

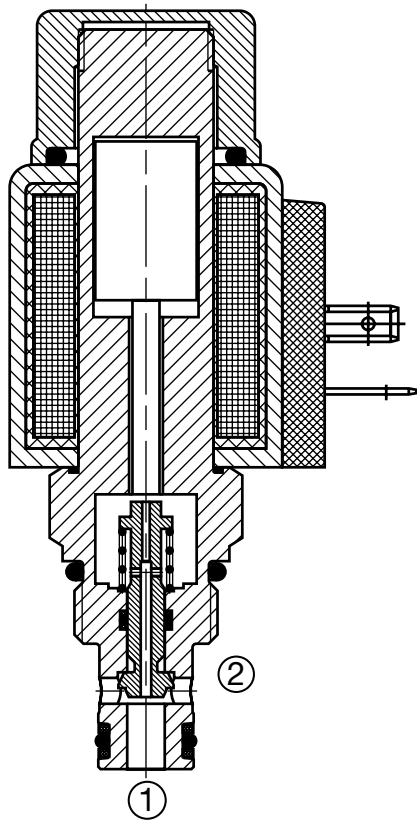
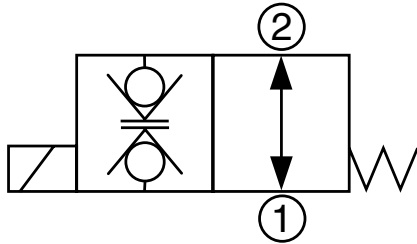
SOLENOID VALVES

WS08V-01

Poppet Type, Bi-directional, Normally Open, Direct Acting

Up to 5 gpm (19 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 2-way, 2-position, normally open, direct acting, poppet type, intended for use as a bi-directional load holding device in hydraulic circuits requiring low internal leakage.

Operation

When de-energized the WS08V allows flow in both directions. When energized the poppet closes and blocks the flow from port 2 to port 1 and from port 1 to port 2.

Operation of Manual Override Option: To override, push and hold the override button. The override is not detented. The manual override option is intended for emergency use, not for continuous duty operation.

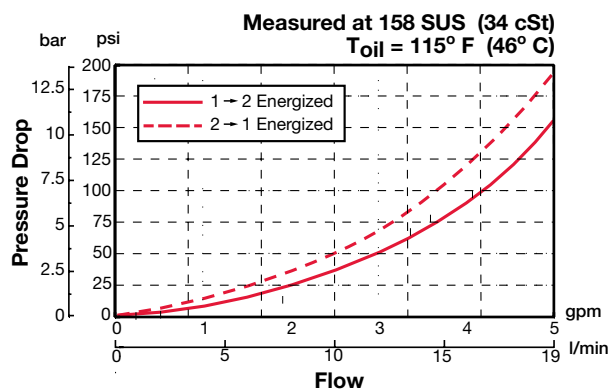
Features

- Push type manual override button, protected by rubber cap

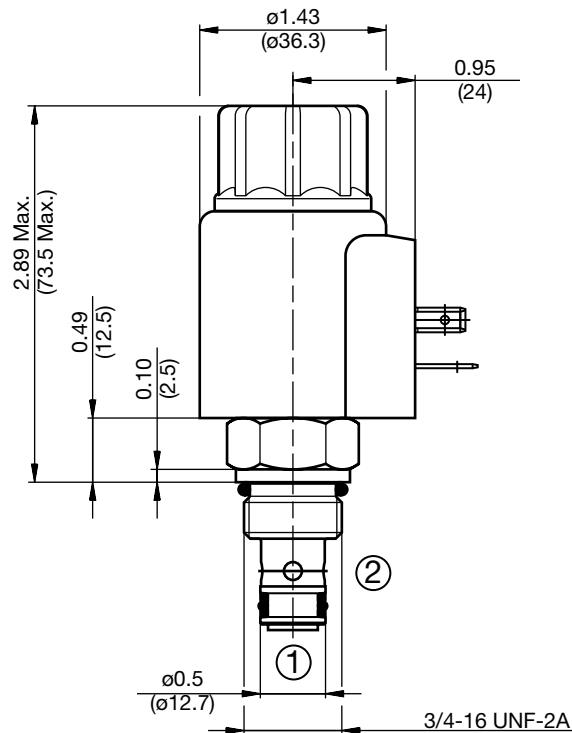
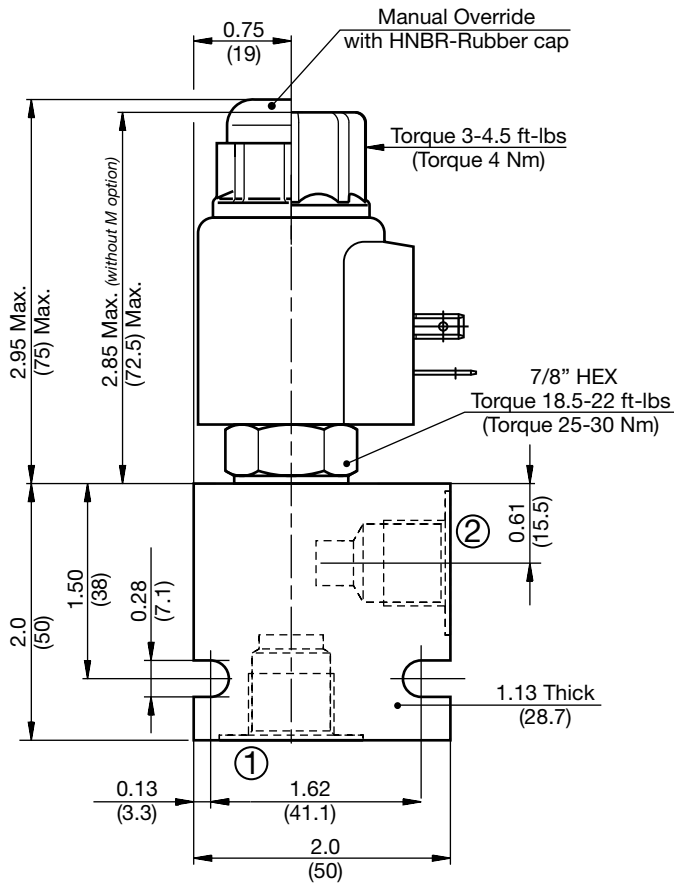
Specifications

Operating Pressure	5000 psi (350 bar)	
Nominal Flow	5 gpm (19 l/min)	
Internal Leakage	Leaktight, less than 2 drops/min. at 3600 psi (0.10 cc/min at 250 bar)	
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <i>(Consult factory for usage at temp. outside range.)</i>	
Ambient Temperature Range	-4° to 140°F (-20° to 60°C)	
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage	
Current Draw @ 68°F (20°C)	1.5 A at 12VDC; 0.8 A at 24VDC	
Min. Pull-in Voltage @ 68°F (20°C)	85% of nominal @ 5000 psi (350 bar)	
Response Time (typical)	Energized	35 ms
	De-energized	50 ms
Fluid Compatibility	Mineral-based or synthetics with lubricating properties	
Viscosity	50 to 2000 SUS (7.4 to 420 cSt)	
Filtration	21/19/16 or cleaner (per ISO 4406). Use with filter rated $\beta_{10} \geq 200$.	
Installation	No orientation restrictions	
Cavity	FC08-2 (see <i>Line Bodies & Cavities</i> section)	
Cavity Tools	Rougher:	02580090
	Finisher:	02580091
Cartridge Weight	0.31 Lbs. (0.14 kg)	
Coil Weight	0.42 Lbs. (0.19 kg)	
Cartridge Material	Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N or Viton® o-rings. PTFE back-up rings.	
Coil Material	Class N high temperature magnet wire, steel shell, polyamid encapsulation.	
Seal Kits	Buna-N	FS082-N P/N: 03033920
	Viton®	FS082-V P/N: 03051756

Performance



Dimensions



All measurements in inches (mm).
Subject to technical modifications

PN#02087369 / 10.19 / CHD1110-1389

Model Code

WS08V-01 M-C-N-24 DS

Valve Model	WS08V-01
Override Option	M
Body & Ports	C-N
Seals	N
Coil Voltage	24
Coil Connector	DS

- Manual Override with HNBR-Rubber cap**
Torque 3-4.5 ft-lbs (Torque 4 Nm)
- 7/8" HEX**
Torque 18.5-22 ft-lbs (Torque 25-30 Nm)
- Seals**
N = Buna-N
V = Viton®
- Coil Voltage**
0 = No coil, cartridge only
DC 12 = 12 VDC
24 = 24 VDC
36 = 36 VDC
110 = 110 VDC (only available with connector DG)
AC 24 = 24 VAC
115 = 115 VAC (AC coils internally full wave rectified)
230 = 230 VAC
- Coil Connector**
DC DG = EN 175301-803-A
DS = Dual spade (SAEJ858a)*
DL = Leadwires (2) - 18" long (46 cm)*
DW = WeatherPak™ on leadwires - 9.5" long (24 cm)*
DN = Deutsch™ DT04-2P, molded, axial (IP69K Rated)*
DT = Amp Junior Timer™, molded, radial mount*
- AC AG = EN 175301-803-A

Coil Model 40-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH082-AS6	03011409	Aluminum, anodized	3500 psi (245 bar)	0.34 lbs (0.15 kg)
FH082-SS6	00560917	Steel, Zinc plated	6000 psi (420 bar)	1.0 lbs (0.45 kg)

*Please refer to Line Bodies & Cavities section for details