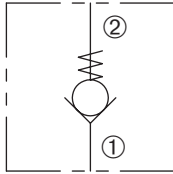


# DCV-080-PB

Direct-Acting, Ball-Type  
Check Valve



## SERIES 8



### DESCRIPTION

A cartridge valve designed to allow free flow in one direction, while preventing flow in the opposite direction. This valve is commonly used as a load-holding or blocking valve.

### OPERATION

Pressure at ① overcomes the spring-bias ball and allows free flow to ②. Flow in the opposite direction, from ② to ①, is blocked by the ball.

### FEATURES and BENEFITS

- Guide ball assembly
- Torlon® ball for positive shut-off.
- Low leak.
- Industry common cavity.

### SPECIFICATIONS

**Operating Pressure:** 3000 psi (207 bar)

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

Nominal Flow 5 gpm (18.9 lpm)

**Internal Leakage:** Less than 2 drops/min max. at 3000 psi (207 bar)

**Crack Pressure:** 2 psi (0.1 bar)

5 psi (0.3 bar)

10 psi (0.7 bar)

30 psi (2.1 bar)

60 psi (4.1 bar)

100 psi (6.9 bar)

**Temperature:** -30°F to +220°F (-35°C to +104°C)

**Recommended Filtration:** Critical Application – ISO 17/15/13

Non-Critical Application – ISO 20/18/14

**Fluids:** Mineral-based fluids.

For other fluid compatibility, consult factory.

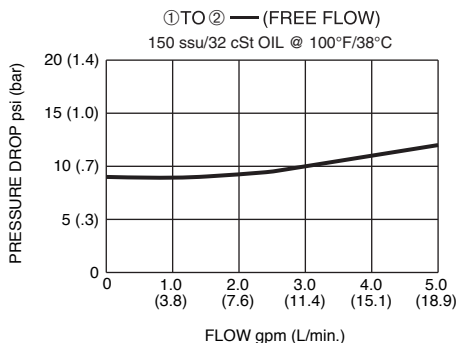
**Cavity/Cavity Tool:** 080-2, see page 11.08.2

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

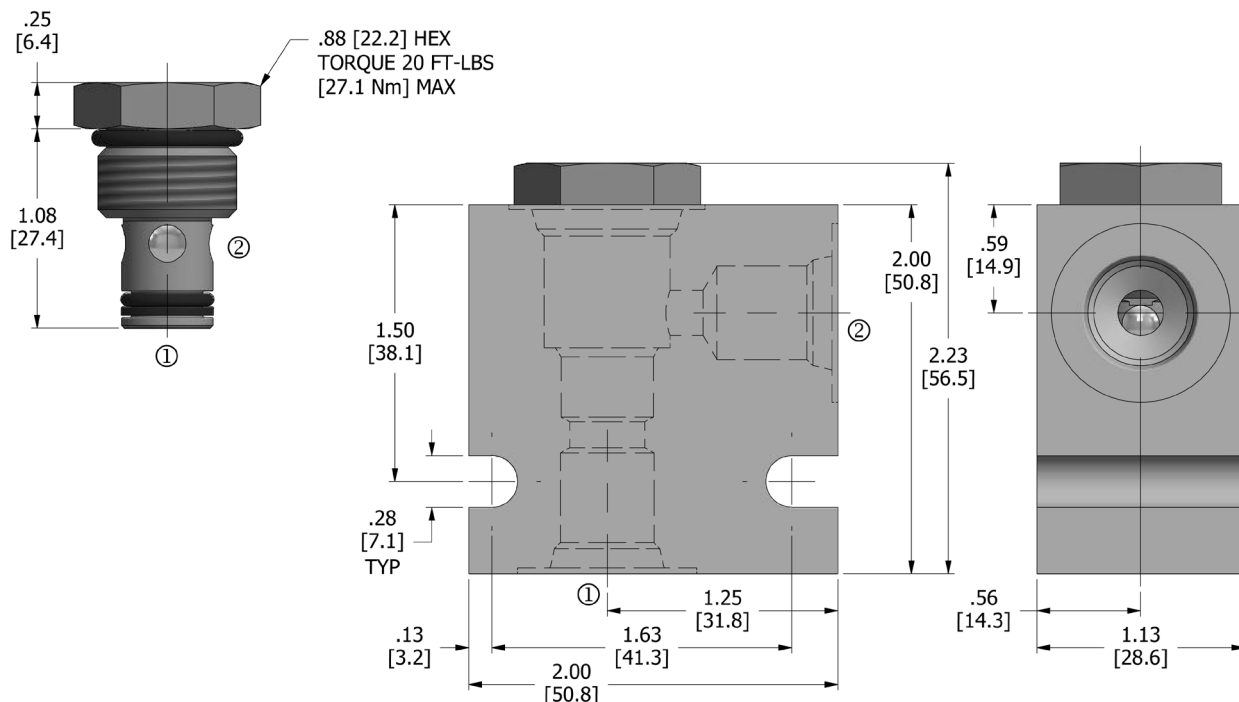


5 psi (0.3 bar)

### PRESSURE DROP VS. FLOW



## DIMENSIONS Inches [Millimeters]



## HOW TO ORDER

|             |   |            |   |              |   |          |   |                |   |           |
|-------------|---|------------|---|--------------|---|----------|---|----------------|---|-----------|
| <b>DCV</b>  | - | <b>080</b> | - | <b>PB</b>    | - | <b>*</b> | - | <b>**</b>      | - | <b>**</b> |
| Check Valve |   | Cavity     |   | Torlon® Ball |   | Seals    |   | Crack Pressure |   | Porting   |

| Seals    |        | Seal Kit      |
|----------|--------|---------------|
| <b>N</b> | Buna N | DSK-080-2-N-A |
| <b>V</b> | Viton  | DSK-080-2-V-A |

| Crack Pressure |                   |
|----------------|-------------------|
| <b>2</b>       | 2 psi (0.1 bar)   |
| <b>5</b>       | 5 psi (0.3 bar)   |
| <b>10</b>      | 10 psi (0.7 bar)  |
| <b>30</b>      | 30 psi (2.1 bar)  |
| <b>60</b>      | 60 psi (4.5 bar)  |
| <b>100</b>     | 100 psi (6.9 bar) |

| Porting <sup>†</sup> |                      | In-Line Body w/o Cartridge |
|----------------------|----------------------|----------------------------|
| omit                 | Cartridge only w/nut |                            |
| <b>2N</b>            | 1/4 PTF              | B-080-2-2N                 |
| <b>3N</b>            | 3/8 PTF              | B-080-2-3N                 |
| <b>4T</b>            | SAE 4                | B-080-2-4T                 |
| <b>6T</b>            | SAE 6                | B-080-2-6T                 |

<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.