

ZT2-N4215

Z-Sensor

PHOTOELECTRIC SENSORS



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Ordering information

Туре	part no.
ZT2-N4215	1045411

Other models and accessories → www.sick.com/Z-Sensor

Illustration may differ

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Energetic
Dimensions (W x H x D)	13.6 mm x 34.8 mm x 21.9 mm
Housing design (light emission)	Hybrid
Thread diameter (housing)	M18 x 1
Sensing range max.	1 mm 100 mm ¹⁾
Sensing range	1 mm 100 mm
Type of light	Infrared light
Light source	LED ²⁾
Light spot size (distance)	Ø 20 mm (100 mm)
Wave length	880 nm
Adjustment	None

 $^{^{1)}}$ Object with 90% remission (based on standard white, DIN 5033).

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	20 mA ³⁾
Switching output	NPN
Switching mode	Light switching

¹⁾ Limit values.

 $^{^{2)}}$ Average service life: 100,000 h at TU = +25 °C.

 $^{^{2)}}$ May not exceed or fall below U_{ν} tolerances.

³⁾ Without load.

⁴⁾ With light/dark ratio 1:1.

 $^{^{5)}}$ Do not bend below 0 °C.

 $^{^{6)}}$ A = V_S connections reverse-polarity protected.

⁷⁾ D = outputs overcurrent and short-circuit protected.

⁸⁾ Reference voltage: 50 V DC.

Output current I _{max.}	≤ 50 mA
Switching frequency	200 Hz ⁴⁾
Connection type	Cable, 3-wire, 2 m ⁵⁾
Cable material	PVC
Conductor cross section	0.23 mm ²
Circuit protection	A ⁶⁾ D ⁷⁾
Protection class	III ⁸⁾
Housing material	Plastic, Glass fiber reinforced ABS plastic
Enclosure rating	IP67
Items supplied	Mounting nut M18
Ambient operating temperature	-25 °C +50 °C
Ambient temperature, storage	-40 °C +70 °C
UL File No.	NRKH.E189383 & NRKH7.E189383

¹⁾ Limit values.

Classifications

ECLASS 5.0	27270903
ECLASS 5.1.4	27270903
ECLASS 6.0	27270903
ECLASS 6.2	27270903
ECLASS 7.0	27270903
ECLASS 8.0	27270903
ECLASS 8.1	27270903
ECLASS 9.0	27270903
ECLASS 10.0	27270904
ECLASS 11.0	27270904
ECLASS 12.0	27270903
ETIM 5.0	EC001821
ETIM 6.0	EC001821
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

 $^{^{2)}\,\}mathrm{May}$ not exceed or fall below U_{V} tolerances.

³⁾ Without load.

⁴⁾ With light/dark ratio 1:1.

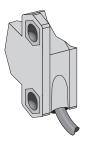
⁵⁾ Do not bend below 0 °C.

 $^{^{6)}}$ A = V_S connections reverse-polarity protected.

⁷⁾ D = outputs overcurrent and short-circuit protected.

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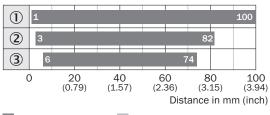
Connection type



Connection diagram Cd-043

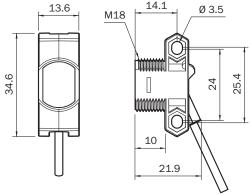


Sensing range diagram ZT1, 100 mm



- Sensing range
- Sensing range max.
- ① sensing range on white, 90% remission
- ② Sensing range on gray, 18 % remission
- 3 sensing range on black, 6% remission

Dimensional drawing ZT2, ZL2, cable



Dimensions in mm (inch)

Recommended accessories

Other models and accessories → www.sick.com/Z-Sensor

	Brief description	Туре	part no.	
connectors ar	nd cables			
	 Connection type head A: Male connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² 	STE-0803-G	6037322	
Mounting systems				
	 Description: Plate N11N for universal clamp bracket Material: Stainless steel Details: Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp) Items supplied: Universal clamp (5322627), mounting hardware Usable for: DeltaPac, Glare, WTD20E 	BEF-KHS-N11N	2071081	

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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