



Electrical Level Gauge

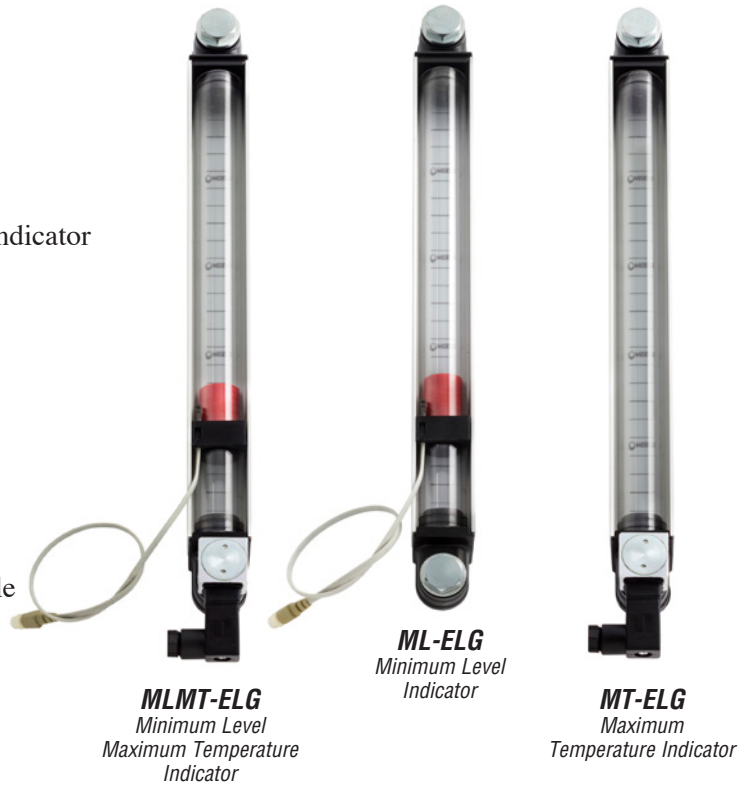
Model ML-ELG, MT-ELG, MLMT-ELG

Specifications

- 12, 15, 18, 24" mounting center transparent level indicator
- Transparent Polycarbonate lens
- Aluminum guard - 90° rotation
- Glass reinforced PA 66 nylon end caps
- Maximum Operating temperature 176° F (80° C)
- Ambient air temperature 68° F (20° C) for temperature indicator
- Maximum working pressure 14.5 PSI (1 bar)
- Compatible with petroleum based fluids, gasoline, diesel, and a variety of solvents
- 70 durometer buna seals
- 1/2"-13 UNC or (M12) mounting hardware available
- Recommended tightening torque 4 ft/lbs (5 Nm)

Options Available

- Optional M12 stainless bolts & nuts



Ordering Code

MLMT — ELG — 12 — M12 — NO

Application		Series	Size	Options		Contacts	
ML	Minimum Level	ELG	12	Omit	No Options	N.O.	Normally Open
MT	Maximum Temperature		15	M12	M12 Bolt	N.C.	Normally Closed
MLMT	Minimum Level, Maximum Temperature		18	V	Viton Seals		
			24	LB	1/2"-13 x 2 Bolts		
				M12-SS	SS Bolts		

Dimensional Detail

Model		Mounting Center L	Wall Thickness	Mounting Hole	Mounting Bolt F	Bolt Torque
ML, MT, MLMT-ELG-12	IN	12	0.4	.50-.53	(1/2-13) x 1.75" (M12-1.75) x 1.65"	4 FT-LBS
	MM	304.8	10	12.6-12.9		5 NM
ML, MT, MLMT-ELG-15	IN	15	0.4	.50-.53		4 FT-LBS
	MM	381	10	12.6-12.9		5 NM
ML, MT, MLMT-ELG-18	IN	18	0.4	.50-.53		4 FT-LBS
	MM	457.2	10	12.6-12.9		5 NM
ML, MT, MLMT-ELG-24	IN	24	0.4	.50-.53		4 FT-LBS
	MM	609.6	10	12.6-12.9		5 NM

Assembling Instructions

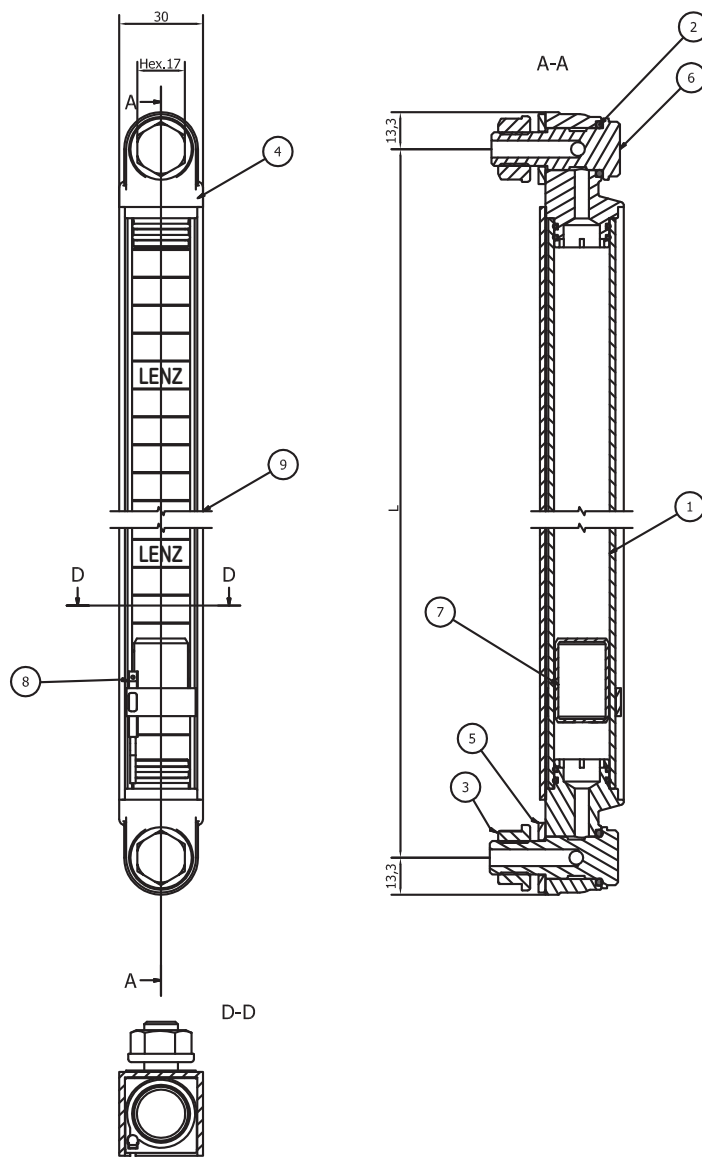
Method A: Tank has to have two drilled and tapped holes in either M12 or 1/2-13 UNC and can be installed from outside into the threaded holes.

Method B: Two holes must be drilled (12.2 mm for M12) (12.6 mm for 1/2-13 UNC) and the level gauge can be installed with two hex nuts from the inside of the tank. The tolerance on center to center distance: 0.3 mm, and the tolerance on the drilled holes is 0.2 mm.

ML-ELG Level Gauge

With minimum level electrical switch

- **Sensor “REED” switch** attached on the internal transparent tube, adjustable in height according to the customer design control requirements of the level. The minimum location position is 2" or 50 mm from the center of the lower bolt. The sensor is supplied with power cable 11.8" (30 cm) in length and M8 male connector. Upon request it is possible to provide a separate connection cable of 98" (250 cm) complete with female M8 connector. It is a possibility to also apply more than one level sensors positioned at different heights.
- **Float element** made of technopolymer containing a magnetic element that activates the electric contact when it reaches the REED level switch sensor.
- **Standard execution:** with electrical contact normally open.
- **Operating features:** the vertical level indicator ML-ELG in addition to allowing for a visual inspection provides an electrical signal when the float reaches the preset minimum level, following the closure of the electrical circuit.

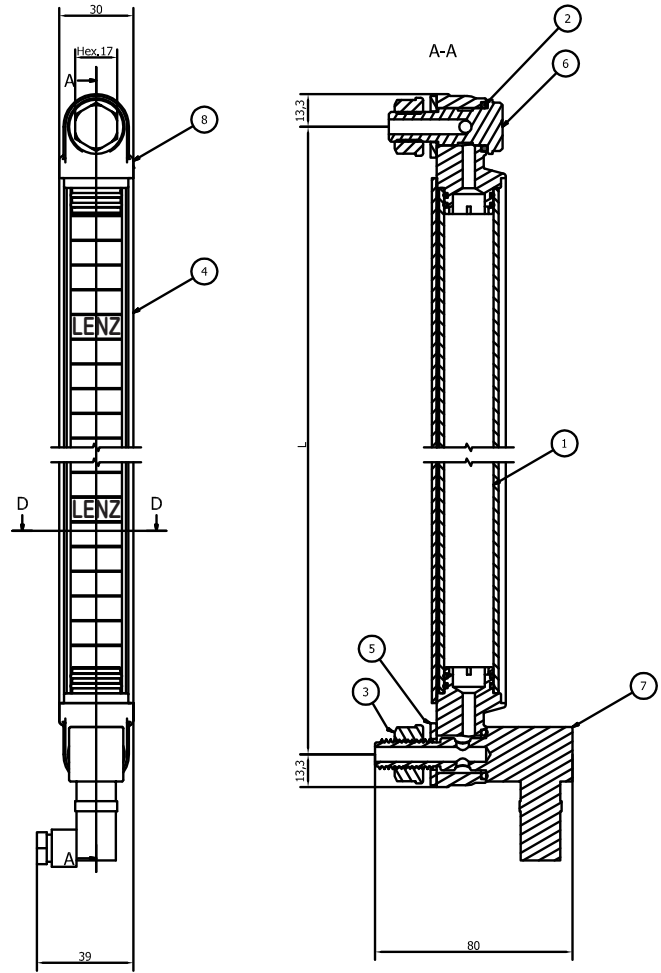


Components List	
Item	Description
1	Polycarbonate transparent tube
2	O-Rings
3	Flanged hex M12, 1/2"-13 UNC
4	Plastic end caps
5	NBR seal
6	Hollow bolt M12, 1/2"-13 UNC
7	Magnetic floating element
8	“REED” sensor with M8 male connector
9	Aluminum U-shape guard

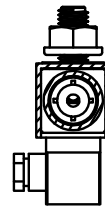
Electrical characteristics	Minimum level REED sensor switch
Power supply	3÷30 VAC / DC
Electrical contacts	NO normally open
Switching current	2 AMPS
Power	6 WATTS
Working temperature	-10°C / +70°C (14°F/158°F)
Protection degree	IP67

MT-ELG Level Gauge With maximum temperature electrical switch

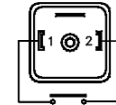
- Preset temperature electrical sensor
167° F (75° C)
- **Temperature executions:**
MT-ELG-NO (electrical contact normally open) –
MT-ELG-NC (electrical contact normally closed)
- **Operation features:** The vertical level indicator
MT-ELG in addition to allowing
a visual oil level inspection provides an electrical
signal when the temperature of the fluid inside
the tank reaches the preset temperature. The
model MT-ELG-NC the electrical circuit is
closed once it reaches the pre-set temperature,
the model MT-ELG-NO the electrical circuit
opens once it reaches the preset temperature.



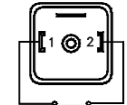
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CONTACT NO



CONTACT NC

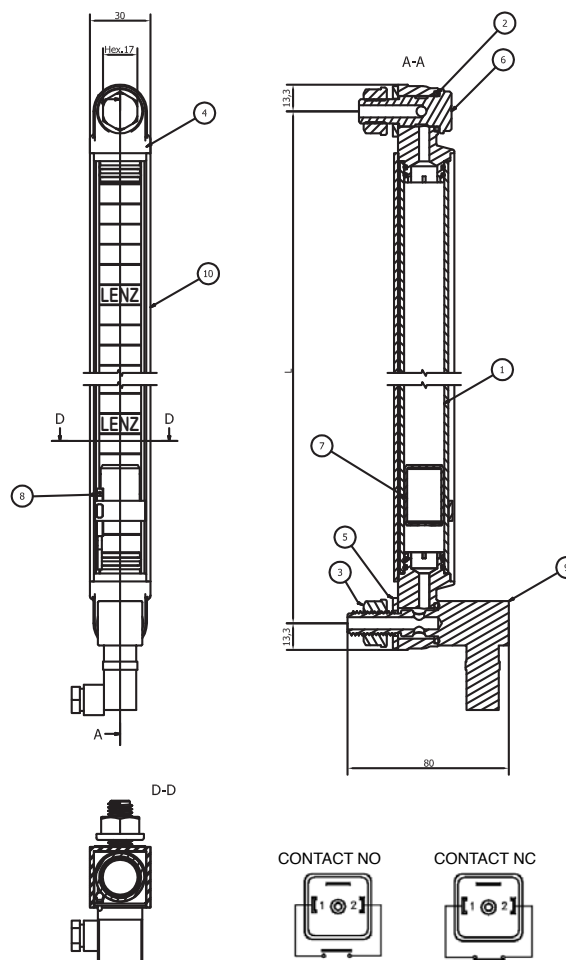


Components List	
Item	Description
1	Polycarbonate transparent tube
2	O-Rings
3	Flanged hex M12, 1/2"-13 UNC
4	Aluminum U-shape guard
5	NBR seal
6	MAX temperature sensor
7	Hollow bolt M12, 1/2"-13 UNC
8	Plastic end caps

Electrical data	Maximum temperature electrical sensor
Supply	AC/DC
Electrical contacts	NO normally open NC normally closed
Electric charge	250 VAC 10 A
Protection degree	IP65, DIN swivel connector
Calibration	167°F (75°C)
Precision	±5°C (data referred to a room temp. = 20°C/68F)

MLMT-ELG Electrical Level Gauge With minimum level and maximum temperature switch

- **Sensor “REED” switch** attached to the internal transparent tube, adjustable in height according to the customer design requirements of the level, minimum positioned is about 2" (50 mm) from the center of the lower bolt. The sensor is supplied with power cable 11.8" (30 cm) in length and M8 male connector; on request it is possible to provide a separate connection cable of 9.8" (250 cm) meter complete with female M8 connector. It is possible to have more than one level sensor positioned at different heights
- **Float element** made of technopolymer containing a Neodymium magnet that activates the electric contact when it reaches the level switch sensor REED.
- **Temperature executions:** MLMT-ELG - NO (electrical contact normally open on the temperature sensor) MLMT-ELG-NC (electrical contact normally closed on the temperature sensor)
- **Operation features:** The vertical level indicator MLMT-ELG in addition to allowing a visual oil inspection provides an electrical signal when the temperature of the fluid inside the tank reaches the specified preset (176° F - 80° C) and provides an electrical signal when the float element reaches the predetermined minimum level as well.
- **MLMT-ELG- NO:** the level sensor closes the electric circuit when it reaches the pre-set minimum level; the maximum temperature sensor closes the electric circuit at the pre-set threshold temperature.
- **MLMT-ELG- NC:** the level sensor closes the electric circuit when it reaches the pre-set minimum level; the maximum temperature sensor opens the circuit to the pre-set temperature threshold.



Components List	
Item	Description
1	Polycarbonate transparent tube
2	O-Rings
3	Flanged hex M12, 1/2"-13 UNC
4	Plastic end caps
5	NBR seal
6	Hollow bolt M12, 1/2"-13 UNC
7	Magnetic floating element
8	"REED" sensor with male connector
9	MAX temperature sensor
10	Aluminum U-shape guard

Electrical characteristics	Maximum level REED sensor switch
Power supply	3÷30 Vac/dc
Electrical contacts	NO normally open
Switching current	0, 2 A 2 AMPS
Power	6 W
Working temperature	-10°C / +70°C 50 to 158° F
Protection degree	IP67
Electrical characteristics	Max temperature electrical sensor
Supply	AC/DC
Electrical contacts	NO normally open / NC normally closed
Electric charge	250 VAC 10 A
Protection degree	IP65
Calibration	75°C 167°F
Precision	±5°C (data referred to a room temp. = 20°C/68°F)