

2D/3D Profile Sensor

MLWL033

LASER

weCat3D

Part Number



- Blue light for applications on metal, organic or semi-transparent materials
- IP69K
- Up to 12 million measuring points per second

2D/3D Profile Sensors project a laser line onto the object to be detected and generate an accurate, linearized height profile with an internal camera which is set up at a triangulation angle. Thanks to its uniform, open interface, the weCat3D series can be incorporated by means of the DLL program library or the GigE Vision standard without an additional control unit. Alternatively, wenglor offers its own software packages for implementing your application.

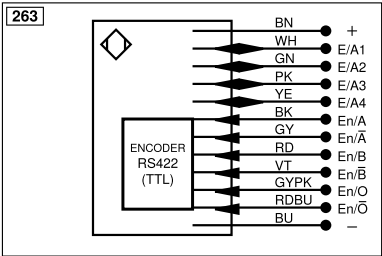
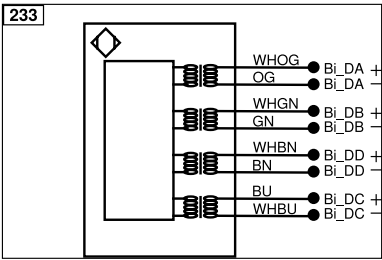
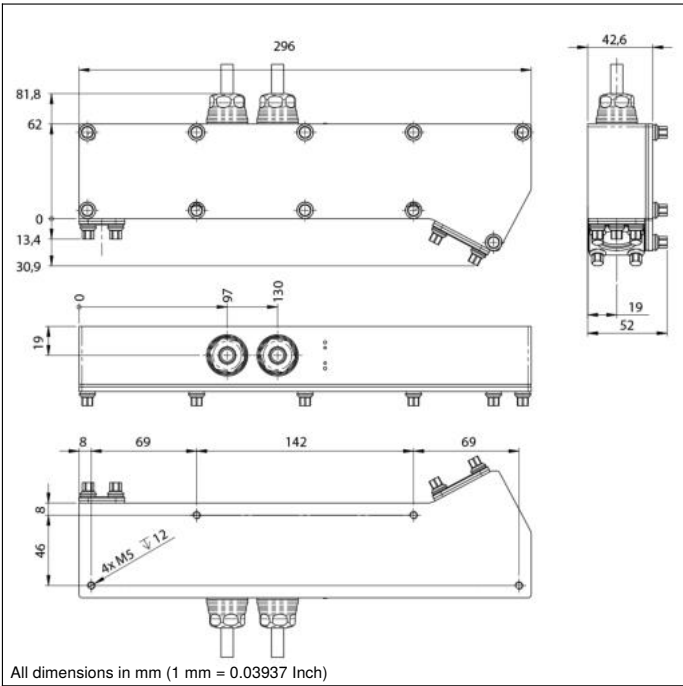


Technical Data

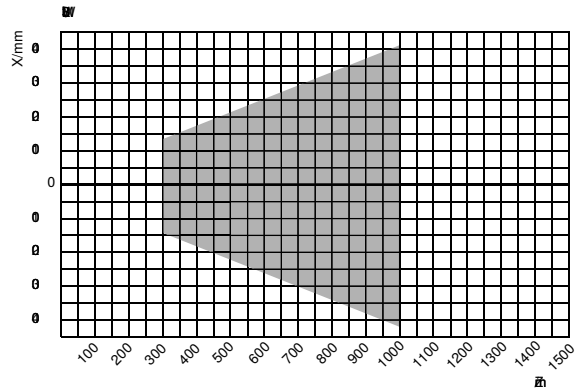
Optical Data	
Working range Z	300...1000 mm
Measuring range Z	700 mm
Measuring range X	280...830 mm
Linearity Deviation	175 µm
Resolution Z	27...162 µm
Resolution X	181...446 µm
Light Source	Laser (blue)
Wavelength	405 nm
Service Life (T = +25 °C)	20000 h
Laser Class (EN 60825-1)	2M
Environmental conditions	
Ambient temperature	0...45 °C
Storage temperature	-20...70 °C
Max. Ambient Light	5000 Lux
EMC	DIN EN 61000-6-2; 61000-6-4
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (Ub = 24 V)	300 mA
Output rate	180...6000 /s
Inputs/Outputs	4
Switching Output Voltage Drop	< 1,5 V
Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	Ethernet TCP/IP
Baud Rate	100/1000 Mbit/s
Protection Class	III
FDA Accession Number	2110262-000
Mechanical Data	
Housing Material	Stainless steel 1.4305
Degree of Protection	IP69K
Cable Length	5 m
Bending Radius	87 mm
Optic Cover	PMMA
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3706,54 a
Push-Pull	●
Connection Diagram No.	233 263

Complementary Products

Control Unit
Software
Switch EHSS001



Measuring field X, Z



Z = Working distance
X = Measuring Range

