

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

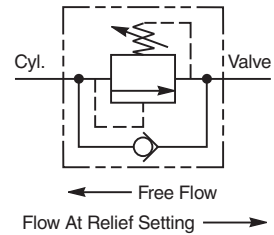
General Description

Direct Acting Relief Valve with Reverse Free Flow Check Valve. For additional information see Technical Tips on pages PC1-PC6.



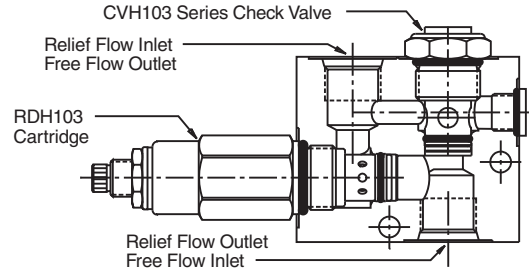
Features

- Hardened, precision ground parts for durability
- Rugged steel body construction
- Spherical poppets for low leakage
- Built-in cartridge check reduces plumbing
- Differential area cartridge relief for high flow capacity
- All external parts zinc plated
- "D"-Ring eliminates backup rings



Specifications

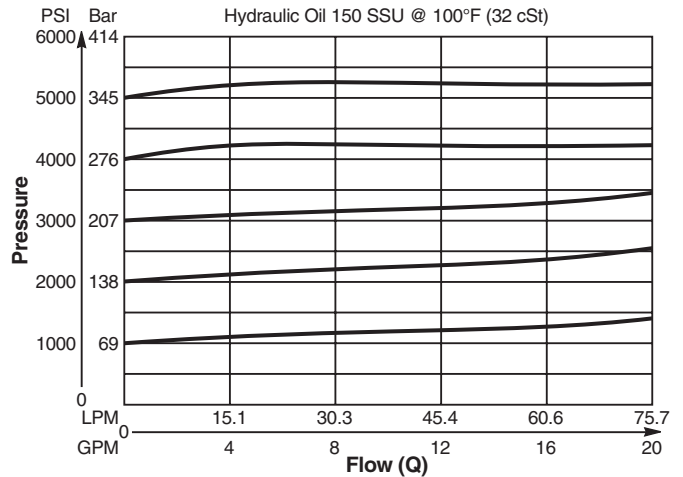
Maximum Flow	60 LPM (16 GPM)								
Maximum Inlet Pressure	380 Bar (5500 PSI)								
Maximum Pressure Setting	350 Bar (5000 PSI)								
Sensitivity: Pressure/Turn	<table style="border: none;"> <tr> <td>10</td> <td>9.8 Bar (143 PSI)</td> </tr> <tr> <td>20</td> <td>17 Bar (246 PSI)</td> </tr> <tr> <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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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.								
Body Material	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	1.2 kg (2.7 lbs.)								



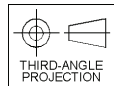
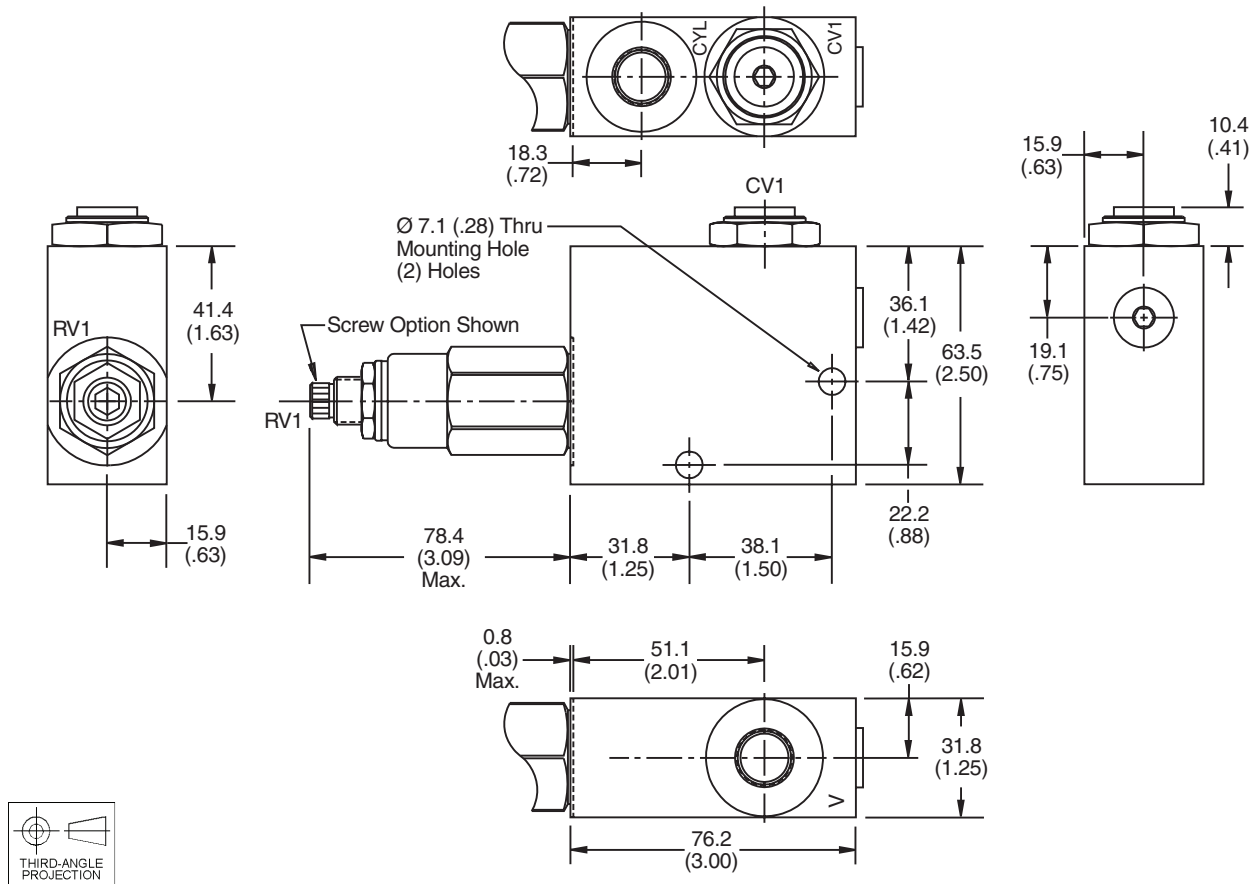
Performance Curve

Flow vs. Inlet Pressure

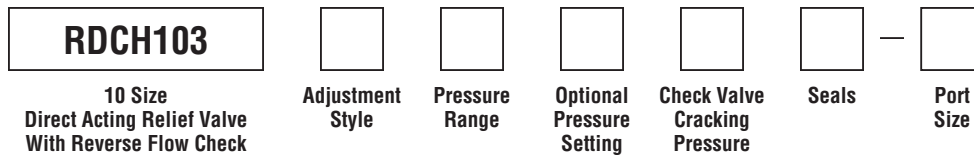
(Pressure rise through cartridge only)



**Dimensions** Millimeters (Inches)



**Ordering Information**



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
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) @ .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	Cracking Pressure
Omit	0.3 Bar (5 PSI)
P20	1.4 Bar (20 PSI)
P50	3.5 Bar (50 PSI)
P65	4.5 Bar (65 PSI)
P100	6.9 Bar (100 PSI)

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

Code	Port Size	Part No.
8T	SAE-8	830313

Individual body requires 1 SAE 5 plug.  
 Part number 5 HP50N-S.