



**QF**

**QFID/BN-1F**

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

## OVERVIEW



## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	15m
Repeat Accuracy	5%
Sensitivity adjustment	No

### Application

Function Principle	Diffuse reflection (medium distance, ≤600mm)
Emitter/Receiver	Receiver
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	$\leq 20\text{mA}$
Load current	$\leq 100\text{mA}$
Leakage current	$\leq 100\mu\text{A}$
Output voltage drop	$\leq 2\text{V}@I_{\text{load}}=100\text{mA}$
Max ripple content	$\leq 10\%$
LED indicators	Yellow (status output), green (stability, powerON)
Time delay before availability	$\leq 200\text{ms}$
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	LED Infrared (850nm)
Interference to external light	$\leq 60000\text{lux}$

Impulsive Overvoltage Protection	Yes
----------------------------------	-----

#### 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
----------------------	-----------------------------

#### Generical Data

Dimensions	31,4x21x11mm
------------	--------------

Operating Temperature

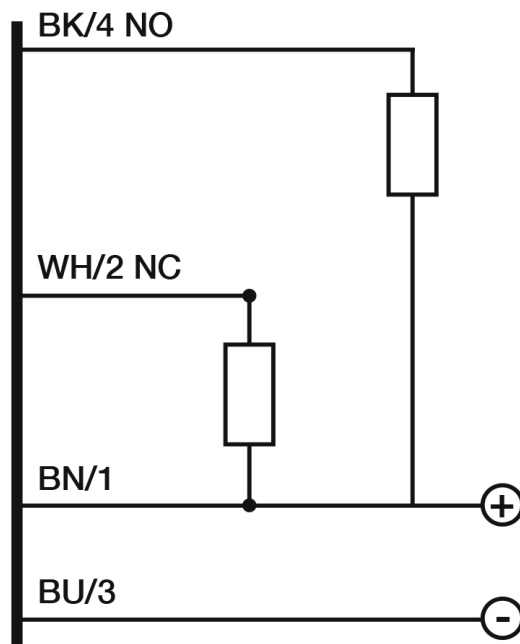
- 15°C...+ 55°C (Without freeze)

Mechanical Protection

IP68, IP69K

## CONNECTIONS

Electrical diagram

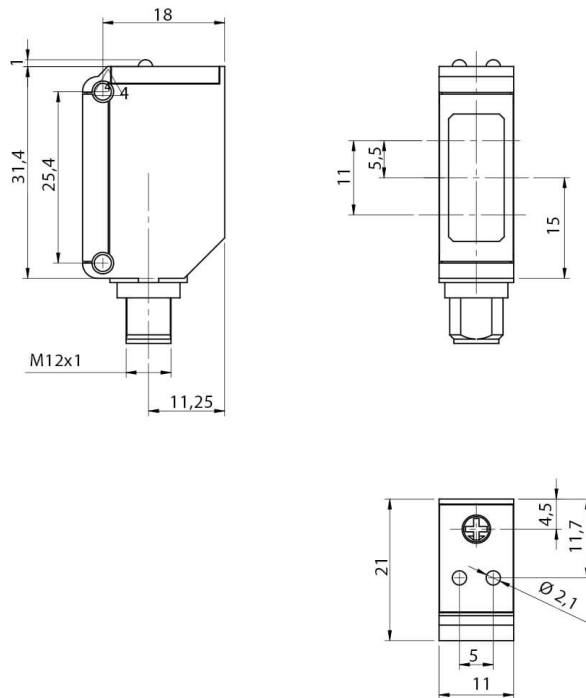


Connector

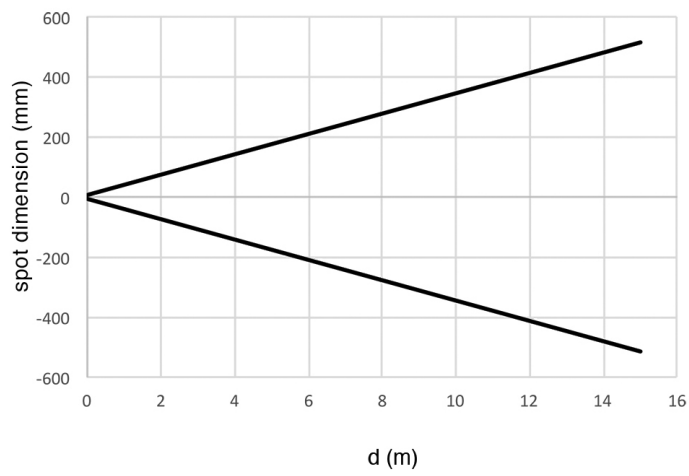


## OTHERS

### Dimensions



### Response curves



**Datasensing  
S.r.l.**

Strada S.Caterina, 235  
41122 Modena (MO)  
Tel. 059 420411  
Fax 059 253973  
E-mail  
info@datasensing.com

**date of  
printing**  
28/05/2026  
19:36:23