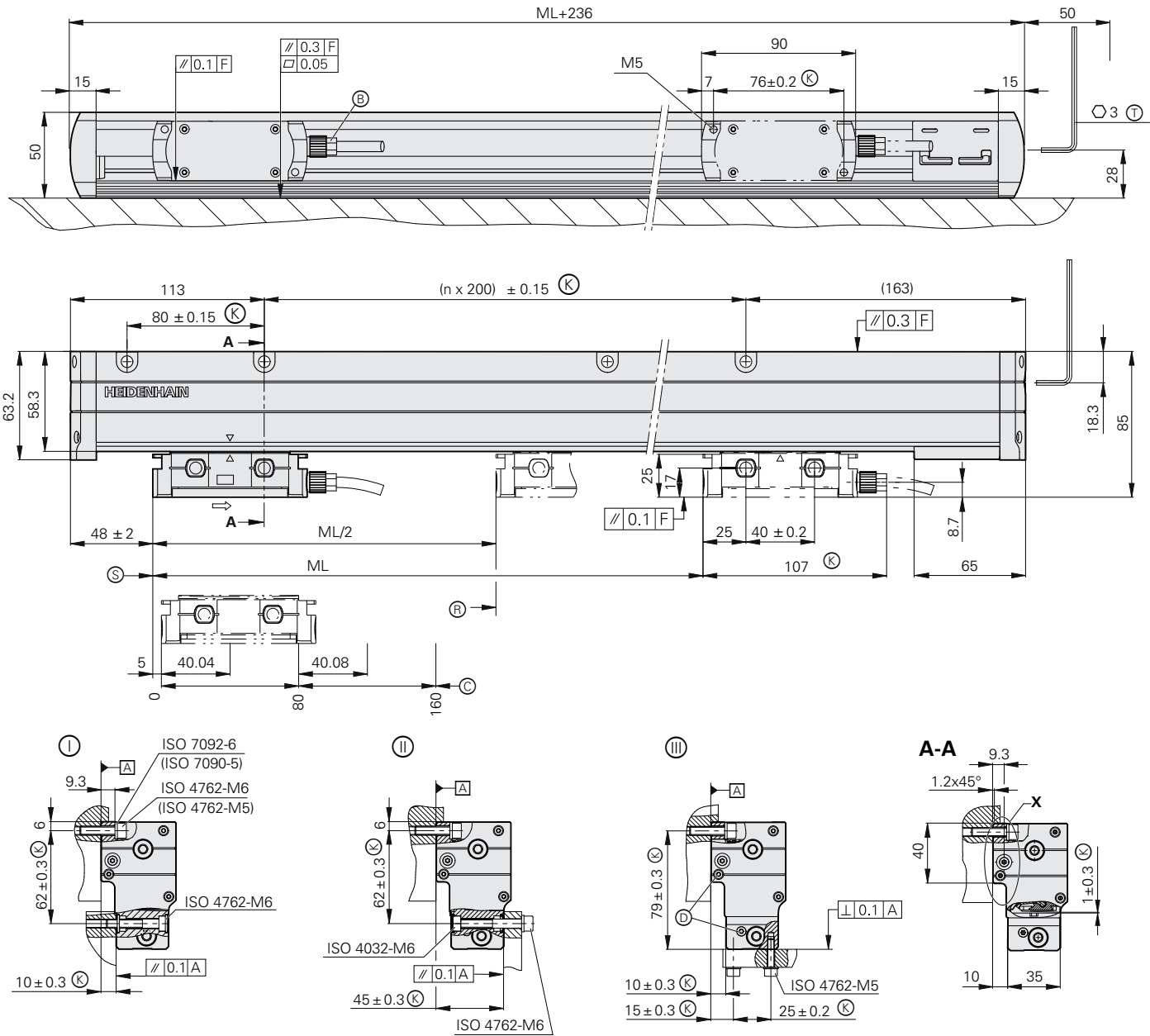


LB 383C up to 3040 mm (single-section)

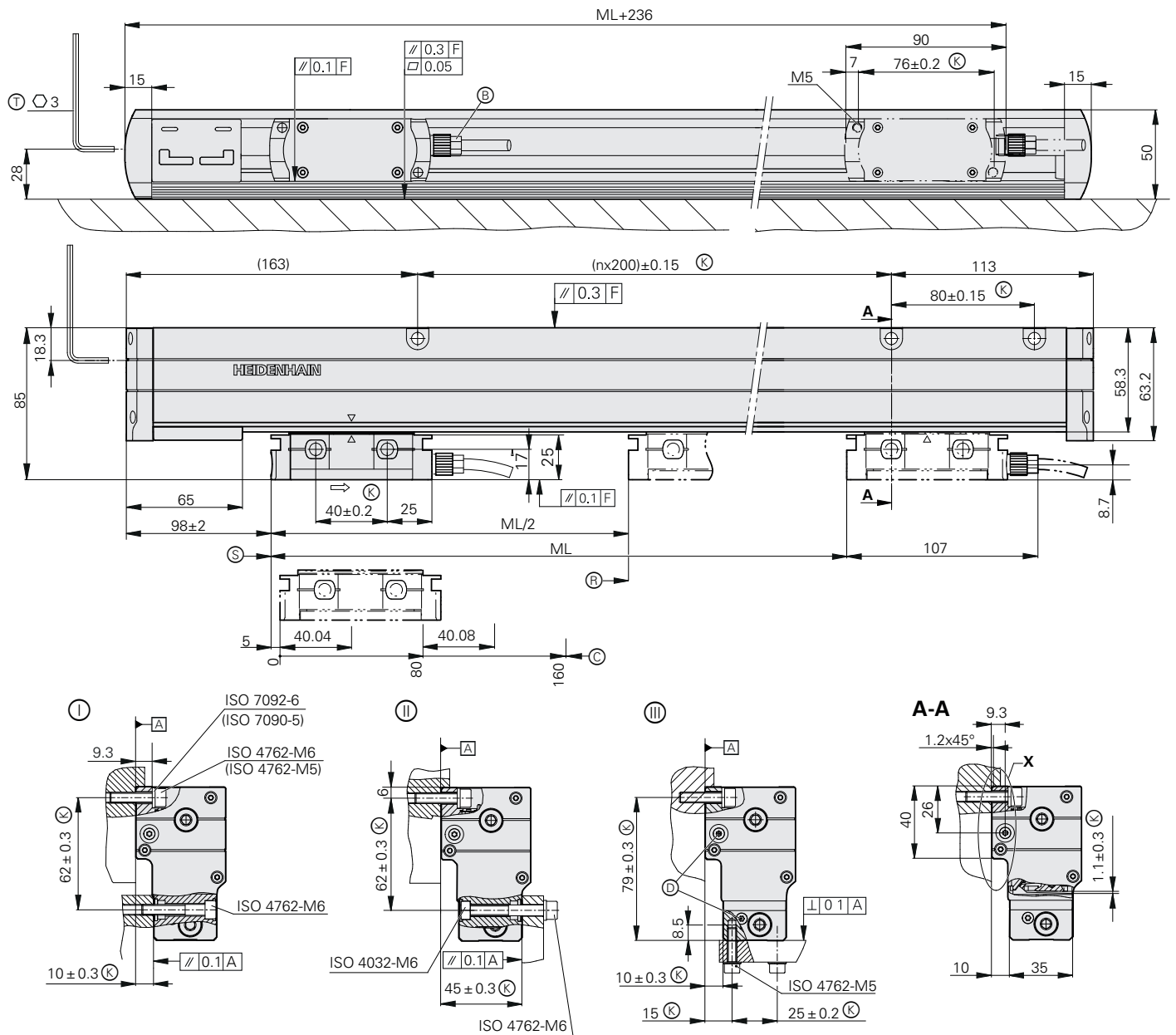
Incremental linear encoder with full-size scale housing

- Flat-lying installation possible



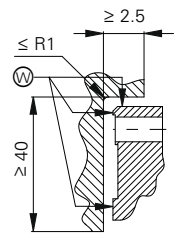
- ①, ②, ③ = Mounting options
F = Machine guideway
Ⓚ = Required mating dimensions
Ⓢ = Cable connection, usable on either side
Ⓣ = Tensioning screw for scale tape
Ⓤ = Compressed air inlet with built-in flow regulator, usable on either side
Ⓡ = Reference mark position on LB 383
Ⓢ = Reference mark position on LB 383C
Ⓦ = Beginning of measuring length (ML)
Ⓧ = Mating surfaces
→ = Direction of motion of the scanning unit for output signals in accordance with the interface description
ML = Measuring length
- mm
Tolerancing ISO 8015
ISO 2768:1989-mH
≤ 6 mm: ±0.2 mm
- ①, ②, ③ = Mounting options
F = Machine guideway
Ⓚ = Required mating dimensions
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Ⓢ = Reference mark position on LB 383C
Ⓦ = Beginning of measuring length (ML)
Ⓧ = Mating surfaces
→ = Direction of motion of the scanning unit for output signals in accordance with the interface description
ML = Measuring length

Mirrored version



mm

 Tolerancing ISO 8015
 ISO 2768:1989-mH
 $\leq 6 \text{ mm: } \pm 0.2 \text{ mm}$

- ①, ②, ③ = Mounting options
 - F = Machine guideway
 - Ⓚ = Required mating dimensions
 - ⓑ = Cable connection, usable on either side
 - Ⓣ = Tensioning screw for scale tape
 - Ⓢ = Compressed air inlet with built-in flow regulator, usable on either side
 - Ⓡ = Reference mark position on LB 383
 - Ⓒ = Reference mark position on LB 383C
 - Ⓢ = Beginning of measuring length (ML)
 - Ⓜ = Mating surfaces
 - = Direction of motion of the scanning unit for output signals in accordance with the interface description
 - ML = Measuring length
- X**
 2:1


LB 383C up to 3040 mm (single section)

Incremental linear encoder with full-size scale housing

- Flat-lying installation possible

Specifications	LB 383C up to ML 3040 mm
Measuring standard Coefficient of linear expansion	METALLUR steel scale tape, 40 µm grating period $\alpha_{\text{therm}} \approx 10 \cdot 10^{-6} \text{ K}^{-1}$
Accuracy grade	±5 µm
Measuring length (ML)* in mm	Single-section housing 440 640 840 1040 1240 1440 1640 1840 2040 2240 2440 2640 2840 3040
Reference marks LB 383 C	Distance-coded
Interface	$\sim 1 \text{ V}_{\text{PP}}$
Signal period	40 µm
Diagnostics interface	Analog
Cutoff frequency -3 dB	≥ 250 kHz
Electrical connection	Separate adapter cable (1 m / 3 m / 6 m / 9 m), connectable at either end of mounting block
Cable length ¹⁾	≤ 150 m
Supply voltage without load	DC 5 V ±0.25 V / < 150 mA
Traversing speed	≤ 180 m/min (max. acceleration in the direction of measurement ≤ 100 m/s ²)
Required moving force	≤ 15 N
Vibration 55 Hz to 2000 Hz acting on Shock 11 ms	Housing: 200 m/s ² (EN 60068-2-6) Scanning unit: 300 m/s ² (EN 60068-2-6) ≤ 300 m/s ² (EN 60068-2-27)
Operating temperature	0 °C to 50 °C
Protection EN 60529	IP53 when mounted as per the mounting information and instructions IP64 with purge air via DA 400
Mass	1.3 kg + 3.6 kg/m of measuring length

* Please select when ordering

¹⁾ With HEIDENHAIN cable

