LIM-307

Stainless Steel Probe

Ceramic Sensor

accuracy according to EN IEC 62828-2: 0.5 % span

Nominal pressure

from 0 ... 4 mH₂O up to 0 ... 250 mH₂O

Output signals

2-wire: 4 ... 20 mA 3-wire: 0 ... 20 mA / 0 ... 10 V others on request

Special characteristics

- diameter 27 mm
- good linearity
- good long term stability
- easy handling

Optional versions

IS-version

Ex ia = intrinsically safe for gas

and dust

- SIL 2 (Safety Integrity Level) according to IEC 61508 / IEC 61511
- different kinds of cables and elastomeres
- customer specific versions
 e. g. special pressure ranges

The level transmitter LIM 307 is designed for continuous level measurement in water or waste water applications. Basic element is a flush mounted ceramic sensor.

Suitable for all fluids which are compatible with media wetted materials. Different cable and elastomer matierals can be offered according to the customerspecific operating conditions.

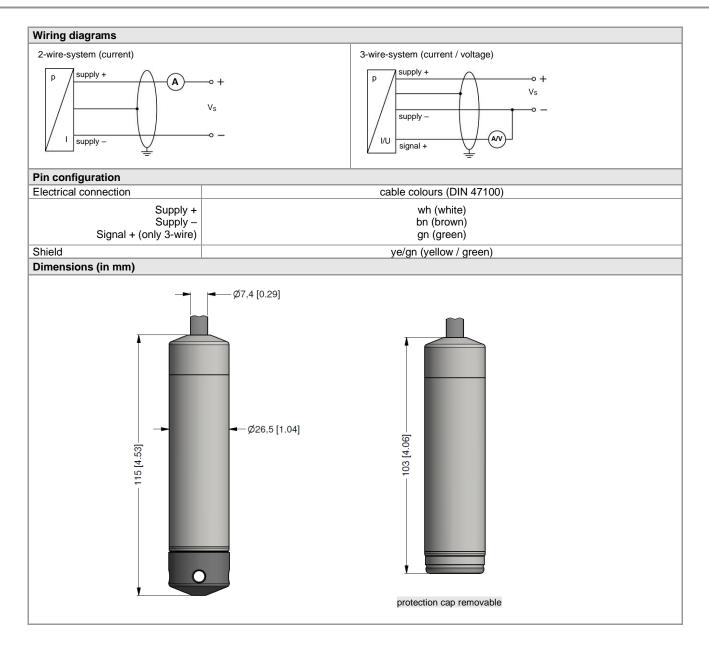
Preferred areas of use are

	<u>Water</u>
	drinking water system
	ground water monitoring
	storm water systems
0	<u>Sewage</u>
	waste water treatment
	water recycling
	dumpsite
0	<u>Fuel / Oil</u>
	fuel storage
	tank farm
	biogas plants



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Input pressure range											
· · · ·								-		10	~ -
Nominal pressure gauge	[bar]	0.4	0.6	1	1.6	2.5	4	6	10	16	25
Level	[mH ₂ O]	4	6	10	16	25	40	60	100	160	250
Overpressure	[bar]	2	2	2	4	4	10	10	20	40	40
Burst pressure	[bar]	4	4	4	5	5	12	12	25	50	50
max. ambient pressure (ho	using) 4	0 bar									
Output signal / Supply											
Standard	2	-wire:	4 20	mA / V	/ _s = 83	32 VDC	SIL-versio	n: V _S = 14	28 V _{DC}		
Option IS-protection	2	-wire:		mA / V			SIL-versio				
Options 3-wire		-wire:		mA / V		30 V _{DC}					
Performance				. , .	0						
	<	+05%	enan								
Accuracy $\leq \pm 0.5 \%$ spanPermissible loadcurrent 2-wire: $R_{max} = [(V_S - V_{S min}) / 0.02 A] \Omega$											
	с	urrent 3-v	wire:	$R_{max} = [(V)]$ $R_{max} = 500$ $R_{min} = 10$	Ω	0.02 AJ S	2				
Influence effects	S	upply:	0.05 %	span / 10 '							
Posponso timo		oad: 10 msec		span / kΩ							
Response time ¹ accuracy according to EN IEC				t (non-linoari	ty hystores	is reneated	oility)				
Thermal effects (Offset a		nin point at	ujusimeni	(non-linean	ty, nysteres	s, repeatat	mity)				
Thermal error	≤	± 0.2 % s									
Permissible temperatures		n compens	sated ra	nge -25	70 °C						
Permissible temperatures		ledium/ e	lectronic	s/ environr	ment/ stor	ae: -20	. 80 °C *				
*If the cable is intended for use						0					
Electrical protection ²						inned by d	no rango:				
Short-circuit protection		ermanent									
Reverse polarity protection		<u>v</u>		so no funct							
Electromagnetic protection				unity accor							
² additional external overvoltag	e protection i	unit in term	inal box l	KL 1 or KL 2	with atmos	oheric pres	sure referenc	ce available	on request		
Electrical connection	-										
Cable with sheath material	P	UR (-			k (with dr		xed condition ter certification	te) 🤇	ð 7,4 mm ð 7,4 mm ð 7,4 mm		
Bending radius				Diaci				,			
³ shielded cable with integrated	5		liation '	0-fold cab		r dynam	ic applicati	on 20-fold	t cable dia	meter	
						r dynam	ic applicati	on: 20-fold	d cable dia	meter	
⁴ do not use freely suspended p	d air tube for a	atmospheri	ic pressui	re reference	le diamete				d cable dia	meter	
⁴ do not use freely suspended p	d air tube for a probes with a	atmospheri	ic pressui	re reference	le diamete				d cable dia	meter	
⁴ do not use freely suspended p Materials (media wetted)	d air tube for a probes with a	atmospheri In FEP cab	ic pressui le if effec	re reference ts due to hig	le diamete				d cable dia	meter	
⁴ do not use freely suspended p	d air tube for a probes with a st	atmosphen on FEP cab tainless s KM	ic pressui le if effec	re reference	le diamete				d cable dia	meter	
⁴ do not use freely suspended (Materials (media wetted) Housing Seals	d air tube for a probes with a st F E	atmosphen in FEP cab tainless s KM PDM	ic pressui le if effec teel 1.44	re reference ts due to hig 104 (316L)	le diamete				d cable dia	meter	
⁴ do not use freely suspended p Materials (media wetted) Housing Seals Diaphragm	d air tube for a probes with a St F E Co	atmospheri in FEP cab tainless s KM PDM eramics A	ic pressui le if effec teel 1.44	re reference ts due to hig 104 (316L)	le diamete				d cable dia	meter	
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⁴ do not use freely suspended (Materials (media wetted) Housing Seals Diaphragm Protection cap Cable sheath Explosion protection (onl Approvals	d air tube for a probes with a strength of the problem of the prob	atmosphern in FEP cab tainless s KM PDM eramics A POM-C VC, PUR 20 mA / 2 BExU10A one 0: one 20: U _i = 28 V, ne supply n zone 0:	ic pressui le if effec teel 1.44 N ₂ O ₃ 96 , FEP, o -wire) TEX112 II 1G E II 1D I II 1G S II 1D S II 1G C II 1D I I = 93 m connect -20 6	re reference ts due to hig 404 (316L) % thers on re 22 X x ia IIC T4 Ex ia IIC T4 E	le diamete hly charging equest Ga 0 mW, Ci ≈ an inner c	g processes • OnF, L _i ≈ apacity of	s are expecte 0 μH, max. 27 nF				
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⁴ do not use freely suspended µ Materials (media wetted) Housing Seals Diaphragm Protection cap Cable sheath Explosion protection (onl Approvals DX9-LMK 307 Safety technical maximum Ambient temperature range Connecting cables	d air tube for a probes with a strength of the problem of the prob	atmospheri in FEP cab tainless s KM PDM eramics A POM-C VC, PUR 20 mA / 2 BExU10A one 0: one 20: U _i = 28 V, ne supply n zone 0: n zone 1: able capa	ic pressui le if effec teel 1.44 N ₂ O ₃ 96 , FEP, o -wire) TEX112 II 1G E II 1D I I ₁ = 93 m connect -20 6 -20 7 acitance:	re reference ts due to hig 404 (316L) % thers on re 22 X x ia IIC T4 Ex ia IIC T4 Ex ia IIC T4 Ex ia IIC T4 ions have 50 °C with p 0 °C signal lin	equest Ga 135°C Da D mW, Ci ≈ an inner c Datm 0.8 ba e/shield al	onF, Li≈ apacity of up to 1.1 so signal I	0 μH, max. 27 nF bar	ed to the ho ine: 160 p	using		
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Accessories

Terminal clamp								
Technical Data								
Suitable for	all probes with cable \varnothing 5.5 10.5 mm							
Material	standard: steel, zinc plated optionally: stainless steel 1.4301 (304)							
Weight	approx. 160 g							
Ordering type	1	Ordering code						
Terminal clamp, steel,	zinc plated	1003440						
Terminal clamp, stainle	ess steel 1.4301 (304)	1000278						