

4 WAY (5/2) SOLENOID VALVE WITH BRASS, STAINLESS OR ALUMINUM HOUSING



DIRECT ACTING

Brochure 1611

SPECIFICATIONS:

Solenoid Valve for air, oil, water and other fluids compatible with valve materials. For contaminated fluids, use of a filter may be required.

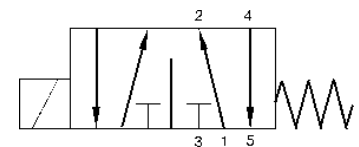
- Port Size:** 1/4" NPT
- Flow Direction:** Unidirectional flow paths
- Flow Factor:** $C_v = 0.58$
- Pressure Range:** 0 - 150 psi
- Shifting Frequency:** 100 CPM (cycles per minute)
- Installation:** Solenoid should be vertical (as pictured) for longest life.



Valve shown with hazardous duty coil, integral 1/2" NPT conduit hub, and 18" leads.

TEMPERATURE RATING:

Seal Material	Environmental	Fluid
NBR (Nitrile)	-15° F to 140° F	-15° F to 175° F
EPDM	-40° F to 140° F	-40° F to *
FKM (Viton)	15° F to 140° F	15° F to *
* Max. Fluid Temp.	water - 200° F / oil - 250° F / gas - 300° F	



Flow Symbol

FEATURES:

- High flow.
- Valve internals are stainless steel and brass.
- Direct acting, solenoid operated.
- No minimum pressure drop required.
- Suitable for use on vacuum.

OPTIONS:

- Wide variety of solenoids including hazardous location and UL, CSA, FM, CENELEC and other international listings.
- "G" thread ports - parallel threads per ISO 228/1 and BSPP.
- Manual override and manual reset options.



Valve shown with general purpose solenoid and DIN connector.

Order Information Table A - Valves



Materials			Valve Variations	Weight without solenoid (lb.)	Spare Parts Kit	Order Number ⁽¹⁾ Valve
Housing	Seat	Internal Parts				
Brass	NBR	Brass/430F SST	Standard - Brass	2.54	0596631	2500306
Brass	NBR	Brass/430F SST	With Reset ⁽²⁾ (See Fig. 9)	2.76	0596631	2500306X1
Brass	NBR	Brass/430F SST	Push Button Manual Override (See Fig. 9)	2.76	0596631	2500316N
Brass	NBR	Brass/430F SST	Locking Manual Override (See Fig.10)	2.76	0596631	2500344
316 SST	FKM	316/430F SST	Standard - Stainless Steel	2.54	8110161	2500308
316 SST	FKM	316/430F SST	With Reset ⁽²⁾ (See Fig. 9)	2.76	8110161	2500308X1
316 SST	FKM	316/430F SST	Push Button Manual Override (See Fig. 9)	2.76	8110161	2500308X2
316 SST	FKM	316/430F SST	Locking Manual Override (See Fig. 10)	2.76	8110161	2500308X3
Aluminum	NBR	Brass/430F SST	Standard - Aluminum	1.37	0596631	2500307
Brass	EPDM	Brass/430F SST	Standard - Brass	2.54	8112067	2500347N
Brass	EPDM	Brass/430F SST	With Reset ⁽²⁾ (See Fig. 9)	2.76	8112067	2500347X1
Brass	EPDM	Brass/430F SST	Push Button Manual Override (See Fig. 9)	2.76	8112067	2500347X2
Brass	EPDM	Brass/430F SST	Locking Manual Override (See Fig. 10)	2.76	8112067	2500347X3
Brass	NBR	Brass/430F SST	Standard - Brass (EEx d IIC T5/T6) ⁽³⁾	2.76	0602869	2500337
316SST	FKM	316/430F SST	Standard - Stainless Steel (EEx d IIC T5/T6) ⁽³⁾	2.54	0605774	2500339

Notes: ⁽¹⁾ Order solenoid from Table B below.

⁽²⁾ Upon electrical failure, valve will trip. Restore power and then manually engage reset button on the bottom of the valve. Valves with reset must be ordered with this feature from the factory. The reset cannot be added to an existing valve.

⁽³⁾ Used with Solenoids 3616 and 3617.

Order Information Table B – Solenoids

Solenoid Number	Power Consumption		Max. Temperature ⁽¹⁾		Weight (lb.)	Solenoid Dimensions Fig. No.	Solenoid Schematic Fig. No.	Hazardous Location Approvals
	AC(VA)	DC(W)	Fluid	Ambient				
0801 ⁽²⁾	--	16	+175°F	+130°F	.73	11,12	2	----
3804 ⁽²⁾	18	--	+175°F	+140°F	.75	11,12	3	----
3616	--	14	+140°F	+140°F	1.76	14	6	CENELEC EEx d IIC T5/T6
3617	16	--					7	
3980	--	12	+113°F (T6)	+113°F (T6)	1.83	13	4	CENELEC EEx em II T5/T6
3981	13	--	+140°F (T5)	+140°F (T5)			5	
3826	--	13	+175°F	+130°F	.84	15	2	  LR 57643-6 File 22Z2A6.AE Class I Division 1,2 Groups A,B,C,D Class II Division 1,2 Groups E,F,G Class III Division 1,2
3827	15	--					3	

Notes: ⁽¹⁾ These are maximum solenoid temperatures. The actual permissible temperature for the valve assembly must not exceed the temperature ratings shown in specifications on page 1.

⁽²⁾ These solenoids include a DIN 43650-A connector with a Pg 11 cable clamp for round cable. Fits wire cable 5/32" to 7/16" diameter. For other connector types such as 1/2" NPT and lighted consult HERION Brochure N-209.

Solenoid Internal Wiring Schematics



Fig. 1 Symbols

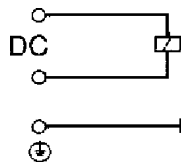


Fig. 2

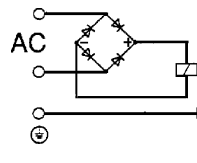


Fig. 3

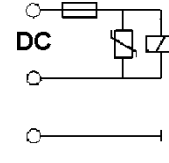


Fig. 4

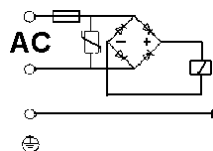


Fig. 5

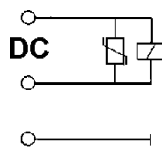


Fig. 6

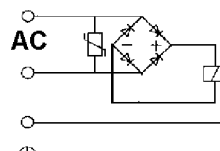


Fig. 7

CROSS SECTION DRAWINGS:

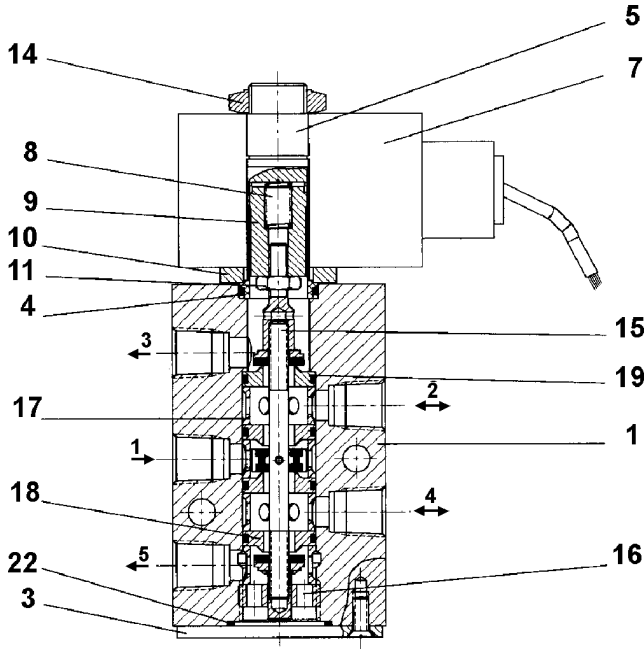


Fig. 8 Valve and Solenoid

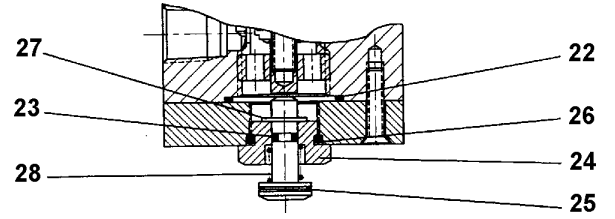


Fig. 9 Push Button Style Manual Override and Manual Reset Options

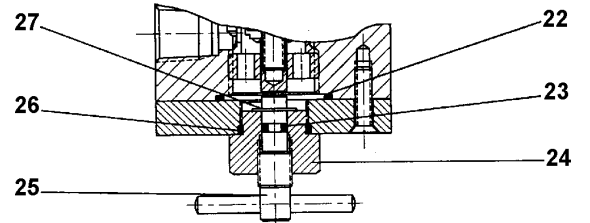


Fig. 10 Locking Style Manual Override

PARTS LIST

- | | | | | | |
|-----|-----------------------|------|-------------------------|------|--------------|
| 1. | Housing | 11. | Nut | 20. | Washer |
| 2. | Connector (not shown) | 12. | Locking Tab (not shown) | *22. | O-Ring |
| 3. | Bottom Valve Plate | 13. | Set Screw (not shown) | *23. | O-Ring |
| *4. | O-Ring | 14. | Solenoid Nut | 24. | Nut |
| 5. | Core Tube | *15. | Spindle Assy. | 25. | Spindle |
| 7. | Solenoid | 16. | Adjusting Ring | *26. | O-Ring |
| *8. | Spring | *17. | Spacer | 27. | Locking Ring |
| 9. | Plunger | *18. | Valve Seat | 28. | Spring |
| 10. | Top Valve Plate | *19. | O-Ring | | |

Note: The parts marked with an asterisk are contained in the spare parts kit. When ordering include Valve Model Number.

VALVE DIMENSIONS:

Note: All dimensions in mm (inches).

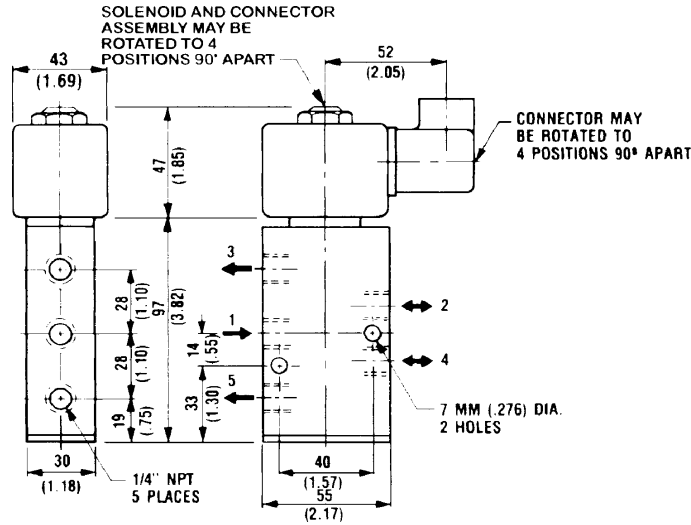


Fig. 11 Standard Valve shown with 0801, 3804 Solenoid

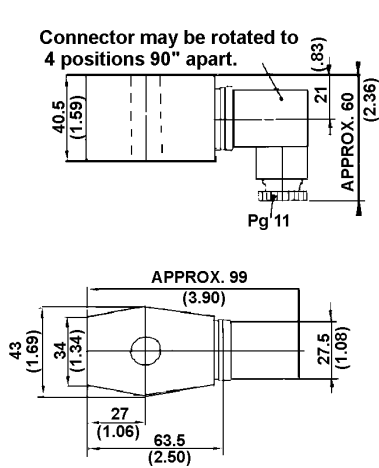


Fig. 12 0801, 3804 Solenoids

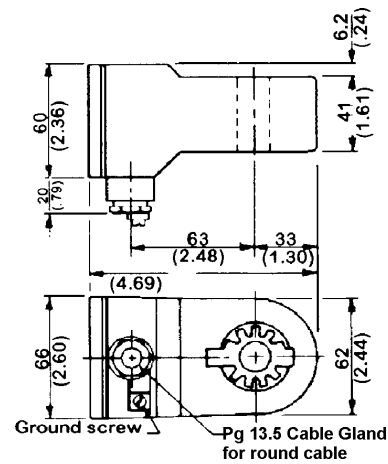


Fig. 13 3980, 3981 Solenoids

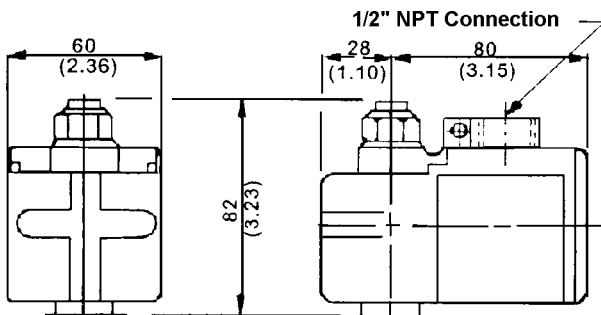


Fig. 14 3616, 3617 Solenoids

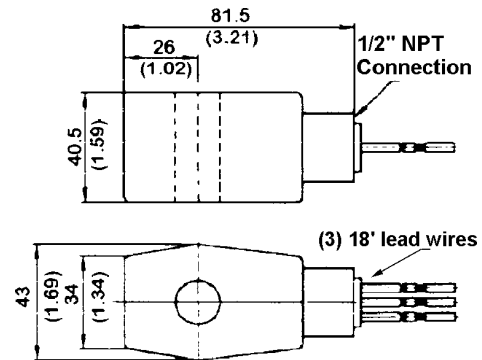


Fig. 15 3826, 3827 Solenoids

HERION USA Inc. • 176 Thorn Hill Road • Warrendale • PA 15086

Phone: 724.776.5577 Fax: 724.776.0310

email:sales@herionusa.com www.herionusa.com