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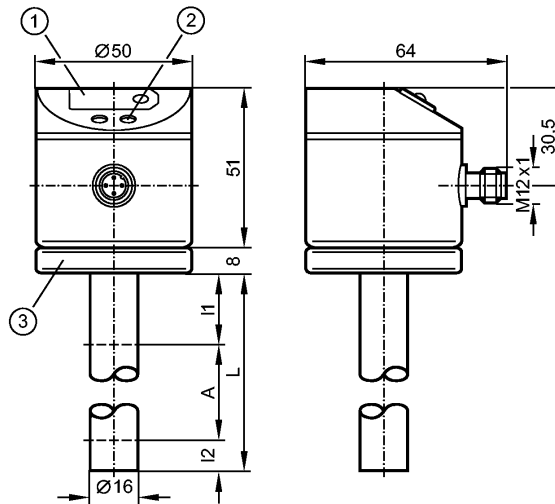
efector160

LK0023



LK0472A-A-00KQNG/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

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

Dielectric constant medium

> 2

Medium temperature [°C]

0...65 **) / 0...60 ***)

Maximum speed of the change of level [mm/s]

200

Electrical data

Electrical design

DC NPN

Operating voltage [V]

12...30 DC

Current consumption [mA]

< 80

Protection class

III

Reverse polarity protection

yes

Outputs

Output

2 switching outputs

Output function

normally open / closed programmable

Current rating [mA]

200

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

LK0023 - Electronic level sensor - eclass: 27371813 / 27-37-18-13

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		12 g
Vibration resistance		2.5 g
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]	0.605
Displays / operating elements		
Display		Switching status 2 x LED red Function display 7-segment LED display Measured values 7-segment LED display
Electrical connection		
Connection		M12 connector; gold-plated contacts
Wiring		
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		**) = medium temperature for oils ***) = medium temperature for coolant emulsions, water and hydrous media for water and hydrous media with temperatures > 35 °C install the unit into a climatic tube (order no. E43101)
Pack quantity	[piece]	1

