

Laser Distance Measuring Device LMC-J-0040-2

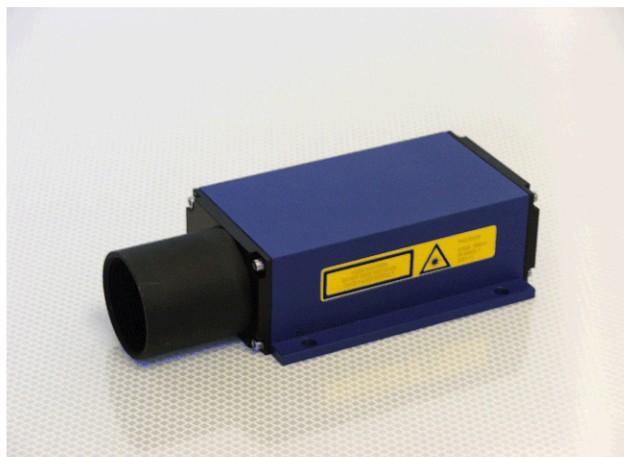
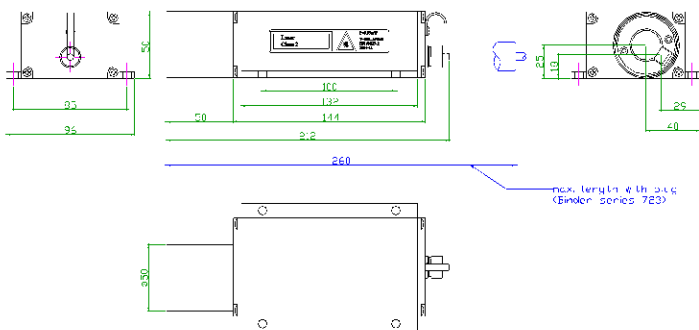
Precise – Robust – Reflectorless – Fast:

- Measures distances with millimetre accuracy
- Precisely defines positions
- Detects movements

The LMC-J-0040-2 is an opto-electronic distance measuring module for industrial applications. The module operates on basis of non-contact comparative phase measurement with amplitude modulation. The Laser diode (cw operation) has a divergence of 0.6 mrad for measurement with pinpoint accuracy. The measured result is available on the RS 232 / RS 422 data interface. A digital switching output, an analogue 4..20mA output and optional a Profibus output is also available. The sensor alignment can be easily achieved with the help of the red pilot laser. The Measuring range is on any natural surface between 0,2 to 30m, for 30 to 100m depends it on the surface reflectivity coefficient (f.e. concrete 30%, white paper 90%) and for more than 100 % we can deliver special plastic reflectors with a very high reflectivity coefficient of 2000%.

Features:

- Laser class 2 for eye safe operation
- Non-reflector measurement
- Millimetre accuracy measurement on any surface
- Easy installation and commissioning
- Allows field bus integration (Profibus).
- Meets IP 65 protection class for industrial use
- Also available in explosion-proofed version



Technical Data

Measuring range: *1	0.2 to 30 m on white and most natural surfaces. More than 100 m possible
Measuring accuracy: *2	± 2 mm under defined measuring condition ± 3 mm (+15°C to +35°C) ± 5 mm (-10°C to +50°C)
Measuring resolution:	0.1 mm
Repeatability	≤ 0,5 mm
Measuring rate: *1	50/10 Hz fixed, else 0,16 - 6 s (typically 5 Hz)
Connector:	12 pin (Binder Series 723)
Laser divergence:	0.6 mrad
Laser classification:	≤ 1 mW under IEC 825-1, laser class 2
Interface:	RS 232/RS 422, baud rate 9600, forma selection of measuring functions, scalin measuring time, output of measured va temperature, error codes, single measu mode.
Switching output:	Programmable switching threshold and "high-side-switch" with 0.5 A load capa
Analogue output:	programmable distance range limits, 4 mA
Operating temperature:	-10 °C to +50 °C
Supply voltage:	10 V to 30 V <1,5 W (without IAlarm)
Phys. dimensions:	212 x 96 x 50 mm (L x W x H)
Weight:	About 850 g
Protection class:	IP 65
Options:	Profibus Interface, Heating, Cooling, EEx Housing

*1 dependent on target reflectivity, stray light influences and atmospheric co

*2 statistical spread 95%

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