

Laser Distance Sensor

Series	AWLG-120-M	AWLG-120-S
Picture		

General data:

Measurement method	Triangulation	Triangulation
Light source	Laser	Laser
Wavelength	655 nm	655 nm
Laser class	2	2
Receiving element	CMOS image sensor	CMOS image sensor
Connection type	Cable with connector, 14-core, 0.5 m	Cable, 10-core, cabtyre, 0.1 mm ² , 5 m
Interface	Serial	None
Analog output current	Yes	Yes
Analog output voltage	Yes	Yes
Beam type	Point	Point
Beam diameter	1 - 1.5 mm	1 - 1.5 mm
Power on indication	LED green	LED green
Display alarm / pollution	LED orange	LED orange
Switching status indicator	3 x LED yellow	3 x LED yellow
Display	5-digit LED display, red	5-digit LED display, red
Electronic	Integrated	Integrated

Measurement data:

Measuring range	60 - 180 mm	60 - 180 mm
Resolution	8 µm	8 µm
Linearity error	0.12 mm	0.12 mm
Measuring frequency in Hz (max.)	5000	5000

Outputs:

Interfaces	RS-422/485	
Output circuit	Analog	Analog
Baud rate	9600 - 921600 bps	
Voltage output	0 - 10.5 V	0 - 10.5 V
Current output	3.2 - 20.8 mA	3.2 - 20.8 mA
Output current	< 50 mA	< 50 mA
Transistor output	PNP, NPN	PNP, NPN

Power supply:

Power supply V DC	10 - 30 V DC	10 - 30 V DC
Power consumption max.	100 mA	100 mA
Short circuit protection	Yes	Yes

Physical characteristics:

Housing material	Plastic (PBT)	Plastic (PBT)
Front (optics)	Acryl	Acryl
Ingress protection	IP67	IP67
Dimensions (W x H x D)	20.4 x 60 x 57 mm	20.4 x 60 x 57 mm
Weight	70 g	70 g
Construction type	Rectangular	Rectangular

Environmental:

Operating temperature range	-10 - +45 °C	-10 - +45 °C
Storage temperature range	-20 - +60 °C	-20 - +60 °C
Humidity	35 - 85 %, non condensing	35 - 85 %, non condensing
Ambient light immunity	< 3 klx	< 3 klx