

CV

Check  
Valves

SH

Shuttle  
ValvesLM  
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

Pilot Operated Spool-Type Relief Valve.  
For additional information see  
Technical Tips on pages PC1-PC6.

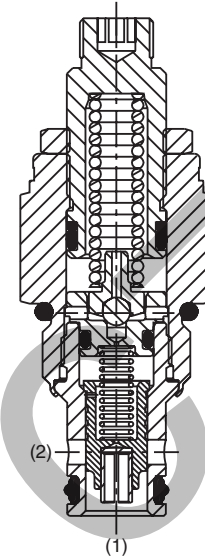
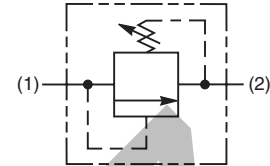


## Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided pilot for more consistent reseal
- Steel adapters are zinc plated
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris

## Specifications

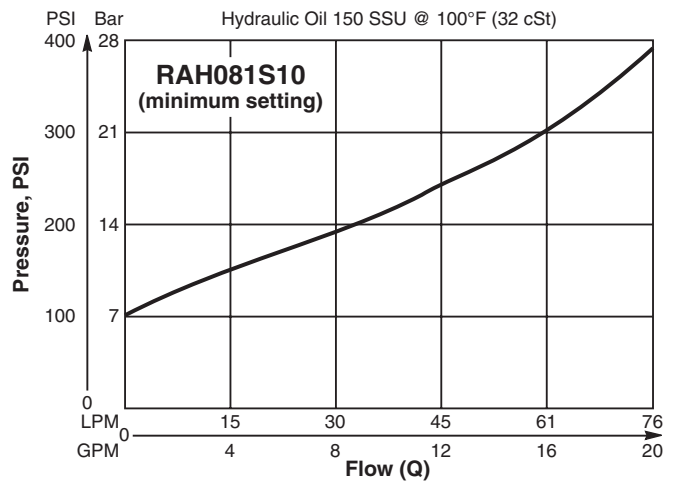
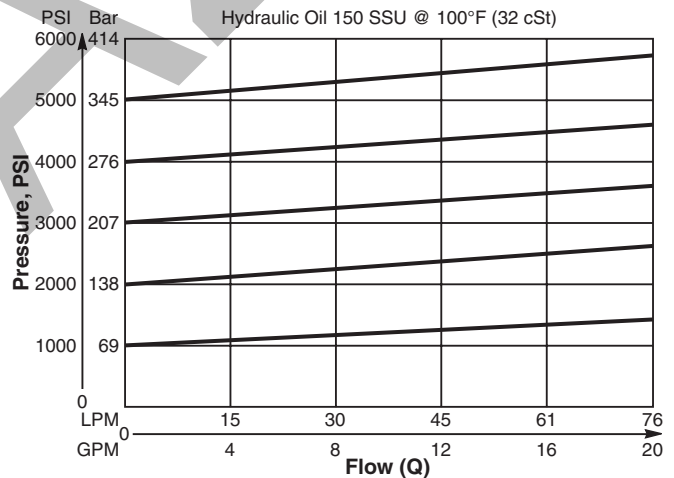
<b>Rated Flow</b>	75.8 LPM (20 GPM)
<b>Maximum Inlet Pressure</b>	350 Bar (5000 PSI)
<b>Maximum Pressure Setting</b>	350 Bar (5000 PSI)
<b>Sensitivity: Pressure/Turn</b>	<b>10</b> 19.6 Bar (285 PSI) <b>20</b> 39.3 Bar (570 PSI) <b>30</b> 58.9 Bar (859 PSI) <b>50</b> 131.7 Bar (1910 PSI)
<b>Maximum Tank Pressure</b>	350 Bar (5000 PSI)
<b>Reseat Pressure</b>	90% of crack pressure
<b>Leakage at 150 SSU (32 cSt)</b>	5 cc per 100 PSI (6.8 Bar) setting
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-45°C to +132°C ("D"-Ring) (-50°F to +270°F) -34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	.09 kg (.20 lbs.)
<b>Cavity</b>	C08-2 (See BC Section for more details)
<b>Form Tool</b>	Rougher None Finisher NFT08-2F



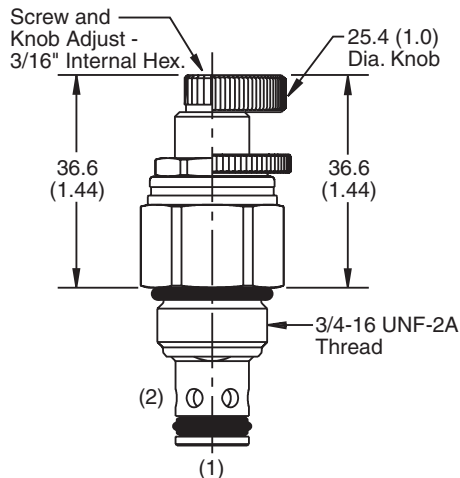
## Performance Curves

### Flow vs. Inlet Pressure

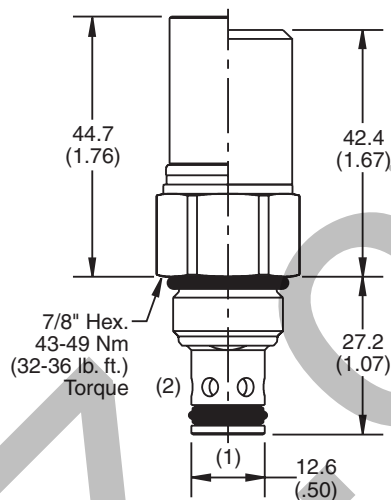
(Pressure rise through cartridge only)



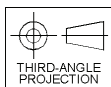
**Dimensions** Millimeters (Inches)



**Screw/Knob Version**



**Fixed Cap/Tamper Resistant Version**



**Ordering Information**

**RAH081**

08 Size Pilot Operated 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	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

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

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
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4T	SAE-4	(B08-2-*4T)
6T	SAE-6	(B08-2-*6T)

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