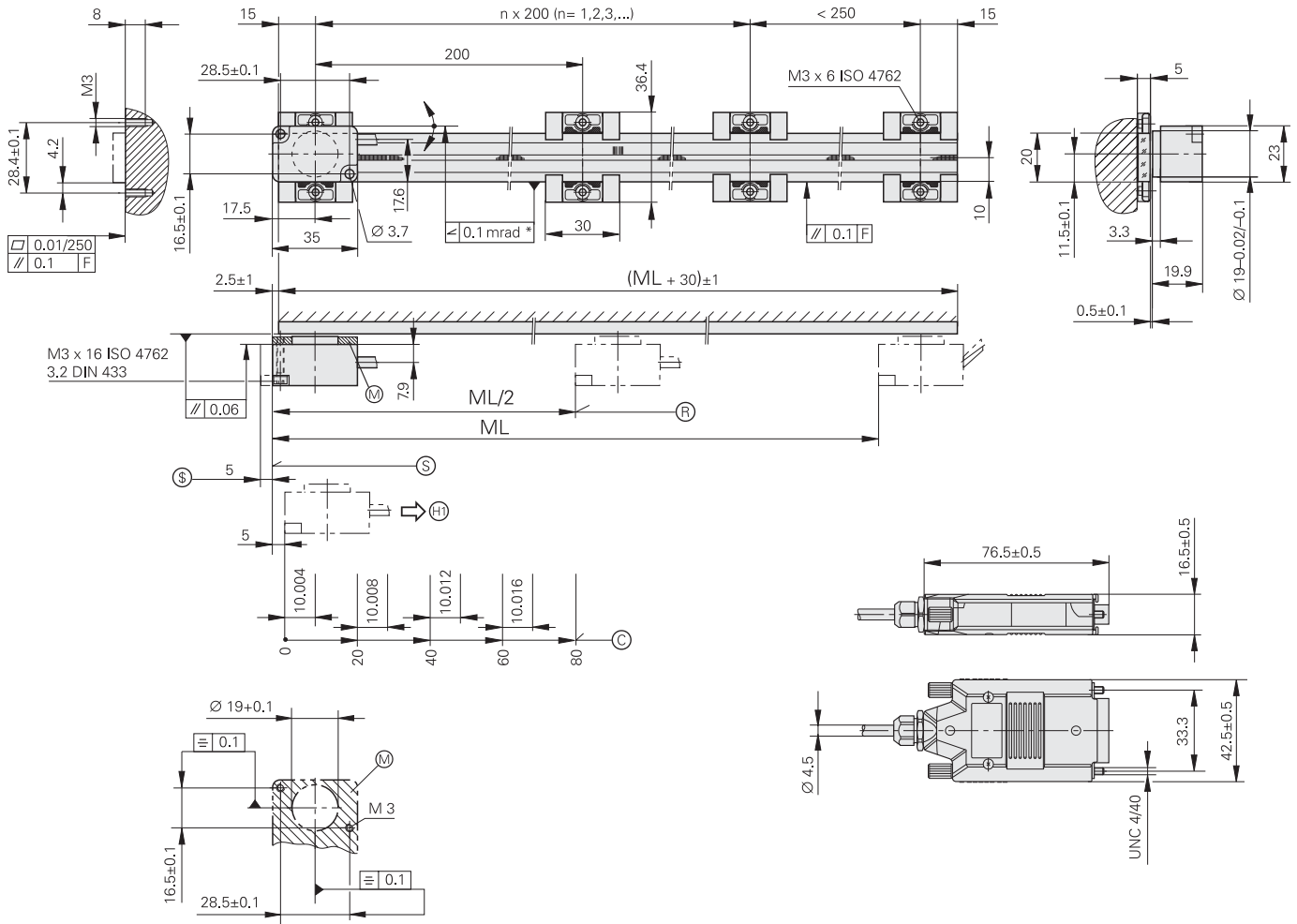



LIP 571, LIP 581

Incremental linear encoders with very high accuracy

- For measuring steps of 1 μm to 0.01 μm
- Measuring standard is fastened by fixing clamps



mm

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

- * = Max. change during operation
- F = Machine guideway
- Ⓜ = Reference-mark position on LIP 5x1 R
- Ⓢ = Reference-mark position on LIP 5x1 C
- Ⓟ = Beginning of measuring length (ML)
- Ⓠ = Permissible overtravel
- Ⓡ = Mounting surface for scanning head
- Ⓡ = Direction of scanning unit motion for output signals in accordance with interface description



Specifications	LIP 581	LIP 571											
Measuring standard Coefficient of linear expansion	DIADUR phase grating on glass $\alpha_{\text{therm}} \approx 8 \cdot 10^{-6} \text{ K}^{-1}$												
Accuracy grade*	$\pm 1 \mu\text{m}$												
Measuring length ML* in mm	70 720	120 770	170 820	220 870	270 920	320 970	370 1020	420 1240	470 1440	520	570	620	670
Reference marks* <i>LIP 5x1R</i> <i>LIP 5x1C</i>	One at midpoint of measuring length Distance-coded												
Incremental signals	$\sim 1 \text{ V}_{\text{pp}}$	\square TTL											
Grating period	8 μm												
Integrated interpolation* Signal period	– 4 μm	5-fold 0.8 μm				10-fold 0.4 μm							
Cutoff frequency –3dB	$\geq 300 \text{ kHz}$	–											
Scanning frequency* Edge separation a	–	$\leq 200 \text{ kHz}$ $\geq 0.220 \mu\text{s}$	$\leq 100 \text{ kHz}$ $\geq 0.465 \mu\text{s}$	$\leq 50 \text{ kHz}$ $\geq 0.950 \mu\text{s}$	$\leq 100 \text{ kHz}$ $\geq 0.220 \mu\text{s}$	$\leq 50 \text{ kHz}$ $\geq 0.465 \mu\text{s}$	$\leq 25 \text{ kHz}$ $\geq 0.950 \mu\text{s}$						
Traversing speed	$\leq 72 \text{ m/min}$	$\leq 48 \text{ m/min}$	$\leq 24 \text{ m/min}$	$\leq 12 \text{ m/min}$	$\leq 24 \text{ m/min}$	$\leq 12 \text{ m/min}$	$\leq 6 \text{ m/min}$						
Power supply Current consumption	DC 5 V \pm 5% < 175 mA	DC 5 V \pm 5% < 175 mA (without load)											
Electrical connection* Cable length	Cable 0.5 m, 1 m, 2 m or 3 m with D-sub connector (15-pin), interface electronics in the connector $\leq 30 \text{ m}$ (with HEIDENHAIN cable)												
Vibration 55 to 2000 Hz Shock 11 ms	$\leq 200 \text{ m/s}^2$ (EN 60068-2-6) $\leq 500 \text{ m/s}^2$ (EN 60068-2-27)												
Operating temperature	0 °C to 50 °C												
Weight	Scanning head Scale Connecting cable Connector	25 g (without connecting cable) 7.5 g + 0.25 g/mm measuring length 38 g/m 140 g											

* Please select when ordering

Representante oficial de:



HEIDENHAIN

[Argentina – Bolivia – Chile – Colombia - Costa Rica – Ecuador - El Salvador –
Guatemala – Honduras – Nicaragua – Panamá – Paraguay – Perú -
República Dominicana – Uruguay – Venezuela.]



Calle 49 N° 5764 - Villa Ballester (B1653AOX) - Prov. de Buenos Aires - ARGENTINA
Tel: (+54 11) 4768-4242 / Fax: (+54 11) 4849-1212
Mail: ventas@nakase.com.ar / Web: www.nakase.com.ar

