



## Information on the compatibility of LC xx5:

### Mechanical design

The LC 1x5 / LC 4x5 can be mounted to the same mating dimensions as the LC 1x3 / LC 4x3. However, a few details have changed, which will be explained below.

### Secure mechanical mounting of LC 1x5 / LC 4x5

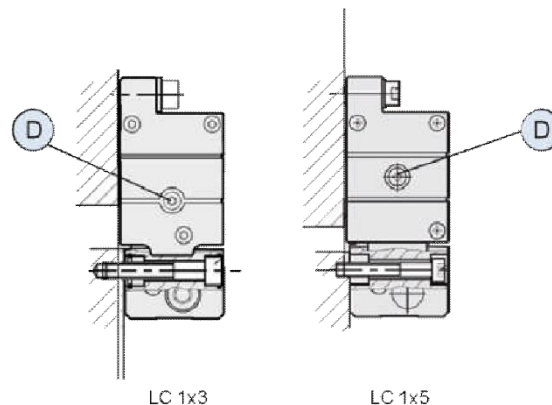
The LC 1x5 and LC 4x5 series both provide fault exclusions for the loosening of the mechanical coupling for certain types of mounting. Such fault exclusions are often required in safety-related applications.

The fault exclusions apply to the certified EnDat and DRIVE-CLiQ LCs, as well as to the standard LCs. This characteristic can thus be used for LC x85 encoders or for encoders with Fanuc / Mitsubishi interfaces.

### LC 1x5

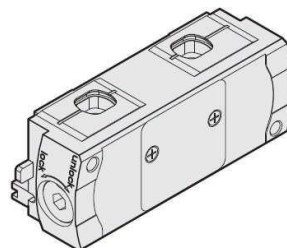
#### Compressed-air inlet on end sections shifted

As the airflow was changed due to the double sealing lip, the compressed air inlet (D) must be shifted by 8 mm in the direction of the integral fastening rail.



#### New mounting aid

A new mounting aid for aligning the fastening element of the scanning unit is required for the LC 1x5. The mounting aid has the ID 10 7589-02 (see also customer information 53/2013). The mounting aid of the LC 1x3 cannot be used for the LC 1x5.





## LC 4x5

### Scanning unit:

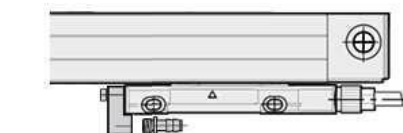
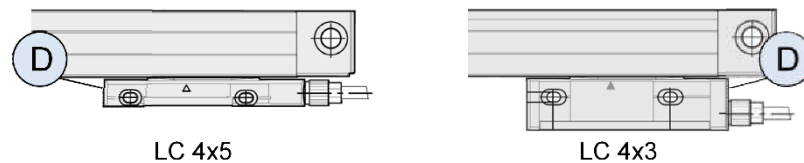
#### Reduced height

In comparison with the LC 483, the height of the scanning unit of the LC 4x5 has been reduced from 25 mm to 13 mm. It is now equal to the height of the LS 400. The housing dimensions and the position of the mounting holes of the scanning unit remain identical to the LC 4x3 so that the LC 4x5 can be mounted unaltered to existing geometries.

#### Compressed-air inlet on the opposite side

The compressed air inlet (D) had to be shifted to the opposite side of the scanning unit as the overall height was reduced. The connection for the pressure tubing can be rotated by 180° to its original direction by means of the adapter piece 630380-01. With the adapter, the height of the LC 4x5 scanning unit remains within the dimensions of the LC 4x3; the length of the scanning unit merely increases by 12 mm.

The adapter piece does not have an integrated throttle. A connecting piece with throttle (ID: 275239-01) is to be used additionally.



LC 4x5 with 180° adapter and connecting piece



180° adapter  
(ID 63038 -01)



Connecting piece with throttle  
(ID 275239-01)



## Shorter slot

The width of the slots in the scanning unit has been reduced by 1,3 mm on the LC 4x5. The nominal distances and nominal positions of the slots remain unchanged, however.

## Nut retention

The LS 4x7 as well as the LC 4x5 are supplied with nut-retention elements. The plastic parts retain the nuts in the scanning unit when mounted on the rear side. If nut retention parts are used, however, it is no longer possible to move the mounting screws within the slots.

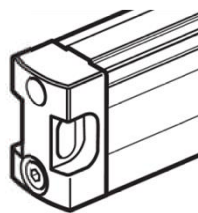
## ML + 105 mm - End blocks with M4 slots

The standard LC 400 with the “small” end blocks (mounting with mounting spar) did not feature holes for a mounting via the end block.

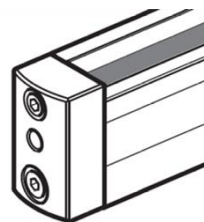
The LC 4x5 are fitted with M4 slots.

**Note!** It is not suitable to mount the unit via the end blocks with M4 screws.

In contrast to the LC 4x3, the LC 4x5 end blocks (14A) do not have a thread for a grounding screw. Grounding can be made via the mounting spar.



LC 4x5 (14A)



LC 4x3

## New setting and testing gauges

Due to the changed geometry of the scanning unit, new mounting and testing gauges (I : 737748) must be used for the LC 4x5. Due to changed bearing surfaces of the original gauges (ID 528753), misadjustments may occur with LC 4x5. The new gauges have been sold since 06/2012 (see customer information 36/2012).

The gauges can be distinguished not only by their ID numbers but also based on their geometry. The new gauges are longer and have two holes on the ends.

