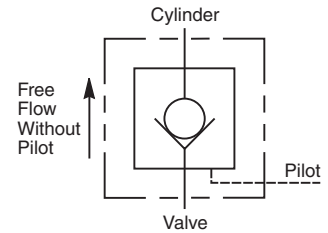
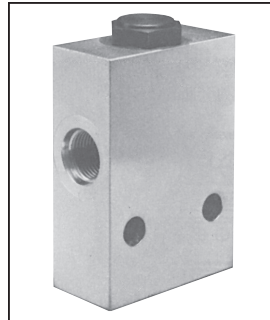


**Technical Information**

- 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 Piston Style Pilot Operated Check Valve. For additional information see Technical Tips on pages CV1-CV4.

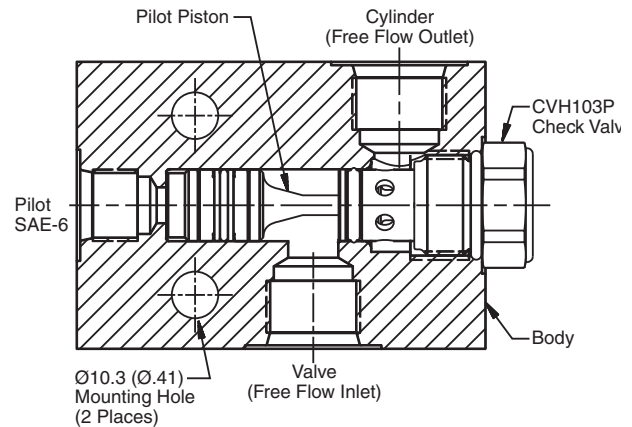


**Features**

- Spherical poppet for low leakage
- “D”-Ring eliminates back-up rings
- Optional sealed pilot piston
- Steel or aluminum body construction

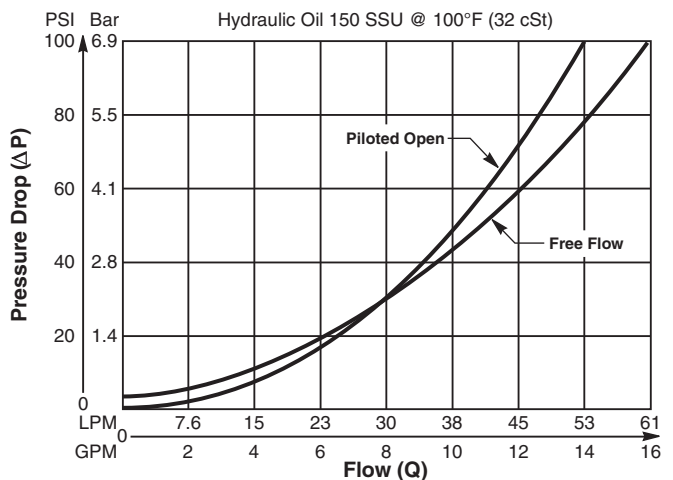
**Specifications**

<b>Maximum Flow</b>	56 LPM (15 GPM)
<b>Maximum Inlet Pressure</b>	210 Bar (3000 PSI) - CSP103 350 Bar (5000 PSI) - CSPH103
<b>Leakage Across Check 150 SSU (32 cSt)</b>	2 drops/min. (.13 cc/min.)
<b>Leakage Across Pilot Piston (No Seals)</b>	312 cc/min 0.3 LPM (.08 GPM)
<b>Pilot Ratio</b>	4:1
<b>Pilot Piston Part Numbers</b>	No Seal - 717909 Nitrile Seal - 717909N Fluorocarbon Seal - 717909V
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Body Material</b>	Aluminum - CSP103 Steel - CSPH103
<b>Operating Temp. Range (Ambient)</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>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Fluids</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Approx. Weight</b>	

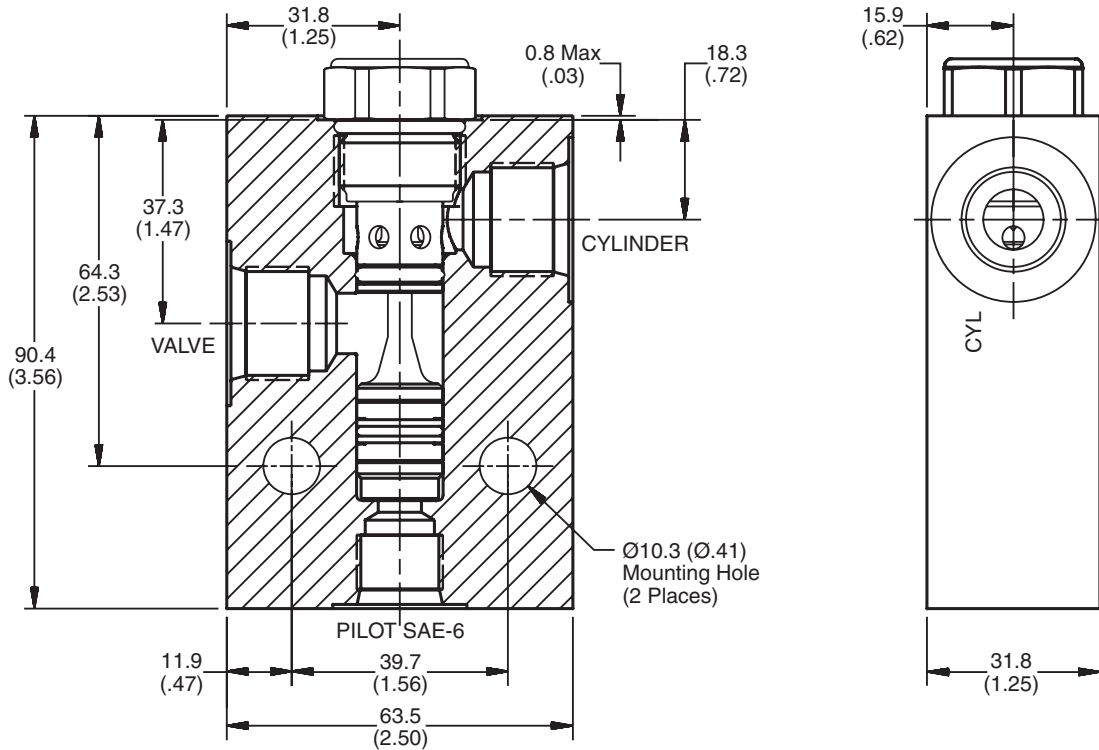


**Performance Curve**

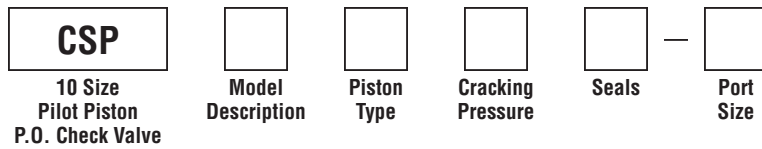
Pressure Drop vs. Flow (Through cartridge only)



**Dimensions** Millimeters (Inches)



**Ordering Information**



Code	Model Description
103	3000 PSI Series
H103	5000 PSI Series

Code	Cracking Pressure
*Omit	0.3 Bar (5 PSI)
20	1.4 Bar (20 PSI)
50	3.5 Bar (50 PSI)
65	4.5 Bar (65 PSI)
80	5.5 Bar (80 PSI)
100	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	Material
A8T	SAE-8	Aluminum (CSP103 Only)
8T	SAE-8	Steel (CSPH103 Only)

Code	Piston Type
P	Pilot Piston without seal
A	Pilot Piston with seal Note: Requires 1.4 Bar (20 PSI) crack minimum.

\*Not available with "A" option.

- 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  
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- TD  
Technical Data