SMART SENSOR BUSINESS

Leuze electronic

the sensor people





Part no.: 50122712 LE328/2N Throughbeam photoelectric sensor receiver



Figure can vary

Contents

- Technical data
- Dimensioned drawings
- · Electrical connection
- Diagrams
- · Operation and display
- Suitable transmitters
- · Part number code
- Notes
- Accessories

Part no.: 50122712 – LE328/2N – Throughbeam photoelectric sensor receiver

Technical data

Desite data	
Basic data	220
Series	328 Throughbeen principle
Operating principle	Throughbeam principle
Device type	Receiver
Ortical data	
Optical data	Cuprenteed exercting range
Operating range	Guaranteed operating range 0 10 m
Operating range Operating range limit	
Operating range limit	Typical operating range 0 15 m
	015111
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 $U_{\rm B}$
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	
Switching element	Transistor , NPN
Switching principle	Light switching
Switching output 2	
Switching element	Transistor , NPN
Switching principle	Dark switching
Timing	
Switching frequency	500 Hz
Response time	1 ms
Readiness delay	300 ms
0 <i>t</i>	
Connection	
Connection 1	Cabla
Type of connection	Cable
Function	Signal OUT Voltage supply
Cable length	2,000 mm
Sheathing material	PUR
Cable color	Black
Number of conductors	4 -wire
Wire cross section	0.2 mm ²

Leuze electronic

Part no.: 50122712 – LE328/2N – Throughbeam photoelectric sensor receiver

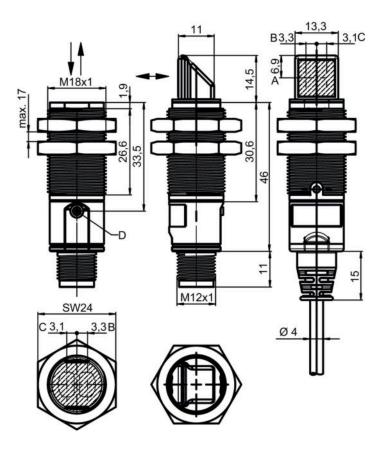
Machanical data	
Mechanical data	
Thread size	M18 x 1 mm
Dimension (Ø x L)	18 mm x 46 mm
Housing material	Plastic Stainless steel , V2A , ABS
Lens cover material	Plastic
Net weight	70 g
Housing color	Black Silver
Operation and display	
Type of display	LED
Number of LEDs	1 Piece(s)
Environmental data	
Ambient temperature, operation	-40 60 °C
Ambient temperature, storage	-40 70 °C
Certifications	
Degree of protection	IP 67
Protection class	III
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

Leuze electronic

Part no.: 50122712 – LE328/2N – Throughbeam photoelectric sensor receiver



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

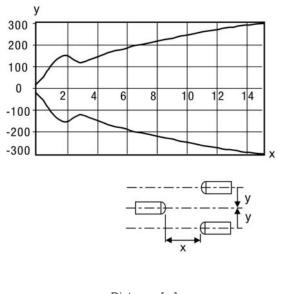
Conductor color	Conductor assignment
Brown	V+
White	OUT 2
Blue	GND
Black	OUT 1

▲ Leuze electronic

Part no.: 50122712 – LE328/2N – Throughbeam photoelectric sensor receiver

Diagrams

Typ. response behavior



x Distance [m] y Misalignment [mm]

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
50122703	LS328/9D	Throughbeam photoelectric sensor transmitter	Special design: Deactivation input Operating range limit: 0 15 m Light source: LED, Red Supply voltage: DC Deactivation inputs: 2 Piece(s) Connection: Cable, 2,000 mm, 4 -wire

Part number code

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

×	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

Leuze electronic

Part no.: 50122712 – LE328/2N – Throughbeam photoelectric sensor receiver

Y	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			
сс	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)			

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

Accessories

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
P	50113548	BT D18M.5	Ŭ	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

Part no.: 50122712 – LE328/2N – Throughbeam photoelectric sensor receiver

Mounting technology - Rod mounts

Part no.	Designation	Article	Description
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
	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
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.