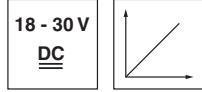


ODS 96B

en 03-2012/11 50110829



120 ... 1400mm



- Reflection-independent distance information
- Highly insensitive to extraneous light
- Analogue voltage output
- PC/OLED display and key pad for configuration
- Measurement value is indicated in mm on OLED display
- Measurement range and mode adjustable
- Switching output and teachable analogue output

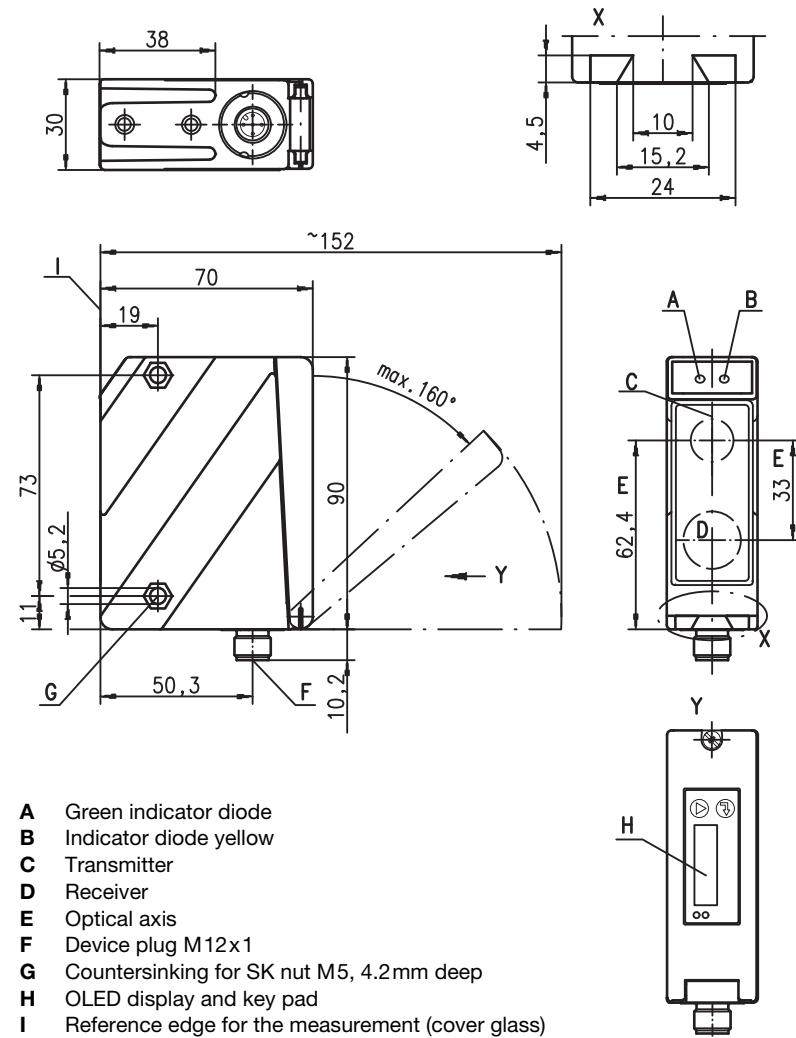


Accessories:

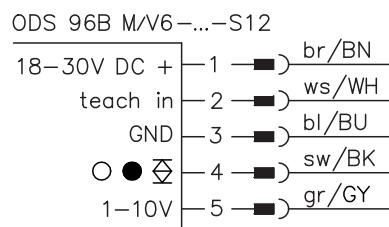
(available separately)

- Mounting systems
- Cable with M12 connector (K-D ...)
- Configuration software

Dimensioned drawing



Electrical connection



Specifications

Optical data

Measurement range 1)	120 ... 1400mm
Resolution 2)	0.1 ... 2mm
Light source	LED
Wavelength	880nm (infrared light)
Light spot	approx. 15 x 15mm ² at 600mm

Error limits (relative to measurement distance)

Absolute measurement accuracy 1)	± 1.5% up to 800mm, ± 2% up to 1400mm
Repeatability 3)	± 0.5% up to 800mm, ± 1% up to 1400mm
B/w detect. thresholds (6 ... 90% rem.)	≤ 1% up to 800mm, ≤ 2% up to 1400mm
Temperature compensation	yes 4)

Timing

Measurement time	1 ... 5 ¹⁾ ms
Response time 1)	≤ 15ms
Delay before start-up	≤ 300ms

Electrical data

Operating voltage U_B	18 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of U_B
Open-circuit current	≤ 150mA
Switching output	push-pull switching output 5), PNP light switching, NPN dark switching
Signal voltage high/low	≥ $(U_B - 2V)/2V$
Analogue output	voltage 1 ... 10V / 0 ... 10V / 1 ... 5V / 0 ... 5V, $R_L \geq 2k\Omega$

Indicators

Green LED	continuous light	teach-in on GND	teach-in on $+U_B$
	flashing	ready	
	off	fault	teaching procedure
Yellow LED	continuous light	no voltage	
	flashing	object inside teach-in measurement distance	teaching procedure
	off	object outside teach-in measurement distance	

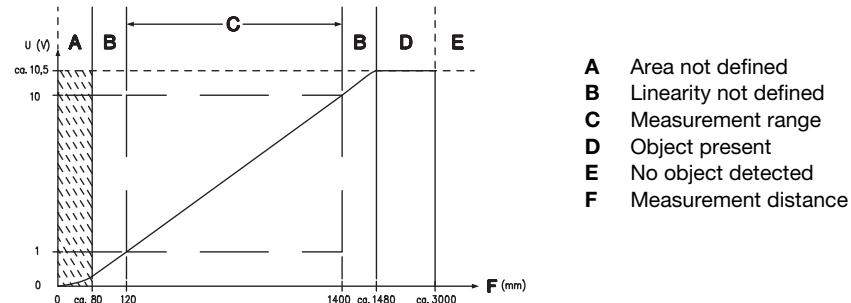
Mechanical data

Housing	diecast zinc
Optics cover	glass
Weight	380g
Connection type	M12 connector

Environmental data

Ambient temp. (operation/storage)	-20°C ... +50°C / -30°C ... +70°C
Protective circuit 6)	1, 2, 3
VDE safety class 7)	II, all-insulated
Protection class	IP 67, IP 69K 8)
Standards applied	IEC/EN 60947-5-2

- 1) Luminosity coefficient 6% ... 90%, complete measurement range, at 20°C, medium range of U_B , measurement object $\geq 50 \times 50 \text{ mm}^2$
- 2) Minimum and maximum value depend on measurement distance
- 3) Same object, identical environmental conditions, measurement object $\geq 50 \times 50 \text{ mm}^2$
- 4) Typ. $\pm 0.02 \% / \text{K}$
- 5) The push-pull switching outputs must not be connected in parallel
- 6) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs
- 7) Rating voltage 250VAC, with cover closed
- 8) IP 69K test in accordance with DIN 40050 part 9 simulated, high pressure cleaning conditions without the use of additives. Acids and bases are not part of the test



Order guide

With M12 connector

Designation

Part No.

ODS 96B M/V6-1400-S12 50110231

Tables

Diagrams

Remarks

- Measurement time depends on the reflectivity of the measurement object and on the measurement mode.
- **Approved purpose:** This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.