# Direct Acting Relief Valve Series RDH082

### **Technical Information**

CV

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Check Valves

SH

Shuttle Valves LM

Load/Motor Controls FC

Flow Controls Pressu

Logic C

LE

Directional Controls MV

Manual Valves SV

Valves PV

Proportional La Coils & Valves C Electronics

B Bodies & Cavities

TD Technical

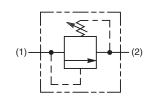
## **General Description**

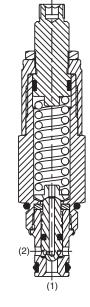
Direct Acting Poppet-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

#### **Features**

- Hardened, precision ground parts for durability
- Fast response
- Spherical poppets for low leakage
- Internal mechanical stop limits poppet travel eliminating spring solidification
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis







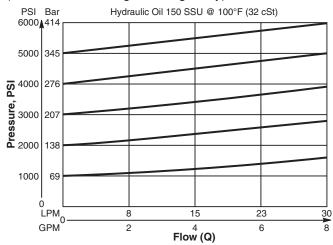
## **Specifications**

| Rated Flow                           | 30 LPM (8 GPM)  |  |
|--------------------------------------|---|--|
| Maximum Inlet<br>Pressure            | 380 Bar (5500 PSI)  |  |
| Maximum<br>Pressure Setting          | 350 Bar (5000 PSI)  |  |
| Reseat Pressure                      | 85% 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       | -45°C to +93.3°C ("D"-Ring)<br>(-50°F to +200°F)<br>-31.7°C to +121.1°C (Fluorocarbon)<br>(-25°F to +250°F) |  |
| Fluid<br>Compatibility/<br>Viscosity | Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)      |  |
| Filtration                           | ISO Code 16/13,<br>SAE Class 4 or better  |  |
| Approx. Weight                       | .18 kg (.40 lbs.)   |  |
| Cavity                               | C08-2<br>(See BC Section for more details)  |  |
| Form Tool                            | Rougher None<br>Finisher NFT08-2F   |  |

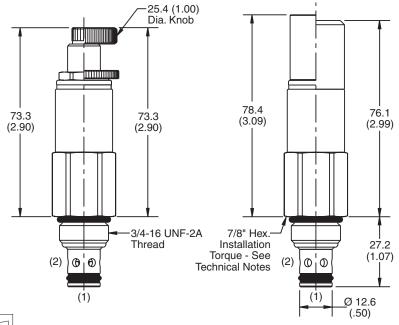
#### **Performance Curve**

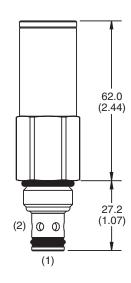
#### Flow vs. Inlet Pressure

(Pressure rise through cartridge only)



#### **Dimensions** Millimeters (Inches)





THIRD-ANGLE PROJECTION

Screw/Knob Version

**Fixed Cap/Tamper Resistant Version** 

Non-Adjustable Version

## **Ordering Information**

# **RDH082**

08 Size Direct Acting Relief Valve

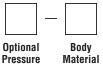


Style

ent Pressure Range









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

| Code | Pressure Range   |
|------|--|
| 15   | 6.9 - 103 Bar (100 - 1500 PSI)<br>Standard Setting:<br>51.7 Bar (750 PSI) @ crack pressure<br>approximately .95 LPM (.25 GPM)    |
| 30   | 17.2 - 207 Bar (250 - 3000 PSI)<br>Standard Setting:<br>103 Bar (1500 PSI) @ crack pressure<br>approximately .95 LPM (.25 GPM)   |
| 50   | 34.5 - 345 Bar (500 - 5000 PSI)<br>Standard Setting:<br>172.4 Bar (2500 PSI) @ crack pressure<br>approximately .95 LPM (.25 GPM) |

|      | Seals / Kit No.          |  |
|------|--------------------------|--|
| 0mit | "D"-Ring / (SK08-2)      |  |
| N    | Nitrile / (SK08-2N)      |  |
| V    | Fluorocarbon / (SK08-2V) |  |

Setting

| Optional Pressure Setting          |  |  |
|------------------------------------|--|--|
| Pressure ÷ 10                      |  |  |
| i.e. 235 = 2350 PSI                |  |  |
| (Omit if standard setting is used) |  |  |
| Setting Range:                     |  |  |
| 100 to 5000 PSI                    |  |  |
| All settings at crack pressure,    |  |  |
| approximately .95 LPM (.25 GPM)    |  |  |

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

| Code     | Port Size              | Body Part No.              |
|----------|------------------------|----------------------------|
| 0mit     | Cartridge Only         |                            |
| 6P       | 3/8" NPTF              | (B08-2-*6P)                |
| 4T<br>6T | SAE-4<br>SAE-6         | (B08-2-*4T)<br>(B08-2-*6T) |
| 4B<br>6B | 1/4" BSPG<br>3/8" BSPG | (B08-2-*4B)<br>(B08-2-*6B) |

<sup>\*</sup> Add "A" for aluminum, omit for steel.

Valves

CV

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Proportional **d** Valves

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