

EVERY  
THING  
ULTRA  
SONIC

Extract from our online catalogue:

ucs ultrasonic sensors

Current to: 2024-08-07



The ucs sensors in a sturdy metal housing are mechanically compatible with the industrial standard of opto sensors.

## HIGHLIGHTS

- › Robust metal housing › for harsh usage conditions
- › Dovetail design › for fast installation
- › Mechanically compatible with the industry standard › a true alternative to the optical sensor
- › IO-Link interface › for support of the new industry standard
- › Automatic synchronisation › for simultaneous operation of up to ten sensors in close quarters
- › UL Listed to Canadian and US safety standards

## BASICS

- › 2 Push-Pull switching outputs › pnp or npn basis
- › Antivalent switching output F1
- › microsonic Teach-in using a button
- › 0.1 mm resolution
- › Temperature compensation
- › 10–30 V operating voltage
- › LinkControl › for configuration of sensors from a PC

# Description

## The sturdy metal housing

of the ucs sensors is mechanically compatible with the industrial standard of optical sensors.

## The rotatable circular connector

allows for flexible selection of the mounting location and facilitates flexible wiring.

## The ucs sensors



are available with 2 Push-Pull switching outputs in pnp- or npn-circuitry with IO-Link interface.

By default, switching output F1 works antivalent to switching output F2. Using LinkControl or IO-Link, the antivalence of switching output F1 can be canceled.

## The Teach-in button

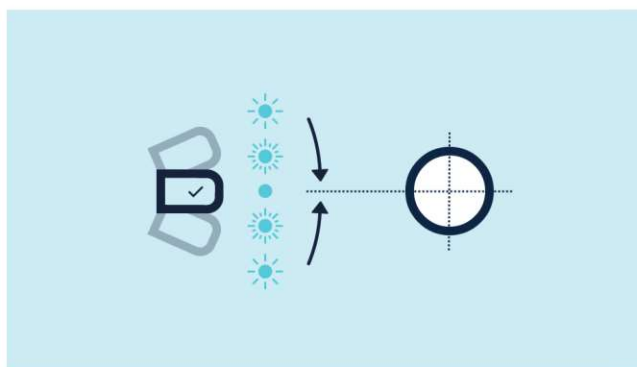
on the sensor's top allows for a convenient setting of the desired detection distance and operating mode.

## A dual LED

indicates the switching status of the two switching outputs.

## New! With the internal alignment assistance

the sensor can be optimally aligned to the object during installation.



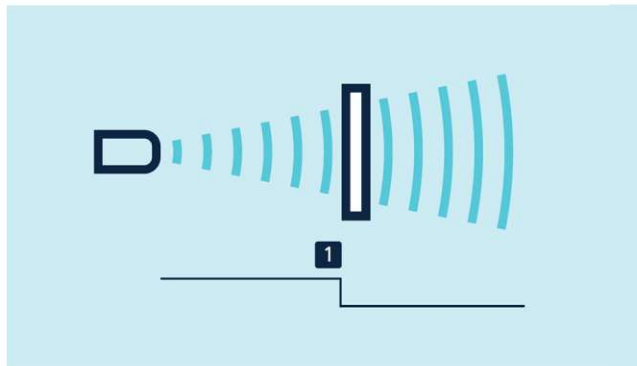
*ucs sensor using alignment assistance*

**The ucs sensors have three operating modes:**

- › Single switching point
- › Two-way reflective barrier
- › Window mode

### The switched output is set

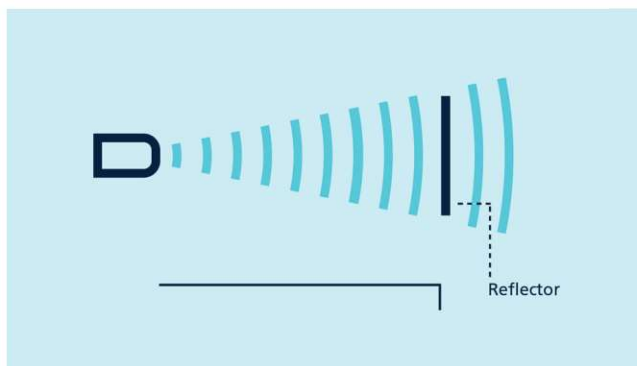
by positioning the object to be detected within the desired distance (1) to the sensor, pressing the button for approx. 3 seconds and then pressing it once more for approx. 1 second. Ready.



*Teach-in of a switching point*

### A two-way reflective barrier

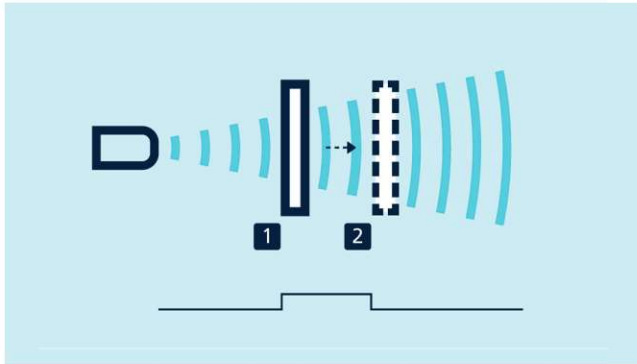
can be set up with the help of a permanently mounted reflector by mounting the ucs sensor and the reflector, then pressing the button for approx. 3 seconds and then pressing it once more for approx. 10 seconds. Now, the two-way reflective barrier has been set.



*Teach-in of a two-way reflective barrier*

### Set a window

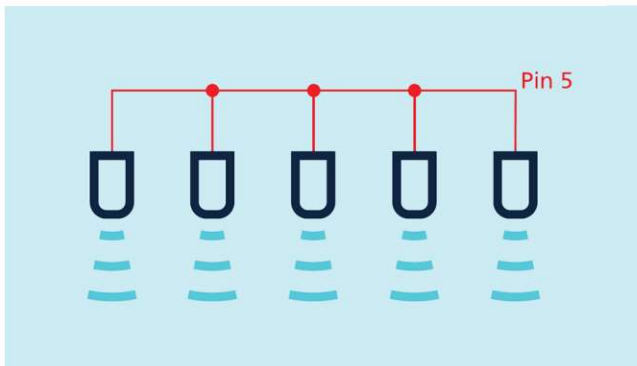
by initially positioning the object to be detected on the sensor-close window limit (1), pressing the button for approx. 3 seconds, shifting the object to the sensor-distant window limit (2) and pressing the button once more for approx. 1 second. Ready.



Teach-in of a window with two switching points

### Up to ten sensors

can be synchronised with one another. To do this, all the sensors are electrically connected on pin 5 on the M12 circular connector.



Synchronisation using pin 5

If more than 10 sensors must be synchronised, this can be carried out with the SyncBox1 , which is available as an accessory.

### LinkControl

optionally permits the extensive parameterisation of ucs sensors. The LCA-2 LinkControl adapter, which is available as an accessory, can be used to connect ucs sensors to the PC.



*Sensor connected to the PC via LCA-2 for programming*

### **IO-Link integrated**

in version 1.1.2 The ucs ultrasonic sensors are equipped with Smart Sensor Profile, which creates more transparency between IO-Link devices.