



the sensor people





LE328.W/2N-M12 Throughbeam photoelectric sensor receiver





Part no.: 50122706



Figure can vary

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Technical data

Basic data				
	Series 328			
Operating principle	Throughbeam principle			
Device type	Receiver			
Device type	Neceivei			
Consist design				
Special design	00° angular antica			
Special design	90° - angular optics			
Optical data				
Operating range	Guaranteed operating range			
Operating range	0 5.5 m			
Operating range limit	Typical operating range			
Operating range limit	0 8 m			
Electrical data				
Protective circuit	Polarity reversal protection Short circuit protected			
Performance data				
Supply voltage U _B	10 30 V , DC , Incl. residual ripple			
Residual ripple	$0 \dots 15 \ \%$, From U_B			
Open-circuit current	0 15 mA			
Outputs				
Number of digital switching outputs	2 Piece(s)			
Switching outputs				
Voltage type	DC			
Switching current, max.	100 mA			
Switching voltage	High: ≥(U _B -2V) Low: ≤2V			
Switching output 1				
Assignment	Connection 1, pin 4			
Assignment Switching element	Connection 1, pin 4 Transistor , NPN			
Switching element	Transistor , NPN			
Switching element Switching principle	Transistor , NPN			
Switching element Switching principle Switching output 2	Transistor , NPN Light switching			
Switching element Switching principle Switching output 2 Assignment	Transistor , NPN Light switching Connection 1, pin 2			
Switching element Switching principle Switching output 2 Assignment Switching element	Transistor , NPN Light switching Connection 1, pin 2 Transistor , NPN			
Switching element Switching principle Switching output 2 Assignment Switching element	Transistor , NPN Light switching Connection 1, pin 2 Transistor , NPN			
Switching element Switching principle Switching output 2 Assignment Switching element Switching principle	Transistor , NPN Light switching Connection 1, pin 2 Transistor , NPN			
Switching element Switching principle Switching output 2 Assignment Switching element Switching principle	Transistor , NPN Light switching Connection 1, pin 2 Transistor , NPN Dark switching			
Switching element Switching principle Switching output 2 Assignment Switching element Switching principle Timing Switching frequency	Transistor , NPN Light switching Connection 1, pin 2 Transistor , NPN Dark switching			
Switching element Switching principle Switching output 2 Assignment Switching element Switching principle Timing Switching frequency Response time	Transistor , NPN Light switching Connection 1, pin 2 Transistor , NPN Dark switching 500 Hz 1 ms			



Connection 1		
Type of connection	Connector	
Function	Signal OUT Voltage supply	
Thread size	M12	
Туре	Male	
Material	Plastic	
No. of pins	4 -pin	
Encoding	A-coded	
	·	

Mechanical data		
Thread size	M18 x 1 mm	
Dimension (Ø x L)	18 mm x 61 mm	
Housing material	Plastic Stainless steel , V2A , ABS	
Lens cover material	Plastic	
Net weight	20 g	
Housing color	Black Silver	

Operation and display		
Type of display	LED	
Number of LEDs	1 Piece(s)	

Environmental data		
Ambient temperature, operation	-40 60 °C	
Ambient temperature, storage	-40 70 °C	

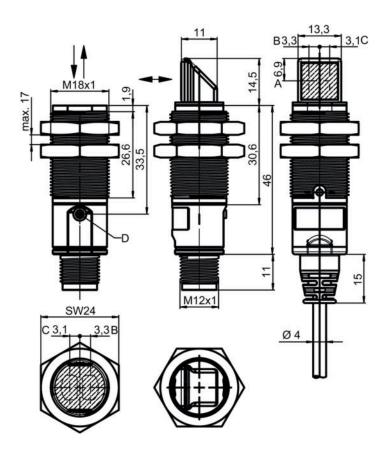
Certifications		
Degree of protection	IP 67	
Protection class	III	
Certifications	c UL US	
Standards applied	IEC 60947-5-2	

Classification	
Customs tariff number	85365019
eCl@ss 8.0	27270901
eCl@ss 9.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716

Dimensioned drawings

All dimensions in millimeters





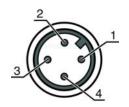
A Vertical position of the optical axis

- B Optical axis (transmitter)
- C Optical axis (receiver)
- D Indicator diode

Electrical connection

Connection 1	
Type of connection	Connector
Function	Signal OUT Voltage supply
Thread size	M12
Туре	Male
Material	Plastic
No. of pins	4 -pin
Encoding	A-coded

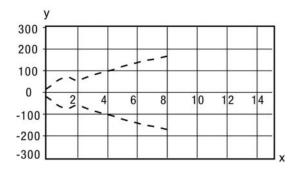
Pin	Pin assignment
1	V+
2	OUT 2
3	GND
4	OUT 1

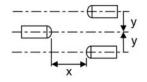




Diagrams

Typ. response behavior





- Distance [m] Misalignment [mm] х у

Operation and display

LEDs

LED	Display	Meaning
1	Green, continuous light	Operational readiness
	Yellow, continuous light	Light path free
	Yellow, flashing	No function reserve

Suitable transmitters

Part no.	Designation	Article	Description
50122700	LS328.W/9D-M12	photoelectric	Special design: 90° - angular optics, Deactivation input Operating range limit: 0 8 m Light source: LED, Red Supply voltage: DC Deactivation inputs: 2 Piece(s) Connection: Connector, M12, Plastic, 4 -pin

Part number code

Part designation: XXX328BY-AAAF.BB/CC-DDD



XXX328	Operating principle: PRK: retro-reflective photoelectric sensor with polarization filter ET: energetic diffuse reflection sensor FT: diffuse reflection sensor with fading LE: throughbeam photoelectric sensor receiver LS: throughbeam photoelectric sensor transmitter
Υ	Light type: n/a: red light l: infrared light
AAAF	Preset range (optional): n/a: operating range acc. to data sheet XXXX: preset range [mm]
BB	Equipment: n/a: axial optics W: 90° angular optics 3: teach-in via button
CC	Switching output / function (OUT1 = pin 4, OUT2 = pin 2):: 4: PNP transistor output, light switching P: PNP transistor output, dark switching 2: NPN transistor output, light switching N: NPN transistor output, dark switching 9: input for transmitter deactivation (deactivation with HIGH signal) D: input for transmitter deactivation (deactivation with LOW signal) X: pin not used
DDD	Electrical connection: n/a: cable, standard length 2000 mm, 4-wire M12: M12 connector, 4-pin (plug)

Note

A list with all available device types can be found on the Leuze electronic website at www.leuze.com.

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.

For UL applications:

- For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).
- These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/CYJV7 or PVVA/PVVA7)
- Sum of the output currents for both outputs, 50 mA for ambient temperatures > 40 °C

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Accessories

Connection technology - Connection cables

Part no.	Designation	Article	Description
50130652	KD U-M12-4A- V1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC
50130690	KD U-M12-4W- V1-050	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
O	50113548	BT D18M.5	Mounting bracket	Diameter, inner: 18 mm Design of mounting device: Angle, L-shape Fastening, 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 Fastening, 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
00	50126631 **	BT 328M	Fastening	Contains: 2x M18 mounting nut Design of mounting device: Mounting clamp Fastening, at system: For 18 mm rod, Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Turning, 360° Material: Stainless steel

^{**} Included in delivery contents

Note

A list with all available accessories can be found on the Leuze electronic website in the Download tab of the article detailed page.