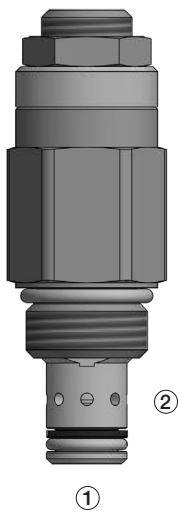
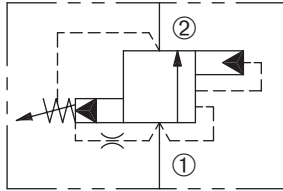


DRVK-080

Adjustable, Pilot-Operated,
Kick-Down Relief Valve
5000 psi (345 bar)

SERIES 8



DESCRIPTION

An adjustable, pilot-operated spool cartridge valve designed to allow flow to actuator circuits until a predetermined pressure is attained, then to discharge flow back to tank at a low pressure.

OPERATION

Flow is blocked from ① to ② until system pressure exceeds the valve setting allowing flow through the pilot section to pass out of the vent port. As flow passes through the pilot section, the resulting differential pressure shifts the main spool to unload the system to a predetermined low pressure. When the system pressure is reduced below 50 psi (3.4 bar), the valve will reset itself and again block flow from port ① to ②.

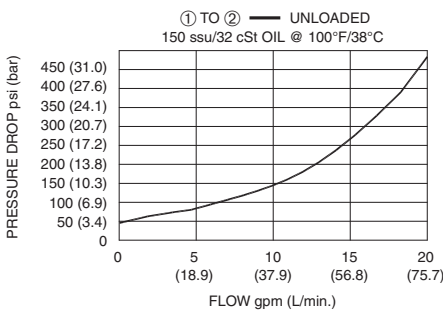
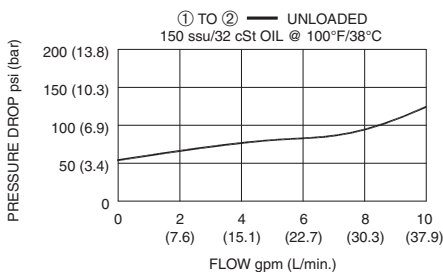
Flow is blocked from port ② to ①.

Pressure at port ② is added to valve setting

FEATURES and BENEFITS

- Quiet operation.
- High accuracy of pilot operated design.
- Hardened parts for long life.
- Hidden adjustment (tamper resistant) option.
- Adjustment prevents spring from going solid.
- Industry common cavity.
- High flow capacity.

PRESSURE DROP VS. FLOW



SPECIFICATIONS

Operating Pressure: 5000 psi (345 bar)

Flow: See PRESSURE DROP VS. FLOW graph
Nominal Flow 10 gpm (37.9 lpm)

Internal Leakage: 5 in³/min (82 cc/min) max. at 80% of crack pressure

Crack Pressure Defined: Determined at .25 gpm (1.0 lpm)

Reset Pressure: When port ① pressure is below 50 psi (3.4 bar), valve will be reset to original pressure setting.

Spring Range: 300 to 5000 psi (21 to 345 bar)
Preset (See HOW TO ORDER)

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

Recommended Filtration: ISO 17/15/13

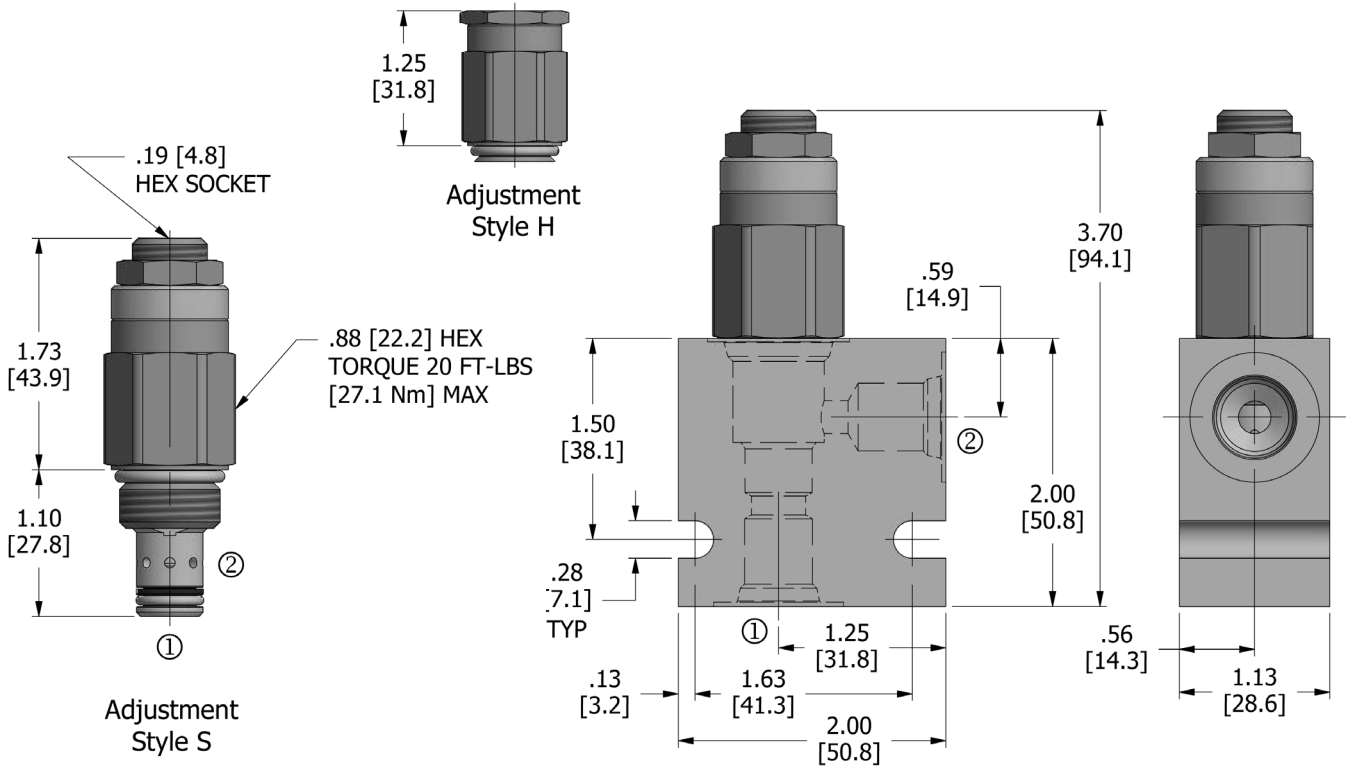
Fluids: Mineral-based fluids.

For other fluid compatibility, consult factory

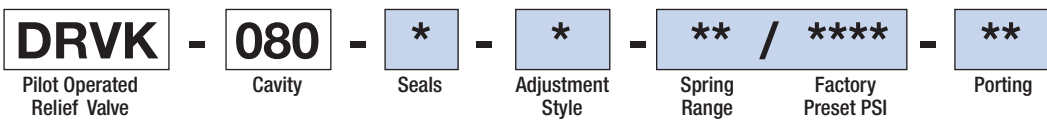
Cavity/Cavity Tool: 080-2, see page 11.08.2

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

DIMENSIONS Inches [Millimeters]



HOW TO ORDER



Seals		Seal Kit
U	Urethane	

Adjustment Style	
H	Hidden
S	Screw

Spring Range		Preset
15	400 to 1500 psi (28 to 103 bar)	500 psi (34 bar)
40	1000 to 4000 psi (69 to 276 bar)	2000 psi (138 bar)
50	300 to 5000 psi (21 to 345 bar)	4000 psi (276 bar)

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

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

† 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