MICCOSONIC Product Description



Operating manual

Ultrasonic sensor with one analogue output

nano-15/CI nano-24/CI nano-15/CU nano-24/CU

The nano sensor offers a non-contact measurement of the distance to an object that has to be present within the sensor's detection zone. Depending on the set window limits, a distance-proportional analogue signal is output.

The window limits of the analogue output and its characteristic can be adjusted with the Teach-in proce-

One 2-colour LED indicates operation and the state of the analogue output.

Safety Notes

- Read the operating instructions prior to start-up.
- Connection, installation and adjustment works should be carried out by expert personnel only.
- No safety component in accordance with the EU Machine Directive

Use for intended purpose only

nano ultrasonic sensors are used for non-contact detection of objects.

Installation

- Mount the sensor at the installation site.
- Connect a connection cable to the M12 device plug.

The assembly distances shown in fig. 2 for two or more sensors should not be fallen below in order to avoid mutual interference.

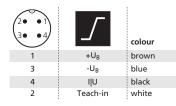


Fig. 1: Pin assignment with view onto sensor plug and colour coding of the microsonic connection cable

Start-Up

- Connect the power supply.
- Carry out the sensor adjustment in accordance with the diagram.

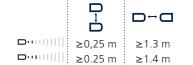


Fig.2: Assembly distances, indicating synchronization

Factory Setting

■ Rising analogue characteristic curve between the blind zone and the operating range

Maintenance

microsonic sensors are maintenancefree. In case of excess caked-on dirt we recommend to clean the white sensor surface.

Notes

- Every time the power supply is switched on, the sensor detects its actual operating temperature and transmits it to the internal temperature compensation. This results in a slight correction of the analoque output value after 45 seconds.
- If the sensor was switched off for at least 30 minutes and after power on an object is placed in the middle of the adjusted analogue window for 30 minutes (the analogue output value is in the range of 11 to 13 mA or 4.4 to 5.6 V) a new adjustment of the internal temperature compensation to the actual mounting conditions takes
- The sensors of the nano family have a blind zone. Within this zone a distance measurement is not possible.
- In the normal operating mode, an illuminated yellow LED signals the object is within the adjusted window limits.
- The sensor can be reset to its factory setting (see »Further settings«).

