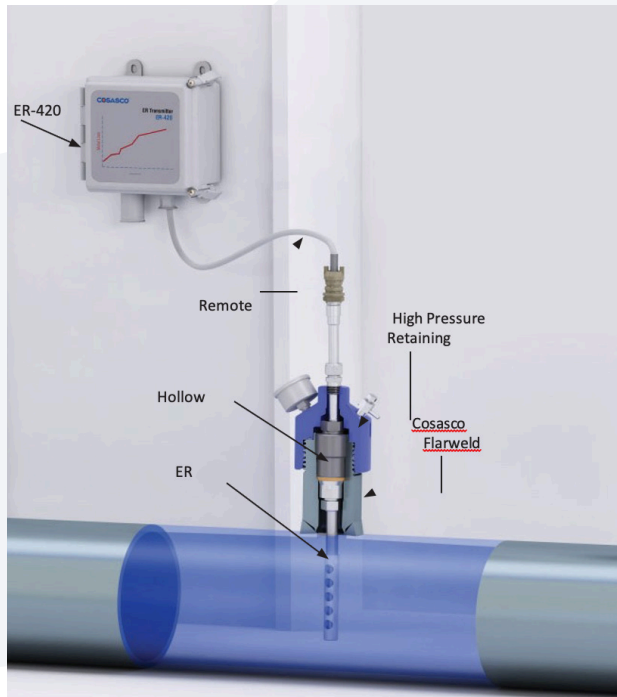


ER Transmitter Model ER-420



Typical System-ER-420 Transmitter



- Real-time communication of corrosion data
- Compatible with all Cosasco Electrical Resistance Probes
- Intrinsically safe (IECEX/ATEX / CCSAUS)
- Certified for use in Class I Zone 1,2 IP 66 rated enclosure

The Model ER-420 transmitter is a two-wire ER transmitter for use with ER probes. This version has been developed to meet stringent European CE and ATEX specifications. This transmitter is well suited for plant locations, widely separated monitoring points, and connection into a distributed control system (DCS).

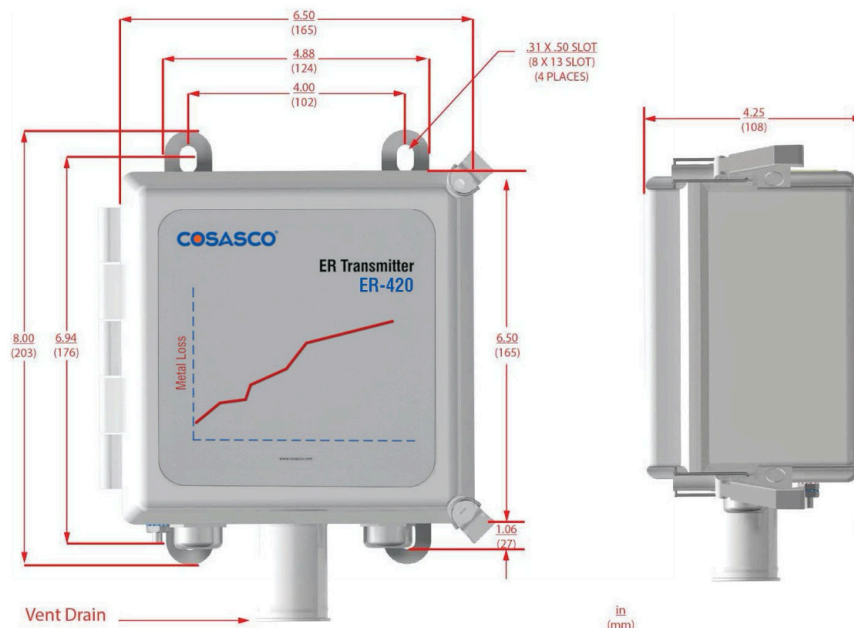
The transmitter has a NEMA 4X enclosure with the option of up to a 100 foot probe cable. A 24 Vdc supply is typically required to power the loop via an approved intrinsic safety barrier (for Zone 1 only). The unit provides isolation between the probe and 4-20 mA circuits. The system is intrinsically safe to USA, Canadian, and European standards.

Specifications

Output	4-20 mA	
Ambient Temperature Range	-40o C to 80o C (-40o F to 176o F) Zone 1 or Zone 2 (With Safety Barrier) -40o C to 70o C (-40o F to 158o F) Zone 2 (Without Safety Barrier)	
Supply Voltage Range	10-30 VDC at 20mA	
Resolution	±0.1%	
Weight	4 lbs. (1.8 kg)	
Enclosures	Fiberglass Polyester NEMA 4X, IP66 or Stainless Steel (316L), IP66	
Probe Cable	100 ft. maximum	
Hazardous Area Certifications	<p><u>ATEX Certification</u> SIRA 14 ATEX 2304X Ex ib IIC T4 Gb, Ta = -40oC to +80oC</p> <p><u>IEC Ex Certification</u> IECEX SIR 14.0107X Ex ib IIC T4 Gb, Ta = -40oC to +80oC</p>	<p><u>North American Certifications</u> CSA Certification: 70026842 CSA Class I, Zone 1, AEx ib IIC T4 Gc, Ta = -40oC to +80oC CSA Ex ib IIC T4 Gb, Ta = -40oC to +80oC</p>

*Protection type "nA" permits the use of the transmitter without the safety barrier, provided the probe and transmitter are in class I Division 2 or Zone 2 area.

Dimensions



Model	Retrievable Erosion Probe						
ER-420	ER Transmitter						
	Code	Cable Type					
	0	Standard					
	1	Flexible Conduit					
	Code	Probe Connector Type					
	A	Inserts: 2000, 3000, 3705					
	B	Fixed & Adj: 2500, 2520, 2600, 2610, 2620, 3500, 3600, 4000 Series					
	S	Retractable: 3700* (Standard Cable Only)					
	Code	Default Probe Element Type**					
	W	Wire Loop					
	T	Tube Loop / Flush					
	S	Strip Loop					
	SP	Cylindrical					
	Code	Enclosure Type					
	0	Fiberglass Polyester NEMA 4X (Standard)					
	1	Stainless Steel 316 NEMA 4X					
	Code	Cable Length					
	L	Cable Length in Feet (100 ft. Max)					
	Code	Classified Location					
	1	Class I Zone 1					
	2	Class I Zone 2					
ER-420	0	B	W	0	10	1	← Example

*Standard cable type only

**Probe Elements easily selected by rotary switch (wire loop-W tube/flush-Loop-T, Strip loop-S, cylindrical-SP).

See image to the right (rotary switch).

Part Number	Description
095786	Intrinsic Safety Barrier for ER-420 (required for Zone 1)
402207	Mounting Bracket Assembly for Pipe
748643	Test Probe Kit (includes wire, cylindrical, tube/strip test probes)

