

WL 260

Reflex/Retro-Reflective Sensors



0.03...45.9 ft (0.01...14 m)
sensing range

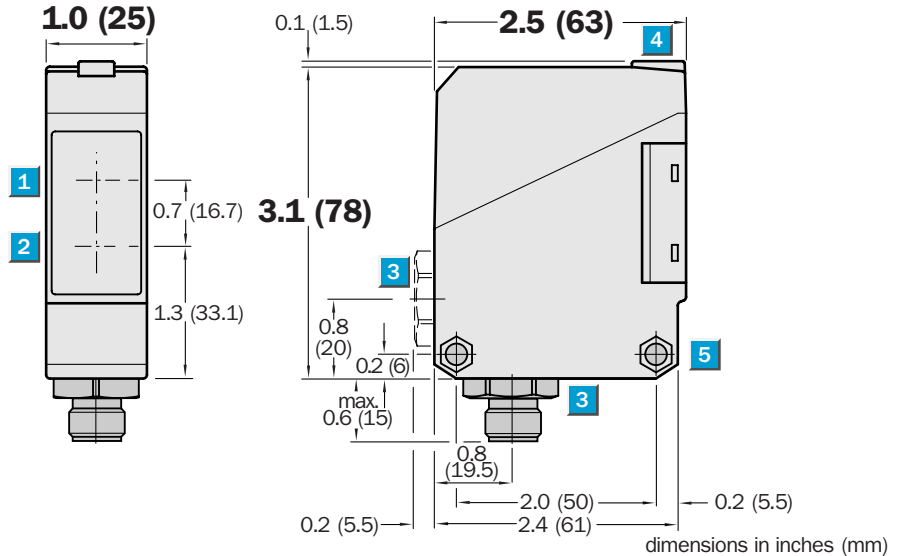
WL 260



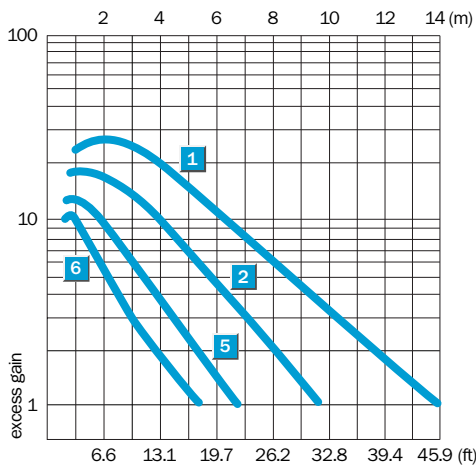
Highlights

- Rugged plastic housing
- Sensitivity adjustment
- Terminal chamber for connection flexibility
- Test input
- Signal strength indicator
- Polarizing filters prevent false readings on reflective surfaces
- Easy mounting with included nuts

Dimensional Drawing

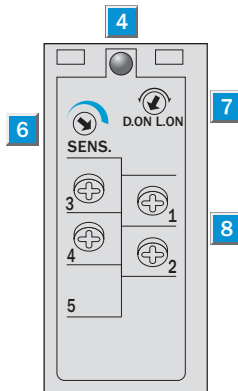


Excess Gain



Adjustments

All types



- Center of optical axis, receiver
- Center of optical axis, sender
- Cable entry gland 1/2"PF thread for cable diameters from 6 to 10 mm optionally at bottom or rear; or plug, M12, bottom
- LED signal strength indicator, yellow
- Through hole \varnothing 5.2 mm on both sides for M 5 hex nut
- Sensitivity adjustment
- Light/dark rotary switch
L.ON = light switching, D.ON = dark switching
- Terminals

Reflector Type	Sensing Range
1 PL 80 A	0.01...14.0 m
2 P 250	0.01...9.5 m
3 PL 50 A, PL 40 A	0.01...11.0 m
4 PL 30 A, PL 31 A	0.01...8.5 m
5 PL 20 A	0.01...7.0 m
6 Reflective tape diamond grade	0.02...5.5 m

Order Information	
Type	Part no.
WL 260-F270	6 020 976
WL 260-F470	6 020 977
WL 260-E270	6 020 978
WL 260-E470	6 021 814

Accessories	page
Cables and connectors	909
Mounting brackets*	924, 935
Reflector P 250*	936

* included with delivery

Technical Data		WL 260-	F270	F470	E270	E470					
Sensing range	0.03...31.2 ft (0.01...9.5 m)/P 250 (included)										
	0.03...45.9 ft (0.01...14 m)/PL 80 A										
Sensitivity	Adjustable, potentiometer 270°										
Light source¹⁾, light type	LED, visible red light, polarized										
Light spot diameter	Approx. 9.4 in at 26.2 ft (240 mm at 8 m)										
Angle of divergence	Approx. 1.7°										
Supply voltage V_s	10...30 V DC ²⁾										
Ripple ³⁾	≤ 5 V _{SS}										
Current consumption ⁴⁾	≤ 35 mA										
Switching outputs	PNP, open collector: Q										
	NPN, open collector: Q										
Output current I _A max.	100 mA										
Light receiver, switching mode	Light /dark switching by rotary switch										
Response time ⁵⁾	≤ 1.5 ms										
Max. switching frequency ⁶⁾	333 Hz										
Test input "TE" sender off	PNP: TE to + V _s										
	NPN: TE to 0 V										
Connection types	Terminal chamber										
	Plug, M12 4-pin										
VDE protection class⁷⁾	<input type="checkbox"/>										
Circuit protection⁸⁾	A, B, C, D										
Enclosure rating	IP 67/NEMA 6										
Ambient temperature T_A	Operation -13...131°F (-25...55°C)										
	Storage -40...158°F (-40...70°C)										
Approximate weight	4.2 oz (120 g)										
Housing material	Glass fiber reinforced ABS										

- 1) Average service life 100,000 h at T_A = 25°C
- 2) Limit values
- 3) Must be within V_s tolerances
- 4) Without load

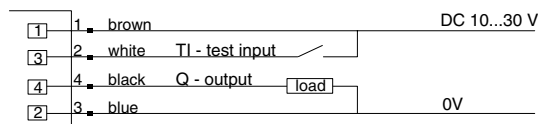
- 5) With resistive load
- 6) With light/dark ratio 1:1
- 7) Reference voltage 50 V DC

- 8) A = V_s connections reverse-polarity protected
- B = Inputs/outputs reverse-polarity protected

- C = Interference suppression
- D = Outputs overcurrent and short-circuit protected

Connection Diagram

PNP Models



wire colors refer to standard cable, not included

NPN Models

