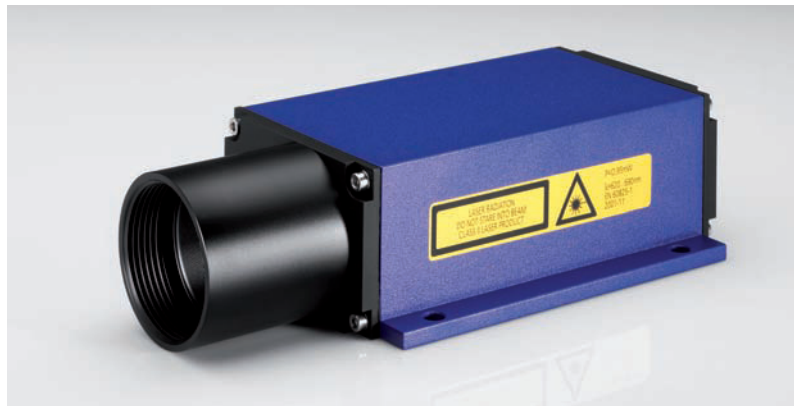




Laser Distance Meter LDM43 With Profibus and SSI Interface



**Measuring distances with millimeter accuracy.
Define positions precisely.
Registering motion processes.**

The LDM43 is an opto-electronic distance meter for industrial applications.

Equipped with a Profibus DP interface, the LDM43 can easily be integrated into any fieldbus-driven process controller.

The additional SSI interface provides another convenient option for controlled operation of the measuring device. A compact and robust design shape combines with low power consumption, selectable switching outputs and the possibility to set specific application parameters to warrant flexibility in use.

Benefits

- Precise: phase comparison allows distances up to 150 meters to be measured with millimeter accuracy.
- Non-wearing: distances can be reliably determined in a non-contact procedure that requires no reflector.
- Accurate: an eye-safe easily perceivable measuring beam is provided for pin-point alignment of the sensor.

Applications

- Distance measurement and determination of positions
- Fill-level measurement
- Position monitoring of moving objects
- Positioning of hoisting facilities, conveyor systems and crane equipment
- Industrial labor protection and security-related applications

Laser Distance Meter LDM43

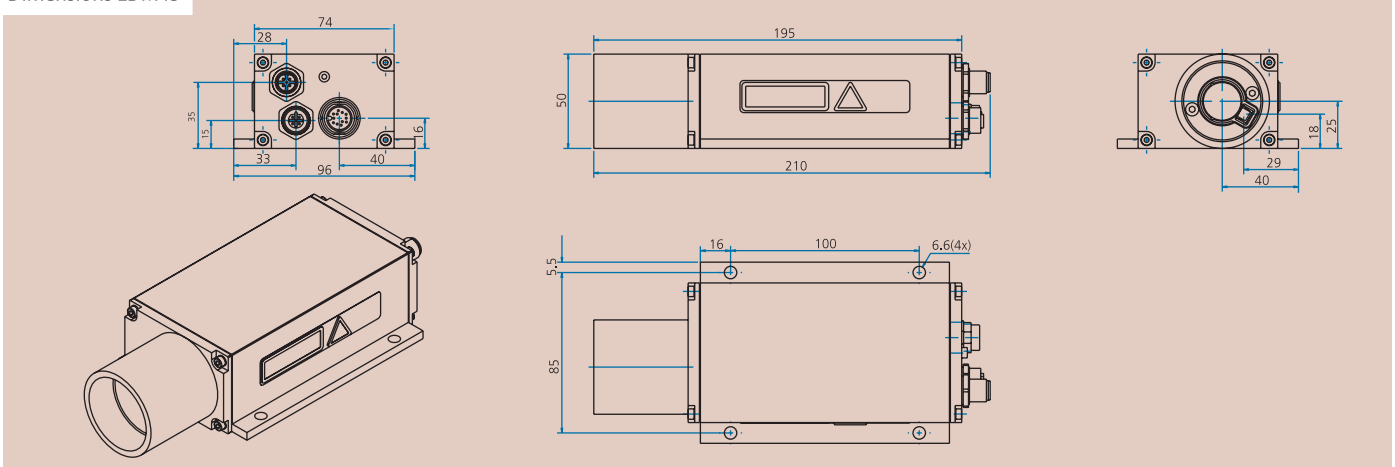
With Profibus and SSI Interface

Specifications

Measuring range*1	0.1 .. 30 m for natural, diffuse reflecting surfaces, up to a max. 150 m with target board
Measuring accuracy*2	± 3 mm (+15 .. +30 °C), ± 5 mm (-10 .. +50 °C)
Measured value resolution	0.1 mm
Reproducibility	≤ 0.5 mm
Time to measure	0.16 .. 6 s
Laser classification	Laser Class 2, ≤ 1 mW according to IEC 825-1 / EN 60825
Wavelength	650 nm (red)
Beam divergence	0.6 mrad
Connector terminals	1x 12-pole (series 423 Binder) M18 2x 5-pole (series 766 Binder) M12 B-encoded
Profibus data interface	Profibus RS485, Profibus DP-V0 slave according to IEC 61158 / IEC 61784 Transfer rates: 9.6 / 19.2 / 93.75 / 187.5 / 500 kBaud; 1.5 / 3 / 6 / 12 MBaud automatic baud rate detection, external terminating resistor
GSD file	LDM409CB.GSD, PNO Profile Encoder Class 1/2 Configuration of measuring parameters, digital output, trigger input, output of measured values and error messages, query for device inner temperature, parameters and PB-address are stored in NVRAM.
SSI interface	Transfer rate: 50 kHz .. 1 MHz, 200 µs pause Signal input to signal output differential signal (RS422), 24 bit, Gray-encoded, electrical isolation to 500 V for signal input
Operating modes	Continuous measurement, external triggering
Switching output	Two outputs with HIGH signal level U_H - 2 V and LOW signal level < 2 V, load carrying capacity max. 0.5 A, short-circuit-proof, switching threshold and hysteresis selectable
Trigger input	One input with HIGH signal level >11 V and LOW signal level < 6.5 V, 2.5 mA input current at 24 V, trigger edge and delay selectable, trigger pulse of max. 24 V
Supply voltage (U_V)	10 .. 30 V DC
Max. power consumption	3.2 W at 24 V
Operating temperature	-10 .. +50 °C, with automatic laser diode shut down on excession of temperature limits
Storage temperature	-20 .. +70 °C
Phys. dimensions (L x W x H)	210 mm x 96 mm x 50 mm
Degree of protection	IP65
EMC	EN 61000-6-2, EN 55011

*1 Depending on target reflectivity, stray light effects and atmospheric conditions. *2 With statistical spread of 95%

Dimensions LDM43



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



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