

LMK 807

Plastic Submersible Transmitter with Ceramic Sensor for Aggressive Media

- ▶ diameter: 35 mm
- ▶ nominal pressure ranges:
0 ... 4 mH₂O up to 0 ... 100 mH₂O
- ▶ accuracy:
0.25 % FSO BFSL
(0.5 FSO IEC 60770)
- ▶ for level measurement particularly in highly contaminated and most of aggressive media



LMK 807

Plastic Submersible Transmitter

Technical Data

Input pressure range									
Nominal pressure gauge	[bar]	0.4	0.6	1	1.6	2.5	4	6	10
Level	[mH ₂ O]	4	6	10	16	25	40	60	100
Permissible overpressure	[bar]	1	2	3	7	7	12	12	25

Output signal / Supply	
Standard	2-wire: 4 ... 20 mA / V _s = 12 ... 36 V _{DC}

Performance		
Accuracy	IEC 60770 ¹ : ≤ ± 0.5 % FSO	BFSL: ≤ ± 0.25 % FSO
Permissible load	$R_{max} = [(V_s - V_{smin}) / 0,02] \Omega$	
Influence effects	supply: 0.05 % FSO / 10 V	permissible load: 0.05 % FSO / kΩ
Response time	< 10 ms	

Thermal effects	
Thermal effects for offset and span	≤ ± 0,2 % FSO / 10 K
in compensated range	-25 ... 70 °C

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

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

² additional external overvoltage protection unit in terminal box KL 1 or KL 2 with atmospheric pressure reference available on request (please ask for data sheet)

LMK 807

Plastic Submersible Transmitter

Technical Data

Permissible temperatures

Medium	PVC: 0 ... 50 °C	PVDF: 0 ... 70 °C
Storage	PVC: -10 ... 50 °C	PVDF: -10 ... 70 °C

Electrical connections

Cable with sheath material ³	PVC grey / PUR black / FEP black
---	----------------------------------

Materials

Housing	standard: PVC grey	on request: PVDF
Seals	FKM / EPDM / FFKM	
Diaphragm	ceramics Al ₂ O ₃ 96 %	
Cable sheath	PVC / PUR / FEP	

Miscellaneous

Optionally SIL 2 application	according to IEC 61508 / IEC 61511	
Connecting cables (by factory)	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
Current consumption	max. 25 mA	
Weight	approx. 200 g (without cable)	
Ingress protection	IP 68	

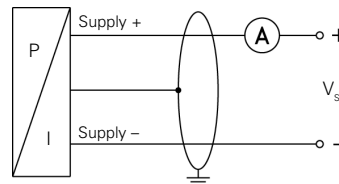
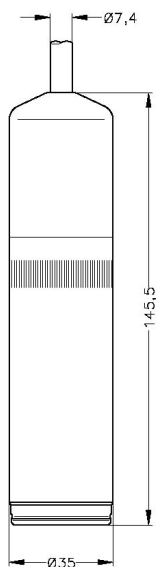
Mounting accessories (not part of delivery)

Screw fitting, of PVC
Terminal clamp, of stainless steel 1.4301 (304) or steel, zinc plated

Pin configuration

Electrical connections	cable colour (DIN 47100)	
2-wire-system	Supply +	white
	Supply -	brown
	Ground	yellow / green (shield)

Dimensions (in mm) / Wiring diagram



³ shielded cable with integrated air tube for atmospheric reference

Ordering code LMK 807

LMK 807

□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Pressure		in bar	3	9	0															
		in mH ₂ O	3	9	1															
Input	[mH ₂ O]	[bar]																		
	4,0	0,40	4	0	0	0														
	6,0	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														
	customer		9	9	9	9														on request
Housing		PVC					A													
		PVDF					B													on request
		customer					9													on request
Diaphragm		Ceramics Al ₂ O ₃ 96%					2													
		customer					9													on request
Output		4 ... 20 mA / 2-wire								1										
		SIL2 4 ... 20 mA / 2-wire								1S										
		customer								9										on request
Seals		FKM								1										
		EPDM								3										
		FFKM								7										
		customer								9										on request
Accuracy		0,5 %								5										
		customer								9										on request
Electrical connection		PVC-cable ¹								1										
		PUR-cable ¹								2										
		FEP-cable ¹								3										
		customer								9										on request
Cable length		in m									9	9	9							
Special version		standard									0	0	0							
		customer									9	9	9							on request

¹ cable with integrated air tube for atmospheric pressure reference

This ordering code contains product specification; properties are not guaranteed. Subject to change without notice.

