

# MAGNETIC READER SENSORS

## **MLS 210**

"Big Size Reader Sensor"











- Resolution from 5 μm to 100 μm
- High Accuracy and Repeatability
- Spiral and Wired Options
- Dust, oil and nourishment insensitive
- Robust Aluminum Body
- IP67 Protection Class
- Easy Installation

MLS 210 series reader sensors can be used with all magnetic tape and profile systems but we suggest you with PS1 profile system or PS3 profile system for the best harmony. The reader sensor glides contactless over the profile with gap up to 0.1 - 2 mm. MLS 210 reader sensors have models with scraper or without scraper. Also spiral or pure cable models are available.

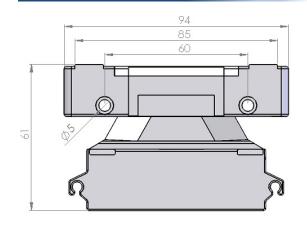
### **Applications:**

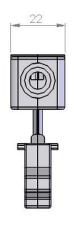
- Machining Centers
- PVC Cutting Machines
- Wood Cutting Machines
- Lathes, Milling, Drilling, Grinding Machines
- Sheet Metal Working Machines
- Marble Machines

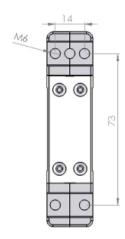
- Welding Machines
- Bending Machines
- Electrical Discharge Machines
- Robotics / Material Handling
- Glass Working Machinery
- etc...

## **MECHANICAL DIMENSIONS (mm)**

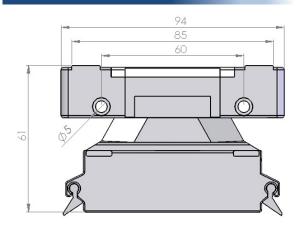
## **Model with scraper**

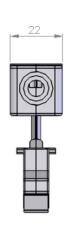


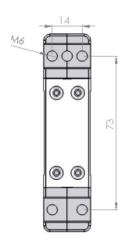




## **Model without scraper**







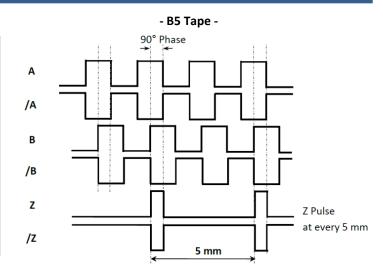
**WARNING (!)** The sensor and magnetic tape must be away from magnetic areas. The proximity of the band with comparator, magnet or similar instruments having a magnetic effect, disrupts the working structure of the band.

TECHNICAL FEATURES						
Measurement Principle	Magnetic, non-contact					
Resolution	5μm, 10μm, 25μm, 62.5μm, 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					

DS-MLS.008 Rev No:0

#### **ELECTRICAL CONNECTIONS**

		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
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 above 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.

#### **PROFILE SYSTEMS USED WITH MLS 210 SERIES**



- PS1 Profile System (With scraper)
- PS3 Profile System (Without scraper)

#### **ORDER CODE**

#### **Cable Length** 3M: 3 meters **Power Supply and Output** 3.5M: 3,5 meters 4M: 4 meters TTL: 5VDC Supply Voltage, 5M: 5 meters 5 VDC TTL RS422 Line Driver Signal Output 6M: 6 meters PP: 10...30 VDC Supply Voltage, **7M** : 7 meters 10...30 VDC Push-Pull Signal Output 8M: 8 meters HTL: 10...30 VDC Supply Voltage, 9M: 9 meters **Z** Signal 5 VDC TTL RS422 Line Driver Signal Output **10M**: 10 meters **Magnetic Tape** No code : Standard\* HPL: 5...30 VDC Supply Voltage, **15M**: 15 meters 5...30 VDC Push-Pull Signal Output Z: Single Z signal \* Please ask for other options MLS210 -XX XX XXX **Signal Output Type** Sensor/Cable Type Resolution Model | **3** : A, B, Z : Pure Cable **05** : 5μm **10** : 10μm 4 : A, /A, B, /B | 6 : A, /A, B, /B, Z, /Z : Shielded Spiral CSL : Cable and with Scraper **25** : 25μm \*Standard: Z reference signal at every 5 mm SSL : Spiral and with Scraper 62: 62.5um Optional, single Z reference signal **100**: 100µm

DS-MLS.008 Rev No:0