



Photoelectric sensors Photoelectric retro-reflective sensor, Product group W160T

WL160T-F412



Model Name > [WL160T-F412](#)
Part No. > [6020489](#)



- Vertical models
- Very small light spot
- Short response time
- Detection of transparent objects; min. attenuation 20%
- Detection of smallest objects
- LED indicator: function reserve

The product has been discontinued on 31.07.2014. Please contact your SICK sales representative for more information about a replacement product.



Product features

Sensing range min ... max:	0.03 m ... 1.5 m, 0.03 m ... 2.2 m
Light source:	LED
Type of light:	Red light
Light spot diameter:	Approx. 2 mm at 70 mm distance
Laser:	Red light
Sensing range max.:	0.03 m ... 1.5 m, 0.03 m ... 2.2 m
Relating to:	Reflector PL80A
Sensitivity adjustment:::	Teach-in: single teach-in button & cable ^{1) 2) 3)}
Wave length:	665 nm

¹⁾ External teach-in (ET) ²⁾ PNP: control wire > 7 V ³⁾ NPN: control wire < 1.5 V

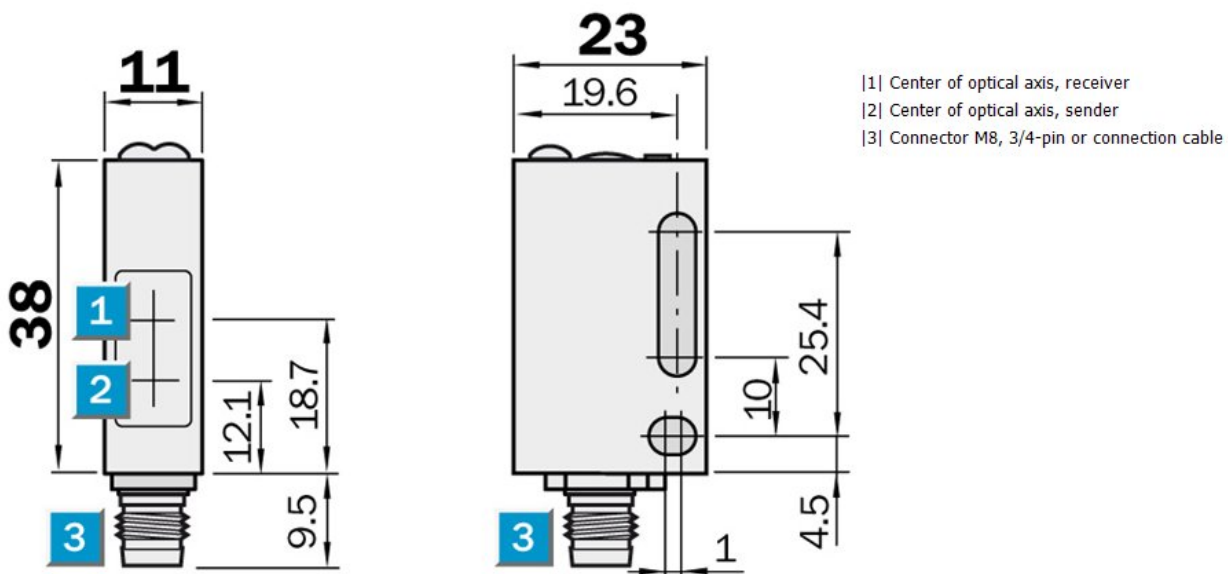
Technical data

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:	≤ 40 mA
Switching output:	PNP: open collector: Q
Switching mode:	Light/dark switching via rotary switch
Output current max.:	100 mA
Response time:	≤ 0.2 ms
Switching frequency:	2,500 Hz
Connection type:	Connector, M8, 4-pin

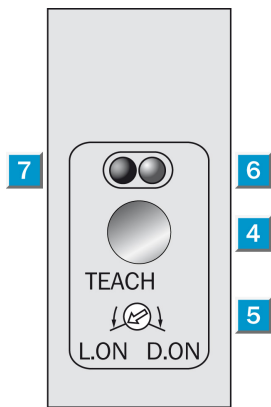
Circuit protection:	V _S connections reverse-polarity protected/In-/outputs short-circuit protected/Interference suppression/Outputs overcurrent and short-circuit protected
Enclosure rating:	IP 67: EN 60529, IP 69K: EN 40050
Ambient operation temperature, min ... max:	-25 °C ... ++55 °C
Ambient storage temperature, min ... max:	-40 °C ... ++70 °C
Weight:	Ca. 20 g
Housing material:	PBT
Series:	W160T
Optics material:	PMMA
Front screen heating:	-
Polarisation filter:	✓
Housing design:	Vertical
UL File No.:	NRNT2.E128350 & NRNT8.E128350
Signal voltage PNP HIGH/LOW:	V _S - 1.8 V/approx. 0 V

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

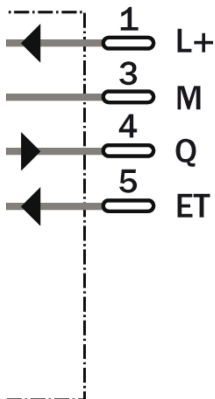
Masszeichnung



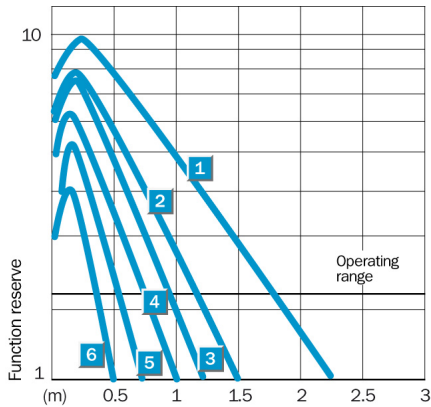
Einstell-Möglichkeiten



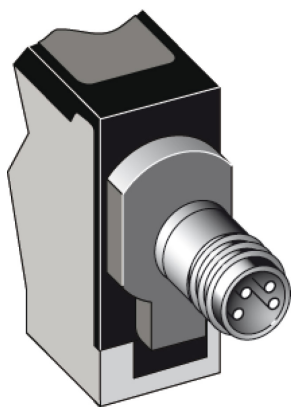
Anschluss-Schema



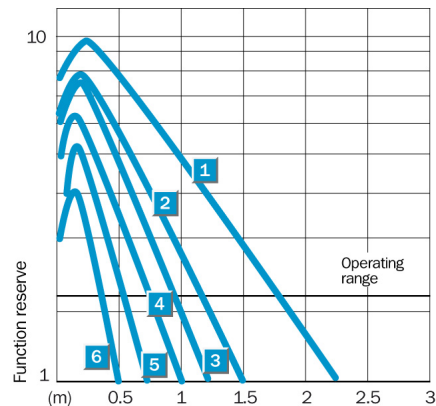
Light spot diameter



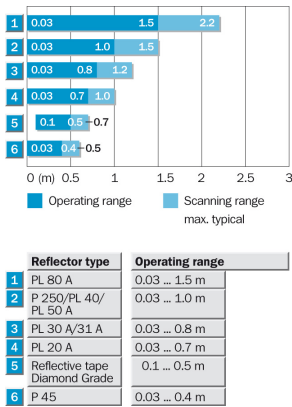
Anschlussart



% der Tastweite



Schaltabstand-Diagramm



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