OM20-P0120.HV.AIN

Performance sensor Article number: 11232067

Overview

- Automatic adjustment of exposure time for precise measurements on changing materials
- High immunity to ambient light for reliable measurements regardless of ambient conditions
- Point beam shape for a precise measurement



Picture similar





Technical data	
General data	
Type	Distance measuring
Measuring distance Sd	16 120 mm
Measuring range Mr	104 mm
Adjustment	Teach-in: button / external
Power on indication	LED green
Output indicator	LED red
Repeat accuracy	8 100 μm
Linearity error	± 0.14 % Mr , 16 70 mm
	± 0.19 % Mr , 16 120 mm
Beam type	Point
Temperature drift	0,04 % Sde/K
Light Source	
Light source	Pulsed red laser diode
Wave length	660 nm
Laser class	2
Maximum pulse power	2 mW
Pulse duration	0.001 1.2 ms
Pulse period	0.2 3.4 ms
Electrical data	
Response delay	0.4 ms
Measuring frequency	5000 Hz
Voltage supply range +Vs	12 28 VDC
Current consumption max. (no load)	50 mA

Electrical data	
Output circuit	Analog
Output signal	4 20 mA
Load resistance	< (+Vs - 9 V) / 0.02 A
Short circuit protection	Yes
Reverse polarity protection	Yes, Vs to GND
Mechanical data	
Width / diameter	13 mm
Height / length	37 mm
Depth	34.5 mm
Туре	Rectangular, front view
Housing material	Die-cast zinc
Front (optics)	Glass
Connection types	Connector M8 4 pin
Weight	41 g
Ambient conditions	
Ambient light immunity	< 100 kLux
Protection class	IP 67
Operating temperature	-10 +50 °C
Storage temperature	-20 +60 °C
Vibration (sinusoidal)	IEC 60068-2-6:2008 1 mm p-p at f = 10 - 55 Hz, duration 5 min per axis 30 min endurance at f = 55 Hz per axis
Shock (semi-sinusoidal)	IEC 60068-2-27:2009

Remarks

 Measurement with Baumer standardized measuring equipment and targets (Measurement on 90% remission (white)).

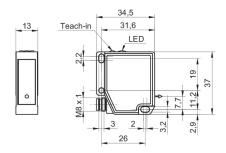
30 g / 11 ms, 6 jolts per axis and direction

Distance sensors

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Dimension drawing



Laser warning

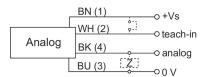


LASER RADIATION DO NOT STARE INTO BEAM Wavelength: 640...670nm

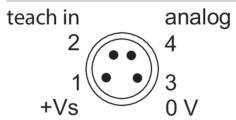
IEC 60825-1, Ed. 3, 2014
CLASS 2 LASER PRODUCT

IEC 60825-1/2014 Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019

Connection diagram



Pin assignment



Beam characteristic (typically)

