

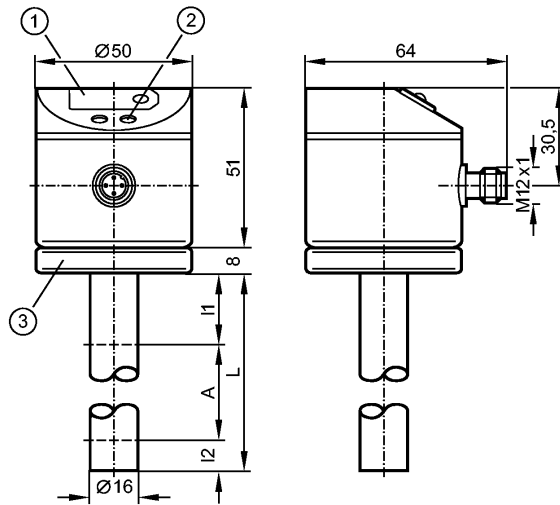


LK7023

LK0472A-A-00KQPKG/US



Level sensors



- 1: 7-segment LED display
- 2: Programming buttons
- 3: Housing connection with cable lug for cable 1.5 - 2.5 mm²



Product characteristics

Electronic level sensor

Quick disconnect

Probe length: L = 472 mm

2 switching outputs

7-segment LED display

Application

Application	<p>hydrous coolants mineral oils (dielectric constant < 3) water, media similar to water cannot be used for media with separation layers (oil + water; oil/metal layer) cannot be used for acids and alkalis</p>
Dielectric constant medium	> 2
Medium temperature oil [°C]	0...65
Medium temperature water and hydrous media [°C]	0...60 **)
Medium temperature coolant emulsions [°C]	0...60 **)
Medium temperature [°C]	0...35 (LK7023 + E43101: 0...60) **)
Maximum speed of the change of level [mm/s]	200

Electrical data

Electrical design	DC PNP
Operating voltage [V]	12...30 DC
Current consumption [mA]	< 80
Protection class	III
Reverse polarity protection	yes

Outputs

Output	2 switching outputs
Output function	2 x normally open / closed programmable
Current rating [mA]	200



LK7023

LK0472A-A-00KQPKG/US



Level sensors

Voltage drop [V]	< 2.5
Short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring / setting range	
Probe length L [mm]	472
Active range A [mm]	390
Inactive range I1 / I2 [mm]	53 / 30
Setting range	
Set point, SP [mm]	40...415
Reset point, rP [mm]	35...410
in steps of [mm]	5
Hysteresis [mm]	5

Accuracy / deviations	
Deviations (% of value of measuring range)	
Switch point accuracy	± 5
Repeatability	± 2

Reaction times	
Power-on delay time [s]	3

Software / programming	
Adjustment of the switch point	Programming button

Environment	
Ambient temperature [°C]	0...60
Storage temperature [°C]	-25...80
Maximum vessel pressure [bar]	0.5 (mounted with mounting accessories E43001 - E43007)
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 61000-4-5 Surge: 500 V / 1 kV EN 61000-4-6 HF conducted: 10 V
Shock resistance	DIN EN 60068-2-29: 12 g (11 ms)
Vibration resistance	DIN EN 60068-2-6 2.5 g (10...2000 Hz)
MTTF [Years]	265

Mechanical data	
Materials (wetted parts)	PP (polypropylene)
Housing materials	EPDM/X (Santoprene); FPM (Viton); brass Optalloy-plated; NBR (Buna N); PA; PBT (Pocan); PC (Makrolon); PP (polypropylene)
Weight [kg]	0.597

Displays / operating elements	
Display	Switching status 2 x LED red Measured values 7-segment LED display Programming 7-segment LED display

Electrical connection	
Connection	M12 connector; gold-plated contacts

Wiring



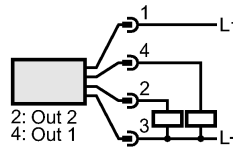
LK7023

LK0472A-A-00KQPKG/US



Level sensors

Programming of the output function:
 Hno = hysteresis / normally open
 Hnc = hysteresis / normally closed
 Fno = window function / normally open
 Fnc = window function / normally closed



Complementary outputs:
 output 1: = Hno, output 2: = Hnc
 (with the same SP / rP)

Remarks

Remarks

** for water and hydrous media with temperatures > 35 °C install the unit into a climatic tube (order no. E43101)

Pack quantity	[piece]	1
---------------	---------	---