

LASER distance sensor for use in Ex zones (0)*,1,2 and (20)*,21,22



LDG series

- > Optical power limitation according to IEC 60079-28
- > Analog output 4 - 20mA
- > RS485 Com-Port
- > ToF (Time of Flight) system



Type

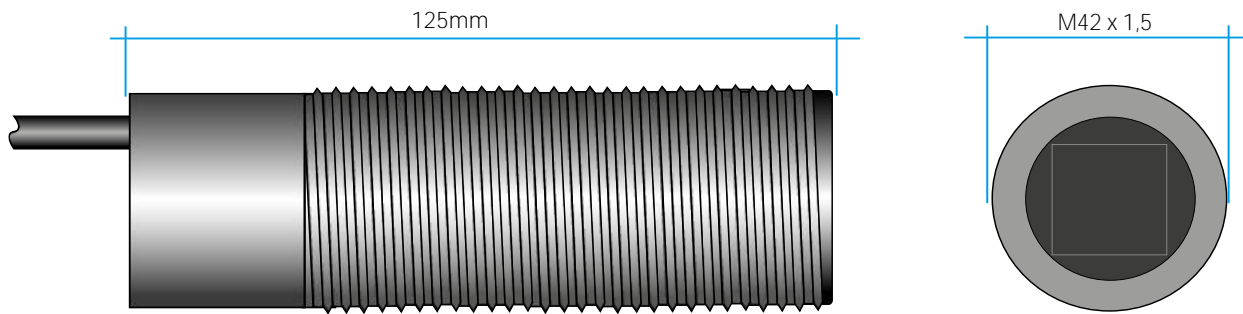
Range on reference surface	50...1'000mm (1m)	50...1'500mm (1,5m)	50...3'000mm (3m)
Analog output: Near 4mA	LDG-AAB-BBA-OF	LDG-AAH-CBF-OF	LDG-AAB-FBA-OF
Range on reference surface	50...5'000mm (5m)	50...10'000mm (10m)	50...30'000mm (30m)
Analog output: Near 4mA	LDG-AAB-JBA-OF	LDG-AAB-BCA-OF	LDG-AAB-FCA-OF

General properties

Type of protection gas, according to 2014/34/EU	II 2(1)G Ex db [op is Ga] IIA T4 Gb
Type of protection dust, according to 2014/34/EU	II 2(1)D Ex tb [op is Da] IIIC T135°C Db IP67
Can be used in Ex zones	Zonen (0)*,1,2 and (20)*,21,22
Light frequency	Red 620 to 690nm, <=1mW
Light source	Laser Class 2 / EN 60825-1
Reaction speed	0,25ms to 4,5s
Readiness delay	800 ms
Supply voltage	24 VDC +/-10%, Um = Max. 30 VDC
Power consumption	max. 70 mA / 2,4W
Analog output	4 - 20mA sinking // 500Ohm Max
Measuring accuracy	+/- 1mm over the set measuring range
Com-Port	RS485
Measuring accuracy	+/- 1mm over the entire measuring range
Working temperature range	-10°C ... +35°C
Housing	M42 x 1,5, Steel 1.4404
Resistance to vibration and shock	Vibration: 30g at 20Hz to 2kHz. Shock: 50g in each direction (X, Y, Z)
Connection cable	7x AWG24, shielded, halogen-free, length: 6m, oil-resistant
Output wiring	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"> <p>LDx-LASER</p> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="background-color: yellow; display: inline-block; padding: 2px;">LABELING</p> Near: 4mA</div> <div style="margin-left: 10px;"> <p>1 24VDC</p> <p>3 Input LASER ON</p> <p>4 Output 4-20mA sinking</p> <p>2 0V</p> <p>5 RS485 Factory-Port</p> <p>6 PE yellow/green Shield</p> </div> </div>

* Light may affect Ex zones 0 and 20

Dimensions in mm



Series options (not all combinations possible)

K:	Specific cable length up to max. 100m (e.g. K:10 = 10m connection cable)
Customized presets	On request

Other possible output/input functions

None	None

Accessories

Accessories, all types	2 pcs. Nuts M42x 1.5
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Optionales Zubehör

Optional accessories, all types	MOXA converter UPORT 1130 kit with adapter and adjustment software
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Important note

The manufacturer's assembly and installation instructions must be observed. These can be found on the manufacturer's original data sheets and are available on request.