

/// ODS 96B



Series ODS 96B distance sensors with large measurement ranges of 60 to 25,000 mm are suitable for many different applications and, thanks to the metal housing, are extremely robust. They measure in the ms range. The integrated display shows the measurement values and allows the sensor to be easily adapted to the measurement task. Apart from analog current/voltage interfaces and binary switching outputs, digital interfaces are also available. Digital interfaces prevent conversion losses in the sensor, control and during measurement data transfer.



ODS(R) 96B

Measures with either red LED light or infrared light and is suitable for large-area objects, such as bulk material.

Benefits:

- For measurements on objects with large surface area, e. g. bulk material, band materials, plate materials
- Robust metal housing
- High accuracy – reflection-independent distance measurement
- Display for measured value display and configuration

Part no.	Part description	Measurement range	Light source Safety class	Light spot dimensions	Analog outputs	Digital switching outputs	Resolution	Measure- ment time	Description
50106727	ODS 96B M/C66.01-1400-S12	120 ... 1,400 mm	LED, infrared	15 mm × 15 mm	1x, current	2x	0.1 ... 0.5 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50110231	ODS 96B M/V6-1400-S12	120 ... 1,400 mm	LED, infrared	15 mm × 15 mm	1x, voltage	1x	0.1 ... 2.0 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106730	ODSR 96B M/C6-600-S12	100 ... 600 mm	LED, red	15 mm × 15 mm	1x, current	1x	0.1 ... 0.5 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106731	ODSR 96B M/V6-600-S12	100 ... 600 mm	LED, red	15 mm × 15 mm	1x, voltage	1x	0.1 ... 0.5 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106720	ODS 96B M/C6-600-S12	100 ... 600 mm	LED, infrared	15 mm × 15 mm	1x, current	1x	0.1 ... 0.5 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106721	ODS 96B M/V6-600-S12	100 ... 600 mm	LED, infrared	15 mm × 15 mm	1x, voltage	1x	0.1 ... 0.5 mm	1 ... 5 ms	Connector, M12, metal, 5-pin

ODSL 96B-S

Small laser light spot for the precise measurement of small objects, objects with color structures or for glossy surfaces.

Benefits:

- Small laser light spot
- Precise measurement on small objects and objects with colored structure
- For measurement on metallic surfaces

Part no.	Part description	Measurement range	Light source Safety class	Light spot dimensions	Analog outputs	Digital switching outputs	Resolution	Measurement time	Description
50123687	ODSL 96B M/C6.C1S-1500-S12	150 ... 1,500 mm	Laser, red, 1	1 mm	1x, current	1x	0.1 ... 2.0 mm	12 ... 60 ms	Small light spot (S), connector, M12, metal, 5-pin
50123686	ODSL 96B M/V6.C1S-1500-S12	150 ... 1,500 mm	Laser, red, 1	1 mm	1x, voltage	1x	0.1 ... 2.0 mm	12 ... 60 ms	Small light spot (S), connector, M12, metal, 5-pin
50106728	ODSL 96B M/C6.S-800-S12	150 ... 800 mm	Laser, red, 2	1 mm	1x, current	1x	0.1 ... 0.8 mm	1 ... 5 ms	Small light spot (S), connector, M12, metal, 5-pin
50111035	ODSL 96B M/D26.S-800-S12	150 ... 800 mm	Laser, red, 2	1 mm		1x	0.1 ... 0.8 mm	1 ... 5 ms	Type of interface: RS 232, small light spot (S), connector, M12, metal, 5-pin
50112065	ODSL 96B M/D36.S-800-S12	150 ... 800 mm	Laser, red, 2	1 mm		1x	0.1 ... 0.8 mm	1 ... 5 ms	Type of interface: RS 485, small light spot (S), connector, M12, metal, 5-pin
50106729	ODSL 96B M/V6.S-800-S12	150 ... 800 mm	Laser, red, 2	1 mm	1x, voltage	1x	0.1 ... 0.8 mm	1 ... 5 ms	Small light spot (S), connector, M12, metal, 5-pin

ODSL 96B-XL

Elongated light spot for precise measurements on porous objects and objects with openings (e.g. corrugated cardboard) as well as on objects that are not aligned precisely.

Benefits:

- Elongated light spot for precise measurement

Part no.	Part description	Measurement range	Light source Safety class	Light spot dimensions	Analog outputs	Digital switching outputs	Resolution	Measurement time	Description
50106736	ODSL 96B M/C6.XL-1200-S12	150 ... 1,200 mm	Laser, red, 2	15 mm × 4 mm	1x, current	1x	0.1 ... 1.5 mm (XL)	1 ... 5 ms	Extra long light spot (XL), connector, M12, metal, 5-pin
50106737	ODSL 96B M/V6.XL-1200-S12	150 ... 1,200 mm	Laser, red, 2	15 mm × 4 mm	1x, voltage	1x	0.1 ... 1.5 mm (XL)	1 ... 5 ms	Extra long light spot (XL), connector, M12, metal, 5-pin

ODSL(R) 96B

Even over large ranges of up to 2 m, this sensor measures in the ms range with millimeter precision. High resolving power in compact, robust design.

Benefits:

- For measurements in ms cycle at large ranges
- Stable and precise measurement values, even at varying temperatures and objects
- Robust: IP 67, IP 69K

Part no.	Part description	Measurement range	Light source Safety class	Light spot dimensions	Analog outputs	Digital switching outputs	Resolution	Measurement time	Description
50106732	ODSLR 96B M/C6-2000-S12	60 ... 2,000 mm	Laser, red, 2, LED, red	2 mm × 6 mm	1x, current	1x	1.0 ... 5.0 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106733	ODSLR 96B M/V6-2000-S12	60 ... 2,000 mm	Laser, red, 2, LED, red	2 mm × 6 mm	1x, voltage	1x	1.0 ... 5.0 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106599	ODSL 96B M/66-2000-S12	150 ... 2,000 mm	Laser, red, 2	2 mm × 6 mm		2x	1.0 ... 3.0 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106735	ODSL 96B M/C6-2000 Ex d	150 ... 2,000 mm	Laser, red, 2	2 mm × 6 mm	1x, current	1x	1.0 ... 3.0 mm	1 ... 5 ms	Ex-protected, cable, 15,000 mm, 5-wire
50106593	ODSL 96B M/C6-2000-S12	150 ... 2,000 mm	Laser, red, 2	2 mm × 6 mm	1x, current	1x	1.0 ... 3.0 mm	1 ... 5 ms	Connector, M12, metal, 5-pin
50106597	ODSL 96B M/D26-2000-S12	150 ... 2,000 mm	Laser, red, 2	2 mm × 6 mm		1x	1.0 ... 3.0 mm	1 ... 5 ms	Type of interface: RS 232, connector, M12, metal, 5-pin
50106598	ODSL 96B M/D36-2000-S12	150 ... 2,000 mm	Laser, red, 2	2 mm × 6 mm		1x	1.0 ... 3.0 mm	1 ... 5 ms	Type of interface: RS 485, connector, M12, metal, 5-pin
50111164	ODSL 96B M/L-2000-S12	150 ... 2,000 mm	Laser, red, 2	2 mm × 6 mm			1.0 ... 3.0 mm	1 ... 5 ms	Type of interface: IO-Link, connector, M12, metal, 5-pin
50106594	ODSL 96B M/V6-2000-S12	150 ... 2,000 mm	Laser, red, 2	2 mm × 6 mm	1x, voltage	1x	1.0 ... 3.0 mm	1 ... 5 ms	Connector, M12, metal, 5-pin

Switching sensors

Measuring sensors

Products for safety at work

Identification

Data transmission / Control components

Industrial image processing

Accessories

ODSL 96-Teach

For simple applications, these sensors with plastic housing offer a large measurement range. The sensor can be quickly commissioned through teach-in.

Benefits:

- Reflection-independent distance information
- 2 teachable switching outputs (push-pull)
- Easy alignment through visible red light
- Degree of protection IP 67
- Measurement range / operating range up to 2,300 mm

Part no.	Part description	Measurement range	Light source Safety class	Light spot dimensions	Analog outputs	Digital switching outputs	Resolution	Measurement time	Description
50101882	ODSL 96K/66-2300-S12	150 ... 2,300 mm	Laser, red, 2	3 mm × 8 mm		2x	1.0 ... 5.0 mm	2 ... 7 ms	Connector, M12, plastic, 5-pin
50101881	ODSL 96K/V66-2300-S12	150 ... 2,300 mm	Laser, red, 2	3 mm × 8 mm	1x, voltage	2x	1.0 ... 5.0 mm	2 ... 7 ms	Connector, M12, plastic, 5-pin

ODSL 96B-TOF

Large range also with dark objects. Measurement according to the "time of flight" principle.

Benefits:

- Large range even with dark objects
- Various operating modes for fast or precise measurement
- Robust measurement procedure
- Very high immunity to ambient light
- Display for measured value display and configuration

Part no.	Part description	Measurement range	Light source Safety class	Light spot dimensions	Analog outputs	Digital switching outputs	Resolution	Measurement time	Description
50109290	ODSL 96B M/C6-S12	300 ... 10,000 mm	Laser, red, 2	7 mm × 7 mm	1x, current	1x	3.0 mm	1.4 ... 50 ms	Connector, M12, metal, 5-pin
50109295	ODSL 96B M/C66-S12	300 ... 10,000 mm	Laser, red, 2	7 mm × 7 mm	1x, current	2x	3.0 mm	1.4 ... 50 ms	Connector, M12, metal, 5-pin
50109292	ODSL 96B M/D26-S12	300 ... 10,000 mm	Laser, red, 2	7 mm × 7 mm		1x	3.0 mm	1.4 ... 50 ms	Type of interface: RS 232, connector, M12, metal, 5-pin
50109293	ODSL 96B M/D36-S12	300 ... 10,000 mm	Laser, red, 2	7 mm × 7 mm		1x	3.0 mm	1.4 ... 50 ms	Type of interface: RS 485, connector, M12, metal, 5-pin
50109294	ODSL 96B M/L-S12	300 ... 10,000 mm	Laser, red, 2	7 mm × 7 mm			3.0 mm	1.4 ... 50 ms	Type of interface: IO-Link, connector, M12, metal, 5-pin
50109291	ODSL 96B M/V6-S12	300 ... 10,000 mm	Laser, red, 2	7 mm × 7 mm	1x, voltage	1x	3.0 mm	1.4 ... 50 ms	Connector, M12, metal, 5-pin
50109302	ODSIL 96B M/C6-S12	300 ... 10,000 mm	Laser, infrared, 1	7 mm × 7 mm	1x, current	1x	3.0 mm	2.8 ... 100 ms	Connector, M12, metal, 5-pin
50127488	ODSIL 96B M/L-S12	300 ... 10,000 mm	Laser, infrared, 1	7 mm × 7 mm			3.0 mm	2.8 ... 100 ms	Type of interface: IO-Link, connector, M12, metal, 5-pin
50109303	ODSIL 96B M/V6-S12	300 ... 10,000 mm	Laser, infrared, 1	7 mm × 7 mm	1x, voltage	1x	3.0 mm	2.8 ... 100 ms	Connector, M12, metal, 5-pin

ODKL 96B

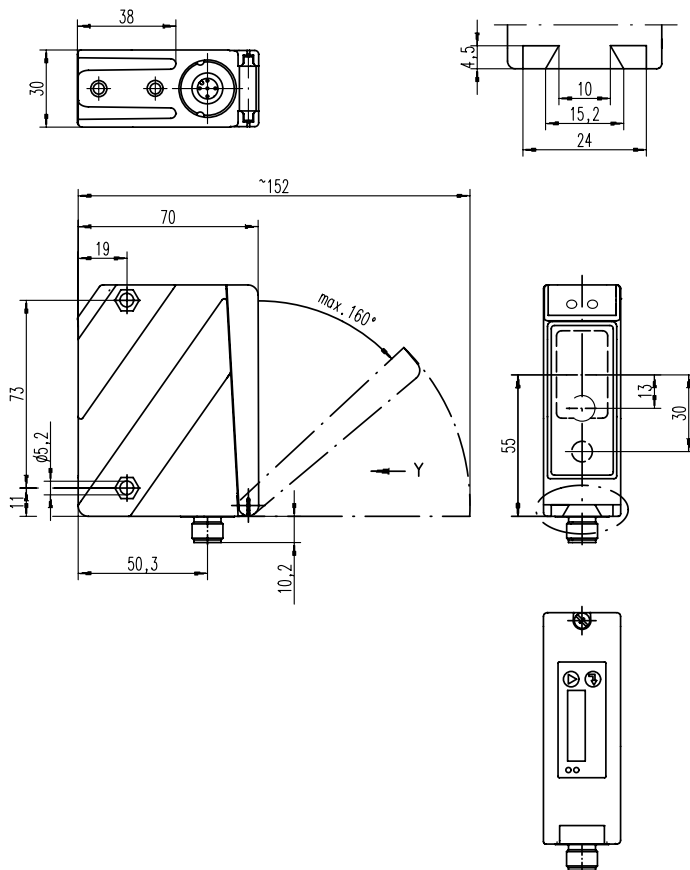
A visible light spot ensures easy alignment. By measuring on reflectors, ranges of up to 25 m are no problem.

Benefits:

- Fast and easy alignment due to highly visible laser light spot
- Very high range by measuring on reflective tape
- Compact design

Part no.	Part description	Measurement range	Light source Safety class	Light spot dimensions	Analog outputs	Digital switching outputs	Resolution	Measurement time	Description
50109297	ODKL 96B M/C6-S12	300 ... 25,000 mm	Laser, red, 2	7 mm × 7 mm	1x, current	1x	3.0 mm	1.4 ... 50 ms	Connector, M12, metal, 5-pin
50109299	ODKL 96B M/D26-S12	300 ... 25,000 mm	Laser, red, 2	7 mm × 7 mm		1x	3.0 mm	1.4 ... 50 ms	Type of interface: RS 232, connector, M12, metal, 5-pin
50109300	ODKL 96B M/D36-S12	300 ... 25,000 mm	Laser, red, 2	7 mm × 7 mm		1x	3.0 mm	1.4 ... 50 ms	Type of interface: RS 485, connector, M12, metal, 5-pin
50109301	ODKL 96B M/L-S12	300 ... 25,000 mm	Laser, red, 2	7 mm × 7 mm			3.0 mm	1.4 ... 50 ms	Type of interface: IO-Link, connector, M12, metal, 5-pin
50109298	ODKL 96B M/V6-S12	300 ... 25,000 mm	Laser, red, 2	7 mm × 7 mm	1x, voltage	1x	3.0 mm	1.4 ... 50 ms	Connector, M12, metal, 5-pin

Dimensioned drawings: ODS 96B



ODS 96B optical distance sensor

ACCESSORIES: ODS 96B

Connection technology

Connection cables

Part no.	Part description	Connection 1	No. of pins	Cable length	Sheathing material
50104556	K-D M12W-5P-2m-PVC	Connector, M12, angled, female	5-pin	2,000 mm	PVC
50104558	K-D M12W-5P-5m-PVC	Connector, M12, angled, female	5-pin	5,000 mm	PVC
50104555	K-D M12A-5P-2m-PVC	Connector, M12, axial, female	5-pin	2,000 mm	PVC
50104557	K-D M12A-5P-5m-PVC	Connector, M12, axial, female	5-pin	5,000 mm	PVC

Further connection cables can be found on our website

Mounting systems

Mounting brackets

Part no.	Part description	Design	Fastening at device	Fastening at system	Material
50025570	BT 96	Angle, L-shape	Screw type	Through-hole mounting	Metal

Further mounting brackets can be found on our website

Rod mounts

Part no.	Part description	Design	Fastening at device	Fastening at system	Material
50082084	BT 450.1-96	Mounting system	Screw type	For 10 mm rod	Metal
50026204	UMS 96	Mounting system	Clampable	For 10 mm rod, for 12 mm rod, for 14 mm rod, for 16 mm rod	Metal

Further rod mounts can be found on our website

Reflective tapes

Reflective tapes for distance sensors

Part no.	Part description	Design	Reflective surface	Fastening	Material
50111527	REF 7-A-100x100	Rectangular	100 mm × 100 mm	Self-adhesive	Plastic

Further reflective tapes can be found on our website

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