



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	
in. wc	mbar	in. wc	mbar	psi	bar	psi	bar
2.5 to 45	6.2 to 110	0.8	2	200	14	400	28

Housing		Wetted Materials	
Weatherproof NEMA 4, 4X, IP66		Diaphragm	TCP 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)
Designator	SPDT	Pressure Port Material	Aluminum
Rating	5 Amps @ 30 VDC		
Dead Band Multiplier	1.0		

Technical drawings of the 1/2 NPTF Process Connection Scale 0.38, showing dimensions in inches (") and millimeters (mm).

Front View Dimensions:

- Overall Width: 108.1 (4.25")
- Top Flange Width: 52.4 (2.06")
- Top Flange Thickness: 69.9 (2.75")
- Top Flange Inner Width: 33.3 (1.31")
- Overall Height: 149.5 (5.89")
- Mounting Flange Height: 57.4 (2.26")
- Process Connection Height: A

Side View Dimensions:

- Overall Width: 18.7 (0.73")
- Top Flange Width: 56.5 (2.22")
- Top Flange Thickness: 28.6 (1.13")
- Top Flange Inner Width: 26.1 (1.03")
- Overall Height: 40.5 (1.59")
- Mounting Flange Height: 7.1 (0.28")

Electrical Connection:

- 3/4 NPTF STD
- 1/2 NPTF OPT
- M20 X 1.5 F OPT (BOTH SIDES ON N3 & P3 HGGS)

Clearance Slots for 6.4 (0.25) Hardware with 63.5 (2.5) Min to 76.2 (3.00) Max Mounting Holes

Process Connection:

- 1/4 OR 1/2 NPTM PROCESS CONNECTION OPTIONAL
- 1/4 NPTF FLUSHING PORT

Detail 2 NPTF Process Connection Scale 0.38