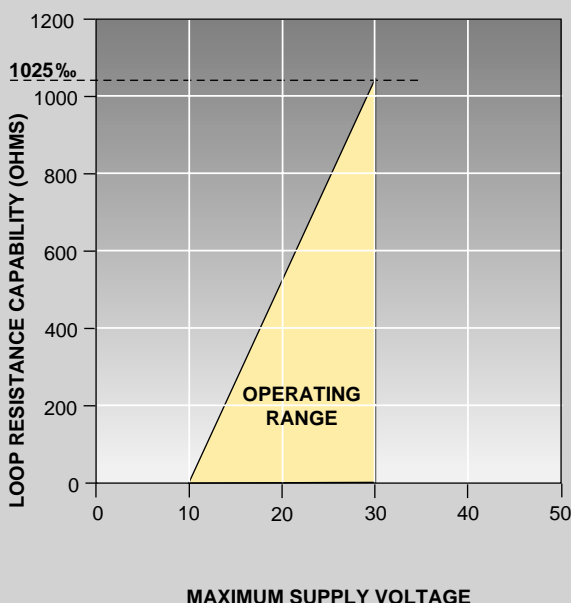




## Non-Contact HART® Enabled Position Monitoring for Linear Control Valves



### Power Supply Requirements



## EPIC™ 360 & 366 Series

### Non-Contact HART® Enabled Position Transmitter

The EPIC™ 360 and 366 Position Transmitters are “smart” devices with microprocessor- based intelligence providing both 4-20 mA signal for position and digital communications via the HART® protocol. The 360 & 366 Series features low copper content aluminum or 316 SS enclosures with single solenoid valve or optional redundant solenoid valve for explosionproof service in Class I, Div. 1 Group B hazardous areas.

The EPIC non-contact position transmitter represents a significant departure from previous attempts to reliably measure the position of rotary control valves. As opposed to conventional devices, no linkages, levers, rotary or linear seals are utilized. A static slide-by actuation assembly, attached to the valve stem, is the only “moving part in the entire transmitter.

The ESD/PS option provides for a discrete output via the SIS to control an ESD solenoid with integrated partial stroke test functionality; PS time, configurable PS stroke duration, time/date stamp of test and PS stroke alarm. PS test can be initiated via HART.

Low current operation of the sensor is enabled through the use of new materials, which allows continuous operation rather than discrete sampling. Continuous operation permits high speed updating of the output current making it suitable for use in fast closed loop systems.

Accurate measurement of valve position provides the precision data required for the use of advanced control strategies and predictive maintenance algorithms.

### TECHNICAL SPECIFICATIONS

Conduit Entries	3/4" NPT
Output	4 to 20 mA proportional to valve position
Terminal Voltage Req.	10 to 30 volts
Linearity	≤0.6% F.S.
Span Adjustment	60 to 120 degrees
Zero Adjustment	30% of calibration span
Resolution	≤0.05% F.S.
Hysteresis	Negligible
Temperature Range	-40°F to 185°F
Temperature Effect	≤0.01% F.S./°C
Humidity	10% to 90% non-condensing
Voltage Effect	≤0.2% F.S. from 10 VDC to 30 VDC
Reverse Polarity	Protected
Mounting Attitude	Any Position
Startup Stabilization	.5 seconds

# EPIC™ 360 & 366 Series

## Non-Contact HART® Enabled Position Transmitter



AREA CLASSIFICATIONS	
Class I, Groups B, C, D	
Class II, Groups E, F, G, Divisions 1 & 2	
Class I, Group A, Division 2	

MATERIALS OF CONSTRUCTION		
<b>360</b>	Housing/Cover	Cast Aluminum
<b>366</b>	Housing/Cover	Cast 316 Stainless Steel

**ORDERING GUIDE** (FALCON® SOLENOID)

COILS	CV	Body	3-Way	4-Way
<b>XSO</b> 24 VDC 0.55 watts	<b>.3 Cv</b>	Brass	<b>2100</b>	<b>2500</b>
		Alum.	<b>3100</b>	<b>3500</b>
		303 S.S.	<b>4100</b>	<b>4500</b>
		316 S.S.	<b>5100</b>	<b>5500</b>
<b>XAO</b> 120 VAC 4.0 watts	<b>.5 Cv</b>	Brass	<b>2200</b>	<b>2600</b>
		Alum.	<b>3200</b>	<b>3600</b>
		303 SS	<b>4200</b>	<b>4600</b>
		316 S.S.	<b>5200</b>	<b>5600</b>
<b>XVO</b> 125 VDC 1.0 watts	<b>.5 Cv</b>	Brass	<b>2200</b>	<b>2600</b>
		Alum.	<b>3200</b>	<b>3600</b>
		303 SS	<b>4200</b>	<b>4600</b>
		316 S.S.	<b>5200</b>	<b>5600</b>
		316 S.S.	<b>5200</b>	<b>5600</b>
<b>XHO</b> 220 VAC 4.0 watts	<b>1.2 Cv</b>	Brass	<b>2300</b>	<b>2700</b>
		Alum.	<b>3300</b>	<b>3700</b>
		303 S.S.	<b>4300</b>	<b>4700</b>
		316 S.S.	<b>5300</b>	<b>5700</b>
	<b>3.5 Cv</b>	Alum.	<b>3400</b>	<b>3800</b>

OPTIONAL FEATURES (See BULLETIN NO. Q-18.02)

**DIMENSIONS** (inches/mm)

APPROVALS / CERTIFICATION				
<b>FM</b>	(Factory Mutual Research)			
<b>CSA</b>	(Canadian Standards Association)			

Solenoid Valve	Dimensions			
	A	B (3-WAY)	C (4-WAY)	D
.3 & .5 Cv	1.50	3.31	4.06	4.26
1.2 Cv	2.00	4.50	5.50	4.69
3.5 Cv	2.75	5.25	6.56	5.01

**Ordering Example**

**D4 70-LO-X-3-2100-1-1-0**

- Product Code for Digital Epic **D4**
- Enclosure Options **"60"** = 360- Aluminum Single/Dual Coil Falcon **"70"** = 366- Stainless Steel Single/Dual Coil Falcon
- Valve Type Options **"LO"** = Linear Valve, **"LR"** = Linear Valve with Remote Option
- Area Class Option **"X"** = Explosion Proof (Class I, Div. 1, Grps B-D/Class I, Div. 2, Grps A-G)
- Conduit Options **"1"** = 1/2" NPT, **"2"** = M20, **"3"** = 3/4" NPT, **"6"** = M25
- Solenoid Valve Body **"0"** = No Solenoid, 2100- 3800 (see Falcon Solenoid Ordering Guide)
- Solenoid Override Options **"0"** = None (for options E, L, M, N, R or S refer to Price Book)
- Solenoid Coil Options **"1"** = FSO 24Vdc, 0.5W (for additional options refer to Price Book)
- Special Operation Options **"0"** = No Special Option, **"1"** = ESD/PST Relay Controller
- Beacon Options **"0"** = None