

## LC 130

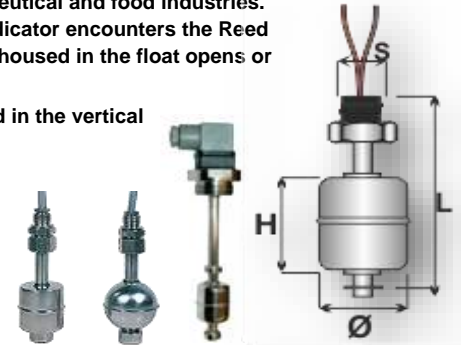
## VERTICAL LEVEL SWITCH IP65

Entirely in stainless steel, they are suitable for use in the production processes of chemical, pharmaceutical and food industries. Suitable for solvents, thinners and all liquids compatible with stainless steel. When the float of the indicator encounters the Reed switch incorporated in the tube at the pre-established distances, the contact activated by the magnet housed in the float opens or closes, thus obtaining the possibility of sending a luminous or acoustic signal or disconnecting any electrical equipment connected to it. The indicator must be fitted in the vertical position, and the float must be at least 35mm from ferrous surfaces (walls, tanks, etc.).

To invert the contact from N.C. to N.O. just remove the bottom stop and turn the float upside down.

BODY AISI 316  
CONTACT SPST or SPDT  
PROTECTION IP 65

PVDF, polipropilene, PVC, PTFE  
body on request



code	S	Ø	H	L	temperature	P max	contacts	power	voltage	protection
LC 13001	Ø 1/8"	28	28	60	20 + 200°C	10	SPST	50 W	240 VAC	IP 65
LC 13003	Ø 3/8"	44,5	52	90	20 + 180°C	10	SPDT	60 W	230 VAC	IP 65

## LC 120

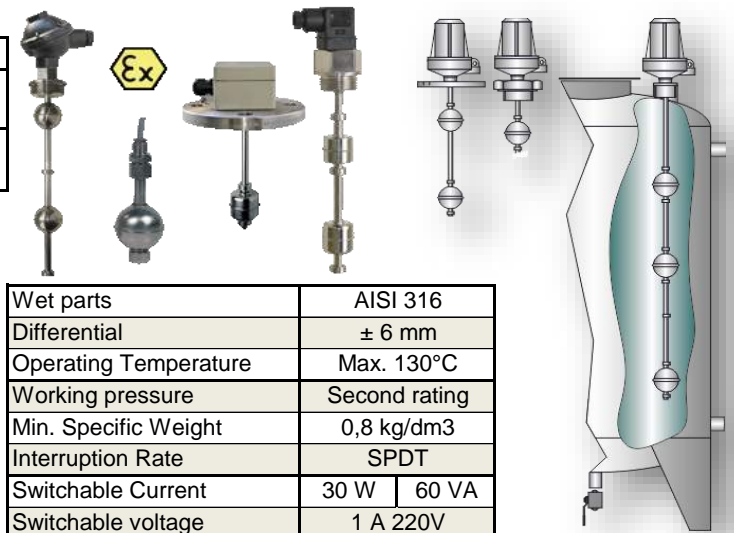
## MAGNETIC LEVEL SWITCH WITH REED CONTACTS

CODE	CONNECTION	FLOAT	TUBE
LC 12008	1 1/2"	THREAD GAS	AISI 316
LC 12009	2"		
LC 12108	DN 40	FLANGED	AISI 316
LC 12109	DN 50		

The magnetic level switch mod. TOR is suitable for mounting on any type of tank.

## FUNCTIONING:

One or more floats, in which there are two permanent magnets, run along a tube within fixed which are positioned as many magnetically operated switches. The increase in level produces a shift of the floats. When a float reaches the corresponding switch, the magnets cause the contact to exchange.



Wet parts	AISI 316
Differential	± 6 mm
Operating Temperature	Max. 130°C
Working pressure	Second rating
Min. Specific Weight	0,8 kg/dm3
Interruption Rate	SPDT
Switchable Current	30 W   60 VA
Switchable voltage	1 A 220V

## LC 170

## MICRO LEVEL SWITCH

LC17204



LC17304



LC17004



LC17405



The main features of these level switches are the reduced overall dimensions

## Horizontal Installation

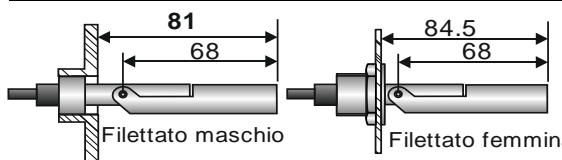
CONTACTS: NA o NC  
ELECTRIC CAPACITY: 230V - 40W - 2A  
CONNECTIONS: gas / NPT / M16

LC17304	Ex	RFS 12Ex N4
GAS =	II 1 GD Exia II CT6	
POWDERS =	II 2/1 ExtD A21 IP65 T85°C	

code	type	body	P.max	T. max	Spec.Weight	protection	Electric
LC17004	NKP 14011	polipropilene	10 bar	80°C	0,6 g/cmq	IP 68	230 Vac- 40W- 2A
LC17104	NKP 15011	PVDF	10 bar	100°C	0,95 g/cmq	IP 68	230 Vac- 40W- 2A
LC17204	RFS 1200N4	INOX	5 bar	120°C	0,7 g/cmq	IP 68	240Vac-15VA-0,5A
LC17304	RFS 12Ex N4	Ex INOX	5 bar	60°C	0,7 g/cmq	ATEX	40 Vdc - 4 VA

## Vibration level switch with reduced dimensions and intrinsic safety in INOX

LC17405	RFS 12Ex N4	II 1G Exeia IICT6	Ø 3/4"	45 bar	90°C	5000 mm <sup>2</sup> /s	intrinsic safety
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2.41

## FLOATING LEVEL SWITCH

VALVOIND Srl Via Pascoli, 5 - 24060 Bagnatica (Bergamo) Tel. 035.681919-Fax. 035.684461


**Valvoind**  
valvole industriali

LC 101

## DUAL MAGNET FLOAT LEVEL SWITCH

CODE	TYPE	DESCRIPTION	COUNTERFLANGE
LC10101	NGS.2100	IP 65	...MFF1 STEEL
LC10102	NGS.2100 Ex	Eex dme II C T4 - T6	...MFF2 ST.STEEL

As the level rises and falls the inclination of the float is changed causing a permanent magnet in the float to be deflected which in turn repels a rotatable opposing magnet. This forced snap-action-contact effect operates a microswitch with a plunger. Even very small changes in level can be detected in this way.



<b>Nominal pressure:</b> 25 bar	<b>Housing material:</b> aluminium, colour coated
<b>Medium temperature:</b> -20°C a + 250°C	<b>Wetted parts:</b> stainless steel 1.4571
<b>Ambient temperature:</b> -20 °C ... +80 °C	<b>Switch rating:</b> 250VAC, 10 A - Ex: 250VAC/2.5 A
<b>Min. medium density:</b> > 0.7 kg/dm <sup>3</sup>	<b>Switching element:</b> 1 microswitch with 1 closing and 1 opening contact (NO and NC)
<b>Installation position:</b> from side	<b>Weight:</b> approx. 2.5 kg
<b>Immersion length:</b> 202...502 mm	
<b>Total deflation:</b> 118mm	



LC 102

## FLOATING LEVEL CONTROL

CODE	TYPE	LEVEL DIFFER. mm	Press. max. bar	Temp. max. Fluid	CONNECTION	BODY	FLOAT	HOUSING	SPEC. WEIGHT Kg/dmc	
LC10201	AD22	25÷175	6	150°C	flang.PN6	DN 32	inox	inox	0,7 a 1,1	
LC10301	AD52	20 - 55	10	100°C	threaded	Ø 1"	brass	steel	PVC	0,7 a 1,1
LC10401	AD52 P	20 - 55	10	100°C	threaded	Ø 1 1/4"	brass	PVC non-toxic	PVC non-toxic	0,7 a 1,1
LC10402	AD52PS					Ø 1"				
LC10501	AD23	20 ÷ 180	6	150°C	flang. PN 6	DN 32	inox	inox	inox	0,7 a 1,1
LC10502	AD23A				flang. PN 16					
LC10503	AD23B				flang. PN 16					
LC10504	AD23C				flang. PN 16					
LC10601	A42A	15 ÷ 50	16	200°C	threaded	Ø 1"	GG25	inox	aluminium	0,9 a 1,2
LC10701	A41A	25 ÷ 50 25 ÷ 75	16	200°C	flang. PN 16	interaxis Ø125mm	GG25	inox	aluminium	0,9 a 1,2
LC10702	A41B	55 ÷ 210 65 ÷ 305 95 ÷ 370 140 ÷ 570								



LC 180

## VARIOUS LEVEL CONTROL FOR POWDERS AND LIQUIDS



Microwave Level Switch Insensitive to foam and adhesions



Vibrating Level Switch For powder, granulate



Capacitive Level Switch for liquids and powders

## LC 130

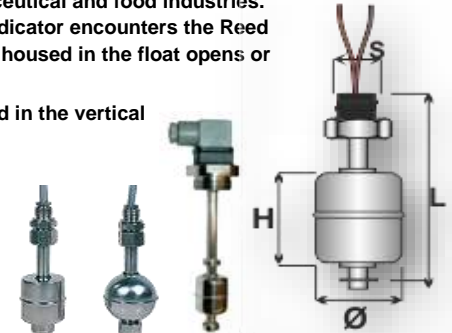
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acoustic signal or disconnecting any electrical equipment connected to it. The indicator must be fitted in the vertical position, and the float must be at least 35mm from ferrous surfaces (walls, tanks, etc.).

To invert the contact from N.C. to N.O. just remove the bottom stop and turn the float upside down.

BODY AISI 316 PVDF, polipropilene, PVC, PTFE body  
CONTACT SPST or SPDT on request  
PROTECTION IP 65



code	S	Ø	H	L	temperature	P max	contacts	power	voltage	protection
LC 13001	Ø 1/8"	28	28	60	20 + 200°C	10	SPST	50 W	240 VAC	IP 65
LC 13003	Ø 3/8"	44,5	52	90	20 + 180°C	10	SPDT	60 W	230 VAC	IP 65

## LC 120

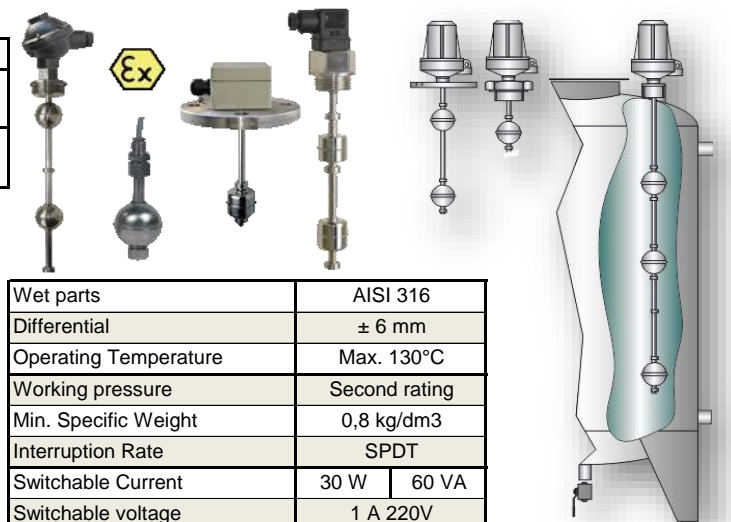
## MAGNETIC LEVEL SWITCH WITH REED CONTACTS

CODE	CONNECTION	FLOAT	TUBE
LC 12008	1½"	THREAD GAS	AISI 316
LC 12009	2"		
LC 12108	DN 40	FLANGED	AISI 316
LC 12109	DN 50		

The magnetic level switch mod. TOR is suitable for mounting on any type of tank.

## FUNCTIONING:

One or more floats, in which there are two permanent magnets, run along a tube within fixed which are positioned as many magnetically operated switches. The increase in level produces a shift of the floats. When a float reaches the corresponding switch, the magnets cause the contact to exchange.



## LC 170

## MICRO LEVEL SWITCH

LC17204



LC17304



LC17004

The main features of these level switches are the reduced overall dimensions

Horizontal Installation

CONTACTS: NA o NC

ELECTRIC CAPACITY: 230V - 40W - 2A

CONNECTIONS: gas / NPT / M16

LC17304	Ex	RFS 12Ex N4
GAS =	II 1 GD Exia II CT6	
POWDERS =	II 2/1 ExtD A21 IP65 T85°C	

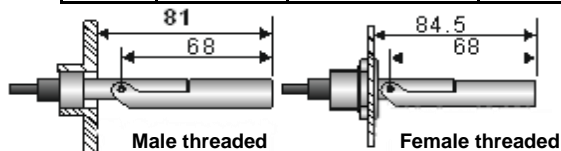
code	type	body	P.max	T. max	Spec.Weight	protection	Electric
LC17004	NKP 14011	polipropilene	10 bar	80°C	0,6 g/cm <sup>3</sup>	IP 68	230 Vac- 40W- 2A
LC17104	NKP 15011	PVDF	10 bar	100°C	0,95 g/cm <sup>3</sup>	IP 68	230 Vac- 40W- 2A
LC17204	RFS 1200N4	INOX	5 bar	120°C	0,7 g/cm <sup>3</sup>	IP 68	240Vac-15VA-0,5A
LC17304	RFS 12Ex N4	Ex INOX	5 bar	60°C	0,7 g/cm <sup>3</sup>	ATEX	40 Vdc - 4 VA

Vibration level switch with reduced dimensions and intrinsic safety in INOX

LC17405	RFS 12Ex N4	II 1G Eexia IICT6	Ø 3/4"	45 bar	90°C	5000 mm <sup>2</sup> /s	intrinsic safety
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LC17405



Male threaded

Female threaded

2.41

FLOATING LEVEL SWITCH

VALVOIND Srl Via Pascoli, 5 - 24060 Bagnatica (Bergamo) Tel. 035.681919-Fax. 035.684461



LC 101

DUAL MAGNET FLOAT LEVEL SWITCH

CODE	TYPE	DESCRIPTION	COUNTERFLANGE
LC10101	NGS.2100	IP 65	...MFF1 STEEL
LC10102	NGS.2100 Ex	Eex dme II C T4 - T6	...MFF2 ST.STEEL

As the level rises and falls the inclination of the float is changed causing a permanent magnet in the float to be deflected which in turn repels a rotatable opposing magnet. This forced snap-action-contact effect operates a microswitch with a plunger. Even very small changes in level can be detected in this way.



<b>Nominal pressure:</b> 25 bar	<b>Housing material:</b> aluminium, colour coated
<b>Medium temperature:</b> -20°C a + 250°C	<b>Wetted parts:</b> stainless steel 1.4571
<b>Ambient temperature:</b> -20 °C ... +80 °C	<b>Switch rating:</b> 250VAC, 10 A - Ex: 250VAC/2.5 A
<b>Min. medium density:</b> > 0.7 kg/dm3	<b>Switching element:</b> 1 microswitch with 1 closing and 1 opening contact (NO and NC)
<b>Installation position:</b> from side	<b>Weight:</b> approx. 2.5 kg
<b>Immersion lenght:</b> 202...502 mm	
<b>Total deflation:</b> 118mm	



LC 102

FLOATING LEVEL CONTROL

CODE	TYPE	LEVEL DIFFER. mm	Press. max. bar	Temp. max. Fluido		CONNECTION	BODY	FLOAT	HOUSING	SPEC. WEIGHT Kg/dmc
LC10201	AD22	25÷175	6	150°C	flang.PN6	DN 32	inox	inox	inox	0,7 a 1,1
LC10301	AD52	20 - 55	10	100°C	threaded	Ø 1 1/4"	brass	steel	PVC	0,7 a 1,1
LC10401	AD52 P	20 - 55	10	100°C	threaded	Ø 1 1/4"	brass	PVC non-toxic	PVC non-toxic	0,7 a 1,1
LC10402	AD52PS					Ø 1"				
LC10501	AD23	20 ÷ 180	6	150°C	flang. PN 6	DN 32	inox	inox	inox	0,7 a 1,1
LC10502	AD23A									
LC10503	AD23B									
LC10504	AD23C									
LC10601	A42A	15 ÷ 50	16	200°C	threaded	Ø 1"	GG25	inox	aluminium	0,9 a 1,2
LC10701	A41A	25 ÷ 50 25 ÷ 75	16	200°C	flang. PN 16	interaxis Ø125mm	GG25	inox	aluminium	0,9 a 1,2
LC10702	A41B	55 ÷ 210 65 ÷ 305 95 ÷ 370 140 ÷ 570								



LC 180

VARIOUS LEVEL CONTROL FOR POWDERS AND LIQUIDS



Microwave Level Switch Insensitive to foam and adhesions



Vibrating Level Switch For powder, granulate



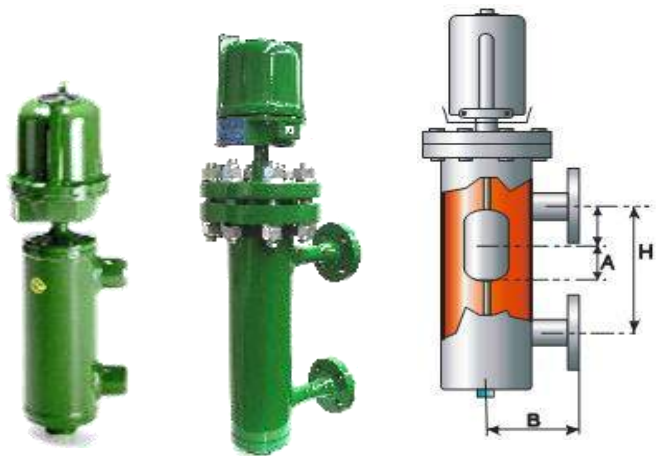
Capacitive Level Switch for liquids and powders

## LC 300

## CONDUCTIVE LEVEL INDICATOR FOR HEAT GENERATOR

Conductive level indicators use the conductivity of the product when in contact with metal rods to cause the switching of relays to signal its presence. When liquid inside a tank or well wets all three probes, the relays are actioned and only deactivated when the level of liquid descends again, uncovering the lower probe. The probes can be supplied with any desired length. They can be used to keep the level of conducting liquids or solids within predetermined limits, to protect pumps in continuous and dynamic use and to trigger alarms to protect against overflow, emptying or dry running. The conductive sensors can be installed either vertically or horizontally, as long as, in order to prevent false triggering, the incoming liquid does not run directly up against their electrodes.

LC 31...	BODY: steel PN 40
LC 32...	BODY: steel ANSI
LC 33...	BODY: steel PN 18
LC 34...	BODY: AISI PN 16
LC 35...	BODY: AISI PN 40
LC 36...	BODY: AISI Ansi
..1	temp. +180°C
..2	With fin for 450°C
...05	FLANGED DN 20
...06	FLANGED DN 25
...08	FLANGED DN 40
...15	THREADED Ø 3/4"
...16	THREADED Ø 1"
...18	THREADED Ø 1½"
.1	Electric Std.
.2	Electric Eex
.3	Pneumatic



## LC 210

## ELECTRONIC SELF TESTING CONDUCTIVITY LEVEL SWITCH

Minimum and maximum level level switch with self-diagnosis according to 97/23/CE (PED) and B+D certification. The switch and the probe, as a whole, represent a safety accessory for boilers and steam where water is in pressure and temperature. Our safety probe is certified for use in all applications lining under to the PED directive. The new version 211 allow to administrate in safety the maximum level.



code	type	description
LC21001	210-200	Minimum level level switch
LC21002	211-200	Maximum level level switch
LC21050	800	Certificated Safety Probe

## LC 220

## VISUAL LEVEL GAUGE

The TLE electric visual level gauge offers visual signalling as well as a minimum level electric signal which can be N.O. or N.C. or EXCHANGE. They have a lot of advantages as: just one purchase, just one installation, savings in costs and work, total safety.



	TL	TLE	TLEP		
	Visual	+ Contact	+ PT 100	SPST in presence of H2O	N.O.
				Power commutable in AC	40W
Max.Temp	130°C	80°C	80°C	Power commutable in DC	40 V.A
H	Interax	Code	Code	Commutable voltage	230 V
108	76	22001	22011		
159	127	22002	22012		
286	254	22003	22013		

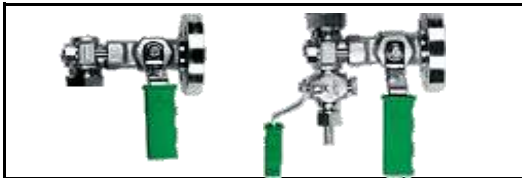
On request termometer included



## LK 200

## Reflex Level Gauges

Level Indicator Group Composed of:  
Higher Cock  
Lower Cock with drain cock



## STEEL LEVEL GROUP WITH THREADED CONNECTION

LK 20104	Ø 1/2"	PN 40	A 105
LK 20105	Ø 3/4"		

## STEEL LEVEL GROUP UNI DIN FLANGED CONNECTION

LK 20504	DN 15	PN 40	A 105
LK 20505	DN 20		
LK 20506	DN 25		

## ANSI 300 RF STEEL LEVEL GROUP

LK 21004	Ø 1/2"	ANSI 150 ANSI 300	A 105
LK 21005	Ø 3/4"		
LK 21006	Ø 1"		



## REFLEX LEVEL GAUGE

TYPE	CODE		LENGHT		INTERAX		
	PN 25	PN 40	C	D	F min.	F max.	
A1	LK21501	B1	LK21601	130	90	235	260
A2	LK21502	B2	LK21602	155	115	260	285
A3	LK21503	B3	LK21603	180	140	285	310
A4	LK21504	B4	LK21604	205	168	310	335
A5	LK21505	B5	LK21605	235	195	340	365
A6	LK21506	B6	LK21606	265	225	370	395
A7	LK21507	B7	LK21607	295	255	400	425
A8	LK21508	B8	LK21608	335	295	440	465
A9	LK21509	B9	LK21609	360	315	465	490

## SPARE PARTS

GLASS	DIMENSION	GASKE
LK25001	115x30x17	LK25101
LK25002	140x30x17	LK25102
LK25003	165x30x17	LK25103
LK25004	190x30x17	LK25104
LK25005	220x30x17	LK25105
LK25006	250x30x17	LK25106
LK25007	280x30x17	LK25107
LK25008	320x30x17	LK25108
LK25009	340x30x17	LK25109

## MULTIPLE REFLEX LEVEL GAUGE

CODE	LEVEL GAUGES		INTERAX		VISIBILITY	
	TYPE	Dimens.	LENGHT	MIN		MAX
LK22024	A4 x 2	205x2	410	515	540	373
LK22025	A5 x 2	235x2	470	575	600	433
LK22026	A6 x 2	265x2	530	635	660	493
LK22027	A7 x 2	295x2	590	695	720	553
LK22028	A8 x 2	335x2	670	775	800	633
LK22029	A9 x 2	360x2	720	825	850	673
LK22036	A6 x 3	265x3	795	900	925	758
LK22037	A7 x 3	295x3	885	990	1015	848
LK22038	A8 x 3	335x3	1005	1110	1145	968
LK22039	A9 x 3	360x3	1080	1185	1210	1028
LK22047	A7 x 4	295x4	1180	1285	1310	1143
LK22048	A8 x 4	335x4	1340	1445	1470	1303
LK22049	A9 x 4	360x4	1440	1545	1570	1383
LK22057	A7 x 5	295x5	1475	1580	1605	1438
LK22058	A8 x 5	335x5	1675	1780	1805	1638
LK22059	A9 x 4	360x5	1800	1905	1930	1738
LK22068	A8 x 6	335x6	2010	2115	2140	1973
LK22078	A8 x 7	335x7	2345			
LK22069	A9 x 6	360x6	2160	2265	2290	2093
LK22079	A9 x 7	360x7	2520	2625	2650	2448

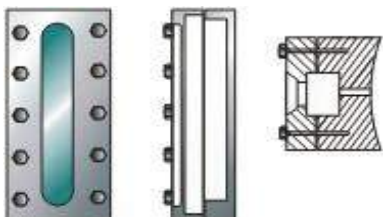


FLANGED PN 40

THREADED PN 25

## LK 300

## SIGHTGLASSES FOR TANKS



Designed sightglasses with "r" radius of curvature according to the tank Ø. In AISI 304/316 they can be rectangular or circular and can be equipped with back lighting.

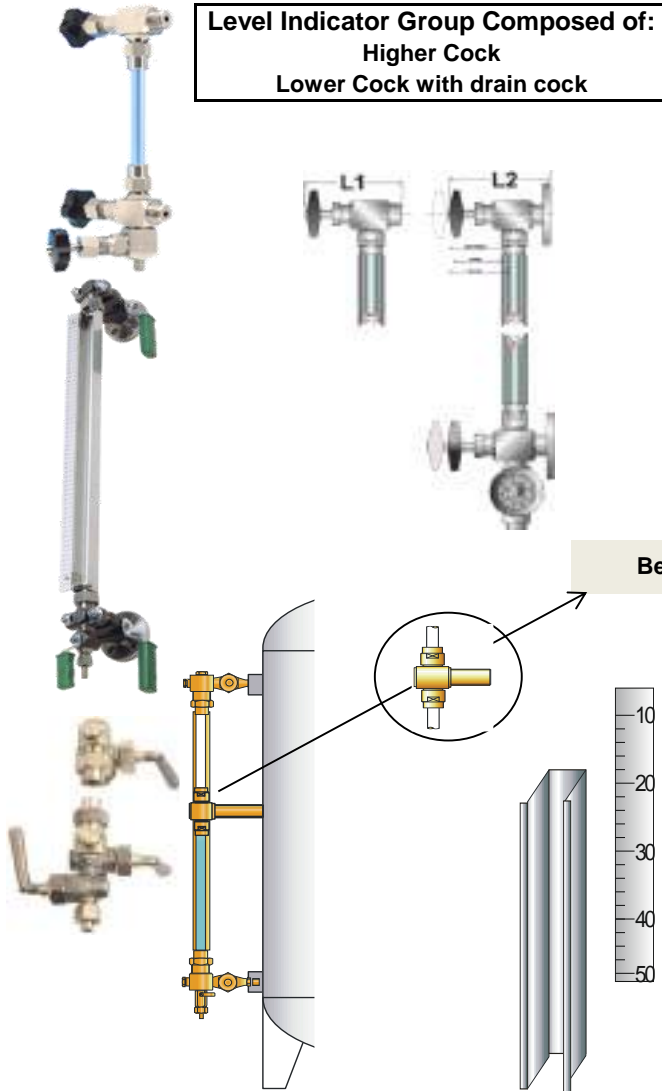
Operating pressures on request.



## LK 100

## GLASS LEVEL GAUGES

Level Indicator Group Composed of:  
 Higher Cock  
 Lower Cock with drain cock



## THREADED

CODE	MATERIAL	PN	CONN	PIPE	L1
	BODY		Ø mm	Ø mm	
LK10104	Brass	PN 10	1/2"	13	100
LK10105	Brass	PN 10	3/4"	16	140
LK10504	Steel	PN 16	1/2"	13	180
LK10505		PN 16	3/4"	16	180
LK11004	AISI 316	PN 16	1/2"	14	143

## FLANGED

CODE	MATERIAL	PN	CONN	PIPE	L1
	BODY		Ø mm	Ø mm	
LK12004	Steel	PN 40	DN 15	16	130
LK12005	Steel	PN 40	DN 20	16	130
LK12604	AISI 316	PN 40	DN 15	16	130
LK12605	AISI 316	PN 40	DN 20	16	130
LK12606	AISI 316	PN 40	DN 25	16	130

Bearing joints for level gauges over 2 mt

brass	LK14510
AISI	LK14511

code	pipe	material	Temp.
LK14101	Ø 13	PVC	40°C
LK14102	Ø 16		
LK14200	Ø 13	PIREX	150°C
LK14201	Ø 14		
LK14202	Ø 16		
LK14203	Ø 20		
LK14300	Ø 13	Borosilicate	300°C
LK14301	Ø 14		
LK14302	Ø 16		

## code MATERIAL

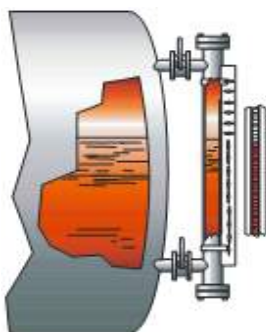
LK14401	BRASS
LK14402	STEEL
LK14403	AISI316

## LK14515 GRADUATED SHAFT

## LK 150

## MAGNETIC LEVEL INDICATOR

Magnetic level gauge indicates the level of fluid inside a tank by using the magnetic properties of its elements. A by-pass (which mainly consists of a tube longer than the fluid range) is connected to the tank containing the fluid whose level is to be measured. A float containing a magnet moves up and down the tube, and its position determines the tank fluid level (the level is clearly indicated by red and white markers). Variation in fluid level



causes the float to move and the float magnet then makes the roller display (which also contains a magnet) rotate. Red markers are normally shown in the part of the tank holding the fluid and white markers in the part containing the gas/steam.

## USES:

## TECHNICAL DATAS:

- Magnetic flags
- Material: Brass
- Flag container
- material: aluminium

- Chemical, pharmaceutical, food plants
- Liquid Specific Weight >0,8 gr/cm<sup>3</sup>
- Working Pressure: fino a 40 bar
- Temperature: 320°C

- Float container
- Length: According to the request of the customer
- material: AISI316

