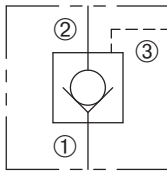


DPTC-100-P (Formerly DPC2-100-P)

Pilot To Close, Poppet-Type
Check Valve



SERIES 10



DESCRIPTION

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

OPERATION

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

FEATURES and BENEFITS

- Hardened poppet and seat for long life.
- Industry common cavity.
- Compact size.

SPECIFICATIONS

Operating Pressure: 3000 PSI (207 Bar)

Flow: See PRESSURE DROP VS. FLOW graph.

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 to 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

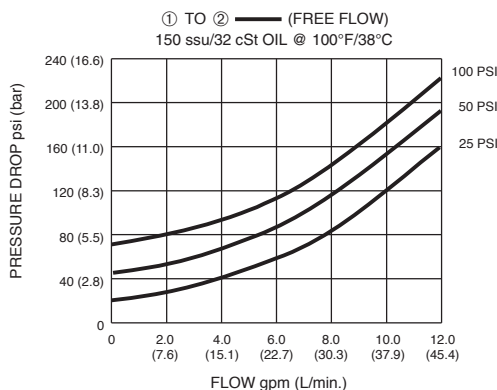
Fluids: Mineral-based fluids.

For other fluid compatibility, consult factory.

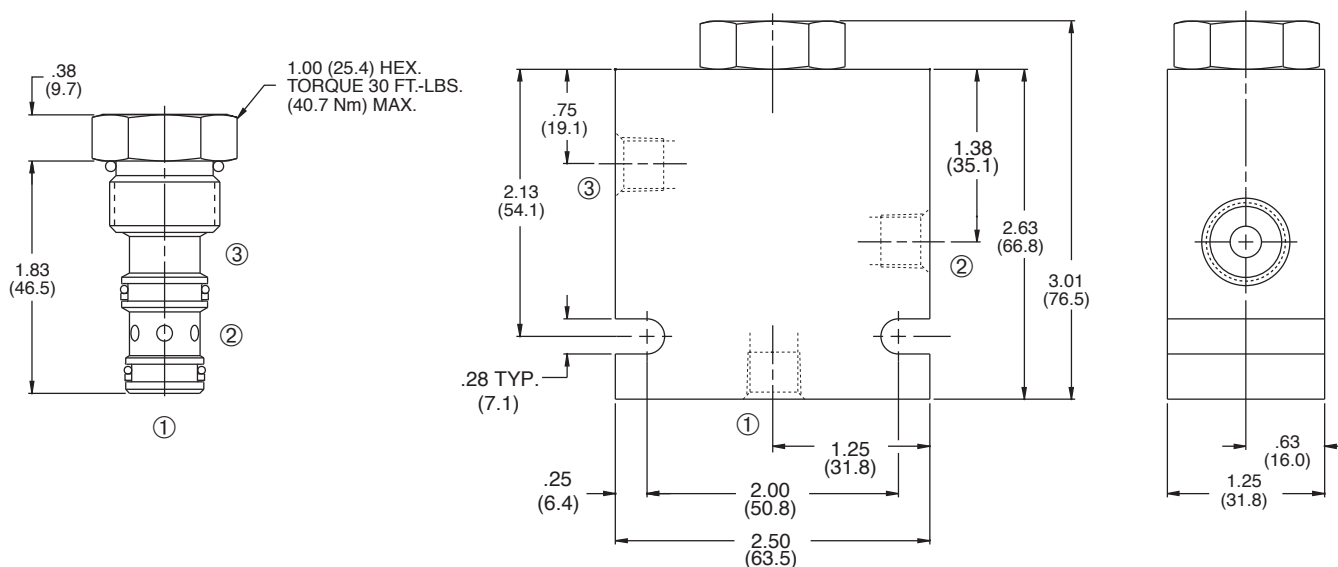
Cavity/Cavity Tool: 100-3, see page 11.10.3

In-Line Body Material: Anodized 6061T6 aluminum
alloy rated at 3000 PSI (207 Bar).

PRESSURE DROP VS. FLOW



INSTALLATION DIMENSIONS



() Parentheses = Millimeters

HOW TO ORDER

DPTC - 100 - P - * - *** - **

PILOT-OPERATED
 CHECK VALVE

CAVITY/SEAL

P = Poppet

SEALS

N = Buna N
 V = Viton

CRACK PRESSURE

25 = 25 PSI (1.7 Bar)
 50 = 50 PSI (3.4 Bar)
 100 = 100 PSI (6.9 Bar)

PORTING

2N = 1/4 PTF

3N = 3/8 PTF

6T = SAE 6

8T = SAE 8

Omit for Cartridge Only.

(Other porting
 options available –
 consult factory.)