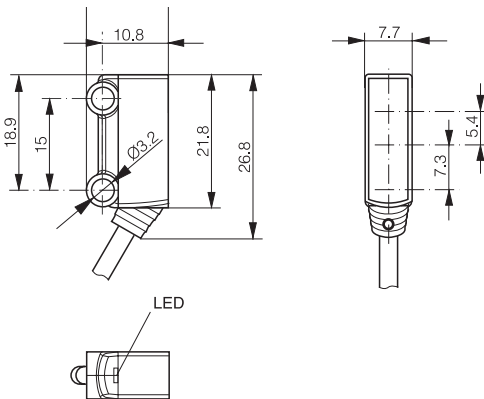


30 mm

- ✓ Subminiature housing
- ✓ Small visible light spot



OPTICAL DATA		INTERFACE	
Sensing range max.	1...36 mm ¹	Sensitivity adjustment	No
Operating range	1...30 mm ¹	Indicator led, green	Supply voltage state
Light source	Pinpoint LED, red 640 nm	Indicator led, yellow	Sensing state
Light spot size (distance)	Ø 3 mm (15 mm)	IO-Link	No
Background suppr. typ. from	38 mm		

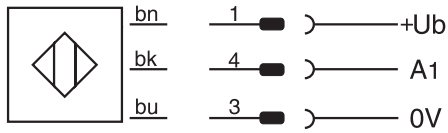
¹Object with 90% reflectance (standard white paper)

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U _b)	10...30 VDC	Enclosure rating	IP67
Residual ripple	≤ 5 Vpp	Ambient temperature operation	-20...+50°C
Output current	≤ 50 mA	Shock and vibration	IEC 60947-5-2
Signal PNP high/low	≤ (U _b -2.0 V)/ approx. 0 V	Weight (connector version)	25 g
Signal NPN high/low	Approx. U _b / ≤ 2.0 V	Weight (cable version)	10 g
Power consumption (no load)	≤ 20 mA	Housing material	ABS
Response time	≤ 0.6 ms	Window material	PMMA
Switching frequency	≤ 800 Hz	Connection cable	PVC, 2 m, 3-wire
Short circuit protection	✓	Connector type	PVC, 0.2 m + M8 3-pin
Voltage reversal protection	✓		

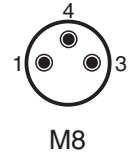
SENSING RANGE

Target	Operating range	Sensing range max.
90%	1...30 mm	1...36 mm
18%	2.5...29 mm	2.5...36 mm
6%	5...28 mm	5...36 mm

WIRING DIAGRAM



PIN ASSIGNMENT



AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output (A)
6415675	LWTH-3213-PS-E2	PNP	Cable, 3-wire	Light-on
6415676	LWTH-3213-PS-F1	PNP	Cable with connector M8 3-pin	Light-on
6415677	LWTH-3213-NS-E2	NPN	Cable, 3-wire	Light-on
6415678	LWTH-3213-NS-F1	NPN	Cable with connector M8 3-pin	Light-on

Note: additional suffix can appear to indicate a revision version or a special version.

These proximity switches **must not be used** in applications where the **safety of people** is dependent on their functioning. Terms of delivery and rights to change design reserved.