



QF

QFRS/BN-1F

Photo.Min, NPN-NO+NC, M8 plug, BGS
METALLIC CUBIC MINIATURIZED PHOTOELECTRIC
SENSORS. FOR HARSH ENVIRONMENTS OR FOOD AND
BEVERAGE APPLICATIONS.

TECHNICAL FEATURES

Detection properties

Nominal sensing distance 200mm

Repeat Accuracy 5%

Sensitivity adjustment Trimmer

Minimum sensing distance (blind zone) 25mm

Application

Function Principle Diffuse reflection (medium distance, $\leq 600\text{mm}$)

Optic position Radial 90°

Outputs

Output type NPN NO+NC

Output Function NO+NC

Switching frequency	500Hz
Response time	1ms

Electrical data

Operating Voltage	10...30VDC
No-Load supply current	≤ 40mA
Load current	≤100mA
Leakage current	≤100μA
Output voltage drop	≤2V@Iload=100mA
Max ripple content	≤10%
LED indicators	Yellow (status output), green (stability, powerON)
Time delay before availability	≤200ms
Short-circuit protection	Short circuit (autoreset), Overvoltage
Reverse Polarity Protection	Polarity inversal, Impulsive voltage
Emission	LED Red (617nm)
Interference to external light	≤10000lux

Mechanical data

Dimensions	31,4x21x11mm
Housing material	Stainless steel AISI 316L

Weight	65g
Connections	M8 plug 4pin
Active Head Material	PPSU
Operating temperature	- 25°C...+ 60° C (Without freeze)
Storage temperature	-40° ... +70°C
Diameter/Dimension	Cubic

Test/Approvals

Approvals	CE cULus ECOLAB
EMC compatibility	EN 60947-5-2
Shocks and vibrations	Vibration IEC 60068-2-6 / Shock IEC 60068-2-27
Degree of protection	IP68, IP69K

Accessories

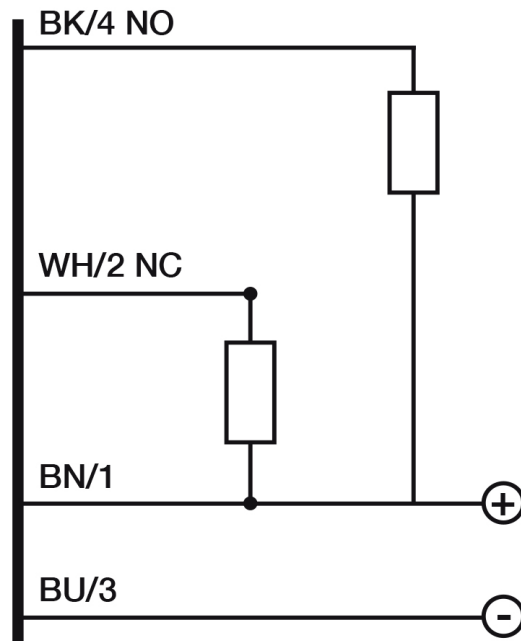
Supplied Accessories	Mouting bracket screwdriver
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Generical Data

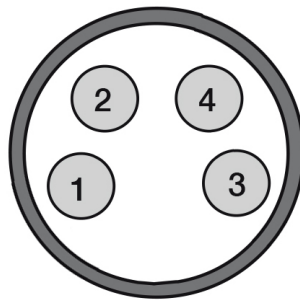
Dimensions	31,4x21x11mm
Operating Temperature	- 15°C...+ 55°C (Without freeze)
Mechanical Protection	IP68, IP69K

CONNECTIONS

Eletrical diagram

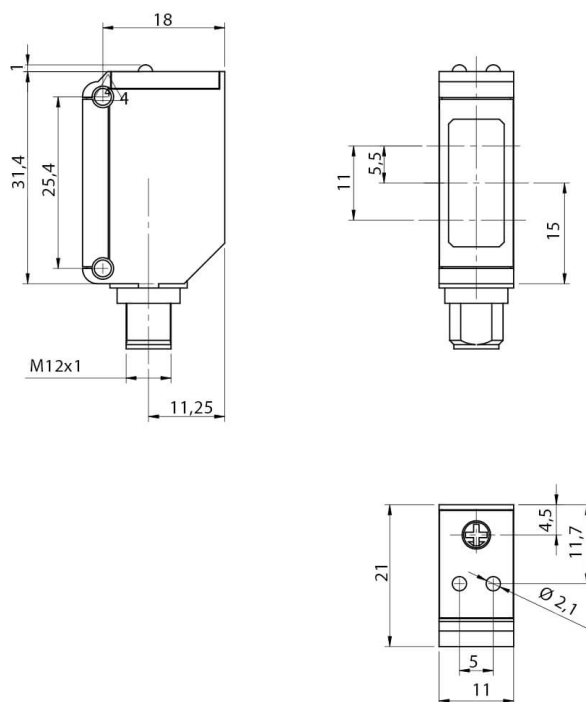


Connector

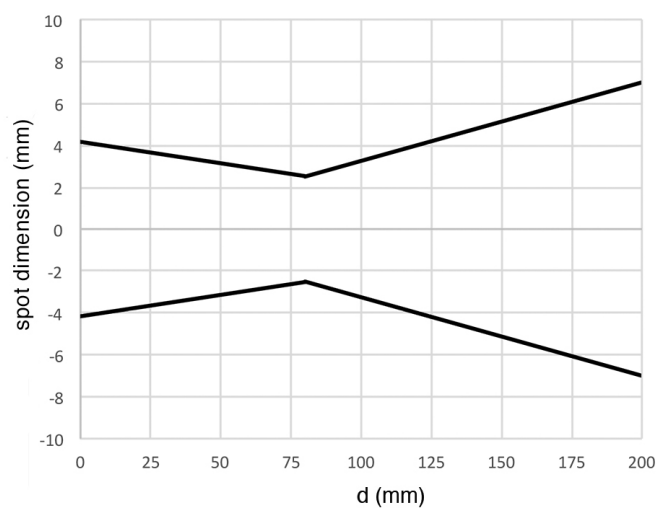


OTHERS

Dimensions



Response curves



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