

CV

Check
Valves

SH

Shuttle
Valves

LM

Load/Motor
Controls

FC

Flow
Controls

PC

Pressure
Controls

LE

Logic
Elements

DC

Directional
Controls

MV

Manual
Valves

SV

Solenoid
Valves

PV

Proportional
Valves

CE

Coils &
Electronics

BC

Bodies &
Cavities

TD

Technical
Data

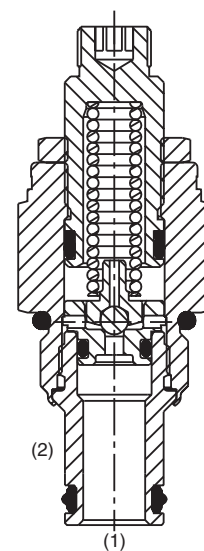
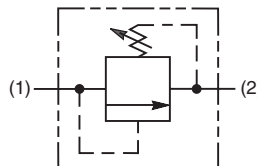
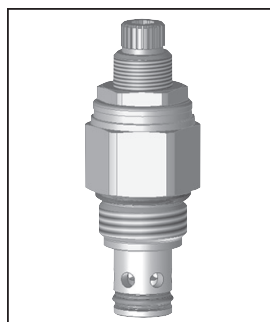
General Description

Direct Acting Relief Valve. This valve is designed for pilot flow circuits. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided pilot for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis



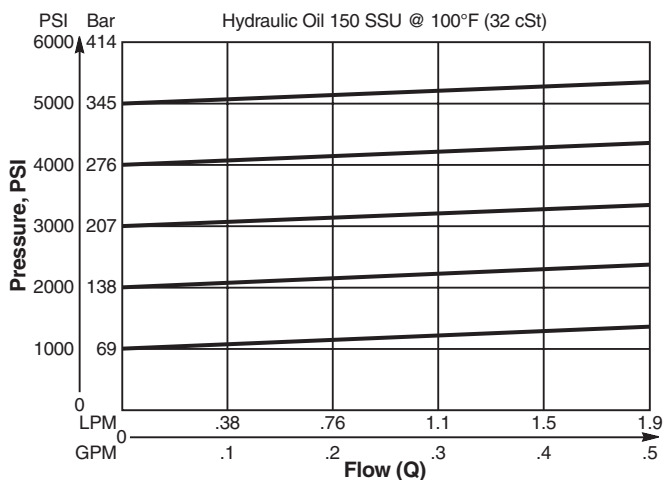
Specifications

| | |
|--------------------------------------|---|
| Rated Flow | 1.9 LPM (.5 GPM) |
| Maximum Inlet Pressure | 380 Bar (5500 PSI) |
| Maximum Pressure Setting | 350 Bar (5000 PSI) |
| Reseat Pressure | 90% of crack pressure |
| Leakage at 150 SSU (32 cSt) | 5 drops/min. (.33 cc/min.) @75% of crack pressure |
| Cartridge Material | All parts steel. All operating parts hardened steel. |
| Operating Temp. Range/Seals | -45°C to +93.3°C ("D"-Ring) (-50°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F) |
| Fluid Compatibility/Viscosity | Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt) |
| Filtration | ISO Code 16/13, SAE Class 4 or better |
| Approx. Weight | .09 kg (.20 lbs.) |
| Cavity | C08-2 (See BC Section for more details) |
| Form Tool | Rougher None Finisher NFT08-2F |

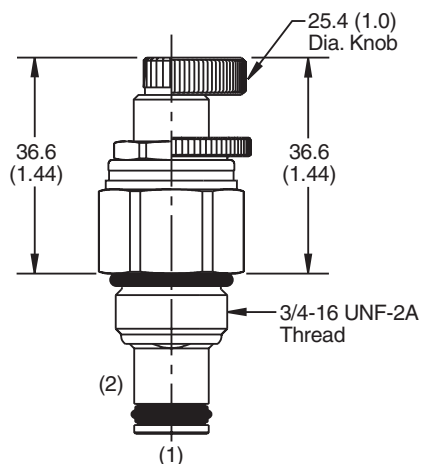
Performance Curve

Flow vs. Inlet Pressure

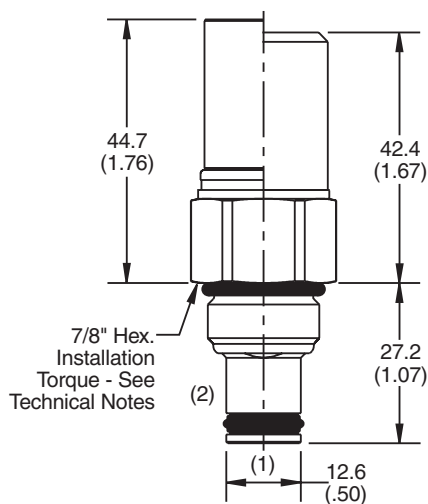
(Pressure rise through cartridge only)



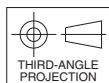
Dimensions Millimeters (Inches)



Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information

| | | | | | | |
|---|----------------------------|--------------------------|--------------|--|-------------------------|---------------------|
| RDH081 | | | | | | |
| 08 Size Direct Acting Relief Valve | Adjustment Style | Pressure Range | Seals | Optional Pressure Setting | Body Material | Port Size |

| Code | Adjustment Style / Kit No. |
|----------|---------------------------------|
| F | Fixed style, preset at factory. |
| K | Knob Adjust (717784-10) |
| S | Screw Adjust |
| T | Tamper Resistant Cap (717943) |

| Code | Seals / Kit No. |
|-------------|--------------------------|
| Omit | "D"-Ring / (SK08-2) |
| N | Nitrile / (SK08-2N) |
| V | Fluorocarbon / (SK08-2V) |

| Code | Body Material |
|-------------|---------------|
| Omit | Steel |
| A | Aluminum |

| Code | Pressure Range |
|-----------|---|
| 10 | 6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min) |
| 20 | 6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min) |
| 30 | 13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min) |
| 50 | 13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min) |

| Optional Pressure Setting | |
|---|--|
| Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at crack pressure, approximately 100 cc/min (6.1 in ³ /min) | |

| Code | Port Size | Body Part No. |
|-------------|----------------|---------------|
| Omit | Cartridge Only | |
| 6P | 3/8" NPTF | (B08-2-*6P) |
| 4T | SAE-4 | (B08-2-*4T) |
| 6T | SAE-6 | (B08-2-*6T) |
| 6B | 3/8" BSPG | (B08-2-*6B) |

* Add "A" for aluminum, omit for steel.