



# Magnetic Immersion Probe for Continuous Measurement



## LMC-Ex

- Sensor for continuous level measurement in liquids
- Resolution 5 mm or 15 mm
- Media contacting parts of stainless steel
- Mounting without removing the float
- Approved for zone 0





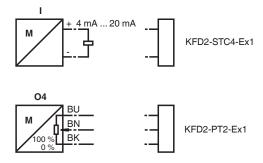
#### **Function**

The device is a sensor for continuous level measurement in liquids.

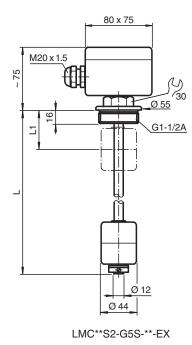
A ring magnet integrated in the float activates a reed contact resistance chain inside the probe tube via its magnetic field.

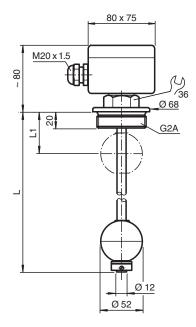
If the level changes, the resistance chain changes its total resistance by closing the contact at the float level. The resistance is converted into a standardised output signal by a control unit. This output signal is proportional to the level of the measured medium.

#### Connection



### **Dimensions**





LMC*	*S3-	G6S	**_	EΧ
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General specifications	
Equipment architecture	A measuring system consists of a magnet-operated immersion probe LMC****-***-I-Ex with built-in converter and a transmitter power supply KFD2-STC4-Ex1 or of a magnet-operated immersion probe LMC****-***-O4-Ex and a potentiometer converter KFD2-PT2-Ex1.
Series	LMC-Ex
Output	
Connection	version I: 2-wire, 4 20 mA version O4: 3-wire, potentiometer connection approx. 40 k $\Omega$
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61000-6-2:2006, EN 61000-6-4:2011
Conformity	
Degree of protection	IEC 60529:2000
Measurement accuracy	
Accuracy	resolution: - version LMC5: 5 mm - version LMC15: 15 mm
Operating conditions	
Process conditions	
Process temperature	-20 100 °C (-4 212 °F)
Process pressure (static pressure)	≤ 16 bar (232.1 psi)
Density	version S1: $\geq$ 0.6 g/cm <sup>3</sup> version S2: $\geq$ 0.8 g/cm <sup>3</sup> version S3: $\geq$ 0.7 g/cm <sup>3</sup>
Ambient conditions	
Ambient temperature	terminal box: -50 60 °C (-58 140 °F)
Mechanical specifications	
Degree of protection	IP66 / IP68
Connection	Version I: 2 terminals, max. 2.5 mm <sup>2</sup> Version O4: 3 terminals, max. 2.5 mm <sup>2</sup>

Material

float, guide tube, process connection: stainless steel 1.4571/316Ti terminal box: aluminum die-casting  $\,$ 

#### **Technical Data**

**Dimensions** - version S1: ball Ø80 mm - version S2: cylinder Ø44 mm x 52 mm - version S3: ball Ø52 mm guide tube: - version LMC5: Ø14 mm, max. length 3000 mm - version LMC15: Ø12 mm, max. length 3000 mm terminal box: 80 x 75 x 57 mm Process connection thread G1-1/2A, G2A to DIN/ISO 228/1 Data for application in connection with hazardous areas EU-type examination certificate **KEMA 03 ATEX 1497 X** Marking  $U_{i}$ 28 V Voltage 120 mA Current l<sub>i</sub> Internal capacitance  $C_i$ 0 nF Internal inductance 0 μΗ Directive conformity Directive 2014/34/EU EN 60079-0:2012, EN 60079-11:2012, EN 60079-26:2007 **General information** Supplementary documentation instruction manuals (SI) Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com. Supplementary information **Accessories** - LML-FS1 float, ball, Ø80 mm, 1.4571/316Ti - LML-FS4 float, ball, Ø44 mm, 1.4571/316Ti - LML-FS5 float, ball, Ø52 mm, Titanium - LML-FS6 float, cylinder, Ø44 mm x 52 mm, 1.4571/316Ti Designation

# Type Code

This overview does not mark options which are mutually exclusive.

L	M	С	(1)	S	(2)	-	(3)	S	-	(4)	-	E	х	1	L
LMC	Dev	rice													
LMC	Мад	gnetic imi	mersion p	robe for o	continuou	s measu	rement								
(1)	Res	olution													
05	5 m	m													
15	15 r	nm													
S			material												
S	Stai	Stainless steel 1.4571/316Ti													
(2)	Floa	at													
1	Ball	, Ø80 mn	n, stainles	ss steel 1	4571/316	3Ti									
2	Cyli	nder, Ø4	4 mm x 5	2 mm, sta	inless ste	eel 1.457	1/316Ti								
3	Ball	, Ø52 mn	n, stainles	ss steel 1	.4571/316	6Ti									
(3)	Pro	cess co	nnection												

G5	Thread G1-1/2A, DIN/ISO 228/1
G6	Thread G2A, DIN/ISO 228/1

S	Process connection material
S	Stainless steel 1.4571/316Ti

(4)	Electrical output
I	2-wire, 4 mA to 20 mA
04	3-wire, potentiometer connection approx. 40 k $\Omega$

Ex	Approval
Ex	ATEX II 1/2G EEx ia IIC T6T4

L	Guide tube length
Length	Specified length, max. 3000 mm