

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

Pilot Operated Pressure Reducing Valve. For additional information see Technical Tips on pages PC1-PC6.

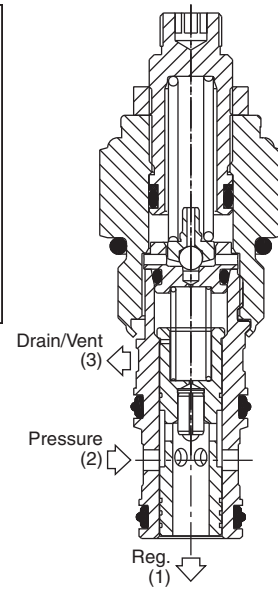
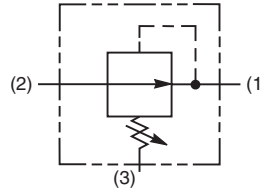
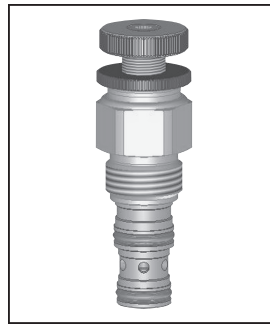


Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided poppet 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

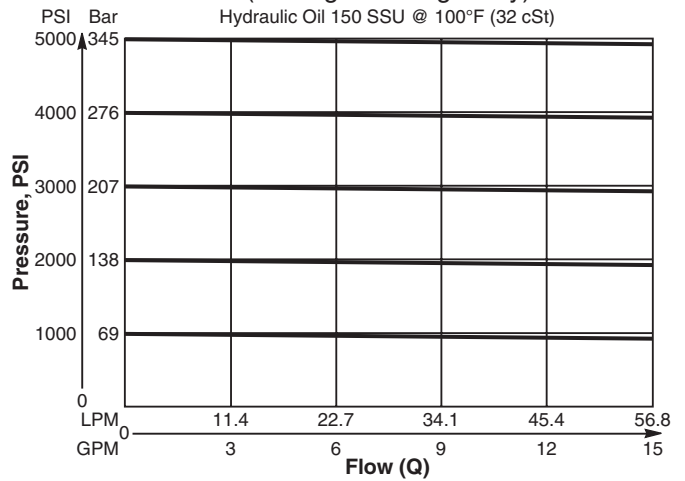
Specifications

| | | | | | | | | | | | |
|---------------------------------------|---|-----------|------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----------|----------------------|
| Rated Flow | 56.3 LPM (15 GPM) | | | | | | | | | | |
| Maximum Inlet Pressure | 380 Bar (5500 PSI) | | | | | | | | | | |
| Maximum Pressure Setting | 350 Bar (5000 PSI) | | | | | | | | | | |
| Sensitivity: Pressure/Turn | <table style="border: none;"> <tr> <td style="padding-right: 10px;">03</td> <td>21 Bar (307 PSI)</td> </tr> <tr> <td>10</td> <td>25.4 Bar (369 PSI)</td> </tr> <tr> <td>20</td> <td>45.1 Bar (655 PSI)</td> </tr> <tr> <td>30</td> <td>64.9 Bar (942 PSI)</td> </tr> <tr> <td>50</td> <td>137.6 Bar (1996 PSI)</td> </tr> </table> | 03 | 21 Bar (307 PSI) | 10 | 25.4 Bar (369 PSI) | 20 | 45.1 Bar (655 PSI) | 30 | 64.9 Bar (942 PSI) | 50 | 137.6 Bar (1996 PSI) |
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| Maximum Tank Pressure | 350 Bar (5000 PSI) | | | | | | | | | | |
| Maximum Drain Flow | 0.94 LPM (0.25 GPM) | | | | | | | | | | |
| 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 | C10-3 (See BC Section for more details) | | | | | | | | | | |
| Form Tool | <table style="border: none;"> <tr> <td>Rougher</td> <td>NTF10-3R</td> </tr> <tr> <td>Finisher</td> <td>NFT10-3F</td> </tr> </table> | Rougher | NTF10-3R | Finisher | NFT10-3F | | | | | | |
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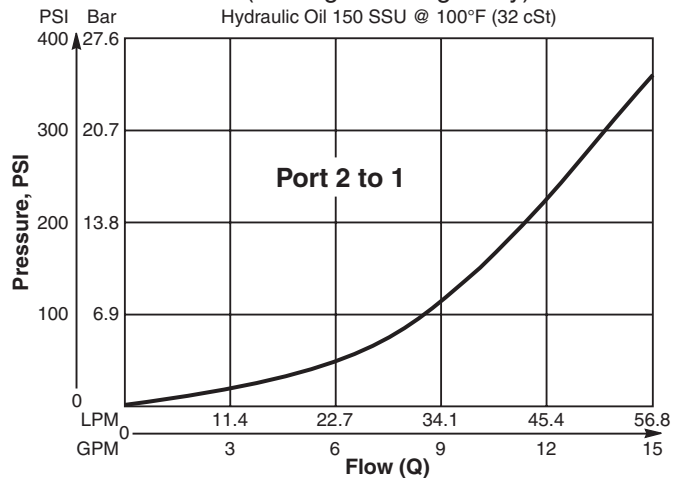


Performance Curves

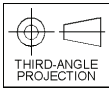
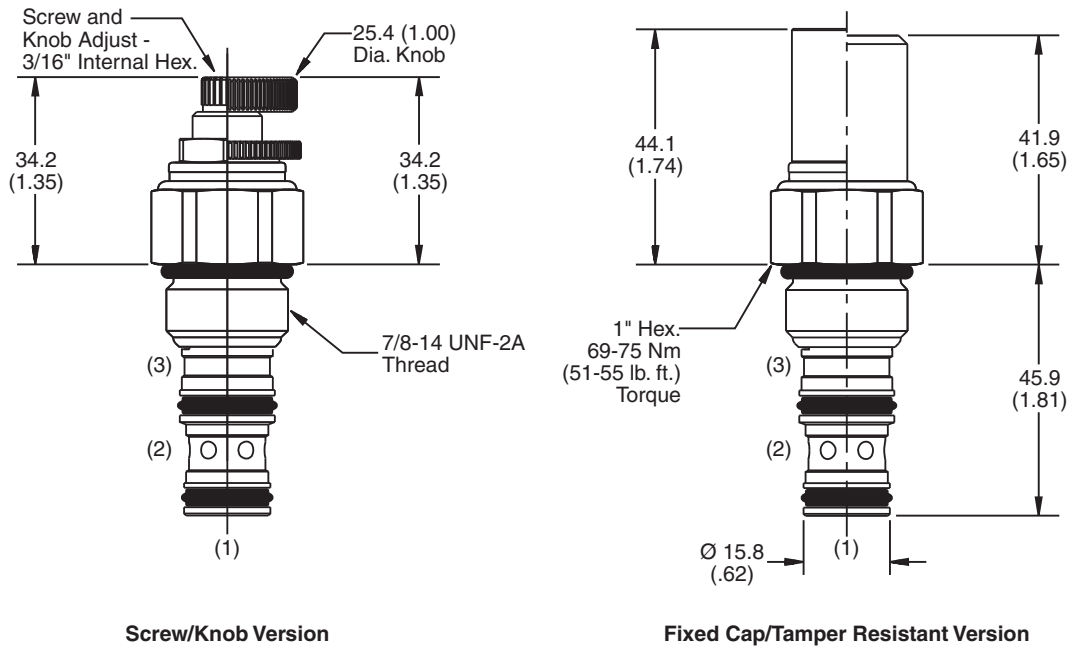
Flow vs. Pressure (Through cartridge only)



Pressure vs. Flow (Through cartridge only)



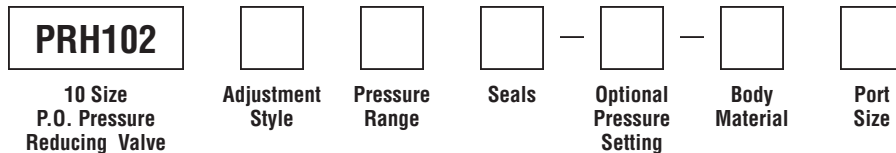
Dimensions Millimeters (Inches)



Screw/Knob Version

Fixed Cap/Tamper Resistant Version

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 (718083) |

| Code | Seals / Kit No. |
|------|--------------------------|
| Omit | "D"-Ring / (SK10-3) |
| N | Nitrile / (SK10-3N) |
| V | Fluorocarbon / (SK10-3V) |

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

| Code | Pressure Range |
|------|---|
| 03 | 6.9 - 34.5 Bar (100 - 500 PSI) Standard Setting: 17.2 Bar (250 PSI) |
| 10 | 13.7 - 69 Bar (200 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) |
| 20 | 27 - 138 Bar (400 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) |
| 30 | 41.4 - 207 Bar (600 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) |
| 50 | 82.8 - 345 Bar (1200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) |

| Optional Pressure Setting |
|---|
| Pressure ÷ 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI |

| Code | Port Size | Body Part No. |
|------|----------------|---------------|
| Omit | Cartridge Only | |
| 6T | SAE-6 | (B10-3-*6T) |
| 8T | SAE-8 | (B10-3-*8T) |

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

NOTE: For settings below 20.7 Bar (300 PSI), flow rating is limited to 11.3 LPM (3 GPM).

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