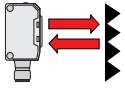


WL 150

Reflex/Retro-Reflective Sensors



0.02...7.9 ft (0.005...2.4 m)
sensing range



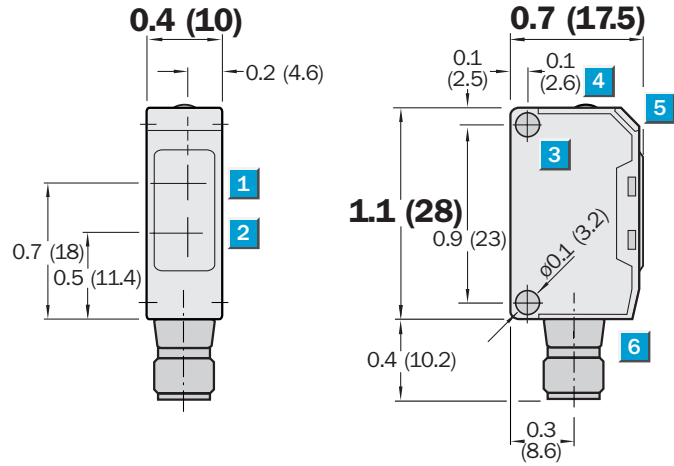
Highlights

- Rugged plastic housing
- Polarizing filter prevents false readings on reflective surfaces
- Also suitable for "Diamond Grade" reflective tape
- Sensitivity adjustment
- Red light for easy alignment
- Signal strength indicator
- Cable or M8 quick disconnect versions

WL 150

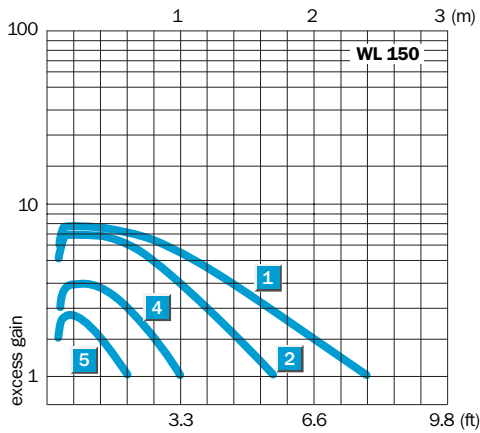


Dimensional Drawing



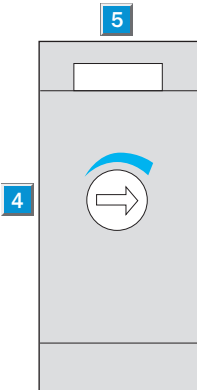
dimensions in inches (mm)

Excess Gain



Adjustments

All types



- 1 Center of optical axis, receiver
- 2 Center of optical axis, sender
- 3 Mounting hole \varnothing 3.2 mm
- 4 Sensitivity adjustment 270°
- 5 LED indicator, red:
Light received \geq switching threshold
- 6 Plug, M8 4-pin or cable

Reflector Type	Sensing Range
1 PL 80 A	0.01...2.4 m
2 P 250	0.01...1.7 m
3 PL 50 A or PL 40 A	0.01...1.7 m
4 PL 30 A or PL 31 A	0.01...1.5 m
5 PL 20 A	0.01...1.0 m
6 Reflect. tape diamond grade	0.01...0.6 m

Order Information	
Type	Part no.
WL 150-P132	6 011 036
WL 150-P430	6 011 038
WL 150-N132	6 011 033
WL 150-N430	6 011 035

Accessories	page
Cables and connectors	908
Mounting brackets Type A*	919
Reflectors**	936

* included with delivery

** reflector PL 20 A included with delivery

Technical Data		WL 150-	P132	P430	N132	N430					
Sensing range	00.02...3.3 ft (0.005...1.0 m)/PL 20 A (included)										
	00.02...7.9 ft (0.005...2.4 m)/PL 80 A										
Sensitivity, adjustable	Potentiometer 270°										
Light source³⁾, light type	LED, visible red light, polarized										
Light spot diameter	Approx. 5.9 in at 4.9 ft (150 mm at 1.5 m)										
Angle of divergence	Approx. 6°										
Supply voltage V_S	10...30 V DC ²⁾										
Ripple ³⁾	± 10%										
Current consumption ⁴⁾	≤ 20 mA										
Switching outputs	PNP, open collector: Q										
	NPN, open collector: Q										
Max. output current I _A	100 mA										
Operation mode ⁵⁾	Light/dark switching via control wire L/D										
	+ V _S = light switching										
	0 V = dark switching										
Response time ⁶⁾	≤ 0.5 ms										
Max. switching frequency ⁷⁾	1000 Hz										
Connection types	Cable, PVC, 2 m ⁸⁾ ; 4 x 0.18 mm ² , Ø 3.5 mm										
	Plug, M8 4-pin										
VDE protection class⁹⁾	<input type="checkbox"/>										
Circuit protection¹⁰⁾	A, B, C, D										
Enclosure rating	IP 67/NEMA 6										
Ambient temperature T_A	Operation -13...131°F (-25...55°C)										
	Storage -40...167°F (-40...75°C)										
Approximate weight	1.6 oz (44 g)										
	0.3 oz (7 g)										
Housing material	Glass fiber reinforced ABS										

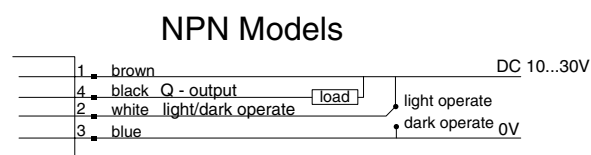
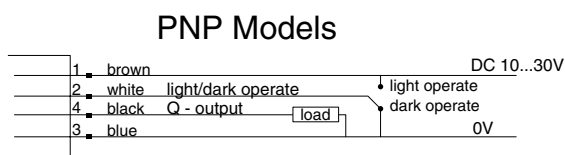
- 1) Average service life 100,000 h where T_A = 25°C
- 2) Limit values
- 3) May not exceed or fall short of V_S tolerances

- 4) Without load
- 5) Control cable open: NPN: light-switching PNP: dark-switching
- 6) Signal transit time with resistive load

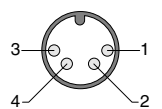
- 7) With light/dark ratio 1:1
- 8) Do not bend below 0°C
- 9) Reference voltage 50 V DC

- 10) A = V_S connections reverse-polarity protected
- B = Inputs and outputs reverse-polarity protected
- C = Interference pulse suppression
- D = Outputs overcurrent and short-circuit protected

Connection Diagram



M8 Connector



wire colors refer to standard cable, not included with quick disconnect models