

# **MAGNETIC READER SENSORS**

# **MLS 130**

"Very Small Size Reader Sensor"











- 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...

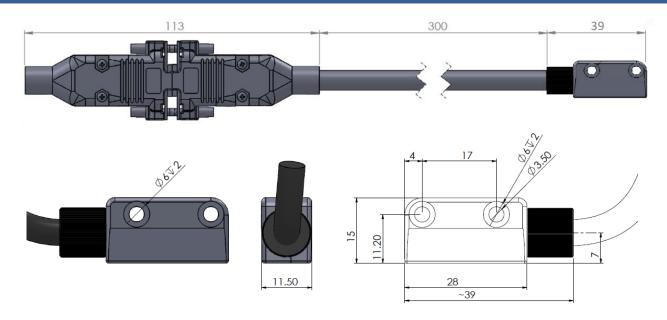
DS-MLS.006 Rev No:0

## **Optional Order \***





# **MECHANICAL DIMENSIONS (mm)**



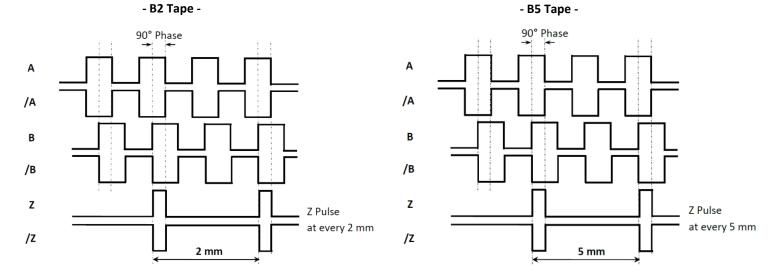
**WARNING (!)** The sensor and magnetic tape must be away from magnetic areas. The proximity of the band with comparator, magnet or similar instruments having a magnetic effect, disrupts the working structure of the band.

TECHNICAL FEATURES						
Measurement Principle	Magnetic, non-contact					
Resolution	1μm, 5μm, 10μm, 25μm, 50μm, 62.5μm, 80μm, 100μm (Optional others)					
Supply And Output		PP	TTL	HTL	HPL	
	Supply	1030 VDC	5 VDC	1030 VDC	530 VDC	
	Output	1030 VDC Push-pull	5 VDC TTL RS422 Line Driver	5 VDC TTL RS422 Line Driver	530 VDC Push-pull	
Output Signals	A, /A, B, /B, Z, /Z					
<b>Current Consumption</b>	40 mA / channel max.					
Repeatabiliy	± 1 Pulse					
Gap between tape and sensor	0,1 mm to 2 mm					
Operating Speed	3 m/s					
<b>Operating Temperature</b>	-25+85 °C					
Storage Temperature	-40+100 °C					
<b>Electrical Connection</b>	D-Sub 9 pin connector, 5 or 8 x 0,14 mm <sup>2</sup> shielded cable					
IP Protection Class	IP67					
Material	Aluminum					

#### **ELECTRICAL CONNECTIONS**

		1 2 3 4 5 • • • • • • 7 8 9
SIGNAL	CABLE COLOR	D-SUB 9 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 TAPE AND PROFILE SYSTEMS USED WITH MLS 130



MLS 130 + PS2 Slim Profile

MLS 130 + RB Magnetic Ring







#### **ORDER CODE**

#### **Cable Length** 3M · 3 meters كانون ايزار **Power Supply and Output** 3.5M: 3,5 meters 4M: 4 meters تلفن: TTL: 5VDC Supply Voltage, 5M: 5 meters 5 VDC TTL RS422 Line Driver Signal Output 6M: 6 meters 02166393900 PP: 10...30 VDC Supply Voltage, **7M** : 7 meters 10...30 VDC Push-Pull Signal Output 09121473023 8M: 8 meters HTL: 10...30 VDC Supply Voltage, 9M: 9 meters **Magnetic Tape** ali5.ir 5 VDC TTL RS422 Line Driver Signal Output 10M: 10 meters HPL: 5...30 VDC Supply Voltage, В5 **15M**: 15 meters 5...30 VDC Push-Pull Signal Output \* Please ask for other options В2 MLS130 -XX XX XXX **Signal Output Type** Model **Cable Type** Resolution 2 : A, B | **3** : A, B, Z C: Pure Cable **01** : 1µm | **05** : 5μm 4 : A, /A, B, /B | 6 : A, /A, B, /B, Z, /Z S : Shielded Spiral $\textbf{10}\,:\,\textbf{10}\mu \textbf{m}\quad |\quad \textbf{25}\,:\,\textbf{25}\mu \textbf{m}$ $62:62,5\mu m \mid 80:80\mu m$ \*Standard: Z reference signal at every 5 mm **100**: 100μm for B5 Tape or every 2 mm for B2 tape

DS-MLS.006 Rev No:0