#### **Product Information**

# Direct Acting Relief Valve **Series RDH081**

## **General Description**

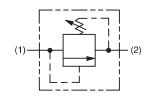
Direct Acting Relief Valve. This valve is designed for pilot flow circuits.

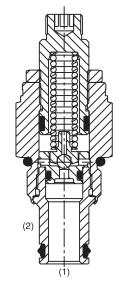
For additional information see Technical Tips on pages PC3-PC7.

#### **Features**

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- · Fully guided pilot for more consistent reseat
- Steel adapters are zinc plated
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis







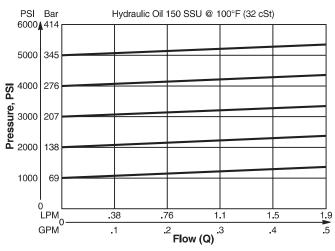
# **Specifications**

| opodinoations -                   |   |  |
|-----------------------------------|---|--|
| Rated Flow                        | 1.9 LPM (0.5 GPM)   |  |
| Maximum Inlet<br>Pressure         | 380 Bar (5500 PSI)  |  |
| Maximum Pressure<br>Setting       | 350 Bar (5000 PSI)  |  |
| Sensitivity:<br>Pressure/Turn     | 10 19.6 Bar (285 PSI)<br>30 58.9 Bar (859 PSI)<br>50 131.7 Bar (1910 PSI)   |  |
| Reseat Pressure                   | 90% of crack pressure   |  |
| Leakage at<br>150 SSU (32 cSt)    | 5 drops/min. (.33 cc/min.)<br>@75% of crack pressure  |  |
| Cartridge Material                | All parts steel. All operating parts hardened steel.  |  |
| Operating Temp.<br>Range/Seals    | -37°C to +93°C ("D"-Ring)<br>(-35°F to +200°F)<br>-34°C to +121°C (Nitrile)<br>(-30°F to +250°F)<br>-26°C to +204°C (Fluorocarbon)<br>(-15°F to +400°F) |  |
| Fluid Compatibility/<br>Viscosity | Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)  |  |
| Filtration                        | ISO-4406 18/16/13, SAE Class 4  |  |
| Approx. Weight                    | 0.09 kg (0.20 lbs.)   |  |
| Cavity                            | C08-2<br>(See BC Section for more details)  |  |

## **Performance Curve**

### Flow vs. Inlet Pressure

(Pressure rise through cartridge only)



CV salves

SH

Shuttle Valves

Load/Motor Controls MT

Flow Controls

PC

Controls

Logic Elements **a** 

DC

Directional Controls

Valves

Proportional Valves

Coils & Electronics

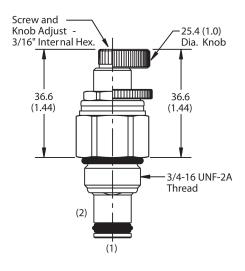
BC

Bodies & Cavities

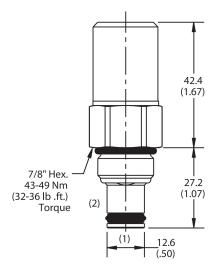
Technical Data



## **Dimensions** Millimeters (Inches)



Screw/Knob Version



**Tamper Resistant Version** 

# **Ordering Information**

**RDH081** 



08 Size **Direct Acting Relief Valve** 

Adjustment Style

Pressure Range

**Highlighted** represents preferred options that offer the shortest lead times. Other options may be available, but at extended lead times.

| Code | Adjustment Style |
|------|------------------|
| S    | Screw Adjust     |

| Code | Seals  |
|------|--------|
| Omit | D-Ring |

| Code | Pressure Range   |
|------|--|
| 10   | 6.9 - 69 Bar (100 - 1000 PSI)<br>Standard Setting:<br>34.5 Bar (500 PSI) @ crack pressure,<br>approximately 100 cc/min (6.1 in³/min)     |
| 30   | 13.8 - 207 Bar (200 - 3000 PSI)<br>Standard Setting:<br>103.5 Bar (1500 PSI) @ crack pressure,<br>approximately 100 cc/min (6.1 in³/min) |
| 50   | 13.8 - 345 Bar (200 - 5000 PSI)<br>Standard Setting:<br>172.4 Bar (2500 PSI) @ crack pressure,<br>approximately 100 cc/min (6.1 in³/min) |

| Kit                  | Part Number |
|----------------------|-------------|
| Knob                 | 717784-10   |
| Tamper Resistant Cap | 717943      |
| D-Ring Seal          | SK08-2      |
| Nitrile Seal         | SK08-2      |
| Fluorocarbon Seal    | SK08-2V     |

**Order Bodies Separately** See section BC



| Code | Porting / Body Material  |
|------|--------------------------|
| 6T   | SAE-6 / Steel (5000 PSI) |

CV

SH

LM Load/Motor Controls

Flow Controls

PC

LE

DC Directional Controls

SV

Proportional Valves

CE Coils & Electronics

BC

TD

