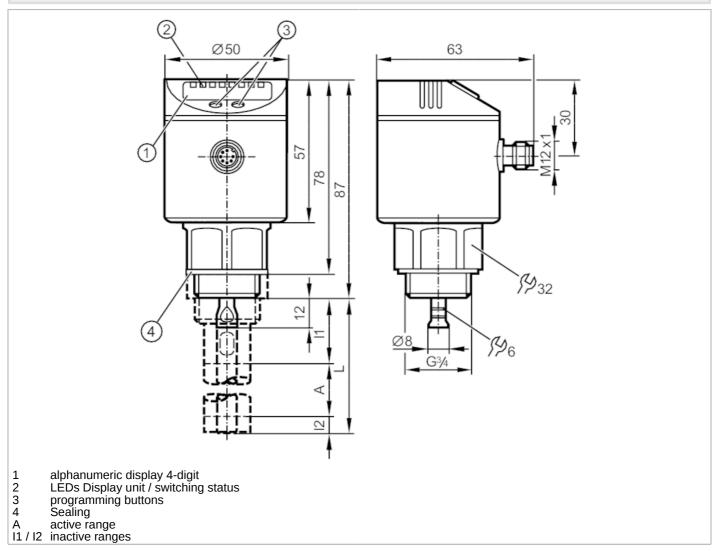
#### Continuous level sensor (guided wave radar)





For 8-pole sockets the core colours are not standardised. Please note the wiring of the sensor and the sockets (see data sheet).





Product characteristics								
Number of inputs and outputs		Number of digital outputs: 4						
Probe length L	[mm]	1001600						
Process connection		G 3/4 external thread						
Application								
Special feature		Gold-plated contacts						
Media		Liquids						
Dielectric constant of the medium		≥ 1,8; (for media with a dielectric constant of 1.85 (e.g. oils), a coaxial pipe is needed for operation)						
Recommended media		water; hydrous media; oils; oil-based media						
Cannot be used for		See the operating instructions, chapter "Function and features".						
Medium temperature	[°C]	-2580; (90 < 1 h)						
Tank pressure	[bar]	-116						

# Continuous level sensor (guided wave radar)





MAWP (for applications according to CRN)	[bar]	25				
Electrical data						
Operating voltage [V]		1830 DC				
Current consumption	[mA]	< 80				
Protection class		III				
Reverse polarity protection		yes				
Power-on delay time	[s]	< 3				
Measuring principle		guided wave radar				
Inputs / outputs						
Number of inputs and outputs		Number of digital outputs: 4				
Outputs						
Total number of outputs		4				
Output signal		switching signal; IO-Link				
Electrical design		PNP				
Number of digital outputs		4				
Output function		normally open / normally closed; (parameterisable)				
Max. voltage drop switching [V] output DC		2.5				
Permanent current rating of [mA] switching output DC		200				
Short-circuit protection		yes				
Type of short-circuit protection		thermal, pulsed				
Measuring/setting range						
Probe length L	[mm]	1001600				
Active range A	[mm]	L-40; (when set to oil and oil based media: L-60)				
Inactive range I1 / I2	[mm]	30 / 10; (when set to oil and oil based media: 30 / 30)				
Sampling rate	[Hz] 4					
Setting range						
Set point SP	[mm]	15L-30				
Note on setpoint SP		when set to oil and oil based media: 35L-30				
Reset point rP [mm]		10 L-35				
Note on reset point rP		when set to oil and oil based media				
In steps of	[mm]	5				
Hysteresis	[mm]	> 5				
Accuracy / deviations						
Repeatability	[mm]	± 5				
Measuring error	[mm]	± 7				
Offset error	[mm]	5				
Resolution	[mm]	1				
Interfaces						
Communication interface		IO-Link				
Transmission type		COM2 (38,4 kBaud)				
IO-Link revision		1.1				

### Continuous level sensor (guided wave radar)





SDCI standard		IEC 61131-9 CDV				
Profiles		no profile				
SIO mode		yes				
Required master port type		A				
Process data analogue		1				
Process data binary		4				
Min. process cycle time	[ms]	2.3				
Supported DeviceIDs		Type of operation DeviceID				
		default	10			
Operating conditions						
Ambient temperature	[°C]	-2560				
Storage temperature	[°C]	-4085				
Protection		IP 67				
Tests / approvals						
EMC		IEC 60947-1				
Shock resistance	Shock resistance		50 g (11 ms)	50 g (11 ms)		
Vibration resistance		DIN IEC 68-2-6	DIN IEC 68-2-6 5 g (102000 Hz)			
MTTF	[years]	205				
Mechanical data						
Weight	[g]		380.45			
Materials		stainless steel (304/1.4301); FKM; PBT; PC; PEI; TPE-V; PTFE				
Materials (wetted parts)		stainless steel (303/1.4305); probe connection: stainless steel (316L/1.4435); PTFE; FKM; Sealing: NBR-PPTA 20				
Process connection		G 3/4 external thread				
Displays / operating elen	nents					
Display		Display unit	3 x LED, gree	en		
		switching status	4 x LED, yello	ow		
		level	alphanumerio	display, 4-digit		
		parameter setting	alphanumerio	display, 4-digit		
Accessories						
Accessories (optional)		Probe:, E43203E43205 / E43207E43210				
		Coaxial pipe:, E43211E43221, E43223, E43224				
Remarks						
Pack quantity		1 pcs.				
Electrical connection						

### Electrical connection

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

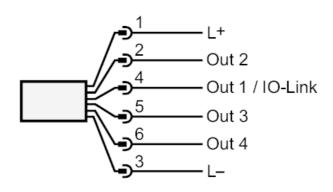


### Continuous level sensor (guided wave radar)





#### Connection



#### Diagrams and graphs

Measurement deviation D at the limits of the active rod range

