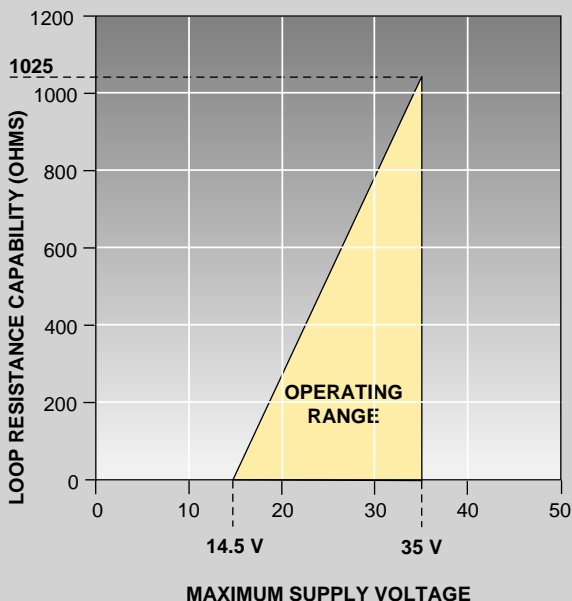


Non-Contact Position Monitoring for Rotary Valves

Power Supply Requirements



EPIC® 420R

Non-Contact Position Transmitter

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, couplers are not utilized. A magnetic proximity module, attached to the actuator output shaft is the only "moving" part in the transmitter. Sensing is performed totally by non-contacting means, based upon characterization of flux strength as a function of axial position.

A state-of-the-art solid-state sensor is employed whose output is a function of both magnetic flux density and excitation voltage.

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.

The inherent reliability of the transmitter permits use of advanced control strategies, where knowledge of valve position can be used in predictive and other algorithms.

TECHNICAL SPECIFICATIONS

Conduit Entries	3/4" NPT
Output	4 to 20 mA proportional to angle
Terminal Voltage Req.	7 to 35 volts
Linearity	± 1%
Span Adjustment	60 to 120 degrees
Zero Adjustment	30% of calibration span
Resolution	Infinite
Hysteresis	Negligible
Temperature Range	-20°F to 185°F
Temperature Effect	.03% per °F
Humidity	10% to 90% non-condensing
Voltage Effect	Less than .05%
Reverse Polarity	Protected
Mounting Attitude	Any Position
Startup Stabilization	.5 seconds

EPIC® 420R

Non-Contact Position Transmitter

AREA CLASSIFICATIONS

NEMA 4, 4x, 7, 9
 Class I, Groups B, C, D
 Class II, Groups E, F, G, Divisions 1 & 2
 Class I, Group A, Division 2

MATERIALS OF CONSTRUCTION

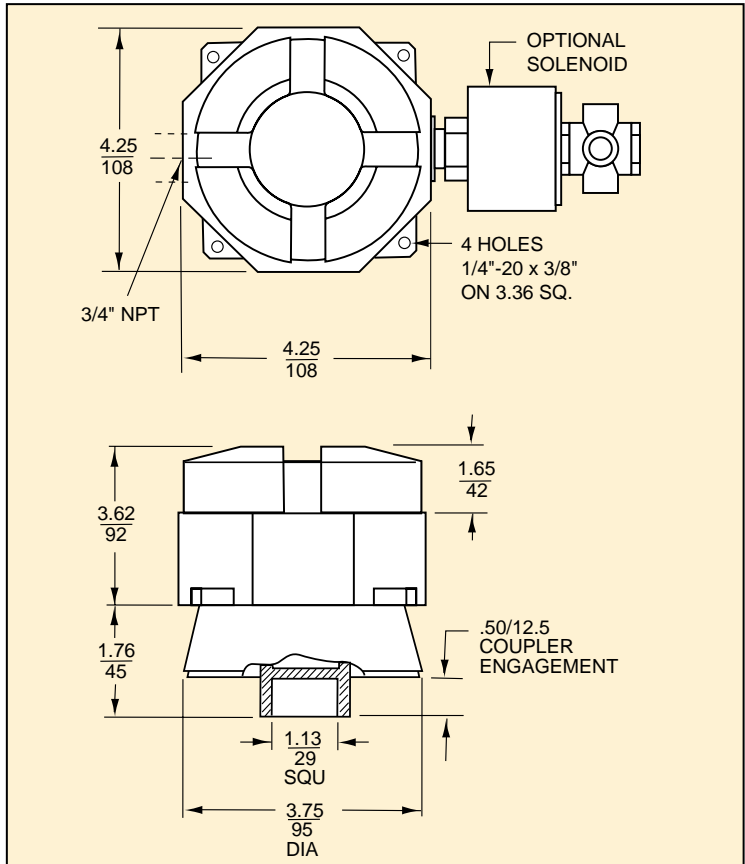
Housing	Cast Aluminum
Cover	Cast Aluminum

APPROVALS / CERTIFICATION


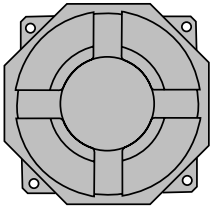
UL (Underwriters Laboratories, Inc.)
CSA (Canadian Standards Association)



DIMENSIONS (inches/mm)



ORDERING GUIDE

EPIC®		SOLENOID
420R Aluminum: Class I, Groups B, C & D Class II, Groups E, F & G, Divisions 1 & 2 Class I, Group A, Division 2	 	To Be Specified By Customer