

Laser Distance Sensor

Series	OWLF-4013-FA-S1	OWLF-4013-FA-S1L
Picture		

General data:

Measurement method	Triangulation	Triangulation
Light source	Laser	Laser
Wavelength	650 nm	650 nm
Laser class	2	2
Receiving element	Position Sensitive Device (PSD)	Position Sensitive Device (PSD)
Connection type	M12 connector, 8-pin, rotatable	M12 connector, 8-pin, rotatable
Interface	None	None
Analog output current	Yes	Yes
Analog output voltage	Yes	Yes
Teach-in	Button / external	Button / external
Teach-in range	> 3 mm	> 3 mm
Beam type	Point	Line
Beam diameter	1 - 2 mm	1 - 2 mm
Beam height		3 - 5 mm
Power on indication	LED green	LED green
Display alarm / pollution	LED red	LED red
Electronic	Integrated	Integrated

Measurement data:

Measuring range	30 - 130 mm	30 - 130 mm
Resolution	5 - 60 μ m	5 - 60 μ m
Linearity error	0.015 - 0.2 mm	0.015 - 0.2 mm
Measuring frequency in Hz (max.)	1100	1100
Temperature drift	< 0.03 %	< 0.03 %

Outputs:

Output circuit	Analog	Analog
Voltage output	0 - 10 V	0 - 10 V
Current output	4 - 20 mA	4 - 20 mA
Output current	< 100 mA	< 100 mA
Alarm output	PNP	PNP

Power supply:

Power supply V DC	12 - 28 V DC	12 - 28 V DC
Power consumption max.	100 mA	100 mA
Short circuit protection	Yes	Yes
Reverse polarity protection	Yes	Yes

Physical characteristics:

Housing material	Die-cast zinc	Die-cast zinc
Front (optics)	Glass	Glass
Ingress protection	IP67	IP67
Dimensions (W x H x D)	20.6 x 65 x 50 mm	20.6 x 65 x 50 mm
Construction type	Rectangular	Rectangular

Environmental:

Operating temperature range	0 - +50 °C	0 - +50 °C
Ambient light immunity	> 40 klx	> 40 klx