



Figure can vary

**Part no.: 50106733**  
**ODSLR 96B M/V6-2000-S12**  
**Optical distance sensor**



## Contents

- Technical data
- Electrical connection
- Operation and display
- Accessories

## Technical data

<b>Basic data</b>	
Series	96
Type of scanning system	Against object
<b>Optical data</b>	
Light source 1	Laser , Red
Laser class	2 ,
Light source 2	LED , Red
Light-spot size [at sensor distance]	2 mm x 6 mm []
Type of light-spot geometry	Rectangular
<b>Measurement data</b>	
Measurement range	60 ... 2,000 mm
Resolution	1.0 ... 5.0 mm
Accuracy, short range	2 %
Accuracy, distant range	1.5 %
Accuracy, short range	60 ... 200 mm
Reference value, accuracy	Measurement distance
Repeatability	0.5 %
Reference value repeatability	Measurement distance
Measurement time	1 ... 5 ms
Referencing	No
Black/white behavior	1 %
<b>Electrical data</b>	
Protective circuit	Polarity reversal protection Short circuit protected Transient protection
<b>Performance data</b>	
Supply voltage $U_B$	18 ... 30 V , DC
Current consumption, max.	
Residual ripple	0 ... 15 % , From $U_B$
Open-circuit current	0 ... 150 mA
<b>Inputs</b>	
Number of digital switching inputs	1 Piece(s)
<b>Switching inputs</b>	
<b>Digital switching input 1</b>	
Function	Programmable
<b>Teach inputs</b>	
Voltage type	DC
Switching voltage	High: $\geq(U_B-2V)$

**Outputs**

Number of analog outputs	1 Piece(s)
Number of digital switching outputs	1 Piece(s)

**Analog outputs**
**Analog output 1**

Type	Voltage
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**Switching outputs**

Switching voltage	High: $\geq(U_B-2V)$
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**Switching output 1**

Switching element	Transistor , Push-pull
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**Timing**
**Connection**

Number of connections	1 Piece(s)
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**Connection 1**

Type of connection	Connector
Function	Signal IN Signal OUT Voltage supply
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

**Mechanical data**

Design	Cubic
Dimension (W x H x L)	30 mm x 90 mm x 70 mm
Housing material	Metal , Diecast zinc
Lens cover material	Glass
Net weight	380 g
Housing color	Red
Type of fastening	Through-hole mounting Via optional mounting device

**Operation and display**

Type of display	LED OLED display
Type of configuration	Software
Operational controls	Membrane keyboard PC software

**Environmental data**

Ambient temperature, operation	-20 ... 50 °C
Ambient temperature, storage	-30 ... 70 °C

**Certifications**

Degree of protection	IP 67 IP 69K
Protection class	II

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Certifications	c UL US
Standards applied	IEC 60947-5-2

#### Classification

Customs tariff number	90318020
eCl@ss 8.0	27270801
eCl@ss 9.0	27270801
ETIM 5.0	EC001825
ETIM 6.0	EC001825

## Electrical connection

Connection 1	
Type of connection	Connector
Function	Signal IN Signal OUT Voltage supply
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

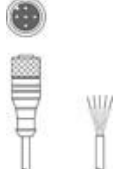
## Operation and display

### LEDs

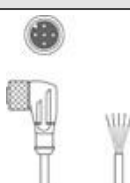
LED	Display	Meaning
1		
2		

## Accessories


### Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50132077	KD U-M12-5A-V1-020	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC


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	Part no.	Designation	Article	Description
	50133842	KD U-M12-5W-V1-020	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 5 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC

**Mounting technology - Mounting brackets**

	Part no.	Designation	Article	Description
	50025570	BT 96	Mounting device	Design of mounting device: Angle, L-shape Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Rigid Material: Metal

**Mounting technology - Rod mounts**

	Part no.	Designation	Article	Description
	50082084	BT 450.1-96	Mounting device	Design of mounting device: Mounting system Fastening, at system: For 10 mm rod Mounting bracket, at device: Screw type Type of mounting device: Turning, 360°, Adjustable Material: Metal

	Part no.	Designation	Article	Description
	50107223	UPG 10	Configuration adapter	Functions: Configuration and test device