



# CX2

## CX2E0RB/10-096V

**Area Sen, H=960mm-10mm  
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 ... 6m |
| Beams space               | 10mm       |
| controlled height         | 960mm      |
| minimum detectable object | Ø 10mm     |

|                |    |
|----------------|----|
| number of rays | 97 |
|----------------|----|

|                        |                  |
|------------------------|------------------|
| Sensitivity adjustment | Teach-in by wire |
|------------------------|------------------|

Application

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

Outputs

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

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

|                     |        |
|---------------------|--------|
| Switching frequency | 12,3Hz |
|---------------------|--------|

Electrical data

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

|                        |        |
|------------------------|--------|
| No-Load supply current | ≤330mA |
|------------------------|--------|

|              |         |
|--------------|---------|
| Load current | < 100mA |
|--------------|---------|

|                 |        |
|-----------------|--------|
| Leakage current | ≤ 10μA |
|-----------------|--------|

|                     |                |
|---------------------|----------------|
| Output voltage drop | < 1,5V @ 100mA |
|---------------------|----------------|

|                    |          |
|--------------------|----------|
| Max ripple content | < 1,2Vpp |
|--------------------|----------|

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

|                                |      |
|--------------------------------|------|
| Time delay before availability | < 3s |
|--------------------------------|------|

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

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

|                                  |                  |
|----------------------------------|------------------|
| Emission                         | Infrared (880nm) |
| Interference to external light   | IEC EN 60947-5-2 |
| Impulsive Overvoltage Protection | Yes              |

Mechanical data

|                       |                                                         |
|-----------------------|---------------------------------------------------------|
| Dimensions            | 20mm x 969mm x 35mm                                     |
| Housing material      | Aluminium                                               |
| Weight                | 2700g                                                   |
| 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

969x36x20

Operating Temperature

-10°C...+ 55° C (without freeze)

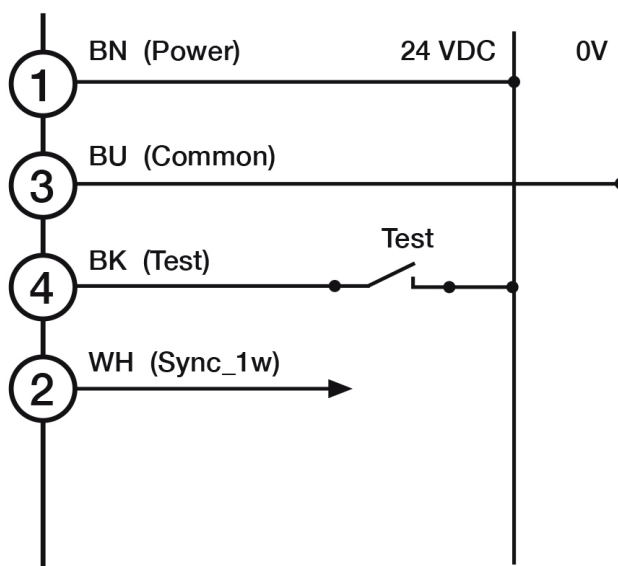
Mechanical Protection

IP67

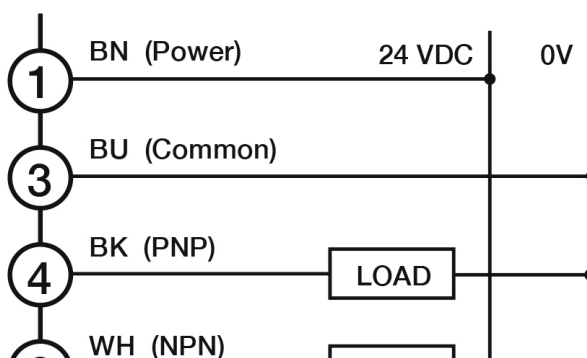
# CONNECTIONS

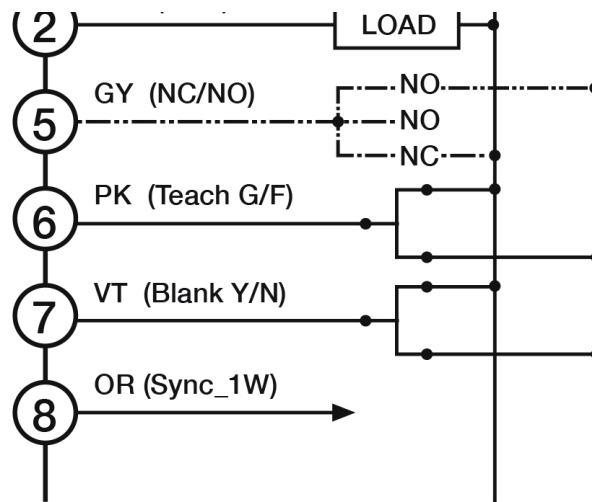
Eletrical diagram

**CX2E0**



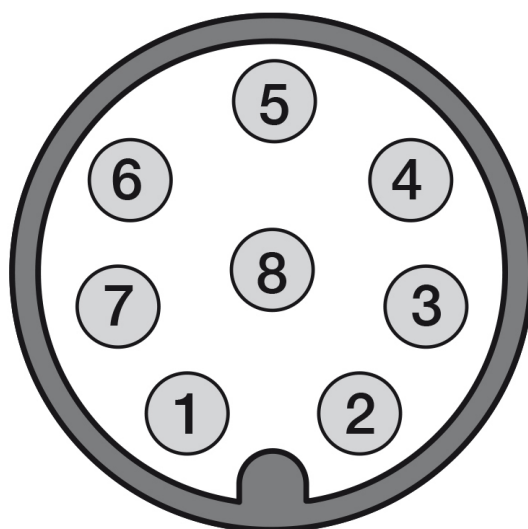
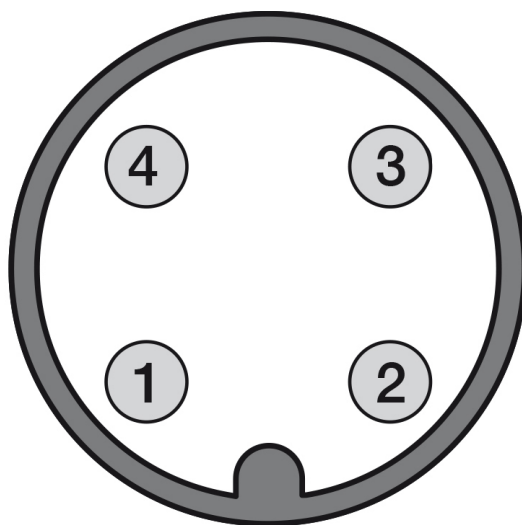
**CX2RB**





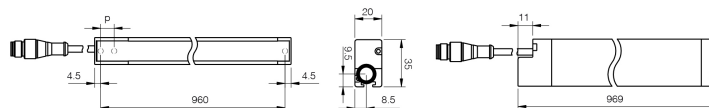
|           |                    |           |                  |
|-----------|--------------------|-----------|------------------|
| <b>G</b>  | coarse calibration | <b>F</b>  | fine calibration |
| <b>BK</b> | black              | <b>BU</b> | blue             |
| <b>BN</b> | brown              | <b>GY</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)

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