WICLO YOUIC



Extract from our online catalogue:

lcs-35/IU/QP

Current to: 2023-11-13



Ultrasonic sensors in the lcs series in cuboidal housing with lateral sound exit are available in three device variants with three different detection ranges.

HIGHLIGHTS

- > Up to 3 pnp switching outputs
- > Automatic synchronisation > for simultaneous operation of up to ten sensors in close quarters

BASICS

- > 2 or 3 switching outputs in pnp variant
- ➤ Analogue output 4–20 mA and 0–10 V ➤ with automatic switching between current and voltage outputs
- > 3 detection ranges with a measurement range of 30 mm to 2 m
- microsonic Teach-in on pin 5
- > 0.18 mm resolution
- > Temperature compensation
- > 9-30 V operating voltage
- ➤ LinkControl ➤ for configuration of sensors from a PC

Description

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,

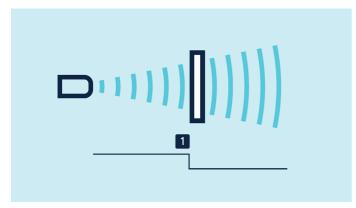
(Com input), the Ics sensors are set (Teach-in): Switched output D1 is set by connecting pin 5 to $+U_B$, while switched output D2 is set by connecting pin 5 to $-U_B$. Also the sensors with analogue output are set via pin 5.

The Ics 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

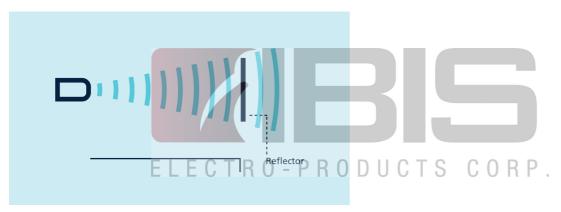


Teach-in of a switching point

Teach-in of a two-way reflective barrier

with a fixed reflector

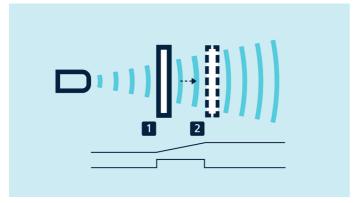
- \rightarrow Apply +U_B to pin 5 for about 3 seconds
- > Then apply +U_B to pin 5 again for about 10 seconds



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

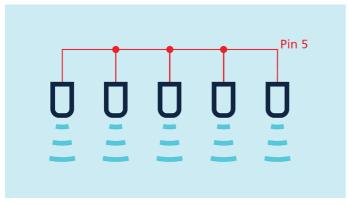
which are set with the help of the Link-Control adapter LCA-2. In addition to this "offline" programming, all Ics sensors can also be parameterised on the PC with the LCA-2 and the Link-Control software.



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.

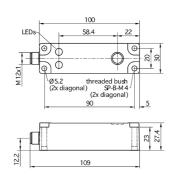


Synchronisation using pin 5

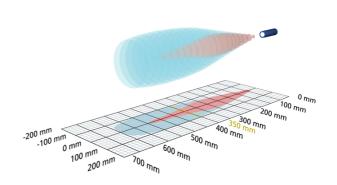


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scale drawing



detection zone





1 x analogue 4-20 mA + 0-10 V

± 1 % (temperature drift internally compensated)

measuring range		65 - 600 mm
design		cuboidal
operating mode		analogue distance measurements
particularities		flat housing lateral sound exit
ultrasonic-specific		
means of measurement	ELECTRO-PRO	echo propagation time measurement 400 kHz
transducer frequency		
blind zone		65 mm
operating range		350 mm
maximum range		600 mm
resolution		0.18 mm
reproducibility		± 0.15 %

electrical data

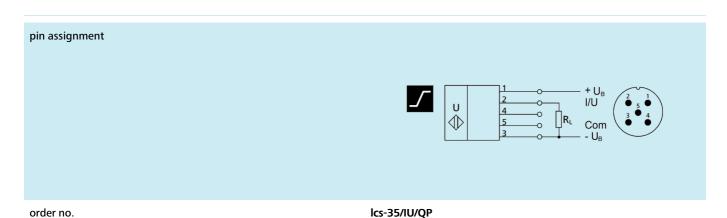
accuracy

operating voltage U _B	9 - 30 V d.c., reverse polarity protection
voltage ripple	± 10 %
no-load current consumption	≤ 70 mA
type of connection	5-pin M12 initiator plug

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analogue output current: 4-20 mA / voltage: 0-10 V (at U ₈ ≥ 15 V), short-circuit-proof switchable rising/falling 70 ms delay prior to availability anautical com input teach-in input PBT polyurethane foam, epoxy resin with glass contents assort of protection to EN 60529 IP 65 paperating temperature current: 4-20°C to +70°C control get emperature description of the second		
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particularities flat housing	multiplex	no
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	particularities	

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The content of this document is subject to technical changes. Specifications in this document are presented in a descriptive way only. They do not warrant any product features.

