**SERIE BX80**

**MANUALE DI INSTALLAZIONE**

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**SCHIEMI DI COLLEGAMENTO**

<table>
<thead>
<tr>
<th>Unità PMP</th>
<th>Ricevitore</th>
<th>SCHEMA DI COLLEGAMENTO</th>
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**COCCODI EOLICI**

<table>
<thead>
<tr>
<th>1-Bt</th>
<th>2-Bt</th>
<th>3-Bt</th>
<th>4-Bt</th>
<th>5-Bt</th>
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<tbody>
<tr>
<td>Blu</td>
<td>Bianco</td>
<td>Nero</td>
<td>Grigio</td>
<td>Grigio</td>
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</tbody>
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**CODICI VARIANTE**

<table>
<thead>
<tr>
<th>Codice</th>
<th>Applicabile</th>
<th>Descrizione</th>
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<tbody>
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**DESCRIZIONE GENERALE**

Serve per area di ad alta risoluzione composto da una coppia proiettore e ricevitore con 12 ottiche e scale ottiche obbligate. Il proiettore è calibrato in un nuovo contenitore per il miglioramento della qualità ottica. Il ricevitore è progettato per un'ottima qualità ottica nelle condizioni di illuminazione non ottimali.

**DESCRIZIONE DEL CODICE**

<table>
<thead>
<tr>
<th>Codice</th>
<th>Breve Descrizione</th>
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**DESENGERI MECANICI**

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<thead>
<tr>
<th>Modello</th>
<th>SX</th>
<th>WX</th>
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<tr>
<td>SX</td>
<td></td>
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<td>WX</td>
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**ATTENZIONE**

Questo prodotto non è un componente di sicurezza e non deve essere usato in applicazioni di salvaguardia della sicurezza delle persone.
For ATEX models read the instructions safety before installation

**GENERAL DESCRIPTION**

High-resolution area sensor made up of 4 cross- 

corder and receiver with 17 optics and 

called spectrometer. The product is contained in a 


**SUPPLIED INFORMATION**

- 1.8 x 1.2 cm media transfering optical 
- 3.5 x 11.5 cm x 11.5 cm potted circuit 
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- 3.5 x 11.5 cm x 11.5 cm potted circuit 

**CONNECTORS**

- In case of combined load, resistance and 
- capacity, the maximum admissible 
- capacity is 100 W for all types of 
- voltage and current.

**INSTALLATION**

- Make sure that the operating voltage is 
- correctly stabilized with a maximum ripple 
- being within the specified value as stated in 
- the catalogue.

- In the event that the noise induced by the 
- power lines is greater than that specified by 
- the EC regulation (interference immunity), 
- detect the sensor cables from the power and 
- high voltage lines and insert the cable in 
- an earthed metal conduit. Furthermore, it 
- is advisable to connect the sensor directly 
- to the supply source and not downstream of 
- other devices.

- To extend the supply and output cables, a 
- cable with a maximum cross-section of 1 x 1 mm² must be used. The length of such an 
- extension is limited to a maximum of 100 m (with respect to a minimum voltage and 
- current, 100 mA).

- The sensor will become auto-calibrated 
- once the supply voltage is applied. During 
- this time, the outputs will be off.

- The use of the brackets ST 16 C is advisable 
- for a perfect mounting and alignment.

- Do not allow dust, water and condensation to 
- deposit on the optics.

- Avoid exposing the optical to 
- organic solvents.

- Do not allow strong light or sunlight to fall 
- directly onto the optics of the receiver.

- For cleaning, use a damp cloth and then 
- dry with a soft cloth.

- In case of systems standing inside, in order 
- to avoid interference, it is necessary to keep 
- a minimum distance between the two 
- optical axes. This distance must be 
- directly proportional to the operating 
- distance: it can be 50 m with respect to 
- an operating distance of 100 m, 100 m 
- with respect to operating distances of 2 m.

**Alignment/Adjustment**

1. Place the optic windows, opposite 

2. Check that the distance between emitter 
- and receiver is the same as specified for 
- the model in use.

3. Prepare the bracket so that the difference 
- between the axes of two optos (and 
- between the axes of the two optos) is 
- as close as possible.

4. Power the system. The green LEDs will turn 
- on, indicating that the power is correct. 
- Turn the receiver to turn on the first 
- green LED. The red LED on the emitter will 
- have to be switched on, and verify in this way the 
- presence of the correct synchronizations.

5. Correct the direction of the emitter by 
- observing the position of the red LED and 
- verifying the position in which the LED 
- completely switches on or off a weak 
- light impact on the receiver.

6. Correct the direction of the receiver by 
- observing its red LED until it is completely 
- switched on or off a weak light. Fasten 
- temporarily the receiver in this position.

7. Repeat points 5 and 6 until you reach 
- a defined tolerance of at least 3 ° for 
- the emitter and a ± 1 ° for the receiver.

8. If you want to increase the sensitivity, 
- in the event that the position of the 
- optical axes is correct, the tolerance 
- of ± 1 ° must be used. The points from 
- 8 to 10 describe how to 
- find the best possible signal range, 
- the perfect alignment of the optoemitter 
- and receiver, to make it see in particu- 
- lar hard environmental signals. For the use in 
- normal conditions, it is sufficient to obtain 
- the red LED switching off.

9. Turn the trimmer on the emitter 
- anticlockwise until a weak light 
- appears on the receiver red LED.

10. Improve the position by rotating 
- points 8 and 9 until the trimmer is to 
- the maximum.

11. To detect small objects, turn the trimmer 
- clockwise of some degree more than 
- the position in which the LED switching 
- off was obtained.

12. Check the detection of the required diame-
- ters, if any.

Analog output:

- In addition to the logic output PNP or NPN, 
- the models with analog output are equipped 
- with further output controlled by analog and 
- current and a maximum of 100 mA, 
- allowing for the digital inputs, 
- between 5 and 10 mA, the power to 
- the load.

- The analog output is controlled by steps, 
- increasing the K parameter, the K function 
- does not change by steps of 5, corresponding 
- to the change of the index or position 
- of the object detected.

- The analog output progresses by steps, 
- increasing the K parameter, the K function 
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