

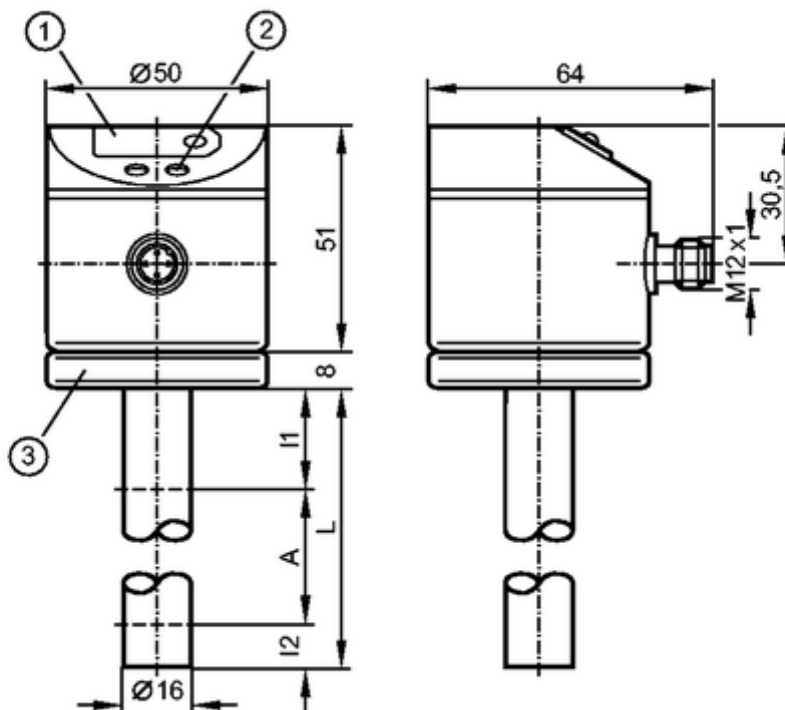
# efector160



## LK7022

LK0264A-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 mm<sup>2</sup>



### Product characteristics

Electronic level sensor

Quick disconnect

Probe length: L = 264 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

&gt; 2

Medium temperature oil [°C]

0...65

Medium temperature [°C]

0...35 (LK7022 + E43100: 0...65) \*\*)

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

100

### Electrical data

Electrical design

DC PNP

Operating voltage [V]

12...30 DC

Current consumption [mA]

&lt; 80

Protection class	III	
Reverse polarity protection	yes	
<b>Outputs</b>		
Output	2 switching outputs	
Output function	2 x normally open / closed programmable	
Current rating [mA]	200	
Voltage drop [V]	< 2.5	
Short-circuit protection	yes (non-latching)	
Overload protection	yes	
<b>Measuring / setting range</b>		
Probe length L [mm]	264	
Active range A [mm]	195	
Inactive range I1 / I2 [mm]	53 / 15	
<b>Setting range</b>		
Set point, SP [mm]	25...205	
Reset point, rP [mm]	20...200	
in steps of [mm]	5	
Hysteresis [mm]	5	
<b>Accuracy / deviations</b>		
<b>Deviations (% of value of measuring range)</b>		
Switch point accuracy	± 5	
Repeatability	± 2	
<b>Reaction times</b>		
Power-on delay time [s]	3	
<b>Software / programming</b>		
Adjustment of the switch point	Programming button	
<b>Environment</b>		
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	
<b>Tests / approvals</b>		
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	
<b>Mechanical data</b>		
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]	0.517	
<b>Displays / operating elements</b>		
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**

Programming of the output function:

Hno = hysteresis / normally open

Hnc = hysteresis / normally closed

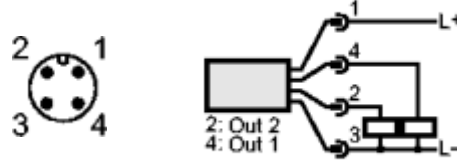
Fno = window function / normally open

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. E43100)

Pack quantity [piece]

1

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