

# EH40 SERIES

## 1/4 - 1/2" PIPE SIZE

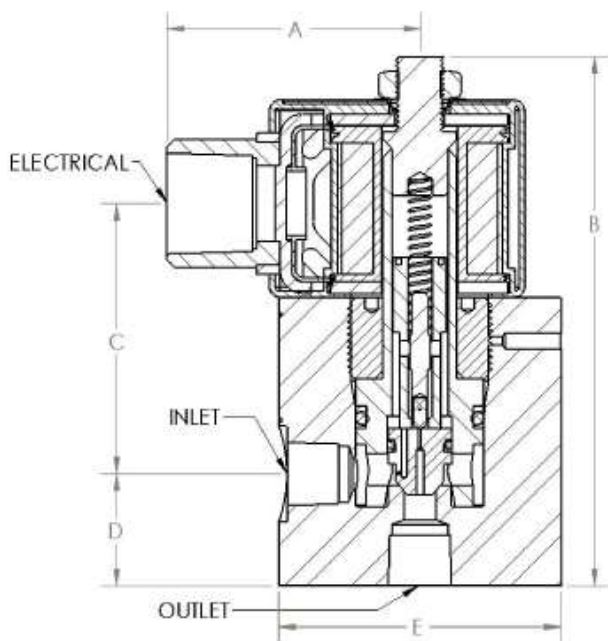
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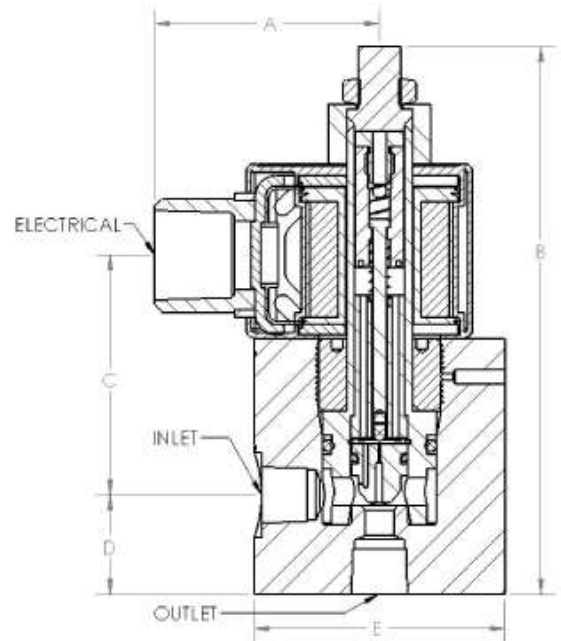
### Features:

The EH40 is a 2-way, unidirectional, full port solenoid valve that is great for a wide range of fluids and gases. This pilot operated valve can be used to control the flow of media such as high pressure air, water, natural gas, hydrogen, nitrogen, and other gases or light liquids compatible with materials of construction. Available in both 1/4" (EH40-04) and 1/2" (EH40-08) sizes, the EH40 is the workhorse of our collection and offers a cartridge design that alleviates your demanding maintenance requirements. The EH40 requires 50 PSIG minimum pressure differential between inlet and outlet for operation. The design is optimal for pressures of 50 to 10,000 PSIG. The Normally Closed DC powered EH40 valves must be mounted upright and vertical, while all other EH40 valves can be universally mounted. **Filters are recommended for all applications.**

### Dimensions



Normally Closed



Normally Open

	Inlet/ Outlet	Electrical	Ship Weights (lbs.)	Reference Dimensions (inches)				
				A	B	C	D	E
EH40-04 Normally Closed	¼" NPT	½" NPT Conduit	2.85	2.0	4.1	2.1	0.9	ø 2.20
EH40-04 Normally Open			3.10	2.0	4.8	2.1	0.9	ø 2.20
EH40-08 Normally Closed	½" NPT		6.05	2.0	4.7	2.2	1.3	ø 2.95
EH40-08 Normally Open			6.04	2.0	5.4	2.2	1.3	ø 2.95

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### How To Order




Base Model Number	—	Connection Size	—	AC/DC Voltage and Hertz	—	Suffix Option Field (s)																																						
EH40																																												
		<table><tr><td>04</td><td>¼"</td></tr><tr><td>08</td><td>½"</td></tr></table>	04	¼"	08	½"		<table><tr><td>A024</td><td>24 / 60</td></tr><tr><td>A120</td><td>120 / 60</td></tr><tr><td>A240</td><td>240 / 60</td></tr><tr><td>D012</td><td>12 DC</td></tr><tr><td>D024</td><td>24 DC</td></tr><tr><td>D120</td><td>120 DC</td></tr></table>	A024	24 / 60	A120	120 / 60	A240	240 / 60	D012	12 DC	D024	24 DC	D120	120 DC		<table><tr><td>DN</td><td>Din Connector (Not Explosion Proof)</td></tr><tr><td>GS</td><td>General Service (Not Explosion Proof)</td></tr><tr><td>HY</td><td>Hydrogen Service (Helium leak test)</td></tr><tr><td>NO</td><td>Normally Open</td></tr><tr><td>OX</td><td>Oxygen Clean</td></tr><tr><td>S4</td><td>SAE J1926 Size "4" Connection</td></tr><tr><td>S8</td><td>SAE J1926 Size "8" Connection</td></tr><tr><td>TC</td><td>Tube Connector</td></tr><tr><td>VT</td><td>Viton O-rings (Higher temps &amp; resistance)</td></tr><tr><td>XP</td><td>22 Watt Coil (Higher Pressure)</td></tr><tr><td>T5</td><td>Class 5 Leakage Test</td></tr></table>	DN	Din Connector (Not Explosion Proof)	GS	General Service (Not Explosion Proof)	HY	Hydrogen Service (Helium leak test)	NO	Normally Open	OX	Oxygen Clean	S4	SAE J1926 Size "4" Connection	S8	SAE J1926 Size "8" Connection	TC	Tube Connector	VT	Viton O-rings (Higher temps & resistance)	XP	22 Watt Coil (Higher Pressure)	T5	Class 5 Leakage Test
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Possible EH40 Options & Add-Ons

### Possible EH40 Options & Add-Ons

							
72" Lead Length	Din Connector	Screw Terminal	1/4 Tab (spade)	General Service	Hydrogen Service	Normally Open	Oxygen Clean
							
SAE Port	Tube Connector	Class V Leakage Testing	Stainless Steel Tags	Viton O-Rings	22 W Coil	ATEX/IECEX	

The following are standard on the EH40:

		
Explosion Proof	Stainless Steel Valve Body	NEMA 4X

### Certifications



CRN - Canadian Registration Number



\*Consult Factory for Listing and Pricing Details.



See Website for certification details.

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## Construction

Valve Body:	316 SS
Piston:	PEEK®
O Ring (Standard):	Buna-N (-50° to 225°F)
O Ring (Optional):	Viton (0° to 400°F)
Piston Rings:	Buna / Viton
Cartridge:	316 SS & 430 SS
Pilot / Seal:	303 SS / PTFE
Spring:	302 SS
Plunger:	430 SS
Bonnet Retainer:	430 SS

\* See Temp Limits for UL Listed Coils

\*Consult Sales for maximum allowable inlet pressures for Fluid Temps Exceeding 300°F.

## Pressure

Maximum pressures shown are measured in PSIG

	1/4" Pipe Size	1/2" Pipe Size
Normally Closed AC Voltage (Standard):	7,500	7,500
Normally Closed AC Voltage (Higher Wattage):	10,000	10,000
Normally Closed DC Voltage (Standard):	3,500	3,600
Normally Closed DC Voltage (Higher Wattage):	10,000	7,200
Normally Open AC Voltage:	5,500	6,500
Normally Open DC Voltage (Higher Wattage):	5,500	6,200
Minimum Required Pressure Differential:	50	50

\*\* For Oils and Hydraulic Fluids with viscosities greater than water, the maximum differential pressure is the value in the table divided by 2.

## Flow

	1/4" Pipe Size	1/2" Pipe Size
C <sub>v</sub>	1.1	4.5

Standard Sealing Is Class 2, Per ANSI/FCI 92-2-2001

## Electrical (Coil)

	Standard	High Wattage
Power:	10 Watts	22 Watts
AC Inrush:	1 amp @ 120V AC	2.5 amp @ 120V AC
AC Holding:	0.1 amp @ 120V AC	0.2 amp @ 120V AC
Insulation:	Class "F"	Class "H"
Duty:	Continuous	Continuous
Connection:	1/2" NPT, 18" Leads	1/2" NPT, 18" Leads
Enclosure		
Explosion Proof (Standard):***	NEMA 3, 3S, 4, 4X, 7, 9	NEMA 3, 3S, 4, 4X, 7, 9
General Service:	NEMA 1, 2, 3, 3S, 4, 4X	NEMA 1, 2, 3, 3S, 4, 4X

\*\*\* All for use in:

Class I Div 1 & 2, Groups A, B, C, D;  
Class II Div 1 & 2, Groups E, F, G

10 Watt Solenoid Coils:

- Temperature Code T4: Ambient Temperature range of -20 C to 65.6 C and maximum fluid temperature of 121.1 C

22 Watt Solenoid Coils:

- Temperature Code T3C: Ambient Temperature range of -20 C to 50 C and maximum fluid temperature of 65.0 C

## Possible Media



General Gases  
& Light Liquids



Fuels &  
Light Oils



Flammable  
Gases



Hydrogen



Oxygen



Corrosives



Sea & Salt  
Water



Viscous  
Liquids



Steam



Cryogenics

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