

3D Sensor

MLBS101

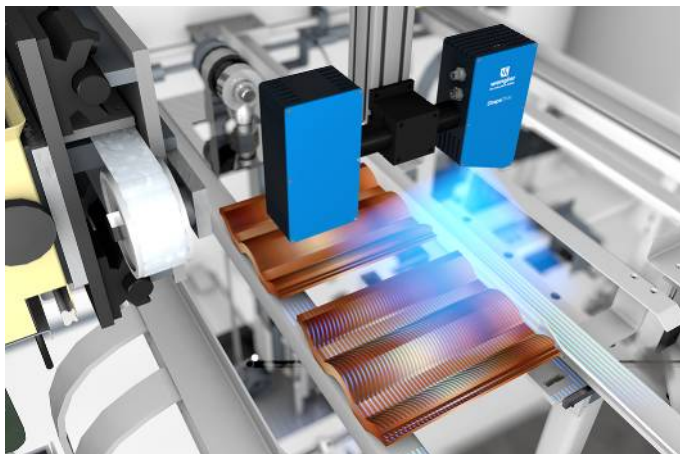
Part Number

ShapeDrive



- 10 Gbit/s interface for high speed data transfer
- 5 MP resolution
- Large measuring volumes (up to 1300 × 1000 × 800 mm)
- Short recording times of up to 0.35 s

ShapeDrive MLBS 3D Sensors are ideally suited for applications with large measuring volumes. The six models in this series are available in two performance classes with camera resolutions of 5 and 12 megapixels. Thanks to the rugged IP67 housing, all ShapeDrive sensors are ideally suited for use in industrial environments. With its 10 Gigabit Ethernet interface and three measuring ranges in each performance class, ShapeDrive is also distinguished by great diversity and high speed.

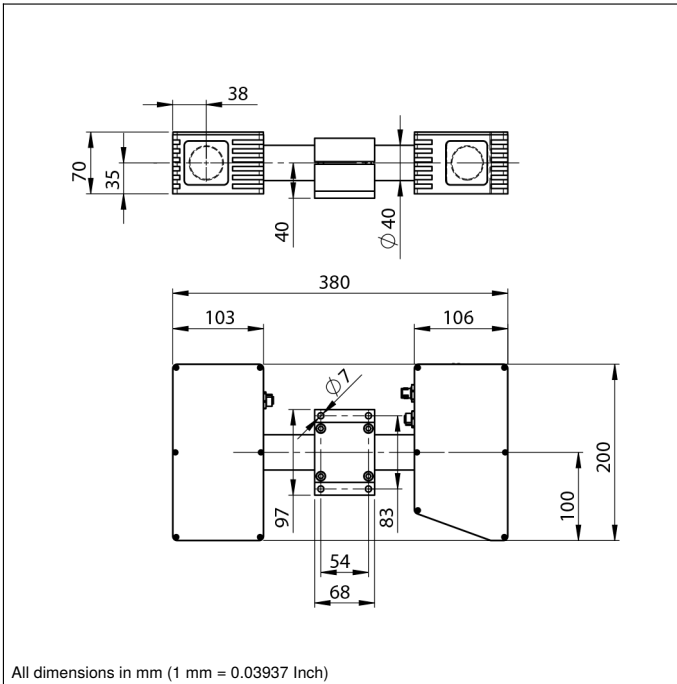


Technical Data

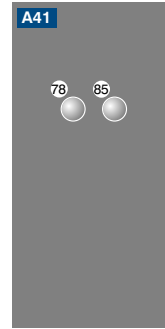
Optical Data	
Working range Z	800...1200 mm
Measuring range Z	400 mm
Measuring range X	500 mm
Measuring range Y	380 mm
Resolution Z	40 µm
Resolution X/Y	281 µm
Camera Resolution	2448 × 2048 Pixel
Light Source	LED (blue)
Wavelength	460 nm
Service Life (T = +25 °C)	20000 h
Risk Group (EN 62471)	2
Max. Ambient Light	5000 Lux
Electrical Data	
Supply Voltage	18...30 V DC
Max. Current Consumption (Ub = 24 V)	5 A
Recording duration	0,35...2,15 s
Temperature Range	0...35 °C
Storage temperature	-5...70 °C
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Interface	Ethernet TCP/IP
Baud Rate	100 Mbit/s
Baud Rate (10 GbE)	10 Gbit/s
Protection Class	III
Mechanical Data	
Housing Material	Aluminium; Plastic
Degree of Protection	IP67
Connection	M12 × 1; 12-pin
Type of Connection Ethernet	M12 × 1; 8-pin, X-cod.
Optic Cover	Plastic
Weight	4200 g
Web server	yes
Connection Diagram No.	238 1022
Control Panel No.	A41
Suitable Connection Equipment No.	50 87

Complementary Products

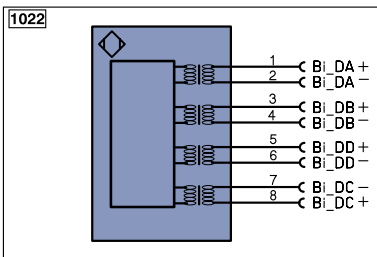
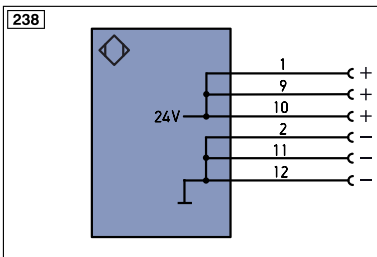
- Cooling Unit ZLBK001
- Cooling Unit ZLBK002



Ctrl. Panel



78 = Module status
85 = Link/Act LED



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN0_8542	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN0_8542	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENa	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENb	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
Ṽ	Contamination/Error Output (NC)	O	Analog Output	ACK	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY_in	Synchronization In
T	Teach Input	BZ	Block Discharge	SY_OUT	Synchronization OUT
Z	Time Delay (activation)	AWV	Valve Output	OLT	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance reserved
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to IEC 60757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
IO-Link	IO-Link	SnR	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	La	Emitted Light disengageable	GY	Grey
Bi_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN0_8542	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNYE	Green/Yellow

Measuring Volume

