

LinACE™ Flat-Board

InAxis Linear Absolute Magnetic Shaft Encoder

LinACE[™] Flat-Board is a board-level absolute linear magnetic encoder system designed for motion control applications as a position and velocity control loop element. The readhead length only 30 mm and low weight of the encoder system make it suitable for applications with limited space.









Why choose

LinACE™ Flat-Board?

FEATURES:

- Non-contact technology for high reliability
- ✓ Absolute position upon power-on.
- ✓ Resolutions up to 0.5 µm
- Measuring lengths up to 300 mm

BENEFITS:

- Built-in self monitoring
- Excellent resistance to stray magnetic fields
- ✓ Stable across temperature
- Suitable for highly dynamic control loops
- ✓ Small footprint 30 × 25 × 8.5 mm



PROCESS AND



INDUSTRIAL



MACHINE TOOLS



MEDICAL



SERVO

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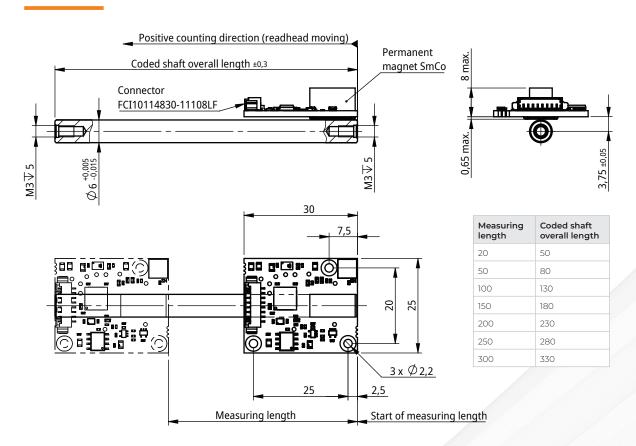
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LinACE™ Flat-Board technical specifications

| SYSTEM DATA | | |
|-----------------------------------|---|---|
| Maximum measuring length | 300 mm | |
| Shaft diameter | 6 mm | |
| System accuracy | ±5 µm – only available for measuring lengths up to 100 mm ±10 µm, ±25 µm, ±50 µm, ±100 µm – for measuring lengths up to 300 mm | |
| Maximum speed | 5 m/s | |
| Repeatability | Less than unit of resolution | |
| Hysteresis | Less than unit of resolution (without mechanical assembly influence) | |
| ELECTRICAL DATA | | |
| Supply voltage | 4.5 V to 5.5 V – voltage on readhead. | |
| Output load | Asynchronous serial, SSI and BiSS ±40 mA | |
| Set-up time | 5 ms (after switch-on) | |
| Current consumption | Typ. 115 mA, max. 150 mA (without output load) | |
| Voltage drop over cable | ~ 55 mV/m (without output load) | |
| MECHANICAL DATA | | |
| Material | Shaft | Carbon steel, Hard chrome coating 800 HV to 1100 HV |
| | Readhead | Assembled PCB |
| ENVIRONMENTAL DATA | | |
| Operating and storage temperature | −40 °C to +105 °C | |

LinACE™ Flat-Board dimensions

All dimensions in mm



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