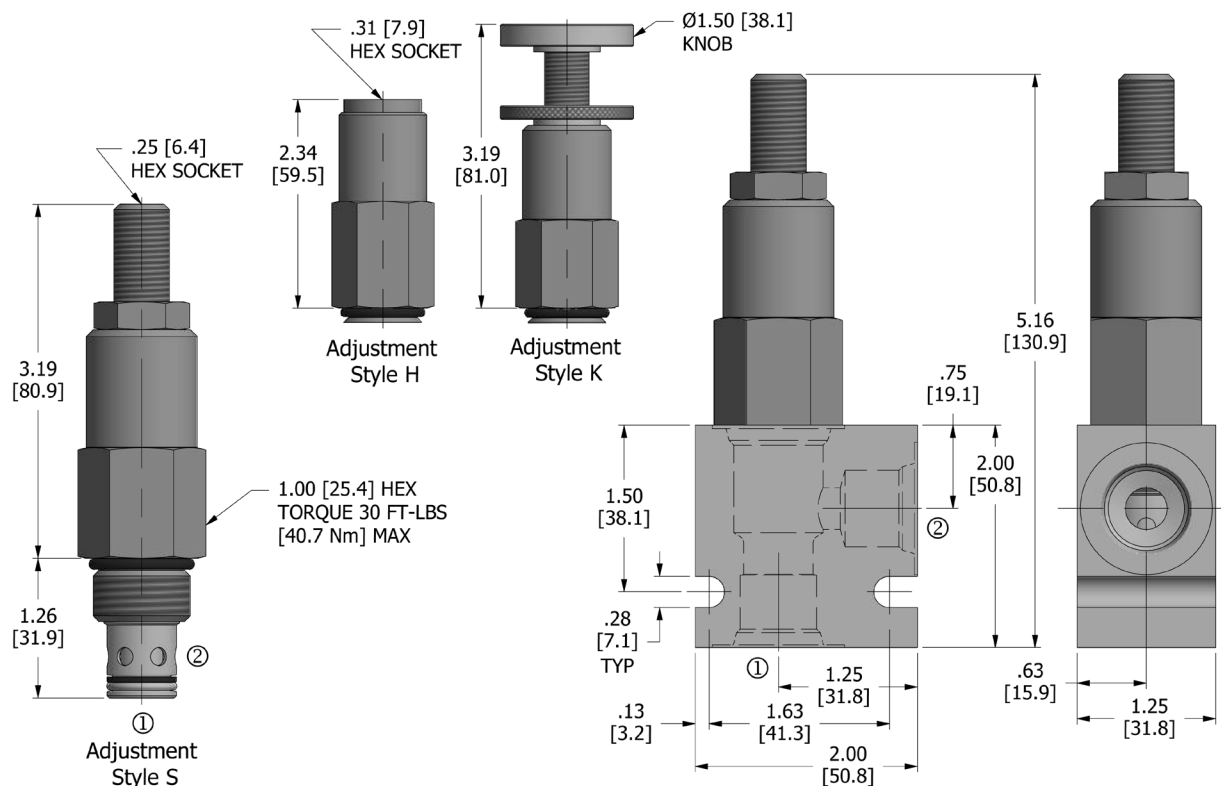
**Cavity/Cavity Tool:** 100-2, see page 11.10.2

**In-Line Body Material:** Anodized 6061T6 aluminum  
alloy rated at 3000 psi (207 bar).

## PRESSURE DROP VS. FLOW



## DIMENSIONS Inches [Millimeters]



## HOW TO ORDER

**DBRV** - **100** - **\*** - **\*** - **\*\* / \*\*\*\*** - **\*\***  
 Bi-Directional Relief Valve    Cavity    Seals    Adjustment Style    Spring Range    Factory Preset PSI    Porting

Seals		Seal Kit
<b>N</b>	Buna N	DSK-100-2-N-C
<b>V</b>	Viton	

Adjustment Style	
<b>H</b>	Hidden
<b>K</b>	Knob
<b>S</b>	Screw

Spring Range		Preset
<b>6</b>	100 to 600 psi (7 to 41 bar)	300 psi (21 bar)
<b>20</b>	500 to 2000 psi (34 to 138 bar)	1000 psi (69 bar)
<b>36</b>	600 to 3600 psi (41 to 248 bar)	2000 psi (138 bar)

Factory Preset PSI	
omit	Standard preset
<b>****</b>	example: 2550 = 2550 psi

Porting†		In-Line Body w/o Cartridge
omit	Cartridge only	
<b>2N</b>	1/4 PTF	B-100-2-2N
<b>3N</b>	3/8 PTF	B-100-2-3N
<b>6T</b>	SAE 6	B-100-2-6T
<b>8T</b>	SAE 8	B-100-2-8T

† Other options available – consult factory

Valve and In-Line Body are supplied individually and need to be assembled. For a completed assembly consult the factory.

All variations may not be configurable. Minimum order quantities may be required on other models. Contact Deltrol Fluid Products for complete details.