



Photoelectric sensors
energetic, divergent optics, Photoelectric
proximity sensor, Product group W160

WT160-E460



Model Name > [WT160-E460](#)
Part No. > [6022798](#)



- Vertical models
- Proximity switch with large opening angle for detecting objects conveyed loosely
- Red light as alignment aid
- Switching point adjustable
- LED indicator: operating reserve



Product features

Sensing range min ... max:	0 mm ... 100 mm, 0 mm ... 115 mm
Light source:	LED
Type of light:	Red light
Light spot diameter:	Approx. 100 mm at 100 mm distance
Laser:	Red light
Sensing range max.:	0 mm ... 100 mm, 0 mm ... 115 mm
Adjustment.:	Potentiometer, 2 rotations
Wave length:	680 nm

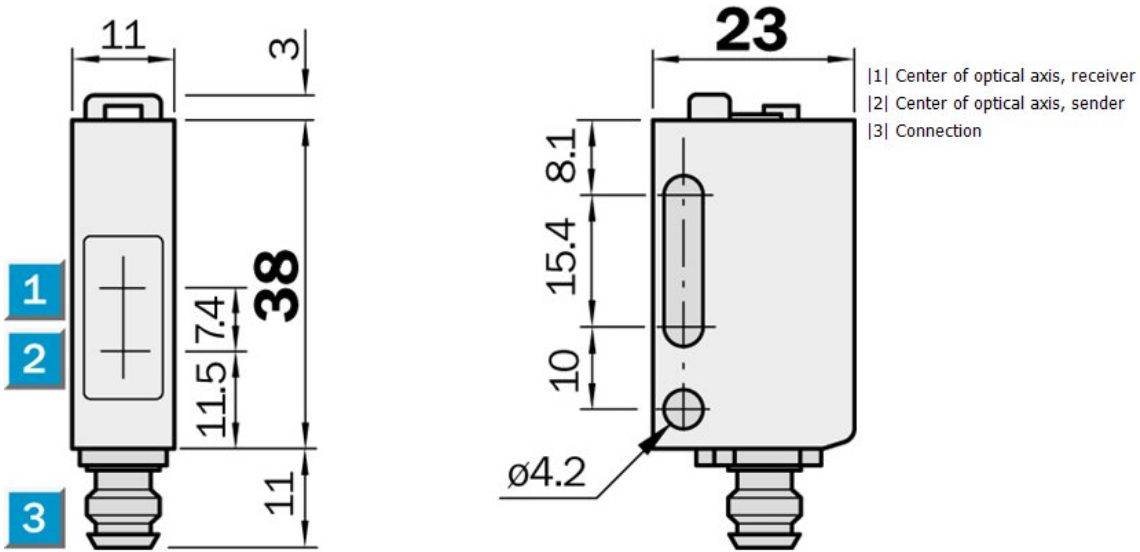
Technical data

Design:	Rectangular
Dimensions (W x H x D):	11 mm x 38 mm x 23 mm
Supply voltage min ... max:	DC 10 ... 30 V ¹⁾
Ripple:	± 10 %
Power consumption:	≤ 25 mA
Switching output:	NPN: open collector: Q
Switching mode:	Light/dark switching via rotary switch
Signal voltage NPN HIGH/LOW:	Approx. $V_S / < 1.8 V$
Output current max.:	100 mA
Response time:	≤ 0.5 ms
Switching frequency:	1,000 Hz
Connection type:	Connector, M8, 4-pin
Circuit protection:	V_S connections reverse-polarity protected/In-/outputs short-circuit protected/Interference suppression/Outputs overcurrent and short-circuit protected
Enclosure rating:	IP 67: EN 60529, IP 69K: EN 40050
Ambient operation temperature, min ... max:	-25 °C ... +55 °C
Ambient storage temperature, min ... max:	-40 °C ... +70 °C

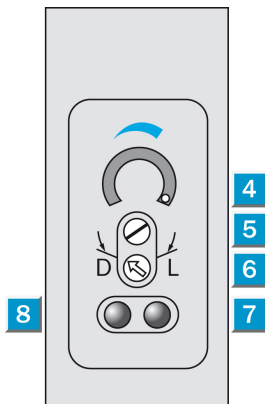
Weight:	Ca. 20 g
Housing material:	PBT
Angle of dispersion:	ca. 50 °
Series:	W160
Optics material:	PMMA
Housing design:	Vertical

1) Limit values, reverse-polarity protected operation in short-circuit protected network max. 8 A

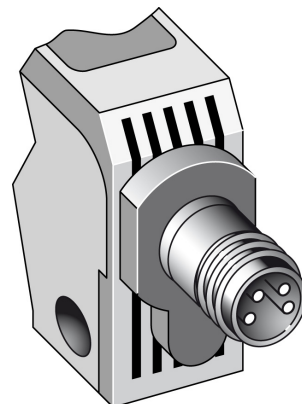
Dimensional drawing



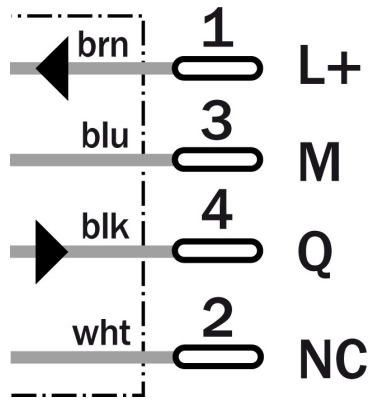
Adjustment possible



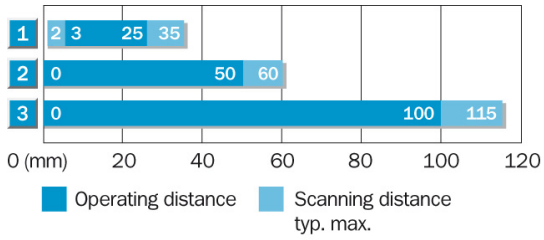
Connection type



Connection diagram

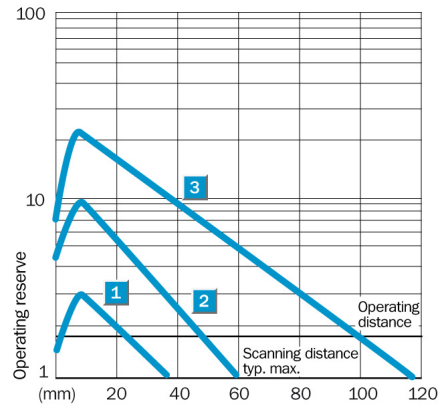


Sensing range diagram



- 1 Scanning range on black, 6 % remission
- 2 Scanning range on grey, 18 % remission
- 3 Scanning range on white, 90 % remission

Characteristic curve



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