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Operating Manual Ultrasonic sensor with one analogue output

lcs+340/IU lcs+600/IU

Product Description

The lcs+ 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 analoque output and its characteristic can be adjusted with the Teach-in procedure. One 2-colour LED indicates the state of the analogue output. The sensor automatically detects the load put to the analogue output and switches to current output or voltage output respectively.

Note

The housing was updated with Batch number

- FA2303759 for lcs+340
- FA2303783 for lcs+600.

The assembly diagram and installation height are identical to the old housing.

Safety Notes

- Read the operating manual prior to start-up.
- Connection, installation and adjustment works should be carried out by expert personnel only.
- No safety component in cordance with the EU Mach Directive, use in the area of personal and machine protection not permitted

Proper Use

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

Installation

→ Mount the sensor at the place of fittina.

Window limits between blind zone → Connect a connection cable to the and operating range

M12 device plug, see Fig. 1.

- Start-Up → Connect the power supply.
- → Set the sensor parameters using the

Teach-in procedure, see Diagram 1.				
	colour			
+U _B	brown			
-U _B	blue			
-	black			
I/U	white			
Sync/Com	grey			
	+U ₈ -U ₈ -			

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

Fig. 2: Assembly distances

lcs+340...

lcs+600...

Factory Setting

Filter at F02

Synchronisation

to be synchronised.

Filter strength at P01

If the assembly distance of multiple

sensors falls below the values shown

in Fig. 2, the internal synchronisation

should be used to avoid mutual inter-

ference between them. To do this in-

terconnect each pin 5 of the sensors

≥2.00 m

≥4.00 m

≥18.00 m

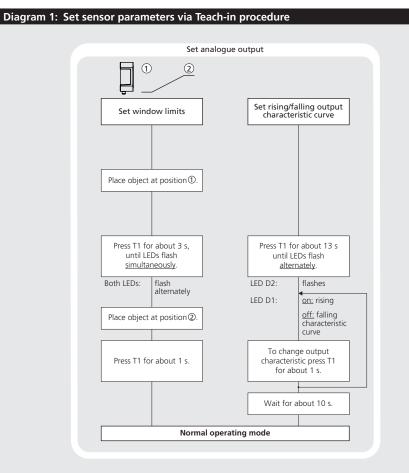
≥30.00 m

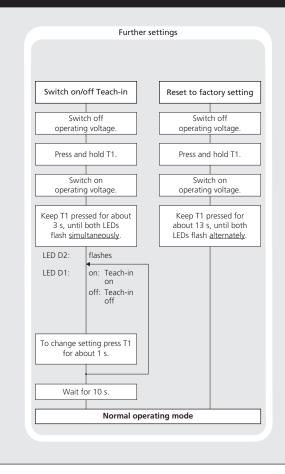
Maintenance Rising analogue characteristic curve

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

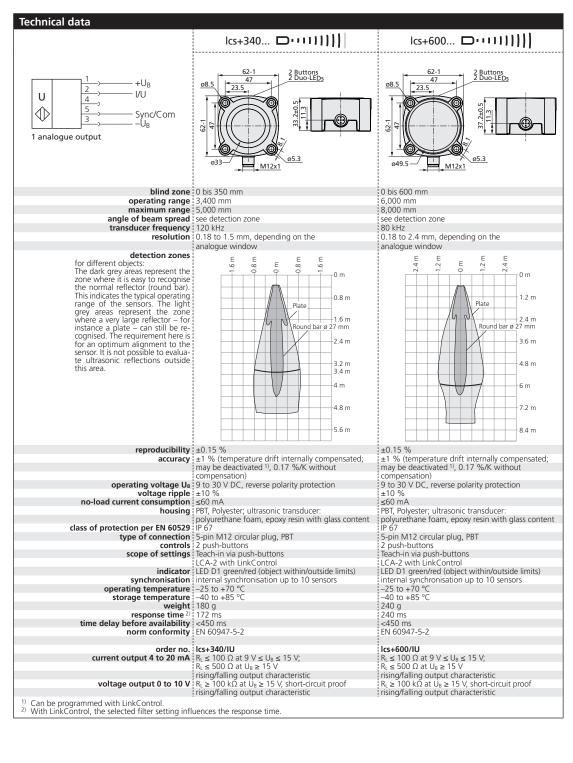
Notes

- Pin 5 (Sync/Com) of the sensor may only be connected for synchronisation.
- The sensors of the lcs+ family have a blind zone, within which a distance measurement is not possible.
- The lcs+ sensors are equipped with an internal temperature compensation. Due to the sensors self heating, the temperature compensation reaches its optimum workingpoint after approx. 30 minutes of operation.
- The load put to the analogue output is detected automatically when turning power supply on (the load must be connected to the analogue output before turning power supply on).
- If an object is within the set window limits of the analogue output, then LED D1 lights up green, if the object is outside the window limits, then LED D1 lights up red.
- If no push-buttons are pressed for 5 minutes during parameter setting mode the made changes are discarded and the sensor returns to normal operating mode.
- The sensor can be reset to its factory setting (see Diagram 1).
- Optionally all Teach-in and additional sensor parameter settings can be made using the LinkControl adapter (optional accessory) and the Link-Control software for Windows®.





		_/	colour
ac-	1	+U _B	brown
ine	3	-U _B	blue
or	4	-	black



K CE 2014/30/EU



The proximity switches shall be used with a Listed (CY1//7) cable/connector assembly rated minimum 32 Vdc, minimum 290 mA, in the final installation

