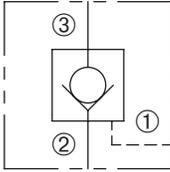


# DPC-080-P

Pilot To Open, Poppet-Type  
Check Valve

## SERIES 8

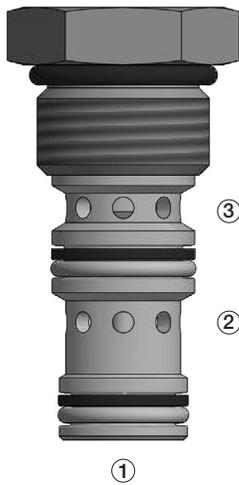


### DESCRIPTION

A cartridge valve designed to allow free flow in one direction while preventing flow in the opposite direction. Reverse flow can be achieved by reaching the required pilot pressure. This valve is commonly used as a load-holding or blocking valve.

### OPERATION

Pressure at ② overcomes the spring-bias poppet and allows free flow to ③. Flow in the opposite direction, from ③ to ②, is blocked by the poppet. When the required pilot pressure is achieved at ①, the poppet unseats and allows flow between ③ and ②. The pilot piston area to poppet seat area ratio is 3:1.



### FEATURES and BENEFITS

- Hardened poppet and seat for long life.
- 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:** 5 drops/min max. at 3000 psi (207 bar)

**Crack Pressure:** 25 psi (1.7 bar)

50 psi (3.4 bar)

100 psi (6.9 bar)

**Pilot Ratio:** 3:1

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

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

Non-Critical Application – ISO 20/18/14

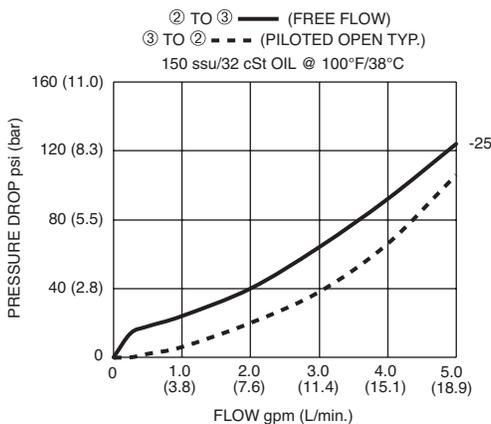
**Fluids:** Mineral-based fluids.

For other fluid compatibility, consult factory.

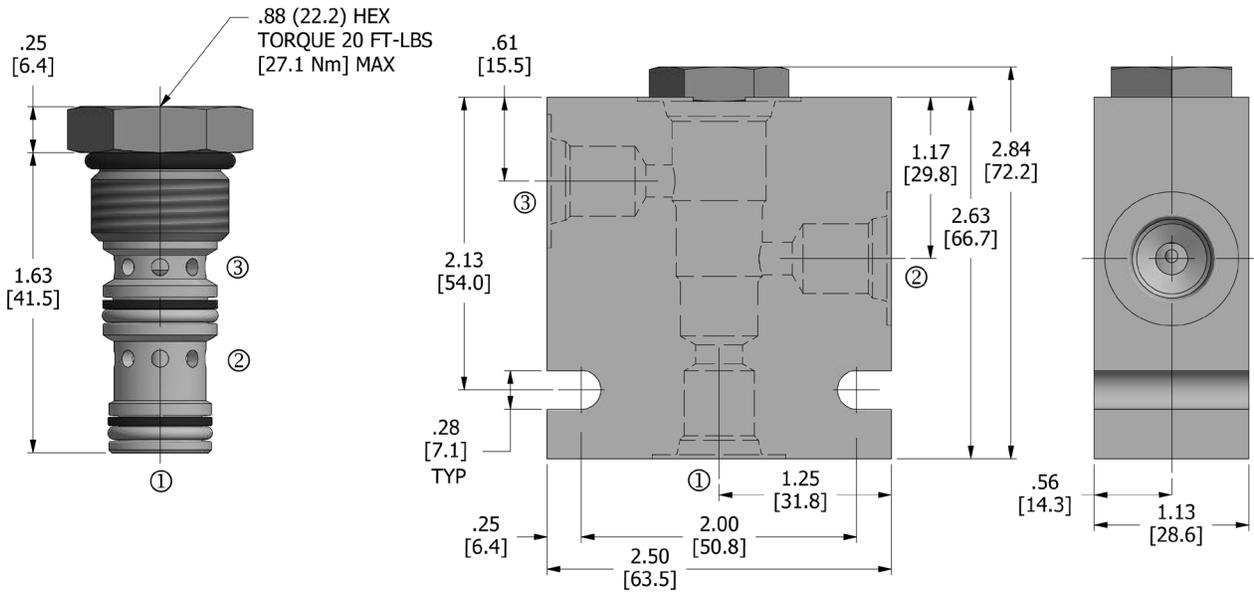
**Cavity/Cavity Tool:** 080-3, see page 11.08.3

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

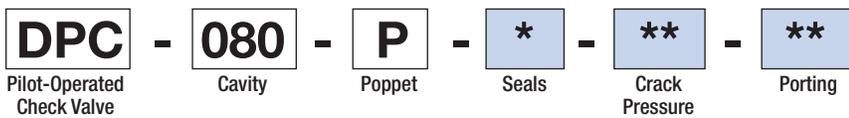
### PRESSURE DROP VS. FLOW



**DIMENSIONS** Inches [Millimeters]



**HOW TO ORDER**



Seals		Seal Kit
<b>N</b>	Buna N	
<b>V</b>	Viton	

Crack Pressure	
<b>25</b>	25 psi (1.7 Bar)
<b>50</b>	50 psi (3.4 Bar)
<b>100</b>	100 psi (6.9 Bar)

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

<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.

SOLENOID  
CHECK  
MOTION CONTROL  
FLOW CONTROL  
RELIEF  
PRESSURE CONTROL  
SEQUENCE  
SHUTTLE  
DIRECTIONAL VALVES  
HAND PUMPS  
TECHNICAL DATA