



DATA SHEET

WLL260-F440

WLL260
Fiber-optic sensors

SICK

Sensor Intelligence



Illustration may differ

FIBER-OPTIC SENSORS

WLL260-F440

ORDERING INFORMATION

Type	part no.
WLL260-F440	6020065

Further device versions and accessories at www.sick.com/WLL260



DETAILED TECHNICAL DATA

FEATURES

Device type	Fiber-optic amplifier
Device type detail	Stand-alone
Dimensions (W x H x D)	25 mm x 77.8 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 mm ... 65 mm (Proximity system) ^{1) 2)} 0 mm ... 110 mm (Proximity system) ^{1) 3)} 0 mm ... 800 mm (Through-beam system) ²⁾
Sensing range	0 mm ... 50 mm, Proximity system ²⁾ 0 mm ... 90 mm, Proximity system ³⁾ 0 mm ... 700 mm, Through-beam system ²⁾
Type of light	Visible red light
Light source	LED ⁴⁾
Adjustment	Potentiometer, 270°
Indication	LED

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

²⁾ LIS/LIB.

³⁾ With special fibre-optic cable.

⁴⁾ Average service life: 100,000 h at T_u = +25 °C.

MECHANICS/ELECTRONICS

Supply voltage U_B	10 V DC ... 30 V DC ¹⁾
Ripple	$\leq 5 \text{ V}_{pp}$ ²⁾
Current consumption	35 mA ³⁾
Switching output	PNP
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark selector
Response time	$\leq 0.7 \text{ ms}$ ⁴⁾
Switching frequency	700 Hz ⁵⁾
Connection type	Male connector M12, 4-pin
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	II ¹⁰⁾
Weight	120 g
Housing material	Plastic, ABS
Enclosure rating	IP66
Items supplied	Mounting bracket BEF-W260
Test input sender off	TE to V_s
Ambient operating temperature	-25 °C ... +55 °C
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

¹⁾ Limit values when operated in short-circuit protected network: max. 8 A.

²⁾ May not fall below or exceed U_B tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ A = V_s connections reverse-polarity protected.

⁷⁾ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

⁹⁾ D = outputs overcurrent and short-circuit protected.

¹⁰⁾ Reference voltage: 50 V DC.

SAFETY-RELATED PARAMETERS

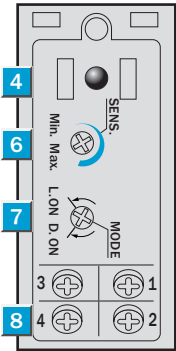
MTTF _D	850 years
DC _{avg}	0 %

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓

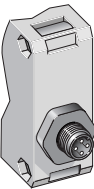
cRUus certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

ADJUSTMENTS

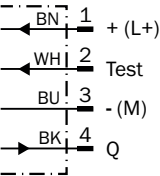


- ④ LED signal strength indicator, red
- ⑥ sensitivity control
- ⑦ Light/ dark rotary switch: L = light switching, D = dark switching

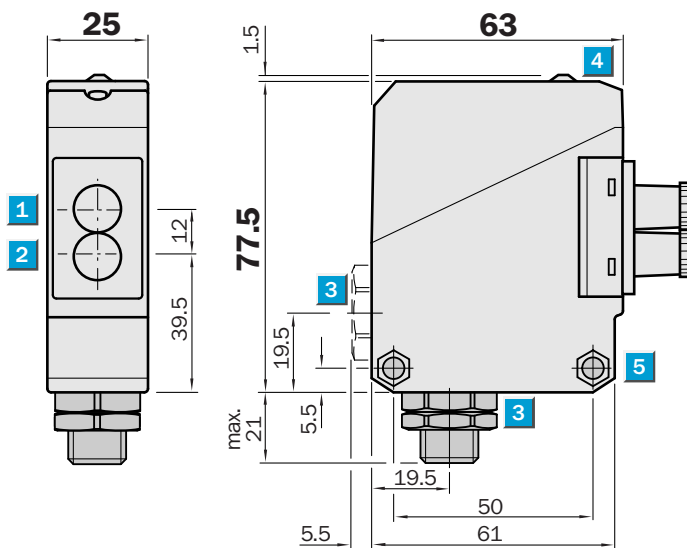
CONNECTION TYPE



CONNECTION DIAGRAM CD-078



DIMENSIONAL DRAWING



Dimensions in mm (inch)

- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- ③ Cable entry gland 1/2" PF for cable diameter 6 to 10 mm optionally at bottom or rear
- ④ LED reception indicator, red
- ⑤ Mounting hole $\varnothing$ 5.2 mm, for M5 hexagon nuts on both sides

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6020065



SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence