

Technical data sheet Throughbeam photoelectric sensor transmitter

Part no.: 50122703

LS328/9D



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Technical data



Basic data

328
Throughbeam principle
Transmitter
Deactivation input
0 10 m (guaranteed operating range)
0 15 m (typical operating range)
LED, Red
620 nm
Pulsed
Exempt group (in acc. with EN 62471)

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 15 %, From U _B
	Open-circuit current	0 15 mA
	Inputs	
	Number of deactivation inputs	2 Piece(s)
	Depativation inputs	

Deac	tivat	ion i	nputs
Type			

Deactivation inputs	
Туре	Deactivation input
Deactivation input 1 Active switching state	Low
Deactivation input 2 Active switching state	High

Time behavior

Readiness delay	300 ms
Connection	

1 Piece(s)

Number of connections

Connection 1		
Function	Signal IN	
	Voltage supply	
Type of connection	Cable	
Cable length	2,000 mm	
Sheathing material	PUR	
Cable color	Black	
Number of conductors	4 -wire	
Wire cross section	0.2 mm ²	

Mechanical data

Dimension (Ø x L)	18 mm x 46 mm
Thread size	M18 x 1 mm
Housing material	Plastic
	Stainless steel
Stainless steel housing	V2A
Plastic housing	ABS
Lens cover material	Plastic
Net weight	70 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
Approvals	c UL US
Standards applied	IEC 60947-5-2

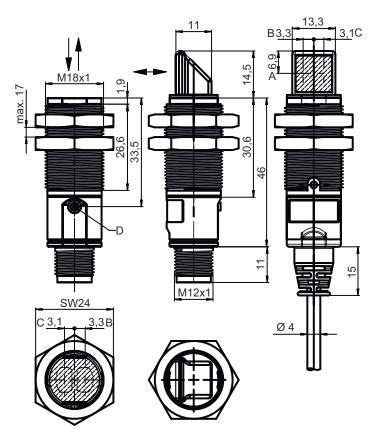
Classification

Customs tariff number	85365019
ECLASS 5.1.4	27270901
ECLASS 8.0	27270901
ECLASS 9.0	27270901
ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 12.0	27270901
ECLASS 13.0	27270901
ECLASS 14.0	27270901
ECLASS 15.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
ETIM 9.0	EC002716
ETIM 10.0	EC002716

Dimensioned drawings

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All dimensions in millimeters



- Vertical position of the optical axis
- Optical axis (transmitter)
- Optical axis (receiver)
- Indicator diode

Electrical connection

Connection 1

Function	Signal IN
	Voltage supply
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PUR
Cable color	Black
Number of conductors	4 -wire
Wire cross section	0.2 mm ²

Conductor color

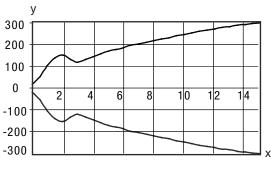
Conductor assignment

Brown	V+
White	In2
Blue	GND
Black	In1

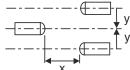
Diagrams



Typ. response behavior



- Distance [m]
- Misalignment [mm]



Operation and display

LED	Display	Meaning
1	Green, continuous light	Operational readiness
	Yellow, continuous light	Transmitted beam active

Suitable receivers

Part no.	Designation	Operating range Operating range limit	Description
50122712	LE328/2N	0 10 m 0 15 m	Supply voltage: DC Digital switching outputs: 2 Piece(s) Switching output 1: Transistor, NPN, Light switching Switching output 2: Transistor, NPN, Dark switching Switching frequency: 500 Hz Connection: Cable, 2,000 mm, 4 -wire
50122710	LE328/4P	0 10 m 0 15 m	Supply voltage: DC Digital switching outputs: 2 Piece(s) Switching output 1: Transistor, PNP, Light switching Switching output 2: Transistor, PNP, Dark switching Switching frequency: 500 Hz Connection: Cable, 2,000 mm, 4 -wire

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 I: infrared light
	Providence (in Const)

AAAF

Preset range (optional) n/a: operating range acc. to data sheet xxxF: Preset range [mm]

Part number code



вв 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 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)

Further information

• Sum of the output currents for both outputs, 50 mA for ambient temperatures > 40 °C

Accessories



Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
0	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
Of:	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

0				
	Part no.	Designation	Article	Description
	50083189	BT 318-ARH	Adjustment fastening part	Design of mounting device: Mounting plate Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Swiveling, Adjustable Material: Metal Shock absorber: No
00	50126631 **	BT 328M	Fastening	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 Shock absorber: No

^{**} Included in delivery contents

Note



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