

the sensor people





Part no.: 50136599 LCS-2M18B-N15NNO-K020V Capacitive sensor



Figure can vary

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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	Short circuit protected		
	Polarity reversal protection		
Performance data			
Supply voltage	10 30 V, DC		
Residual ripple	0 10 %		
Open-circuit current	10 mA		
Rated operating current	300 mA		
Outputs	4 Pinne(s)		
Number of digital switching outputs	1 Piece(s)		
Switching outputs	Digital quitaking output		
Type Voltage type	Digital switching output		
Voltage type	DC		
Switching output 1	Connection 1, conductor 2		
Assignment Switching element	Transistor, NPN		
Switching element Switching principle	NO (normally open)		
Owntoning principle	(normally open)		
Timain a			
Timing Switching frequency	100 Hz		
Cantoning inequality	100 112		
Connection			
Number of connections	1 Piece(s)		
Connection 1	11 1000(0)		
Type of connection	Cable		
Cable length	2,000 mm		
Sheathing material	PVC		
Number of conductors	3 -wire		
Wire cross section	0.35 mm <sup>2</sup>		
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)	Plastic, Polybutylene (PBT)	
Cover material	Plastic, Polybutylene (PBT)		
Operation and display			
Type of display	LED		
Number of LEDs	1 Piece(s)		
Switching distance, adjustable Yes			



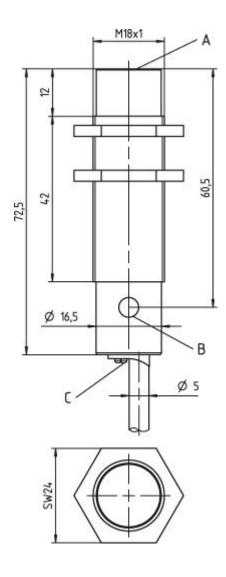
Environmental data				
Environmental data	05 70 00			
Ambient temperature, operation	-25 70 °C			
Certifications				
Degree of protection	IP 67			
Protection class	III			
Standards applied	IEC 60947-5-2			
Correction factors				
Acetone	0.75			
Acrylic resin	0.1 0.25			
Alcohol	0.85			
Ammonia	0.7 0.85			
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				
Classification	27270402			
eCl@ss 8.0	27270102			
eCl@ss 9.0	27270102			



ETIM 5.0 EC002715

### **Dimensioned drawings**

All dimensions in millimeters



A Active surface B Yellow LED C Potentiometer

#### **Electrical connection**

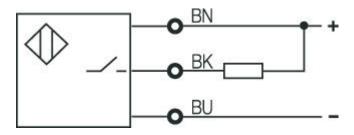
Connection 1		
Type of connection	Cable	
Function		
Cable length	2,000 mm	
Sheathing material	PVC	
Cable color		



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.