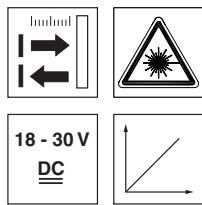


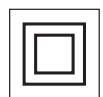
ODSL 96B

en 04-2012/11 5 0108379



150 ... 1200mm

- Wide rectangular-shaped light spot for measurements on objects with openings
- Reflection-independent distance information
- Highly insensitive to extraneous light
- Analogue current or voltage output
- PC/OLED display and key pad for configuration
- Measurement value is indicated in mm on OLED display
- Measurement range and mode adjustable
- Teachable switching output and analogue output

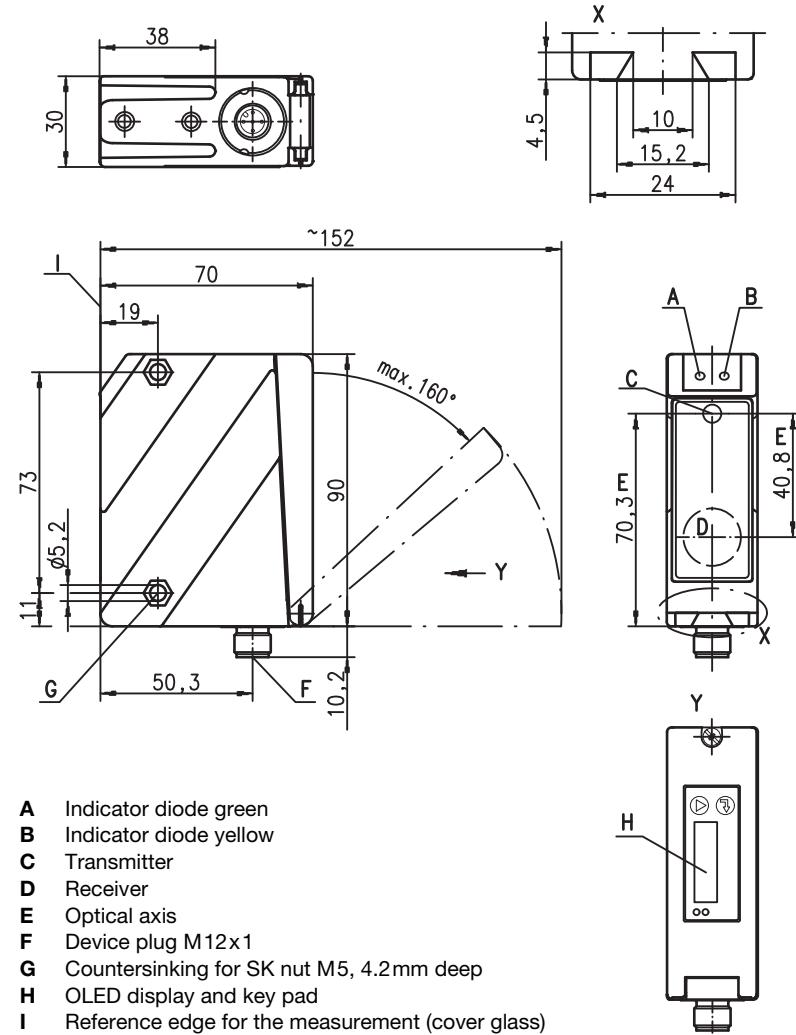


Accessories:

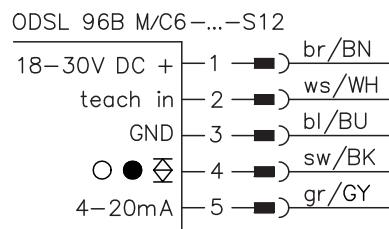
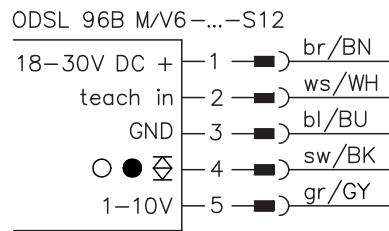
(available separately)

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

Dimensioned drawing



Electrical connection



Specifications

Optical data

Measurement range 1)	150 ... 1200mm
Resolution 2)	0.1 ... 1.5mm
Light source	laser
Wavelength	655nm (red light)
Light spot	divergent, approx. $15 \times 4 \text{ mm}^2$ at 800mm

Error limits (relative to measurement distance)

Absolute measurement accuracy 1)	$\pm 1.5\%$ up to 800mm, $\pm 2\%$ up to 1200mm
Repeatability 3)	$\pm 0.5\%$ up to 800mm, $\pm 1\%$ up to 1200mm
b/w detect. thresholds (6 ... 90% rem.)	$\leq 1\%$ up to 800mm, $\leq 1.5\%$ up to 1200mm
Temperature compensation	yes 4)

Timing

Measurement time	1 ... 5 ¹⁾ ms
Response time 1)	$\leq 15\text{ms}$
Delay before start-up	$\leq 300\text{ms}$

Electrical data

Operating voltage U_B	18 ... 30VDC (incl. residual ripple)
Residual ripple	$\leq 15\%$ of U_B
Open-circuit current	$\leq 150\text{mA}$
Switching output	push-pull switching output 5), PNP light switching, NPN dark switching $\geq (U_B - 2\text{ V})/2\text{V}$ voltage 1 ... 10V, $R_L \geq 2\text{k}\Omega$ current 4 ... 20mA, $R_L \leq 500\Omega$
Signal voltage high/low	
Analogue output	

Indicators

	teach-in on GND	teach-in on $+U_B$
Green LED	continuous light	
	flashing	
	off	
Yellow LED	continuous light	object inside teach-in measurement distance
	flashing	teaching procedure
	off	object outside teach-in measurement distance

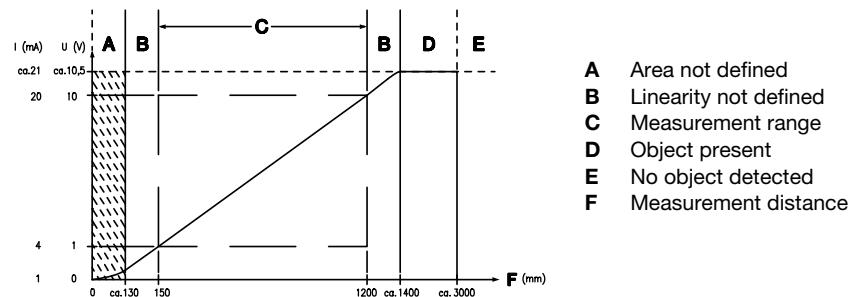
Mechanical data

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)
Laser class	2 (acc. to EN 60825-1)
Standards applied	IEC 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. $\pm 0.02\%$ /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 acc. to 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

Current output	ODSL 96B M/C6.XL-1200-S12	501 06736
Voltage output	ODSL 96B M/V6.XL-1200-S12	501 06737

Tables

Diagrams

Remarks

- Measurement time depends on the reflectivity of the measurement object and on the measurement mode.
- Approved purpose:** The ODSL 96B distance sensors are optical electronic sensors for the optical, contactless measurement of distance to objects.

