



BX80

BX80B/1P-0H

Area Sen, H=70mm-6mm pitch,Receiver
HIGH RESOLUTION CUBIC HOUSING AREA SENSOR

OVERVIEW

- Controlled height 70 mm
- Operating distance up to 2 m
- Microprocessor based circuit
- Sensitivity adjustment
- Strong cubic housing
- Special version with metallic enclosure for high-duty use
- Protection degree IP67
- Complete protection against electrical damages



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	0,3 ... 2m
--------------------------	------------

Thermal drift of Sr	≤10%
---------------------	------

Beams space	6mm
-------------	-----

controlled height	70mm
-------------------	------

minimum detectable object	Ø 5mm
---------------------------	-------

number of rays	12
----------------	----

Application

Function Principle	Receiver
--------------------	----------

Outputs

Output type	PNP
-------------	-----

Output Function	NO/NC
-----------------	-------

Response time	10ms
---------------	------

Electrical data

Operating Voltage	12...24 VDC
-------------------	-------------

No-Load supply current	50mA
------------------------	------

Load current	≤100mA
--------------	--------

Leakage current	10μA
-----------------	------

Output voltage drop	≤1.2V Iload =100mA
---------------------	--------------------

Max ripple content	≤ 10%
--------------------	-------

LED indicators	Green (powerON), red (alignment), yellow (output state)
----------------	---

Time delay before availability	500ms
--------------------------------	-------

Short-circuit protection	Yes (auto reset)
--------------------------	------------------

Reverse Polarity Protection	Yes
-----------------------------	-----

Interference to external light	1.500 lux max. (incandescent lamp), 4.500 lux max. (sunlight)
--------------------------------	---

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

Mechanical data

Dimensions	44mm x 120mm x 20mm
------------	---------------------

Housing material	PBT
------------------	-----

Weight	260 ... 300g
--------	--------------

Connections	M12 plug
-------------	----------

Active Head Material	PC
----------------------	----

Tightening torque	25Nm
-------------------	------

Operating temperature	-25°C...+50°C (without freeze)
-----------------------	--------------------------------

Storage temperature	-40°C...+80°C
---------------------	---------------

Test/Approvals

Approvals	CE cULus
-----------	----------

EMC compatibility	IEC 60947-5-2
-------------------	---------------

Shocks and vibrations	IEC EN 60947-5-2
-----------------------	------------------

Degree of protection	IP67
----------------------	------

Accessories

Supplied Accessories	2 nuts M18x1 - 1 adjustment key - 1 90°angled brackets
----------------------	--

Generical Data

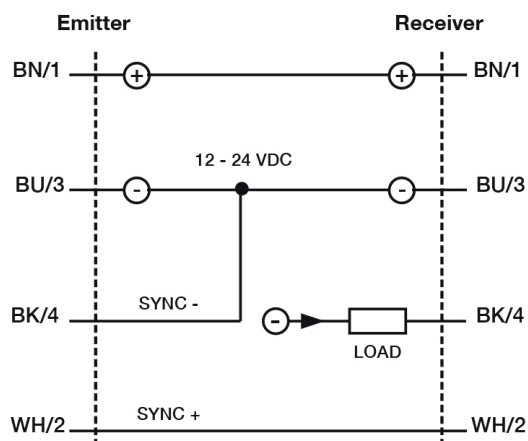
Dimensions 45x145x20

Operating Temperature -25°C...+50°C (without freeze)

Mechanical Protection IP67

CONNECTIONS

Electrical diagram



BN brown

BU blue

BK black

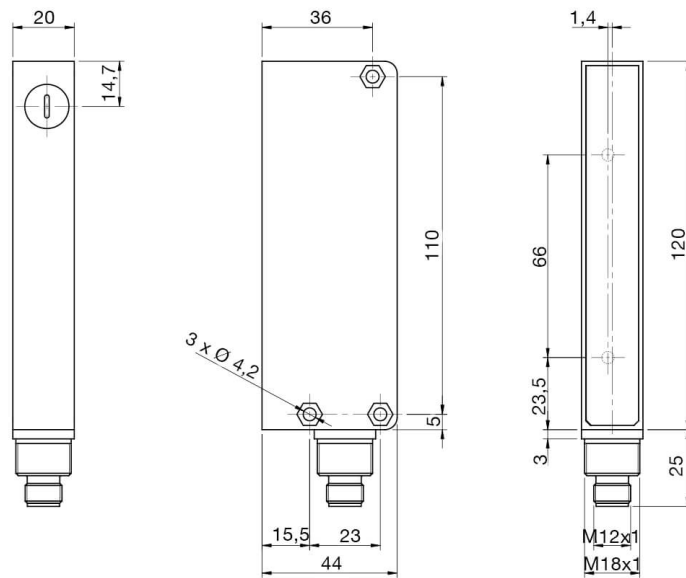
WH white

Connector



OTHERS

Dimensions



**Datasensing
S.r.l.**

Strada S.Caterina, 235
41122 Modena (MO)

**date of
printing**
13/06/2026
11:46:00

Tel. 059 420411
Fax 059 253973
E-mail
info@datasensing.com