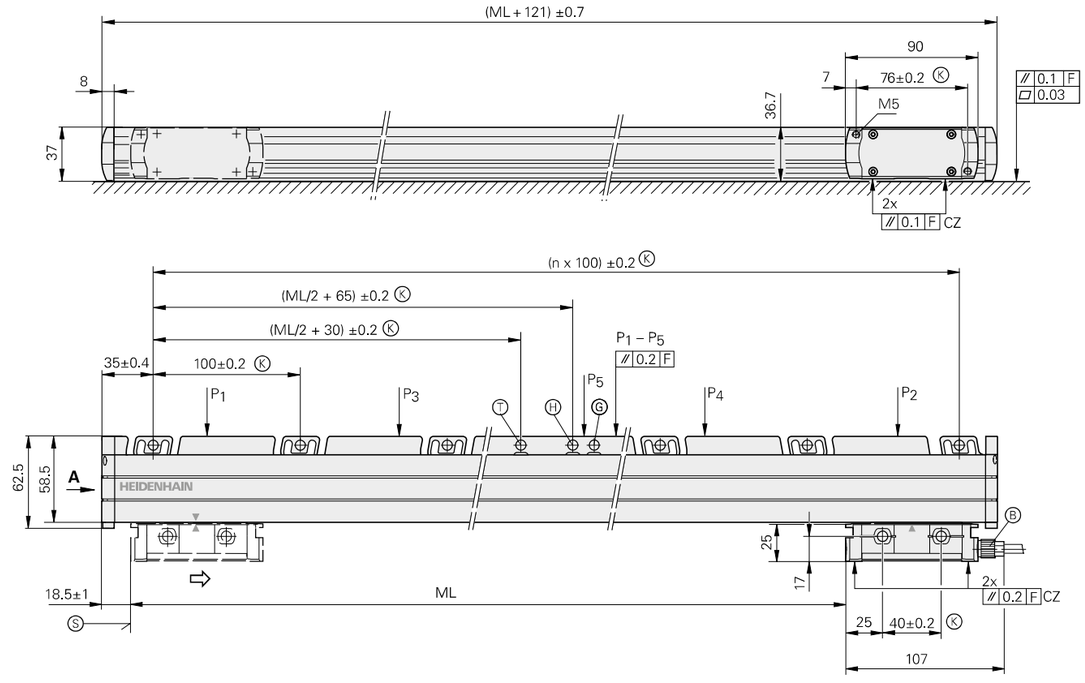
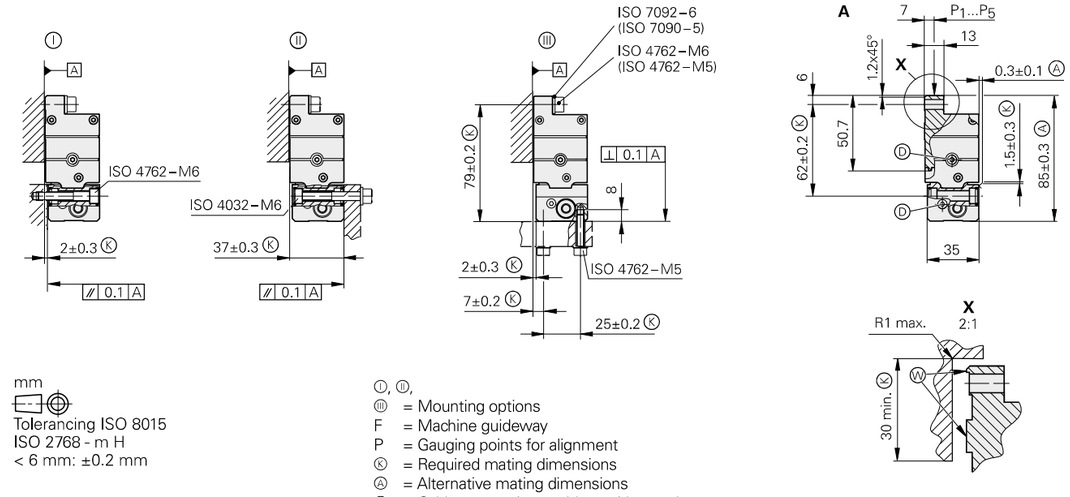
Specifications	LC 195 F	LC 195 M	LC 195 S
Measuring standard Coefficient of linear expansion	DIADUR glass scale with absolute track and incremental track, grating period 20 µm $\alpha_{therm} \approx 8 \times 10^{-6}\ K^{-1}$		
Accuracy grade*	± 3 µm up to measuring length 3040 mm; ± 5 µm		
Measuring length ML* in mm	140 240 340 440 540 640 740 840 940 1040 1140 1240 1340 1440 1540 1640 1740 1840 2040 2240 2440 2640 2840 3040 3240 3440 3640 3840 4040 4240		
Functional safety*	–		Option[1]
Interface	Fanuc Serial Interface αi interface	Mitsubishi high speed interface	DRIVE-CLiQ
Ordering designation	Fanuc05	Mit03-04	DQ01
Resolution *At ± 3 µm* *At ± 5 µm*	αi interface/α interface 0.00125 µm/0.010 µm 0.0125 µm/0.050 µm	0.001 µm 0.010 µm	
Diagnostics interface	Digital		
Electrical connection	Separate adapter cable (1 m/3 m/6 m/9 m) connectable on both sides to mounting block		
Cable length	≤ 50 m	≤ 30 m	≤ 30 m[2]
Voltage supply	3.6 V to 14 V DC		10 V to 28.8 V DC
Power consumption (max.)	*3.6 V:* ≤ 1.1 W; *14 V:* ≤ 1.3 W		*10 V:* ≤ 1.5 W; *28.8 V:* ≤ 1.7 W
Current consumption (typical)	*5 V:* 140 mA (without load)		*24 V:* 46 mA (without load)
Traversing speed	≤ 180 m/min		
Required moving force	≤ 4 N		
Vibration 55 to 2000 Hz *affecting the* **Shock** 11 ms **Acceleration**	*Housing:* ≤ 200 m/s² (EN 60068-2-6) *Scanning unit:* ≤ 200 m/s² (EN 60068-2-6) ≤ 300 m/s² (EN 60068-2-27) ≤ 100 m/s² in measuring direction		
Operating temperature	0 °C to +50 °C		
Protection EN 60529	IP 53 when installed according to instructions in the brochure, IP 64 with sealing air from DA 400		
Weight	0.55 kg + 2.9 kg/m measuring length		

***** Please select when ordering
[1] For dimensions and specifications, see separate Product Information document
[2] Greater cable lengths in preparation

LC 100 series

Absolute linear encoders with full-size scale housing
- **High vibration resistance**
- **Reclining mounting possible**
- **High reliability through double sealing lips**
- **Identical dimensions for LC 115/LC 185/LC 195**





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

I, II,
III = Mounting options
F = Machine guideway
P = Gauging points for alignment
K = Required mating dimensions
A = Alternative mating dimensions
B = Cable connection usable at either end
D = Compressed-air connection usable at either end
T = Mechanical fixed point (to be preferred)
H = Mechanical fixed point, compatible to predecessor model
G = Mechanical fixed point, with spacing interval of 100 mm
S = Beginning of measuring length ML (= 20 mm absolute)
W = Mating surfaces
⇨ = Direction of scanning unit motion for output signals in accordance with interface description