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#### **Model Number**

#### OM-VB14N

oscillating mirror for the VB14N barcode scanner series

#### **Function**

The OM-VB14N oscillating mirror is an accessory for the VB14N barcode reader series. It is designed to generate homogeneous and adjustable raster reading through deflection of the scanning laser beam.

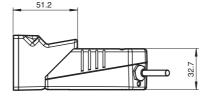
The system consists of the oscillating mirror attached to the scanner and allows a surface instead of a line to be observed; versatility and reading accuracy are therefore increased in "Picket Fence" reading mode.

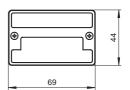
Some examples are given in the following cases: codes presented at different "heights" on the reading surface; codes with printing defects.

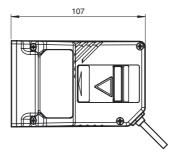
The electronic and electromechanical components controlling the mirror movement are contained inside the rugged metal casing, which guarantees protection class IP65 when the OM-VB14N is mounted correctly onto the scanner

The OM-VB14N is directly powered from the scanner through a connector which is accessible after removing the scanner cover (see assembly instructions).

#### **Dimensions**







### **Technical data**

General specifications		
Reading angle		10 40 $^{\circ}$ , adjustable
Nominal ratings		
Oscillator frequency	$f_O$	0.5 4 Hz , adjustable
Electrical specifications		
Operating voltage	$U_B$	10 30 V DC
Operating current		max. 40 mA @ 10 V DC
Power consumption	$P_0$	max. 1 W @ 30 V DC
Inrush current		1.2 A @ 10 V DC at max. duration = 100 ms
Output		
Response time		max. 1 ms
Ambient conditions		
Ambient temperature		0 45 °C (32 113 °F)
Storage temperature		-20 70 °C (-4 158 °F)
Relative humidity		90 % , noncondensing
Shock resistance		IEC 68-2-6 FC 0,5 G at 9 150 Hz 2 hours on each axis
Vibration resistance		IEC 68-2-27 Test EA 30G; 11 ms; 3 impacts on each axis
Mechanical specifications		
Protection degree		IP65 (with correct installation on the barcode scanner)
Connection		Device connector , 4-pin
Mass		approx. 160 g

## Mounting oscillating mirror

Avoid any contact with the oscillating mirror, mirrored rotor, the lenses or other optical components; otherwise the performance of the reader will be reduced.

- 1. Turn off the device.
- 2. Remove the VB14N scanning window unscrewing the two cover screws.
- 3. Bring the oscillating mirror close to the scanner and insert the cable into the power connector of the scanner.
- 4. Make sure the cable doesn't remain in the path of the mirror movement.

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5. Check that the seal is correctly positioned and then after having aligned the oscillating mirror onto the scanner, fix it using the two screws.