



Part no.: 50135783
LCS-1M18T-N15PNO-K020T
Capacitive sensor



Figure can vary

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Technical data

Basic data	
Series	LCS-1
Switching distance S_n	2 ... 15 mm
Assured switching distance	15 mm
Characteristic parameters	
MTTF	300 years
Electrical data	
Protective circuit	Polarity reversal protection Short circuit protected
Performance data	
Supply voltage	10 ... 35 V, DC
Residual ripple	0 ... 10 %, From U_B
Open-circuit current	15 mA
Temperature drift, max. (in % of S_r)	15 %
Repeatability, max. (in % of S_r)	2 %
Rated operating current	300 mA
Outputs	
Number of digital switching outputs	1 Piece(s)
Switching outputs	
Type	Digital switching output
Voltage type	DC
Switching output 1	
Assignment	Connection 1, conductor 2
Switching element	Transistor, PNP
Switching principle	NO (normally open)
Timing	
Switching frequency	100 Hz
Connection	
Number of connections	1 Piece(s)
Connection 1	
Type of connection	Cable
Function	Voltage supply Signal OUT
Cable length	2,000 mm
Sheathing material	PTFE
Number of conductors	3 -wire
Wire cross section	0.2 mm ²
Mechanical data	
Design	Cylindrical
Thread size	M18 x 1 mm
Dimension (\varnothing x L)	18 mm x 73 mm
Type of installation	Non-embedded
Housing material	Plastic, Teflon (PTFE)

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Sensing face material	Plastic, Teflon (PTFE)
Cover material	Plastic, Teflon (PTFE)
Net weight	110 g

Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)
Switching distance, adjustable	Yes

Environmental data

Ambient temperature, operation	-30 ... 70 °C
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Certifications

Degree of protection	IP 67
Protection class	III
Certifications	c UL US
Standards applied	IEC 60947-5-2

Correction factors

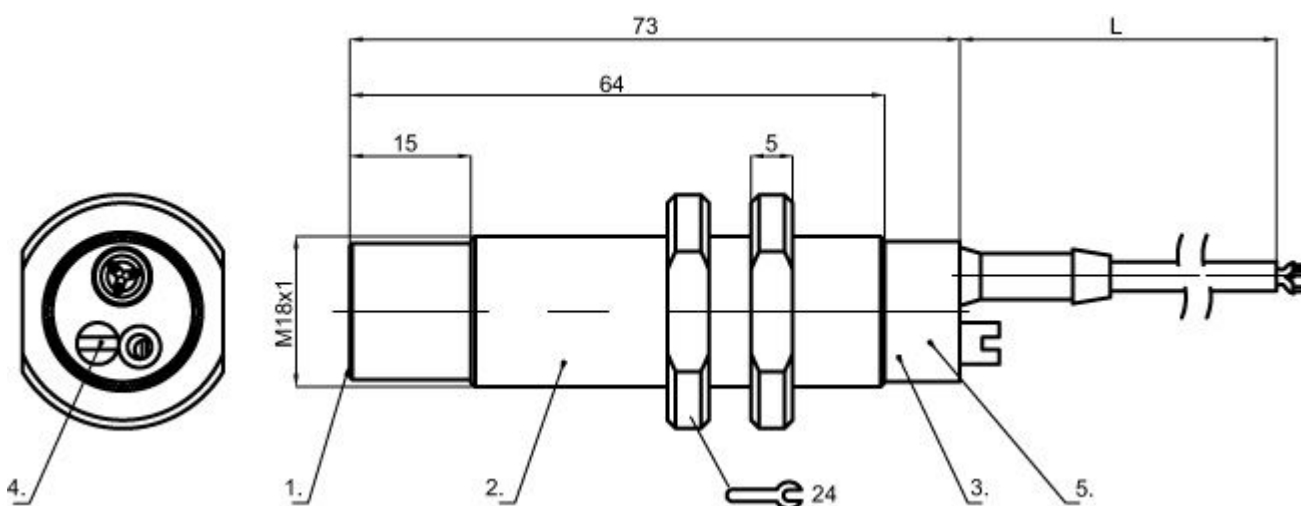
Acetone	0.75
Acrylic resin	0.1 ... 0.25
Alcohol	0.85
Ammonia	0.7 ... 0.85
Aniline	0.4
Gasoline	0.1
Celluloid	0.15
Liquid chlorine	0.1
Ebonite	0.15
Epoxy resin	0.15 ... 0.35
Crude oil	0.05
Ethanol	0.85
Ethylene glycol	0.93
Freon R22 and 502 (liquid)	0.35
Grain	0.15 ... 0.3
Glass	0.2 ... 0.55
Glycerin	0.98
Rubber	0.15 ... 0.9
Wood, wet	0.6 ... 0.85
Wood, dry	0.1 ... 0.4
Marble	0.5
Flour	0.05
Melamine resin	0.25 ... 0.55
Milk powder	0.2
Nylon	0.2 ... 0.3
Oil-containing paper	0.25
Paper	0.1
Polyamide	0.3
Polyester resin	0.15 ... 0.5
Pressboard	0.1 ... 0.3

PTFE	0.1
Quartz glass	0.2
Salt	0.35
Sand	0.15 ... 0.3
Water	1
Cement dust	0.25
Sugar	0.15

Classification	
eCl@ss 8.0	27270102
eCl@ss 9.0	27270102
ETIM 5.0	EC002715

Dimensioned drawings

All dimensions in millimeters



- 1 Active surface
- 2 Housing
- 3 Cover
- 4 Potentiometer
- 5 Red LED, function indicator

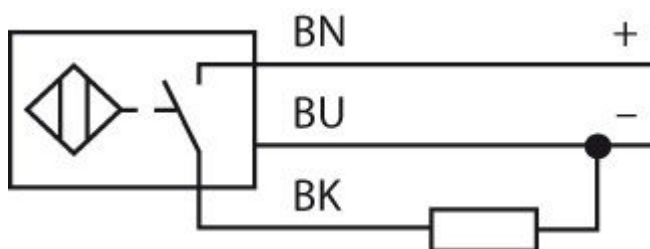
Electrical connection

Connection 1	
Type of connection	Cable
Function	Voltage supply Signal OUT
Cable length	2,000 mm
Sheathing material	PTFE
Cable color	
Number of conductors	3 -wire
Wire cross section	0.2 mm ²

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Conductor color	Conductor assignment
Brown	+10...35 V DC
Black	OUT
Blue	GND

Circuit diagrams




Operation and display

LEDs


LED	Display	Meaning
1	Red, continuous light	Switching output/switching state

Accessories

Mounting technology - Mounting brackets




	Part no.	Designation	Article	Description
	50113548	BT D18M.5	Mounting bracket	Diameter, inner: 18 mm Design of mounting device: Angle, L-shape Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Rigid Material: Stainless steel

Mounting technology - Rod mounts

	Part no.	Designation	Article	Description
	50117490	BTU D18M-D12	Mounting system	Design of mounting device: Mounting system Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal

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Mounting technology - Other

	Part no.	Designation	Article	Description
	50132729	AC D18M-CS	Clamp	Contains: 2x M24 mounting nut Diameter, inner: 18 mm Design of mounting device: Mounting clamp Mounting bracket, at system: Screw type, Through-hole mounting Mounting bracket, at device: Insertable, Clampable with limit stop Type of mounting device: Clampable, With limit stop Material: Metal
	50111501	MC 018K	Clamp	Diameter, inner: 18 mm Design of mounting device: Mounting clamp Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Rigid Material: Plastic
	50111502	MC 018K-LS	Clamp	Diameter, inner: 18 mm Design of mounting device: Mounting clamp Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Clampable with limit stop Type of mounting device: Rigid Material: Plastic

Notes

Observe intended use!

- This product is not a safety sensor and is not intended as personnel protection.
- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.