

	Interface	Signal period	Model	Further information
	 1 V _{PP}	20 μm	LS 388C	Page 32
	 TTL	20 μm	LS 328C	
	 1 V _{PP}	20 μm	LS 688C	Page 34
	 TTL	20 μm	LS 628C	
	 1 V _{PP}	20 μm	LS 487	Linear Encoders For Numerically Controlled Machine Tools brochure
	 TTL	Down to 1 μm	LS 477	
	 1 V _{PP}	20 μm	LS 187	
	 TTL	Down to 1 μm	LS 177	
	EnDat 2.2	–	LC 415	
	EnDat 2.2	–	LC 115	
	 1 V _{PP}	40 μm	LB 382	Linear Encoders For Numerically Controlled Machine Tools brochure
	EnDat 2.2 with  1 V _{PP}	40 μm	LC 281	
	EnDat 2.2	–	LC 211	



LS 388C



LS 688C



LS 487/LC 415



LS 187/LC 115



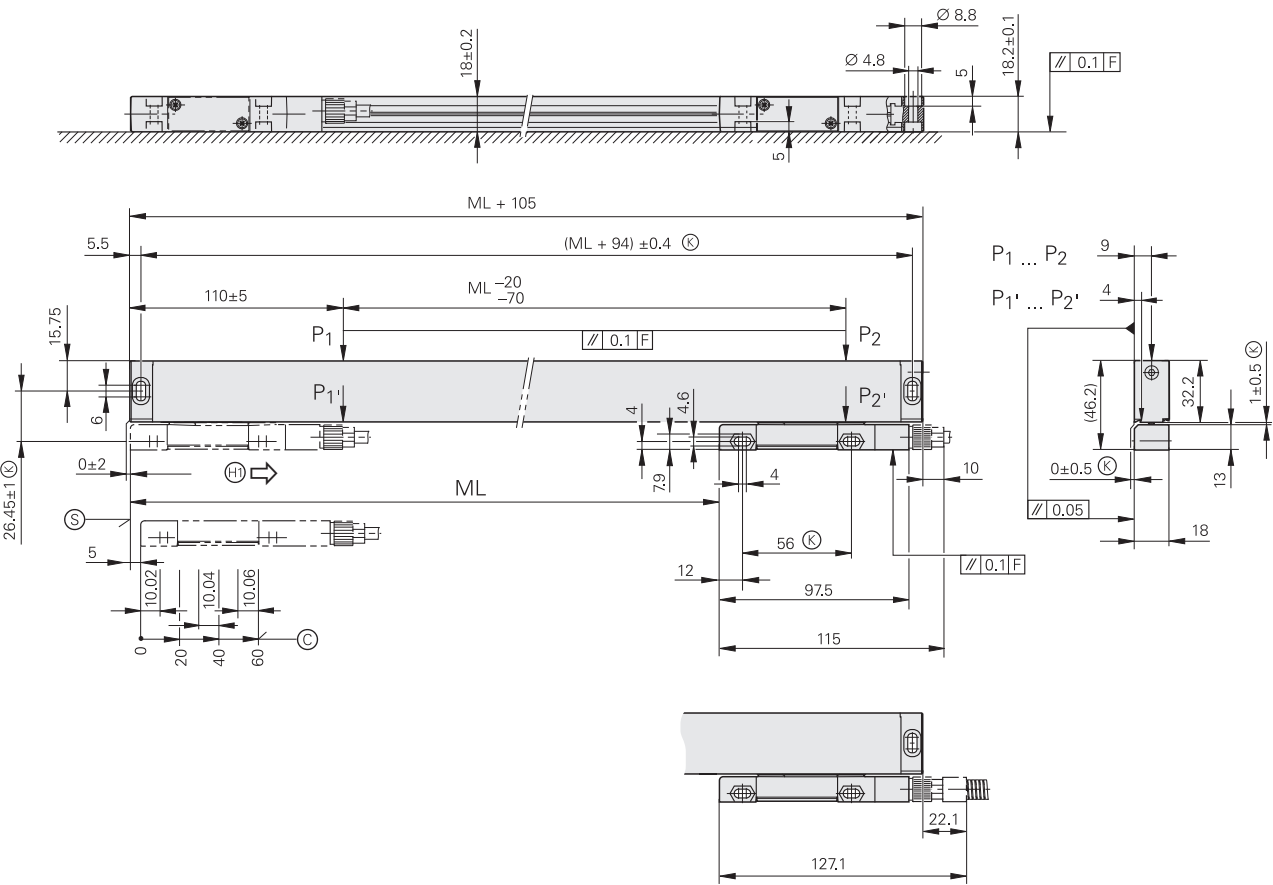
LC 281/LC 211



LB 382



LS 300 series



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

- $\odot$ = Beginning of measuring length (ML)
- $\odot$ = Reference mark position
- F = Machine guideway
- P = Measuring points for alignment
- $\otimes$ = Required mating dimensions
- 1 = Direction of scanning-unit motion for output signals in accordance with the interface description



	Incremental											
Specifications	LS 388C							LS 328C				
Measuring standard	Glass scale with DIADUR graduation											
Accuracy grade	±10 µm											
Measuring length ML*	70 670	120 720	170 770	220 820	270 870	320 920	370 970	420 1020	470 1140	520 1240	570	620
Interface	⌋ 1 V _{PP}							⌋⌋TTL				
Grating period	20 µm											
Edge separation <i>a</i>	–							≤ 5 µs				
Reference mark	Distance-coded											
Recommended measuring step ¹⁾	10 µm, 5 µm											
Supply voltage	DC 5 V ±0.25 V/< 100 mA (without load)											
Electrical connection	Separate adapter cable connectable to mounting block											
Cable length	≤ 30 m (with HEIDENHAIN cable)											
Traversing speed	≤ 60 m/min											
Required moving force	≤ 5 N											
Vibration 55 Hz to 2000 Hz Shock 6 ms	≤ 150 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 instructions											
Mass	0.27 kg + 0.67 kg/m measuring length											

* Please select when ordering
¹⁾ For position measurement

Please refer to the *General electrical information* in the *Interfaces of HEIDENHAIN Encoders* brochure, especially when connecting non-HEIDENHAIN electronics.