

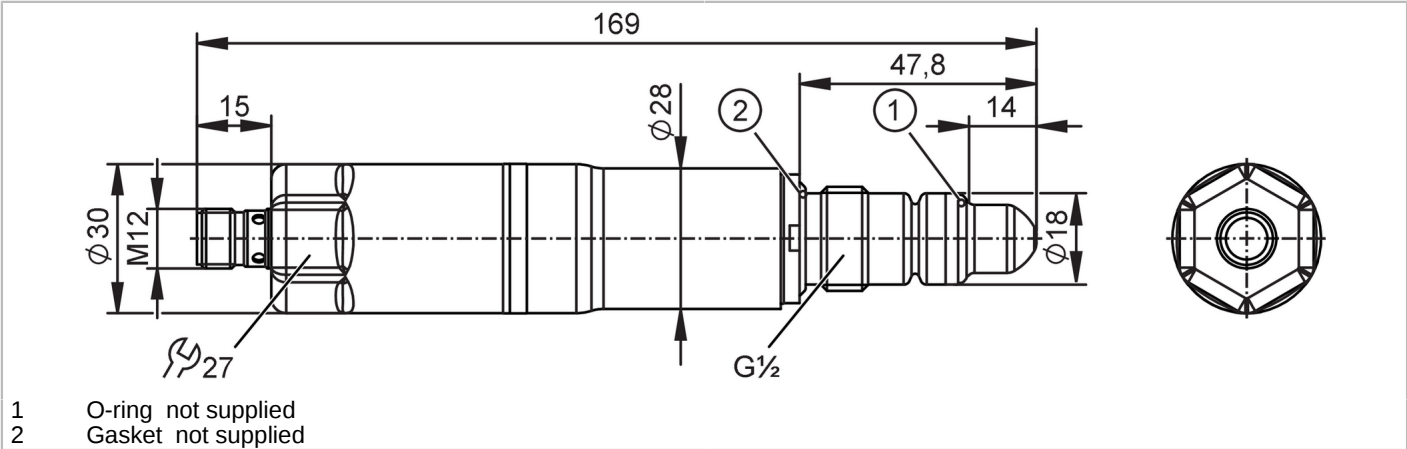
LMH600



Sensor for point level detection

LMACE-A12K-QSKG-0/US

To ensure secure mounting compatible with the medium, a sealing set suitable for the application must be used. Please refer to chapters Medium temperature and Accessories. These sealing sets are not included.



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2		
Factory setting	hydrous media		
Process connection	threaded connection G 1/2		
Application			
Special feature	Gold-plated contacts		
Media	Fluessige_Medien pastoese_Medien; powder		
Conditionally suitable for	use at pressures > 40...100 bar only on request		
Cannot be used for	See the operating instructions, chapter "Function and features".		
Medium temperature	[°C]	-20...250	
Medium temperature	[°C]	when used under hygienic conditions with accessories: E43030	-15...240
		when used under hygienic conditions with accessories: E43033	-15...200
		when used under hygienic conditions with accessories: E43031	-20...150
		when used under industrial conditions with accessories: E43032	-20...250
Pressure rating	[bar]	40	
Vacuum resistance	[mbar]	-1000	
Probe length	[mm]	13.7	
Electrical data			
Operating voltage	[V]	18...30 DC	
Current consumption	[mA]	< 30	
Protection class		III	
Reverse polarity protection		yes	
Measuring principle		capacitive	



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Inputs / outputs		
Number of inputs and outputs	Number of digital outputs: 2	
Outputs		
Total number of outputs	2	
Output signal	switching signal; IO-Link	
Electrical design	PNP/NPN	
Number of digital outputs	2	
Output function	normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	100	
Short-circuit protection	yes	
Type of short-circuit protection	pulsed	
Overload protection	yes	
Measuring/setting range		
Factory setting	hydrous media	
Temperature measurement		
Measuring range [°C]	-40...250	
Resolution [°C]	0.1	
Accuracy / deviations		
Temperature measurement		
Accuracy [K]	± 0,6	
Temperature drift per 10 K [K]	± 0.055	
Response times		
Response time [s]	< 0.5	
Response time T50 [s]	< 15; (water)	
Response time T90 [s]	< 60; (water)	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor - SSP 4.1.2	Measuring and Switching Sensor, 2 channel
	Common - I&D	Identification and Diagnosis
	Extension	Quantity detection, switches when value exceeds the setpoint
	Function	Locator
	Function	ProductURI
SIO mode	yes	
Required master port type	A	
Min. process cycle time [ms]	4.5	
Supported DeviceIDs	Type of operation	DeviceID
	default	1475

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Operating conditions		
Ambient temperature	[°C]	-40...85
Note on ambient temperature		Medium temperature: ≤ 200 °C
		-40...60 °C
		Medium temperature: ≤ 250 °C
Storage temperature	[°C]	-40...85
Protection		IP 68; IP 69K; (7 days / 3 m water depth / 0.3 bar: IP68)
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-4	: in plastic or open metal tanks
	DIN EN 61000-6-3	: in a closed metal tank
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	356
UL approval	UL approval no.	H017
	File number UL	E174191
Mechanical data		
Weight	[g]	301.9
Housing		cylindrical
Dimensions	[mm]	Ø 30 / L = 169
Materials		housing: stainless steel (316L/1.4404); Adapter plug: PEI; O-ring: FKM
Materials (wetted parts)		probe: ceramics (99.97 % Al ₂ O ₃) surface characteristics: Ra < 0,38 µm / Rz = 4 µm; O-ring (internal): FFKM
Process connection		threaded connection G 1/2
Displays / operating elements		
Display	switching status	LED, yellow
	operating status	LED, green
	warning	LED, red
Accessories		
Accessory required		sealing set, E43030
		sealing set, E43033
		sealing set, E43031
		Gasket, E43032
Remarks		
Remarks		An overview of the materials, approvals and conformities of the accessories can be found in the respective data sheet.
		The E43031 sealing kit slightly increases the sensor sensitivity
		the values for accuracy and response times apply to flowing water and an isolated process
		see operating instructions
Notes		To ensure secure mounting compatible with the medium, a sealing set suitable for the application must be used. Please refer to chapters Medium temperature and Accessories.; These sealing sets are not included.
Pack quantity		1 pcs.

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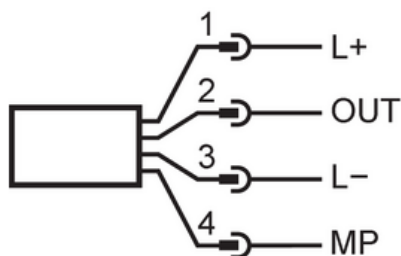
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Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



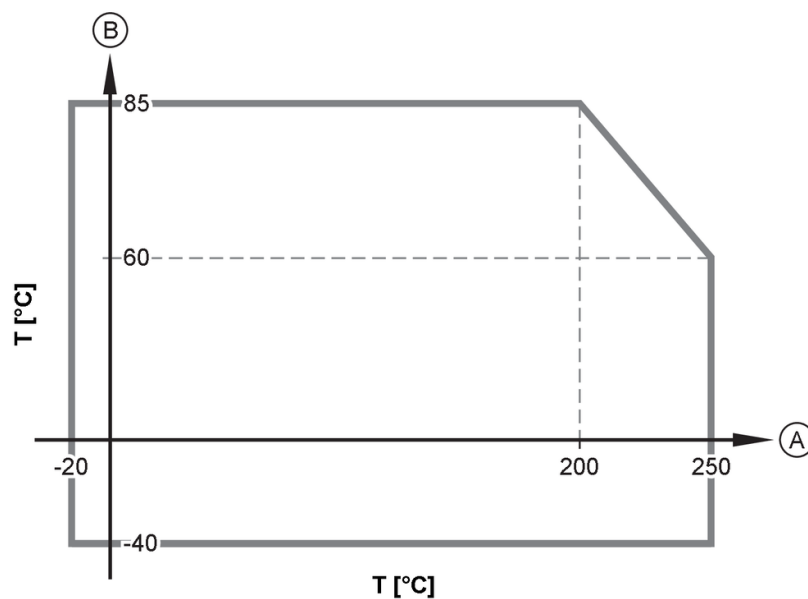
Connection



1	L+	
2	OUT	DO2 (NC)
3	L-	
4	MP	DO1 (NO), IO-Link

DO: digital output; MP: multi-function connection

Diagrams and graphs



- A Medium temperature
B Ambient temperature