



Electrical Level Gauge

Model ML-PLG, MT-PLG, MLMT-PLG

Specifications

- 5" (127mm) mounting center transparent oil level indicator
- Transparent Polyamide lens material ultrasonically welded - pressure tested for leaks
- Slotted plastic PA66 guard (30% fiberglass)
- Maximum working pressure 14.5 PSI (1 bar)
- 70 durometer Nitrile seals
- Compatible with petroleum based fluids, gasoline, diesel, and a variety of solvents
- 1/2"-13 UNC or (M12) mounting hardware steel zinc plated
- Maximum operating temperature 176°F (80°C)

Options Available

- Optional M12 stainless bolts & nuts
- Optional Viton seals
- Optional AR model for alcohol or anti-freeze



ML-PLG-5
Minimum Level Indicator



MT-PLG-5
Maximum Temperature Indicator



MLMT-PLG-5
Minimum Level Maximum Temperature Indicator

Ordering Code

MLMT - PLG - 5 - M12 - A

Application	
ML	Minimum Level
MT	Maximum Temperature
MLMT	Minimum Level, Maximum Temperature

Series
PLG

Size
5

Options	
Omit	No Options
M12	M12 Bolt
V	Viton Seals
*LB	1/2"-13 x 2 Bolts
*M12-SS	303 SS Bolts, Nuts

Temp. Option Contacts	
A	140°F Normally Open
B	140°F Normally Closed
C	158°F Normally Open
D	158°F Normally Closed

*Consult Lenz

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

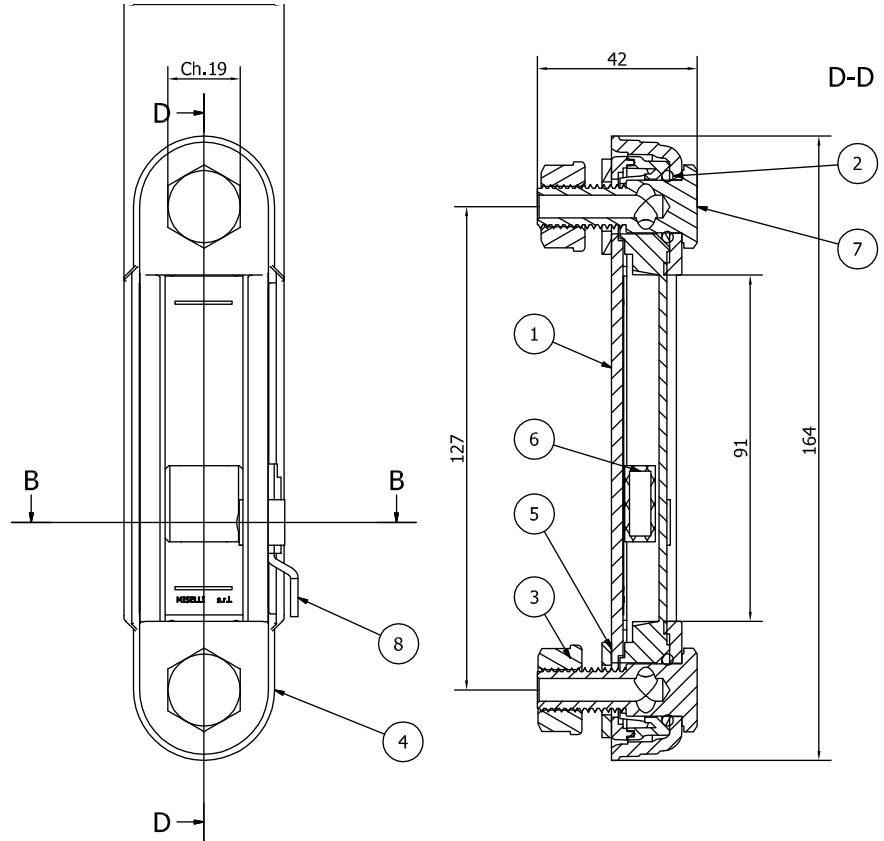
Method B: Two holes must be drilled (12.2 mm for M12) (12.6 mm for 1/2-13 UNC) and the level gauge can be installed with two hex nuts from the inside of the tank. The tolerance on center to center distance is 0.3 mm, and the tolerance on the drilled holes is 0.2 mm

Dimensional Detail

Model		Mounting Center	Hole	Mounting Bolt	Wall Thickness	Torque
ML-PLG, MT-PLG MLMT-PLG	in. mm	5.0" 127	.50 - .53 12.6 - 12.9	(1/2-13) x 1.75" (M12-1.75) x 1.65"	0.4 10	2.2 FT-LBS 3 NM

ML-PLG Level Gauge With Minimum Level Electrical Switch

- A Reed Switch is attached on the external guard, adjustable in height according to the level design requirements. The standard switch is supplied with power cable 11.8" (30 cm) in length with M8 male connector. An optional cable connection is connection cable of 97.5" (250 cm) with female M8 connector.
- Float element is made of a technopolymer containing a magnet so as it travels and comes in proximity with the electric contact activates the level reed switch.
- Standard execution: normally open electrical contact
- Operation features: the level gauge ML-PLG in addition to allowing a visual inspection provides an electrical signal when the float element reaches the preset minimum level, the result is the closure of the electrical circuit.



Components list	
Item	Description
1	Transparent body
2	O-Rings
3	Flanged hex M12, 1/2"-13 UNC nut
4	Plastic guard
5	NBR seal
6	Magnetic floating element
7	Hollow bolt M12, 1/2"-13 UNC
8	"REED" sensor with M8 male connector

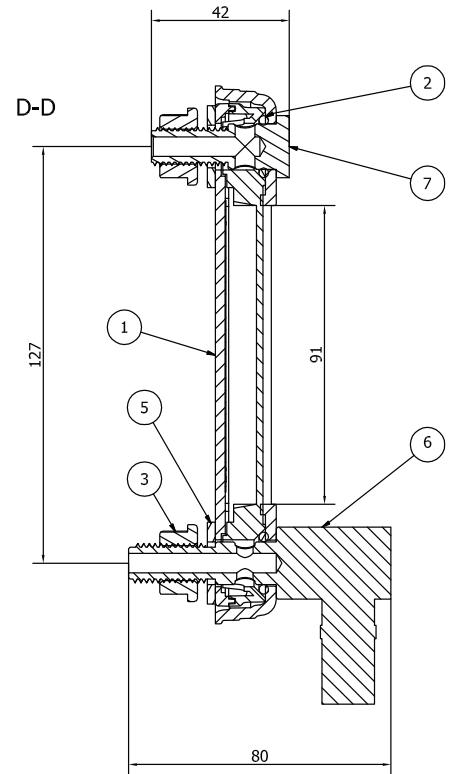
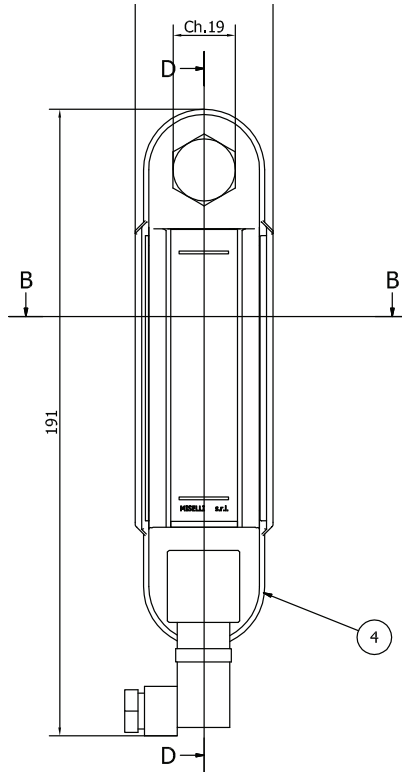
Electrical characteristics	Minimum level "REED" switch
Supply voltage	3-30 VAC / DC
Electrical contacts	NO normally open
Switching current	.2 AMPS
Maximum temperature	176°F (80°C)
Protection degree	IP67



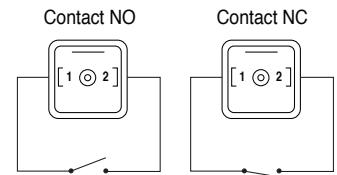
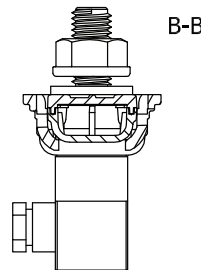
MT-PLG Level Gauge With Maximum Temperature Electrical Switch

Specifications

- Preset electrical sensors are available with switching temperatures of 140°F or 158°F
- Temperature executions: MT-PLG-5-A, MT-PLG-5-C (electrical contact normally open temperature sensor) – MT-PLG-5-B, MT-PLG-5-D (electrical contact normally closed temperature sensor)
- Operation features: The level gauge MT-PLG in addition to allowing a visual oil level inspection provides an electrical signal when the temperature of the fluid inside the reservoir reaches a specified preset switching temperature (see temperature switching chart below). The model MT-PLG-NO the electrical circuit is closed once it reaches the preset temperature of 140°F or 158°F. The model MT-PLG-NC the electrical circuit is opened once it reaches the preset temperature of 140°F or 158°F.



Components list	
Item	Description
1	Transparent body
2	O-Rings
3	Flanged hex 1/2"-13 UNC, M12 nut
4	Plastic guard
5	NBR seal
6	Maximum temperature sensor
7	Hollow bolt M12, 1/2"-13 UNC



The electrical sensor is stamped N/A (normally closed) or N/O (normally open) and also marked 60°C (148°F) or 70°C (158°F) for switching temperature.

Temperature Switching Chart

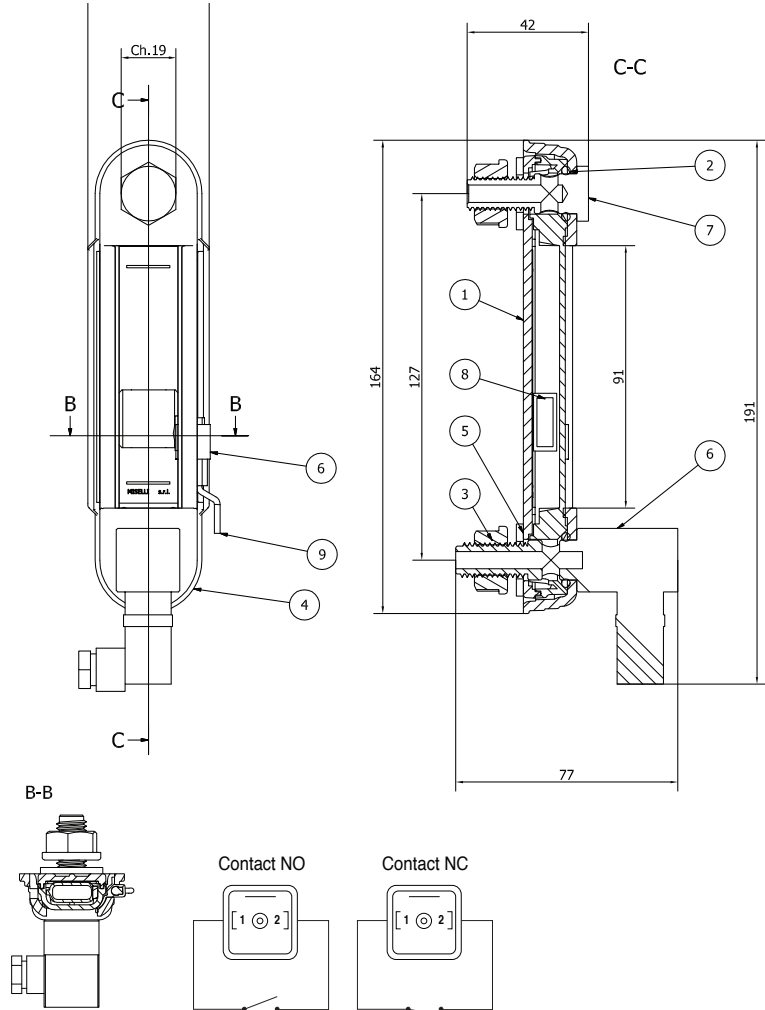
Code	Normally Closed			Tolerance Range
	Opens	Tolerance	Closes	
B	140°F	131-149°F	113°F	106-120°F
	60°C	55-65°C		41 - 49°C
D	158°F	148-168°F	131°F	124-138°F
	70°C	65-75°C		51 - 59°C
Code	Normally Open			Tolerance Range
	Closes	Tolerance	Opens	
A	140°F	131-149°F	113°F	106-120°F
	60°C	55-65°C		41-49°C
C	158°F	148-168°F	131°F	124-138°F
	70°C	65-75°C		51-59°C

Electrical characteristics	Maximum temperature electrical sensor
Supply voltage	3-30 VAC/DC
Electrical contacts	NO normally open, NC normally closed
Protection degree	IP65, DIN swivel connector
Switching temp.	140°F (60°C) or 158°F (70°C)
Accuracy	±5°C (data referred to a room temp. = 68°F (20°C))



MLMT-PLG Electrical Level Gauge With Minimum Level And Maximum Temperature Switch

- The Reed switch is attached on the external guard system, adjustable in height according to the design requirements. The sensor is supplied with power cable 11.8" (30 cm) in length and M8 male connector; or upon request it is possible to provide a separate connection cable of 97.5" (250 cm) complete with female M8 connector.
- Float element made of technopolymer containing a Neodymium magnet that activates when the oil in reservoir reaches minimum level.
- Temperature executions: MLMT-PLG-5-A, MLMT-PLG-5-C (electrical contact normally open temperature sensor) – MT-PLG-5-B, MT-PLG-5-D (electrical contact normally closed temperature sensor)
- Operation features: The vertical level gauge MLMT-PLG allows for a visual oil level inspection provides an electrical signal when the float element reaches the preset minimum level, the result is the closure of the electrical circuit. The MLMT gauge in addition provides an electrical signal when the temperature of the oil in the reservoir reaches a specified preset switching temperature (see temperature switching chart below). The model MLMT-PLG-NO the electrical circuit is closed once it reaches the preset temperature of 140°F or 158°F. The model MLMT-PLG-NC the electrical circuit is opened once it reaches the preset temperature of 140°F or 158°F.
- MLMT-PLG -NO: the level switch 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-PLG-NC: the level sensor closes the electric circuit when it reaches the pre-set minimum level; the maximum temperature sensor opens the circuit at the pre-set temperature threshold.



Components list	
Item	Description
1	Transparent body
2	O-Rings
3	Flanged hex M12, 1/2"-13 UNC nut
4	Plastic guard
5	NBR seal
6	MAX temperature sensor
7	Hollow bolt M12, 1/2"-13 UNC
8	Magnetic floating element
9	"REED" sensor with M8 male connector

Electrical characteristics	Minimum level REED switch
Supply voltage	3-30 VAC/DC
Electrical contacts	NO normally open
Switching current	.2 AMPS
Maximum temperature	176°F (80°C)
Protection degree	IP67
Electrical characteristics	Maximum temperature electrical sensor
Supply voltage	3-30 VAC/DCC
Electrical contacts	NO normally open, NC normally closed
Protection degree	IP65
*Switching temp.	140°F (60°C) or 158°F (70°C)
Accuracy	±5°C (data referred to a room temp. = 68°F (20°C))

*See temperature options chart page 42b