

ELECTRICAL OIL LEVEL INDICATORS

**TANK
ACCESSORIES**

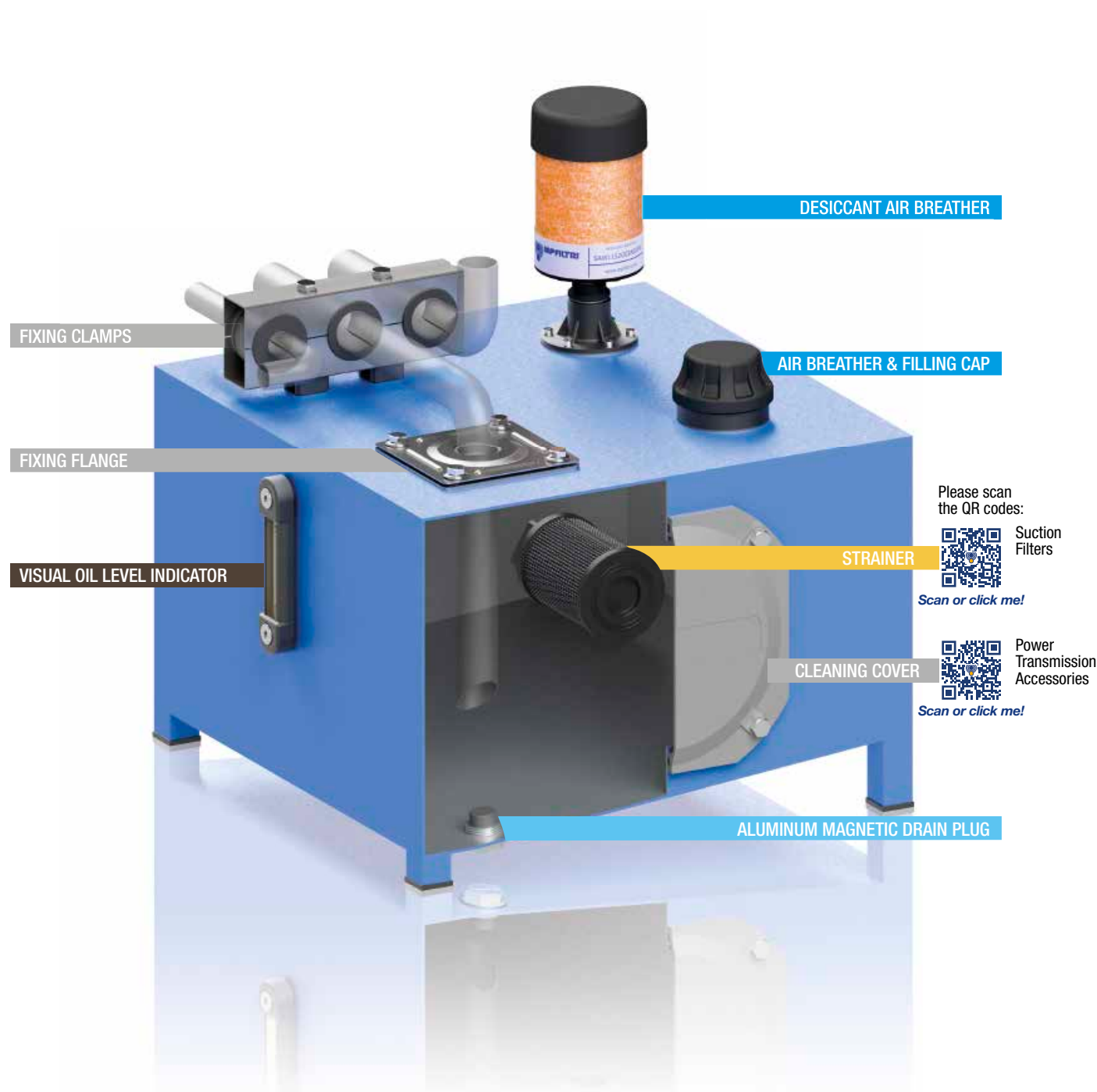
CATALOGUE



MPFILTRI®

PASSION TO PERFORM

TANK ACCESSORIES



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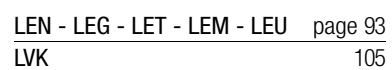
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Electromagnetic float level indicators use the action of a magnet fixed to the float to change the electrical status of a reed switch mounted inside the tube.

As the fluid level in the tank changes, the float moves together with the magnet that, connected with the reed switch, move the contacts thereby tripping an alarm signal.

The movement of the float is normally limited by mechanical stops because once the magnet exceeds the point at which it activates the reed switch, the switch reverts to its original status.

To invert the contact status from N.O. to N.C. and vice versa, it is sufficient to invert the float.



LEN - LEG - LET - LEM - LEU series

Electrical oil level indicators



Technical data

Electrical Oil Level Indicators

LEN is a range of electrical fluid level indicators for monitoring of the fluid level into the tank.

They are directly fitted on the tank.

The float moves through the rod while the fluid level changes.

A magnet, fitted into the float, turns a reed sensor fixed into the rod.

Available features:

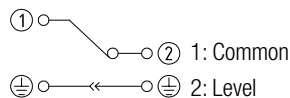
- G 1" male threaded or flanged connections
- Adjustable size on request, to meet every size of tank
- 1 or 2 floats, to monitor the minimum level, the maximum level or both of them

Common applications:

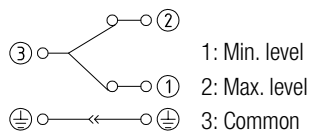
- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LEN 1 Float



LEN 2 Floats



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

LEN 1 float 0.185 kg
LEN 2 floats 0.230 kg

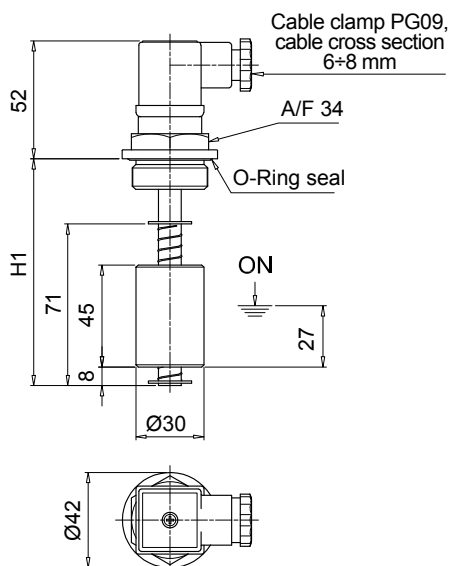


Designation & Ordering code

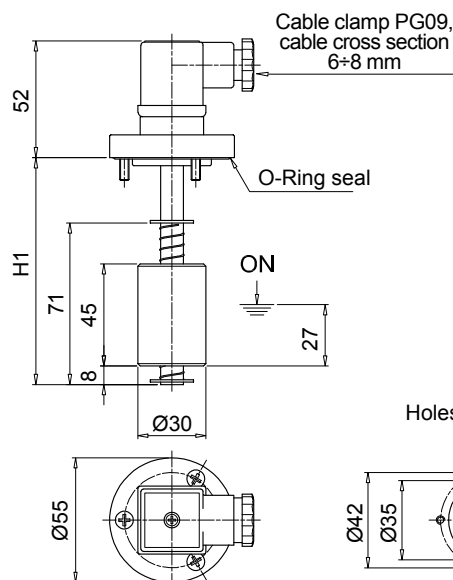
COMPLETE ELECTRICAL OIL LEVEL INDICATORS

Series	Configuration example : LEN A 350 2 A 1 A G S P01									
LEN										
Tube material										
A Brass										
Length										
150 200 250 350 400 500										
Number of floats										
1 Nr. 1 float	•	•	•	•	•	•				
2 Nr. 2 floats	-	•	•	•	•	•				
Float material										
A Polyamide foam										
Electrical switch										
1 N.C. (Normally Closed)										
Seals										
A NBR										
Connections										
G G 1"										
F Nr. 3 holes flange										
Electrical connection										
S EN 175301-803 connector										
										Execution
										P01 MP Filtri standard
										Pxx Customized

Connection "G"



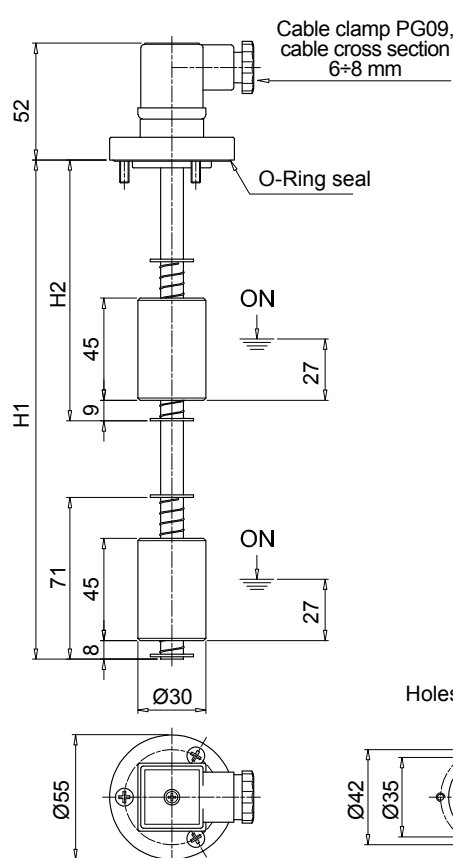
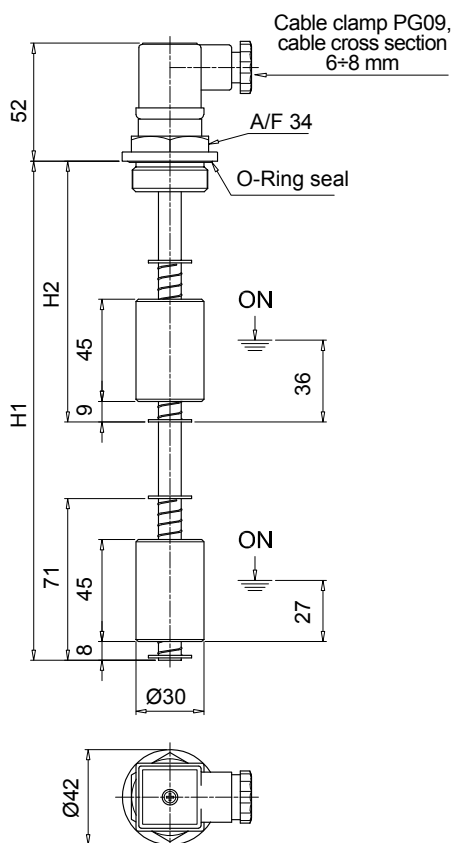
Connection "F"



LEN

Nr. 1 float

Length	H1 [mm]
150	150
200	200
250	250
350	350
400	400
500	500



LEN

Nr. 2 floats

Length	H1 [mm]	H2 [mm]
200	200	95
250	250	105
350	350	115
400	400	115
500	500	125

Technical data

Electrical Oil Level Indicators

LEG is a range of electrical fluid level indicators for monitoring of the fluid level into the tank.

They are directly fitted on the tank side.

The float moves through the rod while the fluid level changes.

A magnet, fitted into the float, turns a reed sensor fixed into the rod.

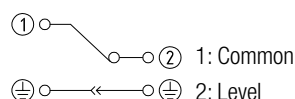
Available features:

- Flanged connections
- Adjustable size on request, to meet every size of tank
- Floating monitor for oil level check

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

The electrical properties indicated are referred to resistive loads; for capacitive and inductive loads and incandescent lamps, use protection circuits.

Temperature

From -15 °C to + 80 °C

Weight

LEG A 102 0.19 kg
LEG A 200 0.22 kg

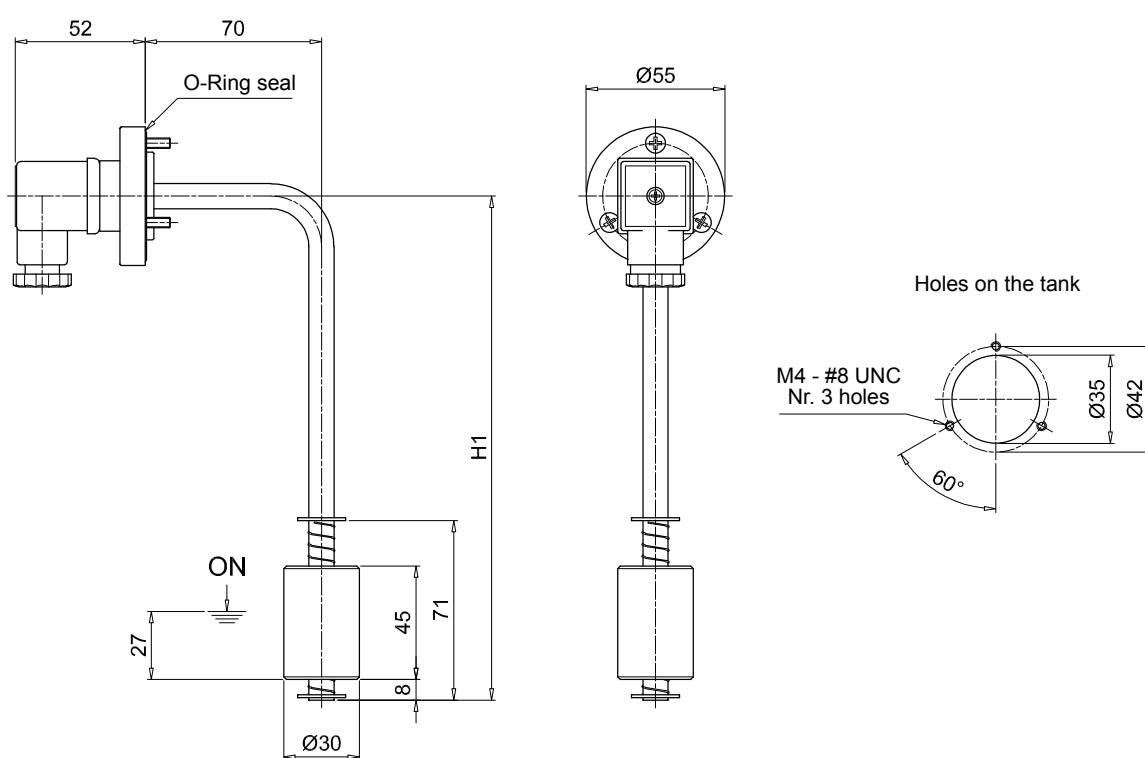


Designation & Ordering code

COMPLETE ELECTRICAL OIL LEVEL INDICATOR

Series	Configuration example :	LEG	A	200	1	A	1	A	F	S	P01
LEG											
Tube material											
A Brass											
Length											
102 200 											
Number of floats											
1 Nr. 1 float											
Float material											
A Polyamide foam											
Electrical switch											
1 N.C. (Normally Closed)											
Seals											
A NBR											
Connections											
F Nr. 3 holes flange											
Electrical connection											
S EN 175301-803 connector											
Execution											
P01 MP Filtri standard											
Pxx Customized											

LEG	
Size	H1 [mm]
LEG 102	103
LEG 200	200



Note: for installation onto OB Cleaning covers see page 147

Technical data

Electrical Oil Level Indicators

LET is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod. The integrated thermostat allows to get a remote monitoring of the temperature.

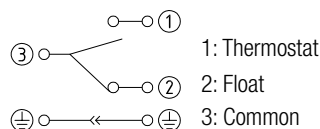
Available features:

- G 1" male threaded or flanged connections
- Adjustable size on request, to meet every size of tank
- Floating monitor for oil level check

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

LET A 200	0.20 kg
LET A 300	0.23 kg
LET A 400	0.28 kg



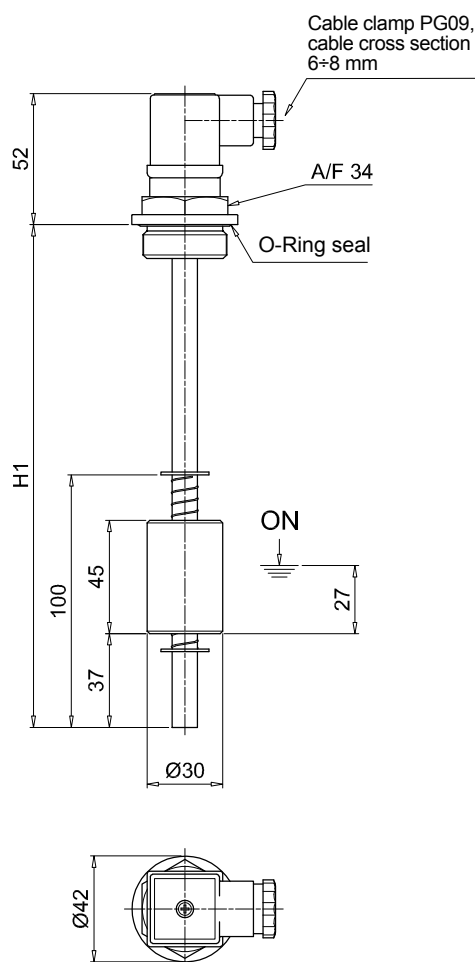
Designation & Ordering code

COMPLETE ELECTRICAL OIL LEVEL INDICATOR

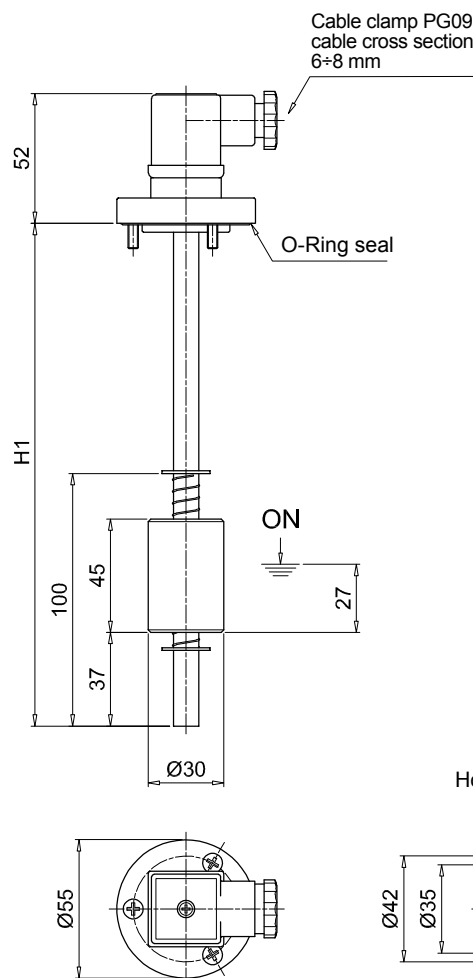
Series	Configuration example :	LET	A	300	1	A	1	A	F	S	50	P01
LET												
Tube material												
A Brass												
Length												
200 300 400												
Number of floats												
1 Nr. 1 float												
Float material												
A Polyamide foam												
Electrical switch												
1 N.C. (Normally Closed)												
Seals												
A NBR												
Connections												
G G 1"												
F Nr. 3 holes flange												
Electrical connection												
S EN 175301-803 connector												
Thermostat setting												
50 50°C N.O. (Normally Open)												
Execution												
P01 MP Filtri standard												
Pxx Customized												

LET	
Length	H1 [mm]
200	200
300	300
400	400

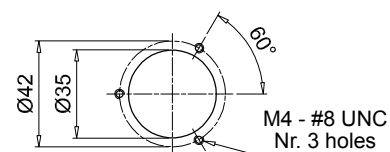
Connection "G"



Connection "F"



Holes on the tank



Technical data

Electrical Oil Level Indicators

LEM is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod. The setting point is adjustable on site, with few easy actions.

Available features:

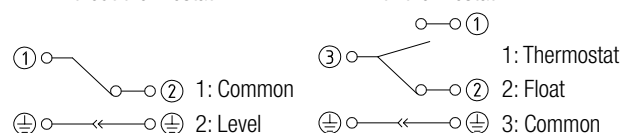
- Flanged connections
- Adjustable size to meet every size of tank
- Floating monitor for oil level check
- Integrated thermostat, to get a remote monitoring of the temperature

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LEM without thermostat



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Float contact: N.C. reed, N.O. (on request)
- Thermostat contact: N.O., N.C. (on request)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

LEM 0.406 kg



Designation & Ordering code

COMPLETE ELECTRICAL OIL LEVEL INDICATOR

Configuration example :

Series	LEM	A	1000	1	A	1	A	F	S	60	P01
--------	-----	---	------	---	---	---	---	---	---	----	-----

Tube material

A Brass

Length

1000

Number of floats

1 Nr. 1 float

Float material

A Polyamide foam

Electrical switch

1 N.C. (Normally Closed)

Seals

A NBR

Connections

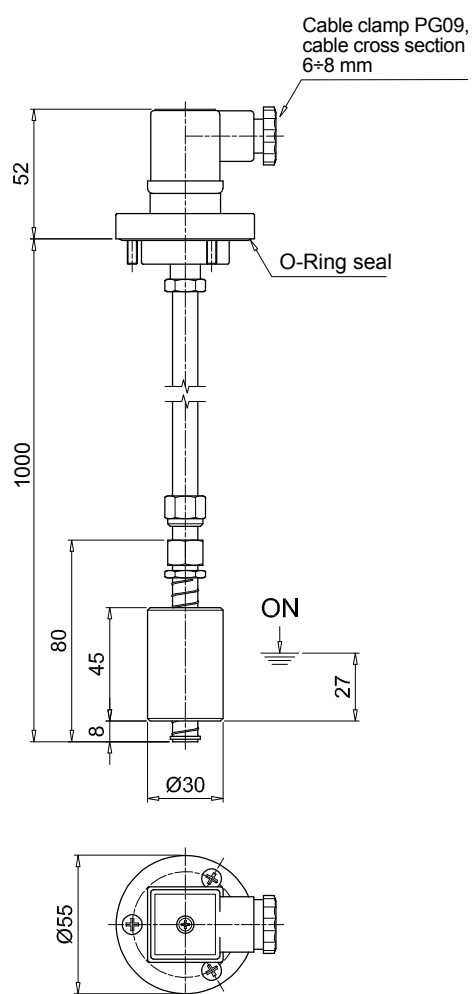
F Nr. 3 holes flange

Electrical connection

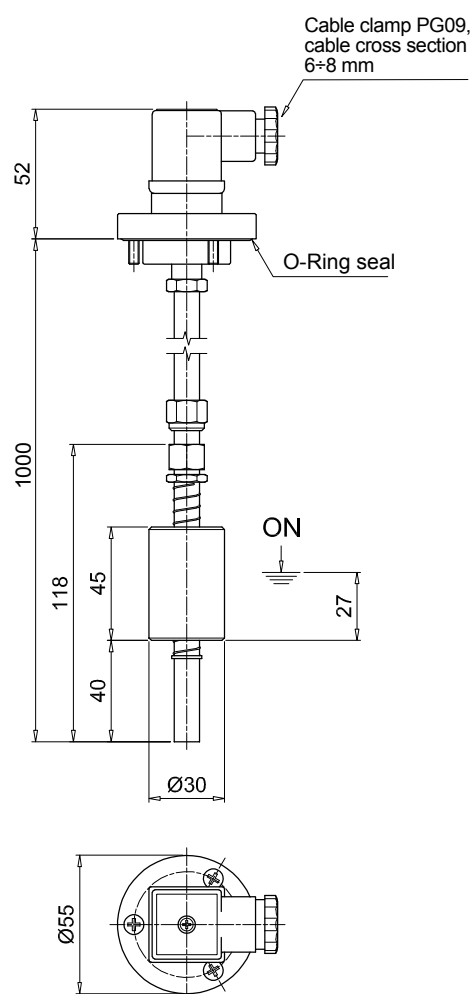
S EN 175301-803 connector

Thermostat setting		Execution	
00	Without thermostat	P01	MP Filtri standard
60	60°C N.O. (Normally Open)	Pxx	Customized

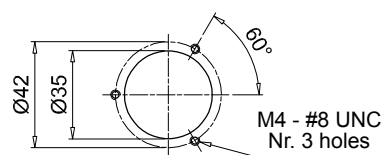
Without thermostat



With thermostat



Holes on the tank



Technical data

Electrical Oil Level Indicators

LEU is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank.
The float moves through the rod while the fluid level changes.
A magnet, fitted into the float, turns a reed sensor fixed into the rod.
The setting point is adjustable on site, with few easy actions.
They are made of stainless steel, to meet every heavy duty application.

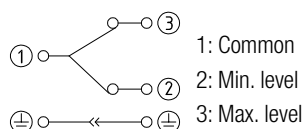
Available features:

- Flanged connections
- Setting size for each tank type
- Double Floating monitor for oil level check

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange / Threaded body: Aluminium
- Tube: AISI 304
- Float: NBR, AISI 316 (on request)
- O-Ring: NBR
- Circlip: AISI 304
- Float contact: N.C. reed, N.O. (on request)

Electrical data

- Protection rating: IP65
- Max switching capacity: 50 W
- Max switching current: 0.5 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

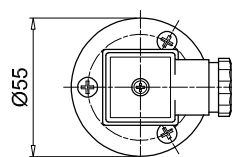
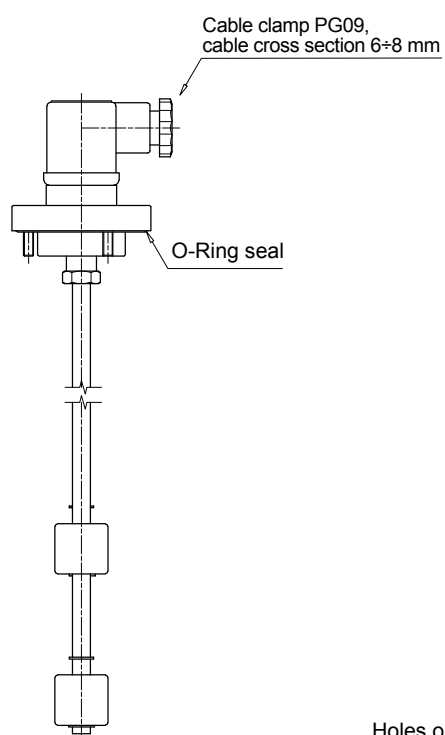
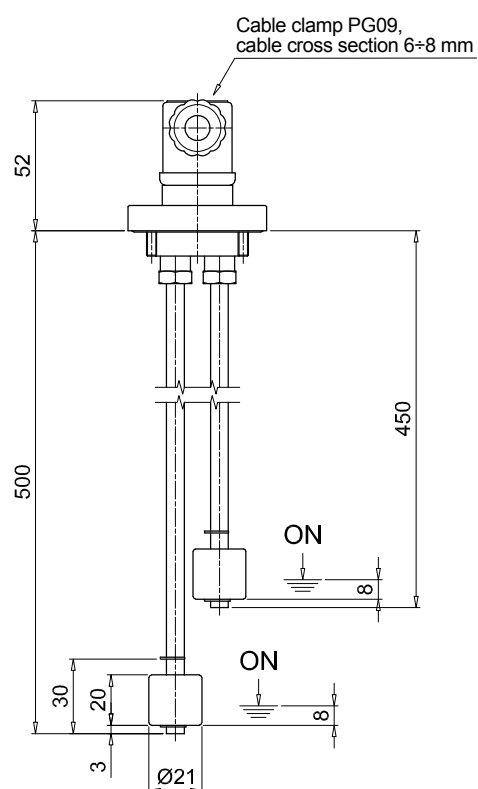
LEU 0.415 kg



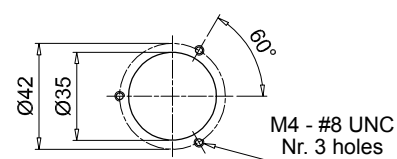
Designation & Ordering code

COMPLETE ELECTRICAL OIL LEVEL INDICATOR

Series	Configuration example :	LEU	B	2	B	1	A	F	S	P01
LEU										
Tube material										
B AISI 304										
Number of floats										
2 Nr. 2 floats										
Float material										
B NBR										
Electrical switch										
1 N.C. (Normally Closed)										
Seals										
A NBR										
Connections										
F Nr. 3 holes flange										
Electrical connection										
S EN 175301-803 connector										
Execution										
P01 MP Filtri standard										
Pxx Customized										

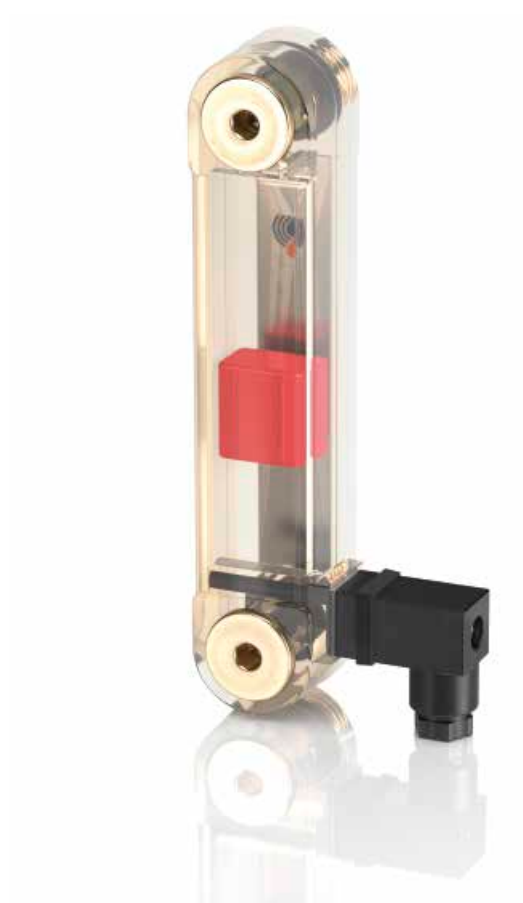


Holes on the tank



LVK series

Electrical and visual oil level indicator



Technical data

Electrical Oil Level Indicators

LVK is a range of electrical and visual fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank side. The float moves through the indicator housing while the fluid level changes.

Available features:

- Several male threaded connections
- Three different sizes, to meet every size of tank
- Thermometer, thermostat or PT100, to check the temperature of the fluid

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

see page. 118

Materials

- Head: Polyamide
- Screws: Nickel plated brass (standard), AISI 314 (optional)
- Seal: NBR (standard)
- Float: Polyamide
- Sensor thermometer: Screw + thermometer

Temperature

From -20 °C to + 80 °C

Weight

LVK 10	0.140 kg
LVK 20	0.170 kg
LVK 30	0.250 kg



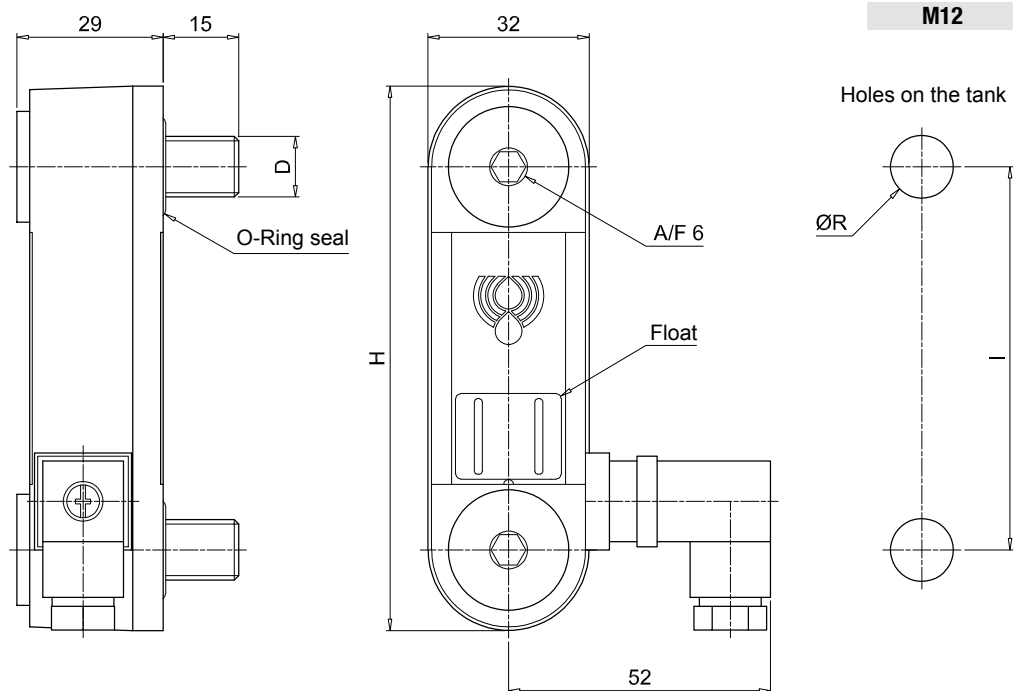
Designation & Ordering code

COMPLETE ELECTRICAL AND VISUAL OIL LEVEL INDICATORS

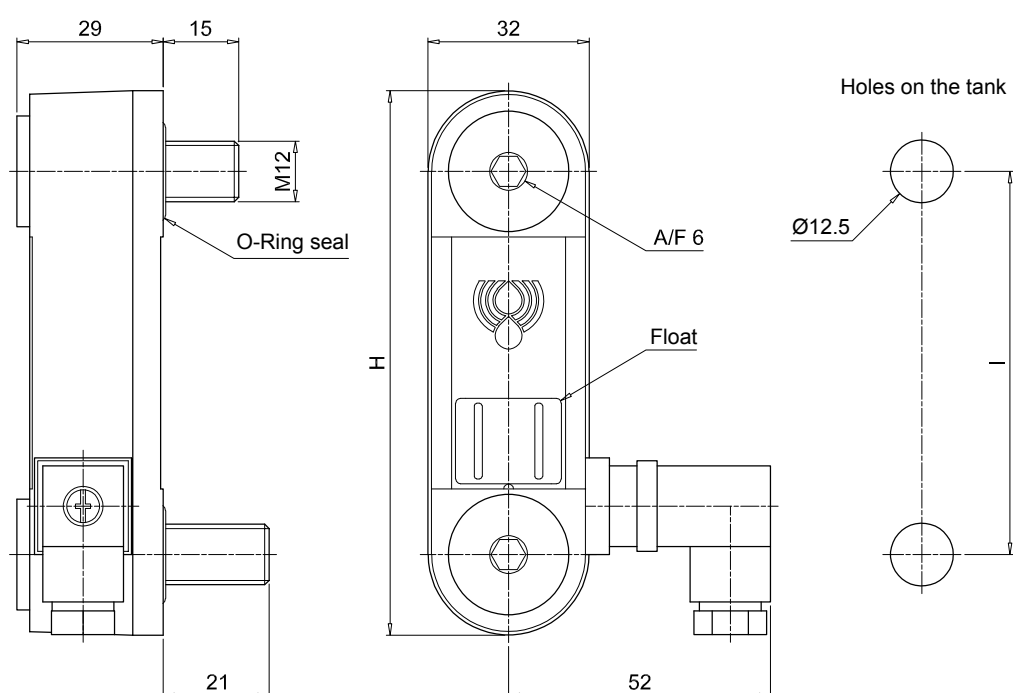
Series				Configuration example : LVK 20 A M12 1 T 5 P01											
LVK															
Length				10		20		30							
Seals				A		NBR									
Connections				M10		Screws M10		M12		Screws M12					
Electrical switch in absence of fluid				1		N.O. (Normally Open)									
				2		N.C. (Normally Closed)									
				3		SPDT (single-pole, double throw)									
Version				M10		M12									
S Standard				•		•									
T With thermostat				-		•									
P With PT100 sensor				-		•									
Thermostat setting				S		T		P							
S Standard (no setting)				•				•							
1 50°C N.O. (Normally Open)				-		•		-							
2 60°C N.O. (Normally Open)				-		•		-							
3 70°C N.O. (Normally Open)				-		•		-							
5 50°C N.C. (Normally Closed)				-		•		-							
6 60°C N.C. (Normally Closed)				-		•		-							
7 70°C N.C. (Normally Closed)				-		•		-							
Execution															
P01														MP Filtri standard	
Pxx														Customized	

LVK		
Size	H [mm]	I [mm]
10	108	76
20	159	127
30	286	254
Connections	D [mm]	ØR [mm]
M10	M10	10.5
M12	M12	12.5

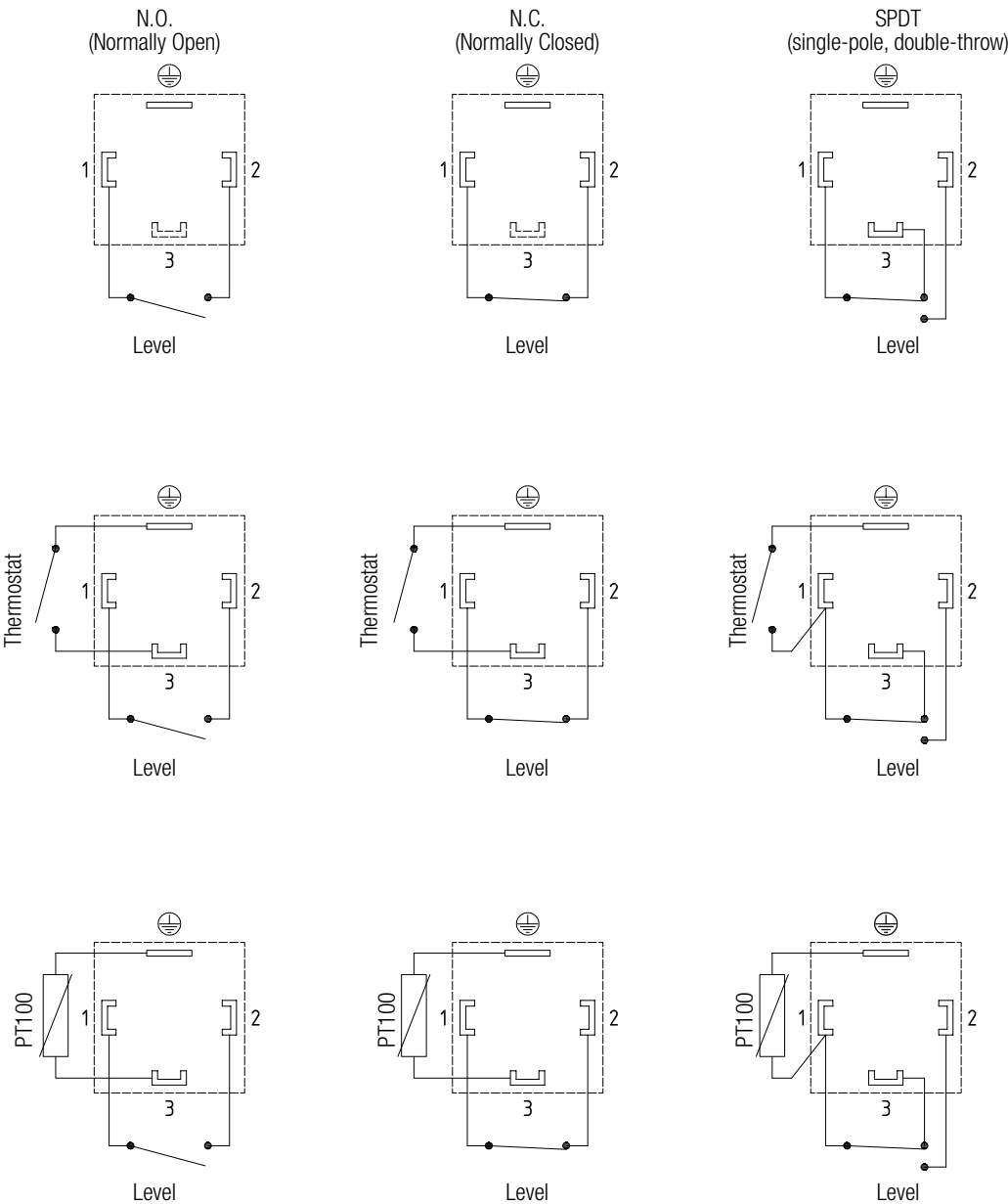
Without thermostat



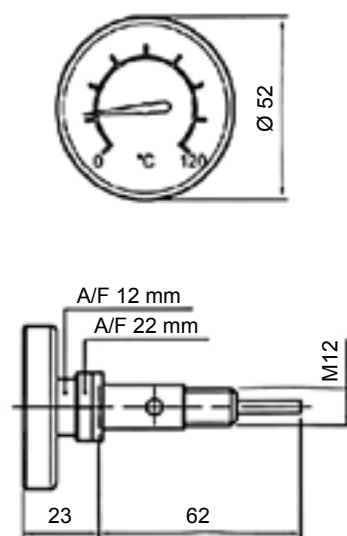
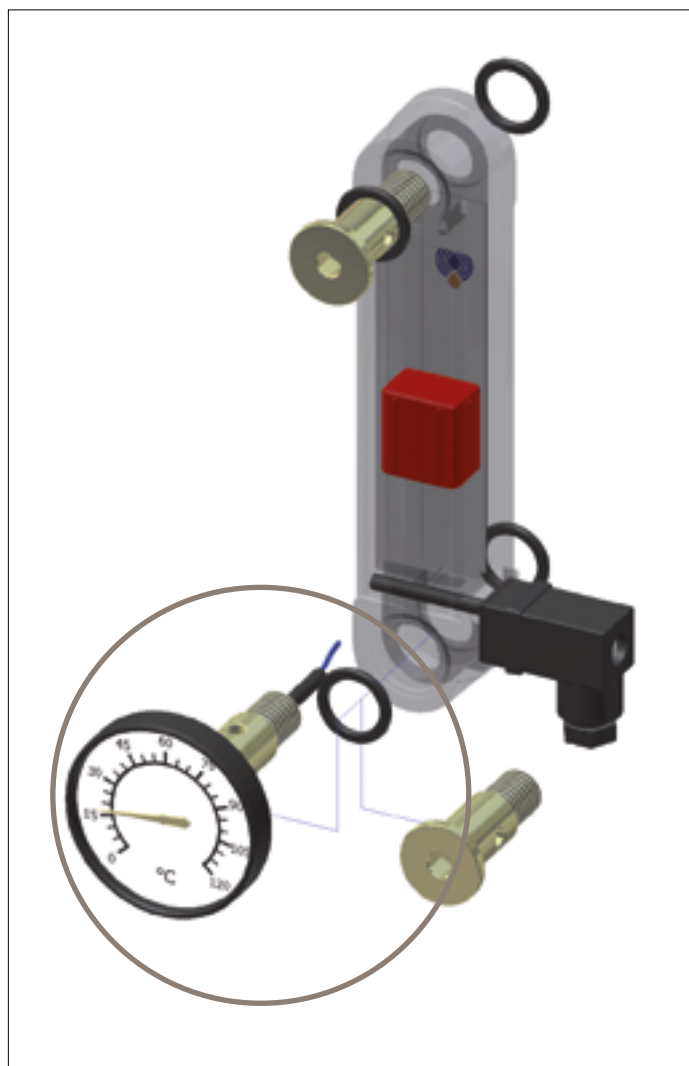
With thermostat



Electrical symbols



Probe thermometer



Probe thermometer	Weight [Kg]	
TV12	0.100	Probe thermometer kit M12 screw

WORLDWIDE NETWORK

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