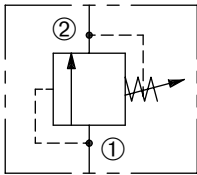


# DPOR-100

Adjustable, Pilot-Operated  
Relief Valve

## SERIES 10

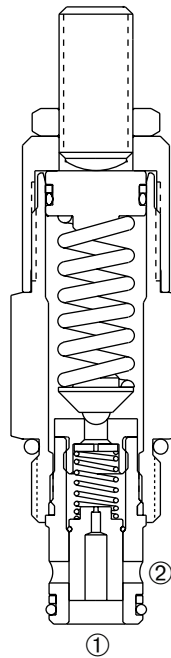


### DESCRIPTION

An adjustable, pilot-operated spool type cartridge valve designed to limit pressure in hydraulic circuits.

### OPERATION

The DPOR-100 prevents flow from ① to ② until pressure at ① exceeds the set crack pressure and opens the pilot section. The pilot flow creates a pressure differential across the spool which causes the valve to open allowing flow from ① or ② protecting the circuit from over pressurization.



### FEATURES and BENEFITS

- Rapid response to pressure surges.
- Low pressure rise.
- Accurate pilot-operated design.
- Hardened poppet and seat for long life.
- Hidden adjustment (tamper resistant) option.
- Aluminum knob and disc nut option.
- Adjustment may be locked in place.
- Industry common cavity.
- Compact size.

### SPECIFICATIONS

**Operating Pressure:** 3000 PSI (207 Bar)

**Flow:** See PRESSURE DROP VS. FLOW graph.  
Nominal Flow 30 GPM (113.6 L/min).

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

**Crack Pressure Defined:** Determined at .25 gpm (0.9 L/min.)

**Reseat Pressure:** Nominal 80% of crack pressure.

**Spring Range:** 100 to 400 PSI ( 7 to 28 Bar)

Preset: 300 PSI ( 21 Bar)

300 to 2000 PSI ( 21 to 138 Bar)

Preset: 1000 PSI ( 69 Bar)

400 to 3000 PSI ( 28 to 207 Bar)

Preset: 2000 PSI (138 Bar)

600 to 4000 PSI ( 41 to 276 Bar)

Preset: 3000 PSI (207 Bar)

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

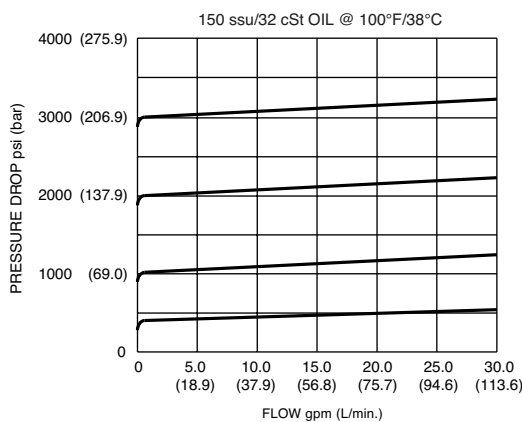
**Recommended Filtration:** ISO 20/18/14

**Fluids:** Mineral-based fluids. For other fluid compatibility, consult factory.

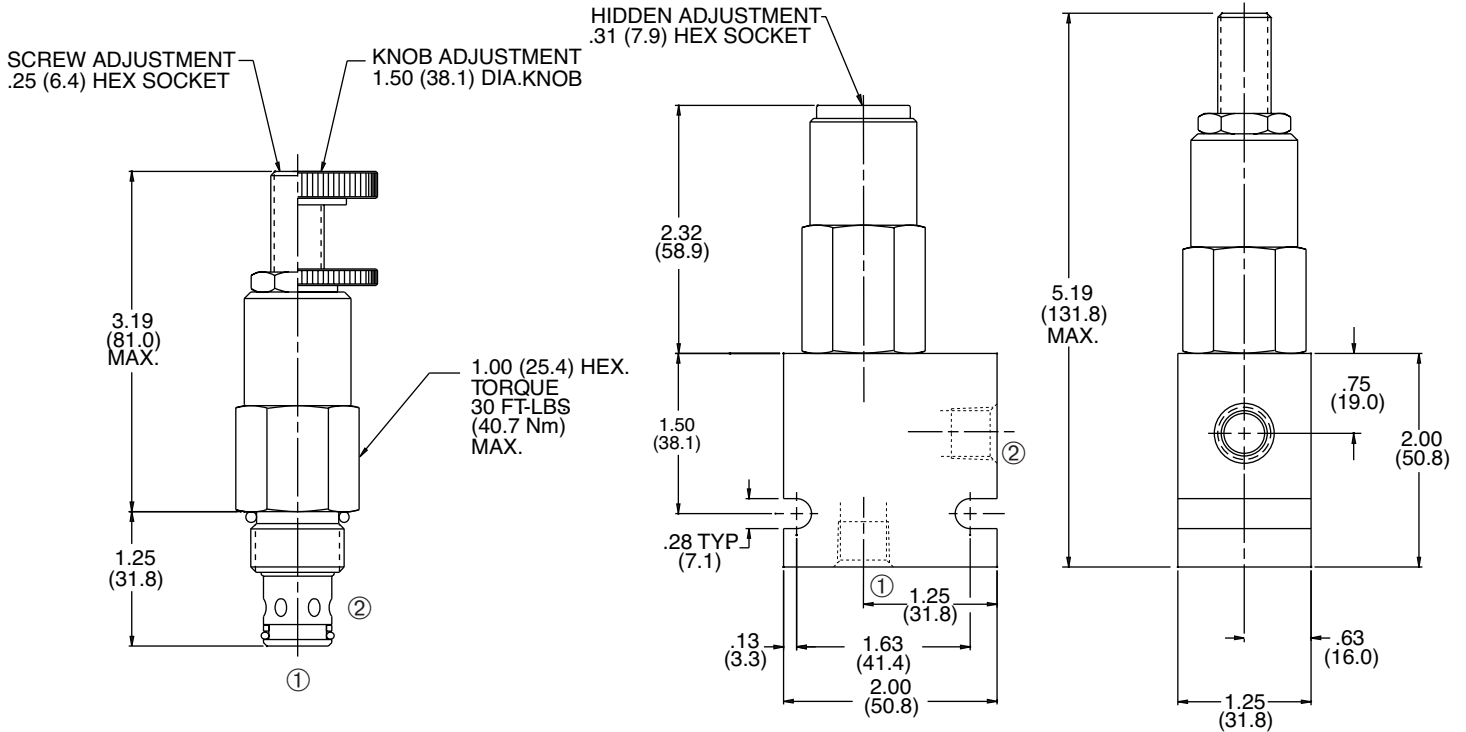
**Cavity/Cavity Tool:** 100-2, see page 11.10.2

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

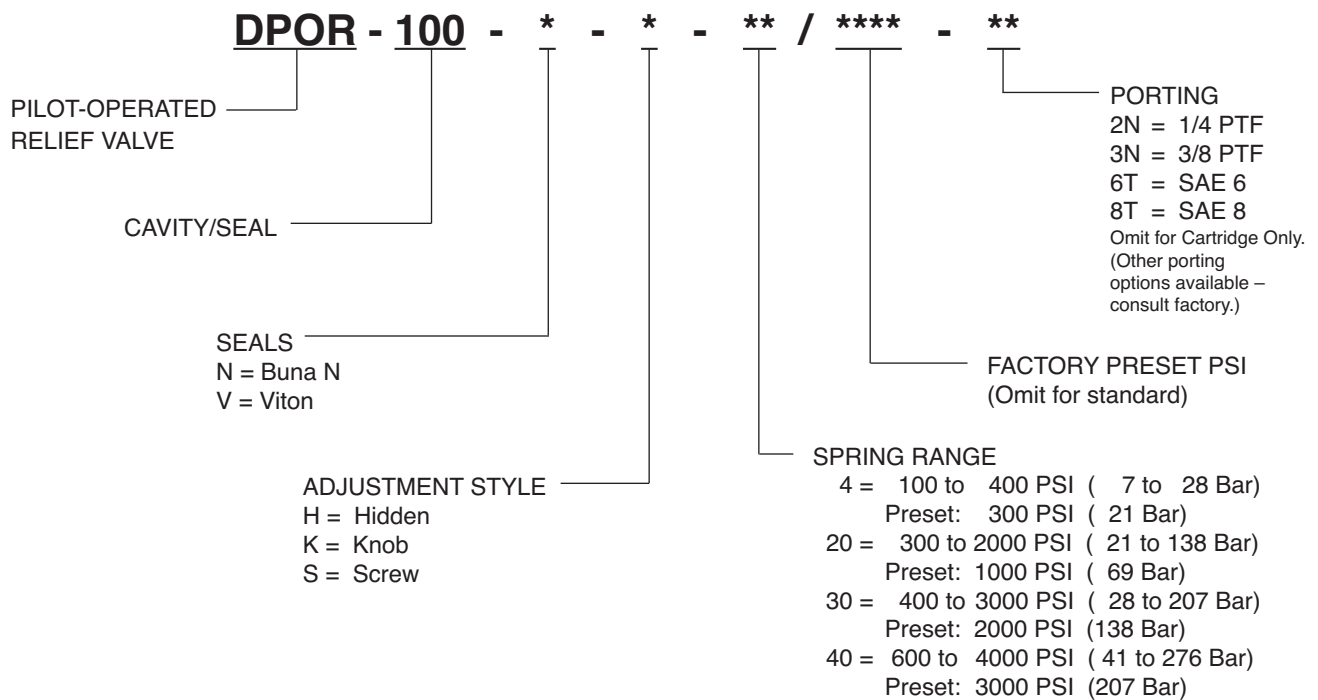
### PRESSURE DROP VS. FLOW



## INSTALLATION DIMENSIONS



## HOW TO ORDER



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