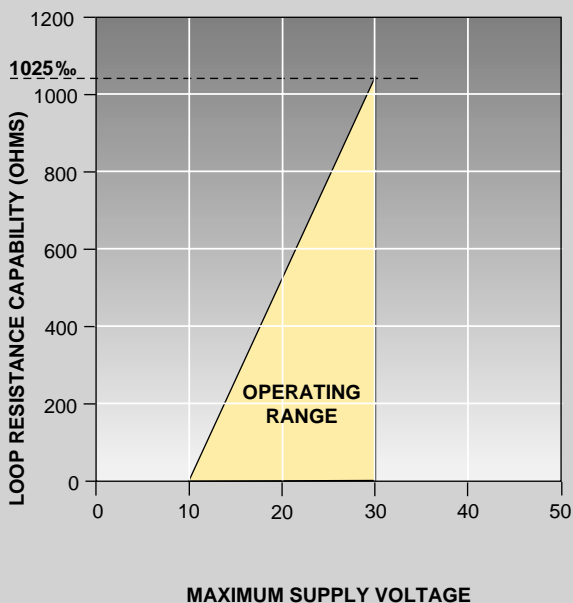




Non-Contact HART® Enabled Position Monitoring for Linear Control Valves



Power Supply Requirements



EPIC™ HORNET

Non-Contact HART® Enabled Position Transmitter

The EPIC™ Position Transmitter is a “smart” device with microprocessor-based intelligence providing both 4-20 mA signal for position and digital communications via the HART® protocol. The EPIC Hornets design represents a significant departure from previous attempts to reliably measure the stem position of linear 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.

Sensing is performed totally by non-contacting means, based upon characterization of flux strength as a function of axial position.

The ESD/PS option provides for a discrete output via the SIS to con-

trol 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, external trigger zones or an internal push button.

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
Output Update rate	100 ms

*NOTE: For linear graphs displaying deviation from straight line (0.4" to 20") see technical manual #374.

EPIC™ HORNET

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

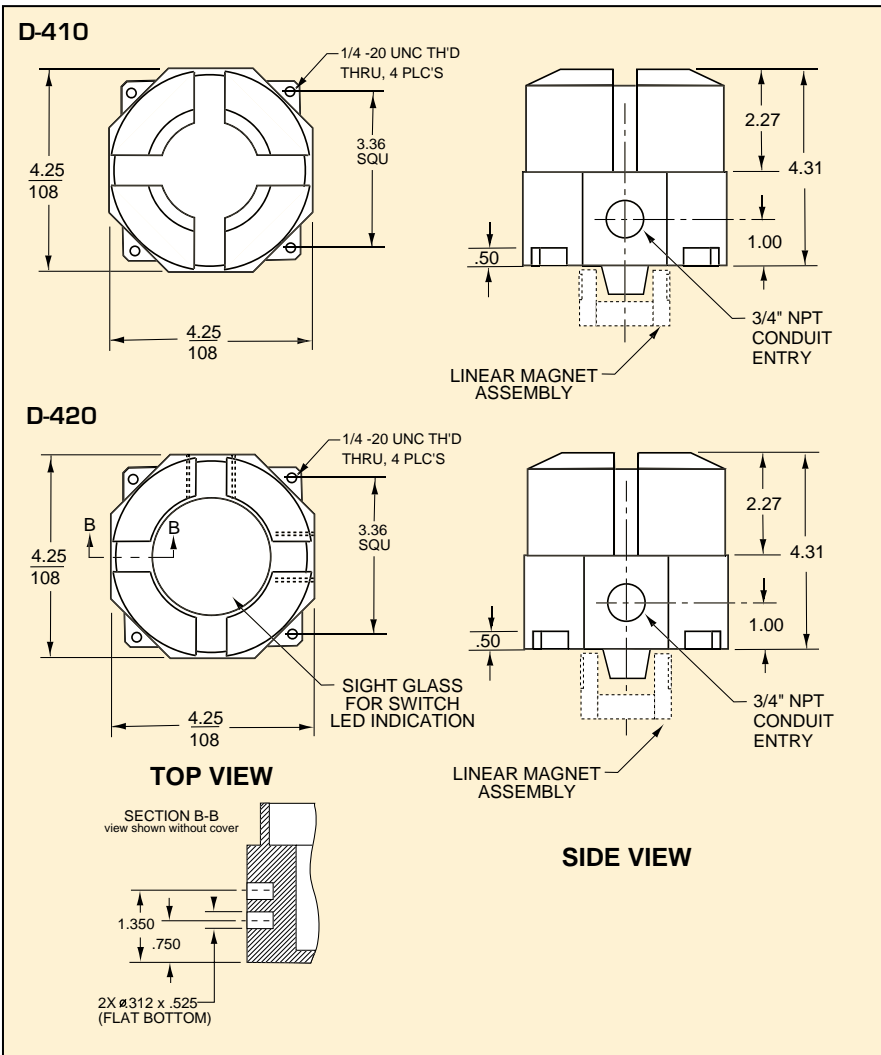
Housing	Cast Aluminum
Cover	Cast Aluminum

APPROVALS / CERTIFICATION

FM (Factory Mutual Research)
CSA (Canadian Standards Association)



DIMENSIONS (inches/mm)



Ordering Example

D420-LO-X-3-0000-0-1-0

