WS/WE160-F430

WS/WE160-F430

Ordering information

Type	Part no.
WS/WE160-F430	6022756

Other models and accessories ➜ www.sick.com/

Illustration may differ

CE c**UL**US

Detailed technical data

Features

Functional principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	11 mm x 23 mm x 38 mm
Housing design (light emission)	Rectangular
Sensing range max.	15 m
Sensing range	0 m … 11 m
Type of light	Visible red light
Light source	LED
Wave length	680 nm

Mechanics/electronics

Supply voltage	10 V DC … 30 V DC
Ripple	± 10 %
Current consumption	25 mA [1]
Switching output	PNP
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark rotary switch
Response time	≤ 0.5 ms [2]
Connection type	Male connector M8, 4-pin
Housing material	Plastic, PBT
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	−25 °C … +55 °C
Ambient temperature, storage	−40 °C … +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

[1] Without load.
[2] Signal transit time with resistive load.
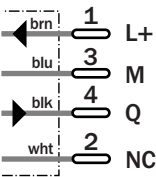
Classifications

eCl@ss 5.0	27270901

eCl@ss 5.1.4	27270901
eCl@ss 6.0	27270901
eCl@ss 6.2	27270901
eCl@ss 7.0	27270901
eCl@ss 8.0	27270901
eCl@ss 8.1	27270901
eCl@ss 9.0	27270901
eCl@ss 10.0	27270901
eCl@ss 11.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
UNSPSC 16.0901	39121528

Connection type

Connection diagram

brn	1	L+
blu	3	M
blk	4	Q
wht	2	NC

WS/WE160-F430
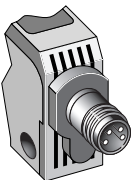
Characteristic curve

Sensing range diagram

	Operating range	Scanning range typ. max.
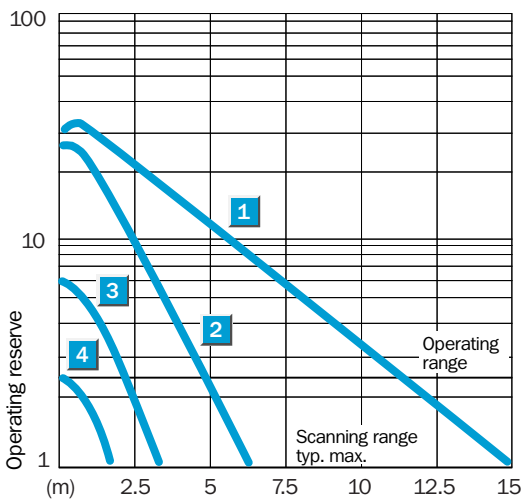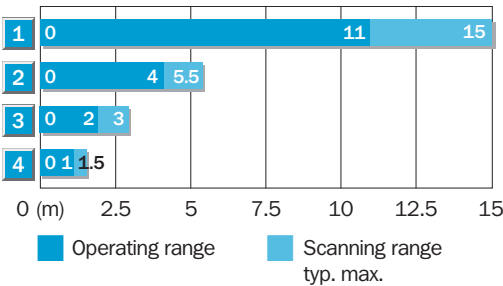
| 1	Without slotted mask
2	With slotted mask 2 mm, BL-160-SK
3	With slotted mask 1 mm, BL-160-SK
4	With slotted mask 0.5 mm, BL-160-SK

Adjustments
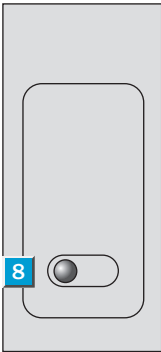
⑧ Red LED: sender active

③ Sensitivity control
④ Scaling 270°
⑤ Light/ dark rotary switch: L = light switching, D = dark switching
⑥ Orange LED indicator : switching output active
⑦ Green LED indicator: light reception with operating reserve >1.1 and < 0.9

Dimensional drawing (Dimensions in mm (inch))
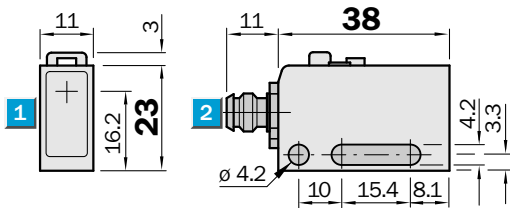
① Center of optical axis
② Connection

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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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