Technical data sheet

Throughbeam photoelectric sensor receiver

Part no.: 50122707

LE328.W/2N
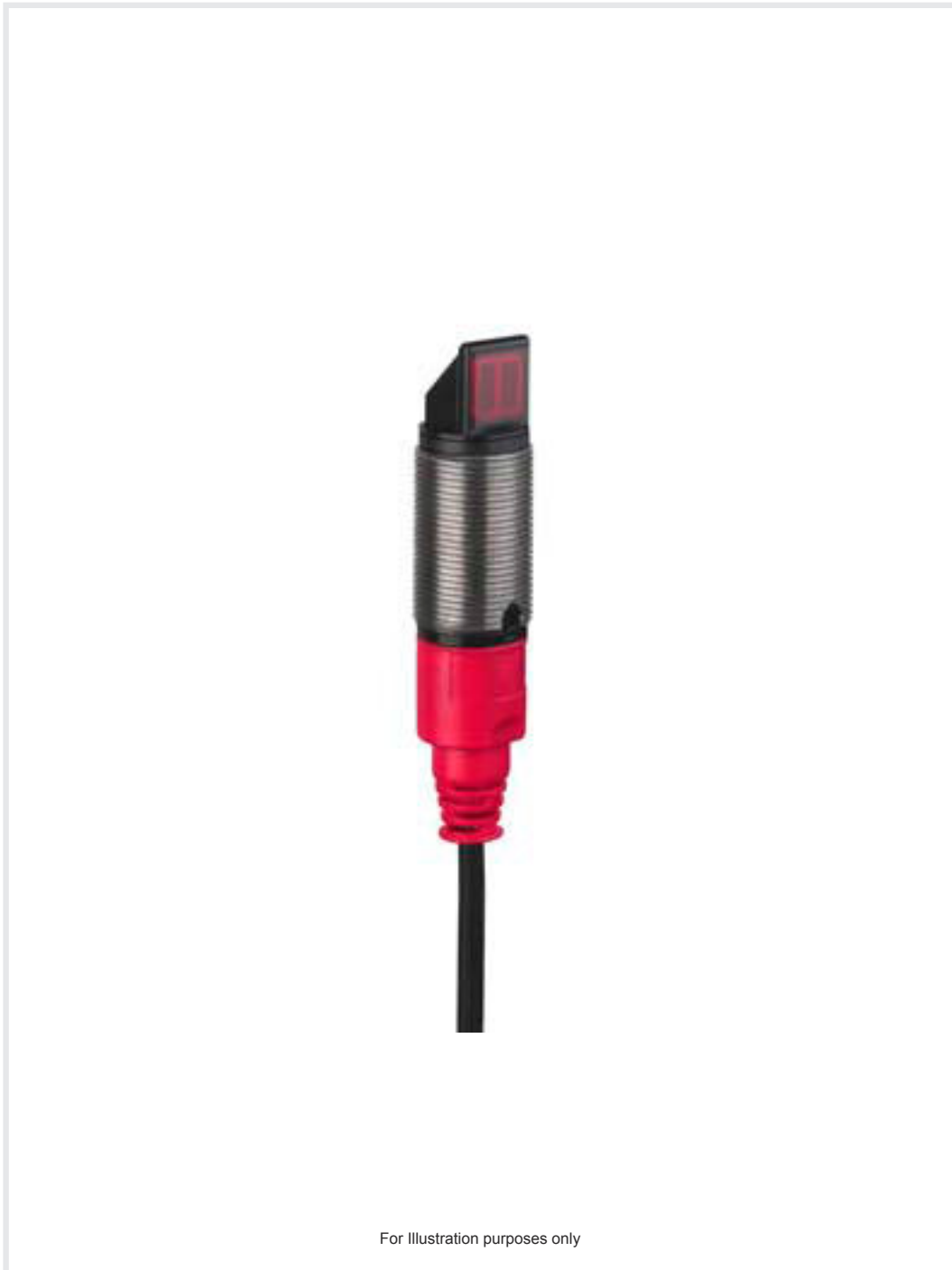
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Contents

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Technical data

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Basic data

Series	328
Operating principle	Throughbeam principle
Device type	Receiver

Special version

Special version	90° - angular optics

Optical data

Operating range	0 ... 5.5 m
Operating range	Guaranteed operating range
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 ... 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: ≤ 2 V

Switching output 1	
Switching element	Transistor, NPN
Switching principle	Light switching

Switching output 2	
Switching element	Transistor, NPN
Switching principle	Dark switching

Time behavior

Switching frequency	500 Hz
Response time	1 ms
Readiness delay	300 ms

Connection

Connection 1	
Function	Signal OUT
	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 mm²

Mechanical data

Thread size	M18 x 1 mm
Dimension (Ø x L)	18 mm x 61 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
Certifications	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
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
ETIM 9.0	EC002716

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We reserve the right to make technical changes
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Dimensioned drawings

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All dimensions in millimeters

A   Vertical position of the optical axis
B   Optical axis (transmitter)
C   Optical axis (receiver)
D   Indicator diode
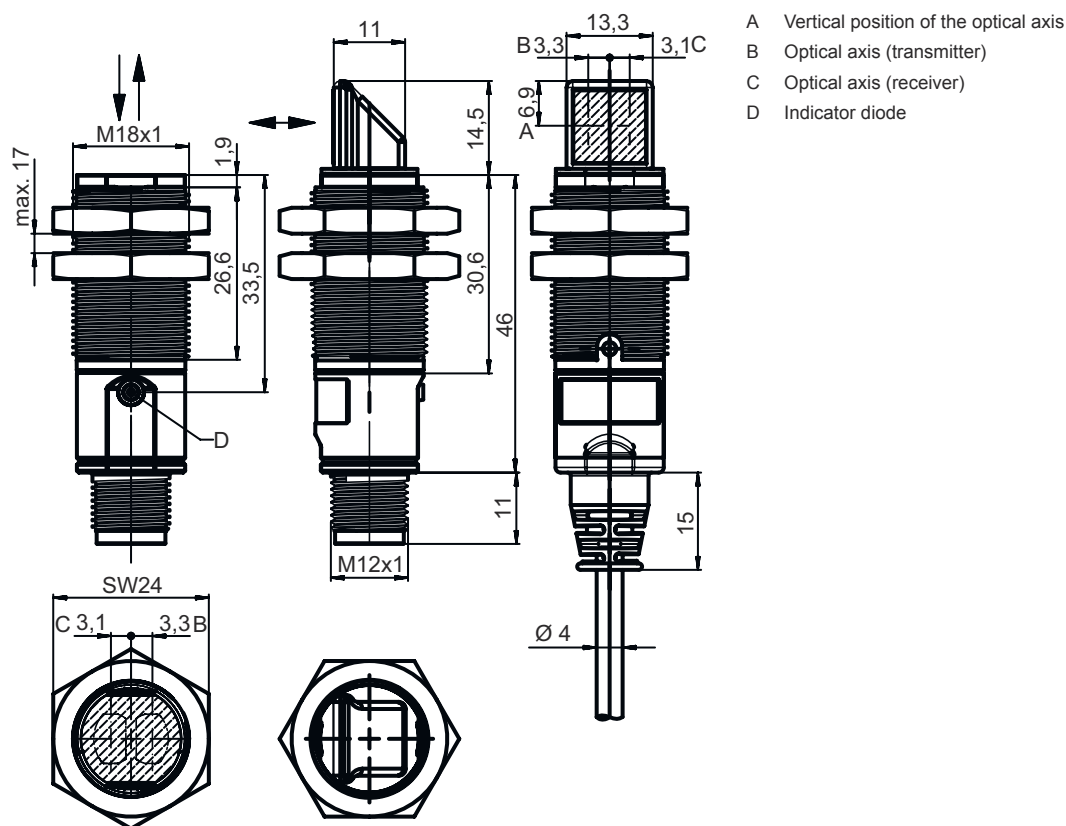
Electrical connection

Connection 1

Function	Signal OUT
	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 mm²

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

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Diagrams

Typ. response behavior

x   Distance [m]

y   Misalignment [mm]
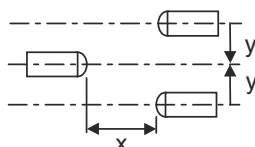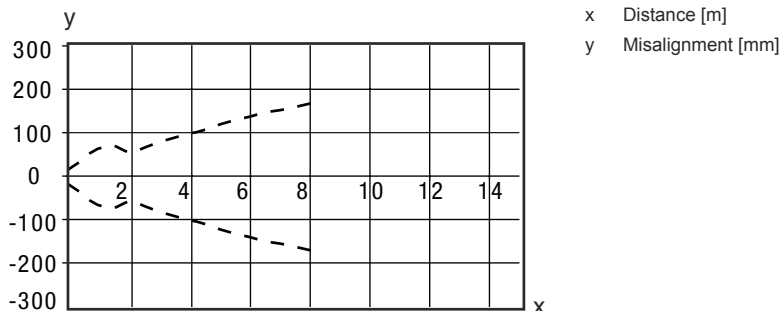
Operation and display

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
	50122701	LS328.W/9D	Throughbeam photoelectric sensor transmitter	Special version: 90° - angular optics, Deactivation input Operating range limit: 0 ... 8 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**

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
Y	**Light type** n/a: red light I: infrared light
AAAF	**Preset range (optional)** n/a: operating range acc. to data sheet xxxF: Preset range [mm]
BB	**Equipment** n/a: axial optics W: 90° angular optics 3: teach-in via button

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Part number code

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
	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

Accessories

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 Shock absorber: No
	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.