



# CX2

## CX2E0RB/05-032V

Area Sen, H=320mm-5mm  
pitch,E+R,NPN+PNP

AREA SENSORS WITH HIGH RESOLUTION AND COMPACT  
HOUSING WITH DIGITAL AND ANALOGUE OUTPUT

## OVERVIEW

- Parallel beams and floating crossbeams with variable amplitude
- Synchronization by cable. Pitch 5, 10 and 20mm
- Control height up 480mm (pitch 5mm) and up 960mm (pitch 10mm and 20mm)
- Maximum operating distance up to 3m (for 5mm pitch) and 6m (for 10mm and 20 pitch)
- Digital outputs NPN and PNP ; analogue current output (4...20mA) and analogue voltage output (0..10V), mix outputs : digital PNP and analogue voltage output (0..10V)
- Adjustment by teach-in , 2 levels of adjustment
- Blanking function . Available analogue versions TOP BEAM



## TECHNICAL FEATURES

### Detection properties

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

Beams space	5mm
-------------	-----

controlled height	320mm
-------------------	-------

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

number of rays	65
Sensitivity adjustment	Teach-in by wire

### Application

Function Principle	emitter/receiver
--------------------	------------------

### Outputs

Output type	NPN + PNP
-------------	-----------

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

Switching frequency	18,1Hz
---------------------	--------

### Electrical data

Operating Voltage	16,8... 30Vdc
-------------------	---------------

No-Load supply current	$\leq 330\text{mA}$
------------------------	---------------------

Load current	$< 100\text{mA}$
--------------	------------------

Leakage current	$\leq 10\mu\text{A}$
-----------------	----------------------

Output voltage drop	$< 1,5\text{V @ } 100\text{mA}$
---------------------	---------------------------------

Max ripple content	$< 1,2\text{Vpp}$
--------------------	-------------------

LED indicators	Blue, red and yellow (emitter) - green, red and yellow (receiver)
----------------	---

Time delay before availability	$< 3\text{s}$
--------------------------------	---------------

Short-circuit protection	Yes
--------------------------	-----

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

Emission	Infrared (850nm)
Interference to external light	IEC EN 60947-5-2
Impulsive Overvoltage Protection	Yes

#### Mechanical data

Dimensions	20mm x 329mm x 35mm
Weight	750g
Housing Material	Aluminium
Connections	M12 4pin + cable PVC 200mm ; M12 8pin + cable PVC 200mm
Active Head Material	PMMA
Operating temperature	-10°C...+ 55° C (without freeze)
Storage temperature	- 25°C...+ 60° C (without freeze)

#### 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	ST151 fixing kit
----------------------	------------------

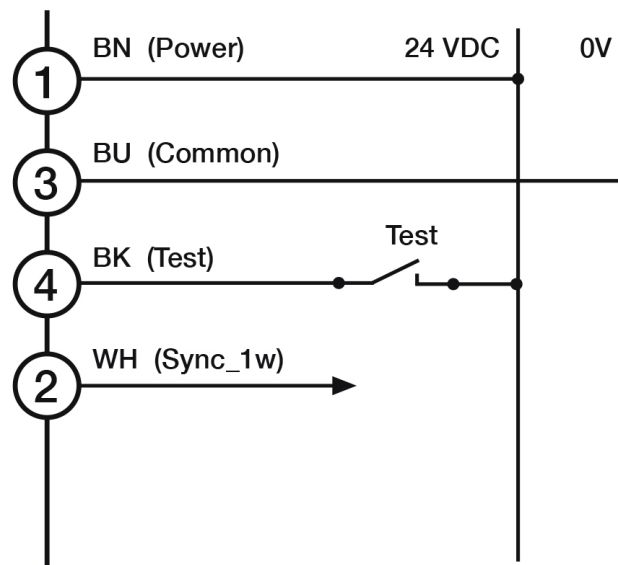
## Generical Data

Dimensions	329x36x20
Operating Temperature	-10°C...+ 55° C (without freeze)
Mechanical Protection	IP67

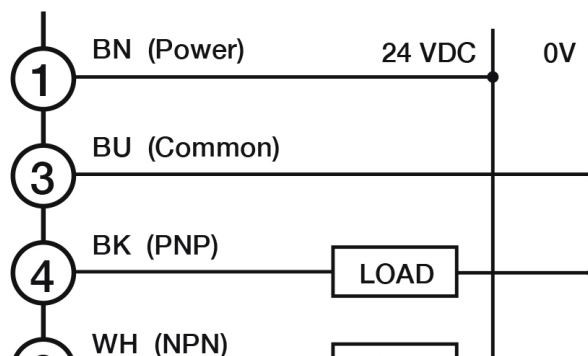
# CONNECTIONS

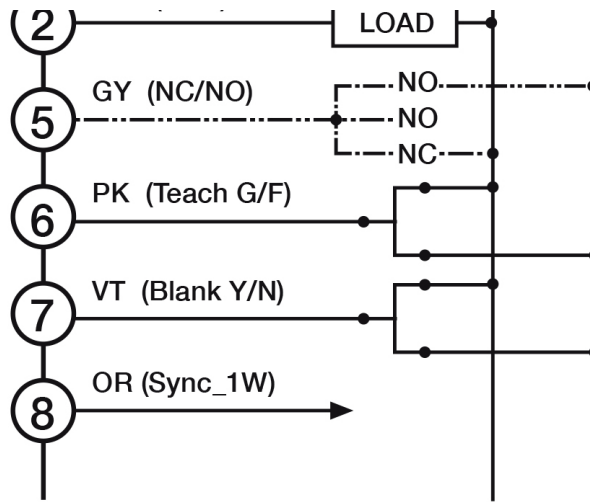
## Eletrical diagram

### CX2E0



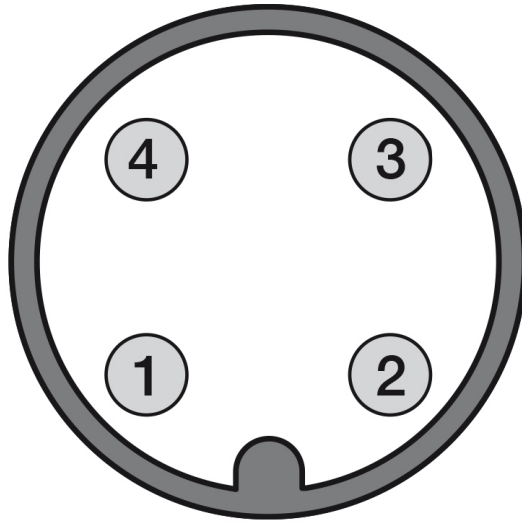
### CX2RB





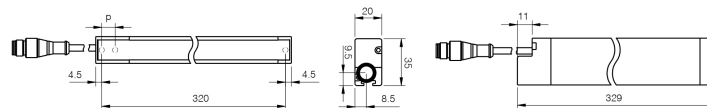
<b>G</b>	coarse calibration	<b>F</b>	fine calibration
<b>BK</b>	black	<b>BU</b>	blue
<b>BN</b>	brown	<b>GY</b>	gray
<b>RD</b>	red	<b>WH</b>	white
<b>PK</b>	pink	<b>VT</b>	violet
<b>OR</b>	orange		

Connector



## OTHERS

### Dimensions



$$H (\text{barrier height}) = h (\text{controlled height}) + 9 \text{ mm}$$

**Datasensing  
S.r.l.**

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

**date of  
printing**

11/04/2025  
10:53:58