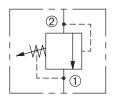
### **DDRV-080**

Adjustable, Direct-Acting, Differential Area Relief Valve



#### **SERIES 8**



#### DESCRIPTION

An adjustable, direct-acting poppet cartridge valve designed to limit pressure in hydraulic circuits.

#### **OPERATION**

The DDRV-080 prevents flow from ② to ① until the set crack pressure at ② is achieved. The poppet then unseats allowing flow from 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.
- Aluminum knob and disc nut option.
- Adjustment may be locked in place.
- Adjustment prevents spring from going solid.
- Hidden adjustment (tamper resistant option).
- Industry common cavity.

#### **SPECIFICATIONS**

Operating Pressure: 3000 psi (207 bar)

Flow: See PRESSURE DROP VS. FLOW graph.

Nominal Flow 10 gpm (37.9 lpm).

Internal Leakage: 10 drops/min max. at reseat.

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

Reseat Pressure: Nominal 80% of crack pressure Spring Range: 50 to 3000 psi (3 to 207 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.

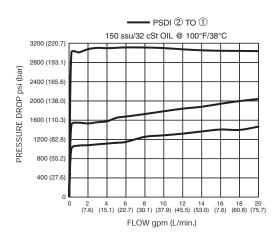
Cavity/Cavity Tool: 080-2, see page 11.08.2 In-Line Body Material: Anodized 6061T6 aluminum

alloy rated at 3000 psi (207 bar).

## PRESSURE DROP VS. FLOW

(1)

(2)





# DDRV-080 Adjustable, Direct-Acting, Differential Area Relief Valve

Porting<sup>†</sup>

1/4 PTF

3/8 PTF

SAE 4

SAE 6

Cartridge only

omit

2N

3N

4T

**6T** 

In-Line Body w/o Cartridge

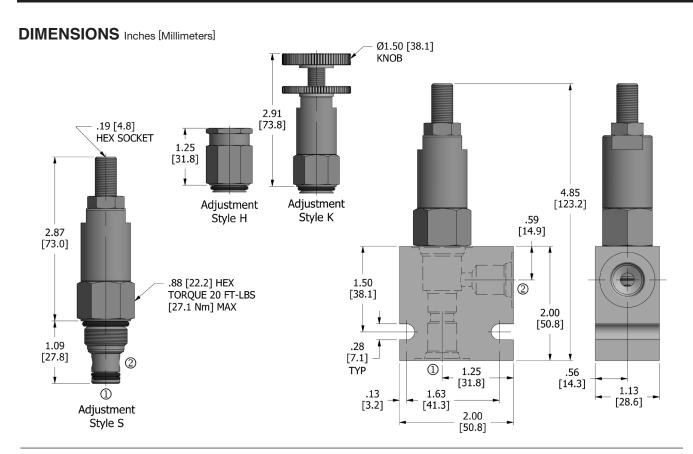
B-080-2-2N

B-080-2-3N

B-080-2-4T

B-080-2-6T

**SERIES 8** 



#### **HOW TO ORDER**

Seals		Seal Kit	
N	Buna N	DSK-080-2-N-A	
V	Viton	DSK-080-2-V-A	

Adjustment Style		
Н	Hidden	
S	Screw	
K	Knob	

Spring Range		Preset			
	Adjustment Style K & S				
4	100 to 400 psi (7 to 28 bar)	300 psi (21 bar)			
20	300 to 2000 psi (21 to 138 bar)	1500 psi (103 bar)			
30	1500 to 3000 psi (103 to 207 bar)	2500 psi (172 bar)			
	Adjustment Style H				
30	50 to 3000 psi (3 to 207 bar)	1500 psi (103 bar)			

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

<sup>†</sup> 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.