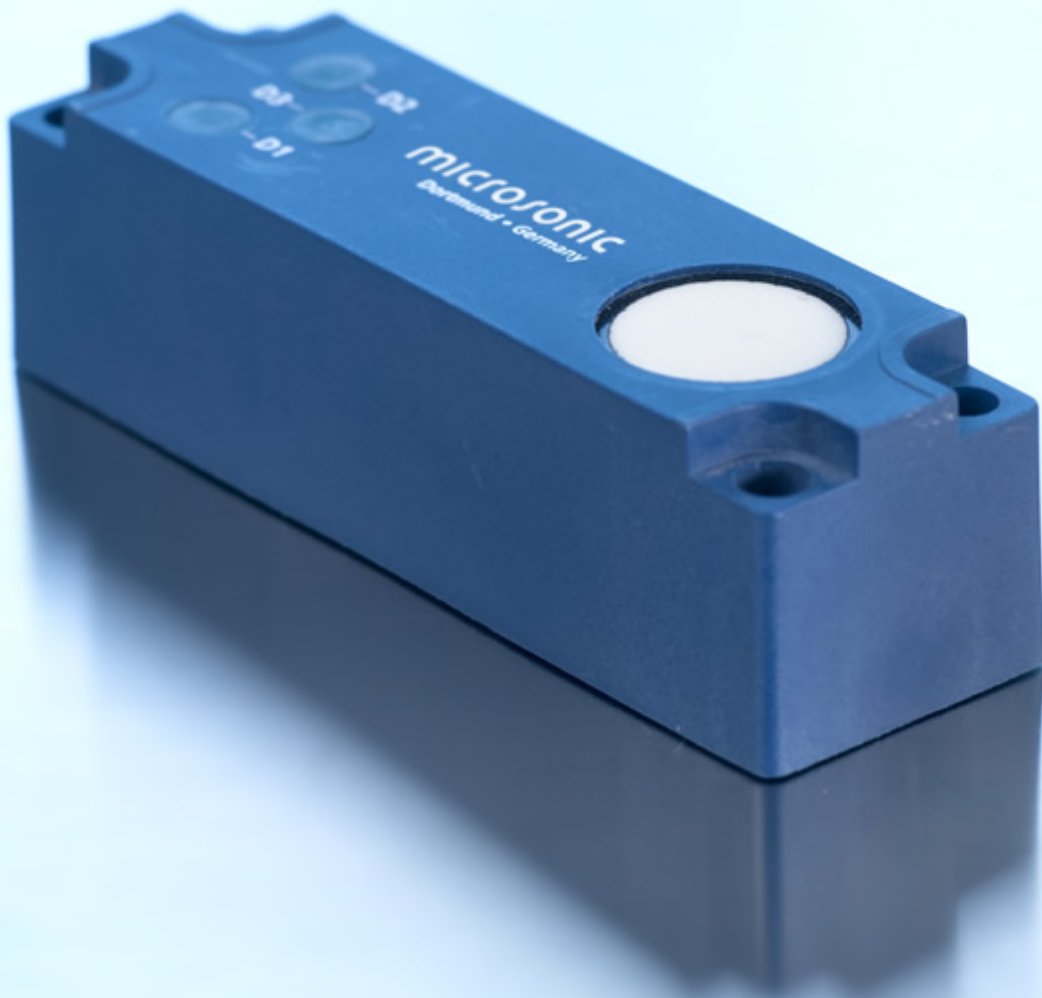




从我们在线的产品目录中提取出来:

Ics-130/DDD/QP

当前: 2025-01-27



ICS系列超声波传感器有三种不同的设计，对应于三种不同的检测范围。

主要特点

- › 最多有3个pnp开关量输出
- › 自动同步 › 最多可实现10个传感器的近距离同步工作

基本特点

- › 2 个或 3个pnp开关量输出
- › 模拟量输出4–20 mA和0–10 V › 电流和电压输出可自动切换
- › 检测距离从 30 mm 到 2 m, 存在3种检测量程
- › 可以通过pin5来进行microsonic的teach-in
- › 0.18 mm 分辨率
- › 温度补偿
- › 工作电压 9–30 V
- › LinkControl › 可以通过连接电脑来配置传感器参数

产品描述

The lcs sensors

have a block-like plastic housing with four fixation bores, two of which are already equipped with M4 threaded bushings for eased mounting.

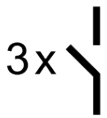
Two or three LEDs

indicate all operating statuses.

Three detection ranges and two output stages are available for selection:



2 pnp switched outputs



3 pnp switched outputs



1 analogue output 4–20 mA and 0–10 V

Via pin 5 at the M12 circular connector,

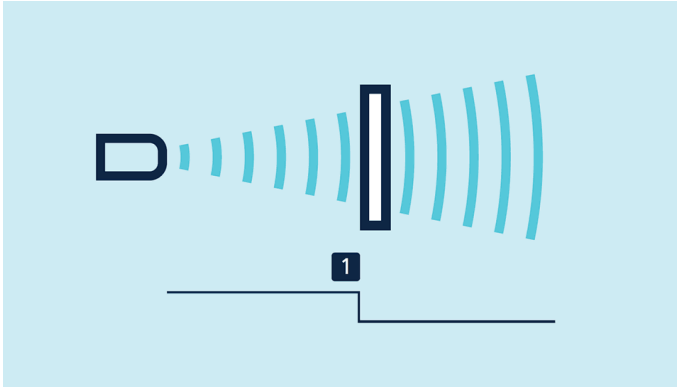
(Com input), the lcs sensors are set (teach-in): Switched output D1 is set by connecting pin 5 to $+U_B$, while switched output D2 is set by connecting pin 5 to $-U_B$. Also the sensors with analogue output are set via pin 5.

The lcs sensors with switched output offer three operating modes:

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

Teach-in of a single switching point

- › Place object to be detected (1) at the desired distance
- › Apply $+U_B$ to pin 5 for about 3 seconds
- › Then apply $+U_B$ to pin 5 again for about 1 seconds

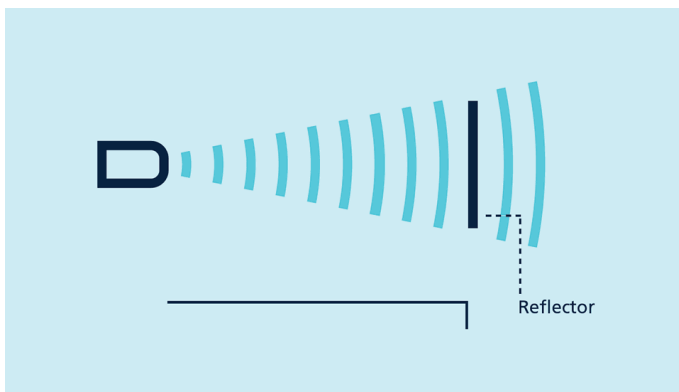


Teach-in of a switching point

Teach-in of a two-way reflective barrier

with a fixed reflector

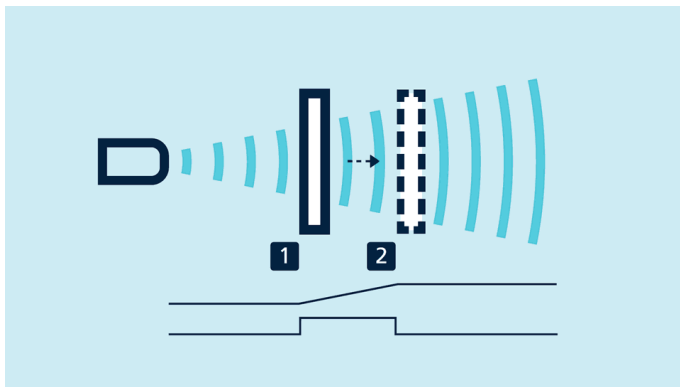
- › Apply $+U_B$ to pin 5 for about 3 seconds
- › Then apply $+U_B$ to pin 5 again for about 10 seconds



Teach-in of a two-way reflective barrier

For configuration of a window

- › Place object at the near edge of the window (1)
- › Apply $+U_B$ to pin 5 for about 3 seconds
- › Then move the object to the far edge of the window (2)
- › Then apply $+U_B$ to pin 5 again for about 1 seconds



Teach-in of an analogue characteristic or a window with two switching points

NCC/NOC

and rising/falling analogue characteristic curve can also be set via pin 5.

The analogue sensor

checks the load connected to the output and then automatically switch to 4–20 mA current output or 0–10 V voltage output to ensure maximum ease of handling.

The Ics-25/DDD is equipped with three pnp switched outputs

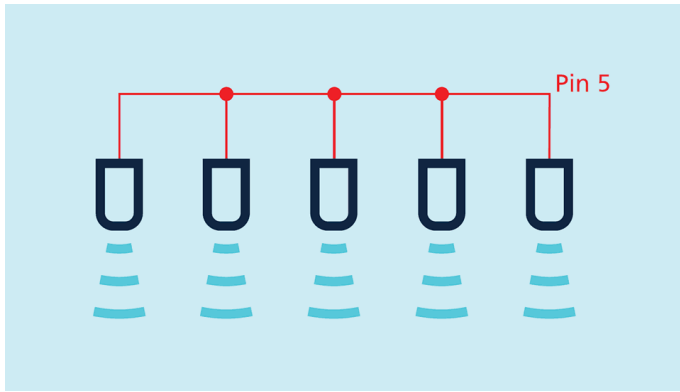
which are set with the help of the Link-Control adapter LCA-2 (see LCA-2). In addition to this “offline” programming, all Ics sensors can also be parameterised on the PC with the LCA-2 and the Link-Control software.



Sensor connected to the PC via LCA-2 for programming

Synchronisation

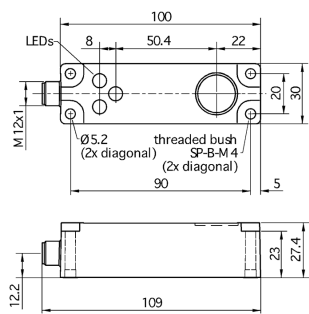
permits the simultaneous use of multiple mic sensors in an application. To avoid mutual interference, the sensors can be synchronised with one another. To do this, all the sensors are electrically connected on pin 5.



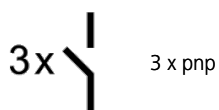
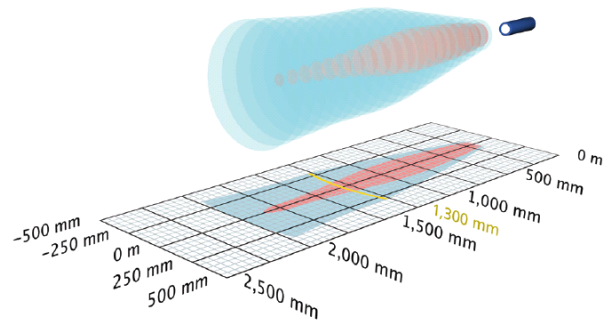
Synchronisation using pin 5

lcs-130/DDD/QP

外壳



检测区域



检测范围	200 - 2.000 mm
设计	胶体的
工作模式	接近开关/反射模式窗口模式
特性	3个开关量输出 齐平的外壳 横向声波出口

超声波特性

测量方法	回波传播时间
换能器频率	200 kHz
盲区	200 mm
检测范围	1,300 mm
最大检测范围	2,000 mm
分辨率	0.18 mm
重复精度	± 0.15 %
精度	± 1 % (内置温度漂移补偿)

电气数据

工作电压	9 - 30 V d.c.,反极性保护
电压脉动	± 10 %
空载电流损耗	≤ 70 mA
连接类型	5芯M12接插件

Ics-130/DDD/QP

输出量

输出1	pnp开关量输出: $I_{\max} = 200 \text{ mA}$ ($U_B - 2V$), 常开/常闭, 可调节, 短路保护
输出2	pnp开关量输出: $I_{\max} = 200 \text{ mA}$ ($U_B - 2V$), 常开/常闭, 可调节, 短路保护
输出3	pnp开关量输出: $I_{\max} = 200 \text{ mA}$ ($U_B - 2V$), 常开/常闭, 可调节, 短路保护
开关回滞	20 mm
开关频率	6 Hz
响应时间	110 ms
上电延时	< 300 ms

输入

输入1	com端输入
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外壳

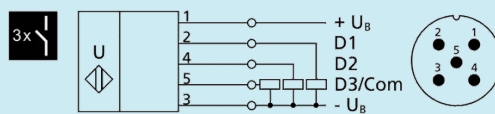
材质	PBT
超声波换能器	泡沫聚氨酯, 玻璃填充的环氧树脂
防护等级EN 60529	IP 65
工作温度	-25°C to +70°C
储存温度	-40°C 到 +85°C
重量	200 g

技术特点/特性

温度补偿	是
控制装置	com端输入
设定范围	LCA-2 with LinkControl
Synchronisation	否
多通道的	否
指示灯	3 x 三色 LED
特性	3个开关量输出 齐平的外壳 横向声波出口

lcs-130/DDD/QP

针脚示意图



订货型号

lcs-130/DDD/QP

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Specifications in this document are presented in a descriptive way
only. They do not warrant any product features.