

the sensor people





Part no.: 50136597 LCS-2M18B-N15PNO-K020V Capacitive sensor



Figure can vary

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- Technical data
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#### **Technical data**

Basic data	
Series	LCS-2
Switching distance S <sub>n</sub>	2 15 mm
Assured switching distance	12.1 mm
Electrical data	
Protective circuit	Polarity reversal protection Short circuit protected
Performance data	
Supply voltage	10 30 V, DC
Residual ripple	0 10 %
Open-circuit current	10 mA
Rated operating current	300 mA
Outputs	
Number of digital switching outputs	1 Piece(s)
Switching outputs	
Туре	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 fraguency	400 11-
Switching frequency	100 Hz
0	
Connection  Number of connections	4 Piece(e)
Number of connections	1 Piece(s)
Connection 1  Type of connection	Cable
Type of connection  Cable length	2,000 mm
Sheathing material	PVC
Number of conductors	3 -wire
Wire cross section	0.35 mm <sup>2</sup>
5 5.555 5554011	0.00
Mechanical data	
Design	Cylindrical
Thread size	M18 x 1 mm
Dimension (Ø x L)	18 mm x 70 mm
Type of installation	Non-embedded
Housing material	Metal
Sensing face material	Plastic, Polybutylene (PBT)
Cover material	Plastic, Polybutylene (PBT)
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Operation and display	
Type of display	LED
Number of LEDs	1 Piece(s)
Switching distance, adjustable	Yes
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Environmental data			
Ambient temperature, operation	-25 70 °C		
Certifications			
Degree of protection	IP 67		
Protection class	III		
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		

27270102

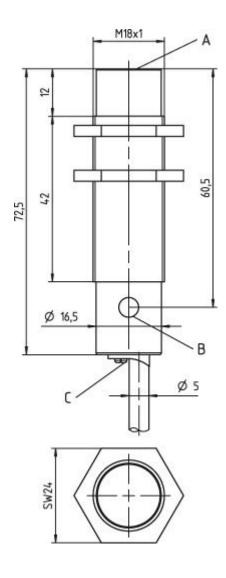
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ETIM 5.0 EC002715

### **Dimensioned drawings**

All dimensions in millimeters



A Active surface B Yellow LED C Potentiometer

#### **Electrical connection**

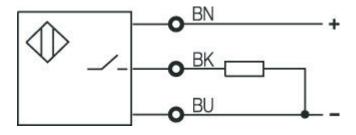
Connection 1		
Type of connection	Cable	
Function		
Cable length	2,000 mm	
Sheathing material	PVC	
Cable color		



Connection 1	
Number of conductors	3 -wire
Wire cross section	0.35 mm <sup>2</sup>

Conductor color	Conductor assignment	
Brown	10 - 30 V DC	
Black	OUT	
Blue	GND	

### **Circuit diagrams**



#### **Operation and display**

#### **LEDs**

LED	Display	Meaning
1	Yellow, 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
Offi	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

### 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.