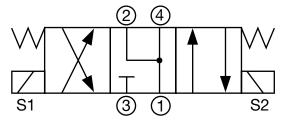
## **SOLENOID VALVES**

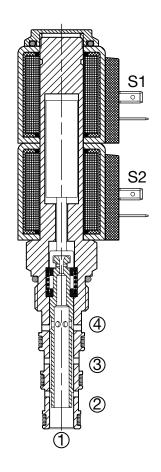
## WK10J-01

# Spool Type, Direct Acting

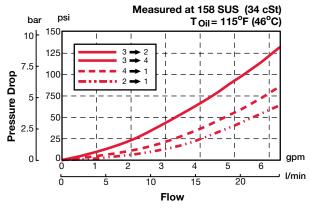
Up to 6 gpm (23 l/min) • 5000 psi (350 bar)

### **Hydraulic Symbol**





#### **Performance**



### Description

A screw-in cartridge, solenoid operated, 4-way, 3 position, direct acting, spool type valve.

### Operation

When de-energized the WK10J allows flow from cylinder ports 2 and 4 to port 1, port 3 is blocked. When coil S1 is energized the spool shifts and allows flow from port 1 to port 2 and from port 3 to port 4. When coil S2 is energized the spool shifts and allows flow from port 4 to port 1 and from port 3 to port 2.

**Operation of Manual Override Option:** To override, twist knurled screw and push or pull to shift spool.

Detented version - twist again after pushing/pulling to hold position.

#### **Features**

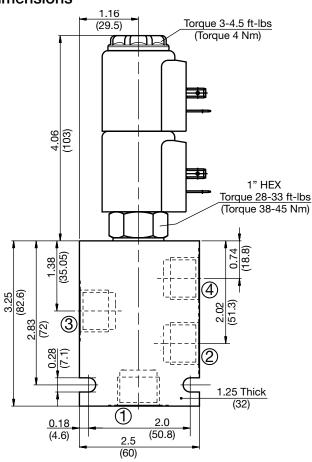
• Push/pull type manual override button, detented manual override option.

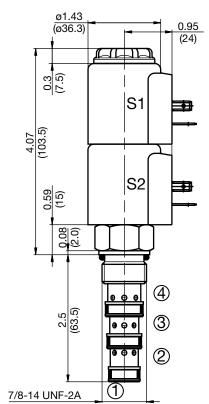
### **Specifications**

Operating Pressure	5000 psi (350 bar)		
Nominal Flow	6 gpm at 3000 psi (23 l/min at 210 bar) Consult factory for flow rating above 3000 psi (210 bar)		
Internal Leakage	10 cu in/min. at 3000 psi and 158 SUS (160 cc/min at 210 bar and 34 cSt)		
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) (Consult factory for usage at temp. outside range.)		
Ambient Temperature Range	-4° to 140°F (-20° to 60°C)		
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage		
Current Draw at 68°F (20°C)	1.5 A at 12VDC; 0.8 A at 24VDC		
Minimum Pull-in Current	90% of nominal @ 5000 psi (350 bar)		
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 ß10 ≥ 200.		
Installation	No orientation restrictions		
Cavity	FC10-4 (see Line Bodies & Cavities section)		
Cavity Tools	Rougher: 02580248 Finisher: 02580249		
Cartridge Weight	0.64 lbs (0.29 kg)		
Coil Weight	0.42 lbs (0.19 kg) - 2 coils required		
Cartridge Material	Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N or Viton® o-rings. PTFE back-up rings.		
Coil Material	Class H high temperature magnetwire, steel shell, polyamid encapsulation.		
Seal Kits Buna-N Viton®	FS104-N P/N: 03051912 FS104-V P/N: 03071275		

## SOLENOID VALVES

#### **Dimensions**





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

#### **Model Code**

	<u>WK10J-01-M-C-N-24</u> DN				
Valve Model -					
Override Opt	ion ————————————————————————————————————				
M =	No manual override Push/pull type, not detented Push/pull type, detented				
	y & Ports				
AS8 =	Cartridge only SAE-8 ports, aluminum body SAE-8 ports, steel body				
Seals					
N = V = V					
Coil Voltage					
DC 12 = 24 = 36 = 36	No coil, cartridge only 12 VDC 24 VDC 36 VDC 110 VDC (only available with connector DG)				
AC 24 = 1 115 = 230 =	115 VAC				
<b>Coil Connect</b>	oil Connector				
	EN 175301-803-A Dual spade (SAEJ858a)*				

DC TDG = EN 175301-803-A
DS = Dual spade (SAEJ858a)\*
DL = Leadwires (2) - 18" long (46 cm)\*
DW = WeatherPak<sup>TM</sup> on leadwires - 9.5" long (24 cm)\*

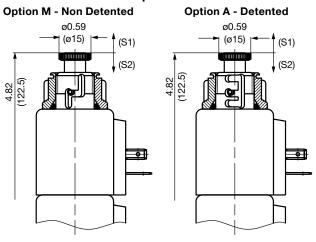
DW = WeatherPak<sup>™</sup> on leadwires - 9.5" long (24 cm)\* DN = Deutsch<sup>™</sup> DT04-2P, molded, axial (IP69K Rated)\* DT = Amp Junior Timer<sup>™</sup>, molded, radial mount\*

AC AG = EN 175301-803-A

**Coil Model** 40-1836, 2 per assembly For other coil connector types consult factory

\*Coils with internal diode are available, consult factory.

### **Manual Override Options**



#### Standard Line Bodies\*

Code	Part No	Material	Pressure Rating	Weight
FH104-AS8	03038110	Aluminum, anodized	3500 psi (245 bar)	0.72 lb (0.33 kg)
FH104-SS8	03037868	Steel, zinc plated	6000 psi (420 bar)	2.12 lb (0.96 kg)

<sup>\*</sup>Please refer to Line Bodies & Cavities section for details