



QM

QMRL/0P-0F

Photo.Min,PNP-NO/NC,M8 plug,Reflex
MINIATURIZED PHOTOELECTRIC SENSORS WITH HIGH
PERFORMANCE

OVERVIEW

- Cubic miniaturized photoelectric high-performance sensors with long sensing distance
- 2 kHz switching frequency, background suppression with mechanical adjustment
- Wide range of models: diffuse reflection with short, medium and long sensing distance, polarized, reflective for transparent objects, through-beam and background suppression
- Available with cable and M8 plug exit or with M8-M12 pig-tail
- Selectable LO/DO output state
- Completely filled with resin (except background suppression models)
- Complete protection against electrical damages



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	4m
Thermal drift of Sr	$\leq 10\%$ Sr
Repeat Accuracy	5%
Sensitivity adjustment	Trimmer

Minimum sensing distance (blind zone)	0,4m
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Application

Function Principle	Transparent objects
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Notes	On RL110 reflector
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Optic position	Radial 90°
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Outputs

Output type	PNP L/D Selectable
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Output Function	L/D Selectable
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Switching frequency	1Khz
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Response time	500μs
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Electrical data

Operating Voltage	10...30VDC
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No-Load supply current	≤ 30mA
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Load current	≤100mA
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Leakage current	≤10μA
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Output voltage drop	≤2V@Iload=100mA
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Max ripple content	≤10%
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LED indicators	Yellow (status output), green (stability)
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Time delay before availability	≤200ms
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	LED Red (630nm)
Interference to external light	3000lux (incandescent lamp), 10000lux (sunlight)
Impulsive Overvoltage Protection	Yes

Mechanical data

Dimensions	40,6x21x13mm
Weight	10g
Housing Material	PA66
Connections	M8 plug 4pin
Active Head Material	PMMA
Tightening torque	1Nm
Operating temperature	- 25°C...+ 70° C (Without freeze)
Storage temperature	- 30°C...+ 80° C (Without freeze)
Diameter/Dimension	Cubic

Test/Approvals

Approvals	CE cULus
EMC compatibility	EN 60947-5-2

Shocks and vibrations

Vibration IEC 60068-2-6 / Shock IEC 60068-2-27

Degree of protection

IP67

Generical Data

Dimensions

40,6x21x13mm

Operating Temperature

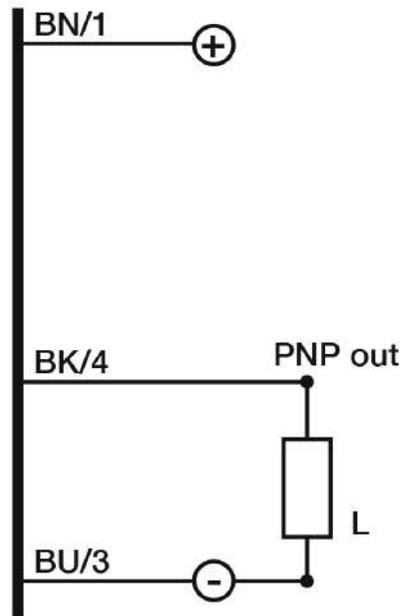
- 25°C...+ 70°C (Without freeze)

Mechanical Protection

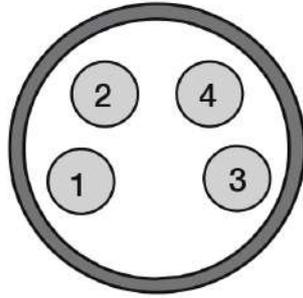
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CONNECTIONS

Electrical diagram

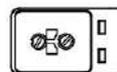
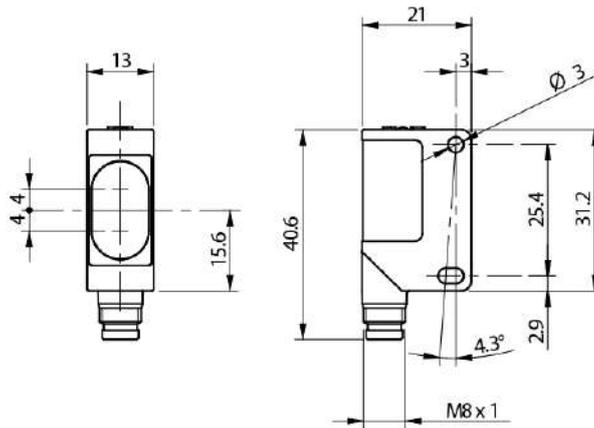


Connector

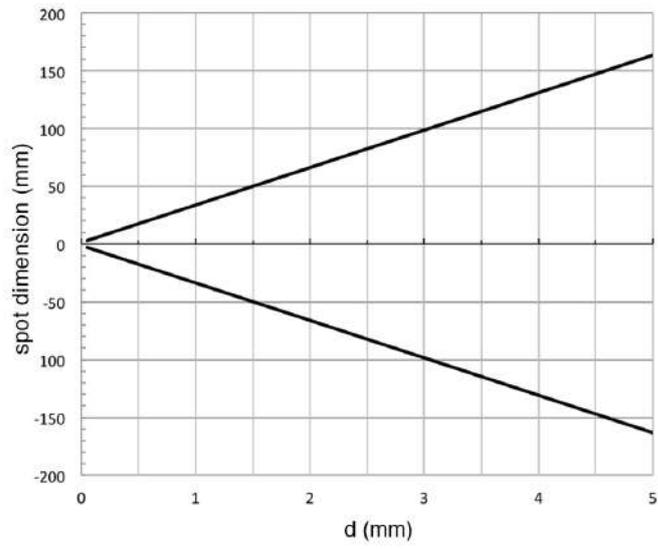


OTHERS

Dimensions



Response curves



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