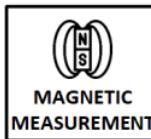
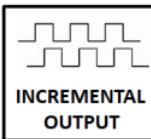


# MAGNETIC READER SENSORS

## MLS 210

“Big Size Reader Sensor”



- Resolution from 5  $\mu\text{m}$  to 100  $\mu\text{m}$
- High Accuracy and Repeatability
- Spiral and Wired Options
- Dust, oil and nourishment insensitive
- Robust Aluminum Body
- IP67 Protection Class
- Easy Installation

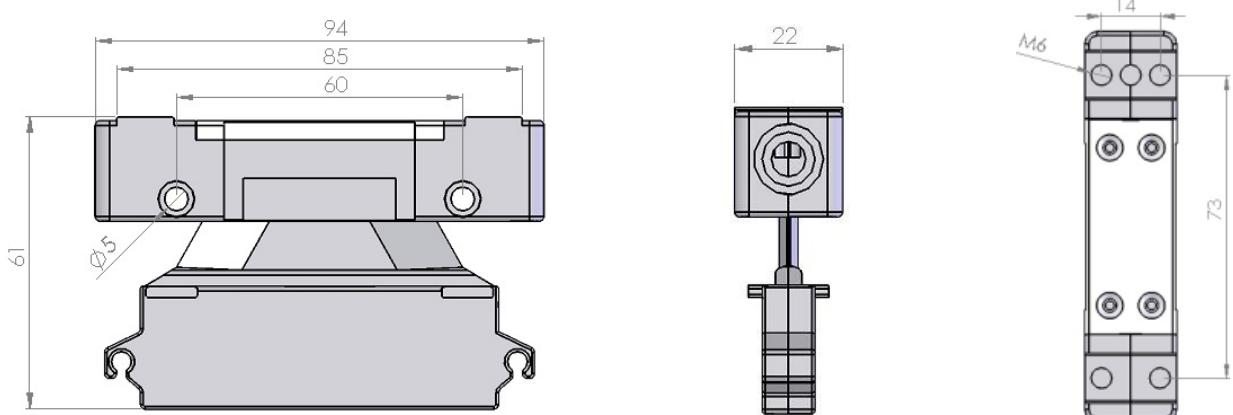
MLS 210 series reader sensors can be used with all magnetic tape and profile systems but we suggest you with PS1 profile system or PS3 profile system for the best harmony. The reader sensor glides contactless over the profile with gap up to 0,1 – 2 mm. MLS 210 reader sensors have models with scraper or without scraper. Also spiral or pure cable models are available.

### Applications:

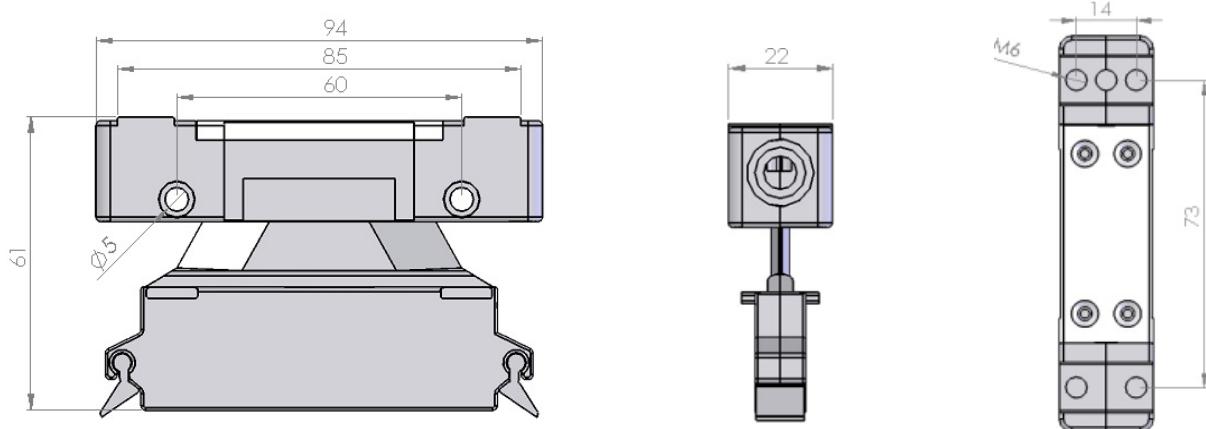
- Machining Centers
- PVC Cutting Machines
- Wood Cutting Machines
- Lathes, Milling, Drilling, Grinding Machines
- Sheet Metal Working Machines
- Marble Machines
- Welding Machines
- Bending Machines
- Electrical Discharge Machines
- Robotics / Material Handling
- Glass Working Machinery
- etc...

## MECHANICAL DIMENSIONS (mm)

### Model with scraper



### Model without scraper



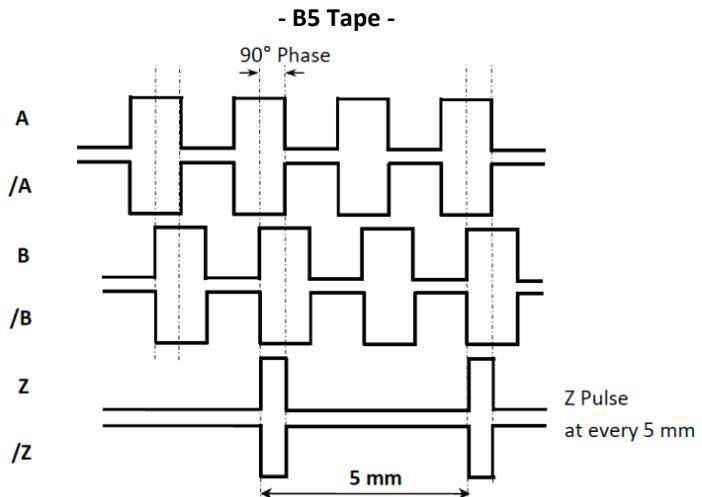
**WARNING (!)** The sensor and magnetic tape must be away from magnetic areas. The proximity of the band with comparator, magnet or similar instruments having a magnetic effect, disrupts the working structure of the band.

## TECHNICAL FEATURES

<b>Measurement Principle</b>	Magnetic, non-contact				
<b>Resolution</b>	5µm, 10µm, 25µm, 62.5µm, 100µm (Optional others)				
<b>Supply And Output</b>	<b>PP</b>	<b>TTL</b>	<b>HTL</b>	<b>HPL</b>	
	<b>Supply</b> 10...30 VDC	5 VDC	10...30 VDC	5...30 VDC	
<b>Output Signals</b>	A, /A, B, /B, Z, /Z				
<b>Current Consumption</b>	40 mA / channel max.				
<b>Repeatability</b>	± 1 Pulse				
<b>Gap between tape and sensor</b>	0,1 mm to 2 mm				
<b>Operating Speed</b>	3 m/s				
<b>Operating Temperature</b>	-25...+85 °C				
<b>Storage Temperature</b>	-40...+100 °C				
<b>Electrical Connection</b>	D-Sub 9 pin connector, 5 or 8 x 0,14 mm <sup>2</sup> shielded cable				
<b>IP Protection Class</b>	IP67				
<b>Material</b>	Aluminum				

## ELECTRICAL CONNECTIONS

SIGNAL	CABLE COLOR	D-SUB 9 PIN / SOCKET PIN NO
A	YELLOW	1
/B	WHITE	2
+V	RED	3
0V	BLACK	4
/A	BLUE	5
B	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

### Power Supply and Output

**TTL** : 5VDC Supply Voltage,  
 5 VDC TTL RS422 Line Driver Signal Output  
**PP** : 10...30 VDC Supply Voltage,  
 10...30 VDC Push-Pull Signal Output  
**HTL** : 10...30 VDC Supply Voltage,  
 5 VDC TTL RS422 Line Driver Signal Output  
**HPL** : 5...30 VDC Supply Voltage,  
 5...30 VDC Push-Pull Signal Output

### Cable Length

**3M** : 3 meters  
**3.5M** : 3,5 meters  
**4M** : 4 meters  
**5M** : 5 meters  
**6M** : 6 meters  
**7M** : 7 meters  
**8M** : 8 meters  
**9M** : 9 meters  
**10M** : 10 meters  
**15M** : 15 meters  
 \* Please ask for other options

### Z Signal

No code : Standard\*  
**Z** : Single Z signal

<b>MLS210</b>	-	<b>XX</b>	-	<b>XX</b>	-	<b>XXX</b>	-	<b>X</b>	-	<b>XX</b>	-	<b>XXX</b>	-	<b>X</b>					
<b>Model</b>								<b>Resolution</b>											
								<b>Signal Output Type</b>											
								<b>Sensor/Cable Type</b>											
								<b>05</b> : 5µm   <b>3</b> : A, B, Z <b>10</b> : 10µm   <b>4</b> : A, /A, B, /B   <b>6</b> : A, /A, B, /B, Z, /Z <b>25</b> : 25µm <b>62</b> : 62,5µm <b>100</b> : 100µm								<b>C</b> : Pure Cable <b>S</b> : Shielded Spiral <b>CSL</b> : Cable and with Scraper <b>SSL</b> : Spiral and with Scraper			

**\*Standard:** Z reference signal at every 5 mm  
 Optional, single Z reference signal