

Technical Information

- 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

Differential Area Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

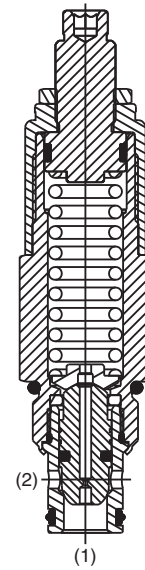
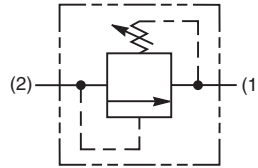
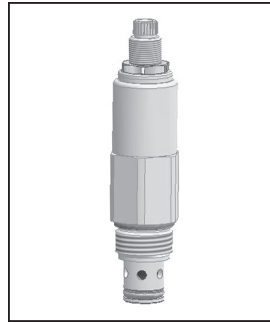


Features

- Hardened, precision ground parts for durability
- Internal mechanical stop limits poppet travel eliminating spring solidification
- Spherical poppets for low leakage
- “D”-Ring eliminates backup rings
- All external parts zinc plated
- High flow capacity

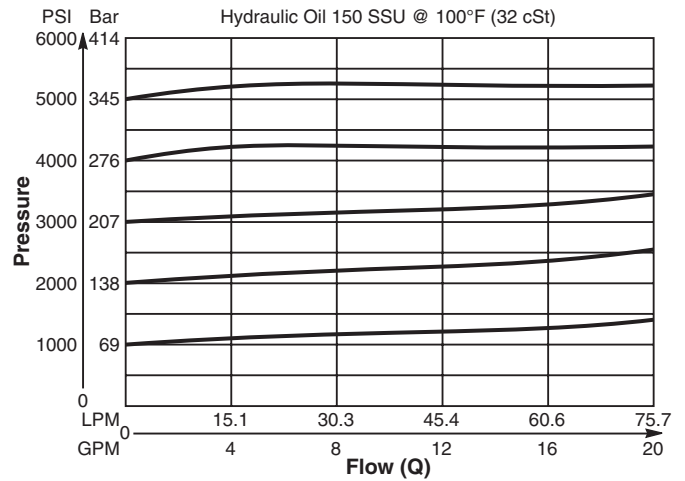
Specifications

Rated Flow	75 LPM (20 GPM)								
Maximum Inlet Pressure	380 Bar (5500 PSI)								
Maximum Pressure Setting	350 Bar (5000 PSI)								
Sensitivity: Pressure/Turn	<table style="display: inline-table; border: none;"> <tr> <td style="padding-right: 10px;">10</td> <td>9.8 Bar (143 PSI)</td> </tr> <tr> <td>20</td> <td>17 Bar (246 PSI)</td> </tr> <tr> <td>30</td> <td>25.8 Bar (375 PSI)</td> </tr> <tr> <td>50</td> <td>40.6 Bar (589 PSI)</td> </tr> </table>	10	9.8 Bar (143 PSI)	20	17 Bar (246 PSI)	30	25.8 Bar (375 PSI)	50	40.6 Bar (589 PSI)
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Maximum Tank Pressure	350 Bar (5000 PSI)								
Reseat Pressure	85% 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 +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)								
Fluid Compatibility/ 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	.23 kg (0.5 lbs.)								
Cavity	C10-2 (See BC Section for more details)								
Form Tool	<table style="display: inline-table; border: none;"> <tr> <td style="padding-right: 20px;">Rougher</td> <td>None</td> </tr> <tr> <td>Finisher</td> <td>NFT10-2F</td> </tr> </table>	Rougher	None	Finisher	NFT10-2F				
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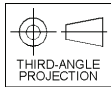
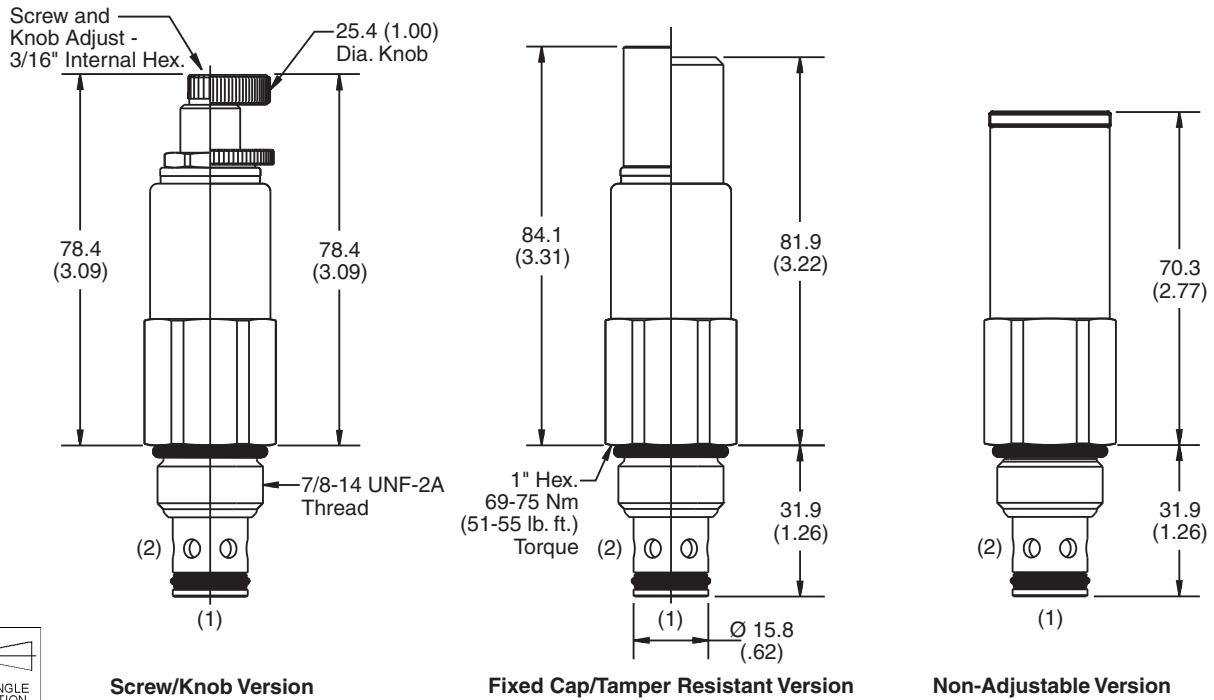


Performance Curve
Flow vs. Inlet Pressure

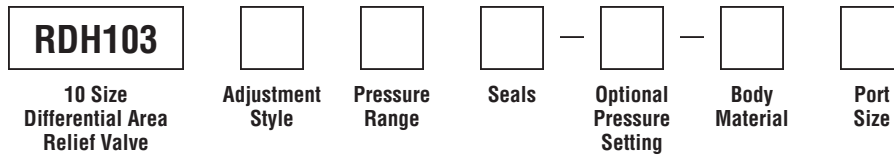
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



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

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-2)
N	Nitrile / (SK10-2N)
V	Fluorocarbon / (SK10-2V)

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) @ .95 LPM (.25 GPM)
20	34.5 - 138 Bar (500 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ .95 LPM (.25 GPM)
30	34.5 - 207 Bar (500 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ .95 LPM (.25 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ .95 LPM (.25 GPM)

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 .95 LPM (.25 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)

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

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