



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, Rostekhnadzor (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.

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Adjustable Range		Typical Dead Band		Overrange		Proof	
psi	bar	psi	mbar	psi	bar	psi	bar
7 to 30	0.5 to 2	0.5	34.5	1500	100	2500	170

Housing		Wetted Materials	
Weatherproof NEMA 4, 4X, IP66		Diaphragm	Teflon-Coated Polyimide
Electrical	3/4" NPT(F) - Right	O-Ring	Buna-N
Material	Copper-free aluminum	Pressure Port	
Detecting Element		Process Connection Size	1/4" NPT(F)
		Pressure Port Material	Carbon Steel
	Designator	SPDT	
	Rating	5 Amps @ 30 VDC	
Dead Band Multiplier	1.0		

Technical drawing of the 3000 Series Process Mounting Bracket, showing front and side views with dimensions and callouts.

Front View Dimensions:

- Overall Width: 108.1 (4.25)
- Distance from Left Edge to Center of Mounting Slots: 52.4 (2.06)
- Distance from Left Edge to Center of Electrical Connection: 69.9 (2.75)
- Distance between Mounting Slots: 33.3 (1.31)
- Overall Height: 146.8 (5.78)
- Distance from Bottom Edge to Center of Mounting Slots: 54.7 (2.15)
- Distance from Bottom Edge to Center of Electrical Connection: A

Side View Dimensions:

- Overall Depth: 56.5 (2.22)
- Distance from Front Face to Center of Mounting Slots: 28.6 (1.13)
- Distance from Front Face to Center of Electrical Connection: 26.1 (1.03)
- Distance from Bottom Edge to Center of Mounting Slots: 40.5 (1.59)
- Distance from Bottom Edge to Center of Electrical Connection: 7.1 (0.28)

Callouts:

- ELECTRICAL CONNECTION:** 3/4 NPTF STD, 1/2 NPTF OPT, M20 X 1.5 F OPT (BOTH SIDES ON N3 & P3 HSGS)
- 2X 13.5 x 7.1 0.53 x 0.28 MOUNTING SLOTS**
- 1/4 OR 1/2 NPTM PROCESS CONNECTION OPTIONAL**