

# **Side Mounted Level Detectors**

**ENA501-010069-010** is a chambered horizontally oriented, foat-operated level detector suitable for plant and OEM applications where open or closed contacts are required to signal the presence or absence of liquid at a discrete level. The float extension arm moves a magnet which actuates (deactuates) an electromechanical detecting element.



ENA501-010069-010 may be used on a wider variety of applications and process conditions than any other single model of chambered level detector currently offered by EDM. The flexibility in this design is critical to customers all over the world in a wide variety of industries.

ENA501-010069-010 Horizontal Mechanical Level Detector suitable for most point level applications.

- drip legs
- boilers
- de-aerators
- high pressure feed-water heaters
- storage vessels
- low pressure feed-water heaters

# Features and Benefits

- Five-year warranty
- Low maintenance costs
- Compact chamber design
- NEMA 4X "Quick-Release" cover
- Withstands temperatures up to 750°F (399°C)
- Withstands pressures up to 1799 psig (124 bar)
- Socket weld and NPT process connections available
- ASME Section IX and AWS D2.1 qualified welding system
- Designed to ANSI/ASME B31.1 and B31.3 guidelines
- Stainless steel switching mechanisms

- · All stainless steel wetted parts
- Quick worldwide delivery
- Only ASTM grade materials with certified mill test reports used
- CSA certified for Ordinary Locations in U.S. and Canada
- 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.



## **Product Specifications**

Orientation Horizontal mount only **Float Material** Stainless Steel **Chamber Material** Schedule 40 106 Grade B

Carbon Steel with A105 and A234-WPB fittings

### Orientation & Connection Size/Type

Horizontal Chamber with 1" Socket Weld Top/Bottom Process Connections

**Maximum Process Pressure** at 100°F (38°C)

1435 psi (99 bar)

**Process Temperature Range\*** (-40 to 750°F)

(-40 to 399°C)

### Electrical

Mounting

Detect type SPDT snap detect Contact rating 0.1A-6A at 250 VAC Contact material Silver Plated Housing material Aluminum Conduit connection size 1" NPT Minimum Specific Gravity 0.60 SG **Agency Listing** CSA Certified (US & Canada)

**Oridinary Locations** 

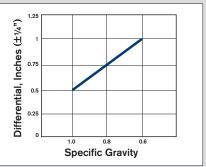
**Design Code** ANSI B31.1 or ANSI B31.3

Certificate available

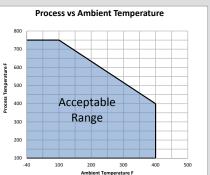
Weight

With Chamber 22 lbs. (10 kg)

### Differential (Dead Band)



**Detect Process Temperature** vs. Ambient Temperature



# **Maximum Operating Pressure Ratings**

Chamber Description	Pressure at Listed Temperature in psig (bar)								
	100°F (38°C)	200°F (93°C)	300°F (149°C)	400°F (204°C)	500°F (260°C)	600°F (316°C)	650°F (343°C)	700°F (371°C)	750°F (399°C)
S40 Carbon Steel (includes float)	1435 (99)	1435 (99)	1435 (99)	1435 (99)	1435 (99)	1435 (99)	1435 (99)	1378 (95)	1244 (86)



ENA501-010069-010 unit allows for a smaller chamber size making it more compactand economical than most traditional vertical chambers. Although ENA501-010069-010 is more compact, it provides the rugged reliability customers have come to expect from EDM.

The design starts with a high pressure float counter-weighted with a magnet. The magnet is coupled with another magnet inside the housing which is attached to the detecting mechanism. The key is that the two magnets are separated by a pressure retaining wall of non-magnetic material. The magnets interact with each other as the float goes up and down, providing a safe and reliable system you can depend on for the most critical of applications. ENA501-010069-010 features a NEMA 4X, Quick-Release cover. Approximately 1½ turns are needed to remove/replace the cover for service or maintenance.

