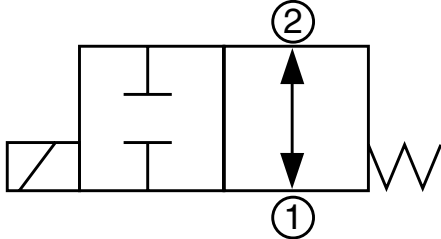


WK06V-01 Spool Type, Normally Open, Direct Acting Up to 4 gpm (15.2 lpm) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 2-way, 2 position, normally open, direct acting, spool type, intended for use as a bi-directional flow blocking valve.

Operation

When de-energized the WK06V allows bi-directional flow. When energized the spool shifts and blocks flow in both directions.

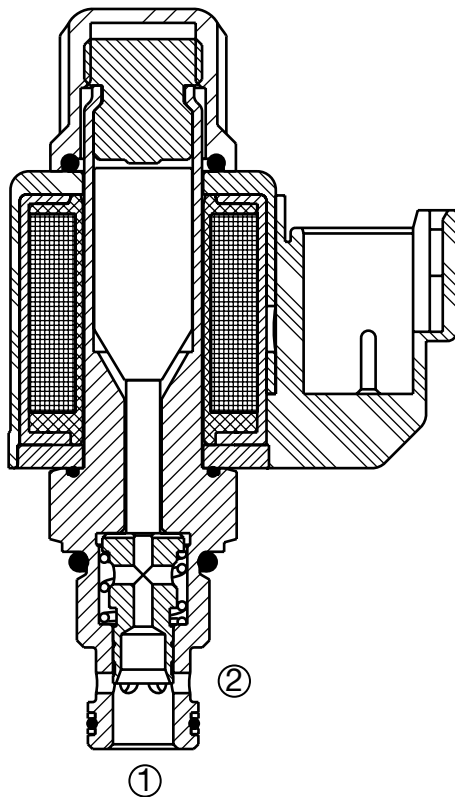
Operation of Manual Override Option: To override, push and hold the override button. The override is not detented. The manual override option is intended for emergency use, not for continuous duty operation.

Features

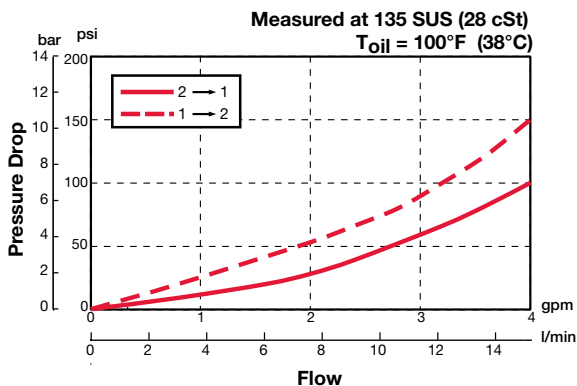
- Push type manual override button, protected by rubber cap

Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	See Operating Limits
Internal Leakage	5.5 cu in/min at 3600 psi and 135 SUS (90cc/min at 248 bar at 28cSt)
Fluid Operating Temp. Range	-20° to 248°F (-29° to 120°C) <i>(Consult factory for usage at temp. outside range.)</i>
Ambient Temperature Range	-20° to 140°F (-29° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw @ 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC
Min. Pull-in Current to Operate Valve	80% of nominal amperage
Typical Response Time <i>(Varies with Pressure and Flow)</i>	Energized 50ms De-energized 35ms
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)
Installation	No orientation restrictions
Cavity	FC06-2 <i>(see Line Bodies & Cavities section)</i>
Cavity Tools	Rougher: 02582046 Finisher: 02582047
Cartridge Weight	0.17 lb (0.08 kg)
Coil Weight	0.19 lb (0.09 kg)
Cartridge Material	Steel with hardened work surfaces. Zinc plated exposed surfaces. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation.
Seal Kits	Buna-N P/N: 02610184 Viton® P/N: 02610185

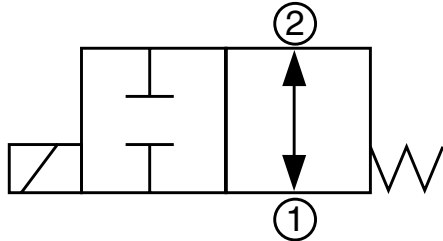


Performance



WK08V-01 Spool Type, 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, spool type, intended for use as a bi-directional flow blocking valve.

Operation

When de-energized the WK08V allows bi-directional flow. When energized the spool shifts and blocks flow in both directions.

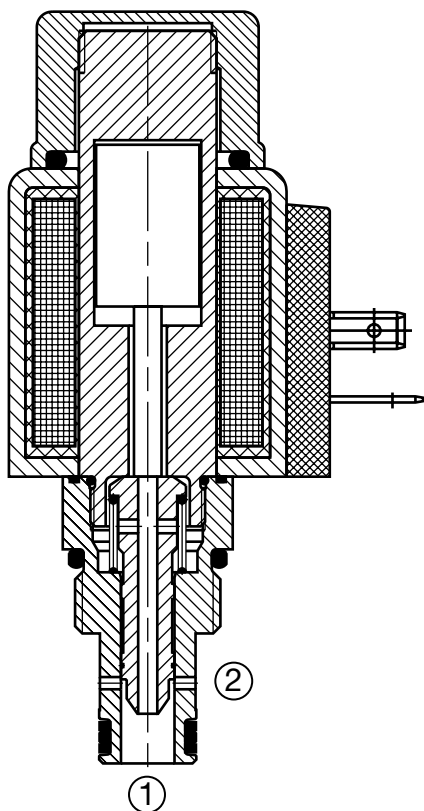
Operation of Manual Override Option: To override, push and hold the override button. The override is not detented. The manual override option is intended for emergency use, not for continuous duty operation.

Features

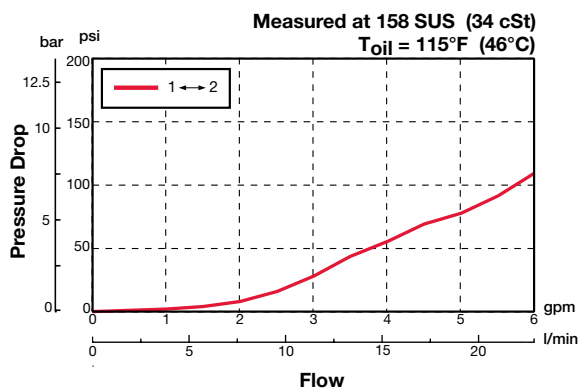
- Push type manual override button, protected by rubber cap

Specifications

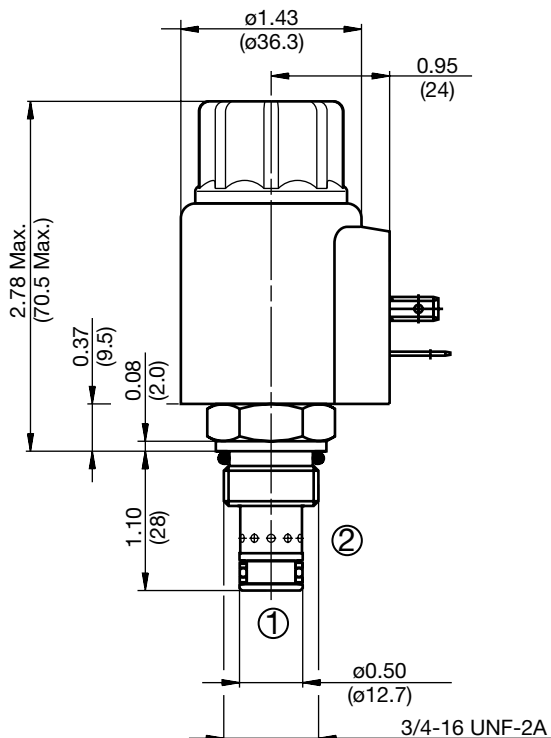
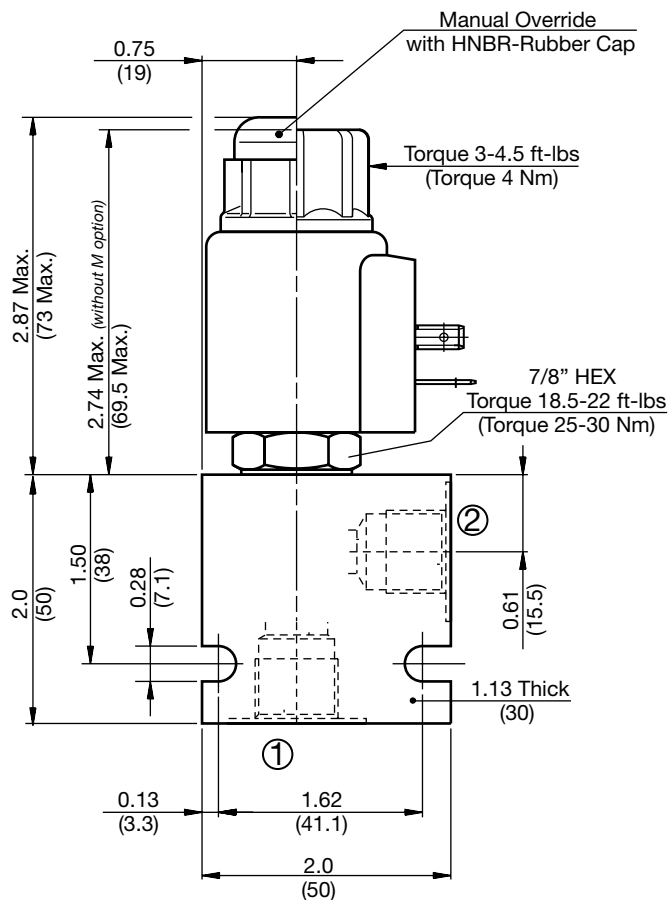
Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm (19 l/min)
Internal Leakage	5.5 cu in./min. at 3000 psi and 158 SUS (90 cc/min at 210 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <i>(Consult factory for usage at temp. outside range.)</i>
Ambient Temperature Range	-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)
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	0.38 Lbs. (0.17 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

Model Code

WK08V-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

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.

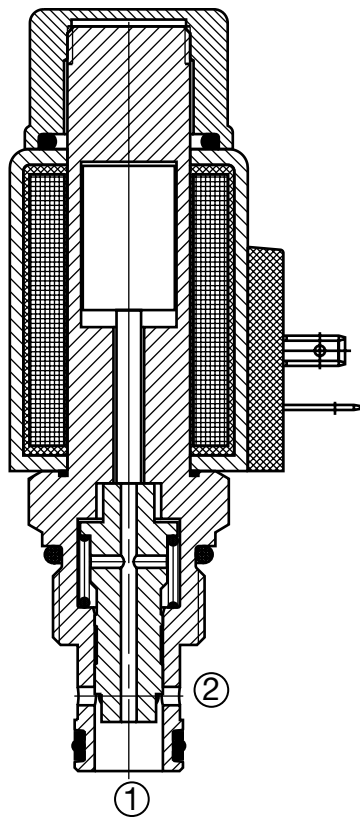
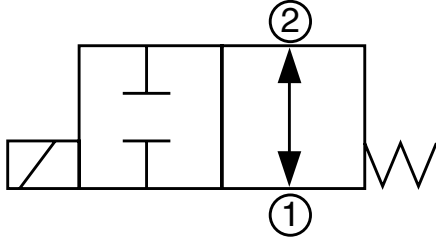
Standard Line Bodies*

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

WK10V-01 Spool Type, Normally Open, Direct Acting Up to 9 gpm (35 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 2-way, 2 position, normally open, direct acting, spool type, intended for use as a bi-directional flow blocking valve.

Operation

When de-energized the WK10V allows bi-directional flow. When energized the spool shifts and blocks flow in both directions.

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.

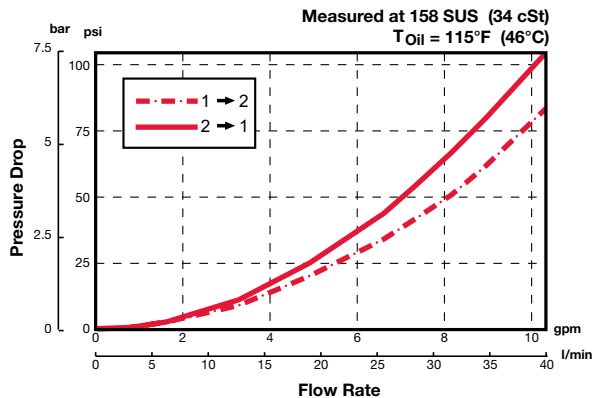
Features

- Push type manual override button, protected by rubber cap

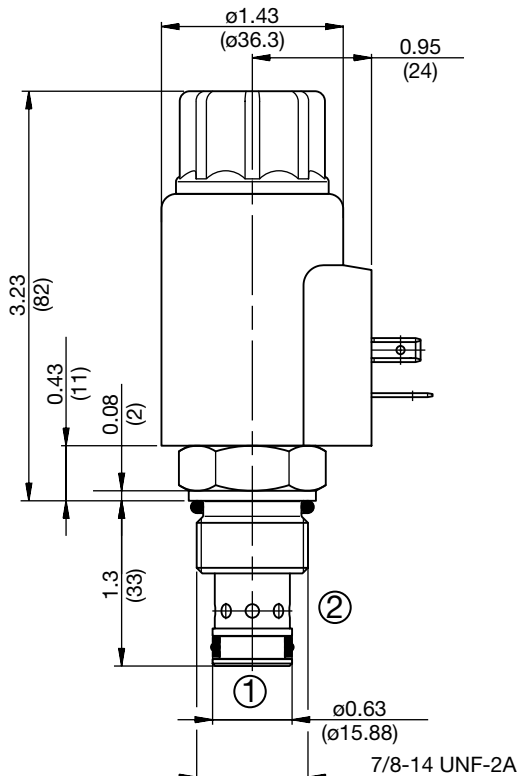
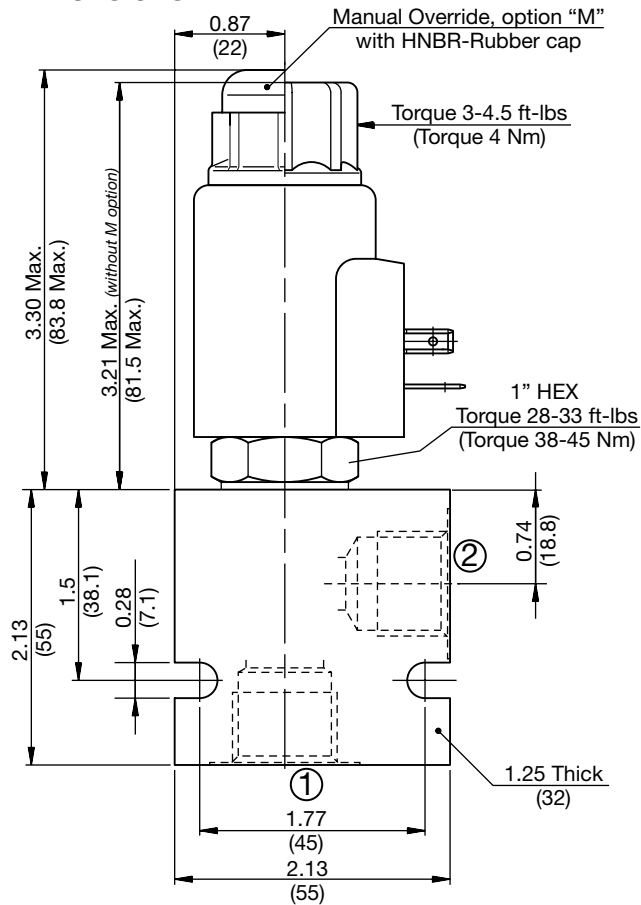
Specifications

Operating Pressure	5000 psi (350 bar)	
Nominal Flow	9 gpm (35 l/min)	
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 bar and 34 cSt)	
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)	2.22 A at 12VDC; 1.13 A at 24VDC	
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.	
Installation	No orientation restrictions	
Cavity	FC10-2 (see <i>Line Bodies & Cavities</i> section)	
Cavity Tools	Rougher:	02580274
	Finisher:	02580247
Cartridge Weight	0.48 Lbs. (0.22 kg)	
Coil Weight	0.51 Lbs. (0.23 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	FS102-N P/N: 03033872
	Viton®	FS102-V P/N: 03051757

Performance



Dimensions



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

Model Code

WK10V-01 M-C-N-24 DN

- Valve Model _____
- Override Option _____
 - blank = No manual override
 - M = Manual override, push type
- Body & Ports _____
 - C = Cartridge only
 - AS8 = SAE-8 Ports, aluminum body
 - SS8 = SAE-8 Ports, steel body
- 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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

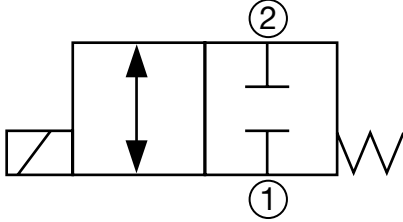
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH102-AS8	03037778	Aluminum, anodized	3500 psi (245 bar)	0.40 lbs (0.18 kg)
FH102-SS8	03037612	Steel, Zinc plated	6000 psi (420 bar)	1.16 lbs (0.53 kg)

*Please refer to Line Bodies & Cavities section for details

WK06W-01
Spool Type, Normally Closed, Direct Acting
Up to 2.5 gpm (9.5 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

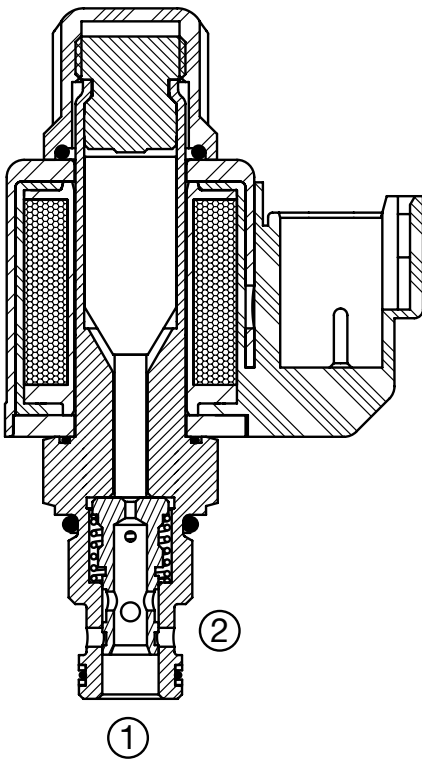
A screw-in cartridge, solenoid operated, 2-way, 2 position, direct acting, spool type valve.

Operation

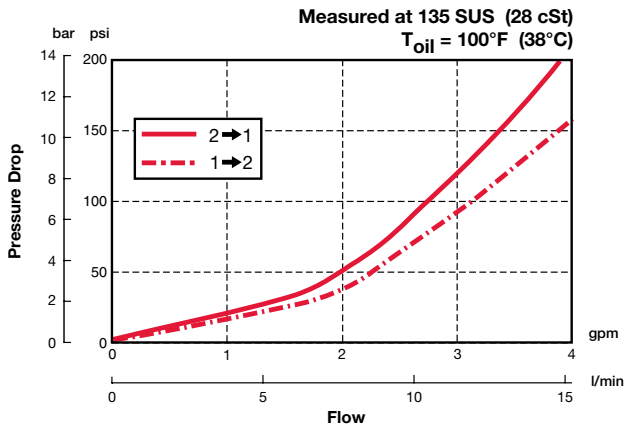
When de-energized the WK06W blocks flow in both directions. When energized the spool shifts and opens the bidirectional flow path.

Specifications

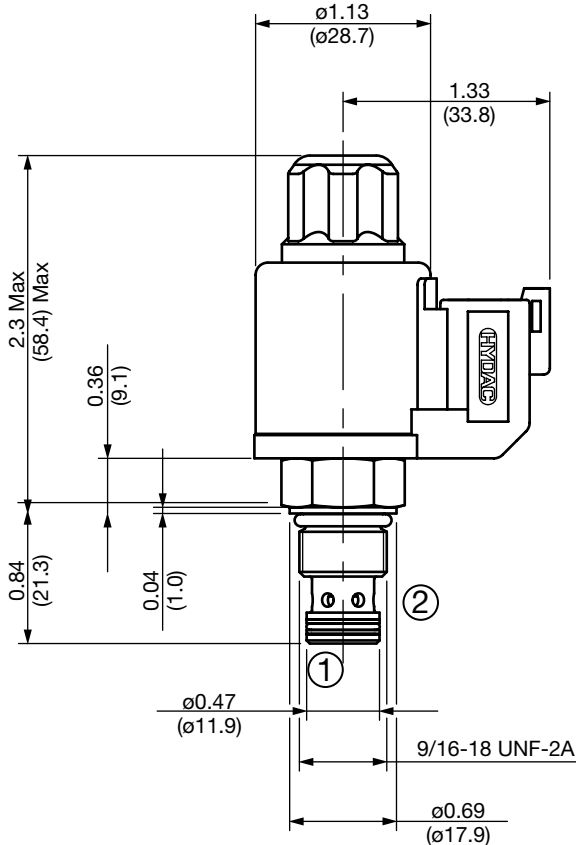
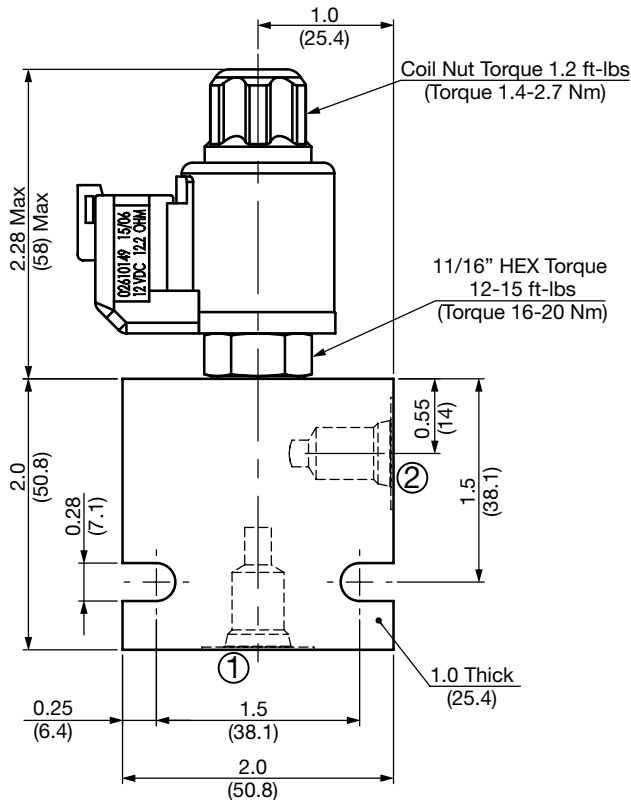
Operating Pressure	5000 psi (350 bar)
Nominal Flow	2.5 gpm (9.5 l/min)
Internal Leakage	5.5 cu in/min. at 3000 psi and 135 SUS (90 cc/min at 207 bar and 28 cSt)
Fluid Operating Temp. Range	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw at 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC
Min. Pull-in Current to Operate Valve	70% of nominal amperage
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)
Installation	No orientation restrictions
Cavity	FC06-2 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02582046 Finisher: 02582047
Cartridge Weight	2.7 oz (75 grams)
Coil Weight	3.1 oz (88 grams)
Cartridge Material	Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation
Seal Kits	Buna-N FS062-N P/N: 02610184 Viton® FS062-V P/N: 02610185



Performance



Dimensions



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

Model Code

WK06W-01 M-C-N-24-DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type (for availability consult factory)

Body & Ports

- C = Cartridge only
- AS4 = SAE-4 Ports, aluminum body
- SS4 = SAE-4 Ports, steel body

Seals

- N = Buna-N
- V = Viton®

Coil Voltage

- 0 = No coil, cartridge only
- DC 12 = 12 VDC
- DC 24 = 24 VDC
- AC 115 = 105 VDC (only available with connector DG)
- AC 230 = 205 VDC (only available with connector DG)

(All model 32-1329 coils are DC. AC models require an external diode bridge mounted outside the coil)**

Coil Connector

- DG = EN 175301-803-B (IP65 Rated)**
- DC DL = Leadwires (2) - 18" long (46 cm) AWG18, TYPE UL 1815 (IP69K Rated)*
- DN = Deutsch DT04-2P intergral molded (IP69K Rated)*

Use mating plug EN 175301-803-B without diode bridge for DC voltages P/N 02600570

Use mating plug EN 175301-803-B w/diode bridge for AC voltages P/N 02600582

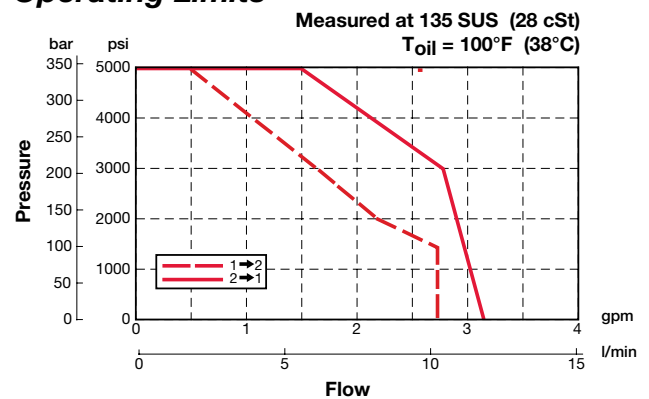
Coil Model 32-1329

For other coil connector types consult factory

** Mating Plugs sold separately

*Coils with internal transient suppression diode are available, consult factory.

Operating Limits



Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH062-AS4	02600491	Aluminum, anodized	3500 psi (245 bar)	0.33 lbs (0.15 kg)
FH062-SS4	02600490	Steel, Zinc plated	6000 psi (420 bar)	0.97 lbs (0.44 kg)

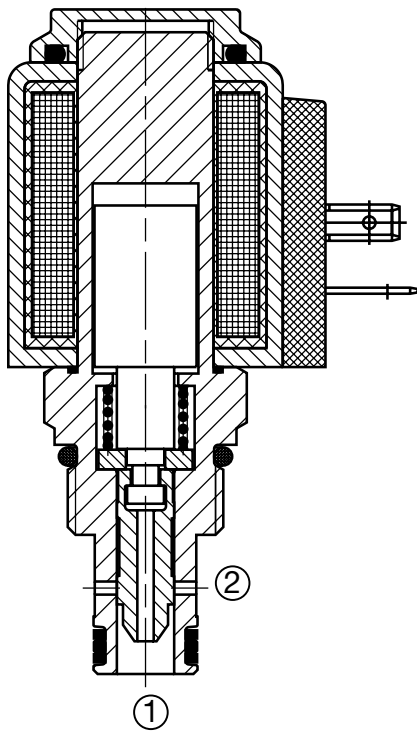
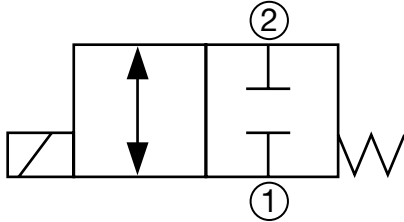
*Please refer to Line Bodies & Cavities section for details

WK08W-01

Spool Type, Normally Closed, 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 closed, direct acting, spool type, intended for use as a bi-directional flow blocking valve.

Operation

When de-energized the WK08W blocks flow in both directions. When energized the spool shifts and opens the bidirectional flow path.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

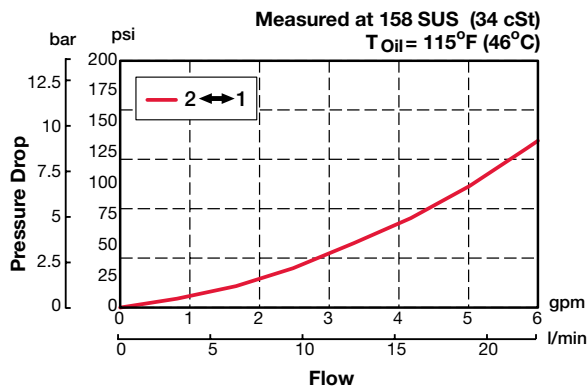
Features

- Screw type manual override option

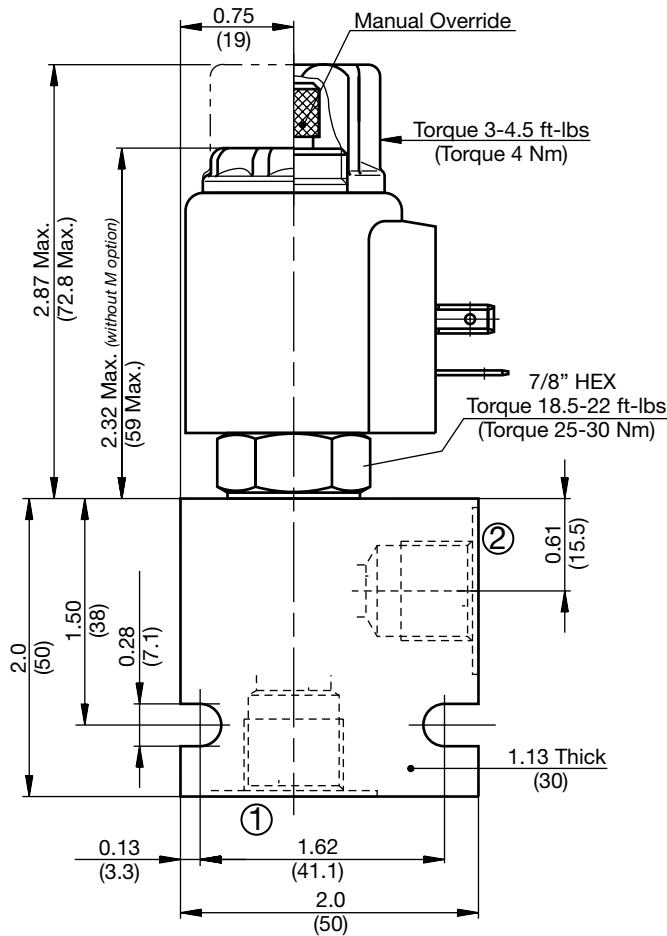
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm (19 l/min)
Internal Leakage	5.5 cu in/min. at 3000 psi and 158 SUS (90 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 @ 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)
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	0.38 Lbs. (0.17 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 P/N: 03033920 Vitons® P/N: 03051756

Performance



Dimensions



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

Model Code

WK08W-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
 blank = No manual override
 M = Manual override, screw type
- Body & Ports** _____
 C = Cartridge only
 AS6 = SAE-6 Ports, aluminum body
 SS6 = SAE-6 Ports, steel body
- 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.

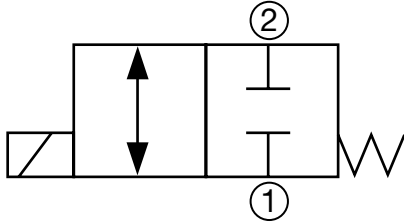
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH082-AS6	03011409	Aluminum, anodized	3500 psi (245 bar)	0.33 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

WK10W-01
Spool Type, Normally Closed, Direct Acting
Up to 9 gpm (35 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 2-way, 2 position, normally closed, direct acting, spool type, intended for use as a bi-directional flow blocking valve.

Operation

When de-energized the WK10W blocks flow in both directions. When energized the spool shifts and opens the bidirectional flow path.

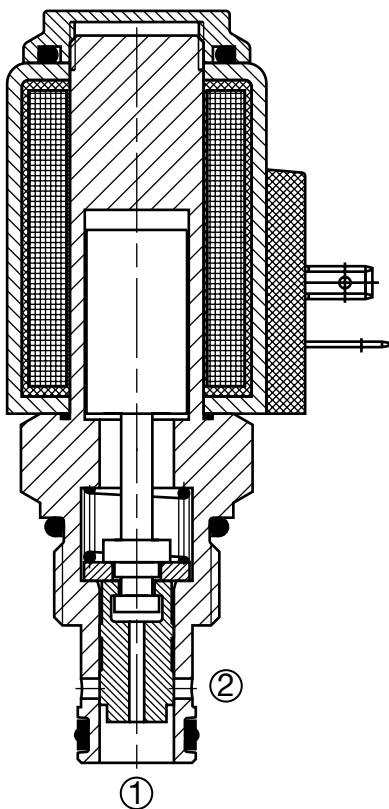
Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

Features

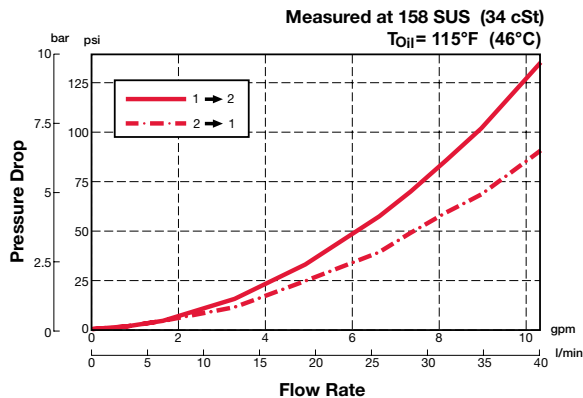
- Screw type manual override option

Specifications

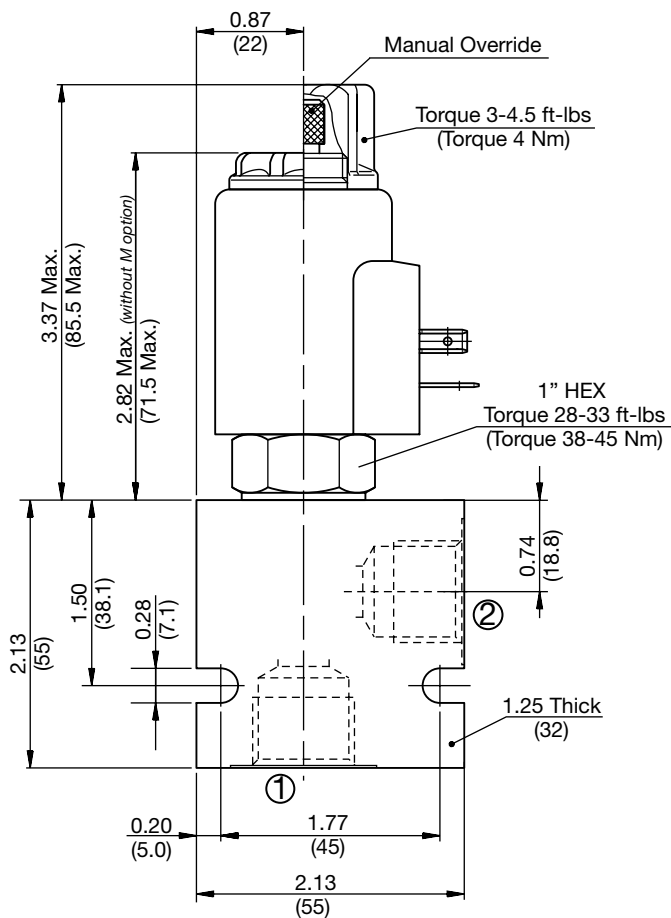
Operating Pressure	5000 psi (350 bar)
Nominal Flow	9 gpm (35 l/min)
Internal Leakage	7.3 cu in/min. at 5000 psi and 158 SUS (120 cc/min at 350 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) (Consult factory for usage at temp. outside range.)
Ambient Temperature Range	-4° to 140°F (-20° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw @ 68°F (20°C)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-2 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580274 Finisher: 02580247
Cartridge Weight	0.48 Lbs. (0.22 kg)
Coil Weight	0.51 Lbs. (0.23 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 FS102-N P/N: 03033872 Viton® FS102-V P/N: 03051757



Performance



Dimensions



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

Model Code

WK10W-01 M-C-N-24 DN

Valve Model _____

Override Option _____

- blank = No manual override
- M = Manual override, screw type

Body & Ports _____

- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum body
- SS8 = SAE-8 Ports, steel body

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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

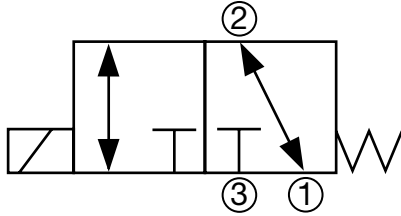
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH102-AS8	03037778	Aluminum, anodized	3500 psi (245 bar)	0.40 lbs (0.18 kg)
FH102-SS8	03037612	Steel, Zinc plated	6000 psi (420 bar)	1.16 lbs (0.53 kg)

*Please refer to Line Bodies & Cavities section for details

WK06C-01
Spool Type, Direct Acting
Up to 4 gpm (15 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

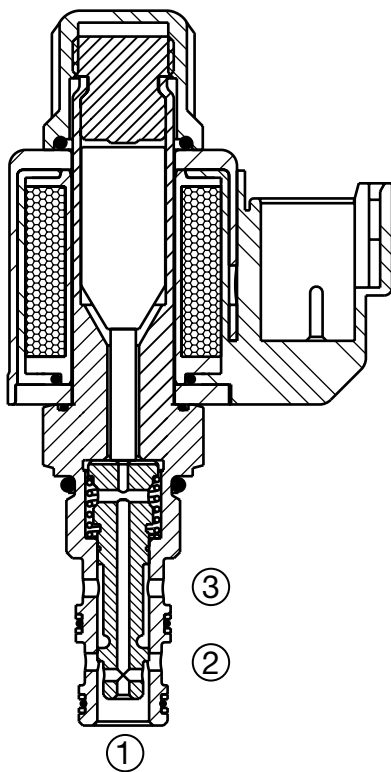
A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK06C allows flow from port 2 to port 1 bi-directionally, while blocking flow at port 3. When energized the spool shifts and opens flow from port 2 to port 3 bi-directionally, while blocking flow at port 1.

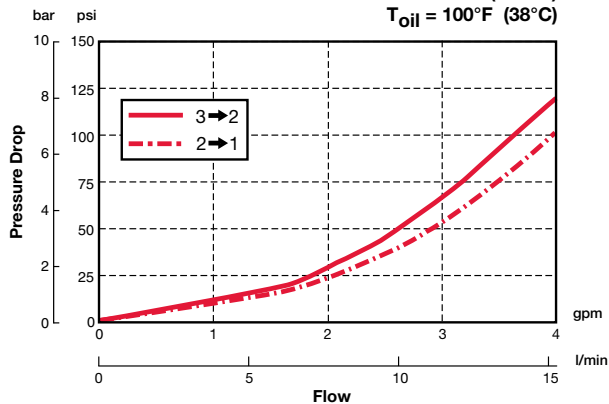
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	4 gpm (15 l/min)
Internal Leakage	5.5 cu in/min. at 3000 psi and 135 SUS (90 cc/min at 207 bar and 28 cSt)
Fluid Operating Temp. Range	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw at 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC
Minimum Pull-in Current to Operate Valve	70% of nominal amperage
Typical Response Time (Varies with Pressure and Flow)	On: 30 to 60 ms Off: 20 to 40 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)
Installation	No orientation restrictions
Cavity	FC06-3 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02582050 Finisher: 02582051
Cartridge Weight	3.0 oz (85 grams)
Coil Weight	3.1 oz (88 grams)
Cartridge Material	Steel with hardened work surfaces. Zinc plated solenoid tube surface. Buna N or Viton® o-rings Solid thermoplastic polyester back-up rings.
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation
Seal Kits	Buna-N P/N: 02610186 Viton® P/N: 02610187

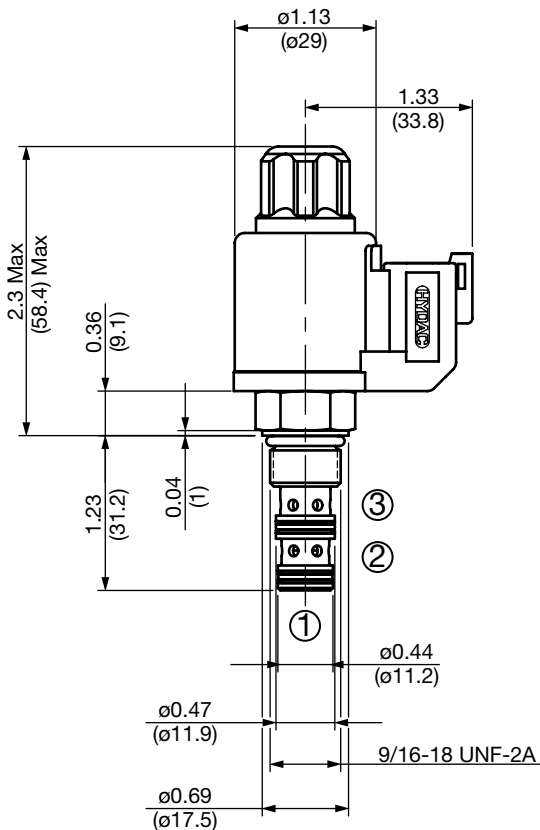
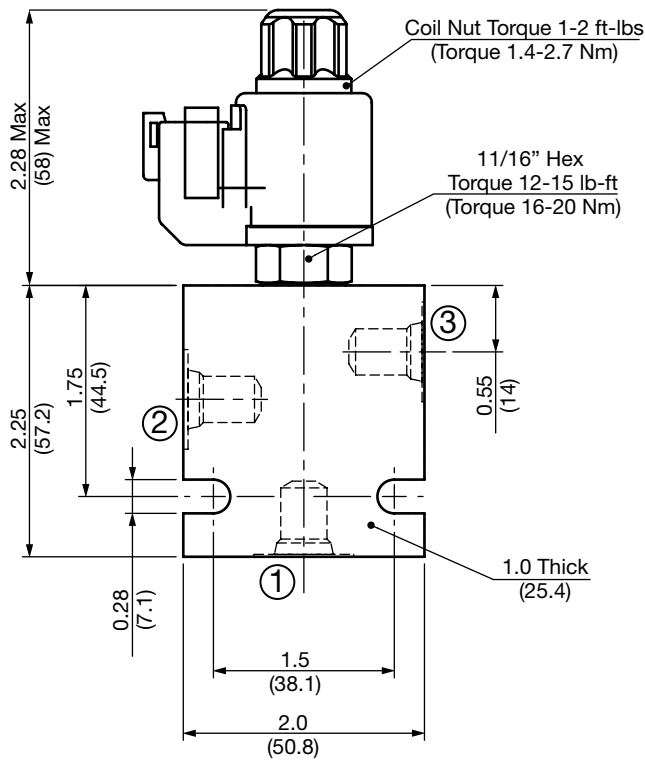


Performance

Measured at 135 SUS (28 cSt)
 T_{oil} = 100°F (38°C)



Dimensions



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

Model Code

WK06C-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
 blank = No manual override
 M = Manual override, push type
 (for availability consult factory)
- Body & Ports** _____
 C = Cartridge only
 AS4 = SAE-4 Ports, aluminum body
 SS4 = SAE-4 Ports, steel body
- Seals** _____
 N = Buna-N
 V = Viton®
- Coil Voltage** _____
 0 = No coil, cartridge only
 DC 12 = 12 VDC
 24 = 24 VDC
 AC 115 = 105 VDC (only available with connector DG)
 230 = 205 VDC (only available with connector DG)
 (All model 32-1329 coils are DC. AC models require an external diode bridge mounted outside the coil)**
- Coil Connector** _____
 DG = EN 175301-803-B (IP65 Rated)**
 DC DL = Leadwires (2) - 18" long (46 cm) AWG18, TYPE UL 1815 (IP69K Rated)*
 DN = Deutsch DT04-2P integral molded (IP69K Rated)*

Use mating plug EN 175301-803-B without diode bridge for DC voltages P/N 02600570

Use mating plug EN 175301-803-B w/diode bridge for AC voltages P/N 02600582

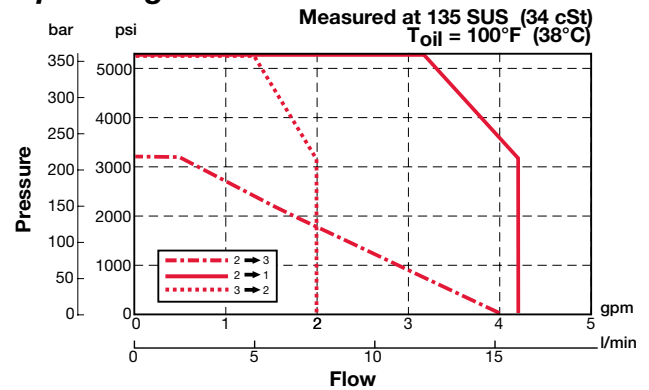
Coil Model 32-1329

For other coil connector types consult factory

**Mating Plugs sold separately

*Coils with internal transient suppression diode are available, consult factory.

Operating Limits



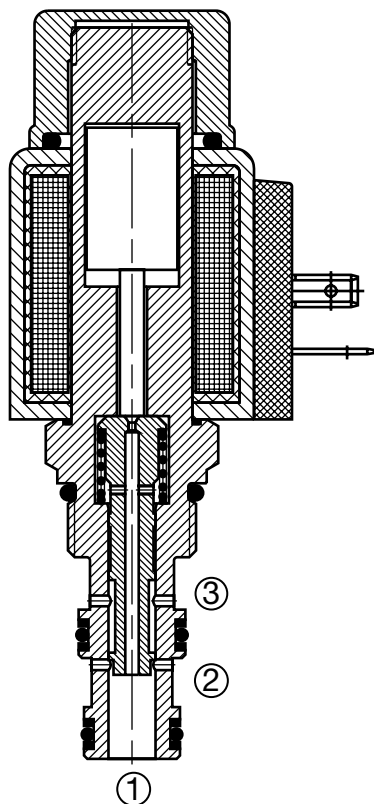
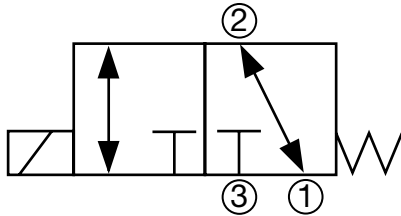
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH063-AS4	02600492	Aluminum, anodized	3500 psi (245 bar)	0.37 lbs (0.17 kg)
FH063-SS4	02600493	Steel, zinc plated	6000 psi (420 bar)	1.07 lbs (0.43 kg)

*Please refer to Line Bodies & Cavities section for details

WK08C-01 Spool Type, Direct Acting Up to 5 gpm (19 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08C allows flow from port 2 to port 1 bi-directionally, while blocking flow at port 3. When energized the spool shifts and opens flow from port 2 to port 3 bi-directionally, while blocking flow at port 1.

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.

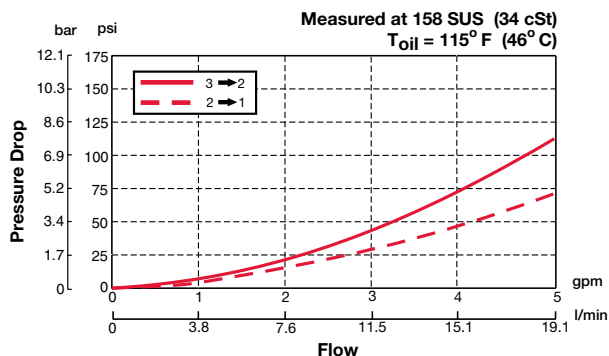
Features

- Push type manual override button, protected by rubber cap

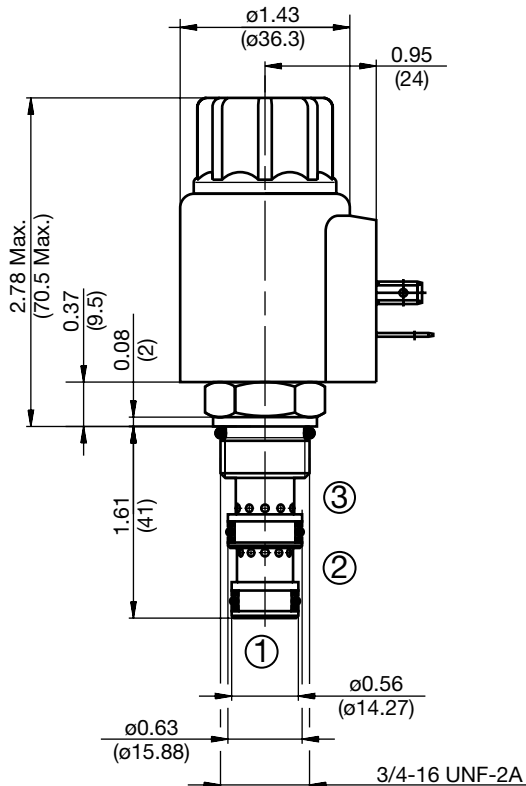
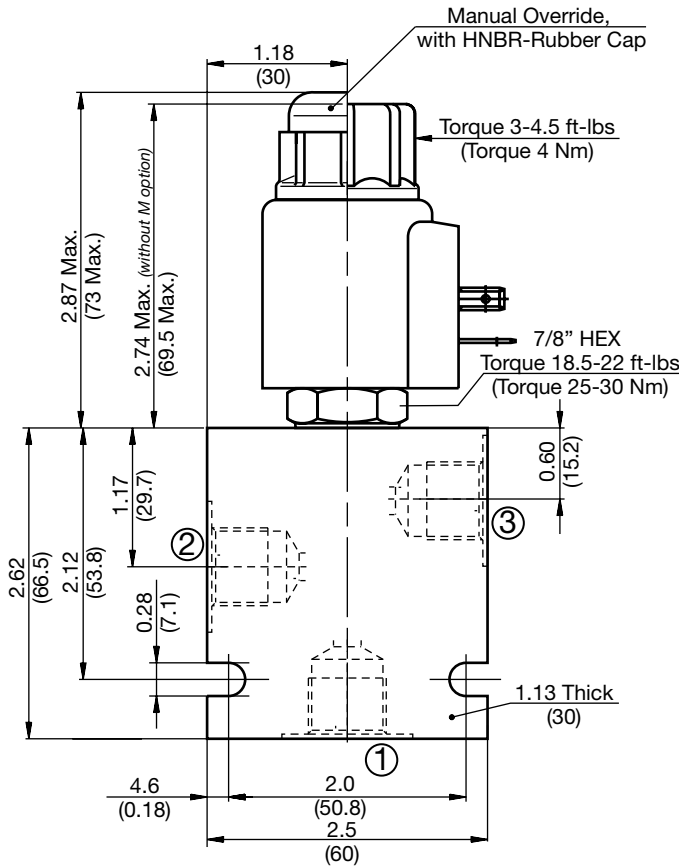
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm (19 l/min)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 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 @ 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)
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	FC08-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580086 Finisher: 02580087
Cartridge Weight	0.40 Lbs. (0.18 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 P/N: 03054795 Viton® P/N: 02591059

Performance



Dimensions



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

Model Code

WK08C-01 M-C-N-24 DN

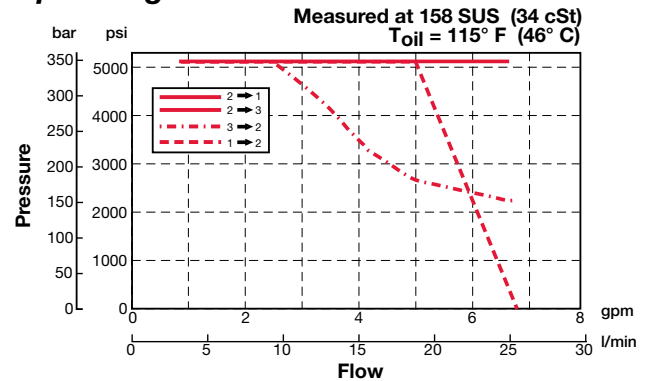
- Valve Model** _____
- Override Option** _____
 blank = No manual override
 M = Manual override, push type
- Body & Ports** _____
 C = Cartridge only
 AS6 = SAE-6 Ports, aluminum body
 SS6 = SAE-6 Ports, steel body
- Seals** _____
 N = Buna-N
 V = Viton®
- Coil Voltage** _____
 0 = No coil, cartridge 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.

Operating Limits



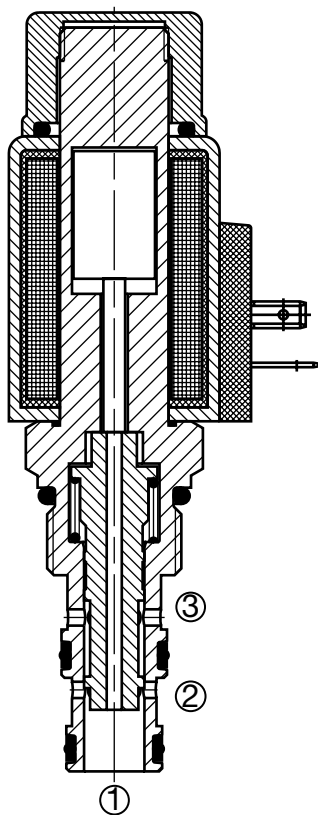
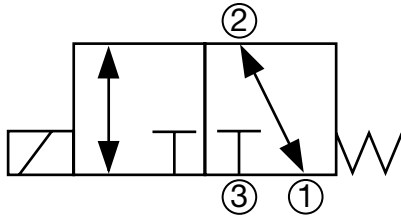
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH083-AS6	03011424	Aluminum, anodized	3500 psi (245 bar)	0.58 lbs (0.26 kg)
FH083-SS6	00560920	Steel, zinc plated	6000 psi (420 bar)	1.7 lbs (0.77 kg)

*Please refer to Line Bodies & Cavities section for details

WK10C-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10C allows flow from port 2 to port 1 bi-directionally, while blocking flow at port 3. When energized the spool shifts and opens flow from port 2 to port 3 bi-directionally, while blocking flow at port 1.

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.

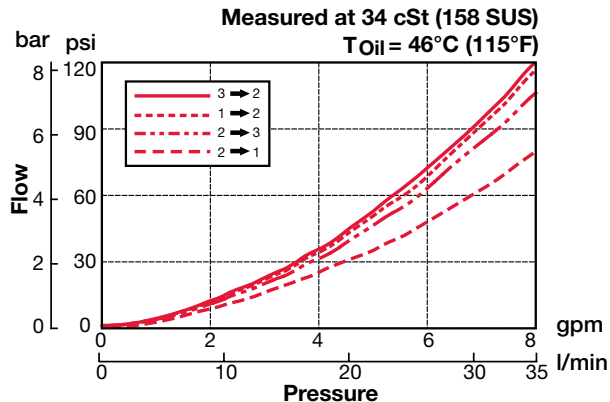
Features

- Push type manual override button, protected by rubber cap

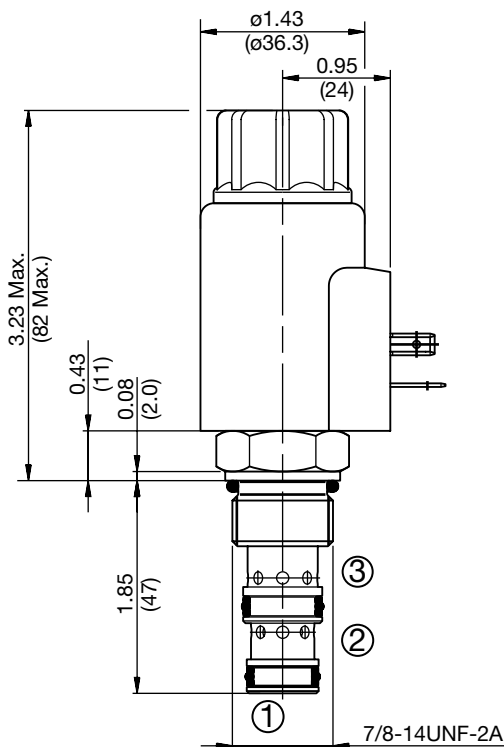
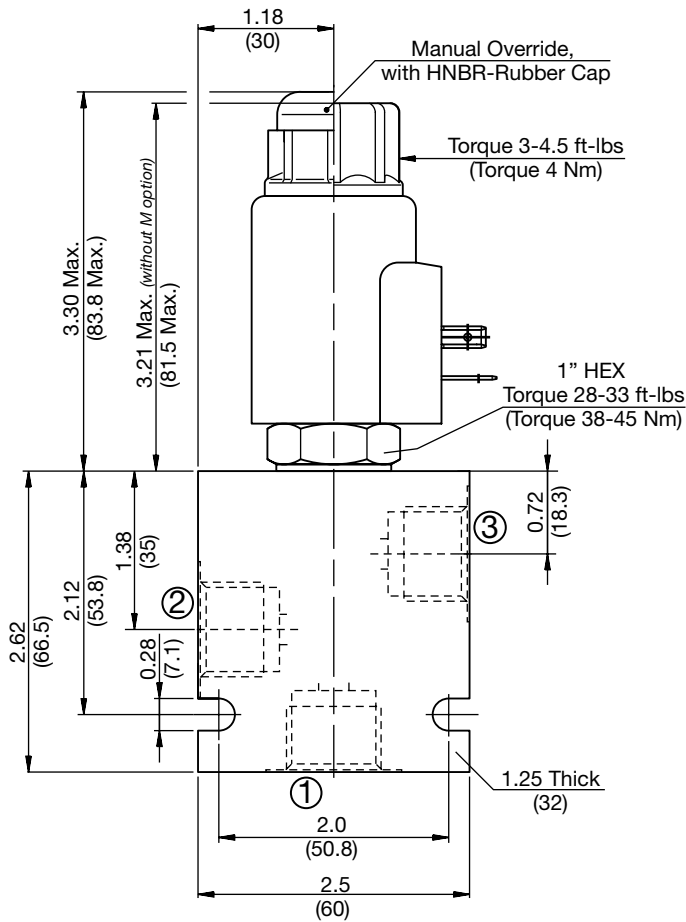
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm (32 l/min)
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 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 @ 68°F (20°C)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580092 Finisher: 02580093
Cartridge Weight	0.52 Lbs. (0.24 kg)
Coil Weight	0.51 Lbs. (0.23 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 P/N: 03071274 Viton® P/N: 03049443

Performance



Dimensions



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

Model Code

WK10C-01 M-C-N-24 DN

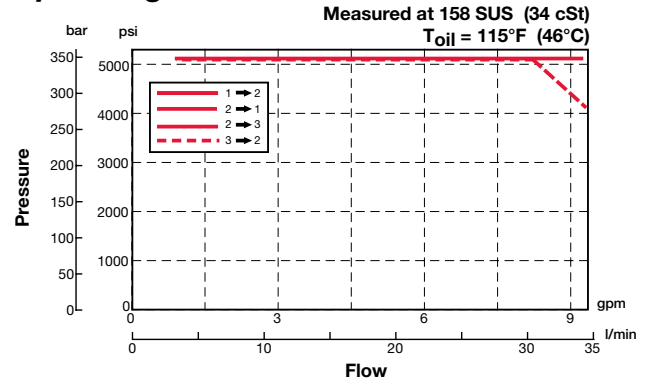
- Valve Model** _____
- Override Option** _____
 blank = No manual override
 M = Manual override, push type
- Body & Ports** _____
 C = Cartridge only
 AS8 = SAE-8 Ports, aluminum body
 SS8 = SAE-8 Ports, steel body
- Seals** _____
 N = Buna-N
 V = Viton®
- Coil Voltage** _____
 0 = No coil, cartridge 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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Operating Limits



Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH103-AS8	03038095	Aluminum, anodized	3500 psi (245 bar)	0.60 lbs (0.27 kg)
FH103-SS8	03037704	Steel, zinc plated	6000 psi (420 bar)	1.74 lbs (0.79 kg)

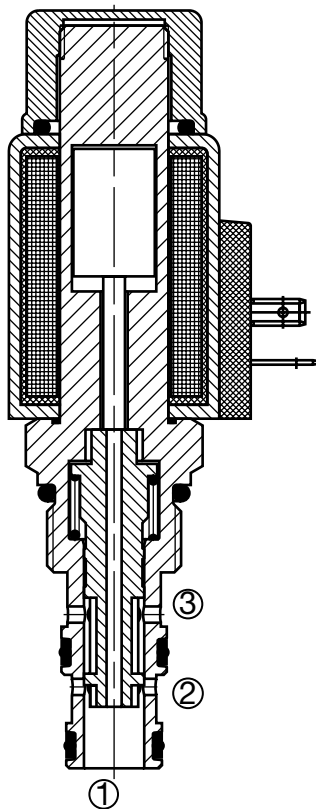
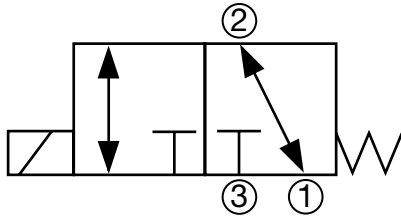
*Please refer to Line Bodies & Cavities section for details

WK10C-40

Spool Type, Direct Acting

Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve, optimized for low pressure drop applications.

Operation

When de-energized the WK10C allows flow from port 2 to port 1 bi-directionally, while blocking flow at port 3. When energized the spool shifts and opens flow from port 2 to port 3 bi-directionally, while blocking flow at port 1.

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.

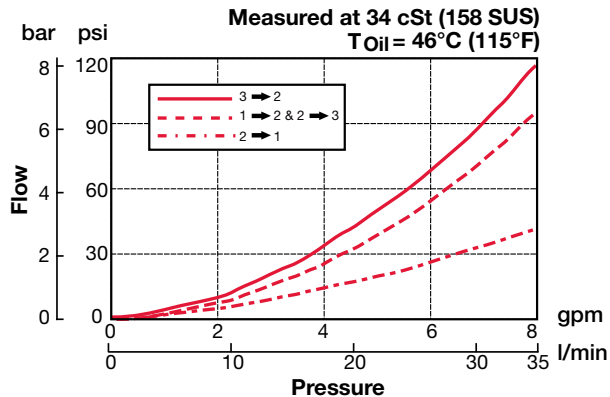
Features

- Push type manual override button, protected by rubber cap

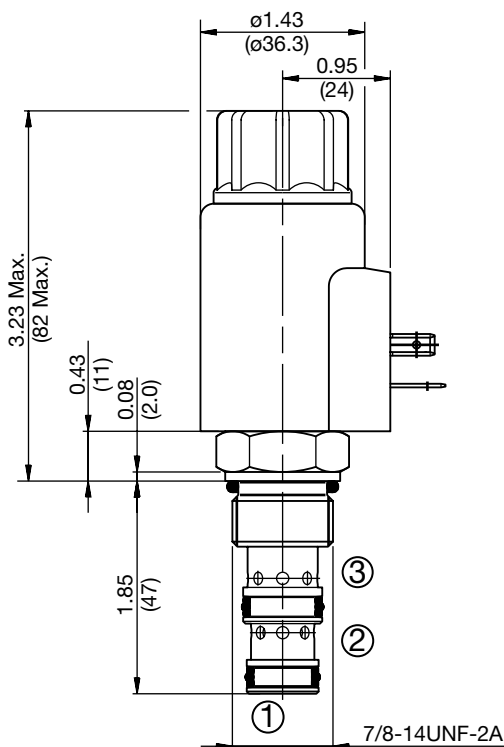
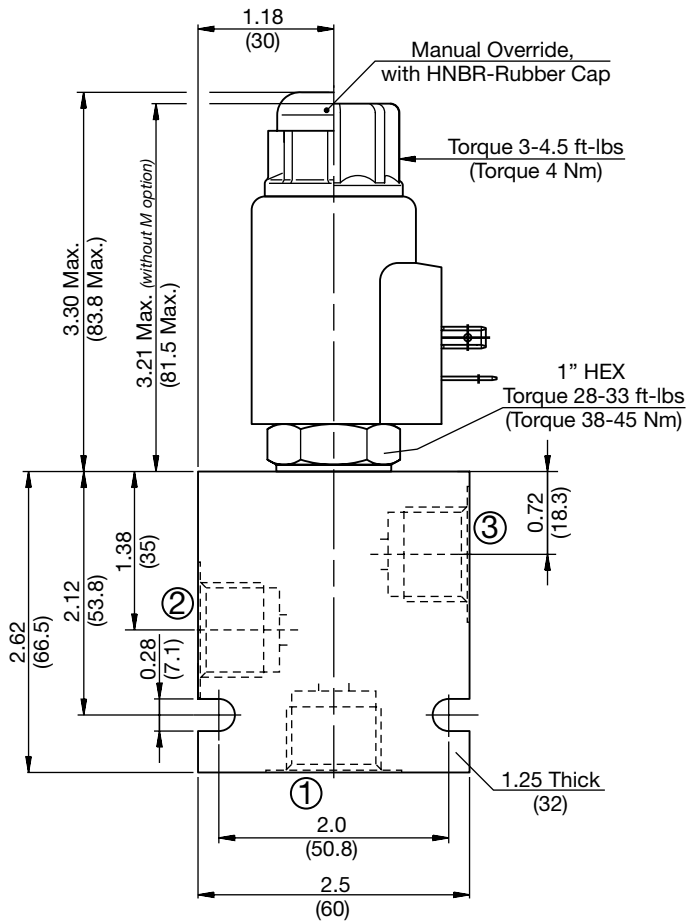
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm (32 l/min)
Internal Leakage	18 cu in./min. at 3600 psi and 158 SUS (250 cc/min at 250 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 @ 68°F (20°C)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580092 Finisher: 02580093
Cartridge Weight	0.52 Lbs. (0.24 kg)
Coil Weight	0.51 Lbs. (0.23 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 P/N: 03071274 Viton® P/N: 03049443

Performance



Dimensions



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

Model Code

WK10C-40 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum body
- SS8 = SAE-8 Ports, steel body

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

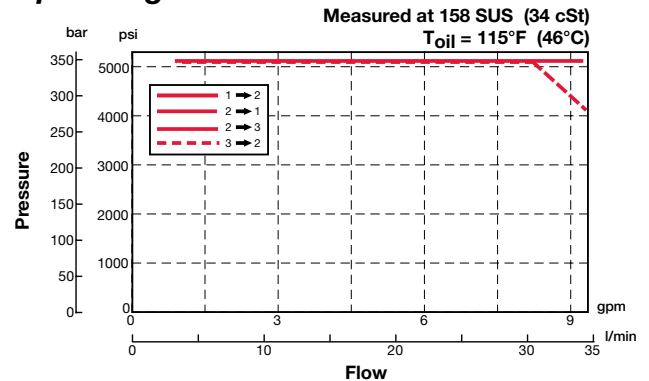
- AG = EN 175301-803-A

Coil Model 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Operating Limits



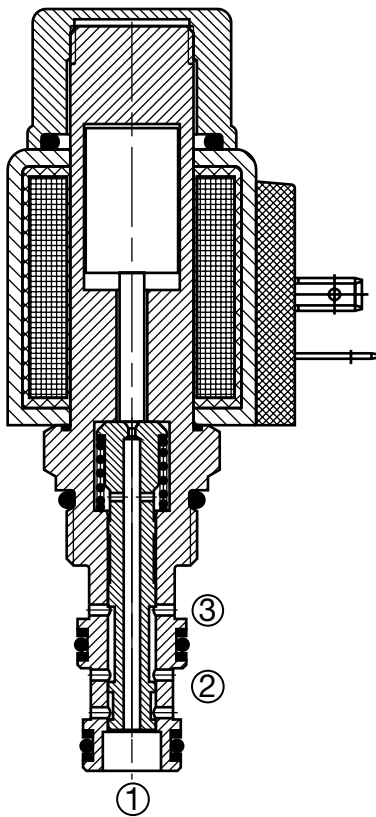
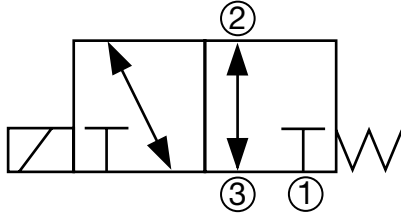
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH103-AS8	03038095	Aluminum, anodized	3500 psi (245 bar)	0.60 lbs (0.27 kg)
FH103-SS8	03037704	Steel, zinc plated	6000 psi (420 bar)	1.74 lbs (0.79 kg)

*Please refer to Line Bodies & Cavities section for details

WK08D-01
Spool Type, Direct Acting
Up to 5 gpm (19 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08D allows flow from port 3 to port 2 bi-directionally, while blocking flow at port 1. When energized the spool shifts and opens flow from port 2 to port 1 bi-directionally, while blocking flow at port 3.

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.

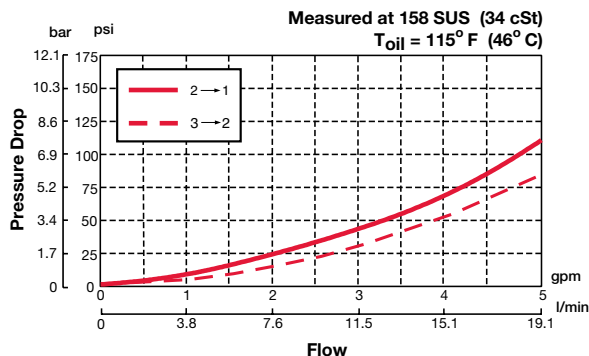
Features

- Push type manual override button, protected by rubber cap

Specifications

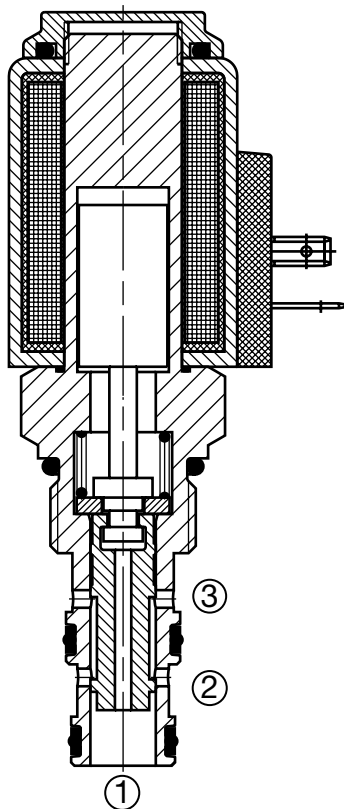
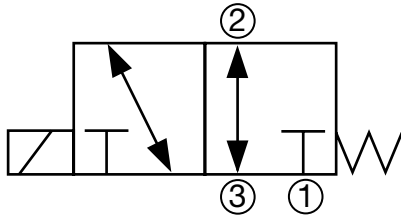
Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm (19 l/min)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) (Consult factory for usage at temp. outside range.)
Ambient Temperature Range	-4° to 140°F (-20° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw @ 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)
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	FC08-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580086 Finisher: 02580087
Cartridge Weight	0.40 Lbs. (0.18 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 P/N: 03054795 Viton® P/N: 02591059

Performance



WK10D-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10D allows flow from port 2 to port 3 bi-directionally, while blocking flow at port 1. When energized the spool shifts and opens flow from port 2 to port 1 bi-directionally, while blocking flow at port 3.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

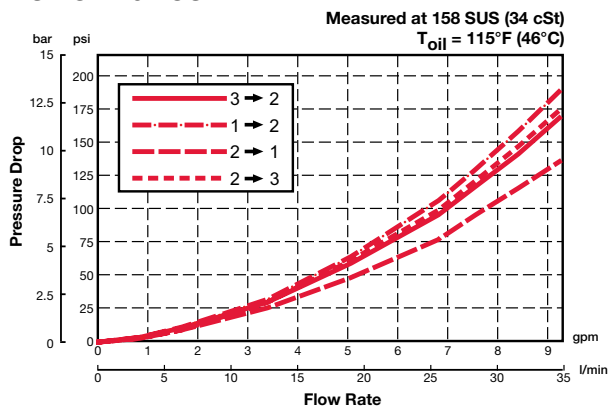
Features

- Screw type manual override option

Specifications

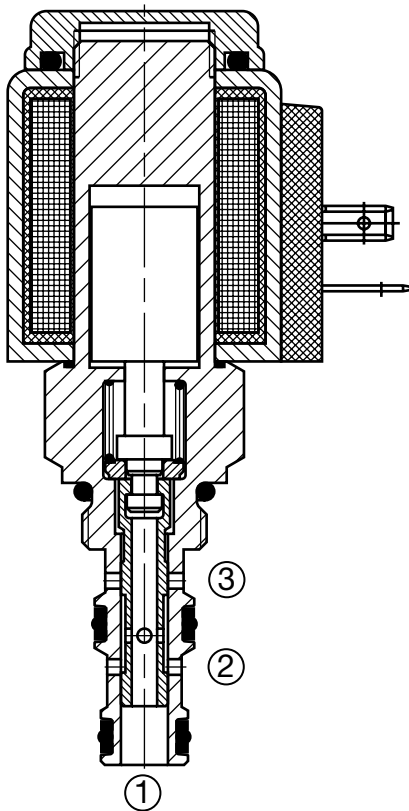
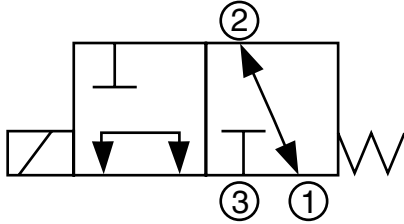
Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm (32 l/min)
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <i>(Consult factory for usage at temp. outside range.)</i>
Ambient Temperature Range	-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)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580092 Finisher: 02580093
Cartridge Weight	0.52 Lbs. (0.24 kg)
Coil Weight	0.51 Lbs. (0.23 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 FS103-N P/N: 03071274 Viton® FS103-V P/N: 03049443

Performance



WK07L-01 Spool Type, Direct Acting Up to 2.5 gpm (10 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK07L allows flow from port 2 to port 1 bi-directionally, while blocking flow at port 3. When energized the spool shifts and opens flow from port 1 to port 3 bi-directionally, while blocking flow at port 2.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

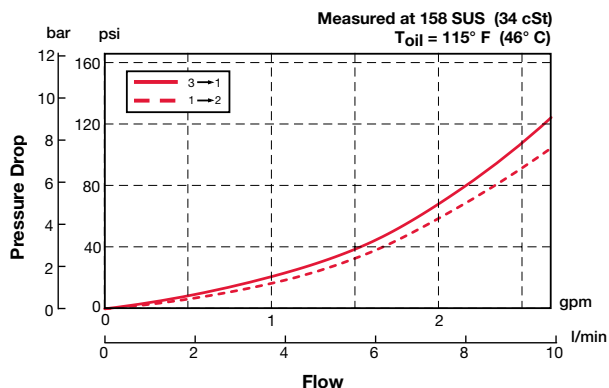
Features

- One piece cartridge body design to maximize reliability
- Screw type manual override option

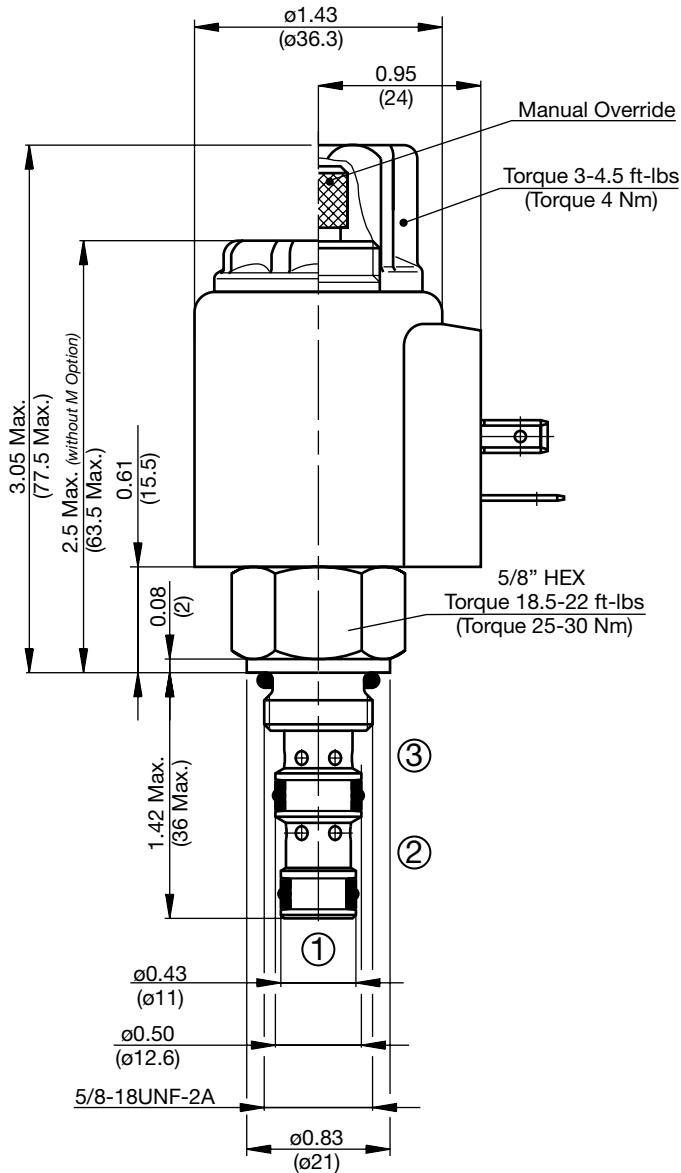
Specifications

Operating Pressure	5000 psi (350 bar)		
Nominal Flow	2.5 gpm at 5000 psi (10 l/min at 350 bar)		
Internal Leakage	4.3 cu in/min. at 3000 psi and 158 SUS (70 cc/min at 280 bar and 34 cSt)		
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)		
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	FC07-3 <i>(contact HYDAC for information)</i>		
Cavity Tools	Rougher:	N/A	
	Finisher:	N/A	
Cartridge Weight	0.33 Lbs. (0.15 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	FS073-N	P/N: Consult factory
	Viton®	FS073-V	P/N: Consult factory

Performance



Dimensions



Model Code

WK07L-01 M-C-N-24 DN

Valve Model _____

Override Option _____

- blank = No manual override
- M = Manual override, screw type

Body & Ports _____

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

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

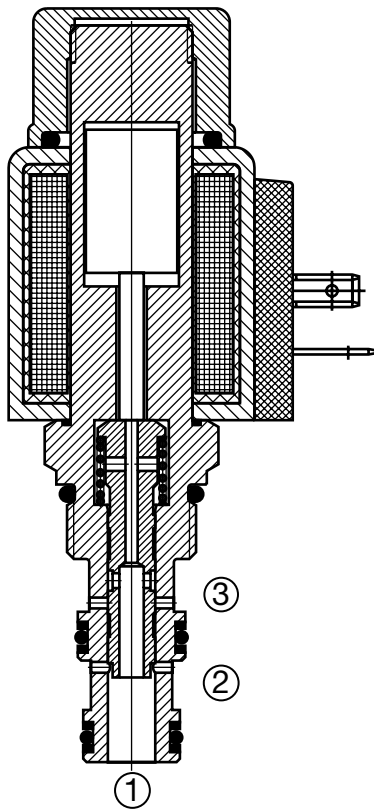
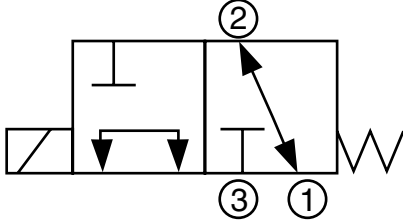
For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

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

WK08L-01 Spool Type, Direct Acting Up to 4.5 gpm (17 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08L allows flow from port 2 to port 1 bi-directionally, while blocking flow at port 3. When energized the spool shifts and opens flow from port 1 to port 3 bi-directionally, while blocking flow at 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.

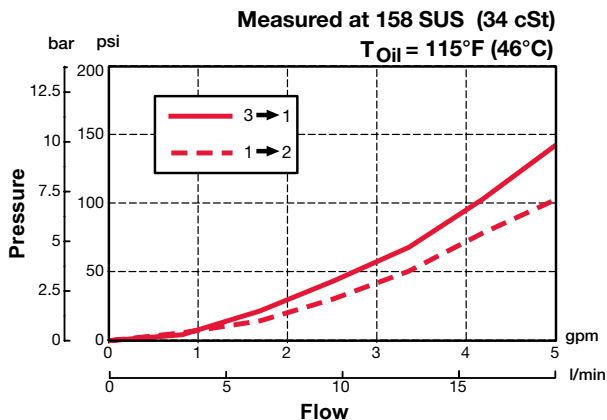
Features

- Push type manual override button, protected by rubber cap

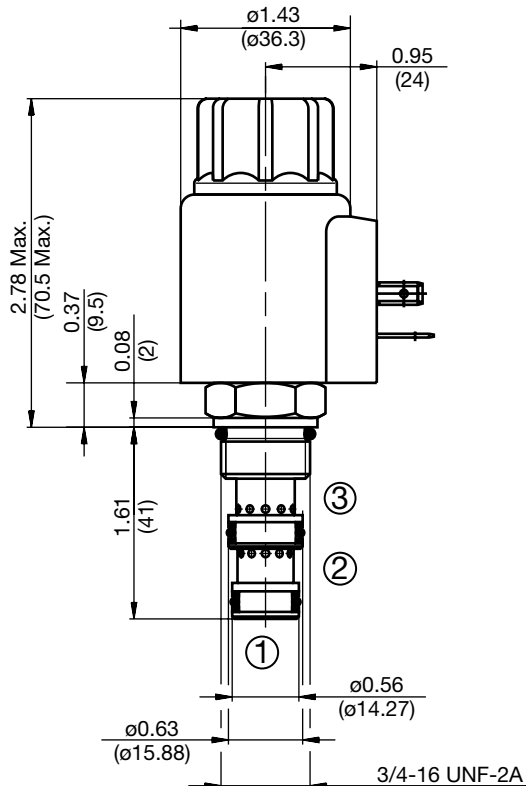
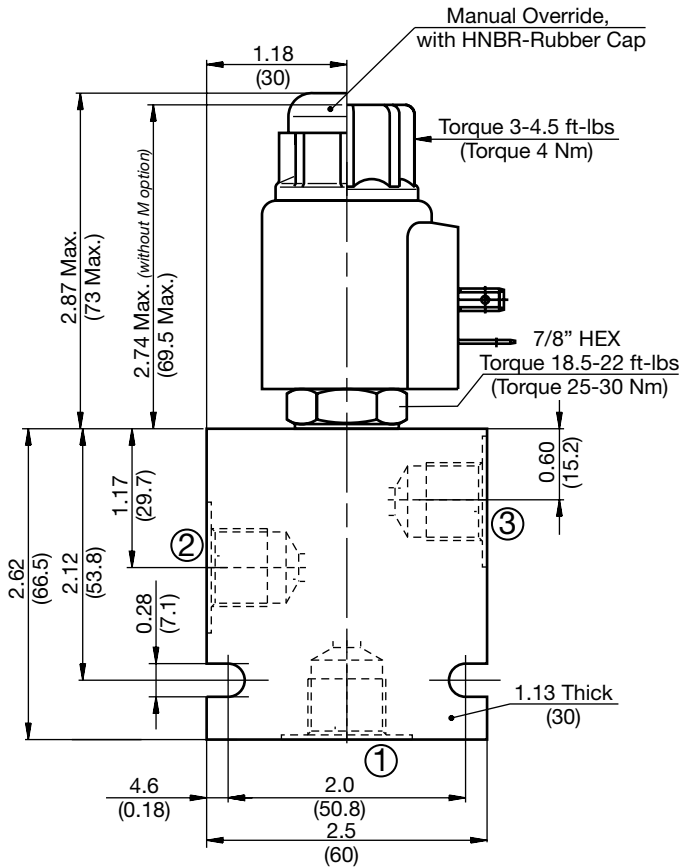
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	4.5 gpm (17 l/min)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 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 @ 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)
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	FC08-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580086 Finisher: 02580087
Cartridge Weight	0.40 Lbs. (0.18 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 P/N: 03054795 Viton® P/N: 02591059

Performance



Dimensions



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

Model Code

WK08L-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

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

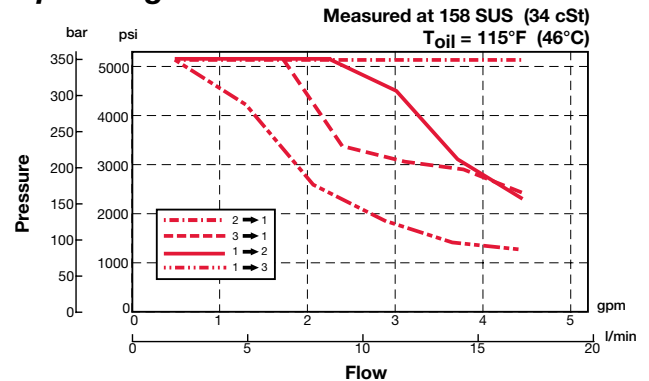
- DC DG = EN 175301-803-A
- DS = Dual spade (SAEJ858a)*
- DL = Leadwires (2) - 18" long (46 cm)*
- DW = WeatherPak™ on leadwires - 9.5" long (24 cm)*
- DN = Deutsch™ DT04-2P, molded, axial (IP69K Rated)*
- DT = Amp Junior Timer™, molded, radial mount*
- AC AG = EN 175301-803-A

Coil Model 40-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Operating Limits



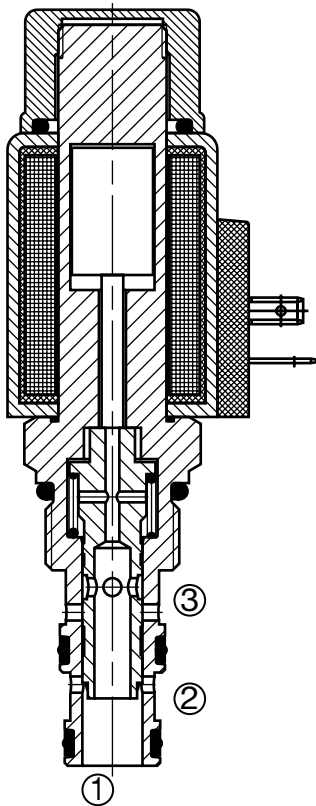
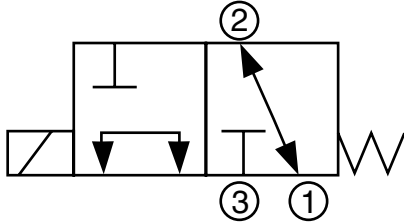
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH083-AS6	03011424	Aluminum, anodized	3500 psi (245 bar)	0.58 lbs (0.26 kg)
FH083-SS6	00560920	Steel, zinc plated	6000 psi (420 bar)	1.7 lbs (0.77 kg)

*Please refer to Line Bodies & Cavities section for details

WK10L-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 3-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10L allows flow from port 2 to port 1 bi-directionally, while blocking flow at port 3. When energized the spool shifts and opens flow from port 1 to port 3 bi-directionally, while blocking flow at 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.

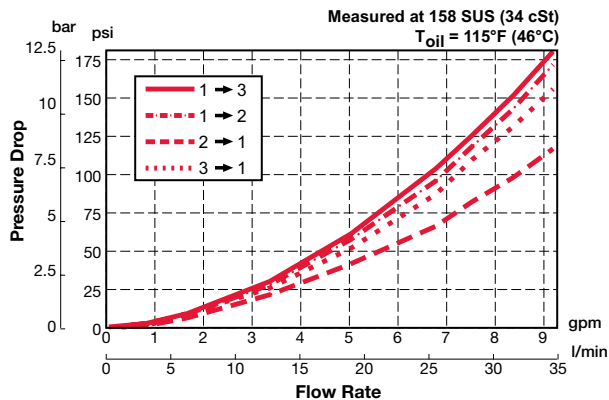
Features

- One piece cartridge body design to maximize reliability
- Push type manual override button, protected by rubber cap

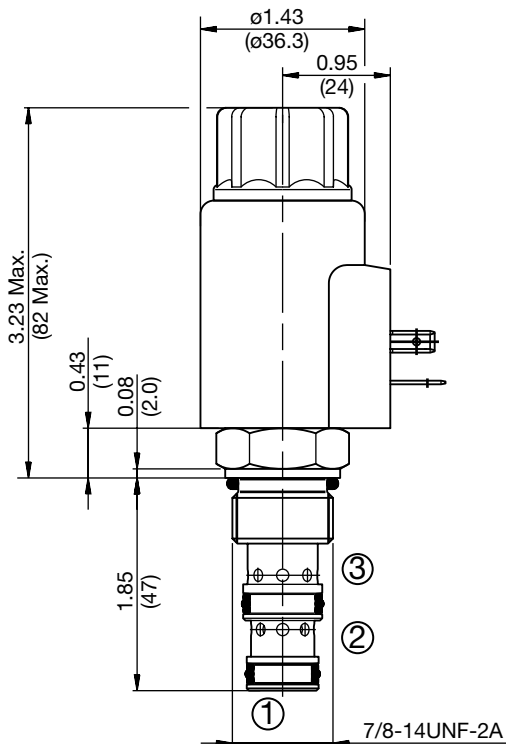
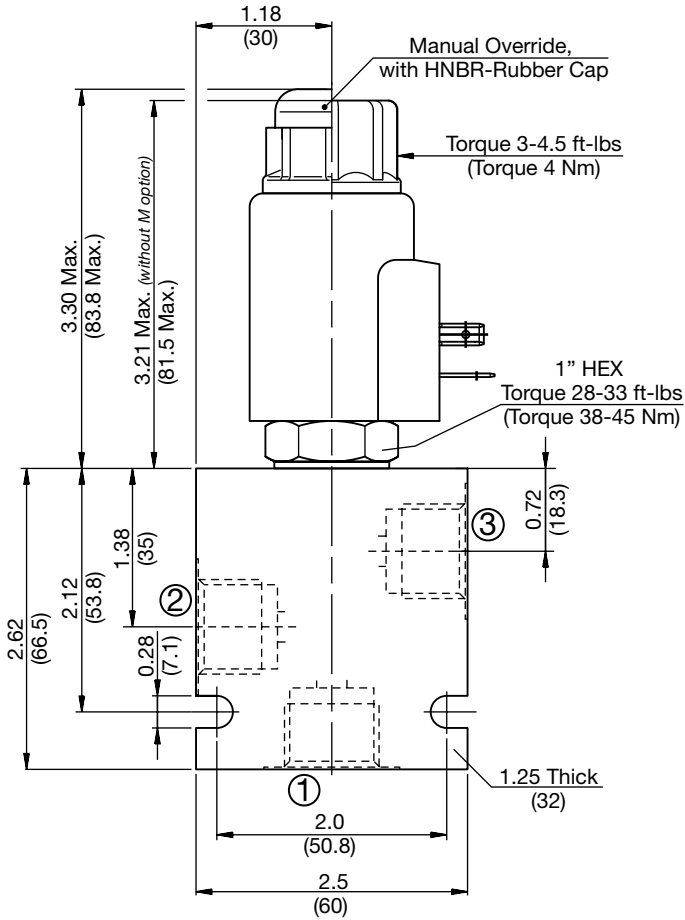
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm (32 l/min)
Internal Leakage	6 cu in/min. at 3600 psi and 158 SUS (100 cc/min at 250 bar and 34 cSt)
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)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-3 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580092 Finisher: 02580093
Cartridge Weight	0.52 Lbs. (0.24 kg)
Coil Weight	0.51 Lbs. (0.23 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 FS103-N P/N: 03071274 Viton® FS103-V P/N: 03049443

Performance



Dimensions



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

Model Code

WK10L-01 M-C-N-24 DN

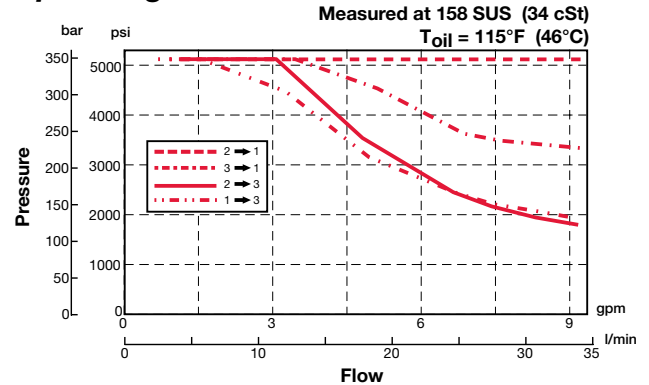
- Valve Model** _____
- Override Option** _____
 - blank = No manual override
 - M = Manual override, push type
- Body & Ports** _____
 - C = Cartridge only
 - AS8 = SAE-8 Ports, aluminum body
 - SS8 = SAE-8 Ports, steel body
- Seals** _____
 - N = Buna-N
 - V = Viton®
- Coil Voltage** _____
 - 0 = No 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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Operating Limits



Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH103-AS8	03038095	Aluminum, anodized	3500 psi (245 bar)	0.60 lbs (0.27 kg)
FH103-SS8	03037704	Steel, zinc plated	6000 psi (420 bar)	1.74 lbs (0.79 kg)

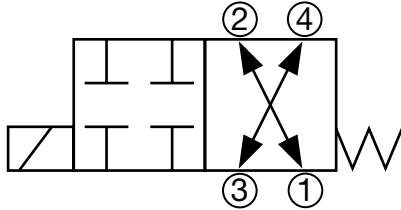
*Please refer to Line Bodies & Cavities section for details

WK08A-01

Spool Type, Direct Acting

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

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08A allows flow from port 2 to port 1 bi-directionally and port 3 to port 4 bi-directionally. When energized the spool shifts and blocks all ports.

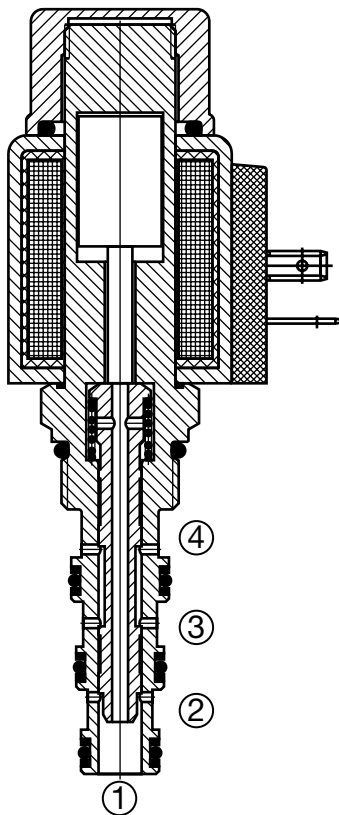
Operation of Manual Override Option: To override, push and hold the override button. The override is not detented. The manual override option is intended for emergency use, not for continuous duty operation.

Features

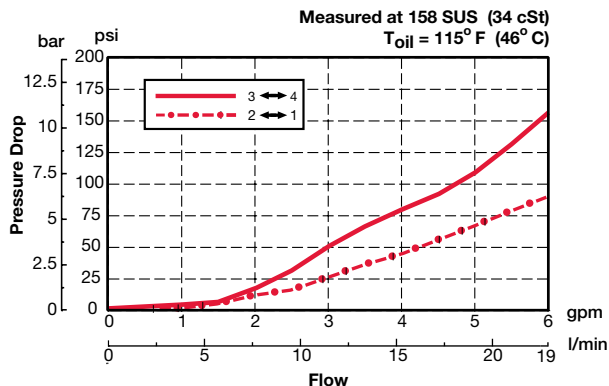
- Push type manual override button, protected by rubber cap

Specifications

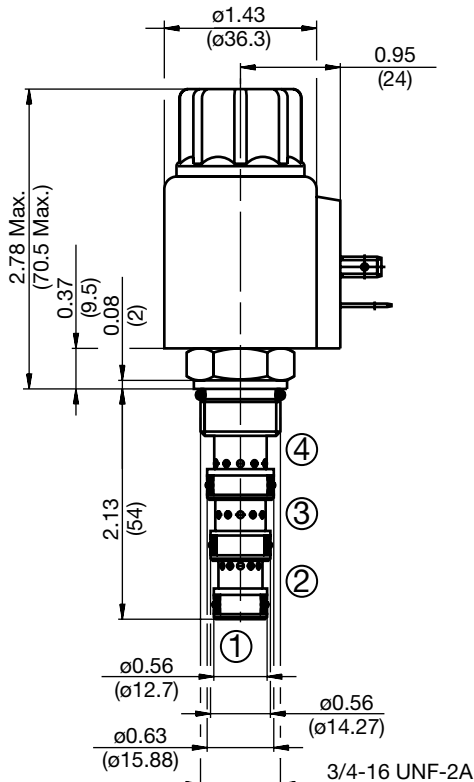
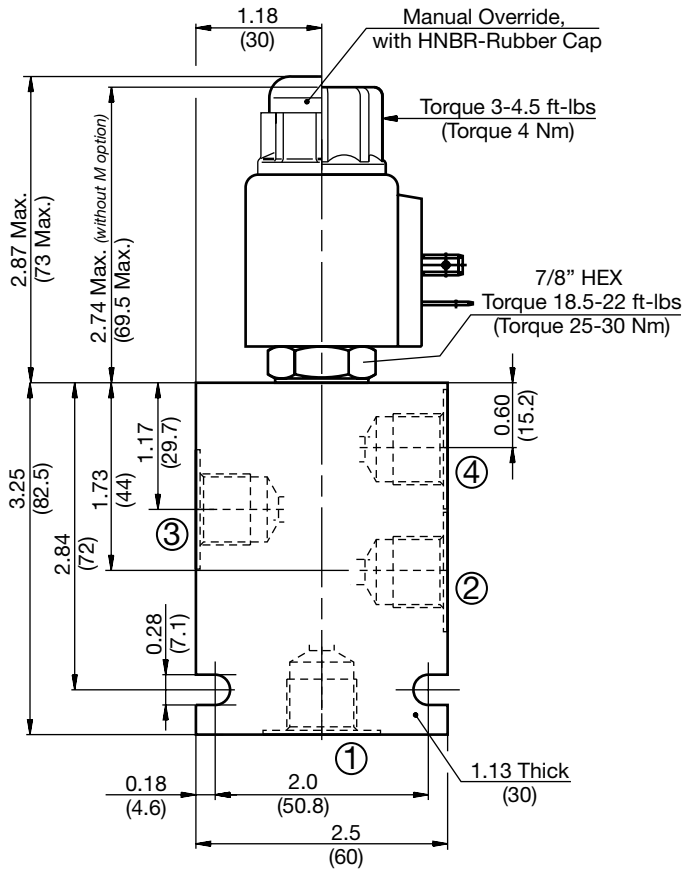
Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm at 3600 psi (19 l/min at 250 bar) 2 gpm at 5000 psi (7.6 l/min at 350 bar)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <i>(Consult factory for 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)
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	FC08-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.42 Lbs. (0.19 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 P/N: 03071272 Viton® P/N: 03071273



Performance



Dimensions



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

Model Code

WK08A-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
 blank = No manual override
 M = Manual override, push type
- Body & Ports** _____
 C = Cartridge only
 AS6 = SAE-6 Ports, aluminum body
 SS6 = SAE-6 Ports, steel body
- 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.

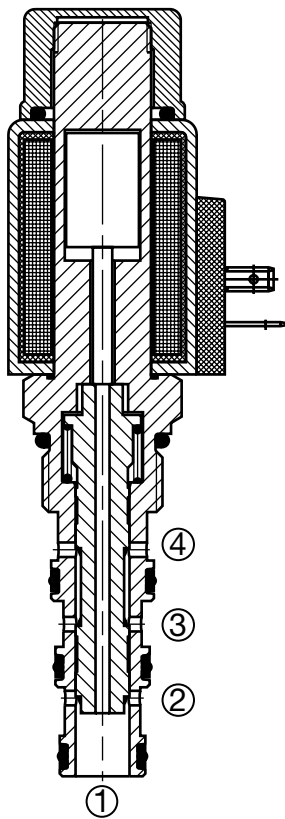
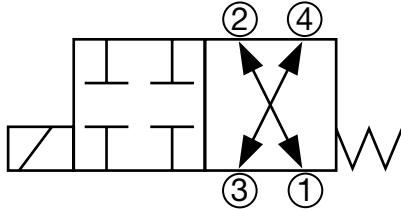
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10A-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10A allows flow from port 3 to port 4 bi-directionally and port 2 to port 1 bi-directionally. When energized the spool shifts and blocks flow at all ports.

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.

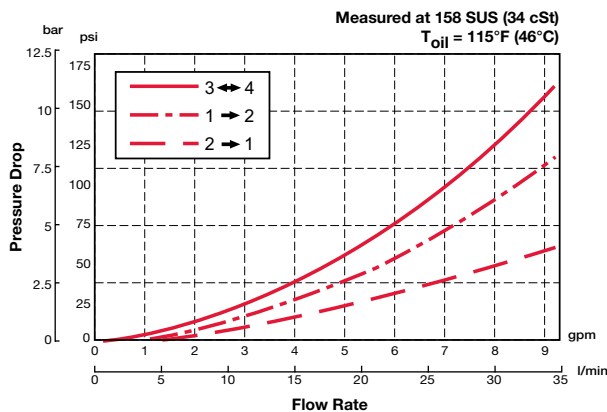
Features

- Push type manual override button, protected by rubber cap

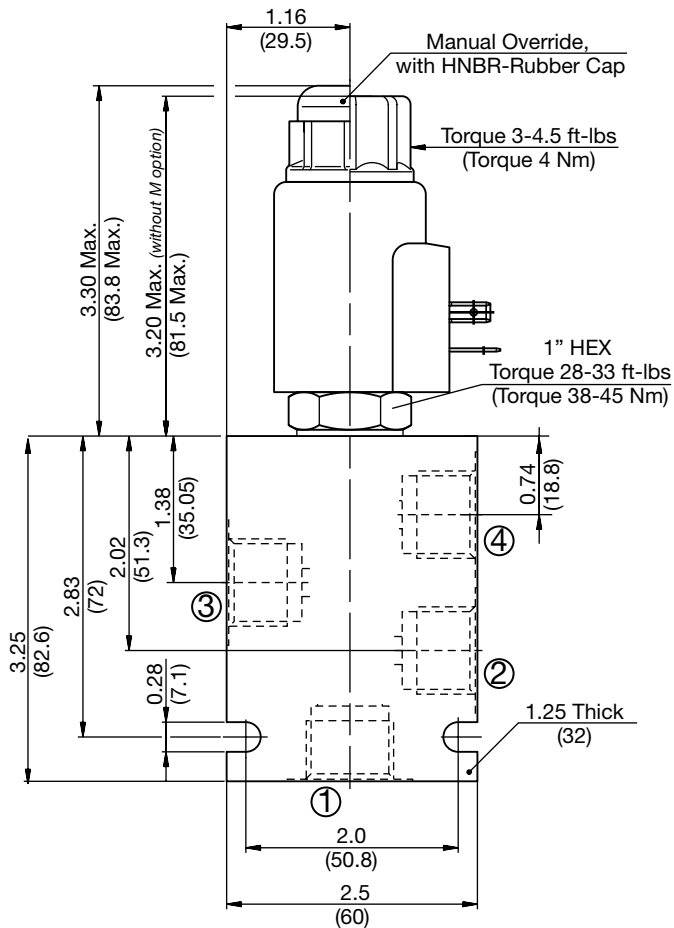
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 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 @ 68°F (20°C)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.55 Lbs. (0.25 kg)
Coil Weight	0.51 Lbs. (0.23 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 P/N: 03051912 Viton® P/N: 03071275

Performance



Dimensions



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

Model Code

WK10A-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum body
- SS8 = SAE-8 Ports, steel body

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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

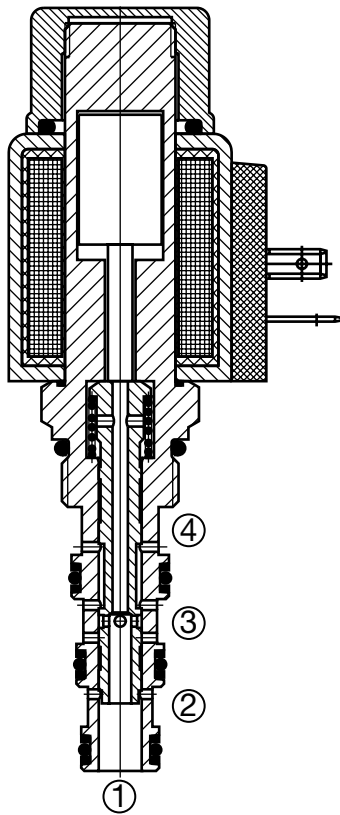
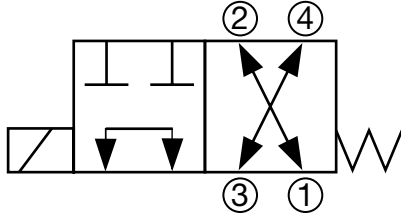
Standard Line Bodies*

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

*Please refer to Line Bodies & Cavities section for details

WK08K-01 Spool Type, Direct Acting Up to 4 gpm (15 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08K allows flow from port 2 to port 1 bi-directionally and port 3 to port 4 bi-directionally. When energized the spool shifts and allows flow from port 1 to port 3 bi-directionally, ports 2 and 4 are blocked.

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.

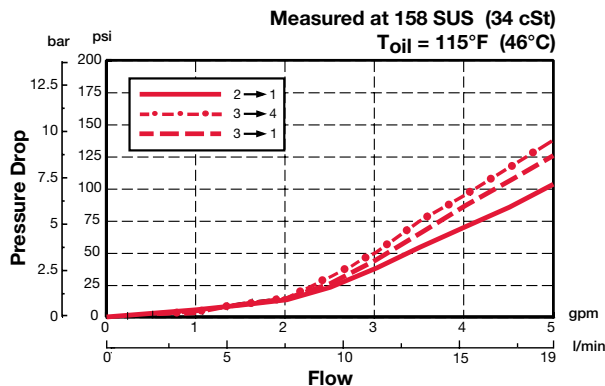
Features

- Push type manual override button, protected by rubber cap

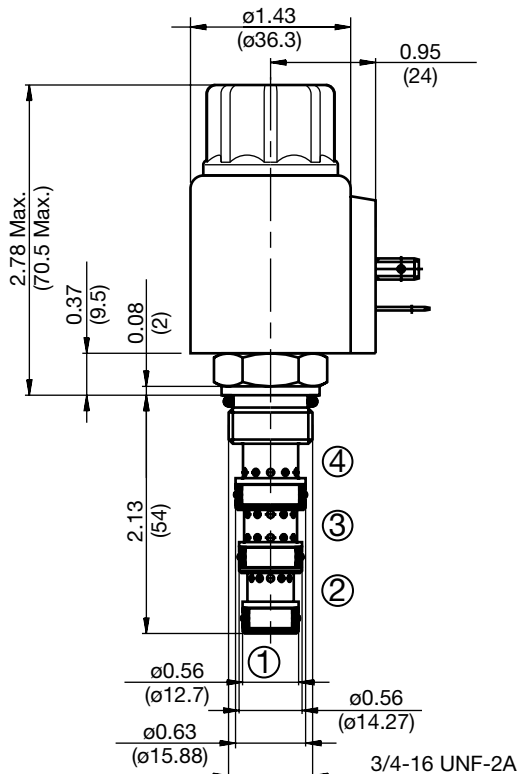
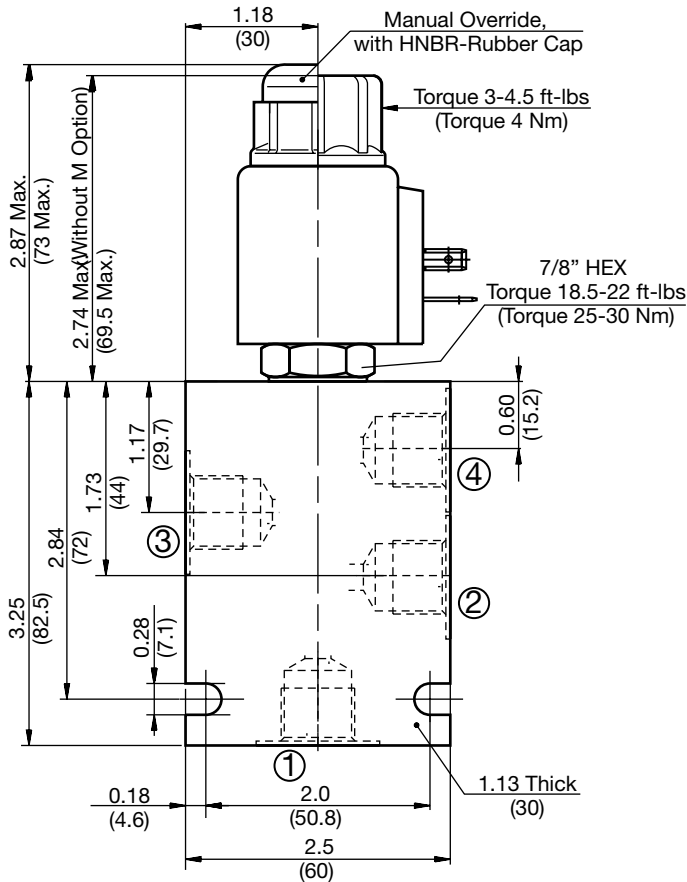
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	4 gpm at 3600 psi (15 l/min at 250 bar) 2 gpm at 5000 psi (7.6 l/min at 350 bar)
Internal Leakage	5 cu in/min. at 3600 psi and 158 SUS (82 cc/min at 250 bar and 34 cSt)
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)
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	FC08-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.42 Lbs. (0.19 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 FS084-N P/N: 03071272 Viton® FS084-V P/N: 03071273

Performance



Dimensions



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

Model Code

WK08K-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
 blank = No manual override
 M = Manual override, push type
- Body & Ports** _____
 C = Cartridge only
 AS6 = SAE-6 Ports, aluminum body
 SS6 = SAE-6 Ports, steel body
- 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.

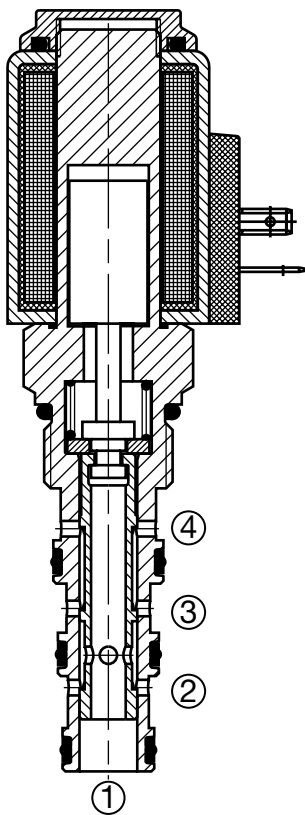
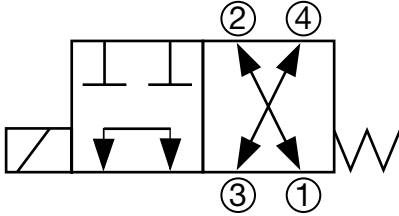
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10K-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10K allows flow from port 1 to port 2 bi-directionally and from port 3 to port 4 bi-directionally. When energized the spool shifts and allows flow from port 1 to port 3 bi-directionally, ports 2 and 4 are blocked.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

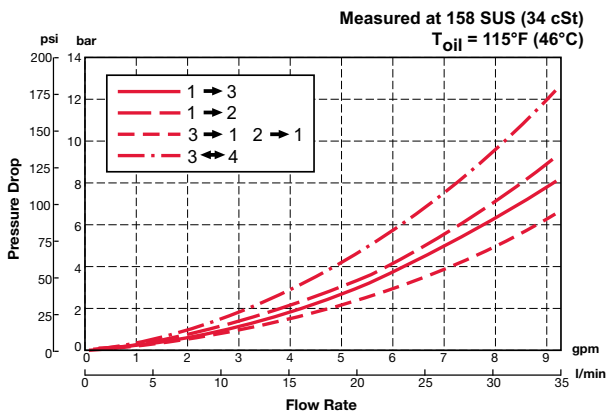
Features

- Screw type manual override

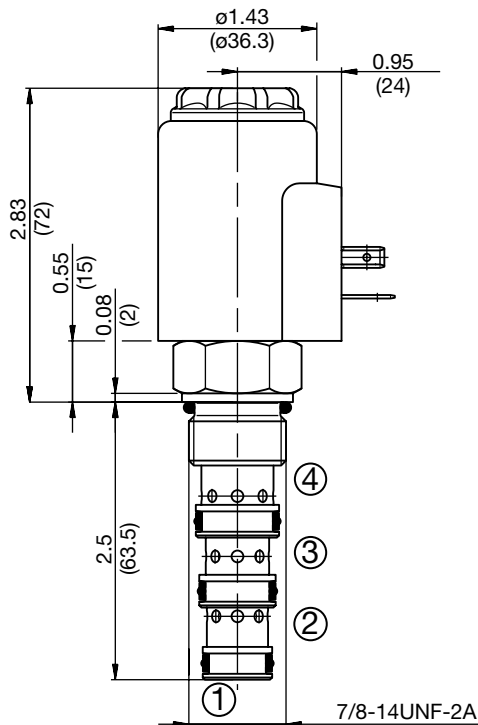
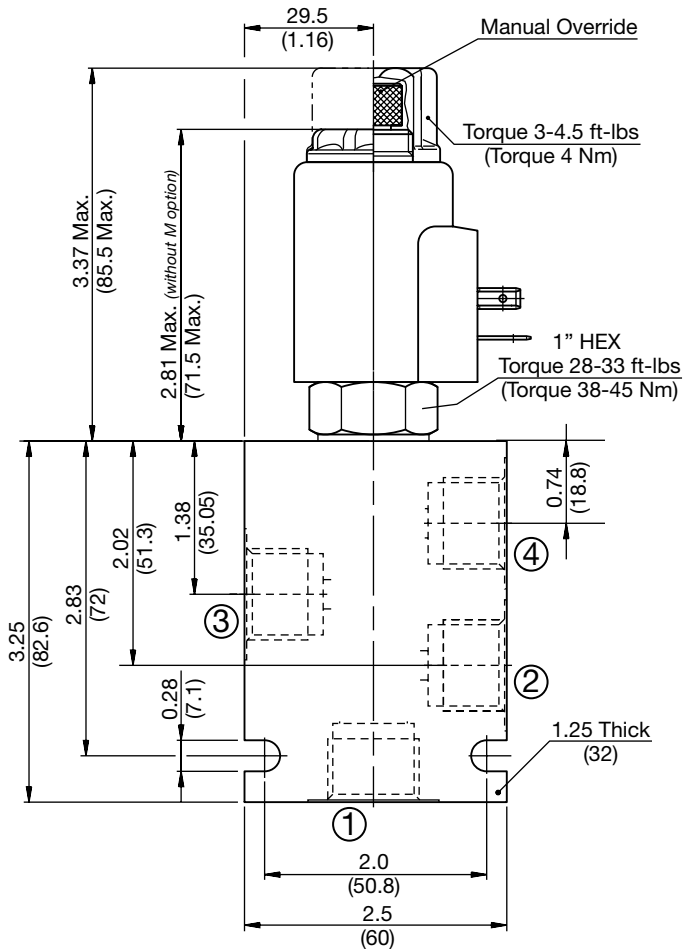
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 bar and 34 cSt)
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)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.55 Lbs. (0.25 kg)
Coil Weight	0.51 Lbs. (0.23 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 FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance



Dimensions



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

Model Code

WK10K-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
blank = No manual override
M = Manual override, screw type
- Body & Ports** _____
C = Cartridge only
AS8 = SAE-8 Ports, aluminum body
SS8 = SAE-8 Ports, steel body
- 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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

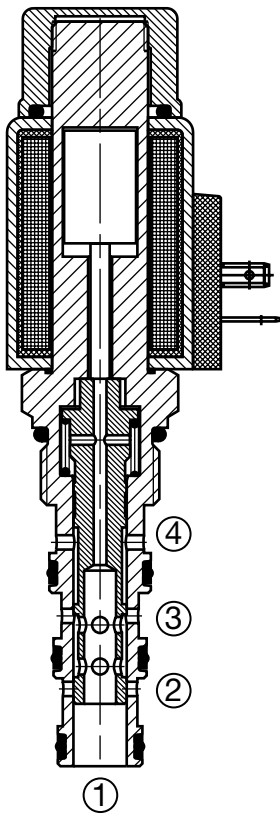
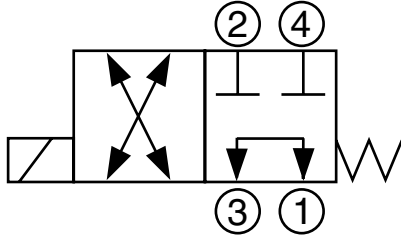
Standard Line Bodies*

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

*Please refer to Line Bodies & Cavities section for details

WK10N-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10N allows flow from port 1 to port 3 bi-directionally, ports 2 and 4 are blocked. When energized the spool shifts and allows flow from port 1 to port 2 bi-directionally and from port 3 to port 4 bi-directionally.

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

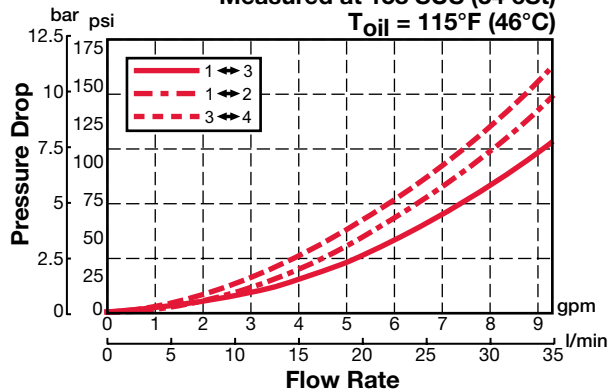
- Push type manual override button, protected by rubber cap

Specifications

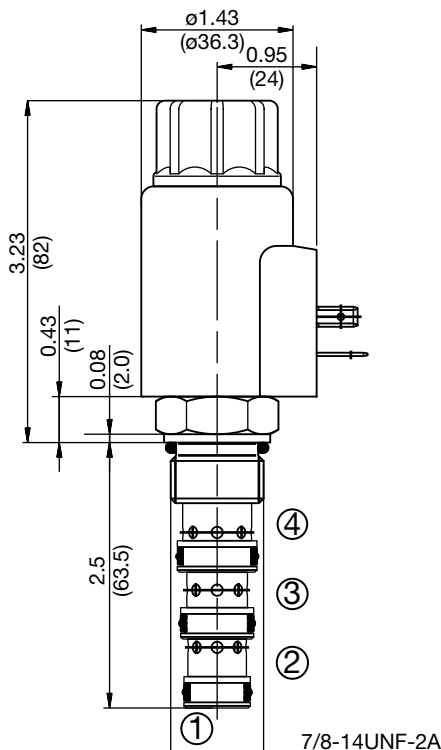
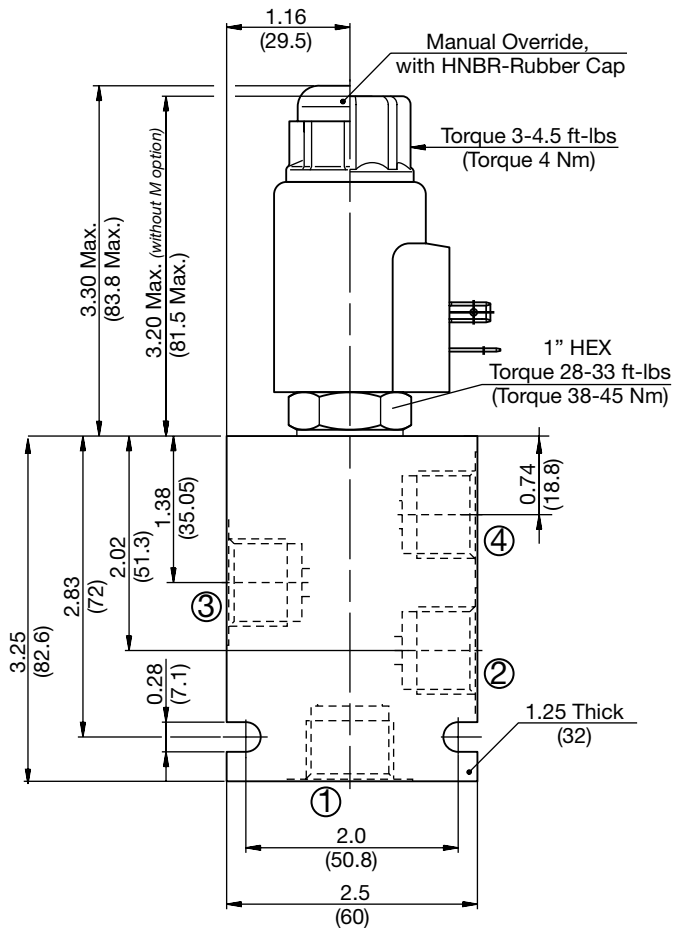
Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) (Consult factory for usage at temp. outside range.)
Ambient Temperature Range	-4° to 140°F (-20° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw @ 68°F (20°C)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.55 Lbs. (0.25 kg)
Coil Weight	0.51 Lbs. (0.23 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 P/N: 03051912 Viton® P/N: 03071275

Performance

Measured at 158 SUS (34 cSt)
T_{oil} = 115°F (46°C)



Dimensions



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

Model Code

WK10N-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
 - blank = No manual override
 - M = Manual override, push type
- Body & Ports** _____
 - C = Cartridge only
 - AS8 = SAE-8 Ports, aluminum body
 - SS8 = SAE-8 Ports, steel body
- 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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

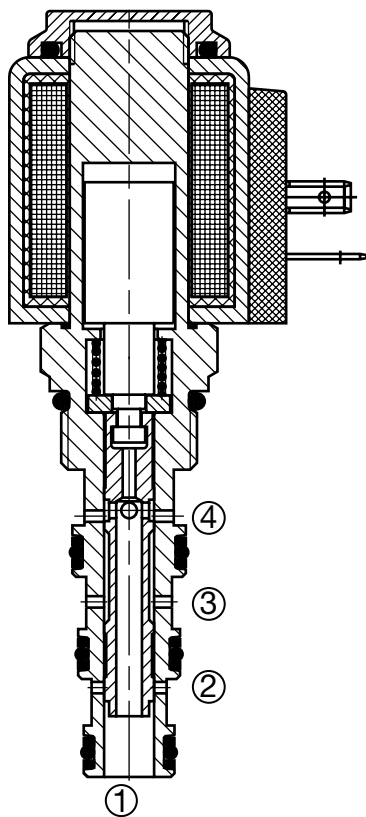
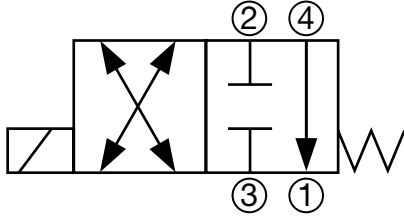
Standard Line Bodies*

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

*Please refer to Line Bodies & Cavities section for details

WK08P-01 Spool Type, Direct Acting Up to 4 gpm (15 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08P blocks flow at ports 2 and 3, flow is allowed from port 1 to port 4 bi-directionally. When energized the spool shifts and allows flow from port 1 to port 2 bi-directionally and from port 3 to port 4 bi-directionally.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

Features

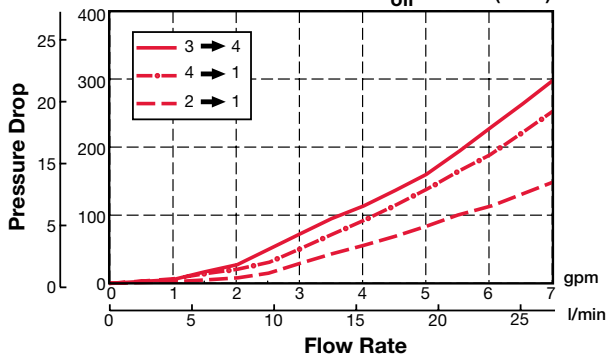
- Screw type manual override

Specifications

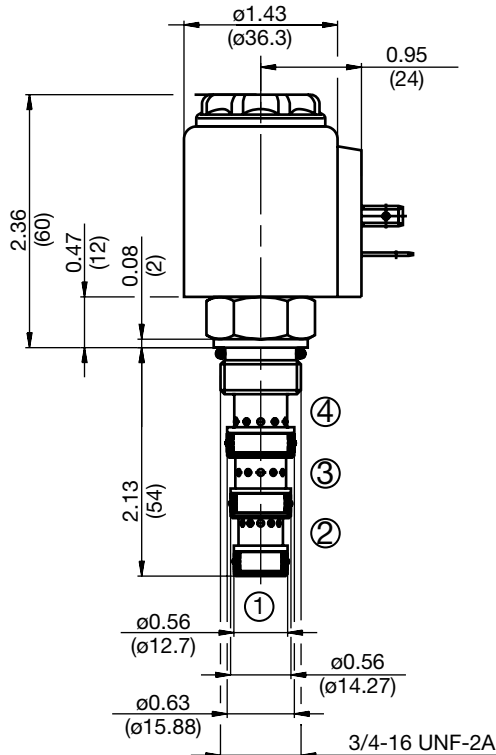
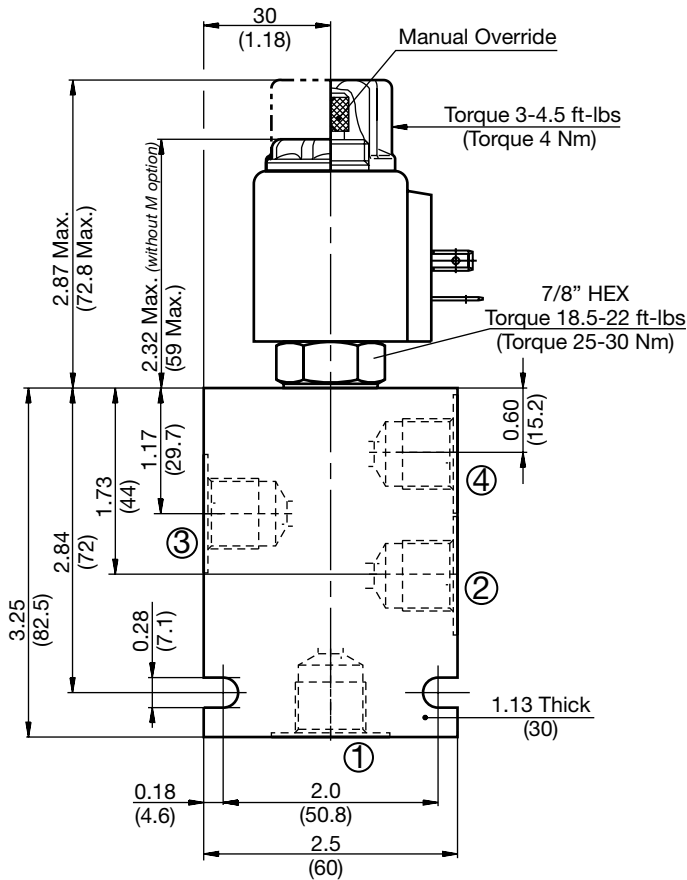
Operating Pressure	5000 psi (350 bar)
Nominal Flow	4 gpm at 3600 psi (15 l/min at 250 bar) 2 gpm at 5000 psi (7.6 l/min at 350 bar)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) (Consult factory for usage 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 @ 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)
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	FC08-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.42 Lbs. (0.19 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 FS084-N P/N: 03071272 Viton® FS084-V P/N: 03071273

Performance

Measured at 158 SUS (34 cSt)
 $T_{oil} = 115^{\circ}\text{F} (46^{\circ}\text{C})$



Dimensions



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

Model Code

WK08P-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, screw type

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

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.

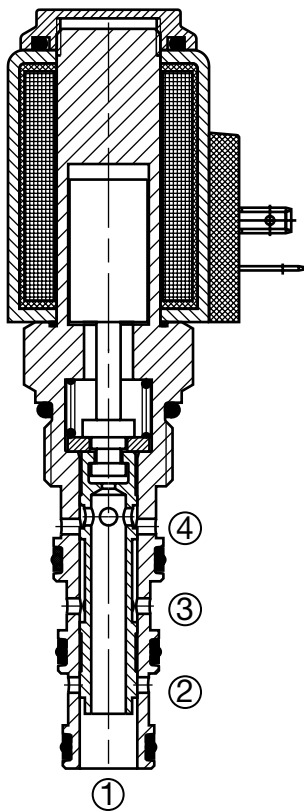
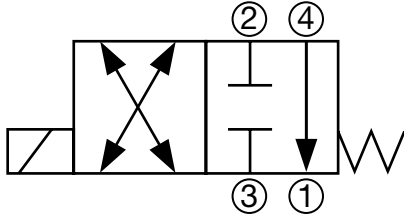
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10P-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10P blocks flow at ports 2 and 3, flow is allowed from port 1 to port 4 bi-directionally. When energized the spool shifts and allows flow from port 1 to port 2 bi-directionally and from port 3 to port 4 bi-directionally.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

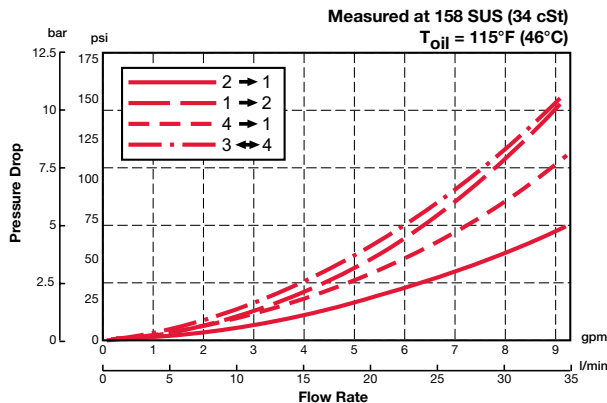
Features

- Screw type manual override

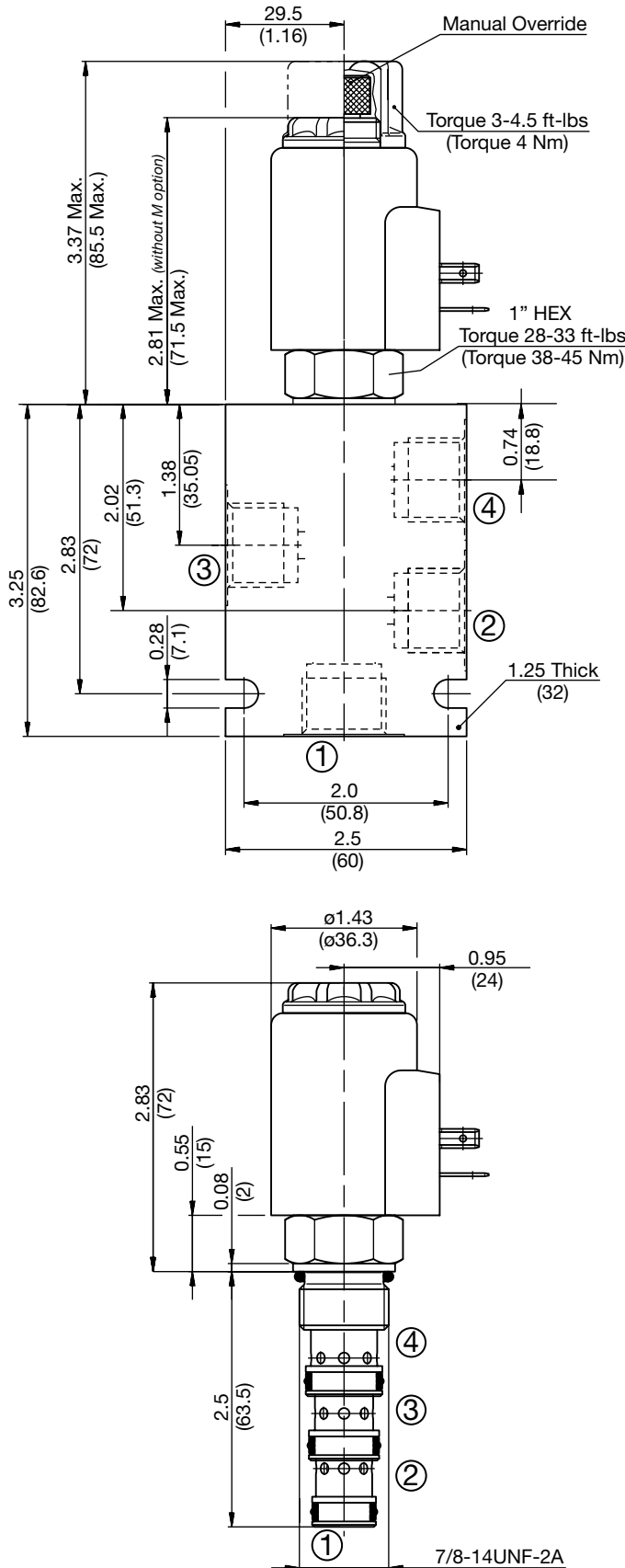
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 bar and 34 cSt)
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)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.55 Lbs. (0.25 kg)
Coil Weight	0.51 Lbs. (0.23 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 FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance



Dimensions



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

Model Code

WK10P-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, screw type

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum body
- SS8 = SAE-8 Ports, steel body

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 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

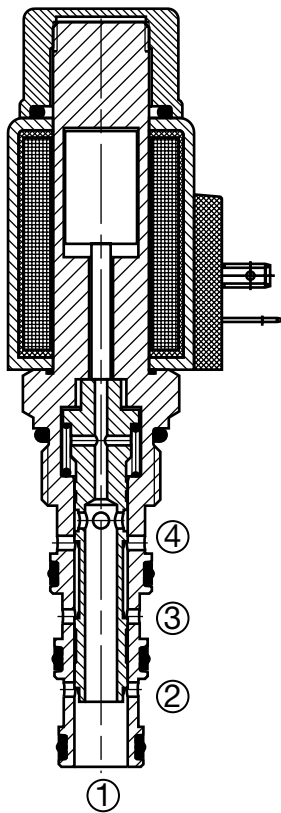
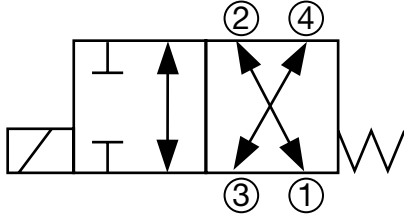
Standard Line Bodies*

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

*Please refer to Line Bodies & Cavities section for details

WK08R-01 Spool Type, Direct Acting Up to 5 gpm (19 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08R allows flow from port 2 to port 1 bi-directionally and port 3 to port 4 bi-directionally. When energized the spool shifts and allows bi-directional flow from port 1 to port 4, ports 2 and 3 are blocked.

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.

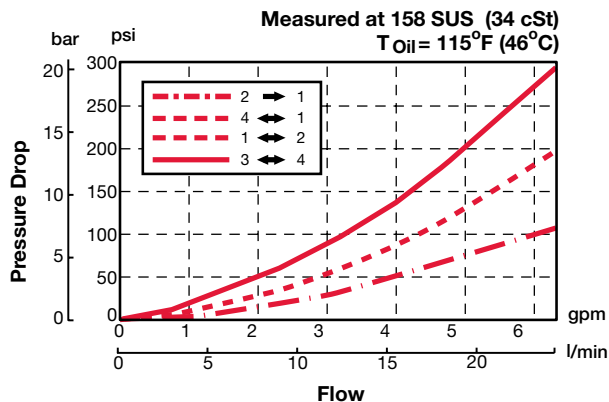
Features

- Push type manual override button, protected by rubber cap

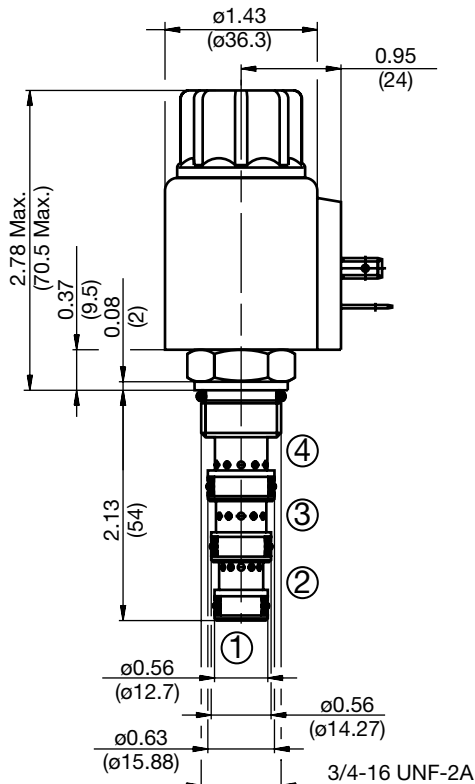
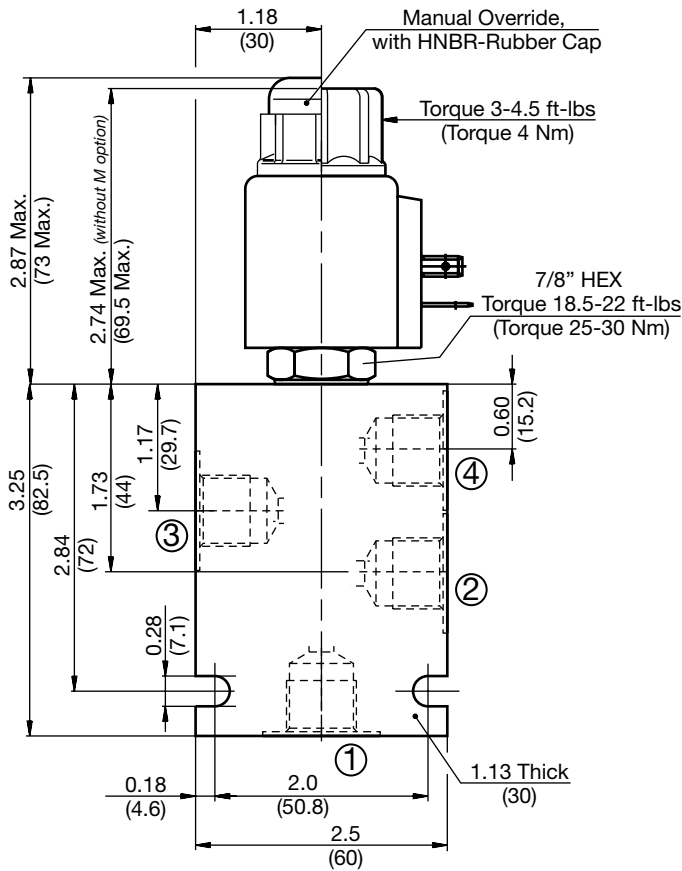
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm at 3600 psi (19 l/min at 250 bar)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 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 @ 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)
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	FC08-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.42 Lbs. (0.19 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 P/N: 03071272 Viton® P/N: 03071273

Performance



Dimensions



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

Model Code

WK08R-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

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*

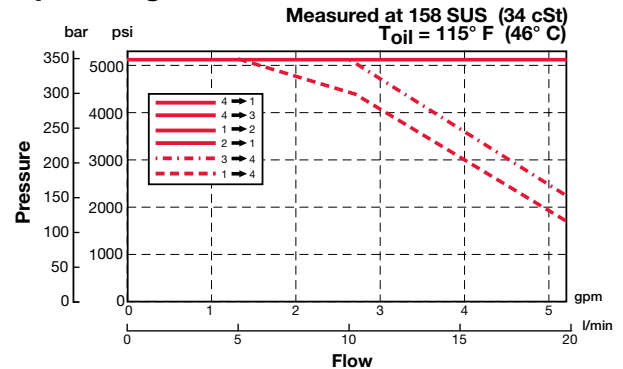
AC AG = EN 175301-803-A

Coil Model 40-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Operating Limits



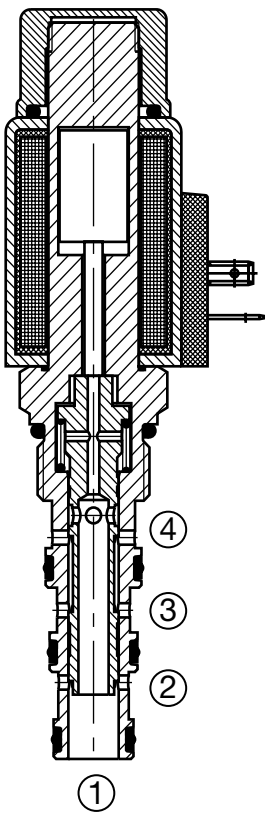
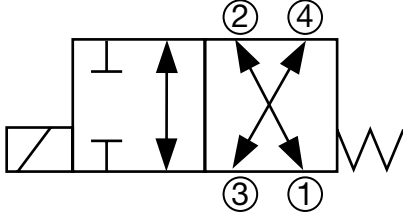
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10R-01
Spool Type, Direct Acting
Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10R allows flow from port 3 to port 4 bi-directionally and port 2 to port 1 bi-directionally. When energized the spool shifts and blocks flow at ports 2 and 3, allowing the flow from port 1 to port 4 bi-directionally.

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

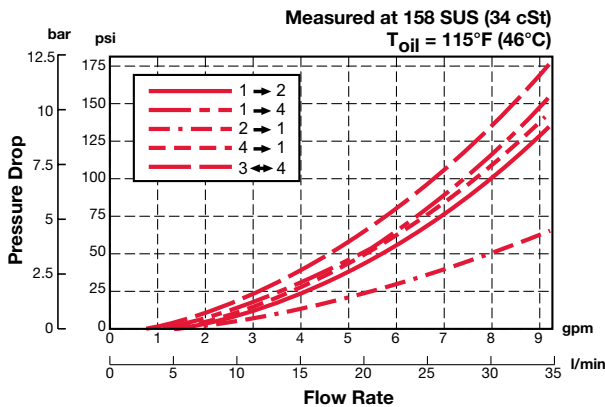
Features

- Push type manual override button, protected by rubber cap

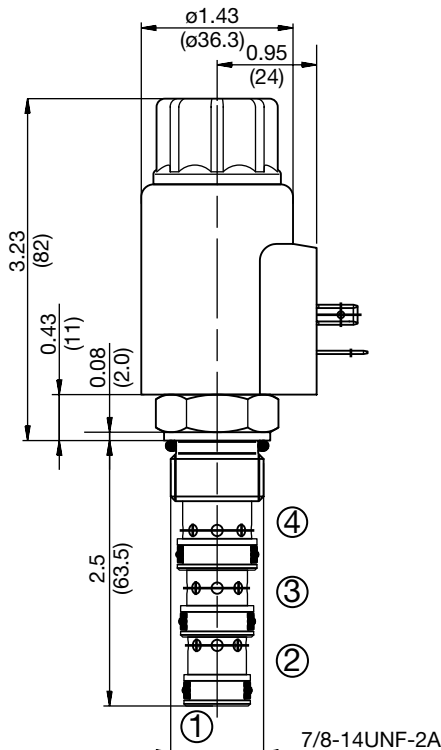
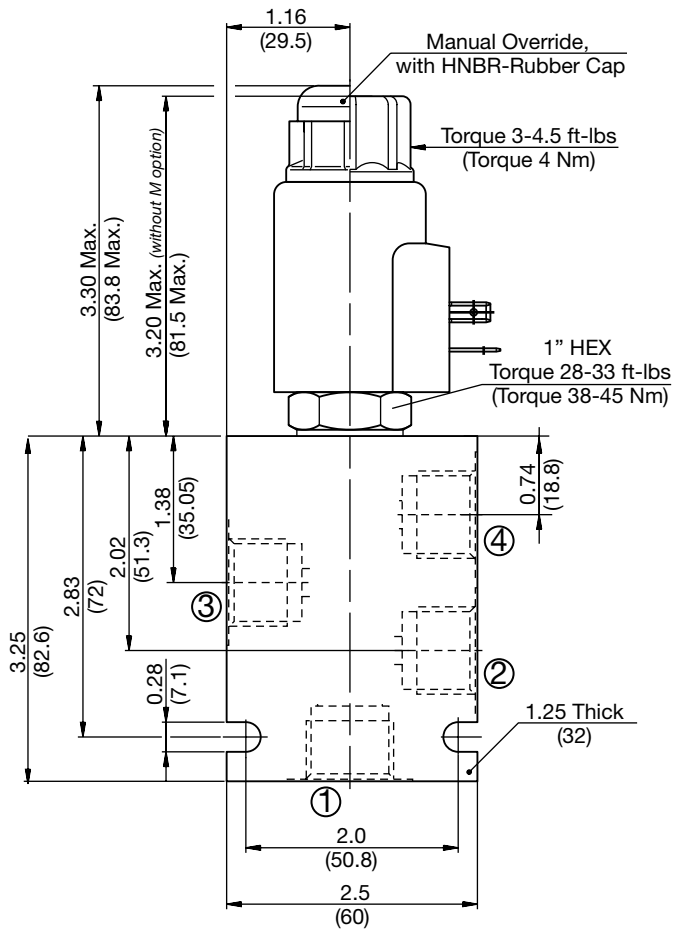
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	6 cu in/min. at 3600 psi and 158 SUS (100 cc/min at 250 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 @ 68°F (20°C)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.55 Lbs. (0.25 kg)
Coil Weight	0.51 Lbs. (0.23 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 P/N: 03051912 Viton® P/N: 03071275

Performance



Dimensions



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

Model Code

WK10R-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum body
- SS8 = SAE-8 Ports, steel body

Seals

- N = Buna-N
- V = Viton®

Coil Voltage

- 0 = No coil, cartridge only
- DC 12 = 12 VDC
- DC 24 = 24 VDC
- DC 36 = 36 VDC
- DC 110 = 110 VDC (only available with connector DG)
- AC 24 = 24 VAC
- AC 115 = 115 VAC (AC coils internally full wave rectified)
- AC 230 = 230 VAC

Coil Connector

- DC DG = EN 175301-803-A
- DC DS = Dual spade (SAEJ858a)*
- DC DL = Leadwires (2) - 18" long (46 cm)*
- DC DW = WeatherPak™ on leadwires - 9.5" long (24 cm)*
- DC DN = Deutsch™ DT04-2P, molded, axial (IP69K Rated)*
- DC DT = Amp Junior Timer™, molded, radial mount*
- AC AG = EN 175301-803-A

Coil Model 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

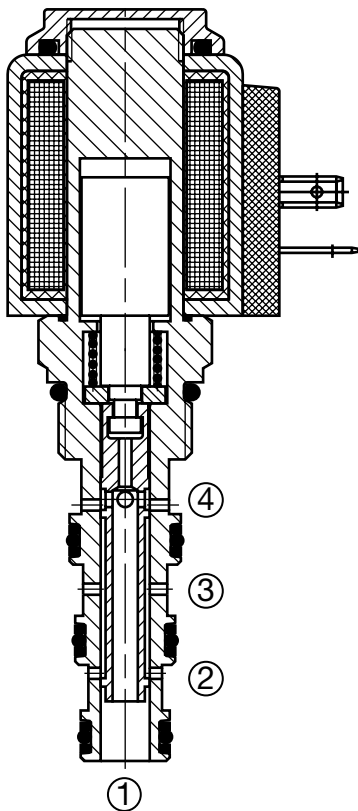
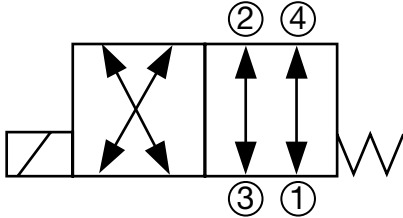
Standard Line Bodies*

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

*Please refer to Line Bodies & Cavities section for details

WK08X-01 Spool Type, Direct Acting Up to 4.5 gpm (17 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08X allows flow from port 2 to port 3 bi-directionally and port 1 to port 4 bi-directionally. When energized the spool shifts and allows flow from port 3 to port 4 bi-directionally and from port 2 to port 1 bi-directionally.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

Features

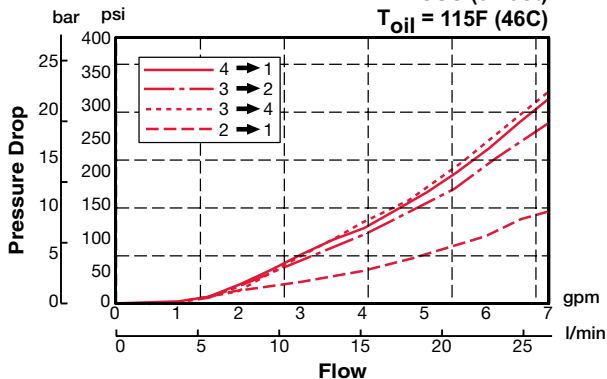
- Screw type manual override

Specifications

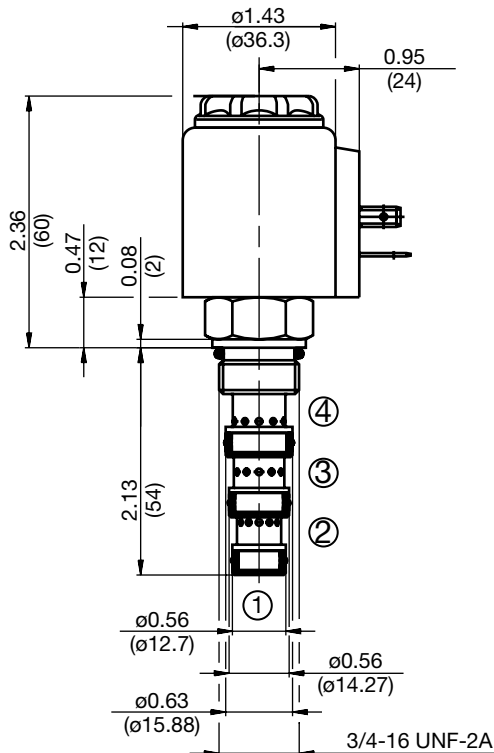
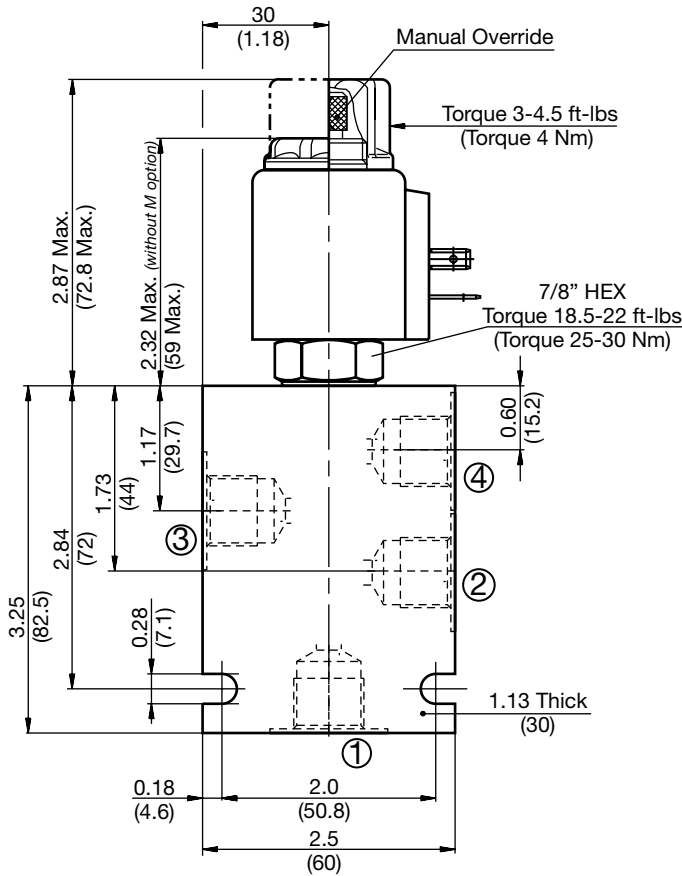
Operating Pressure	5000 psi (350 bar)
Nominal Flow	4.5 gpm at 3600 psi (17 l/min at 250 bar)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <i>(Consult factory for usage at temp. outside range.)</i>
Ambient 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)
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	FC08-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.42 Lbs. (0.19 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 FS084-N P/N: 03071272 Viton® FS084-V P/N: 03071273

Performance

Measured at 158 SUS (34 cSt)
 $T_{oil} = 115F (46C)$



Dimensions



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

Model Code

WK08X-01 M-C-N-24 DN

Valve Model _____

Override Option _____

- blank = No manual override
- M = Manual override, screw type

Body & Ports _____

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

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
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

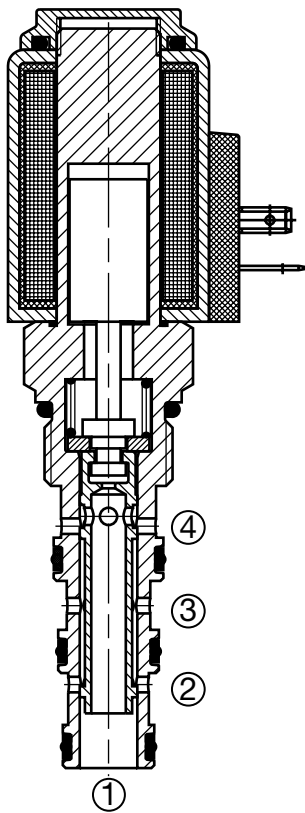
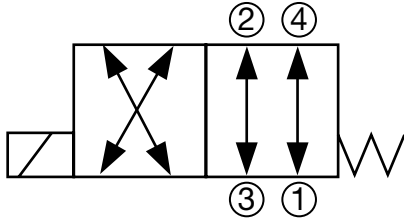
*Please refer to Line Bodies & Cavities section for details

WK10X-01

Spool Type, Direct Acting

Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10X allows flow from port 2 to port 3 bi-directionally and port 1 to port 4 bi-directionally. When energized the spool shifts and allows flow from port 3 to port 4 bi-directionally and from port 2 to port 1 bi-directionally.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

Features

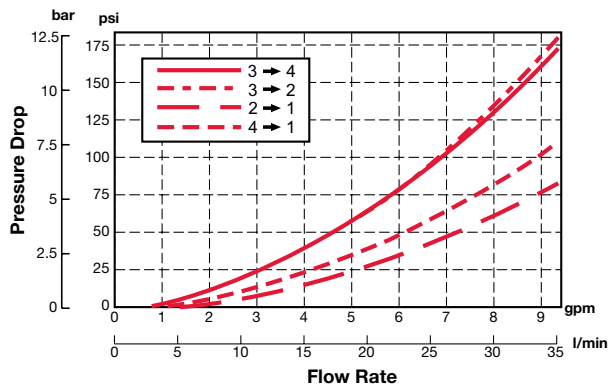
- Screw type manual override

Specifications

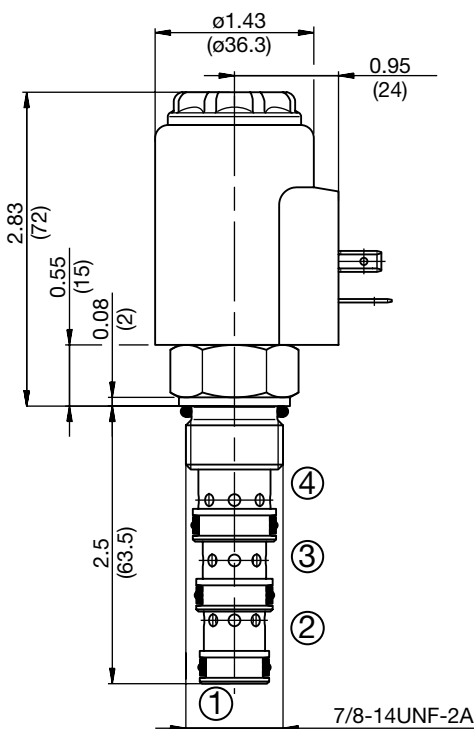
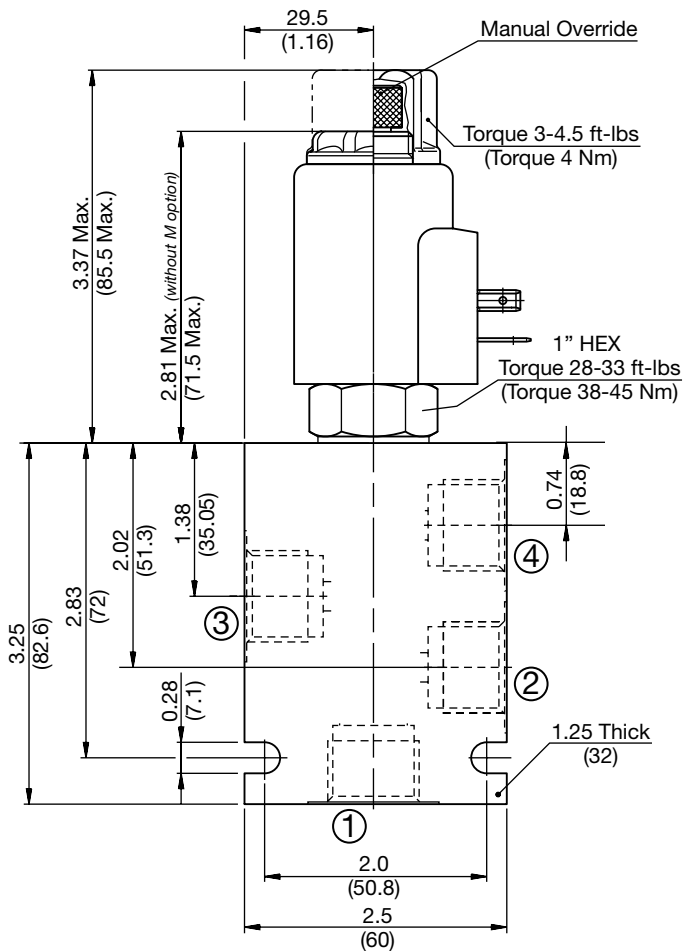
Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	6 cu in/min. at 3600 psi and 158 SUS (100 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <i>(Consult factory for usage at temp. outside range.)</i>
Ambient 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)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.55 Lbs. (0.25 kg)
Coil Weight	0.51 Lbs. (0.23 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 FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance

Measured at 158 SUS (34 cSt)
T_{oil} = 115°F (46°C)



Dimensions



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

Model Code

WK10X-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
blank = No manual override
M = Manual override, screw type
- Body & Ports** _____
C = Cartridge only
AS8 = SAE-8 Ports, aluminum body
SS8 = SAE-8 Ports, steel body
- 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
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

Coil Model 50-1836

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
FH104-AS8	03038110	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH104-SS8	03037868	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

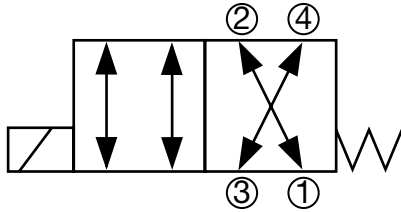
*Please refer to Line Bodies & Cavities section for details

WK06Y-01

Spool Type, Direct Acting

Up to 2 gpm (7.6 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

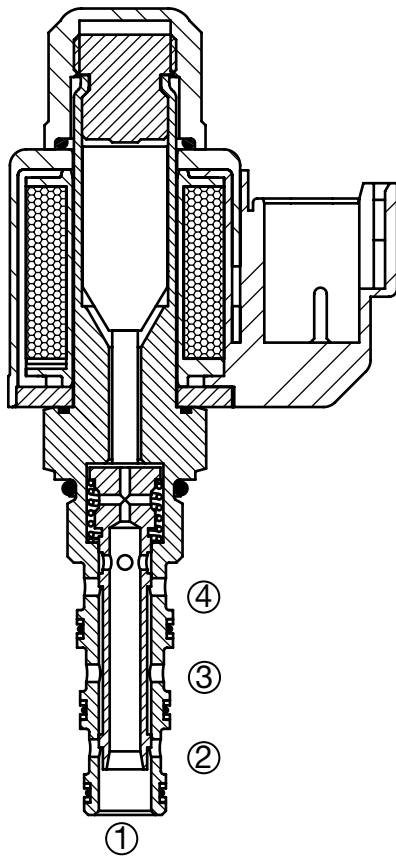
A screw-in cartridge, solenoid operated, 4 way 2 position, direct acting, spool type valve.

Operation

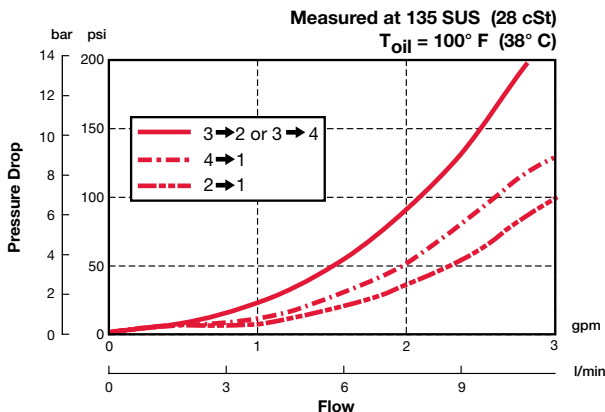
When de-energized the WK06Y allows flow from port 2 to port 1 bi-directionally and port 3 to port 4 bi-directionally. When energized the spool shifts and opens flow from port 2 to port 3 bi-directionally and from port 4 to port 1

Specifications

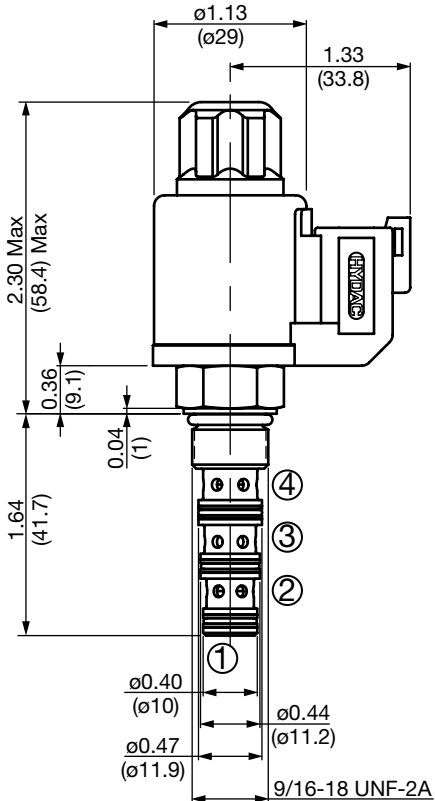
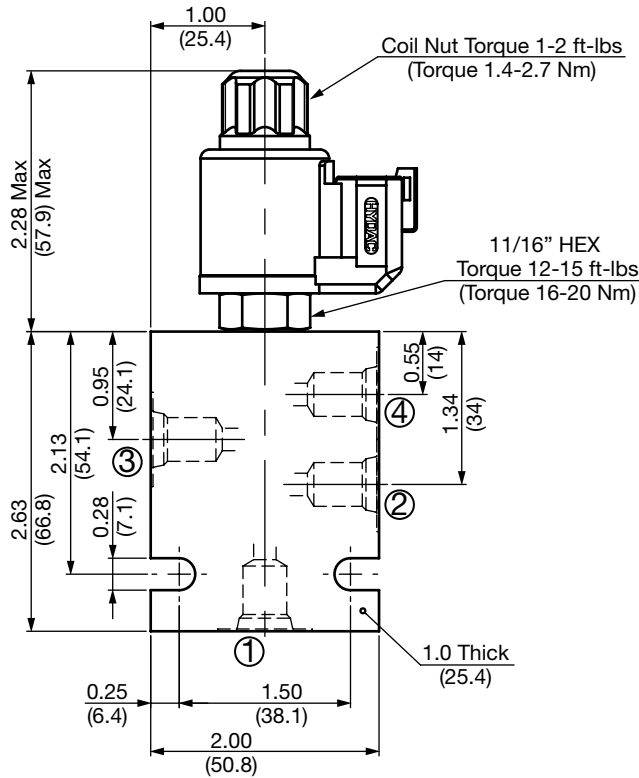
Operating Pressure	5000 psi (350 bar)
Nominal Flow	2 gpm (7.6 l/min)
Nominal Pressure	Up to 5000 psi. (350 bar), 3000 psi (207 bar) max on tank (port 1)
Internal Leakage	6.0 cu in/min. at 3000 psi and 135 SUS (100 cc/min at 207 bar and 38 cSt)
Fluid Operating Temp. Range	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw at 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC
Min. Pull-in Current to Operate Valve	70% of nominal amperage
Typical Response Time <i>(Varies with Pressure and Flow)</i>	On: 30 to 60 ms Off: 20 to 40 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)
Installation	No orientation restrictions
Cavity	FC06-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02582057 Finisher: 02582058
Cartridge Weight	3.6 oz (102 grams)
Coil Weight	3.1 oz (88 grams)
Cartridge Material	Steel with hardened work surfaces. Zinc plated exposed surfaces. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation.
Seal Kits	Buna-N FS064-N P/N: 02610188 Viton® FS064-V P/N: 02610189



Performance



Dimensions



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

Model Code

WK06Y-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type (for availability consult factory)

Body & Ports

- C = Cartridge only
- AS4 = SAE-4 Ports, aluminum body
- SS4 = SAE-4 Ports, steel body

Seals

- N = Buna-N
- V = Viton®

Coil Voltage

- 0 = No coil, cartridge only
- DC 12 = 12 VDC
- DC 24 = 24 VDC
- AC 115 = 105 VDC (only available with connector DG)
- AC 230 = 205 VDC (only available with connector DG)

(All model 32-1329 coils are DC. AC models require an external diode bridge mounted outside the coil)**

Coil Connector

- DG = EN 175301-803-B (IP65 Rated)**
- DC DL = Leadwires (2) - 18" long (46 cm) AWG18, TYPE UL 1815 (IP69K Rated)*
- DN = Deutsch DT04-2P integral molded (IP69K Rated)*

Use mating plug EN 175301-803-B without diode bridge for DC voltages P/N 02600570

Use mating plug EN 175301-803-B w/diode bridge for AC voltages P/N 02600582

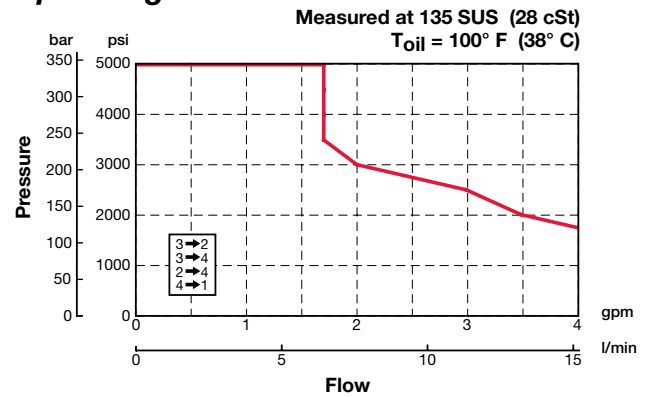
Coil Model 32-1329

For other coil connector types consult factory

** Mating Plugs sold separately

*Coils with internal transient suppression diode are available, consult factory.

Operating Limits



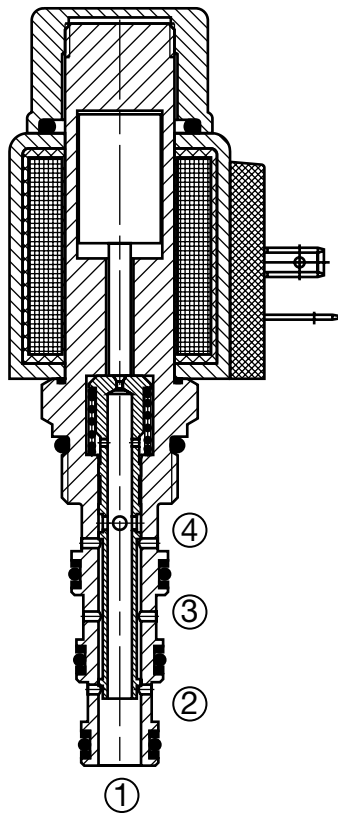
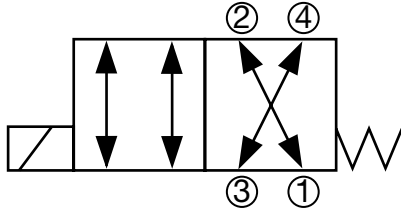
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH064-AS4	02600462	Aluminum, anodized	3500 psi (245 bar)	0.43 lbs (0.20 kg)
FH064-SS4	02600461	Steel, zinc plated	6000 psi (420 bar)	1.25 lbs (0.57 kg)

*Please refer to Line Bodies & Cavities section for details

WK08Y-01 Spool Type, Direct Acting Up to 5 gpm (19 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08Y allows flow from port 2 to port 1 bi-directionally and port 3 to port 4 bi-directionally. When energized the spool shifts and opens flow from port 2 to port 3 bi-directionally and from port 4 to port 1.

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.

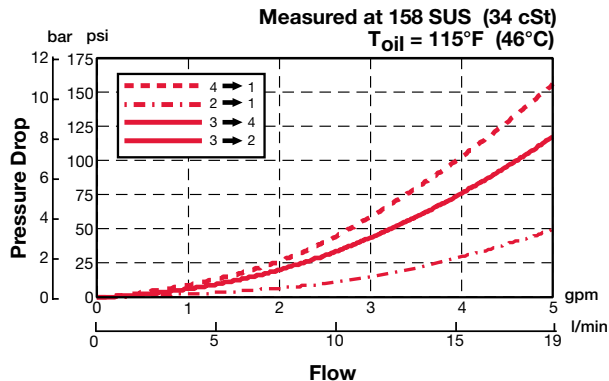
Features

- Push type manual override button, protected by rubber cap

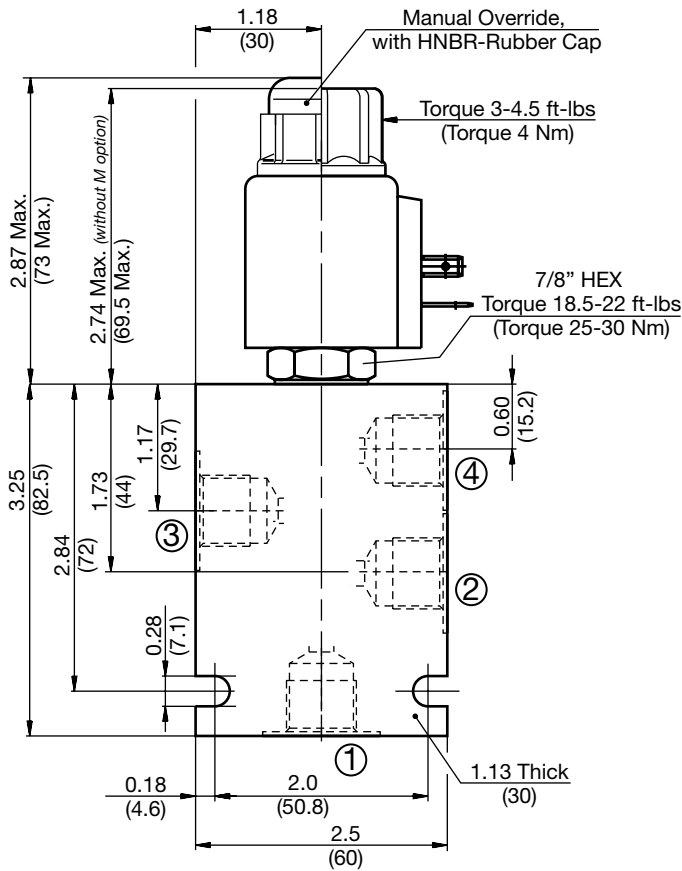
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm at 3600 psi (19 l/min at 250 bar)
Internal Leakage	5 cu in/min. at 3600 psi and 158 SUS (82 cc/min at 250 bar and 34 cSt)
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)
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	FC08-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.42 Lbs. (0.19 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 P/N: 03071272 Viton® P/N: 03071273

Performance



Dimensions



Model Code

WK08Y-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

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

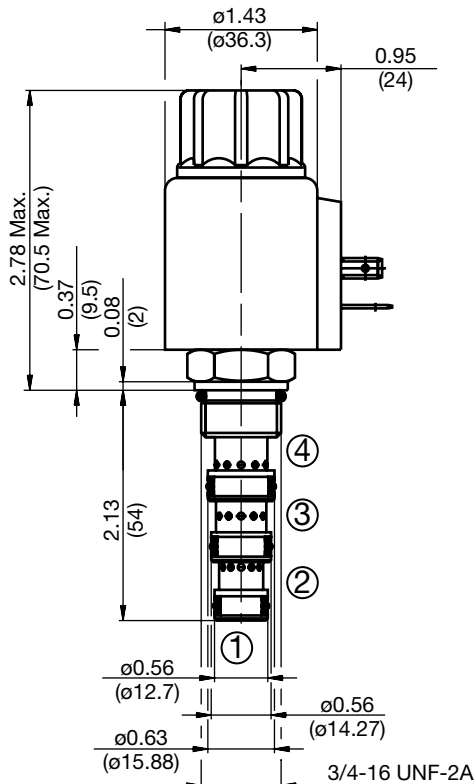
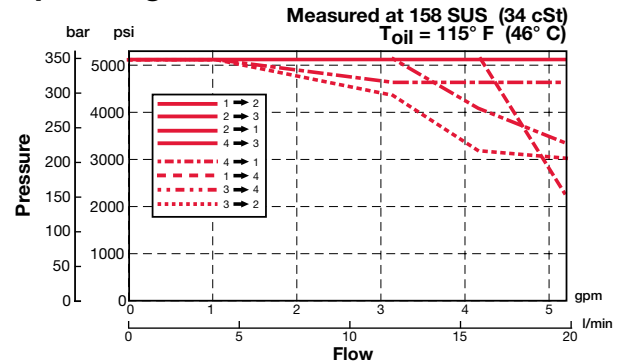
- DC DG = EN 175301-803-A
- DS = Dual spade (SAEJ858a)*
- DL = Leadwires (2) - 18" long (46 cm)*
- DW = WeatherPak™ on leadwires - 9.5" long (24 cm)*
- DN = Deutsch™ DT04-2P, molded, axial (IP69K Rated)*
- DT = Amp Junior Timer™, molded, radial mount*
- AC AG = EN 175301-803-A

Coil Model 40-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Operating Limits



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

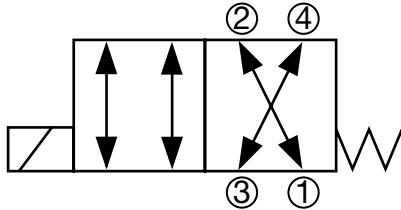
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10Y-01
Spool Type, Direct Acting
Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10Y allows flow from port 2 to port 1 bi-directionally and port 3 to port 4 bi-directionally. When energized the spool shifts and opens flow from port 2 to port 3 bi-directionally and from port 4 to port 1.

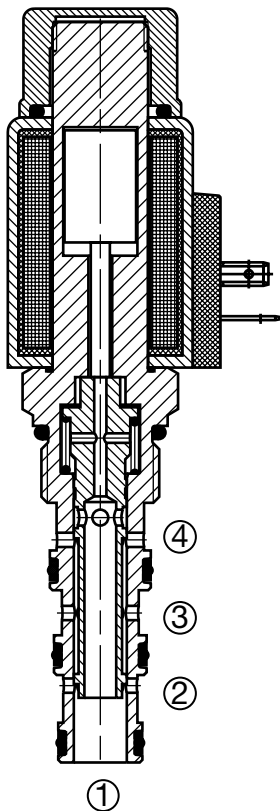
Operation of Manual Override Option: To override, push and hold the override button. The override is not detented. The manual override option is intended for emergency use, not for continuous duty operation.

Features

- Push type manual override button, protected by rubber cap

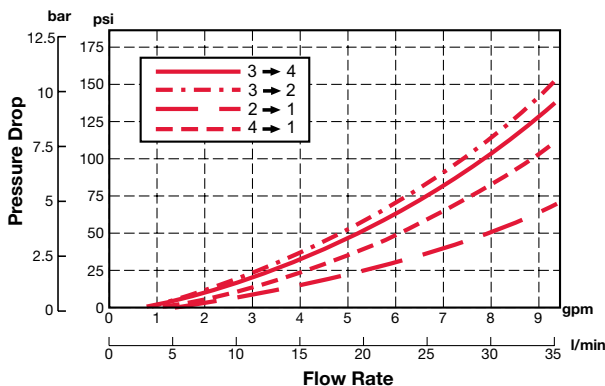
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	7.3 cu in/min. at 3600 psi and 158 SUS (120 cc/min at 250 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 @ 68°F (20°C)	2.22 A at 12VDC; 1.13 A at 24VDC
Min. Pull-in Voltage @ 68°F (20°C)	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.55 Lbs. (0.25 kg)
Coil Weight	0.51 Lbs. (0.23 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 P/N: 03051912 Viton® P/N: 03071275

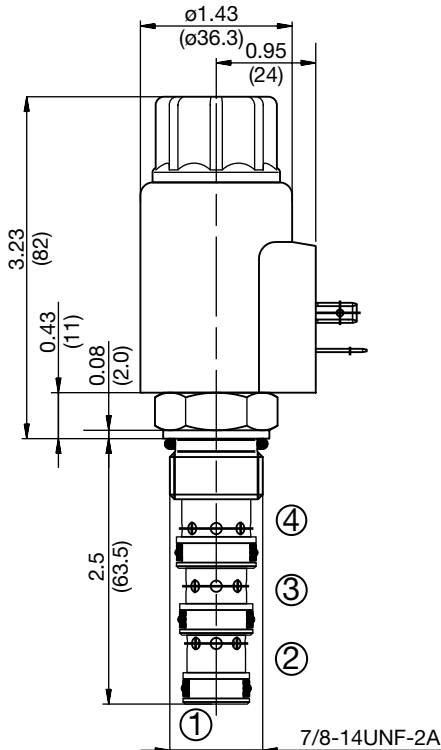
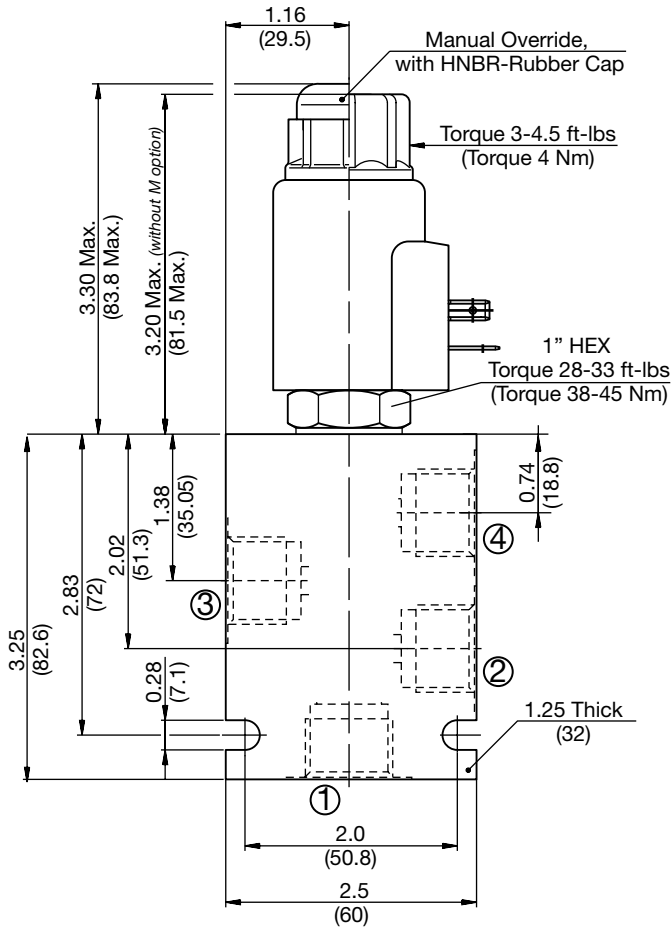


Performance

Measured at 158 SUS (34 cSt)
 $T_{oil} = 115^{\circ}F (46^{\circ}C)$



Dimensions



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

Model Code

WK10Y-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum body
- SS8 = SAE-8 Ports, steel body

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 = DIN 175301-803-A

Coil Model 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

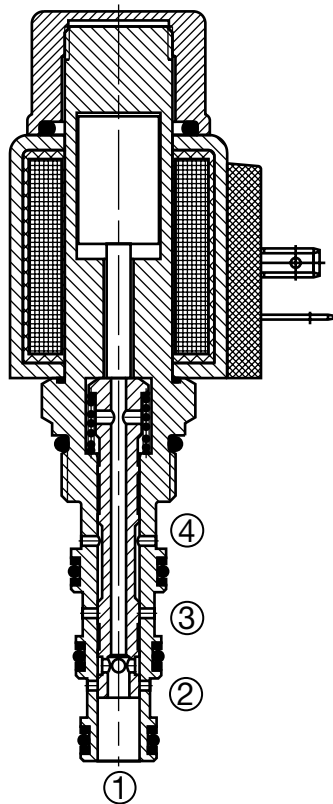
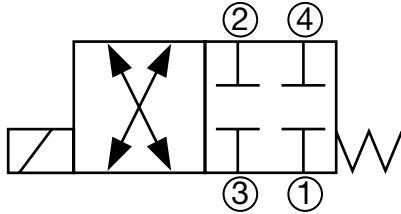
Standard Line Bodies*

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

*Please refer to Line Bodies & Cavities section for details

WK08Z-01
Spool Type, Direct Acting
Up to 4.5 gpm (17 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK08Z blocks flow at all ports. When energized the spool shifts and allows flow from port 1 to port 2 bi-directionally and from port 3 to port 4 bi-directionally.

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

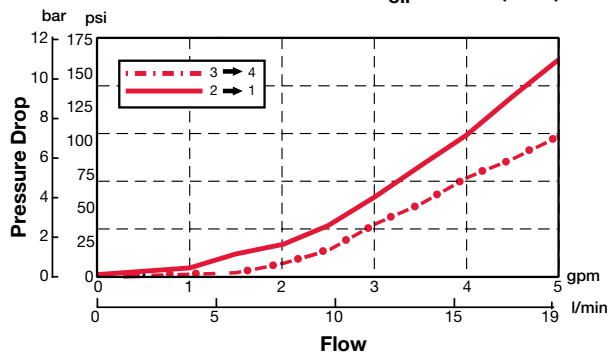
- Push type manual override button, protected by rubber cap

Specifications

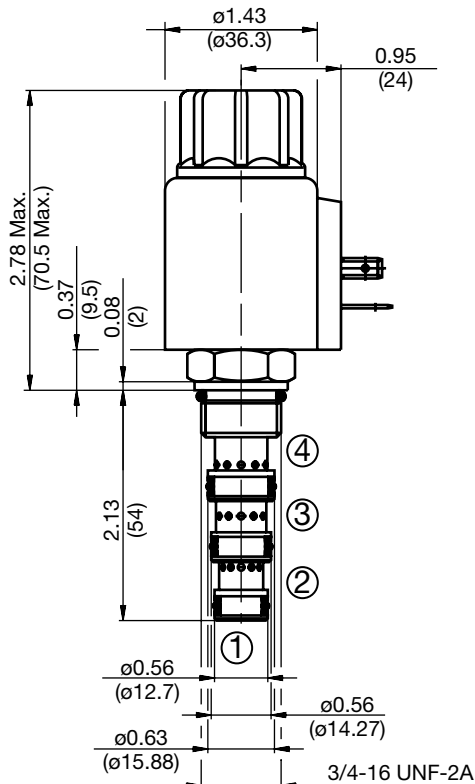
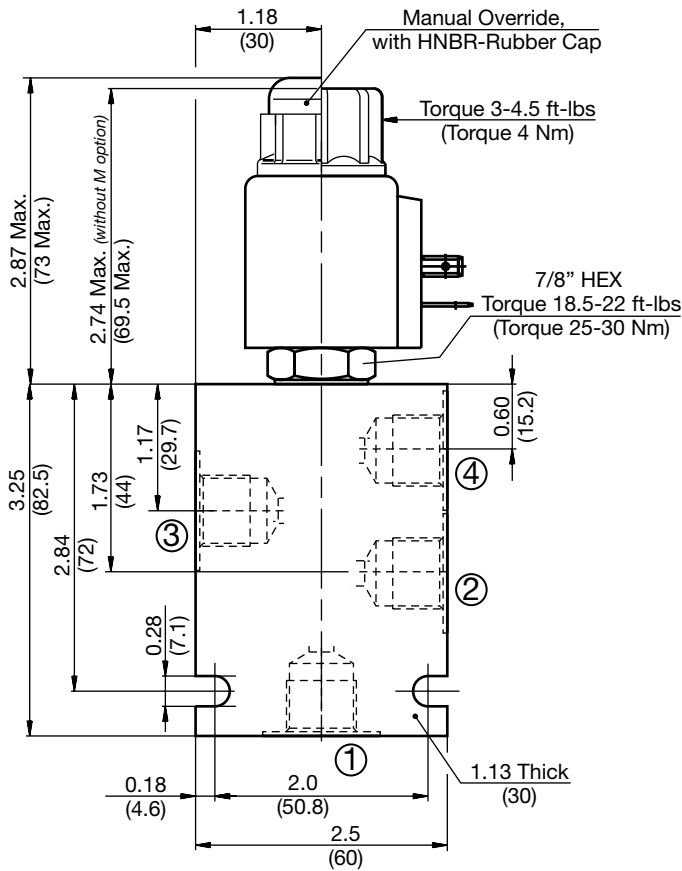
Operating Pressure	5000 psi (350 bar)
Nominal Flow	4.5 gpm at 3600 psi (17 l/min at 250 bar) 2 gpm at 5000 psi (7.6 l/min at 350 bar)
Internal Leakage	5.5 cu in/min. at 3600 psi and 158 SUS (90 cc/min at 250 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <i>(Consult factory 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)
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	FC08-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.42 Lbs. (0.19 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 P/N: 03071272 Viton® P/N: 03071273

Performance

Measured at 158 SUS (34 cSt)
 $T_{oil} = 115^\circ F (46^\circ C)$



Dimensions



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

Model Code

WK08Z-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, push type

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 Ports, aluminum body
- SS6 = SAE-6 Ports, steel body

Seals

- N = Buna-N
- V = Viton®

Coil Voltage

- 0 = No coil, cartridge only
- DC 12 = 12 VDC
- DC 24 = 24 VDC
- DC 36 = 36 VDC
- DC 110 = 110 VDC (only available with connector DG)
- AC 24 = 24 VAC
- AC 115 = 115 VAC (AC coils internally full wave rectified)
- AC 230 = 230 VAC

Coil Connector

- DC DG = EN 175301-803-A
- DC DS = Dual spade (SAEJ858a)*
- DC DL = Leadwires (2) - 18" long (46 cm)*
- DC DW = WeatherPak™ on leadwires - 9.5" long (24 cm)*
- DC DN = Deutsch™ DT04-2P, molded, axial (IP69K Rated)*
- DC 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.

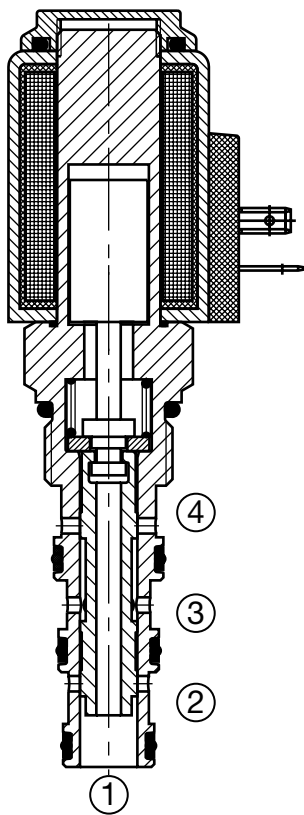
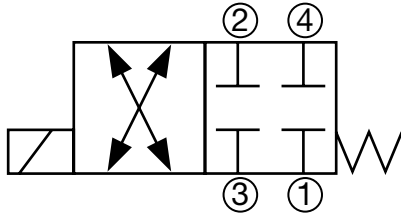
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lbs (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lbs (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10Z-01 Spool Type, Direct Acting Up to 8.4 gpm (32 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

A screw-in cartridge, solenoid operated, 4-way, 2 position, direct acting, spool type valve.

Operation

When de-energized the WK10Z blocks flow at all ports. When energized the spool shifts and allows flow from port 1 to port 2 bi-directionally and from port 3 to port 4 bi-directionally.

Operation of Manual Override Option: To override, remove the coil nut, turn the override knurled knob counterclockwise until it stops. The override will remain activated until the knob is turned clockwise to original position. The manual override option is intended for emergency use, not for continuous duty operation.

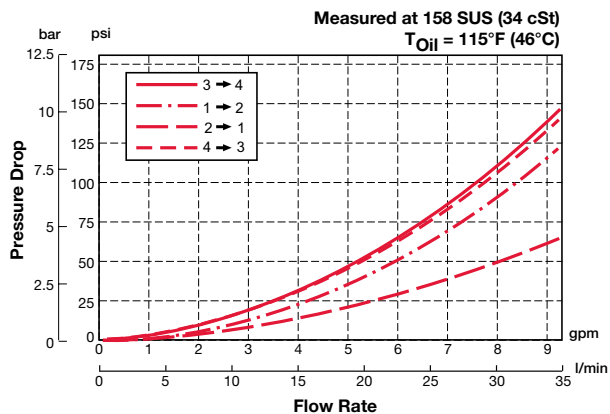
Features

- Screw type manual override

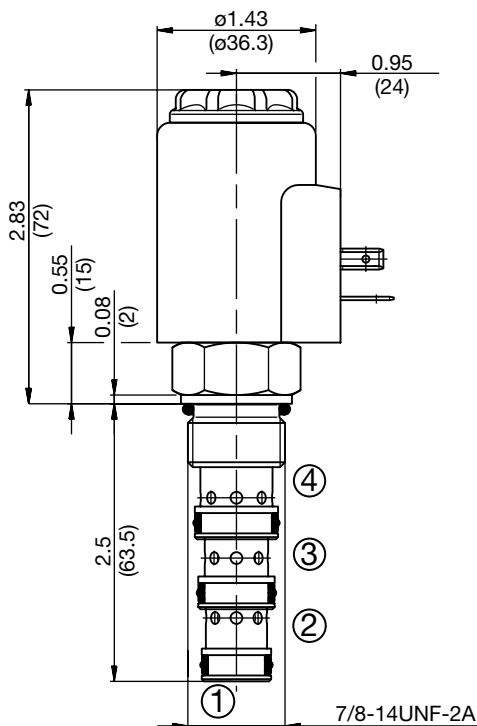
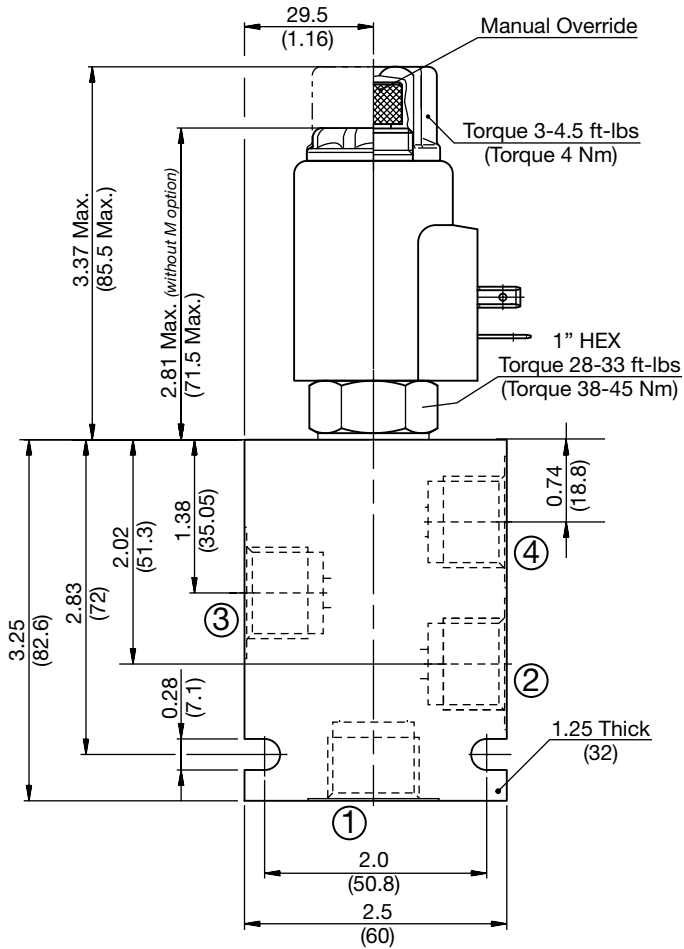
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	8.4 gpm at 5000 psi (32 l/min at 350 bar)
Internal Leakage	6 cu in/min. at 3600 psi and 158 SUS (100 cc/min at 250 bar and 34 cSt)
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)	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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> section)
Cavity Tools	Rougher: 02580248 Finisher: 02580249
Cartridge Weight	0.64 Lbs. (0.29 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 FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance



Dimensions



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

Model Code

WK10Z-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, screw type

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 Ports, aluminum body
- SS8 = SAE-8 Ports, steel body

Seals

- N = Buna-N
- V = Viton®

Coil Voltage

- 0 = No coil, cartridge only
- DC 12 = 12 VDC
- DC 24 = 24 VDC
- DC 36 = 36 VDC
- DC 110 = 110 VDC (only available with connector DG)
- AC 24 = 24 VAC
- AC 115 = 115 VAC (AC coils internally full wave rectified)
- AC 230 = 230 VAC

Coil Connector

- DC DG = EN 175301-803-A
- DC DS = Dual spade (SAEJ858a)*
- DC DL = Leadwires (2) - 18" long (46 cm)*
- DC DW = WeatherPak™ on leadwires - 9.5" long (24 cm)*
- DC DN = Deutsch™ DT04-2P, molded, axial (IP69K Rated)*
- DC DT = Amp Junior Timer™, molded, radial mount*
- AC AG = EN 175301-803-A

Coil Model 50-1836

For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

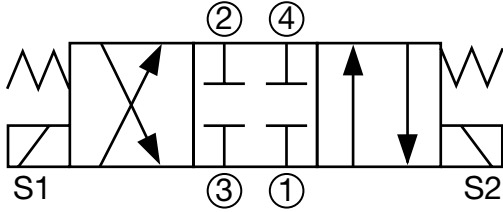
Standard Line Bodies*

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

*Please refer to Line Bodies & Cavities section for details

WK06E-01 Spool Type, Direct Acting Up to 3 gpm (11.4 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

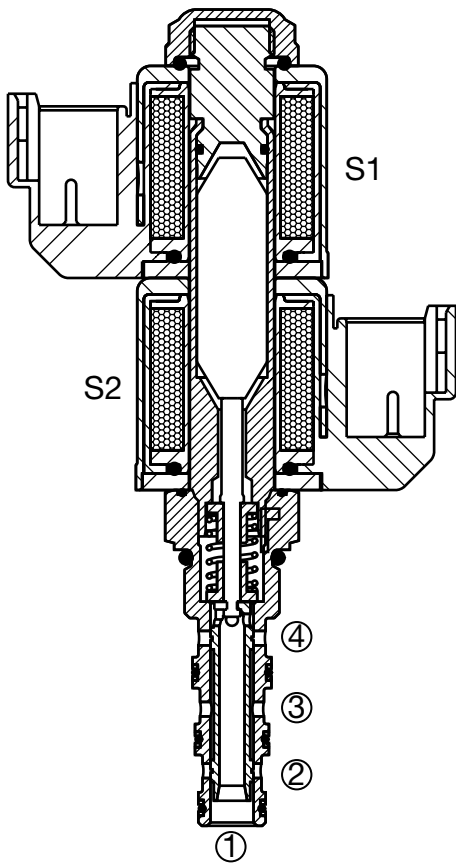
A screw-in cartridge, solenoid operated, 4-way, 3 position, direct acting, spool type valve.

Operation

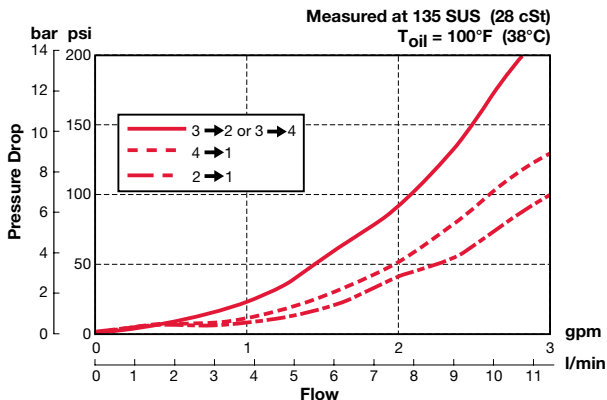
When de-energized the WK06E blocks flow at all ports. When coil S1 is energized the spool shifts and allows flow from port 2 to port 1 and from port 3 to port 4. When coil S2 is energized the spool shifts and allows flow from port 4 to port 1 and from port 3 to port 2.

Specifications

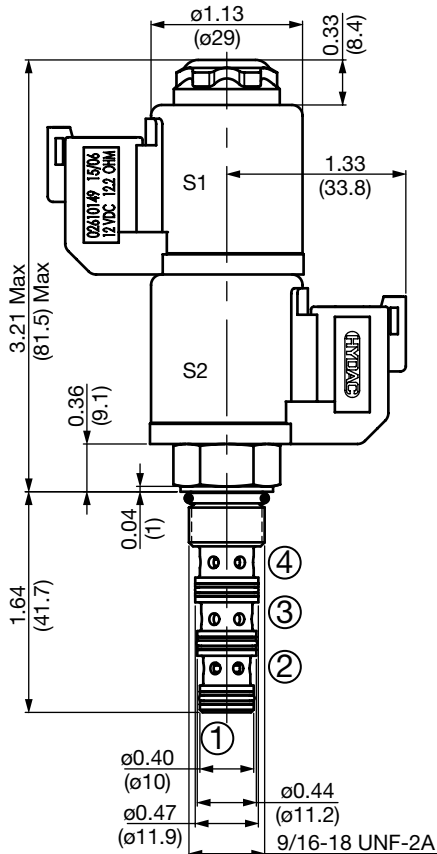
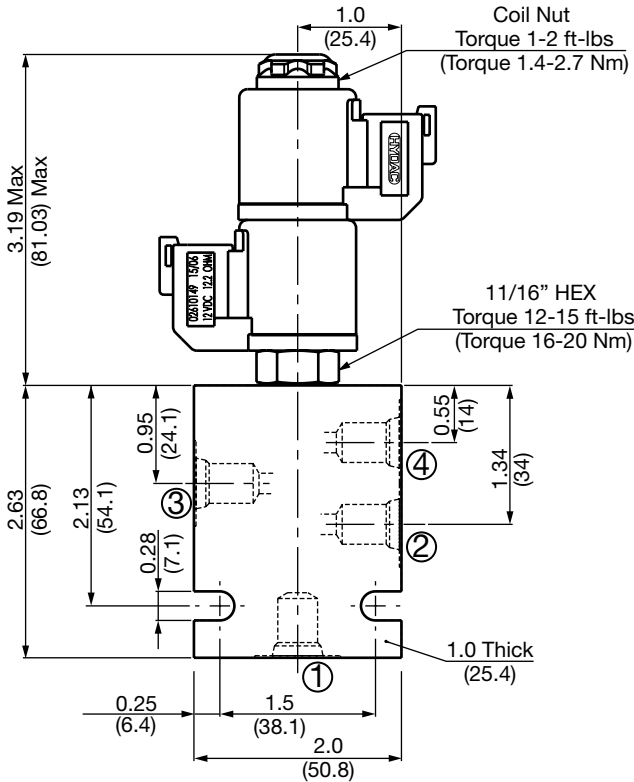
Operating Pressure	5000 psi (350 bar), 3000 psi (210 bar) Max Port 1
Nominal Flow	See Operating Limits
Internal Leakage	14.0 cu in/min. at 3000 psi and 135 SUS (230 cc/min at 207 bar and 28 cSt)
Fluid Operating Temp. Range	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw at 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC
Min. Pull-in Current to Operate Valve	70% of nominal amperage
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)
Installation	No orientation restrictions
Cavity	FC06-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02582057 Finisher: 02582058
Cartridge Weight	3.6 oz (102 grams)
Coil Weight	3.1 oz (88 grams) each (2 required)
Cartridge Material	Steel with hardened work surfaces. Zinc plated exposed surfaces. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation.
Seal Kits	Buna-N P/N: 02610188 Viton® P/N: 02610189



Performance



Dimensions



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

Model Code

WK06E-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, not detented
- A = Manual override, detented

Body & Ports

- C = Cartridge only
- AS4 = SAE-4 Ports, aluminum Body
- SS4 = SAE-4 Ports, steel Body

Seals

- N = Buna-N
- V = Viton®

Coil Voltage

- 0 = No coil, cartridge only
- DC 12 = 12 VDC
- 24 = 24 VDC
- AC 115 = 105 VDC (only available with connector DG)
- 230 = 205 VDC (only available with connector DG)

(All model 32-1329 coils are DC. AC models require an external diode bridge mounted outside the coil)**

Coil Connector

- DG = EN 175301-803-B (IP65 Rated)**
- DC DL = Leadwires (2) - 18" long (46 cm) AWG18, TYPE UL 1815 (IP69K Rated)*
- DN = Deutsch DT04-2P intergral molded (IP69K Rated)*

Use mating plug EN 175301-803-B without diode bridge for DC voltages P/N 02600570

Use mating plug EN 175301-803-B w/diode bridge for AC voltages P/N 02600582

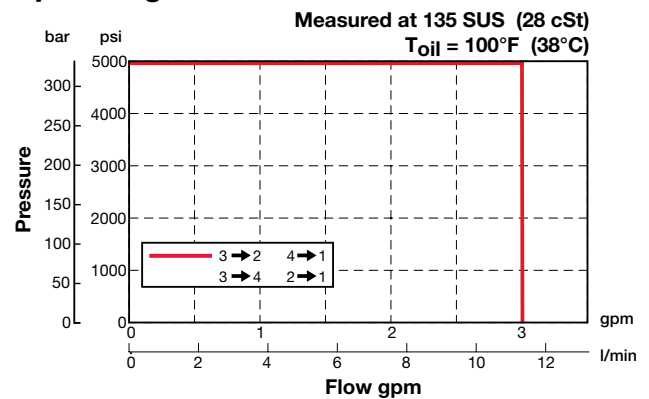
Coil Model 32-1329

For other coil connector types consult factory

** Mating Plugs sold separately

*Coils with internal transient suppression diode are available, consult factory.

Operating Limits

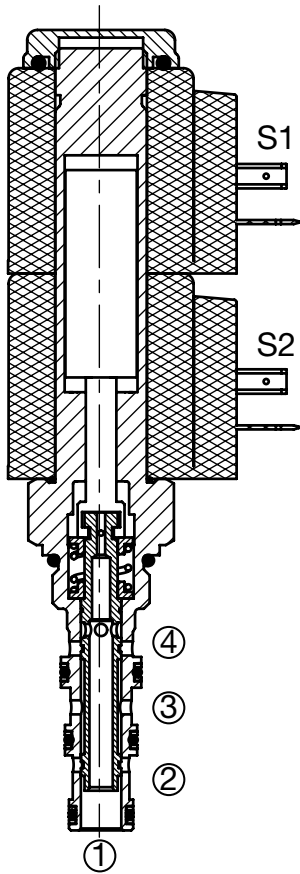


Standard Line Bodies*

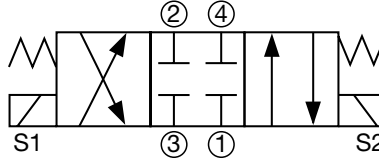
Code	Part No	Material	Pressure Rating	Weight
FH064-AS4	02600462	Aluminum, anodized	3500 psi (245 bar)	0.41 lbs (0.19 kg)
FH064-SS4	02600461	Steel, zinc plated	6000 psi (420 bar)	1.22 lbs (0.55 kg)

*Please refer to Line Bodies & Cavities section for details

WK08E-01
Spool Type, Direct Acting
Up to 5 gpm (19 l/min) • 5000 psi (350 bar)



Hydraulic Symbol



Description

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

Operation

When de-energized the WK08E blocks flow at all ports. 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.

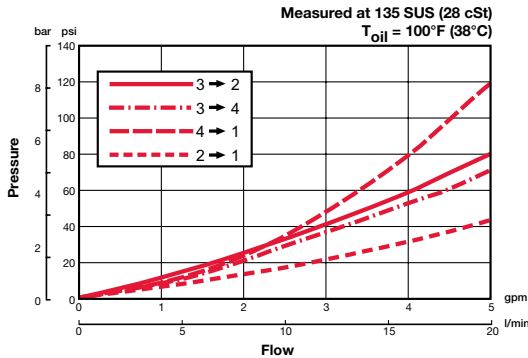
Features

- Push/pull type manual override button, detented manual override option.
- High flow capacity

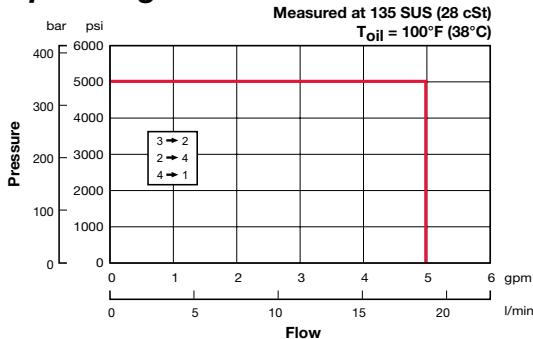
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm at 3000 psi (20 l/min@ 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	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° 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	75% of nominal amperage
Typical Response Time (Varies with Pressure and Flow)	On: 30 to 60 ms Off: 20 to 40 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)
Installation	No orientation restrictions
Cavity	FC08-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.6 lbs (0.27 kg)
Coil Weight	2 x 0.42 lbs (2 x 0.19 kg)
Cartridge Material	Steel with hardened work surfaces. Zinc plated solenoid tube surface. Buna N or Viton® o-rings Solid thermoplastic polyester back-up rings.
Coil Material	Class N high temperature magnet wire, steel shell, polyamid encapsulation.
Seal Kits	Buna-N FS084-N P/N: 03071272 Viton® FS084-V P/N: 03071273

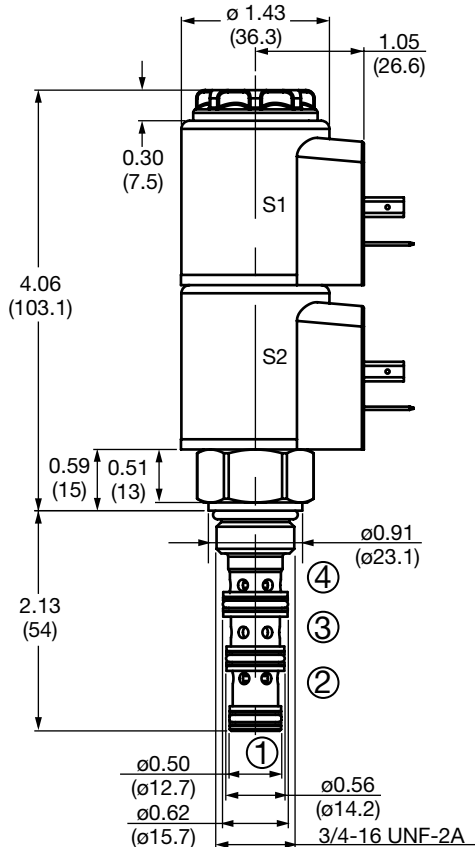
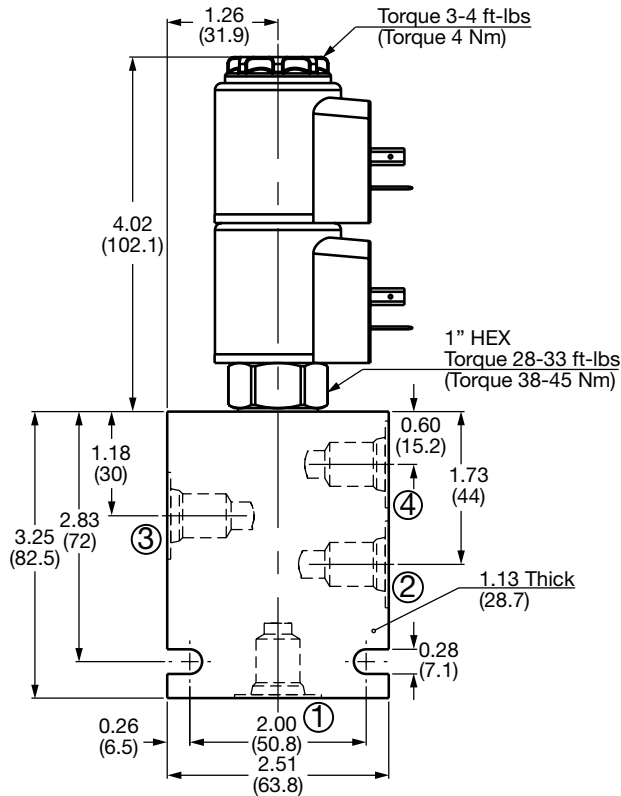
Performance



Operating Limits



Dimensions



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

Model Code

WK08E-01-M-C-N-24 DN

Valve Model

Override Option

- (omit) = No manual override
- M = Push/pull type, not detented
- A = Push/pull type, detented

Body & Ports

- C = Cartridge only
- AS6 = SAE-6 ports, aluminum body
- SS6 = SAE-6 ports, steel body

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
- 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, 2 per assembly

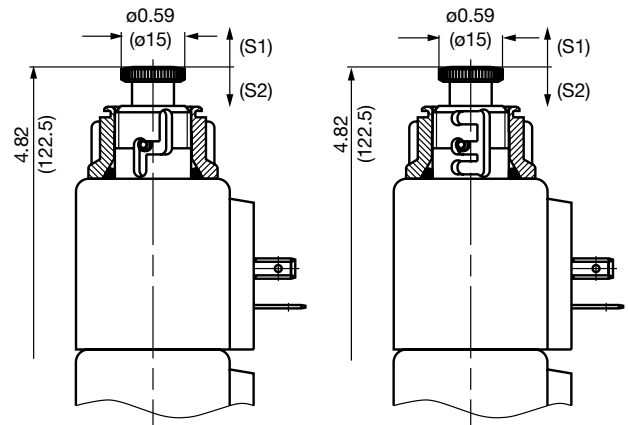
For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Manual Override Options

Option M - Non Detented

Option A - Detented



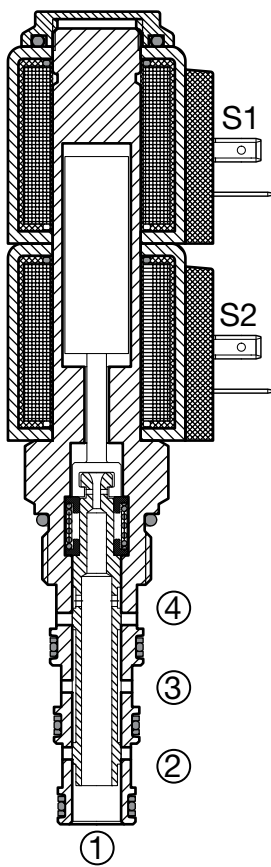
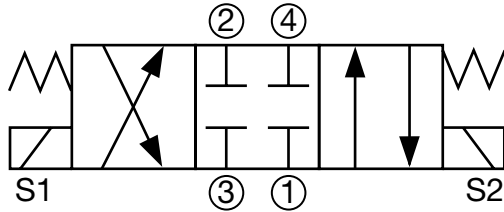
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lb (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lb (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10E-01 Spool Type, Direct Acting Up to 6 gpm (23 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

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

Operation

When de-energized the WK10E blocks flow at all ports. 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

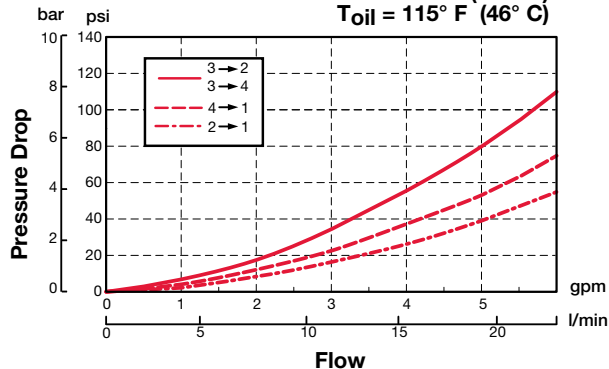
- Push/pull type manual override button, detented manual override option.

Specifications

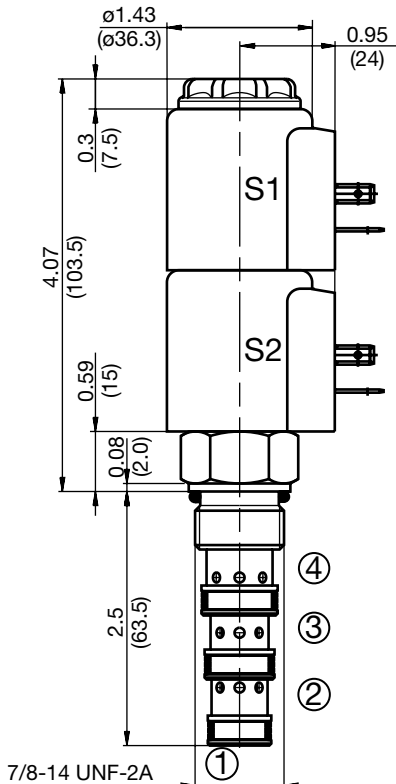
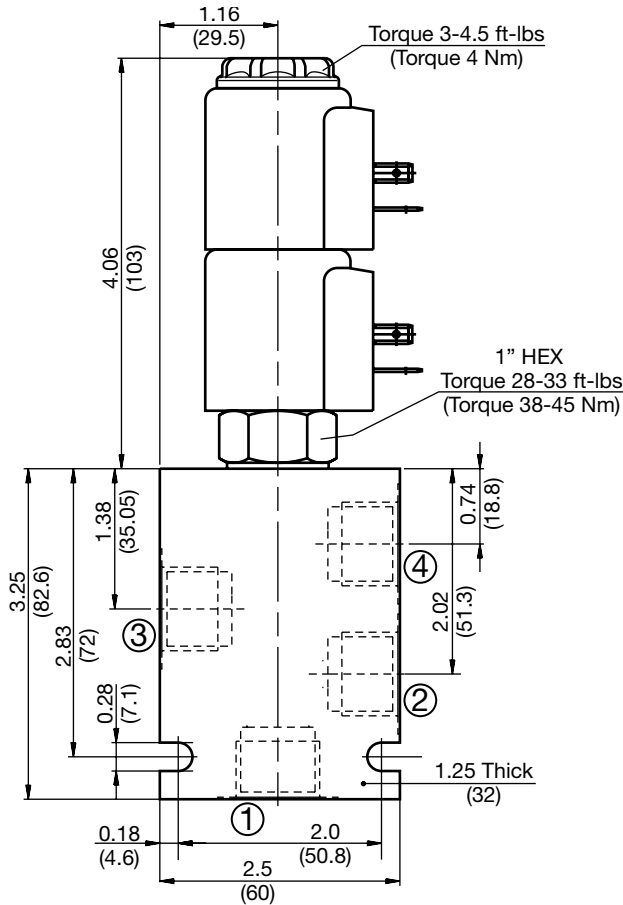
Operating Pressure	5000 psi (350 bar)
Nominal Flow	6 gpm at 3000 psi (23 l/min at 210 bar) <i>Consult factory for flow rating above 3000 psi (210 bar)</i>
Internal Leakage	10 cu in/min. at 3000 psi and 158 SUS (160 cc/min at 210 bar and 34 cSt)
Fluid Operating Temp. Range	-4° to 248°F (-20° to 120°C) <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 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> 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 N high temperature magnet wire, steel shell, polyamid encapsulation.
Seal Kits	Buna-N FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance

Measured at 158 SUS (34 cSt)
Toil = 115° F (46° C)



Dimensions



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

Model Code

WK10E-01-M-C-N-24 DN

Valve Model

Override Option

- (omit) = No manual override
- M = Push/pull type, not detented
- A = Push/pull type, detented

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 ports, aluminum body
- SS8 = SAE-8 ports, steel body

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
- 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, 2 per assembly

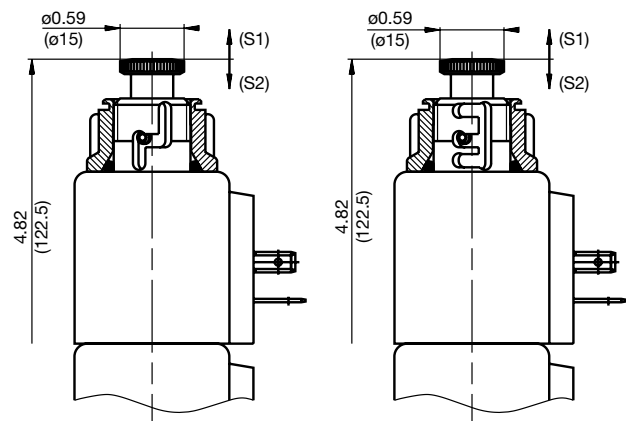
For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Manual Override Options

Option M - Non Detented

Option A - Detented



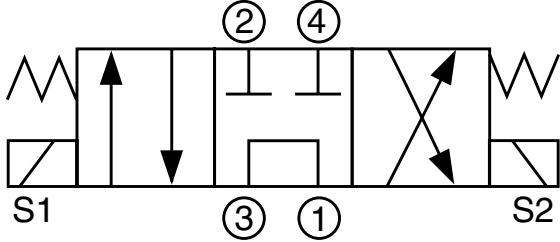
Standard Line Bodies*

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)

*Please refer to Line Bodies & Cavities section for details

WK06G-01 Spool Type, Direct Acting Up to 2 gpm (7.6 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

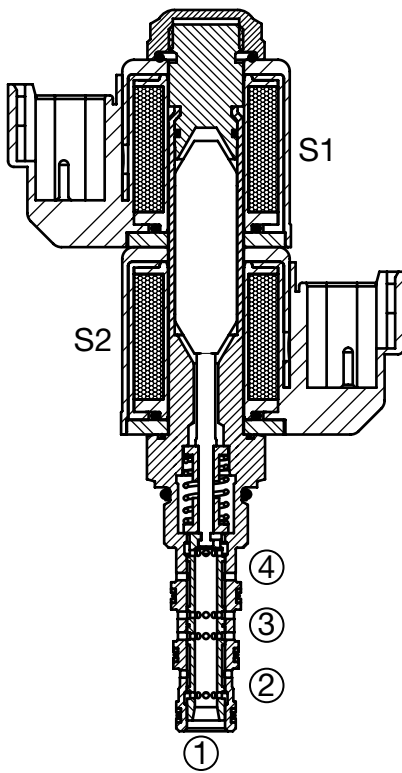
A screw-in cartridge, solenoid operated, 4-way, 3 position, direct acting, spool type valve.

Operation

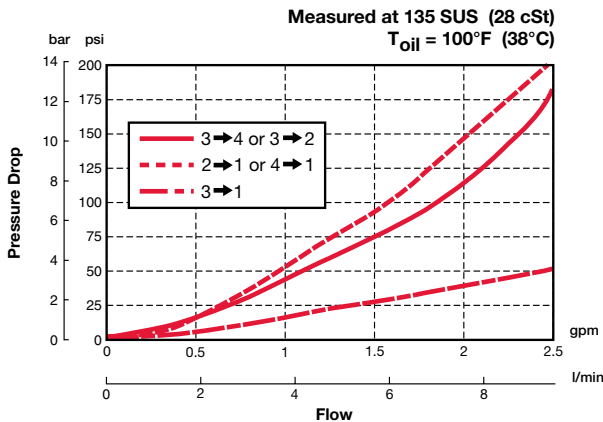
When de-energized the WK06G allows flow from port 3 to port 1, while blocking flow at ports 2 and 4. When coil S1 is energized the spool shifts and allows flow from port 3 to port 2 and from port 4 to port 1. When coil S2 is energized the spool shifts and allows flow from port 3 to port 4 and from port 2 to port 1.

Specifications

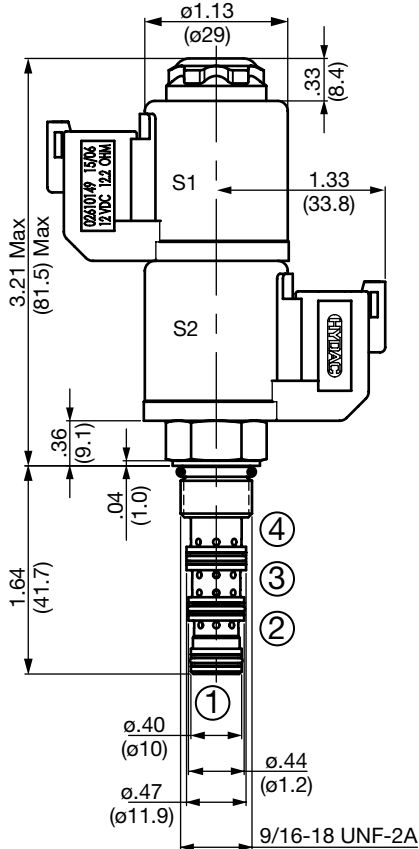
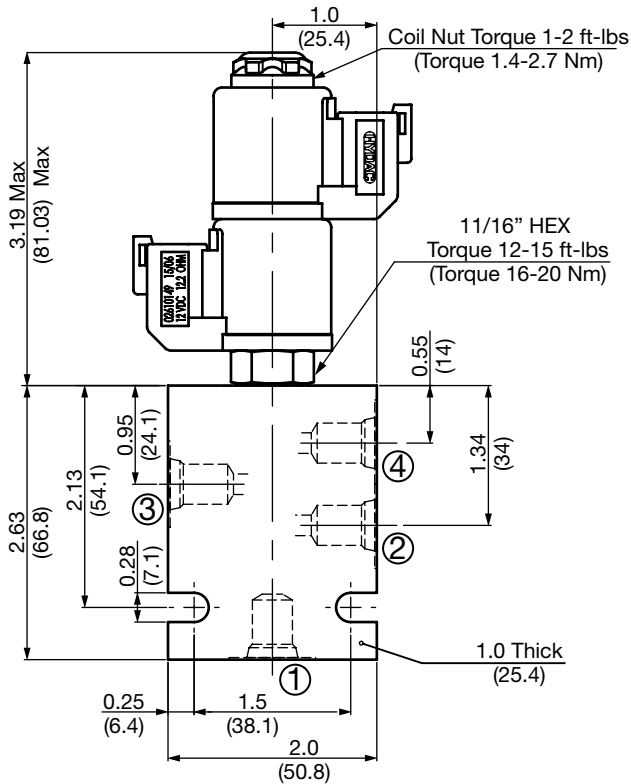
Operating Pressure	5000 psi (350 bar), 3000 psi (210 bar) Max Port 1
Nominal Flow	See Operating Limits
Internal Leakage	11.6 cu in/min. at 3000 psi and 135 SUS (190 cc/min at 207 bar and 28 cSt)
Fluid Operating Temp Range	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw at 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC
Min. Pull-in Current to Operate Valve	70% of nominal amperage
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)
Installation	No orientation restrictions
Cavity	FC06-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02582057 Finisher: 02582058
Cartridge Weight	3.6 oz (102 grams)
Coil Weight	3.1 oz (88 grams) each (2 required)
Cartridge Material	Steel with hardened work surfaces. Zinc plated exposed surfaces. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation.
Seal Kits	Buna-N P/N: 02610188 Viton® P/N: 02610189



Performance



Dimensions



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

Model Code

WK06G-01 M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
 - blank = No manual override
 - M = Manual override, not detented
 - A = Manual override, detented
- Body & Ports** _____
 - C = Cartridge only
 - AS4 = SAE-4 Ports, aluminum body
 - SS4 = SAE-4 Ports, steel body
- Seals** _____
 - N = Buna-N
 - V = Viton®
- Coil Voltage** _____
 - 0 = No coil, cartridge only
 - DC 12 = 12 VDC
 - DC 24 = 24 VDC
 - AC 115 = 105 VDC (only available with connector DG)
 - AC 230 = 205 VDC (only available with connector DG)
- Coil Connector** _____
 - DG = EN 175301-803-B (IP65 Rated)**
 - DC DL = Leadwires (2) - 18" long (46 cm) AWG18, TYPE UL 1815 (IP69K Rated)*
 - DN = Deutsch DT04-2P intergral molded (IP69K Rated)*

(All model 32-1329 coils are DC. AC models require an external diode bridge mounted outside the coil)**
Use mating plug EN 175301-803-B without diode bridge for DC voltages P/N 02600570
Use mating plug EN 175301-803-B w/diode bridge for AC voltages P/N 02600582

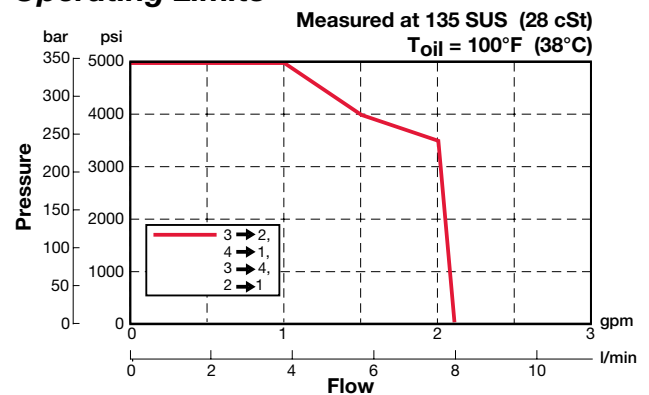
Coil Model 32-1329

For other coil connector types consult factory

** Mating Plugs sold separately

*Coils with internal transient suppression diode are available, consult factory.

Operating Limits



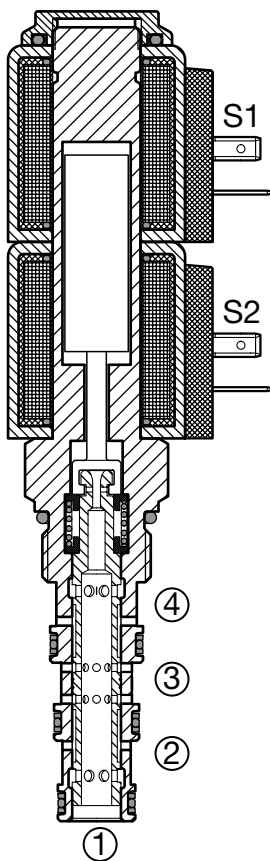
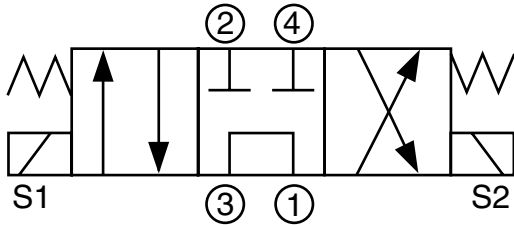
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH064-AS4	02600462	Aluminum, anodized	3500 psi (245 bar)	0.41 lbs (0.19 kg)
FH064-SS4	02600461	Steel, zinc plated	6000 psi (420 bar)	1.22 lbs (0.55 kg)

*Please refer to Line Bodies & Cavities section for details

WK10G-01 Spool Type, Direct Acting Up to 6 gpm (23 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

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

Operation

When de-energized the WK10G allows flow from port 3 to port 1, while blocking flow at ports 2 and 4. When coil S1 is energized the spool shifts and allows flow from port 3 to port 2 and from port 4 to port 1. When coil S2 is energized the spool shifts and allows flow from port 3 to port 4 and from port 2 to port 1.

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.

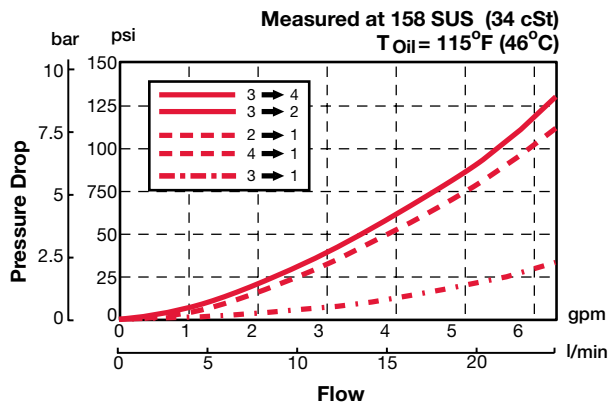
Features

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

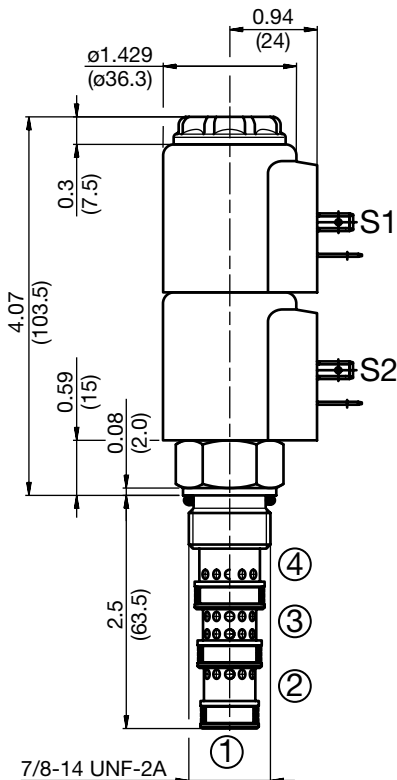
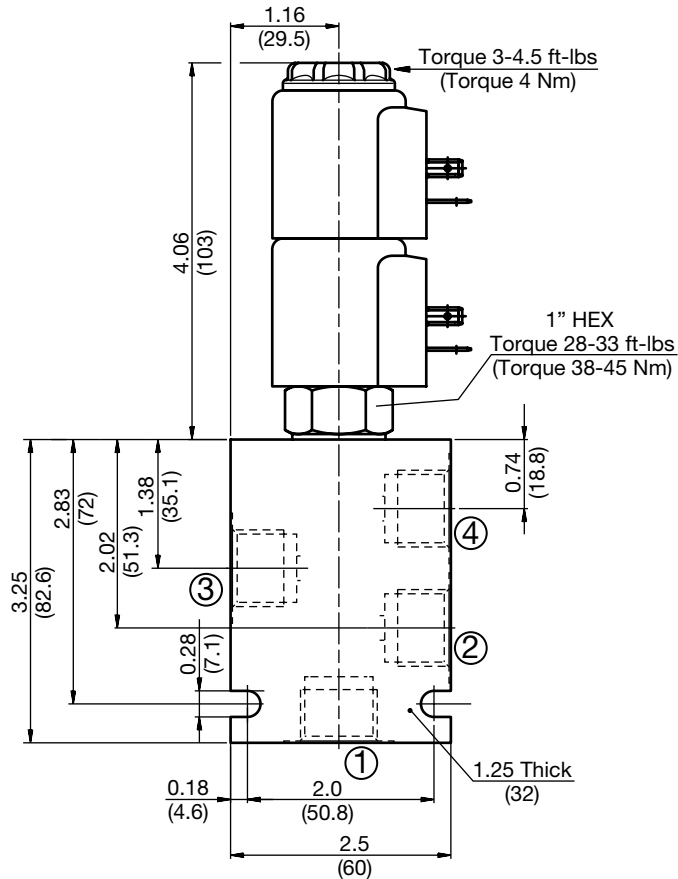
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	6 gpm at 3000 psi (23 l/min at 210 bar) <i>Consult factory for flow rating above 3000 psi (210 bar)</i>
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) <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 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> 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 N high temperature magnet wire, steel shell, polyamid encapsulation.
Seal Kits	Buna-N FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance



Dimensions



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

Model Code

WK10G-01-M-C-N-24 DN

Valve Model

Override Option

- (omit) = No manual override
- M = Push/pull type, not detented
- A = Push/pull type, detented

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 ports, aluminum body
- SS8 = SAE-8 ports, steel body

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
- 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, 2 per assembly

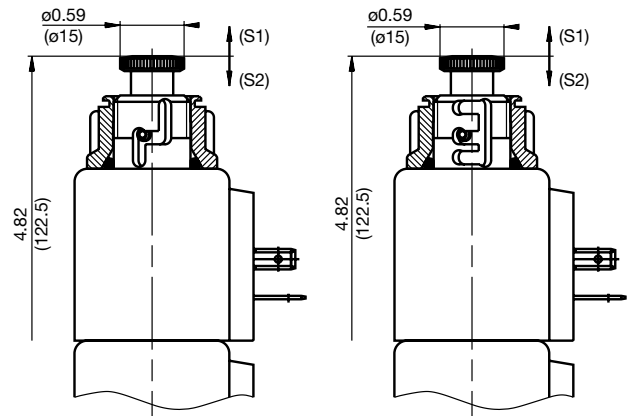
For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Manual Override Options

Option M - Non Detented

Option A - Detented



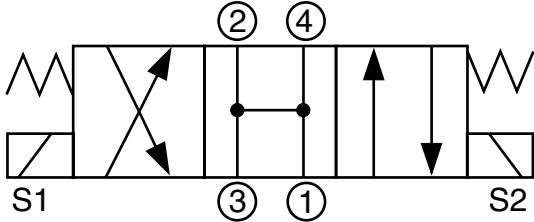
Standard Line Bodies*

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)

*Please refer to Line Bodies & Cavities section for details

WK06H-01 Spool Type, Direct Acting Up to 2.4 gpm (9 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

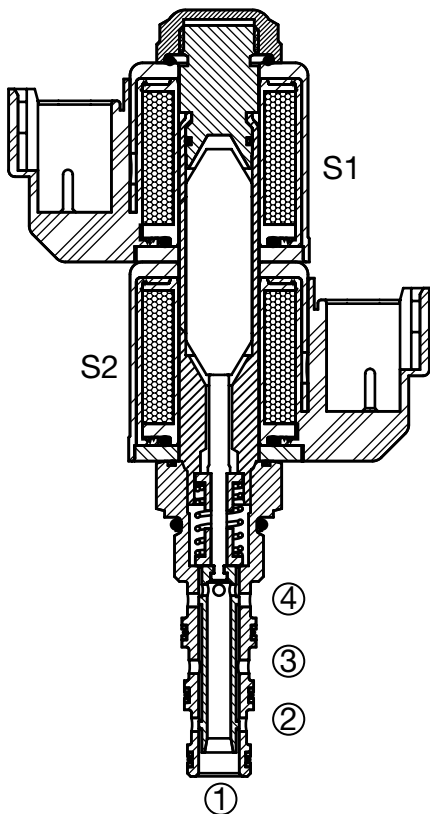
A screw-in cartridge, solenoid operated, 4-way, 3 position, direct acting, spool type valve.

Operation

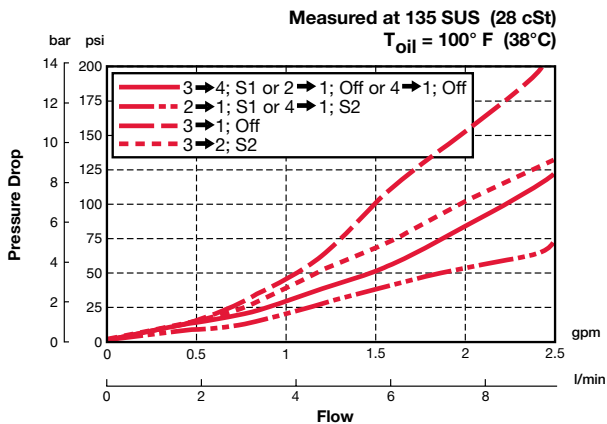
When de-energized the WK06H allows flow to all ports. When coil S1 is energized the spool shifts and allows flow from port 2 to port 1 and from port 3 to port 4. When coil S2 is energized the spool shifts and allows flow from port 4 to port 1 and from port 3 to port 2.

Specifications

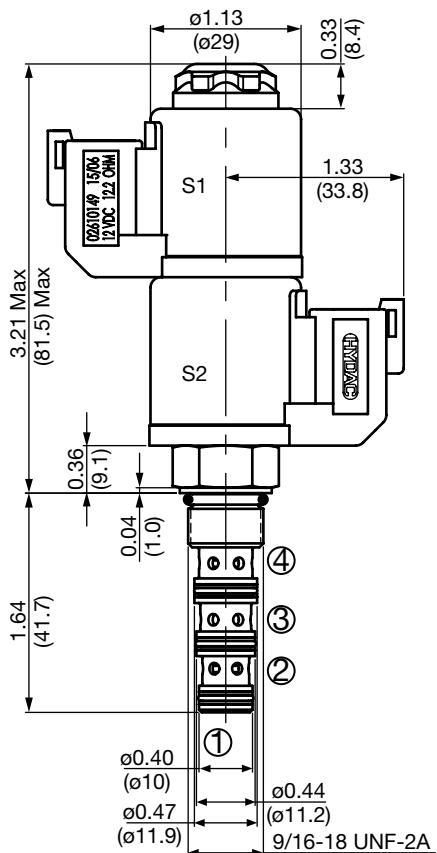
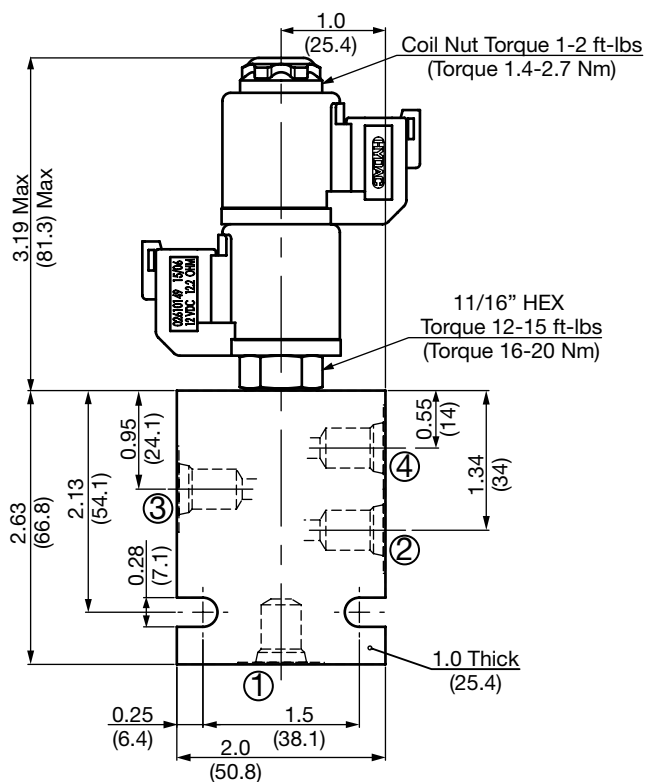
Operating Pressure	5000 psi (350 bar), 3000 psi (210 bar) Max Port 1
Nominal Flow	See Operating Limits
Internal Leakage	6.0 cu in/min. at 3000 psi and 135 SUS (100 cc/min at 207 bar and 28 cSt)
Fluid Operating Temp Range	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° to 60°C)
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage
Current Draw at 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC
Min. Pull-in Current to Operate Valve	70% of nominal amperage
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)
Installation	No orientation restrictions
Cavity	FC06-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02582057 Finisher: 02582058
Cartridge Weight	3.6 oz (102 grams)
Coil Weight	3.1 oz (88 grams) each (2 required)
Cartridge Material	Steel with hardened work surfaces. Zinc plated exposed surfaces. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation.
Seal Kits	Buna-N P/N: 02610188 Viton® P/N: 02610189



Performance



Dimensions



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

Model Code

WK06H-01 M-C-N-24 DN

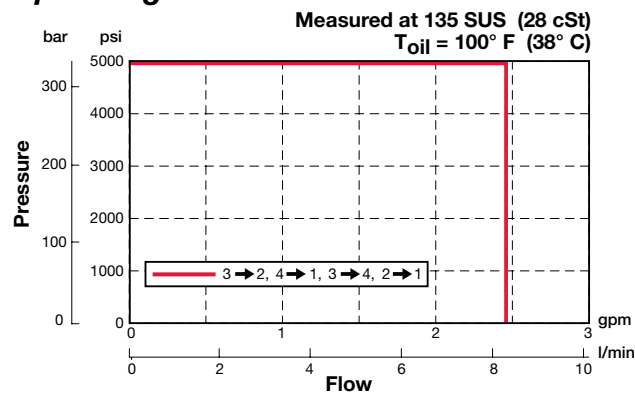
- Valve Model** _____
- Override Option** _____
- blank = No manual override
 - M = Manual override, not detented
 - A = Manual override, detented
- Body & Ports** _____
- C = Cartridge only
 - AS4 = SAE-4 Ports, aluminum body
 - SS4 = SAE-4 Ports, steel body
- Seals** _____
- N = Buna-N
 - V = Viton®
- Coil Voltage** _____
- 0 = No coil, cartridge only
 - DC 12 = 12 VDC
 - DC 24 = 24 VDC
 - AC 115 = 105 VDC (only available with connector DG)
 - AC 230 = 205 VDC (only available with connector DG)
- (All model 32-1329 coils are DC. AC models require an external diode bridge mounted outside the coil)**
- Coil Connector** _____
- DG = EN 175301-803-B (IP65 Rated)**
 - DC DL = Leadwires (2) - 18" long (46 cm) AWG18, TYPE UL 1815 (IP69K Rated)*
 - DN = Deutsch DT04-2P intergral molded (IP69K Rated)*
- Use mating plug EN 175301-803-B without diode bridge for DC voltages P/N 02600570
- Use mating plug EN 175301-803-B w/diode bridge for AC voltages P/N 02600582

Coil Model 32-1329
For other coil connector types consult factory

** Mating Plugs sold separately

*Coils with internal transient suppression diode are available, consult factory.

Operating Limits



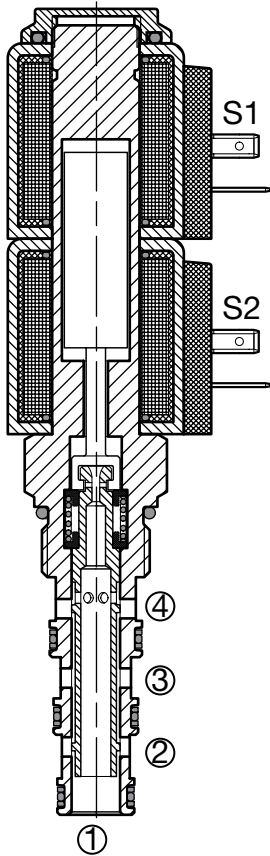
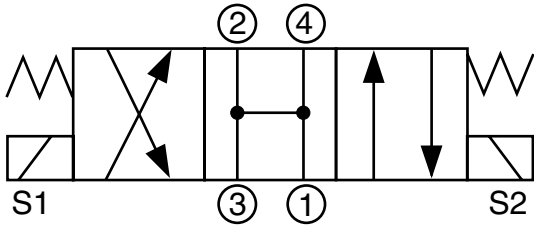
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH064-AS4	02600462	Aluminum, anodized	3500 psi (245 bar)	0.41 lbs (0.19 kg)
FH064-SS4	02600461	Steel, zinc plated	6000 psi (420 bar)	1.22 lbs (0.55 kg)

*Please refer to Line Bodies & Cavities section for details

WK10H-01 Spool Type, Direct Acting Up to 6 gpm (23 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

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

Operation

When de-energized the WK10H allows flow to all ports. 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.

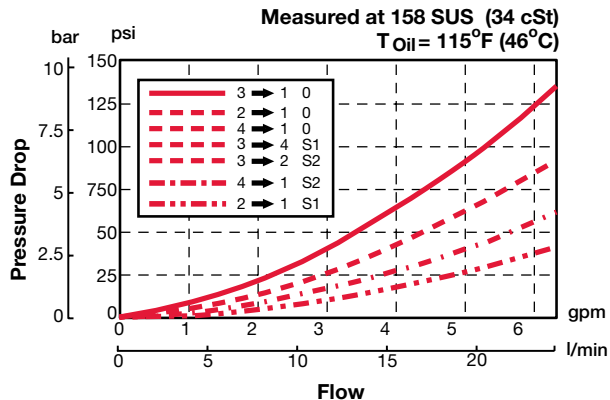
Features

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

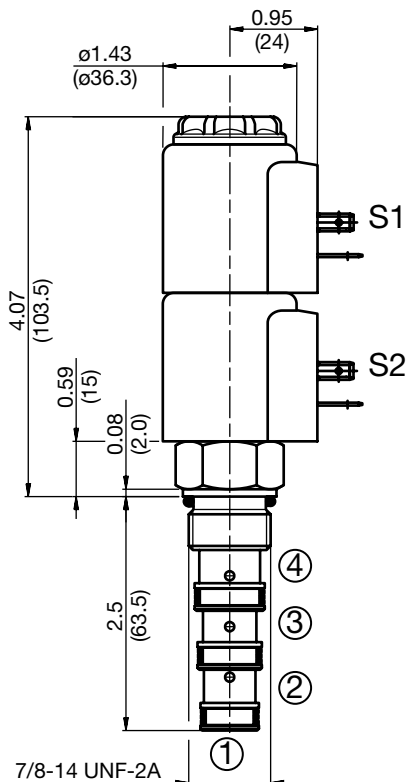
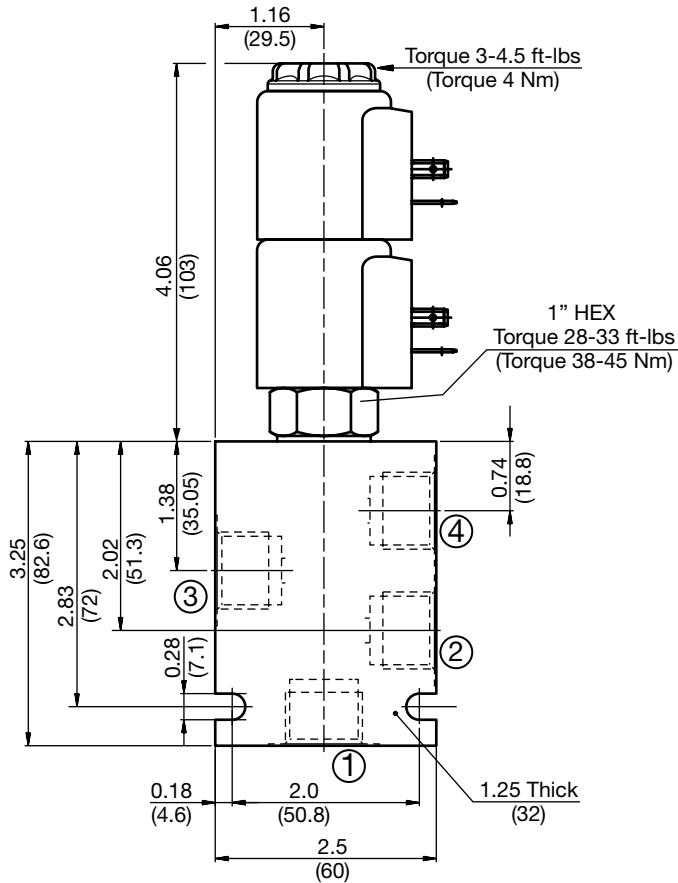
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	6 gpm at 3000 psi (23 l/min at 210 bar) <i>Consult factory for flow rating above 3000 psi (210 bar)</i>
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) <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 at 68°F (20°C)	1.5 A at 12VDC; 0.8 A at 24VDC
Minimum Pull-in Current	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> 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 N high temperature magnet wire, steel shell, polyamid encapsulation.
Seal Kits	Buna-N FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance



Dimensions



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

Model Code

WK10H-01-M-C-N-24 DN

Valve Model

Override Option

- (omit) = No manual override
- M = Push/pull type, not detented
- A = Push/pull type, detented

Body & Ports

- C = Cartridge only
- AS8 = SAE-8 ports, aluminum body
- SS8 = SAE-8 ports, steel body

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
- 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, 2 per assembly

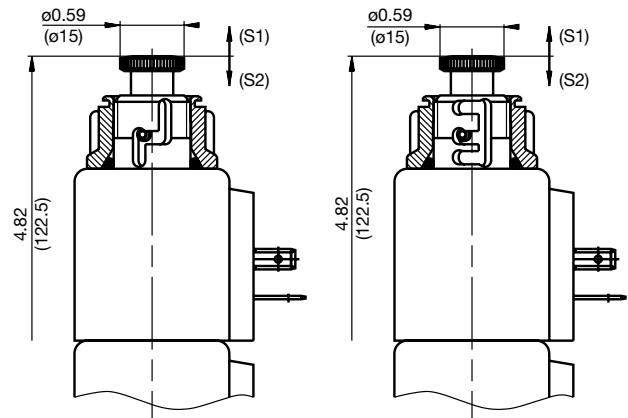
For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Manual Override Options

Option M - Non Detented

Option A - Detented



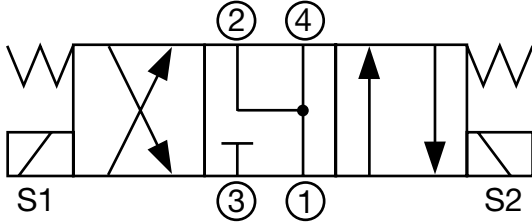
Standard Line Bodies*

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)

*Please refer to Line Bodies & Cavities section for details

WK06J-01
Spool Type, Direct Acting
Up to 3 gpm (11.4 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



Description

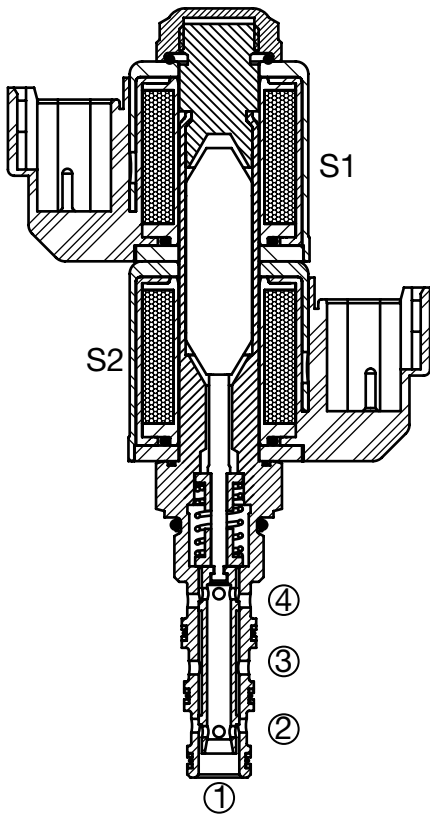
A screw-in cartridge, solenoid operated, 4-way, 3 position, direct acting, spool type valve.

Operation

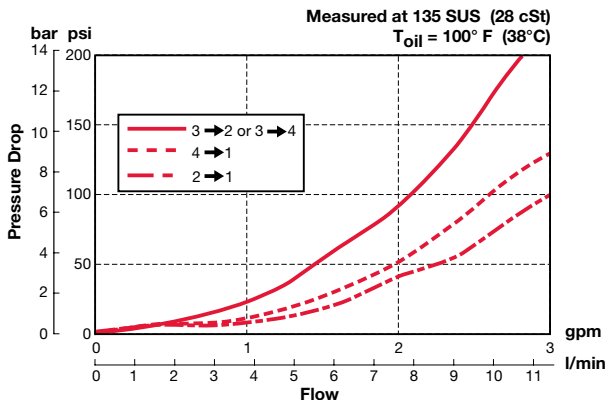
When de-energized the WK06J allows flow from cylinder ports 2 and 4 to port 1, port 3 is blocked. When coil S1 is energized the spool shifts and allows flow from port 2 to port 1 and from port 3 to port 4. When coil S2 is energized the spool shifts and allows flow from port 4 to port 1 and from port 3 to port 2.

Specifications

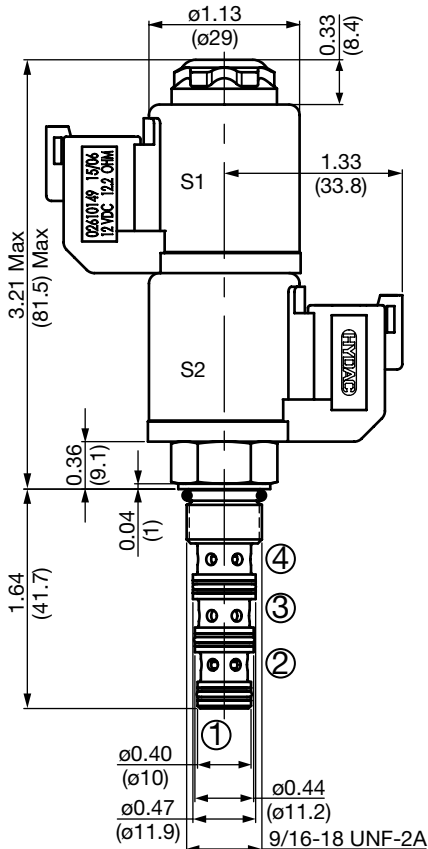
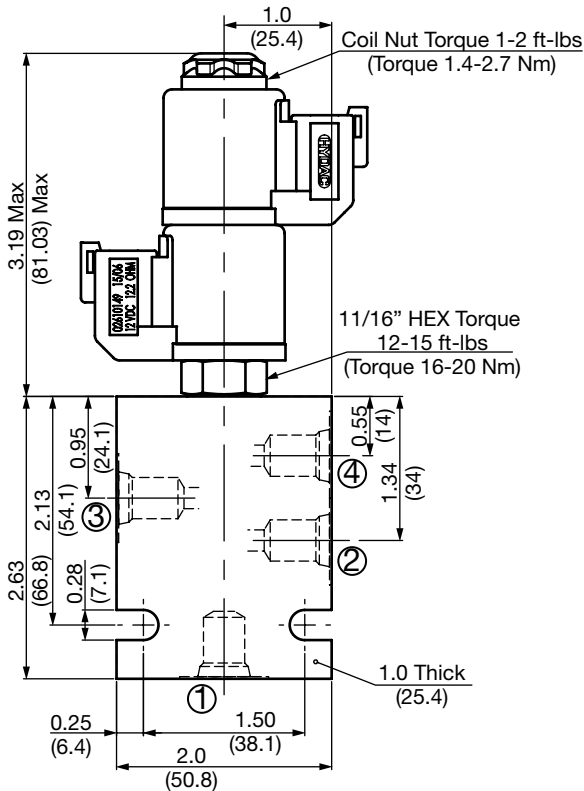
Operating Pressure	5000 psi (350 bar), 3000 psi (210 bar) Max Port 1		
Nominal Flow	See Operating Limits		
Internal Leakage	11.6 cu in/min. at 3000 psi and 158 SUS (190 cc/min at 250 bar and 34 cSt)		
Fluid Operating Temp. Range	-20° to 248°F (-29° to 120° C)		
Ambient Temperature Range	-20° to +140°F (-29° to +60°C)		
Coil Duty Rating	Continuous from 85% to 115% of nominal voltage		
Current Draw at 68°F (20°C)	984 mA at 12VDC; 492 mA at 24VDC		
Min. Pull-in Current to Operate Valve	70% of nominal amperage		
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)		
Installation	No orientation restrictions		
Cavity	FC06-4 (see Line Bodies & Cavities section)		
Cavity Tools	Rougher: 02582057 Finisher: 02582058		
Cartridge Weight	3.6 oz (102 grams)		
Coil Weight	3.1 oz (88 grams) each (2 required)		
Cartridge Material	Steel with hardened work surfaces. Zinc plated exposed surfaces. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.		
Coil Material	Class N, 200°C high temperature magnet wire, steel shell, polyester encapsulation.		
Seal Kits	Buna-N	FS064-N	P/N: 02610188
	Viton®	FS064-V	P/N: 02610189



Performance



Dimensions



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

Model Code

WK06J-01 M-C-N-24 DN

Valve Model

Override Option

- blank = No manual override
- M = Manual override, not detented
- A = Manual override, detented

Body & Ports

- C = Cartridge only
- AS4 = SAE-4 Ports, aluminum body
- SS4 = SAE-4 Ports, steel body

Seals

- N = Buna-N
- V = Viton®

Coil Voltage

- 0 = No coil, cartridge only
- DC { 12 = 12 VDC
- 24 = 24 VDC
- AC { 115 = 105 VDC (only available with connector DG)
- 230 = 205 VDC (only available with connector DG)

(All model 32-1329 coils are DC. AC models require an external diode bridge mounted outside the coil)**

Coil Connector

- DG = EN 175301-803-B (IP65 Rated)**
- DC { DL = Leadwires (2) - 18" long (46 cm) AWG18, TYPE UL 1815 (IP69K Rated)*
- DN = Deutsch DT04-2P intergral molded (IP69K Rated)*

Use mating plug EN 175301-803-B without diode bridge for DC voltages P/N 02600570

Use mating plug EN 175301-803-B w/diode bridge for AC voltages P/N 02600582

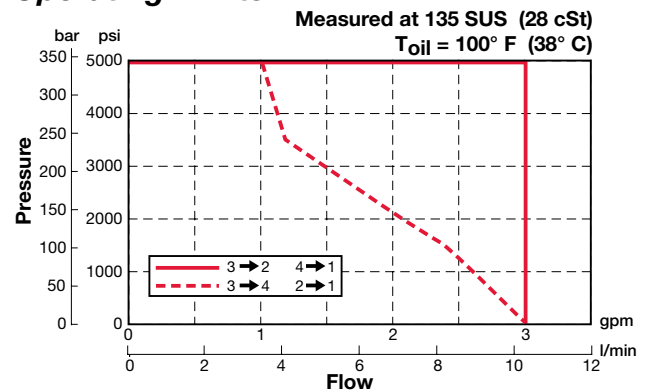
Coil Model 32-1329

For other coil connector types consult factory

** Mating Plugs sold separately

*Coils with internal transient suppression diode are available, consult factory.

Operating Limits

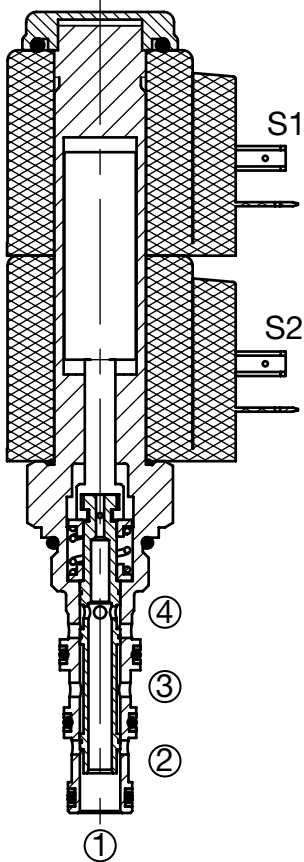


Standard Line Bodies*

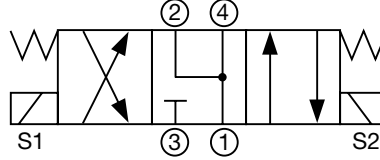
Code	Part No	Material	Pressure Rating	Weight
FH064-AS4	02600462	Aluminum, anodized	3500 psi (245 bar)	0.41 lbs (0.19 kg)
FH064-SS4	02600461	Steel, zinc plated	6000 psi (420 bar)	1.22 lbs (0.55 kg)

*Please refer to Line Bodies & Cavities section for details

WK08J-01
Spool Type, Direct Acting
Up to 5 gpm (19 l/min) • 5000 psi (350 bar)



Hydraulic Symbol



Description

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

Operation

When de-energized the WK08J 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 2 to port 1 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.

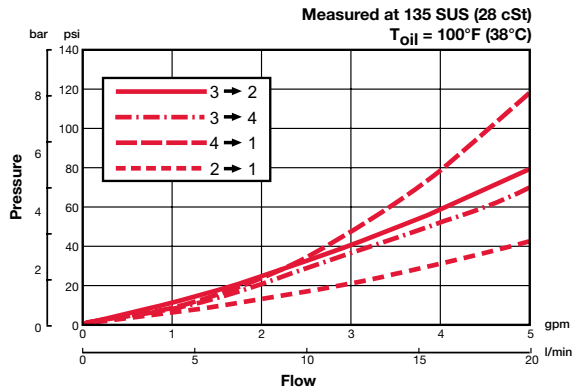
Features

- Push/pull type manual override button, detented manual override option.
- High flow capacity

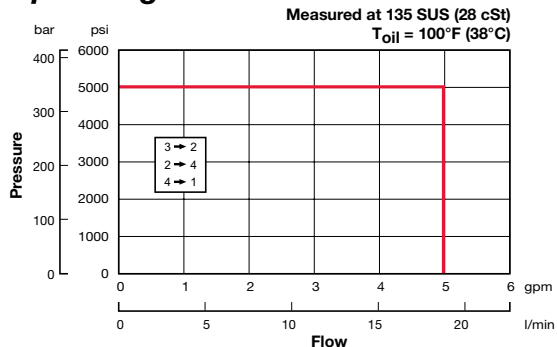
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	5 gpm at 3000 psi (20 l/min@ 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	-20° to 248°F (-29° to 120°C)
Ambient Temperature Range	-20° to 140°F (-29° 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	75% of nominal amperage
Typical Response Time (Varies with Pressure and Flow)	On: 30 to 60 ms Off: 20 to 40 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)
Installation	No orientation restrictions
Cavity	FC08-4 (see Line Bodies & Cavities section)
Cavity Tools	Rougher: 02580088 Finisher: 02580089
Cartridge Weight	0.6 lbs (0.27 kg)
Coil Weight	2 x 0.42 lbs (2 x 0.19 kg)
Cartridge Material	Steel with hardened work surfaces. Zinc plated solenoid tube surface. Buna N or Viton® o-rings. Solid thermoplastic polyester back-up rings.
Coil Material	Class N high temperature magnet wire, steel shell, polyamid encapsulation.
Seal Kits	Buna-N FS084-N P/N: 03071272 Viton® FS084-V P/N: 03071273

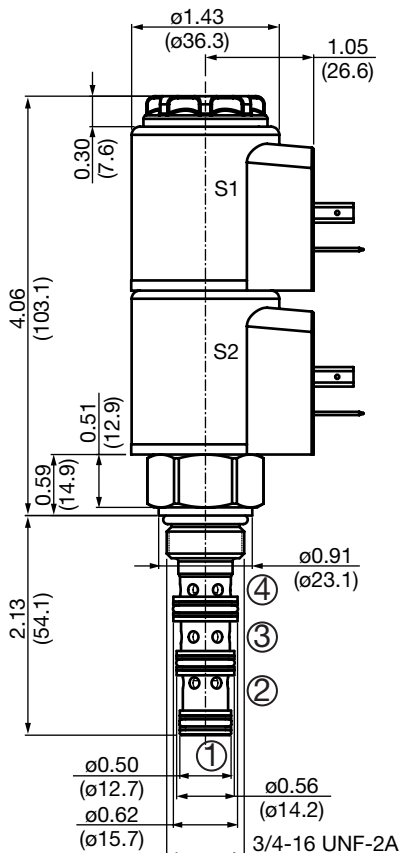
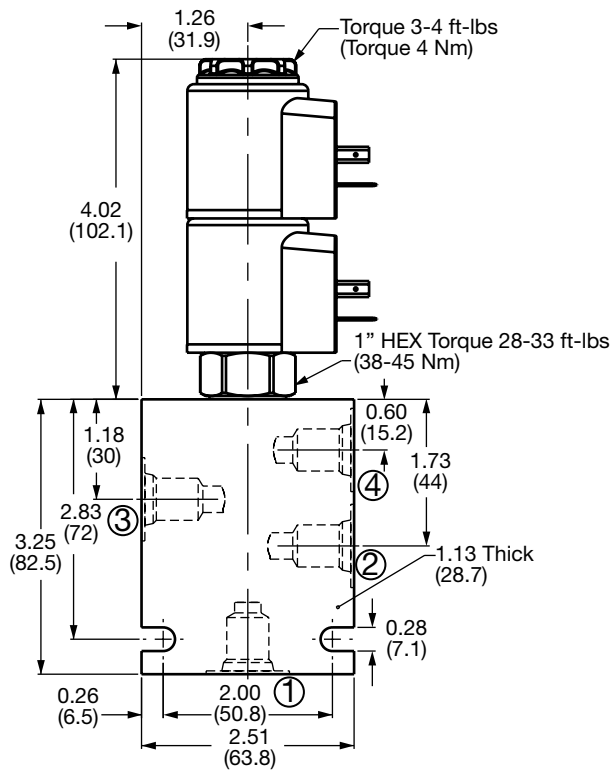
Performance



Operating Limits



Dimensions



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

Model Code

WK08J-01-M-C-N-24 DN

- Valve Model** _____
- Override Option** _____
 (omit) = No manual override
 M = Push/pull type, not detented
 A = Push/pull type, detented
- Body & Ports** _____
 C = Cartridge only
 AS6 = SAE-6 ports, aluminum body
 SS6 = SAE-6 ports, steel body
- 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
 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

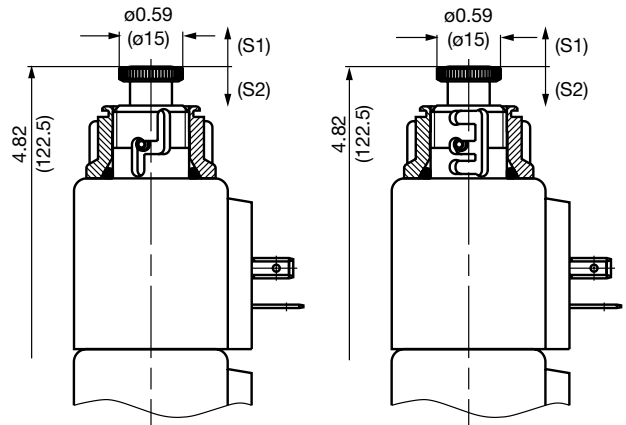
Coil Model 40-1836, 2 per assembly
 For other coil connector types consult factory

*Coils with internal diode are available, consult factory

Manual Override Options

Option M - Non Detented

Option A - Detented



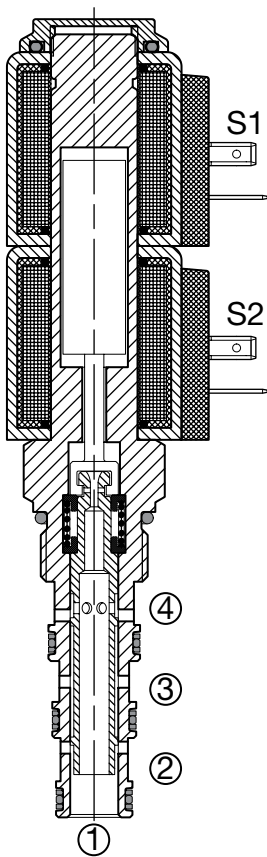
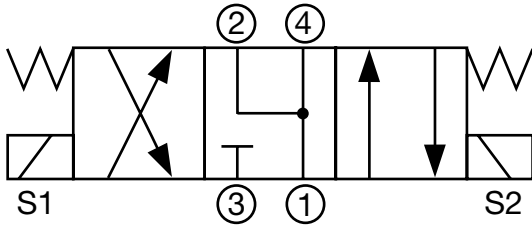
Standard Line Bodies*

Code	Part No	Material	Pressure Rating	Weight
FH084-AS6	03011404	Aluminum, anodized	3500 psi (245 bar)	0.72 lb (0.33 kg)
FH084-SS6	00563381	Steel, zinc plated	6000 psi (420 bar)	2.12 lb (0.96 kg)

*Please refer to Line Bodies & Cavities section for details

WK10J-01 Spool Type, Direct Acting Up to 6 gpm (23 l/min) • 5000 psi (350 bar)

Hydraulic Symbol



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.

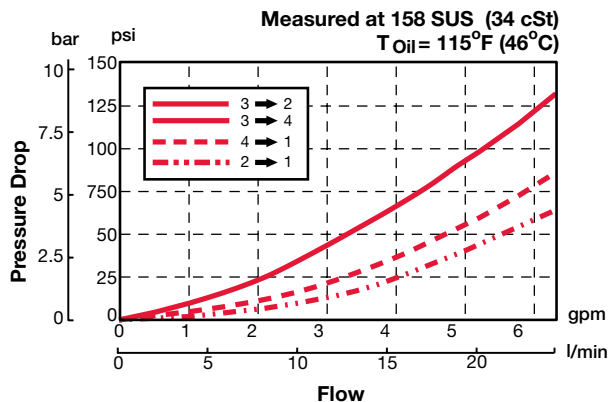
Features

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

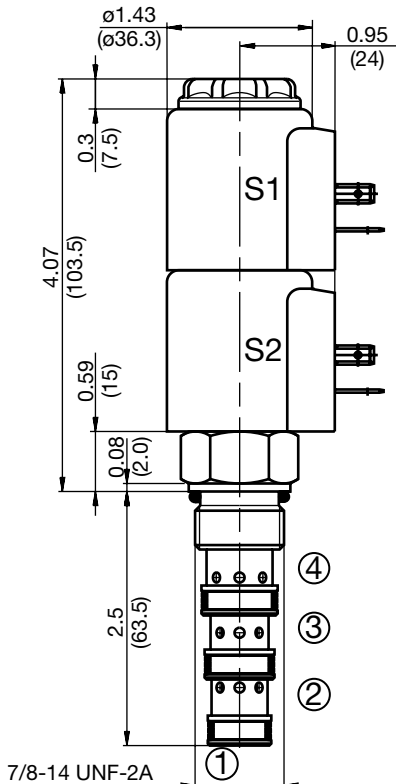
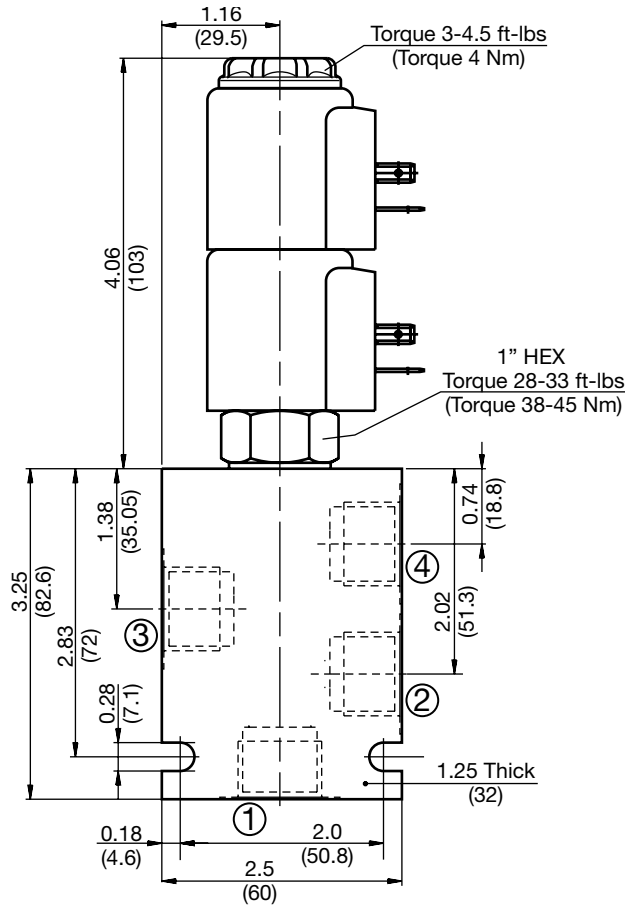
Specifications

Operating Pressure	5000 psi (350 bar)
Nominal Flow	6 gpm at 3000 psi (23 l/min at 210 bar) <i>Consult factory for flow rating above 3000 psi (210 bar)</i>
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) <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 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> 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 FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Performance



Dimensions



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

Model Code

WK10J-01-M-C-N-24 DN

Valve Model _____

Override Option _____

- (omit) = No manual override
- M = Push/pull type, not detented
- A = Push/pull type, detented

Body & Ports _____

- C = Cartridge only
- AS8 = SAE-8 ports, aluminum body
- SS8 = SAE-8 ports, steel body

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
- 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, 2 per assembly

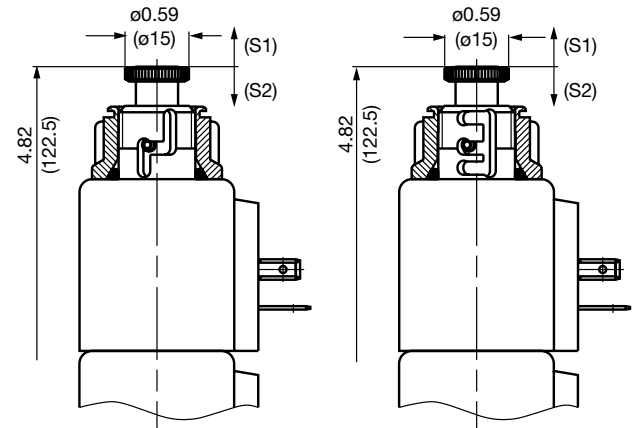
For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Manual Override Options

Option M - Non Detented

Option A - Detented



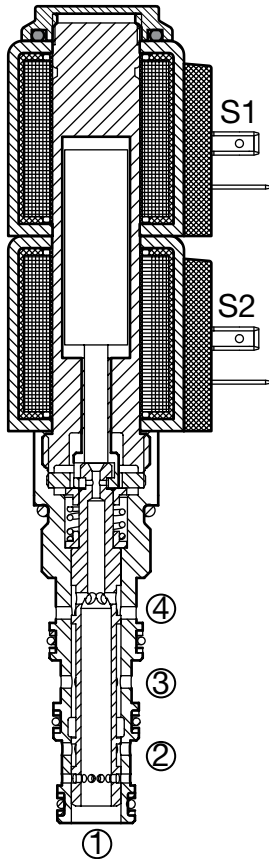
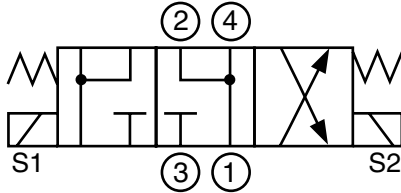
Standard Line Bodies*

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)

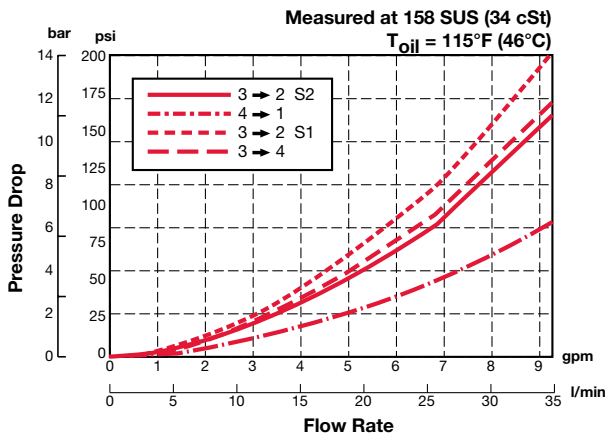
*Please refer to Line Bodies & Cavities section for details

WK10T-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 WK10T 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 3 to port 2 and port 4. When coil S2 is energized the spool shifts and allows flow from port 3 to port 4 and from port 2 to port 1.

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.

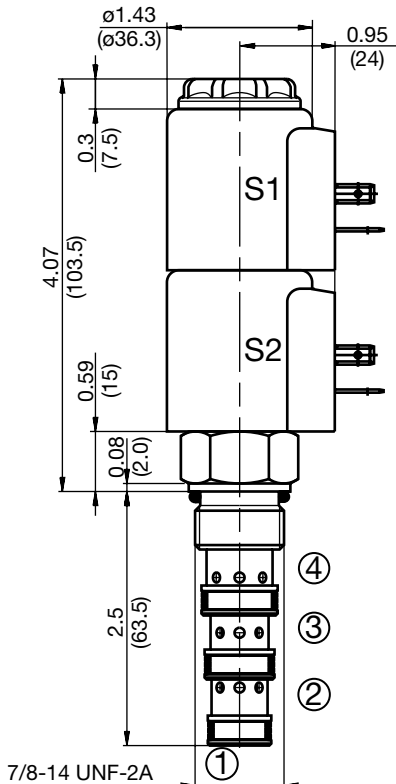
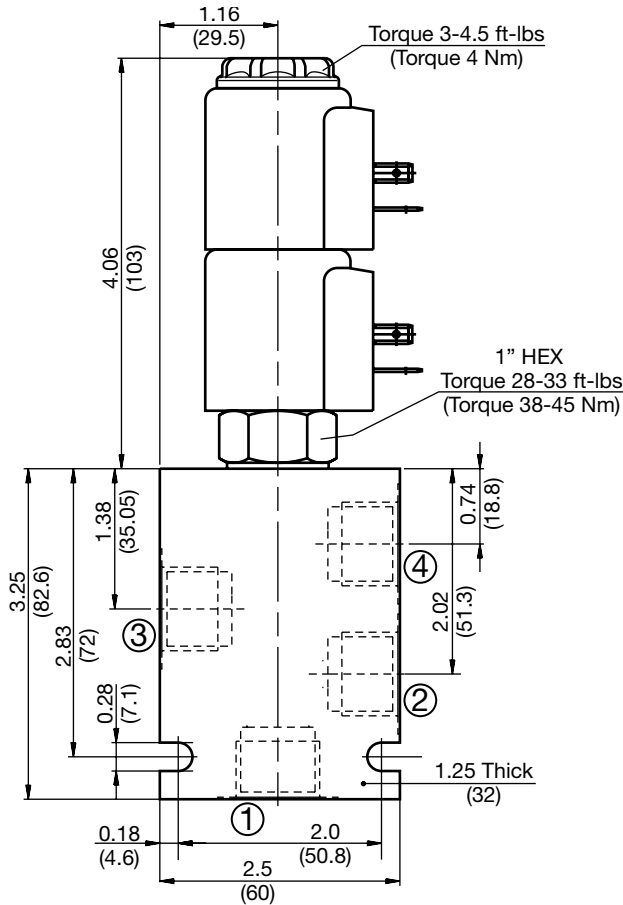
Features

- 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) <i>Consult factory for flow rating above 3000 psi (210 bar)</i>
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) <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 at 68°F (20°C)	1.5 A at 12VDC; 0.8 A at 24VDC
Minimum Pull-in Current	85% 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 $\beta_{10} \geq 200$.
Installation	No orientation restrictions
Cavity	FC10-4 (see <i>Line Bodies & Cavities</i> 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 N high temperature magnet wire, steel shell, polyamid encapsulation.
Seal Kits	Buna-N FS104-N P/N: 03051912 Viton® FS104-V P/N: 03071275

Dimensions



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

Model Code

WK10T-01-M-C-N-24 DN

Valve Model _____

Override Option _____

- (omit) = No manual override
- M = Push/pull type, not detented
- A = Push/pull type, detented

Body & Ports _____

- C = Cartridge only
- AS8 = SAE-8 ports, aluminum body
- SS8 = SAE-8 ports, steel body

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
- 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, 2 per assembly

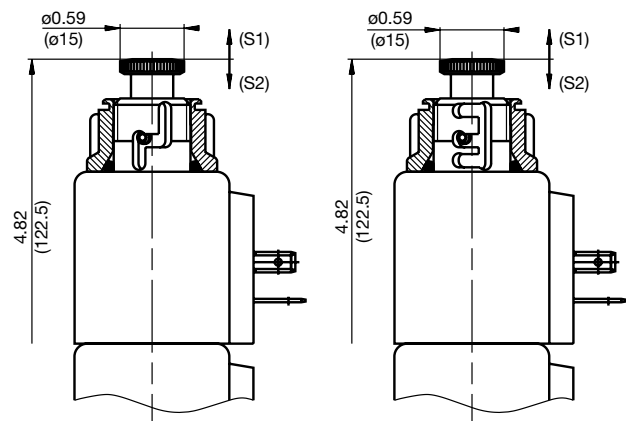
For other coil connector types consult factory

*Coils with internal diode are available, consult factory.

Manual Override Options

Option M - Non Detented

Option A - Detented



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)

*Please refer to Line Bodies & Cavities section for details