



sense
by MACO
Universal

Product description

The products in the Sense by MACO family are radio-based sensors designed for concealed installation in the rebate area of windows, sliding doors or entrance doors made of PVC, timber or aluminium and combinations thereof. They can detect the locking status (open/closed) of the building element, are intended for integration into smart home systems and support the Matter (Matter-over-Thread) communication standard, which is used to transmit the status of the sensor to the smart home system via radio. A Thread border router and the correct functioning of the smart home system are a prerequisite for the reliable operation of the wireless sensors and is the responsibility of the end user. The product is intended for use in residential, commercial and light industrial environments only.

EU Declaration of Conformity



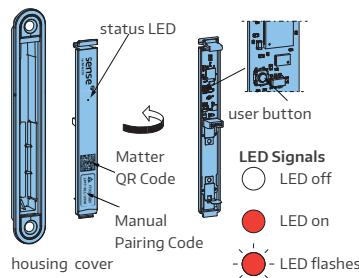
Technische Daten

Material (housing)	PC/ABS
Order Number	481965
Colour	black
round	140.0 x 20 x 13.8 mm
Dimension square	138.5 x 20 x 13.8 mm
square 24 mm	143.5 x 24 x 13.8 mm
Operating temperature	-10 ... +55°C
Air humidity	≤95%, non-condensing
Storage temperature	-25 ... +70°C
User groups	private users
Utilisation environment	rooms closed on all sides
Frequency bands	IEEE 802.15.4-2006 2400–2483.5 MHz
Transmission power	Bluetooth: +8dBm Thread: +8dBm
Power supply	1x Battery AAA 1.5V
Battery life	approx. 2 years
Operating voltage	1.5V
User interface	1x User button 1x status LED (red)
Communication interface	Matter Bluetooth Thread
IP-Class	IP51 when installed
Certificate	CE

Content

- 1x Sense by MACO | Universal
- 1x Round cover plate
- 1x Square cover plate for eurogroove
- 1x Square cover plate 24 mm
- 1x Package insert

Overview



Important note!

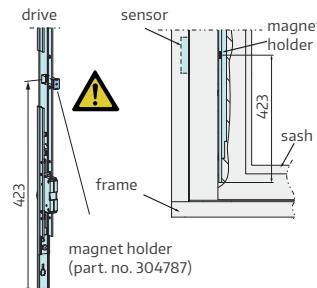
If building elements are not set or maintained in accordance with the specifications, there may be problems with the correct detection or signalling of the status. It is therefore recommended to have the relevant element checked or serviced by a specialised company before commissioning the sensor.

Mounting

Sense by MACO | Universal is universal and versatile. Depending on the installation situation, the sensor can be used for lock monitoring in lift and slide elements (1a) or for opening and lock monitoring in other elements (1b). Start with point 1a or point 1b depending on the application.

Installation in lift & slide elements (lock monitoring):

- 1a. Clip the magnetic holder (part no. 304787) into the appropriate hole in the gearbox. Install the gearbox in accordance with the instructions.



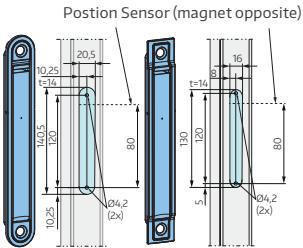
Notice: Avoid contamination with oil, grease, dust or contact with water. If contamination occurs, the sensor must be cleaned with a soft, non-linting cloth.

Caution: Warning of magnetic fields!
Magnets can destroy electronic and mechanical components. Please remove such objects from the installation area.

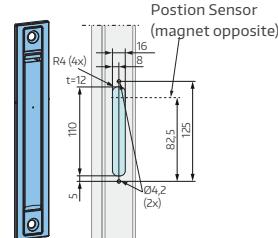
Installation in windows or doors (opening or lock monitoring):

- 1b. For opening monitoring, Sense by MACO | Universal works with various magnets (e.g. 373147 or 455428, not included). Lock monitoring is also possible with a magnetic pin from MACO MULTI hardware. Choose a suitable magnet and position it in the frame or sash to clearly differentiate between closed (magnet facing) and open (magnet out of sensor range) positions.
2. Select the appropriate cover plate for the profile system, position the sensor opposite the magnet at the height of the positioning notch and mill the appropriate cut-out in the frame. Drill with 2x Ø 4.2.

Round cover plate Square cover plate

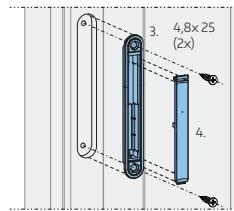


Square cover plate 24 mm



Notice: Do not use a power tool as excessive tightening of the screws damages the housing.

3. Mount the housing with suitable screws. Ensure correct alignment. Tighten the screws hand-tight (<1 Nm).
4. Close the housing with the cover and check the proper mechanical function of the component. The mounting process is now completed. All further steps have to be carried out by the end user.



Start-up and battery replacement

1. Open the housing.
2. Insert a suitable battery (AAA 1.5 V, not included). The LED lights up briefly. Leave the housing open if you need to continue with the start-up process; you can close the housing if you are just changing the battery.
3. The device will automatically enter pairing mode, indicated by the flashing of the status LED.
4. Open the App of your Matter-compatible smart home system.

Please note that the necessary steps may vary depending on the app.

5. Click on „Add device“.
6. Select „Matter-compatible device“.
7. Scan the Matter QR-code printed on to the device. Alternatively, you can use the 11-digit code to set up without the QR code.

8. The status LED will stop flashing. Now follow the rest of the instructions in the Smart Home app until the setup is completed. The status of the sensor should be displayed as "Open". Continue with the „Calibration“ chapter.

Calibration

1. Briefly press the user button. This process can be repeated at any time if required.
2. The sensor will now enter calibration mode for 30 seconds. During this time, the status LED will flash.
3. Close the sensor. Close and lock the sash properly within 30 seconds of pressing the user button. Wait until the status of the sensor is displayed as "Closed" in the Smart Home app.

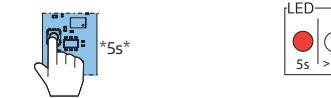


4. Check that all the states of the building element are correctly detected by the sensor. Open and close the sash and check the status in your smart home app.

Reset: Soft Reset

The soft reset restarts the product, deletes the connection with the smart home system and puts it into pairing mode. The calibration data is retained.

1. Open the housing (without figure).
2. Press and hold the user button for at least 5 seconds until the LED shortly turns off. Release the user button to start the soft reset.



3. Once the soft reset is completed, the product will automatically enter pairing mode. This is indicated by a flashing status LED. Continue with step 4 in chapter „Start-up“. Recalibration (see chapter „Calibration“) is possible, but not necessary.

Reset: Hard Reset

The hard reset resets the product to factory settings, deletes the calibration data as well as the connection with the smart home system and puts it into pairing mode.

1. Open the housing (without figure).
2. Press and hold the user button for at least 10 seconds. After 5 seconds, the status LED will turn off and then lights up again. Continue to push the user button until the LED turns off permanently. Release the user button to start the hard reset.
3. Once the hard reset is completed, the product will automatically enter pairing mode. This is indicated by a flashing status LED. Continue with step 4 in chapter „Start-up“.



Troubleshooting
Status LED does not flash when battery is inserted.

- Check battery polarity.
- Check the battery voltage.

Sensor cannot be paired with smart home ecosystem

- Check that the sensor is operating in pairing mode. This is indicated by the flashing status LED. Please note that pairing mode is only active for 15 minutes. To restart pairing mode after 15 minutes, a soft reset must be performed.

- Check if the sensor has already been paired with another smart home system. If this is the case, you may generate a new setup code over the other smart home system. In order to reset the pairing, you may perform a soft reset if necessary.

The sensor is paired with the smart home ecosystem, but the smart home ecosystem displays it as unavailable

- Check the battery.
- Check the signal strength by moving the sensor closer to the Border Router. This will help to eliminate radio interference.
- Repeat the Start-up process.
- Restart the Border Router or the smartphone.

Sensor reports incorrect status.

- Repeat the calibration process.
- Check the correct installation position of the sensor using the instructions.

Information on how to handle the battery

- Use only the specified type of battery.
- Keep the area around the battery away from any open flame, glowing embers or sparks. Do not burn or heat the battery above the permitted temperature.
- Do not cut into or apply excessive pressure to the battery. Replace the batteries immediately if you notice any damage.

Disposal

Dispose of in accordance with local regulations and laws.

Notice: For more information on installation, simply scan the QR code alongside to access the installation guide.



This package insert is available in other languages at: www.maco.eu