



Excellent Design & Manufacture

Pressure and Vacuum Detectors for Process Applications

EDM pressure detectors

are rugged, field-mounted instruments. The pressure sensing element of the EDM pressure detector is a force-balance, piston-actuated assembly. The sensing element is sealed by a flexible diaphragm and a static o-ring. A wide selection of wetted parts materials for media compatibility and containment are available. A metal diaphragm may be welded to the pressure port for certain applications, thereby eliminating the o-ring.

Application Information

The EDM pressure detectors in this catalog are suitable for a variety of process applications. Basic models with standard wetted parts are normally suitable for air, oil, water and non-corrosive processes. Certain applications may require customized specials. Consult the EDM representative in your area or the factory.



Features and Benefits

Complete Product Line

- Standard models and customized specials cover pressure ranges from 30 inches Hg VAC to 4000 psi.

Robust Construction

- Rugged, high-cycle rate tolerance, long life, not critical to vibration, high overrange and proof pressures, excellent corrosion resistance to hostile environments.
- Enclosure ratings: NEMA 1, 4, 4X, 7, or 9 available.
- Ingress protection rating up to IP66.

Instrument Quality

- High resolution of set points, high repeatability, narrow dead band, negligible temperature effect.

Wetted Parts

- Wide selection materials, process connection configurations and sizes. Optional "fire-safe" pressure sensor.

Snap-Action Electrical Detecting

- Wide selection UL Listed and CSA Certified detecting elements for AC and DC service. Optional "hermetically sealed" capsule for hazardous and hostile environments.

Field Adjustable

- Self-locking adjustment, no special tools required. No-charge factory calibration.

Cost Effective

- Simple and fast installation without special tools, long service life, no required periodic service or spare parts.

Agency Listings/Certification

- Select models with ATEX, IECEx, CSA, FM, GOST R, INMETRO, Rostechnadzor (RTN), TIIS, UL
- Meets most code and customer requirements.

Safety Certified to IEC 61508 (SIL)

- EDM products are certified to IEC 61508 for non-redundant use in SIL1 and SIL2 Safety Instrumented Systems for most models. For more details or values applicable to a specific product, see the Safety Integrity Level Quick Guide.

Shock/Vibration

- Select models tested to MIL-S-901D (Navy) shock test.
- Select models tested to MIL-S-167 vibration test.

Built-In Quality

- Rigid quality standards maintained from raw material to finished product.

Delivery

- Routine shipments 7 to 10 working days. Emergency shipments via same day air.

Service

- Factory sales engineers and area EDM representatives provide effective and prompt worldwide service.

EX3008-025026-025

Adjustable Range		Typical Dead Band		Overrange		Proof	
psi	bar	psi	bar	psi	bar	psi	bar
45 to 550	3.1 to 38	3.9	0.27	1500	100	2500	170

Housing	Wetted Materials	
Hazardous Locations	Diaphragm	TCP Teflon-Coated Polyimide
- Conventional Explosion Proof NEMA 4, 4X, 7, 9, IP66	O-Ring	Buna-N
UL Listed Class I, Groups C & D; Class II,	Pressure Port	
Groups E, F & G; Divisions 1 & 2 as an outlet box only	Process Connection Size	1/4" NPT(F)
Electrical	Pressure Port Material	Aluminum
Material		
3/4" NPT(F) - Right		
Copper-free aluminum		
Detecting Element		
Designator		SPDT
Rating		5 Amps @ 30 VDC
Dead Band Multiplier		1.0

Technical drawing of the 100 Series Transmitter, showing front and side views with dimensions and callouts.

Front View Dimensions:

- Overall width: 137.3 (5.41)
- Mounting bracket width: 133.4 (5.25)
- Mounting bracket offset: 71.1 (2.80)
- Overall height: 178.8 (7.04)
- Mounting bracket height: 112.6 (4.43)
- Mounting bracket offset: 72.2 (2.84)
- Mounting bracket width: 71.4 (2.81)
- Mounting bracket offset: 40.4 (1.59 TYP)
- Mounting bracket height: 80.8 (3.18 TYP)
- Mounting bracket offset: 6.4 (0.25)
- Mounting bracket offset: 7.9 (0.31)
- Mounting bracket offset: 11.9 (0.47)

Side View Dimensions:

- Overall width: 79.4 (3.12)
- Mounting bracket width: 50.8 (2.00)
- Mounting bracket offset: 20.7 (0.81)
- Mounting bracket offset: 6.4 (0.25)
- Mounting bracket offset: 71.4 (2.81)
- Mounting bracket offset: 28.6 (1.13)
- Mounting bracket offset: 11.9 (0.47)

Callouts:

- CAUTION: TO AVOID DAMAGE TO THE TRANSMITTER, DO NOT EXCEED THE MAXIMUM PRESSURE, TEMPERATURE, AND VIBRATION RATING. SEE THE USER MANUAL FOR THE MAXIMUM RATING. (SEE THE USER MANUAL FOR THE MAXIMUM RATING.)
- ELECTRICAL CONNECTION: 3/4 NPTF STD, 1/2 NPTF OPT
- PIPE KIT MOUNTING BRACKET OPTIONAL
- CLEARANCE FOR 0.25 MOUNTING HARDWARE
- CLEARANCE FOR 0.31 MOUNTING HARDWARE
- 1/4 OR 1/2 NPTM PROCESS CONNECTION OPTIONAL
- PROCESS CONNECTION