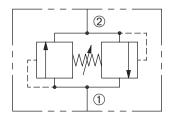
## **DBRVS-100**

Tamper-Resistant, Direct-Acting, Bi-Directional Relief Valve 5000 psi (345 bar)



## **SERIES 10**



## DESCRIPTION

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

#### **OPERATION**

The DBRVS-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).
- Industry common cavity.

## **SPECIFICATIONS**

Operating Pressure: 5000 psi (345 bar)

Flow: See PRESSURE DROP VS. FLOW graph.

Nominal Flow 20 gpm (75.7 lpm)

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

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

Reseat Pressure: Nominal 80% of crack pressure.

Spring Range: 100 to 5000 psi (7 to 345 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.

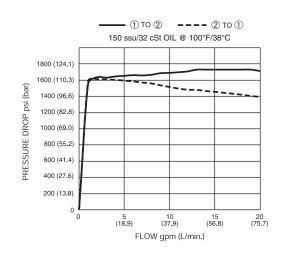
Cavity/Cavity Tool: 100-2, see page 11.10.2

In-Line Body Material: Anodized 6061T6 aluminum

alloy rated at 3000 psi (207 bar).



## PRESSURE DROP VS. FLOW



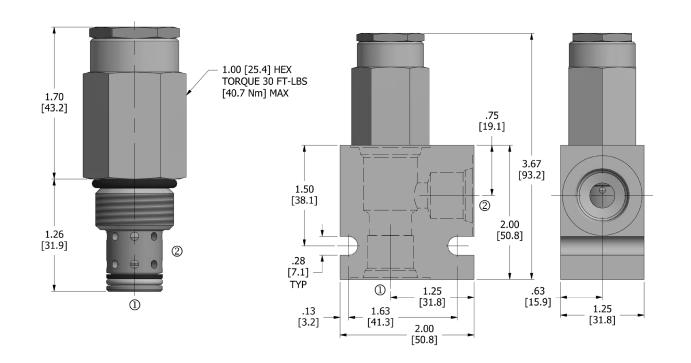


# **DBRVS-100**

Tamper-Resistant, Direct, Bi-Directional Relief Valve 5000 psi (345 bar)

**SERIES 10** 

### **DIMENSIONS** Inches [Millimeters]



### **HOW TO ORDER**



Seals		Seal Kit	
N	Buna N	DSK-100-2-N-C	
V	Viton		

	Spring Range	Preset
50	100 to 5000 psi (7 to 345 bar)	2500 psi (172 bar)

	Factory Preset PSI		
omit	Standard preset		
****	example: 2550 = 2550 psi		

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

<sup>†</sup> Other options available - consult factory