

# 2 WAY (2/2) SOLENOID VALVE



HERION USA INC.  
Valve Technology and Systems

Pilot Operated

Brochure 1592

## SPECIFICATIONS:

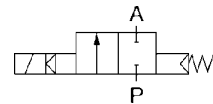
- Normally closed** valve for air, oil or water <sup>4),5)</sup>
- Port Sizes:** 1/4 to 1 inch NPT
- Flow Direction:** One Way
- Fluid Temperature:** 195° F Max (230°F for EPDM, FKM)
- Environmental Temperature:** 120° F Max.
- Sum of Fluid and Environmental Temperatures:** 265° F Max.
- Installation:** Solenoid should be vertical for maximum life
- Body Material:** Brass
- Seat Material:** Buna N (NBR)<sup>6)</sup>



**ISO 9001  
CERTIFIED  
PRODUCT**

## FEATURES:

- Valve operates without pressure differential ( $\Delta P=0$  psi) or on Vacuum<sup>1)</sup>
- High flow rate
- Easily interchangeable solenoid
- Optional seal materials



Switching function:  
Normally closed

Port Size (NPT)	Orifice Size (mm)	Operating Pressure PSI				C <sub>v</sub>	Weight (lb.)	Spare Parts <sup>3),6)</sup> Kit No. (Buna N)	Order Number	
		DC		AC					Valve	Solenoid <sup>2)</sup> DC or AC
		min.	max.	min.	max.					
1/4"	8	Vac	115	Vac	230	2.3	2.2	12-440-48	82-650-00	.9301
3/8"	10	Vac	115	Vac	230	3.1	2.0	12-440-48	82-651-00	.9301
1/2"	12	Vac	115	Vac	230	3.8	2.0	12-440-48	82-652-00	.9301
3/4"	20	Vac	115	Vac	230	8.4	3.4	12-432-23	82-653-00	.9301
1"	25	Vac	115	Vac	230	9.6	3.2	12-432-23	82-654-00	.9301

- Note:
- <sup>1)</sup> For vacuum applications connect vacuum pump to "A" port.
  - <sup>2)</sup> State voltage [V] and frequency [Hz].
  - <sup>3)</sup> Consult factory for other seat materials.
  - <sup>4)</sup> For contaminated fluids insertion of a strainer is recommended, 50 micron or better.
  - <sup>5)</sup> For liquids the maximum allowable viscosity is 25 centistokes.
  - <sup>6)</sup> For EPDM and FKM seals consult Herion.

Solenoid Specifications	Standard Voltages			Power Consumption			
	DC	AC		Solenoid	DC	AC	
		50 Hz	60 Hz			Inrush	Holding
<ul style="list-style-type: none"> <li>• Connector to DIN 43650 Form A</li> <li>• 100% Duty Cycle</li> <li>• Meets NEMA 4</li> <li>• Insulation Class F</li> <li>• Non Polarity Sensitive</li> <li>• Voltage range + 10%</li> </ul>	24 V -- 205 V	24 V 110 V 230 V	-- 120 V 220 V	.9301	18 W	106 VA	35 VA

**General Purpose (.9301) Solenoids:**

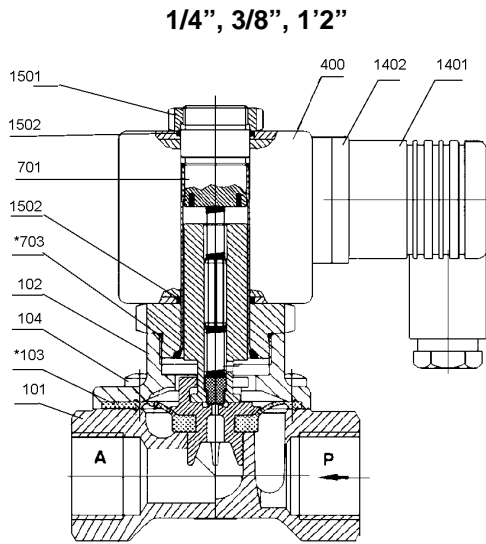
These solenoids include a mating connector. Together, the molded coil and connector combination complies with NEMA 4 specifications. A solenoid retaining nut secures the solenoid / connector assembly to the valve. The electrical connection is made through the three integral solenoid prongs (2 power, 1 ground), once the solenoid is "plugged" into the connector. The connection is then secured by tightening the screw provided with the unit. Consult Herion for solenoid voltages or arrangements not found in this brochure.

**General Purpose Connector:**

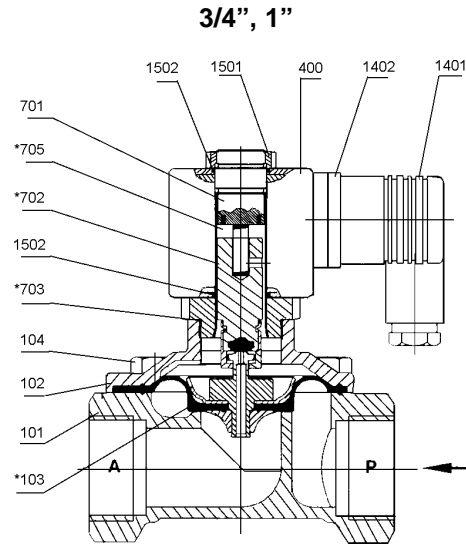
A standard cable clamp connector is included with the .9301 solenoid. Optional connectors may be selected from the table below.

Standard Cable Clamp	Optional Connector Part Number			
	1/2" NPT	Lighted – Cable Clamp		
		24 VAC, VDC	120 VAC	220 VAC
05-702-75	06-613-74	05-708-18	05-708-16	05-708-17

Options such as lighted 1/2" NPT connectors are also available. See Brochure N-209.

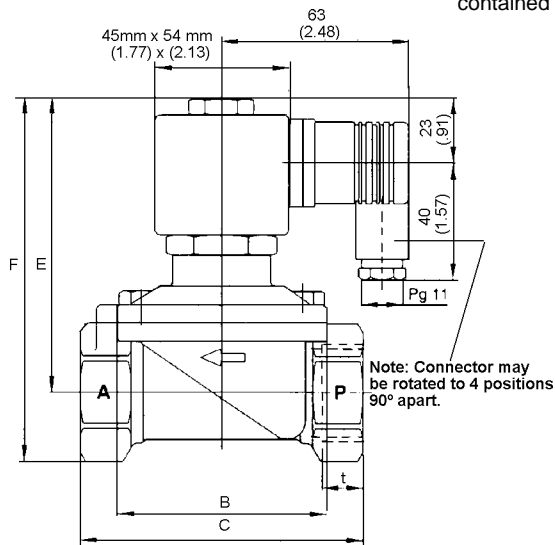


- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm
- 104 Oval cap screw up to 1/2"  
Hexagon cap screw of 3/4" and 1"
- 400 Solenoid
- 701 Core tube



- \*702 Core
- \*703 O-Ring
- \*705 Pressure Spring
- 1401 Socket
- 1402 Gasket
- 1501 Hexagon Nut
- 1502 O-Ring

\*Parts marked with an asterisk are contained in the spare parts kit.



Part Number	Port Size (NPT)	B	C	E	F
82-650-00	1/4"	44 (1.73)	67 (2.64)	90 (3.54)	105 (4.13)
82-651-00	3/8"	44 (1.73)	67 (2.64)	90 (3.54)	105 (4.13)
82-652-00	1/2"	44 (1.73)	67 (2.64)	90 (3.54)	105 (4.13)
82-653-00	3/4"	44 (1.73)	95 (3.74)	104 (4.04)	130 (5.12)
82-654-00	1"	44 (1.73)	95 (3.74)	104 (4.04)	130 (5.12)

All Dimensions in mm (inches)

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