



SONUS

The smallest and lightest
ultrasonic sensors worldwide

Sensor Solutions

Motion Control

Vision Technologies

SONUS ultrasonic sensors

10 x 14 x 27 mm small and 4 grams light

What characterizes the SONUS sensors?

- The smallest and lightest ultrasonic sensors worldwide
- Positioning, counting, measuring
- Long measuring range, short blind region
- High resolution
- Narrow sonic cone profile, e.g. for level measurement
- Connection variants: cable, connector, flylead connector
- Models for synchronization and multiplex operation
- Simple Teach-in procedure with external control line
- Simplest mounting

Ultrasonic technology gives you more benefits!

Detection of objects regardless of:

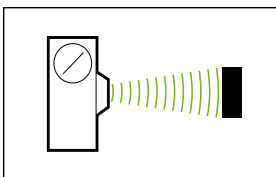
- Surface structure
- Color
- Reflection
- Transparency

Insensitive to:

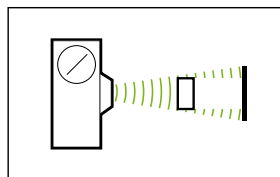
- Soiling
- External light effects

Positioning, counting, measuring – SONUS can do it all!

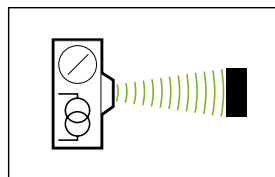
The new SONUS sensor range fully covers the three most important tasks of industrial automation. The new sensors complement the wide portfolio of Baumer ultrasonic sensors in an ideal way. Due to SONUS, miniaturization has also become reality with ultrasonic sensors.



Proximity switches
For positioning and detecting transparent, reflective or multicolored objects.



Retro-reflective sensors
Optimally suited to detect or count objects with sound-absorbing surfaces.

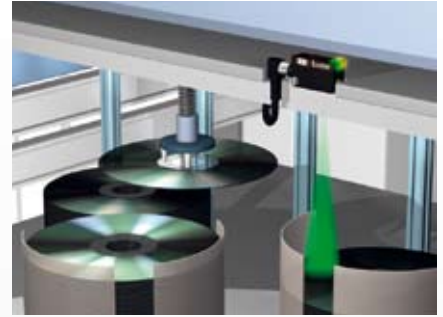


Analog sensor
Permit measurement of distances with high linearity and a resolution of less than 0,3 mm.

SONUS ultrasonic sensors in automation technology

Height measurement

Distance to objects can be reliably measured regardless of the surface color, reflectivity or transparency with *SONUS*.



Level measurement

Due to the small size and low weight, the *SONUS* sensor can be installed directly in applications with high acceleration. Levels can also be reliably measured in narrow cartridges.



Distance detection

With its small shape, the *SONUS* can also be installed in microgrippers which, until now, did not have enough space for ultrasonic sensors.



Typical fields of application

- Handling and robotics
- Machine construction
- Special machines
- Laboratory automation
- Filling machines
- Semiconductor industry
- Packaging machines

A successful housing concept for different sensor technologies!

As an alternative to the *SONUS* ultrasonic sensors, Baumer also offers solutions with red light and laser sensors as well as fiber optic versions in the same series 10 housing. This ensures that different technologies are interchangeable if required – it is unnecessary to replace the mounting brackets.



Series 10
Red light and laser sensors
(Actual size)

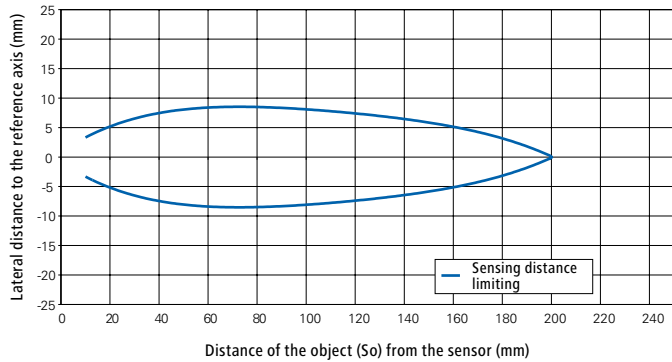


Series 10
Fiber optic sensor
(Actual size)

The most important technical features

| | Proximity switches | Retro-reflective sensors | Sensors with analog outputs |
|-----------------------|--------------------|--------------------------|-----------------------------|
| Scanning range Sd | 10...200 mm | 0...200 mm | 20...200 mm |
| Repeat accuracy | < 0,5 mm | < 1,5 mm | < 0,5 mm |
| Resolution | – | – | < 0,3 mm |
| Temperature drift | < 0,18% Sde/K | < 2% of measuring range | < 2% of measuring value |
| Response time | < 15 ms | < 15 ms | < 60 ms |
| Operating temperature | -10...+60 °C | -10...+60 °C | -10...+60 °C |

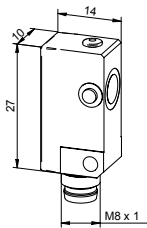
Narrow sonic cone profile for constrained conditions



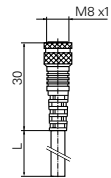
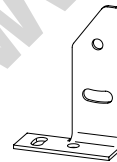
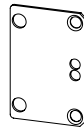
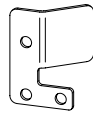
The right solution for each connection



Dimension drawing



Plug and Go with SONUS accessories



Ordering information

| | Proximity switches | Retro-reflective sensors | Sensors with analog outputs |
|--------------------------------|--------------------|--------------------------|-----------------------------|
| Connector version PNP | UNDK 10P8914/S35A | URDK 10P8914/S35A | |
| Connector version NPN | UNDK 10N8914/S35A | URDK 10N8914/S35A | |
| Connector version 0...10 V | | | UNDK 10U6914/S35A |
| Cable version PNP | UNDK 10P8914 | URDK 10P8914 | |
| Cable version NPN | UNDK 10N8914 | URDK 10N8914 | |
| Cable version 0...10 V | | | UNDK 10U6914 |
| Flylead connector version PNP | UNDK 10P8914/KS35A | URDK 10P8914/KS35A | |
| Flylead connector version NPN | UNDK 10N8914/KS35A | URDK 10N8914/KS35A | |
| Flylead conn. version 0...10 V | | | UNDK 10U6914/KS35A |

Baumer offers an extensive product range of ultrasonic sensors.
More info at www.baumerelectric.com/en/198.html

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