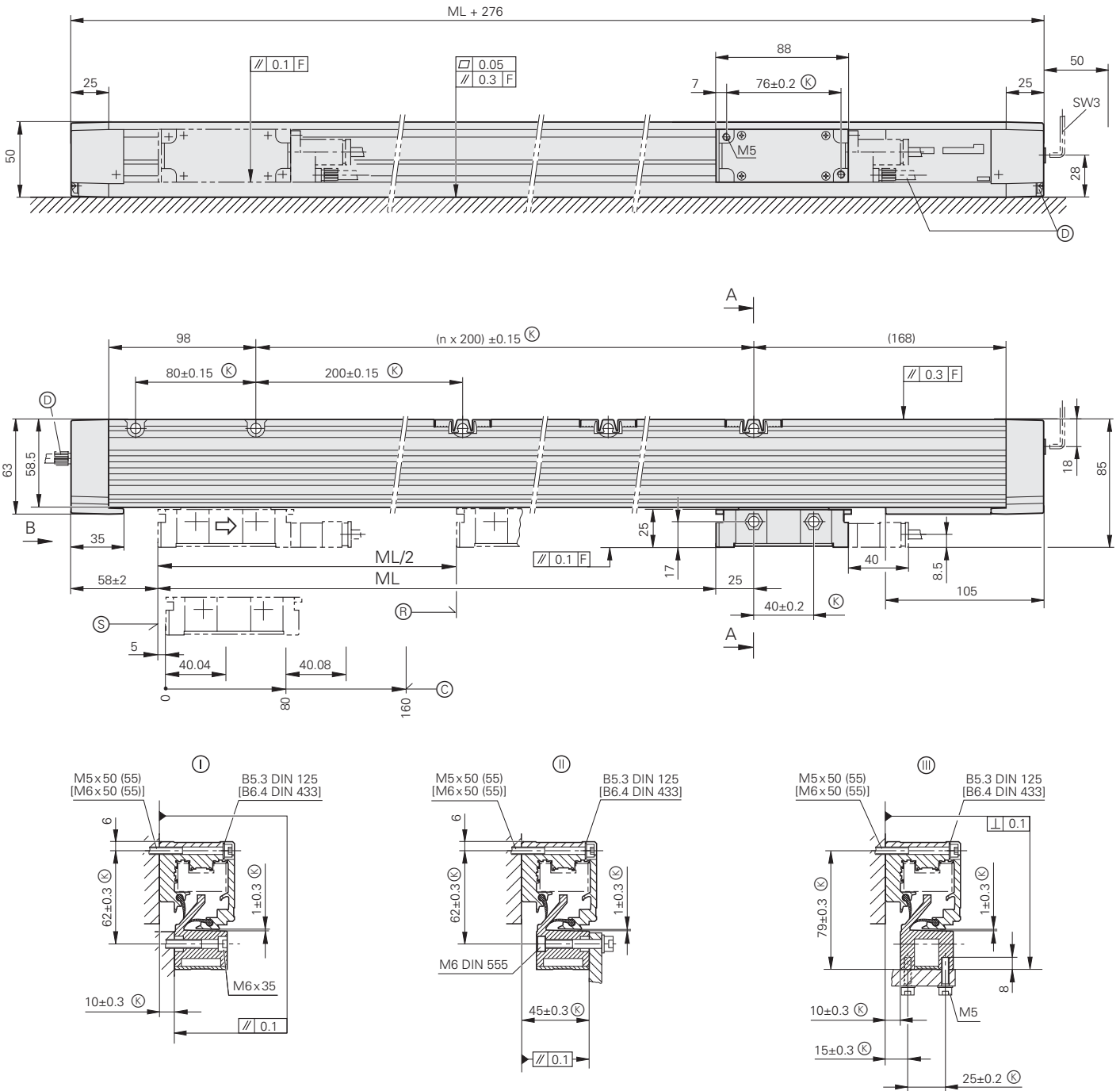


LB 382 up to 3040 mm Measuring Length (Single-Section Housing)

- Incremental linear encoder for measuring steps to 0.1 μm
- Horizontal mounting possible
- Mirror-image version available

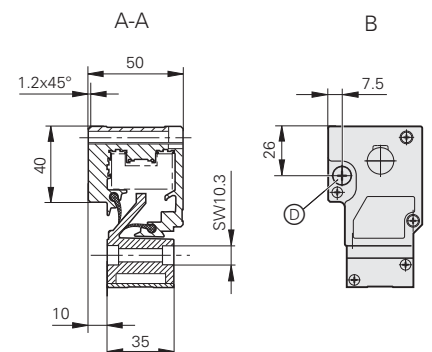


Dimensions in mm



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

- Ⓘ, ⓓ, ⓔ = Mounting options
- F = Machine guideway
- Ⓚ = Required mating dimensions
- Ⓛ = Compressed air inlet
- Ⓜ = Reference-mark position on LB 3x2
- Ⓝ = Reference-mark position on LB 3x2C
- Ⓢ = Beginning of measuring length (ML)
- ⇒ = Direction of scanning unit motion for output signals in accordance with interface description





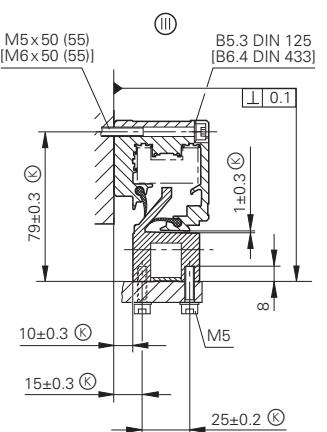
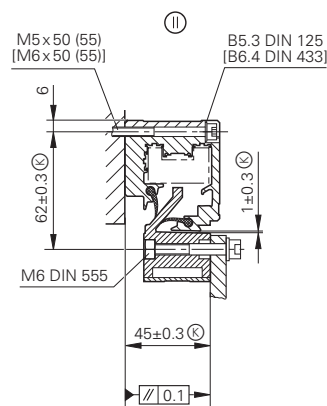
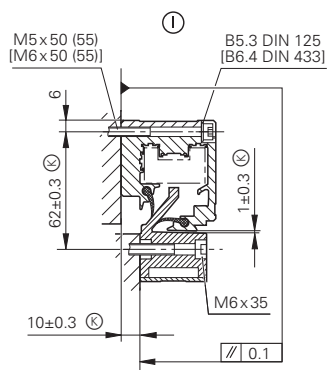
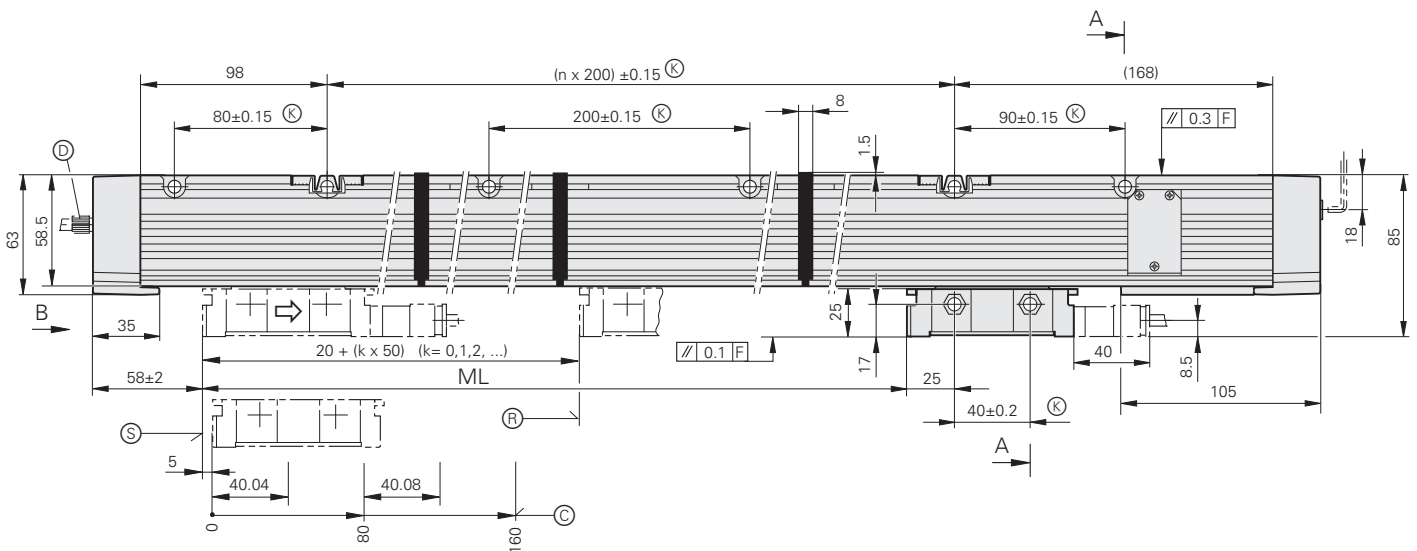
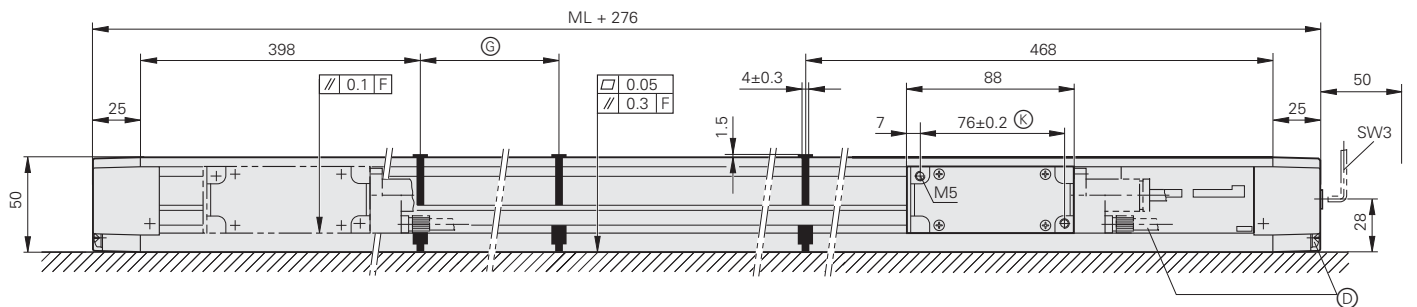
Specifications	LB 382 up to ML 3040 mm
Measuring standard Expansion coefficient	Stainless steel tape with AURODUR graduation $\alpha_{\text{therm}} \approx 10 \times 10^{-6} \text{ K}^{-1}$
Accuracy grade	$\pm 5 \mu\text{m}$
Measuring length ML* in mm	Single-section housing 440 640 840 1040 1240 1440 1640 1840 2040 2240 2440 2640 2840 3040
Reference marks* <i>LB 382</i> <i>LB 382C</i>	Selectable with selector plates every 50 mm, standard setting: 1 reference mark in the center Distance-coded
Incremental signals	$\sim 1 \text{ V}_{\text{pp}}$
Grating period Signal period	40 μm 40 μm
Cutoff frequency -3dB	$\geq 250 \text{ kHz}$
Traversing speed	$\leq 120 \text{ m/min}$
Power supply without load	$5 \text{ V} \pm 5 \% / < 150 \text{ mA}$
Electrical connection	Separate adapter cable (1 m/3 m/6 m/9 m) connectable to mounting block
Cable length ¹⁾	$\leq 150 \text{ m}$
Required moving force	$\leq 15 \text{ N}$
Vibration 55 to 2000 Hz Shock 11 ms Acceleration	$\leq 300 \text{ m/s}^2$ (IEC 60068-2-6) $\leq 300 \text{ m/s}^2$ (IEC 60068-2-27) $\leq 60 \text{ m/s}^2$ in measuring direction
Operating temperature	0 °C to 50 °C
Protection IEC 60529	IP 53 when mounted according to the mounting instructions IP 64 if compressed air is connected via DA 300
Weight	1.3 kg + 3.6 kg/m measuring length

* Please indicate when ordering

¹⁾ With HEIDENHAIN cable

LB 382 up to 30040 mm Measuring Length (Multi-Section Housing)

- Incremental linear encoder for long measuring ranges up to 30 m
- Measuring steps to 0.1 μm
- Horizontal mounting possible
- Mirror-image version available



Dimensions in mm



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

Ⓛ, Ⓜ,

Ⓜ = Mounting options

F = Machine guideway

Ⓢ = Required mating dimensions

Ⓚ = Compressed air inlet

Ⓛ = Reference-mark position on LB 3x2

Ⓚ = Reference-mark position on LB 3x2C

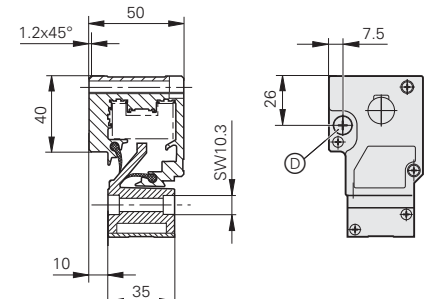
Ⓢ = Beginning of measuring length (ML)

Ⓛ = Housing section lengths

⇒ = Direction of scanning unit motion for output signals in accordance with interface description

A-A

B





Specifications	LB 382 from ML 3 240 mm
Measuring standard Expansion coefficient	Stainless steel tape with AURODUR graduation Same as machine main casting
Accuracy grade	$\pm 5 \mu\text{m}$
Measuring length ML*	Kit with single-section AURODUR steel tape and housing section lengths for measuring lengths from 3 240 mm to 30040 mm in 200-mm steps. Housing section lengths: 1000 mm, 1 200 mm, 1 400 mm, 1 600 mm, 1 800 mm, 2 000 mm
Reference marks* <i>LB 382</i> <i>LB 382 C</i>	Selectable with selector plates every 50 mm Distance-coded
Incremental signals	$\sim 1 V_{pp}$
Grating period Signal period	40 μm 40 μm
Cutoff frequency -3dB	$\geq 250 \text{ kHz}$
Traversing speed	$\leq 120 \text{ m/min}$
Power supply without load	$5 \text{ V} \pm 5 \% < 150 \text{ mA}$
Electrical connection	Separate adapter cable (1 m/3 m/6 m/9 m) connectable to mounting block
Cable length ¹⁾	$\leq 150 \text{ m}$
Required moving force	$\leq 15 \text{ N}$
Vibration 55 to 2000 Hz Shock 11 ms Acceleration	$\leq 300 \text{ m/s}^2$ (IEC 60068-2-6) $\leq 300 \text{ m/s}^2$ (IEC 60068-2-27) $\leq 60 \text{ m/s}^2$ in measuring direction
Operating temperature	0 °C to 50 °C
Protection IEC 60529	IP 53 when mounted according to the mounting instructions IP 64 if compressed air is connected via DA 300
Weight	1.3 kg + 3.6 kg/m measuring length

* Please indicate when ordering

¹⁾ With HEIDENHAIN cable

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