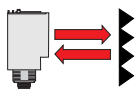


WL 2000

Reflex/Retro-Reflective Sensors



0...59 ft (0...18 m)

sensing range



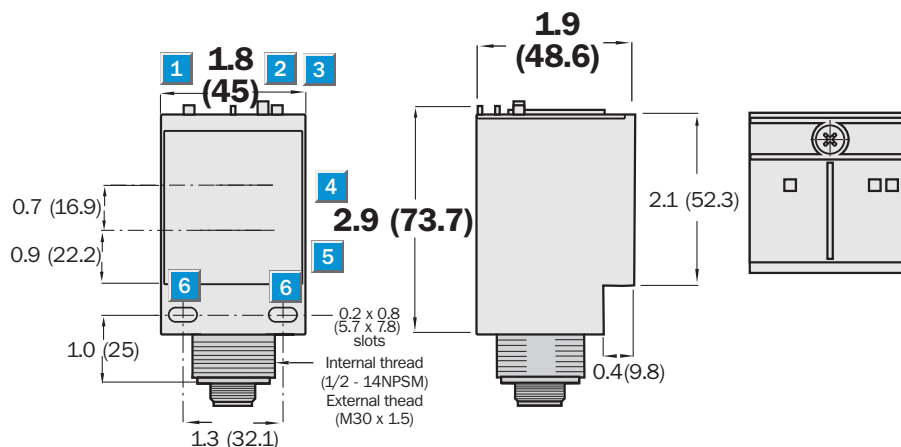
Highlights

- Rugged plastic housing
- Standard mounting for your existing applications
- Alarm output
- Crosstalk immunity
- Polarizing filters prevent false readings on shiny surfaces
- Red light for easy alignment
- Selectable time delays
- Cable or M12 quick disconnect versions

WL 2000

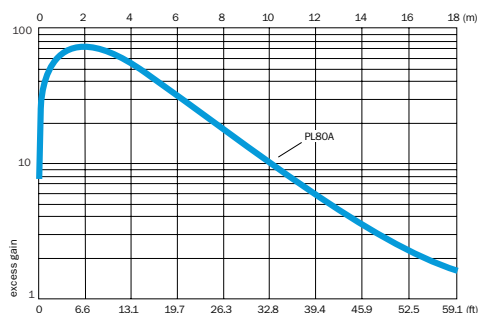


Dimensional Drawing



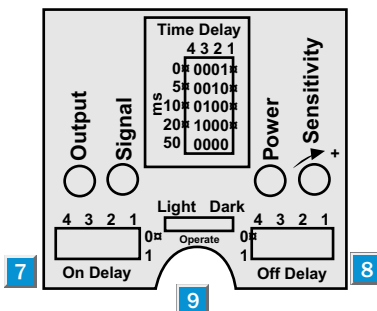
dimensions in inches (mm)

Excess Gain



Adjustments

All types



- 1 LED power indicator (green)
- 2 LED signal strength indicator (red)
- 3 LED output indicator (yellow)
- 4 Center of optical axis, sender
- 5 Center of optical axis, receiver
- 6 Mounting through-hole \varnothing 0.2 x 0.8 mm,
- 7 ON delay selector
- 8 OFF delay selector
- 9 Light/dark switching selector

Reflector Type

- 1 PL 80 A
- 2 PL 50 A
- 3 PL 40 A
- 4 PL 30 A
- 5 PL 20 A
- 6 Reflective tape diamond grade

Sensing Range

- | |
|----------|
| 1...15 m |
| 0...11 m |
| 0...11 m |
| 0...8 m |
| 0...8 m |
| 0...8 m |

Order Information

Type	Part no.
WL 2000-B1302	7 023 044
WL 2000-B1312	7 023 045
WL 2000-B1322	7 023 046
WL 2000-B5300	7 023 047
WL 2000-B5310	7 023 048
WL 2000-B5320	7 023 049
WL 2000-B4300	7 024 002

Accessories

Accessories	page
Cables and connectors	909
Reflectors	936
Mounting brackets	927

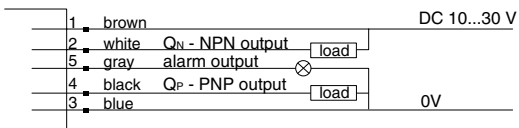
Sensing range	0...59 ft (0...18 m)									
Light source¹⁾, light type	LED, red light, 660 nm, polarized									
Light spot diameter	Approx. 12.5 in at 45.9 ft (320 mm at 14 m)									
Angle of divergence	Approx. 1.3°									
Supply voltage V_S	10...30 V DC									
Ripple ³⁾	≤ 5 V									
Current consumption ⁴⁾	≤ 80 mA									
Switching outputs	PNP or NPN, Q and \bar{Q}									
Voltage drop (Max.)	2 V									
Operation mode	Light/dark switching via switch									
Output current I _A max.	80 mA									
Response time ⁵⁾	≤ 1 ms									
Max. switching frequency ⁶⁾	500 Hz									
Alarm output	PNP									
Time delay settings	0, 5, 10, 20 or 50 ms									
OFF delay										
ON/OFF delay										
Connection types	Cable, 2 m, PVC									
	Plug, M12 5-pin									
	Plug, M12 4-pin									
VDE protection class⁸⁾	<input type="checkbox"/>									
Circuit protection⁹⁾	A, B, C									
Enclosure rating	IP 67/NEMA 6									
Ambient temperature T_A	Operation -13...104°F (-25...40°C)									
	Storage -40...158°F (-40...70°C)									
Approximate weight	5.3 oz (150 g)									
Housing material	Glass fiber reinforced plastic									

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

- 4) Without load
- 5) Signal transit time with resistive load
- 6) With light/dark ratio 1:1
- 7) Do not bend below 0°C
- 8) Reference voltage 50 V DC

- 9) A = V_S connections reverse-polarity protected
- B = Output Q and \bar{Q} short-circuit protected
- C = Interference pulse suppression

Connection Diagram



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

