

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**

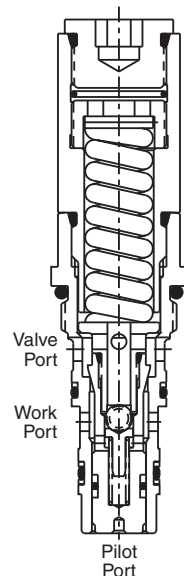
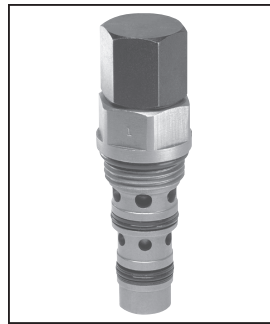
Threaded Cartridge Style Counterbalance Valve. For additional information see Technical Tips on pages LM1-LM4.

**Features**

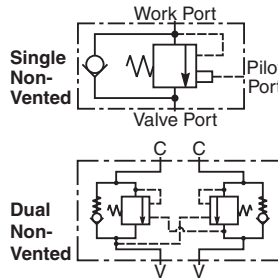
- Conical Poppet design provides longer metering stroke for stable operation
- Hardened seat provides reliable load holding
- External vent option available for high back pressure applications
- Tamper resistant cap for added safety and security
- Various pilot ratios available for application flexibility
- Unique cavity prevents other valves from being “accidentally” installed

**Specifications**

<b>Rated Flow</b>	37.5 LPM (10 GPM)
<b>Maximum Inlet Pressure</b>	350 Bar (5000 PSI)
<b>Leakage at 150 SSU (32 cSt)</b>	5 drops/min. (.33 cc/min.) @ 80% of thermal crack pressure
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-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>	.38 kg (.88 lbs.)
<b>Cavity</b>	CDD-1010 (See BC Section for more details)
<b>Form Tool</b>	FR-500

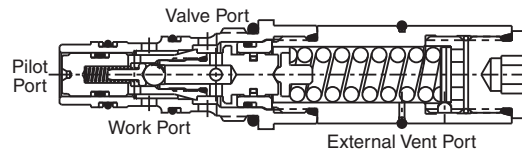


MHC-010-S\*S\* Non-Vented Counterbalance Adjustable

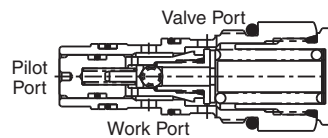


**Construction**

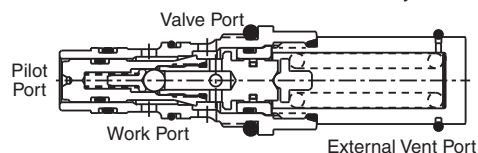
MHC-010-V\*S\* Vented Counterbalance Adjustable



MHC-010-S\*N\* Non-Vented Counterbalance Non-Adjustable

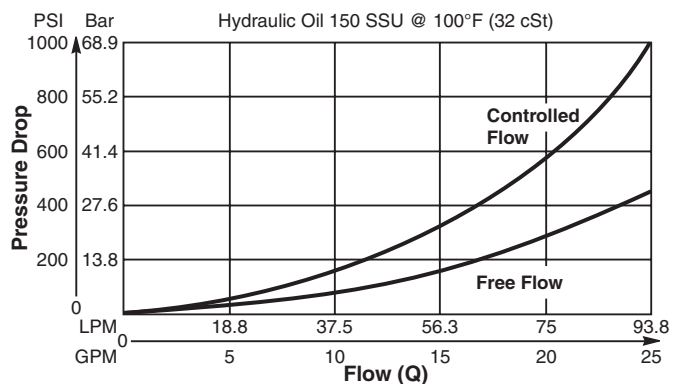


MHC-010-V\*N\* Vented Counterbalance Non-Adjustable

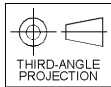
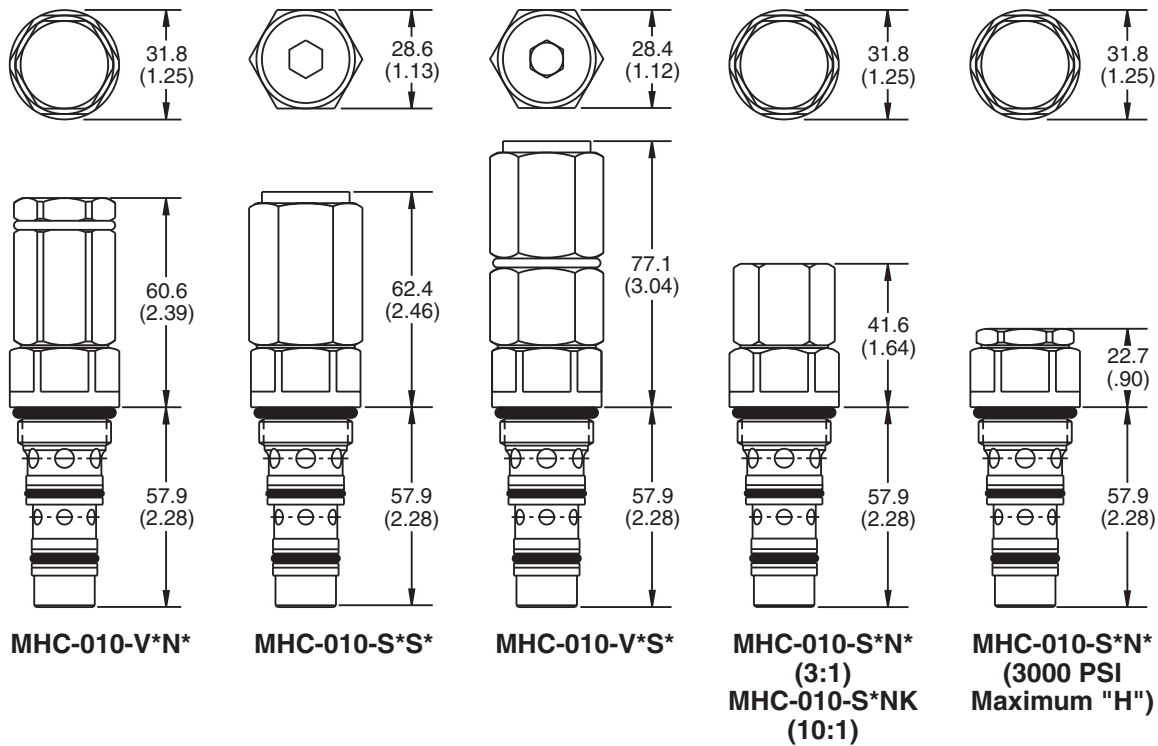


**Performance Curve**

Flow vs. Pressure Drop (Through cartridge only)

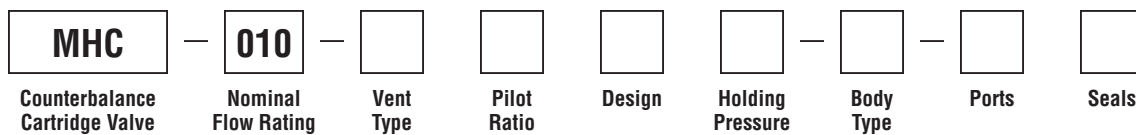


**Dimensions** Millimeters (Inches)



**Torque Values**  
 68-75 Nm (50-55 lb. ft.)  
*Typical for all*

**Ordering Information**



Code	Nominal Flow Rating
010	37.5 LPM (10 GPM)

Code	Vent Type
S	Standard (non-vented)
V	Vented

Code	Pilot Ratio
A	Equal Area (1:1)
B	4:1
F	7:1 (Standard)
J	10:1

Code	Design
S	Standard (adjustable)
N	Shimmed (non-adjustable)

Code	Holding Pressure
C	Equal Area
D	34.5 Bar (500 PSI) Crack
E	69 Bar (1000 PSI) Shim adjustable version only
F	105 Bar (1500 PSI)
G	140 Bar (2000 PSI)
H	170 Bar (2500 PSI)
K	210 Bar (3000 PSI) Standard version
	350 Bar (5000 PSI) 7:1 and 10:1 only Shim version only

Code	Body Type	Part Number
Omit	No Body	
A	Single	MHC-010-A-53
D	Dual	MHC-010-D-53

Code	Ports
00	No Ports
52	SAE-8 through port
53	SAE-10 through port

Code	Seals / Kits
B	Nitrile / 711922
F	Fluorocarbon / 711825