



## LMK 306

### Stainless Steel Probe

Ceramic Sensor

accuracy according to IEC 60770:  
0.5 % FSO

#### Nominal pressure

from 0 ... 6 mH<sub>2</sub>O up to 0 ... 200 mH<sub>2</sub>O

#### Output signals

2-wire: 4 ... 20 mA  
others on request

#### Special characteristics

- ▶ diameter 17 mm
- ▶ suitable for hydrostatic level measurement e.g. in 3/4" pipes
- ▶ good linearity
- ▶ good long term stability

#### Optional versions

- ▶ different cable materials
- ▶ customer specific versions e.g. special pressure ranges

The slimline probe LMK 306 with ceramic sensor has been especially designed for the continuous level measurement at confined space conditions. Permissible media are clean or slightly contaminated water and thin fluids.

Different cable sheath materials are available in order to achieve maximum media compatibility.

#### Preferred areas of use are

##### Water

level measurement at confined space conditions



ground water monitoring  
depth or level measurement in wells

drinking water abstraction

level measurement in open and closed tanks



Input pressure range										
Nominal pressure gauge	[bar]	0.6	1	1.6	2.5	4	6	10	16	20
Level	[mH <sub>2</sub> O]	6	10	16	25	40	60	100	160	200
Overpressure	[bar]	2	2	4	4	10	10	20	40	40
Burst pressure ≥	[bar]	4	4	5	5	12	12	25	50	50
Max. ambient pressure (housing): 40 bar										

Output signal / Supply	
2-wire	4 ... 20 mA / V <sub>S</sub> = 12 ... 36 V <sub>DC</sub>

Performance	
Accuracy	≤ ± 0.5 % FSO
Permissible load	$R_{max} = [(V_S - V_{S min}) / 0.02 A] \Omega$
Influence effects	supply: 0.05 % FSO / 10 V      load: 0.05 % FSO / kΩ
Response time	≤ 10 msec

<sup>1</sup> accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)

Thermal effects (offset and span) / Permissible temperatures	
Thermal error	≤ ± 0.2 % FSO / 10 K      in compensated range 0 ... 70 °C
Permissible temperatures	medium: -10 ... 70 °C      storage: -25 ... 70 °C

Electrical protection <sup>2</sup>	
Short-circuit protection	permanent
Reverse polarity protection	no damage, but also no function
Electromagnetic protection	emission and immunity according to EN 61326

<sup>2</sup> additional external overvoltage protection unit in terminal box KL 1 or KL 2 with atmospheric pressure reference available on request

Electrical connection	
Cable with sheath material <sup>3</sup>	PVC ( -5 ... 70 °C) grey Ø 7.4 mm PUR ( -10 ... 70 °C) black Ø 7.4 mm FEP <sup>4</sup> ( -10 ... 70 °C) black Ø 7.4 mm others on request

Cable capacitance	signal line/shield also signal line/signal line: 160 pF/m
Cable inductance	signal line/shield also signal line/signal line: 1 µH/m
Bending radius	static installation: 10-fold cable diameter dynamic application: 20-fold cable diameter

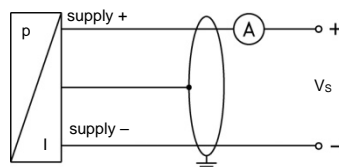
<sup>3</sup> shielded cable with integrated ventilation tube for atmospheric pressure reference

<sup>4</sup> do not use freely suspended probes with an FEP cable if effects due to highly charging processes are expected

Materials (media wetted)	
Housing	stainless steel 1.4404 (316L)
Seals	FKM
Diaphragm	ceramics Al <sub>2</sub> O <sub>3</sub> 96 %
Protection cap	POM-C
Cable sheath	PVC, PUR, FEP

Miscellaneous	
Current consumption	max. 25 mA
Weight	approx. 100 g (without cable)
Ingress protection	IP 68
CE-conformity	EMC Directive: 2014/30/EU

Wiring diagram	
2-wire-system (current)	

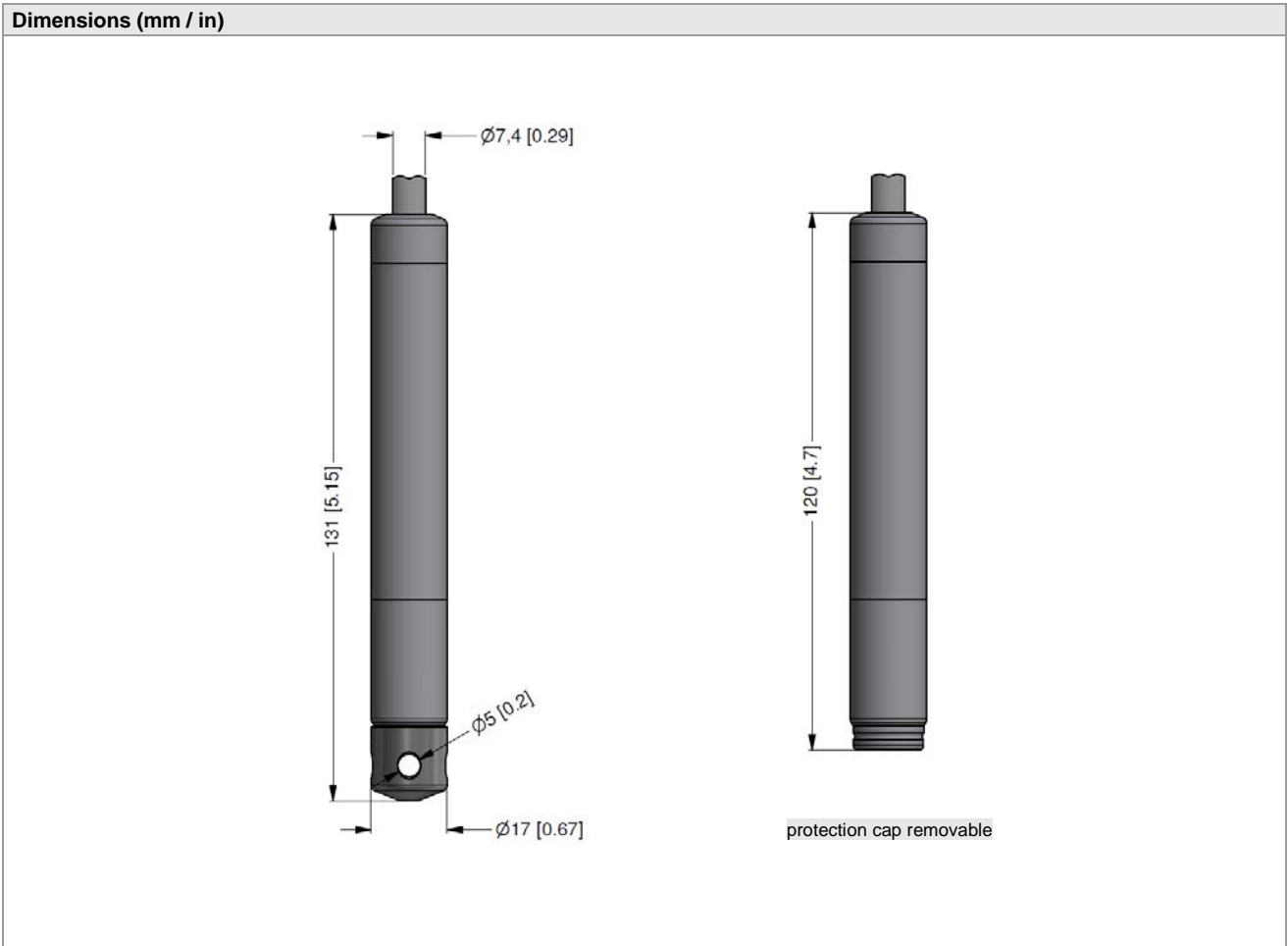


Pin configuration	
Electrical connection	cable colours (IEC 60757)
Supply +	WH (white)
Supply -	BN (brown)
Shield	GNYE (green-yellow)

# LMK 306

Stainless Steel Probe

Technical Data



## Accessories

Terminal clamp		
Technical data		
Suitable for	all probes with cable $\varnothing$ 5.5 ... 10.5 mm	
Material of housing	standard: steel, zinc plated      optionally: stainless steel 1.4301 (304)	
Material of clamping jaws and positioning clips	PA (fibre-glass reinforced)	
Dimensions (mm)	174 x 45 x 32	
Hook diameter	20 mm	
Ordering type	Ordering code	Weight
Terminal clamp, steel, zinc plated	Z100528	approx. 160 g
Terminal clamp, stainless steel 1.4301 (304)	Z100527	

## Ordering code LMK 306

LMK 306

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Pressure																				
	in bar	3	7	0																
	in mH <sub>2</sub> O	3	7	1																
Input		[mH <sub>2</sub> O]	[bar]																	
	6	0.60		6	0	0	0													
	10	1.0		1	0	0	1													
	16	1.6		1	6	0	1													
	25	2.5		2	5	0	1													
	40	4.0		4	0	0	1													
	60	6.0		6	0	0	1													
	100	10		1	0	0	2													
	160	16		1	6	0	2													
	200	20		2	0	0	2													
	customer			9	9	9	9													consult
Housing																				
	stainless steel 1.4404 (316L)																			1
	customer																			9
																				consult
Diaphragm																				
	ceramics Al <sub>2</sub> O <sub>3</sub> 96 %																			2
	customer																			9
																				consult
Output																				
	4 ... 20 mA / 2-wire																			1
	customer																			9
																				consult
Seal																				
	FKM																			1
	customer																			9
																				consult
Accuracy																				
	0.5 % FSO																			5
	customer																			9
																				consult
Electrical connection																				
	PVC-cable (grey, Ø 7.4 mm) <sup>1</sup>																			1
	PUR-cable (black, Ø 7.4 mm) <sup>1</sup>																			2
	FEP-cable (black, Ø 7.4 mm) <sup>1</sup>																			3
	customer																			9
																				consult
Cable length																				
	in m																			9 9 9
Special version																				
	standard																			0 0 0
	customer																			9 9 9
																				consult

<sup>1</sup> shielded cable with integrated ventilation tube for atmospheric pressure reference