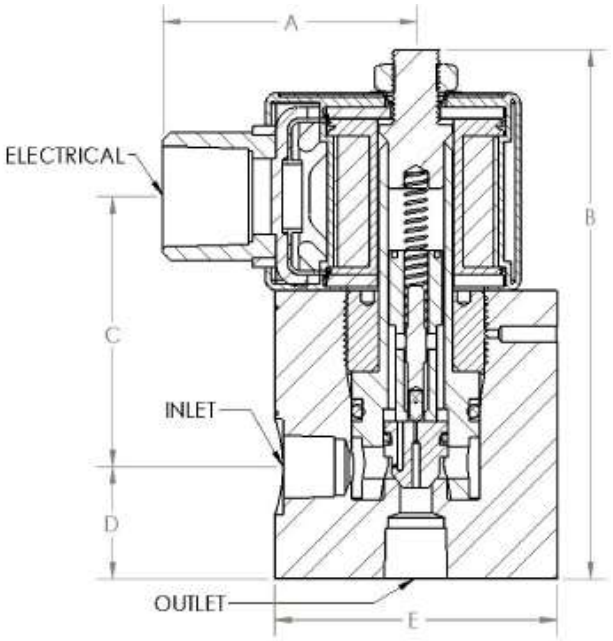
EH40 Series
1/4 -1/2" Pipe Size

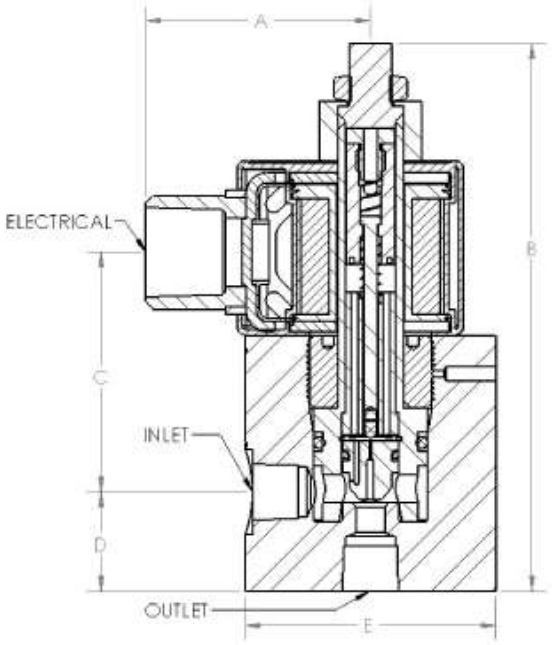
Features:

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

How To Order

Base Model Number: EH40 —

Connection Size: ____ —

04	¼"
08	½"

AC/DC Voltage and Hertz: ____ —

A024	24 / 60
A120	120 / 60
A240	240 / 60
D012	12 DC
D024	24 DC
D120	120 DC

Suffix Option Field (s): ____

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

Possible EH40 Options & Add-Ons

72" Lead Length


Din Connector


Screw Terminal


¼ 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.

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

	¼" Pipe Size	½" 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

	¼" Pipe Size	½" Pipe Size
C_v	1.1	4.5

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

Electrical (Coil)

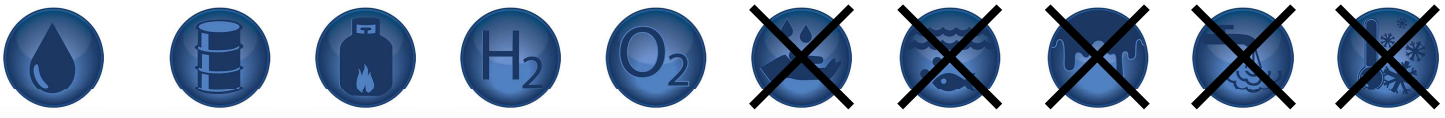
	Standard	High Wattage
Power:	10 Watts	22 Watts
AC Inrush:	1 amp @ 120V AC	2.5 amp @ 120V AC
AC Holding:	0.1 amp @ 120V AC	0.2 amp @ 120V AC
Insulation:	Class "F"	Class "H"
Duty:	Continuous	Continuous
Connection:	1/2" NPT, 18" Leads	1/2" NPT, 18" Leads
Enclosure		
Explosion Proof (Standard):***	NEMA 3,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

Document Issue: 2024.1

Title:	EXPLOSION-PROOF ENCLOSURES FOR USE IN CLASS I HAZARDOUS LOCATIONS
Company:	Clark Cooper
Product Information:	10 Series Solenoids, Clark Cooper, Model Nos. 358017; followed by 0, 1, or 2; followed by 0, 1, 2, 3, 4, 5, 7, 8, or 9; followed by NXX. 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
Evaluated to the following:	A representative sample of the listed devices have been tested, investigated, and found to comply with the requirements of the Standard(s) for Explosion-Proof Enclosures for use in Class 1 Hazardous Locations (UL-1203 & CAN/CSA-C22.2 No. 30) and are identified with the cETL Listed Mark

Please refer to the *10 Series Solenoid Coil* manual for additional information.

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