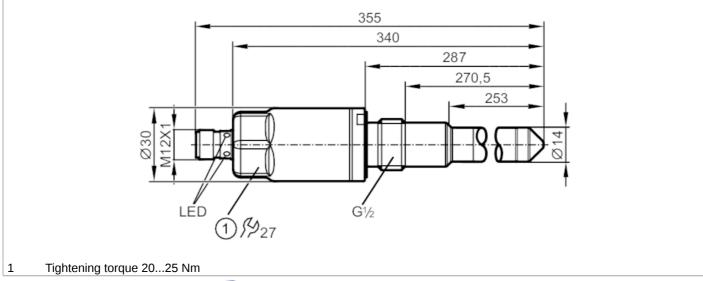
## LMT195

# Level sensor for limit detection with overspill protection (German Federal Water Act)



LMECE-A12E-QPKG-2/US



# 

Product characteristics			
Number of inputs and outputs		Number of digital outputs: 2	
Factory setting		hydrous media	
Process connection		threaded connection G 1/2 sealing cone	
Application			
Special feature		Gold-plated contacts	
Media		Liquids	
Recommended media		water; hydrous media; oils; oil-based media	
Cannot be used for		See the operating instructions, chapter "Function and features".	
Probe length	[mm]	253	
Tank pressure	[bar]	-140; (applications subject to the German Federal Water Act : -0,510 bar)	
Oil			
Medium temperature	[°C]	-25100; (applications subject to the German Federal Water Act $0100 \ ^{\circ}C$ )	
Medium temperature short time	[°C]	-25150; (1 h; applications subject to the German Federal Water Act : 0100 $^{\circ}\text{C}$ )	
Water			
Medium temperature	[°C]	-2585; (applications subject to the German Federal Water Act : 085 $^\circ$ C)	
Medium temperature short time	[°C]	-25150; (1 h; applications subject to the German Federal Water Act : 0100 $^\circ\text{C}$ )	
Electrical data			
Operating voltage	[V]	1830 DC	
Current consumption	[mA]	< 50	
Protection class		III	
Reverse polarity protection		yes	
Measuring principle		capacitive	
Inputs / outputs			
Number of inputs and outputs		Number of digital outputs: 2	

## LMT195

## Level sensor for limit detection with overspill protection (German Federal Water Act)



Outputs   2     Total number of outputs   2     Output signal   switching signal; IO-Link     Electrical design   PNP     Number of digital outputs   2     Max. voltage drop switching output DC   (M)     Short-circuit protection   yes     Type of short-circuit protection   yes     Measuring/setting range   yes     Measuring/setting range   Voltage drop switching     Factory setting   hydrous media     Response times   (S)     Communication interface   IO-Link     Transmission type   COM2 (38,4 KBaud)     Output BC   Smart Sensor: Process Data Variable; Device Identification     SIO mode   yes     Process data analogue   1     Process data inalogue   1     Process data inalogue   1     Process data inalogue   2,3     Type of operation   2,3     Supported DeviceIDs   Ype of operation     Gefault   449     Operating conditions   2,3     Supported DeviceIDs   Ype of operation     Gefault   449		ai mai			
Total number of outputs 2   Output signal switching signal; IO-Link   Electrical design PNP   Number of digital outputs 2   Max. voltage drop switching [M]   output DC 2.5   Permanent current rating of [mA]   switching output DC yes   Short-circuit protection yes   Type of short-circuit pulsed   Overload protection yes   Response times    Response times    Communication interface IO-Link   Transmission type COM2 (38,4 kBaud)   OL-Link revision 1.1   SDCI standard IEC 61131-9   Protess data analogue 1   Process data analogue 2.3   Supported DeviceIDs Ype of operation   Gregord DeviceIDs Ype of operation   Gregord DeviceIDs Type of operation   Operating conditions 2.3   Supported DeviceIDs Type of operation   Operating conditions 449   Operating conditions Condition   Supported DeviceIDs Medium temperature 100150 °C   Supported Temperature IVP of operation   Operation IP 68; IP 69K	LMECE-A12E-QPKG-2/US				
Output signal     switching signal; IO-Link       Electrical design     PNP       Number of digital outputs     2       Max. voltage drop switching of [M]     2.5       Permanent current rating of [mA]     100       Short-circuit protection     yes       Verifical protection     yes       Measuring/setting range     yes       Factory setting     hydrous media       Response times     [S]     <0.5	-			2	
Electrical design   PNP     Number of digital outputs   2     Max. voltage drop switching output DC   2.5     Permanent current rating of [mA]   100     Switching output DC   yes     Short-circuit protection   yes     Overload protection   yes     Measuring/setting range   yes     Factory setting   hydrous media     Response times   <0.5	·				
Number of digital outputs     2       Max. voltage drop switching output DC     [MA]       Permanent current rating of switching output DC     100       Short-circuit protection     yes       Short-circuit protection     yes       Coverload protection     yes       Overload protection     yes       Response times     100       Response times     100       Response times        Communication interface     Not-Clink       Transmission type     <0.5					
Max. voltage drop switching [V]     2.5       Permanent current rating of [mA]     100       switching output DC     yes       Short-circuit protection     yes       Overload protection     yes       Weasuring/setting range     yes       Factory setting     hydrous media       Response times     (S)       Interfaces     0-Link       Communication interface     IO-Link       Transmission type     COM2 (38,4 kBaud)       Ob-Link revision     1.1       SDI Condition     yes       Required master port type     A       Process data analogue     yes       Process data analogue     1       Process data binary     2       Supported DeviceIDs     Zipe of operation       Min. process cycle time [ms]     Ype of operation       Supported DeviceIDs     Medium temperature       Condition     Ype of operation       Condition     Ype of operation       Supported DeviceIDs     Medium temperature       Tope of operation     Ype of operation       Medium temperature 100150 °C <td< td=""><td></td><td></td><td></td><td></td></td<>					
output DC     2.5       Permanent current rating of [mA]     100       Short-circuit protection     yes       Short-circuit protection     yes       Overload protection     yes       Measuring/setting range     yes       Factory setting     hydrous media       Response times        Response time     [s]       COM2 (38,4 kBaud)        OL-Link        Transmission type     COM2 (38,4 kBaud)       OL-Link     1.1       SDC I standard     IEC 61131-9       Profiles     Smart Sensor: Process Data Variable; Device Identification       SIO mode     yes       Required master port type     A       Process data analogue     1       Process data analogue     1       Min. process cycle time [ms]     2.3       Supported DeviceIDs     Type of operation default       Questing conditions     -2085       Storage temperature     [°C]       Anbient temperature     '2085       Storage temperature     [°C]       Yeection		DЛ		2	
switching output DC     IOU       Short-circuit protection     yes       Type of short-circuit protection     yes       Overload protection     yes       Measuring/setting range     yes       Factory setting     hydrous media       Response times        Communication interface     IO-Link       Transmission type     COM2 (38,4 kBaud)       IO-Link revision     1.1       SDCI standard     IEC 61131-9       Profiles     Smart Sensor: Process Data Variable; Device Identification       SIO mode     yes       Required master port type     A       Process data analogue     1       Process data binary     2.3       Supported DeviceIDs     Type of operation default       Min. process cycle time [ms]     Process       Supported DeviceIDs     Comestion       Matient temperature     [°C]       Coracting conditions     -2085       Storage temperature     [°C]       Coracting conditions     -4060 °C	output DC			2.5	
Type of short-circuit protection     pulsed       Overload protection     yes       Measuring/setting range     hydrous media       Response times        Response times        Communication interface     IO-Link       Transmission type     COM2 (38.4 kBaud)       OL-Link revision     1.1       SDCI standard     IEC 61131-9       Profiles     Smart Sensor: Process Data Variable; Device Identification       SIO mode     yes       Required master port type     A       Process data analogue     1       Process data analogue     2.3       Supported DeviceIDs     Type of operation default     default       Ambient temperature     -2085       Note on ambient temperature     Medium temperature 100150 °C -4060 °C       Storage temperature     IP 68; IP 69K	Permanent current rating of switching output DC	[mA]		100	
protection     pusse       Overload protection     yes       Measuring/setting range     Image: Setting range       Factory setting     hydrous media       Response times     Image: Setting range       Response times     Image: Setting range       Interfaces     Image: Setting range       Communication interface     IO-Link       Transmission type     COM2 (38,4 kBaud)       IO-Link revision     1.1       SDCI standard     IEC 61131-9       Profiles     Smart Sensor: Process Data Variable; Device Identification       SIO mode     yes       Required master port type     A       Process data analogue     1       Process data analogue     2       Min. process cycle time [ms]     Iype of operation       Supported DeviceIDs     Ideault       Adage: Setting conditions     Image: Setting sett	Short-circuit protection			yes	
Measuring/setting range     Factory setting   hydrous media     Response times   < 0.5	Type of short-circuit protection			pulsed	
Factory setting   hydrous media     Response times      Response time   [S]   < 0.5     Interfaces   IO-Link     Communication interface   IO-Link     Transmission type   IO-Link     IO-Link revision   III     SDCI standard   IEC 61131-9     Profiles   Smart Sensor: Process Data Variable; Device Identification     SIO mode   yes     Required master port type   A     Process data analogue   I     Process data binary   Image of operation default   DeviceID     Supported DeviceIDs   Type of operation default   DeviceID     Mini. process cycle time   [ms]   Z.3     Supported DeviceIDs   Type of operation default   DeviceID     Motion temperature   [°C]   -2085     Note on ambient temperature   [°C]   -2085     Storage temperature   [°C]   -2085     Storage temperature   [°C]   -2085	Overload protection			yes	
Factory setting   hydrous media     Response times      Response time   [S]   < 0.5     Interfaces   IO-Link     Communication interface   IO-Link     Transmission type   IO-Link     IO-Link revision   III     SDCI standard   IEC 61131-9     Profiles   Smart Sensor: Process Data Variable; Device Identification     SIO mode   yes     Required master port type   A     Process data analogue   I     Process data binary   Image of operation default   DeviceID     Supported DeviceIDs   Type of operation default   DeviceID     Mini. process cycle time   [ms]   Z.3     Supported DeviceIDs   Type of operation default   DeviceID     Motion temperature   [°C]   -2085     Note on ambient temperature   [°C]   -2085     Storage temperature   [°C]   -2085     Storage temperature   [°C]   -2085	Measuring/setting range				
Response time   [s]   < 0.5	Factory setting			hydrous media	
Interfaces     IO-Link       Communication interface     IO-Link       Transmission type     COM2 (38,4 kBaud)       IO-Link revision     1.1       SDCI standard     IEC 61131-9       Profiles     Smart Sensor: Process Data Variable; Device Identification       SIO mode     yes       Required master port type     A       Process data analogue     1       Process data binary     2       Min. process cycle time     Ims]       Supported DeviceIDs     Type of operation default       Operating conditions     449       Ambient temperature     °C]       Note on ambient temperature     °C]       Storage temperature     °C]       Storage temperature     °C]       Procetion     IP 68; IP 69K	Response times				
Communication interface   IO-Link     Transmission type   COM2 (38,4 kBaud)     IO-Link revision   1.1     SDCI standard   IEC 61131-9     Profiles   Smart Sensor: Process Data Variable; Device Identification     SIO mode   yes     Required master port type   A     Process data analogue   1     Process data binary   2     Min. process cycle time [ms]   Type of operation     Supported DeviceIDs   Type of operation     DeviceID   default     Ambient temperature   [°C]     Note on ambient temperature   [°C]     Storage temperature   [°C]     Protection   IP 69K	Response time	[s]		< 0.5	
Transmission type   COM2 (38,4 kBaud)     IO-Link revision   1.1     SDCI standard   IEC 61131-9     Profiles   Smart Sensor: Process Data Variable; Device Identification     SIO mode   yes     Required master port type   A     Process data analogue   1     Process data binary   2     Min. process cycle time [ms]   Type of operation default     Supported DeviceIDs   Type of operation default     Ambient temperature   °C     Note on ambient temperature   °C     Storage temperature   °C     Storage temperature   °C     Storage temperature   °C     Protection   IP 68; IP 69K	Interfaces				
IO-Link revision   1.1     SDCI standard   IEC 61131-9     Profiles   Smart Sensor: Process Data Variable; Device Identification     SIO mode   yes     Required master port type   A     Process data analogue   1     Process data binary   2     Min. process cycle time   [ms]     Supported DeviceIDs   Type of operation default     Operating conditions   DeviceID     Ambient temperature   [°C]     Note on ambient temperature   [°C]     Storage temperature   [°C]     Protection   IP 68; IP 69K	Communication interface			IO-Link	
IO-Link revision   1.1     SDCI standard   IEC 61131-9     Profiles   Smart Sensor: Process Data Variable; Device Identification     SIO mode   yes     Required master port type   A     Process data analogue   1     Process data binary   2     Min. process cycle time   [ms]     Supported DeviceIDs   Type of operation default     default   449     Operating conditions   -2085     Note on ambient temperature   [°C]     Storage temperature   [°C]     Procetion   IP 68; IP 69K	Transmission type			COM2 (38,4 kBaud)	
Profiles   Smart Sensor: Process Data Variable; Device Identification     SIO mode	IO-Link revision			1.1	
SIO mode   yes     Required master port type   A     Process data analogue   1     Process data binary   2     Min. process cycle time   [ms]     Supported DeviceIDs   Type of operation default     Operating conditions   2     Ambient temperature   [°C]     Note on ambient temperature   [°C]     Storage temperature   [°C]     Protection   IP 68; IP 69K	SDCI standard			IEC 61131-9	
Required master port type A   Process data analogue 1   Process data binary 2   Min. process cycle time [ms]   Supported DeviceIDs Type of operation default DeviceID   Operating conditions 449   Ambient temperature [°C]   Note on ambient temperature [°C]   Storage temperature [°C]   Protection IP 68; IP 69K	Profiles				
Process data analogue   1     Process data binary   2     Min. process cycle time   [ms]     Supported DeviceIDs   Type of operation default     DeviceID   449     Operating conditions   -2085     Ambient temperature   [°C]     Note on ambient temperature   [°C]     Storage temperature   [°C]     Protection   IP 68; IP 69K	SIO mode				
Process data binary2Min. process cycle time[ms]Supported DeviceIDsType of operation defaultOperating conditionsAmbient temperature[°C]Note on ambient temperature[°C]Storage temperature[°C]ProtectionIP 68; IP 69K	Required master port type				
Min. process cycle time[ms]2.3Supported DeviceIDsType of operation defaultDeviceID 449Operating conditions449Ambient temperature[°C]Note on ambient temperature[°C]Storage temperature[°C]ProtectionIP 68; IP 69K	Process data analogue				
Supported DeviceIDsType of operation defaultDeviceIDOperating conditionsAmbient temperature[°C]Note on ambient temperature[°C]Storage temperature[°C]ProtectionIP 68; IP 69K	Process data binary				
default 449   Operating conditions 449   Ambient temperature [°C]   Note on ambient temperature [°C]   Storage temperature [°C]   Protection IP 68; IP 69K	Min. process cycle time	[ms]		2.3	
Operating conditions     Ambient temperature   [°C]     Note on ambient temperature   Medium temperature 100150 °C     -4060 °C   -4060 °C     Storage temperature   [°C]     Protection   IP 68; IP 69K	Supported DeviceIDs		Type of operation	DeviceID	
Ambient temperature[°C]-2085Note on ambient temperatureMedium temperature 100150 °C-4060 °C-4060 °CStorage temperature[°C]ProtectionIP 68; IP 69K			default	449	
Note on ambient temperature Medium temperature 100150 °C   -4060 °C   Storage temperature   [°C]   Protection   IP 68; IP 69K	Operating conditions				
Storage temperature [°C]   Protection IP 68; IP 69K	Ambient temperature	[°C]			
Storage temperature [°C]   Protection IP 68; IP 69K	Note on ambient temperature		Mediu	-	
Protection IP 68; IP 69K	Other was to make an a first start of the	[00]			
		[°C]			
				IP 68; IP 69K	
	Tests / approvals				
	Approval			ling authority approval; overflow prevention	
	EMC				
DIN EN 61000-6-4open tanksShock resistanceDIN EN 60068-2-2750 g (11 ms)	Shock resistance				
	Vibration resistance				
		A N I N I T			
UL approval UL Approval no. H001	MTTF	ANNI		222.73	

## LMT195

# Level sensor for limit detection with overspill protection (German Federal Water Act)

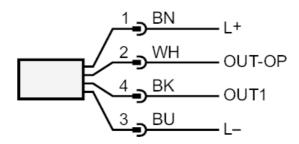


LMECE-A12E-QPKG-2/US				
Mechanical data				
Weight	[g]	401		
Materials		stainless steel (1.4404 / 316L); stainless steel (1.4571/316Ti ); PEEK; PEI; FKM		
Materials (wetted parts)		stainless steel (1.4404 / 316L); stainless steel (1.4571/316Ti ); PEEK; surface characteristics: Ra < 0,8 / Rz 4; FKM		
Process connection		threaded connection G 1/2 sealing cone		
Displays / operating elem	nents			
Display		switching status	LED, yellow	
		operating status	LED, green	
Remarks				
Pack quantity		1 pcs.		
Electrical connection				
Connector: 1 x M12; coding	g: A; Conta	cts: gold-plated		



2

#### Connection



OUT1: OUT-OP	switching output switching output overflow prevention to the German Federal Water Act (WHG) colours to DIN EN 60947-5-2 Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white