

MAGNETIC READER SENSORS

MLS 130

"Very Small Size Reader Sensor"



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- Small structure
- Easy installation
- Resolution from 1 μm to 100 μm
- High Accuracy and Repeatability
- Dust, oil and nourishment insensitive
- Robust Aluminum Body
- IP67 Protection Class

MLS130 series sensors can be used with magnetic stripe tape as well as PS1 profile system and PS2 profile system. It moves position 0.1-2 mm without touching the magnetic band and reads the position information precisely and sends it as encoder pulse. The MLS 130 magnetic reader sensors can be installed in even the smallest areas due to very small dimensions.

Applications:

- Machining Centers
- PVC Cutting Machines
- Wood Cutting Machines
- Lathes, Milling, Drilling, Grinding Machines
- Sheet Metal Working Machines
- Marble Machines

- Welding Machines
- Bending Machines
- Electrical Discharge Machines
- Robotics / Material Handling
- Glass Working Machinery etc...

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DS-MLS.006 Rev No:0

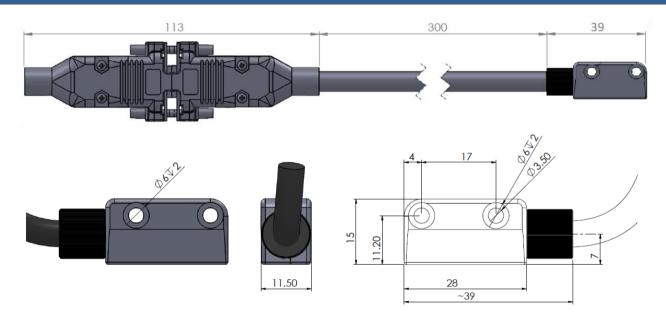
Standard Order



Optional Order*



MECHANICAL DIMENSIONS (mm)



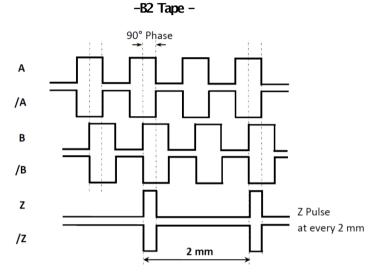
WARNING (!) The sensor and magnetic tape must be away from magnetic areas. The proximity of the band with comparator, magnet or similar instruments having a magnetic effect, disrupts the working structure of the band.

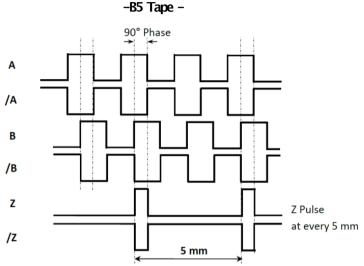
TECHNICAL FEATURES						
Measurement Principle	Magnetic, non-contact					
Resolution	1µm, 5µm, 10µm, 25µm, 50µm, 62.5µm, 80µm, 100µm (Optional others)					
Supply And Output		PP	ΠL	HTL	HPL	
	Supply	1030 VDC	5 VDC	1030 VDC	530 VDC	
	Output	1030VDC Push-pull	5 VDC TTL RS422 Line Driver	5 VDC TTL RS422 Line Driver	530VDC Push-pull	
Output Signals	A, /A, B, /B, Z, /Z					
Current Consumption	40 mA / channel max.					
Repeatabiliy	±1 Pulse					
Gap between tape and sensor	0,1 mm to 2 mm					
Operating Speed	3 m/s					
Operating Temperature	–25+85℃					
Storage Temperature	−40+100°C					
Electrical Connection	D-Sub9 pin connector, $5 \text{ or } 8 \times 0,14 \text{ mm}^2\text{shielded cable}$					
IP Protection Class	IP67					
Material	Aluminum					

ELECTRICAL CONNECTIONS

		1 2 3 4 5
SIGNAL	CABLE COLOR	D-SUB9 PIN / SOCKET PIN NO
Α	YELLOW	1
/B	WHITE	2
+ V	RED	3
0V	BLACK	4
/A	BLUE	5
В	GREEN	6
/Z	GREY	7
Z	PINK	8
-	SHIELD	9

In the left table the cable colors of sensors output signals are given. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget that these edges have electricity too.





MAGNETIC TAPEAND PROFILE SYSTEMS USED WITH MLS 130

MLS 130+B Series Magnetic Tape

MLS 130+PS2 Slim Profile





ORDER CODE

Cable Length 3M: 3 meters **Power Supply and Output** 3.5M: 3.5 meters 4M: 4 meters TTL: 5VDCSupply Voltage, 5 VDCTTLRS422 Line Driver Signal Output 5M: 5 meters 6M · 6 meters PP: 10...30VDCSupply Voltage, 7M: 7 meters 10...30VDCPush-Pull Signal Output 8M: 8 meters HTL: 10...30VDCSupply Voltage, 9M: 9 meters **Magnetic Tape** 5 VDCTTLRS422 Line Driver Signal Output 10M: 10 meters HPL: 5...30VDCSupply Voltage, 15M: 15 meters 5...30VDCPush-Pull Signal Output * Please ask for other options MLS130 -XX Signal Output Type Cable Type Model Resolution | 3: A, B, Z C: Pure Cable | **05** : 5um **01**: 1um $\bf 4$: A, /A, B, /B | $\bf 6$: A, /A, B, /B, Z, /Z S: Shielded Spiral **25**: 25µm 10: 10µm | 62: 62,5µm | 80: 80µm *Standard: Z reference signal at every 5 mm **100**: 100µm for B5 Tape or every 2 mm for B2 tape

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