

# LL8024

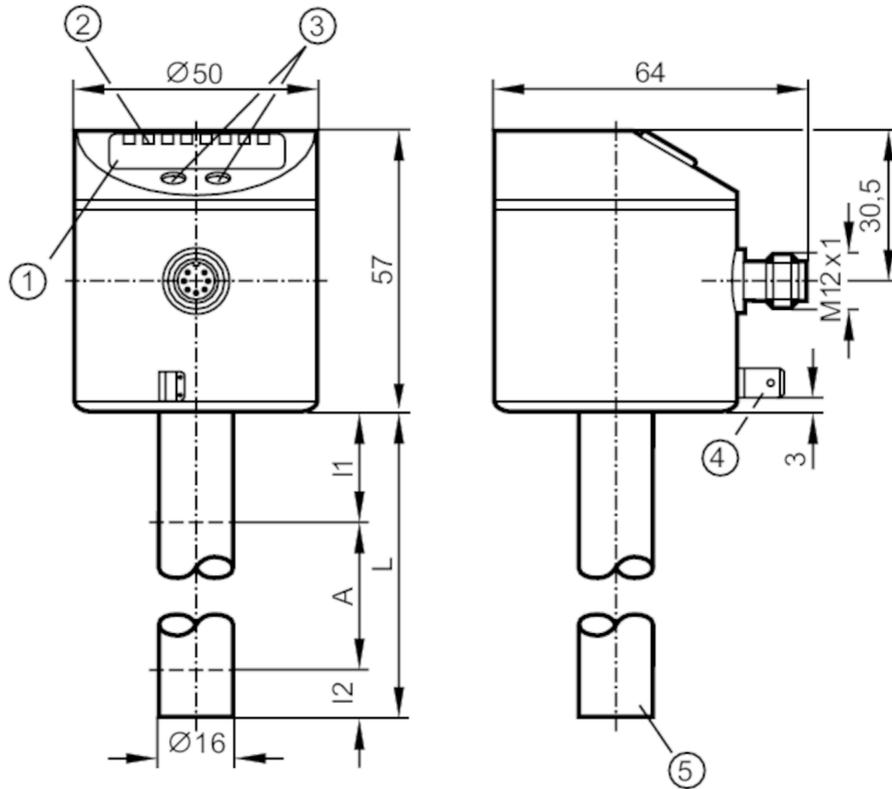


## Continuous level sensor with leakage monitoring

LL0728B-B-00KVPKG/US

phase-out article

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



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming buttons
- 4 housing connection flat-pin connector 6.3 mm DIN 46244
- 5 position of the temperature measuring element



### Product characteristics

Number of inputs and outputs	Number of digital outputs: 4
Probe length L [mm]	728

### Application

Special feature	Gold-plated contacts
Media	hydrous coolants; oils; water; media similar to water
Dielectric constant of the medium	> 2
Cannot be used for	extremely conductive media; adhering media; granulates; bulk material; acids; alkali
Tank pressure [bar]	0.5; (when mounting with mounting accessories: E43001 - E43007, E43019)
Coolants	
Medium temperature [°C]	0...35; (LL8024 + E43102: 0...55; For water and hydrous media with temperatures > 35 °C install the unit into a climatic tube.)

# LL8024



## Continuous level sensor with leakage monitoring

LL0728B-B-00KVPKG/US

<b>Oil</b>		
Medium temperature	[°C]	0...70
Medium temperature short time	[°C]	0...90
<b>Water</b>		
Medium temperature	[°C]	0...35; (LL8024 + E43102: 0...55; For water and hydrous media with temperatures > 35 °C install the unit into a climatic tube.)
<b>Electrical data</b>		
Operating voltage	[V]	18...30 DC; ("supply class 2" to cULus)
Current consumption	[mA]	< 60
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	3
Measuring principle		capacitive
<b>Inputs / outputs</b>		
Number of inputs and outputs		Number of digital outputs: 4
<b>Outputs</b>		
Total number of outputs		4
Output signal		switching signal
Electrical design		PNP
Number of digital outputs		4
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	200
Short-circuit protection		yes
Type of short-circuit protection		thermal, pulsed
Overload protection		yes
<b>Measuring/setting range</b>		
Probe length L	[mm]	728
Active range A	[mm]	585
Inactive range I1 / I2	[mm]	102 / 40
<b>Setting range</b>		
Set point SP	[mm]	60...580
Reset point rP	[mm]	50...570
In steps of	[mm]	10
Hysteresis	[mm]	10
Overflow switch point OP	[mm]	200 - 240 - 280 - 310 - 350 - 390 - 420 - 460 - 500 - 530 - 570 - 610
Hysteresis, OP	[mm]	4
<b>Temperature monitoring</b>		
Display range	[°C]	-10...100

# LL8024



## Continuous level sensor with leakage monitoring

LL0728B-B-00KVPKG/US

Accuracy / deviations		
Measuring error [% of the final value]		± 5
Repeatability		± 2
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; SP/ rP position; OP position; adjustment OP; medium selection; offset setting; Display unit; settings for leakage monitoring	
Operating conditions		
Ambient temperature	[°C]	0...60
Storage temperature	[°C]	-25...80
Protection		IP 67
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN EN 60068-2-29	15 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	5 g (10...2000 Hz)
MTTF	[years]	202
Mechanical data		
Weight	[g]	534.8
Dimensions	[mm]	Ø 16
Materials	stainless steel (304/1.4301); FKM; NBR; PBT; PC; PEI; PP; TPE-V	
Materials (wetted parts)	PP	
Displays / operating elements		
Display	display unit / status	4 x LED, green
	switching status	4 x LED, yellow
	level	alphanumeric display, 4-digit
	parameter setting	alphanumeric display, 4-digit
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		

# LL8024



## Continuous level sensor with leakage monitoring

LL0728B-B-00KVPKG/US

### Connection

