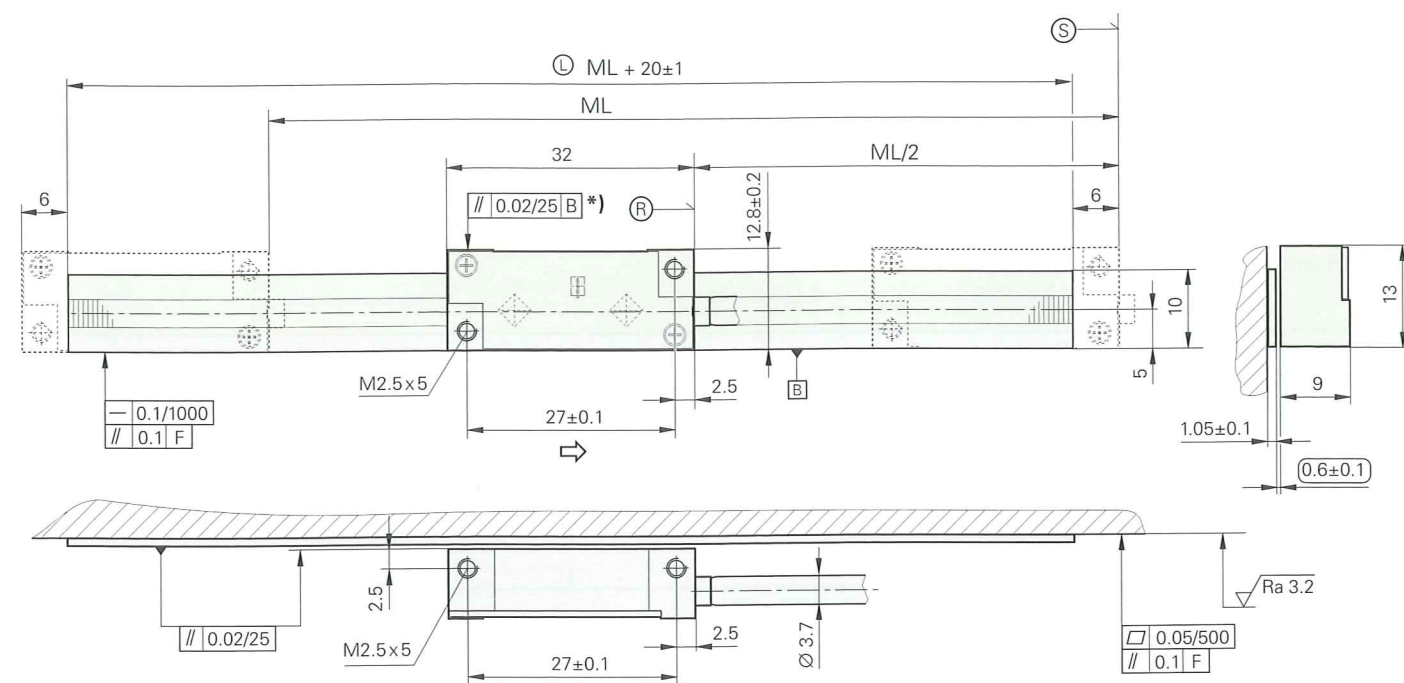


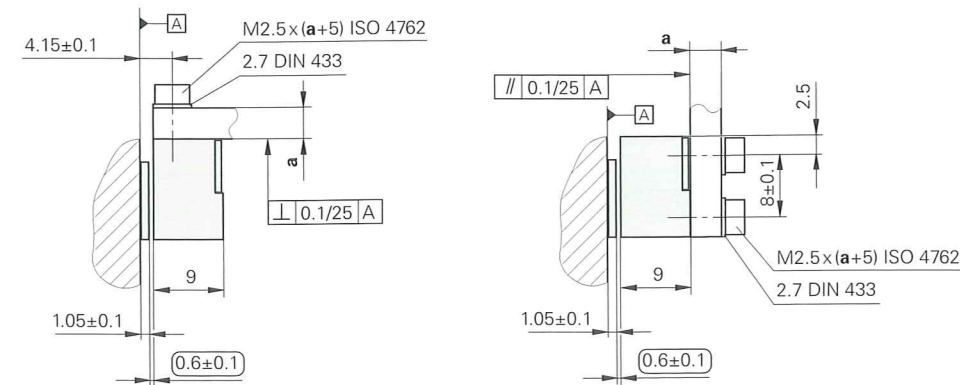
# LIDA 500 Series

Incremental linear encoders for limited installation space

- For measuring steps of 1 µm to 0.1 µm
- Simple mounting with PRECIMET adhesive film
- Large mounting tolerances



## Possibilities for mounting the scanning head

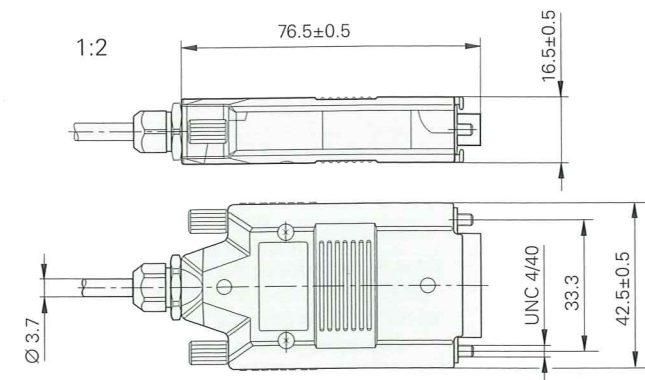


- F = Machine guideway
- Ⓜ = Reference mark
- Ⓢ = Scale tape length
- Ⓣ = Beginning of measuring length (ML)
- Ⓚ = Adjust
- \*) = Or adjust to max. signal or reference-mark position
- ⇨ = Direction of scanning head motion for output signals in accordance with interface description

Dimensions in mm

Tolerancing ISO 8015  
ISO 2768 - m H  
< 6 mm: ±0.2 mm

## D-sub connector for LIDA 573



Specifications	LIDA 583	LIDA 573				
Measuring standard	METALLUR graduation on glass					
Coefficient of linear expansion	$\alpha_{\text{therm}} \approx 8 \cdot 10^{-6} \text{ K}^{-1}$					
Accuracy grade	± 5 µm					
Measuring length ML* in mm	70 720	120 770	170 820	220 870	270 920	320 970 370 1020
Reference marks	One at midpoint of measuring length					
Incremental signals	~ 1 V <sub>PP</sub>		□ TTL			
Grating period	20 µm					
Integrated interpolation* Signal period	20 µm	5-fold 4 µm	10-fold 2 µm	25-fold 0.8 µm	50-fold 0.4 µm	
Cutoff frequency	≥ 250 kHz	–	–	–	–	
Scanning frequency	–	≤ 200 kHz	≤ 100 kHz	≤ 50 kHz	≤ 25 kHz	
Edge separation a	–	≥ 0.220 µs	≥ 0.220 µs	≥ 0.175 µs	≥ 0.175 µs	
Traversing speed	≤ 300 m/min	≤ 240 m/min	≤ 120 m/min	≤ 60 m/min	≤ 30 m/min	
Power supply Current consumption	5 V ± 5 % < 100 mA	5 V ± 5 % < 200 mA (without load)				
Electrical connection* Cable length	Cable 1 m or 3 m with D-sub connector (15-pin), interface electronics for LIDA 573 in the connector ≤ 30 m (with HEIDENHAIN cable)					
Vibration 55 to 2000 Hz Shock 11 ms	≤ 200 m/s <sup>2</sup> (EN 60068-2-6) ≤ 500 m/s <sup>2</sup> (EN 60068-2-27)					
Operating temperature	0 °C to 50 °C					
Weight Scanning head Scale tape Connector Cable	6 g (without cable) 26 g/m LIDA 583: 32 g, LIDA 573: 140 g 22 g/m					

\* Please select when ordering