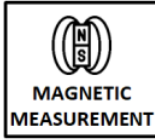
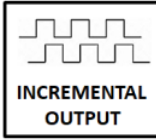


# MAGNETIC READER SENSORS

## 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

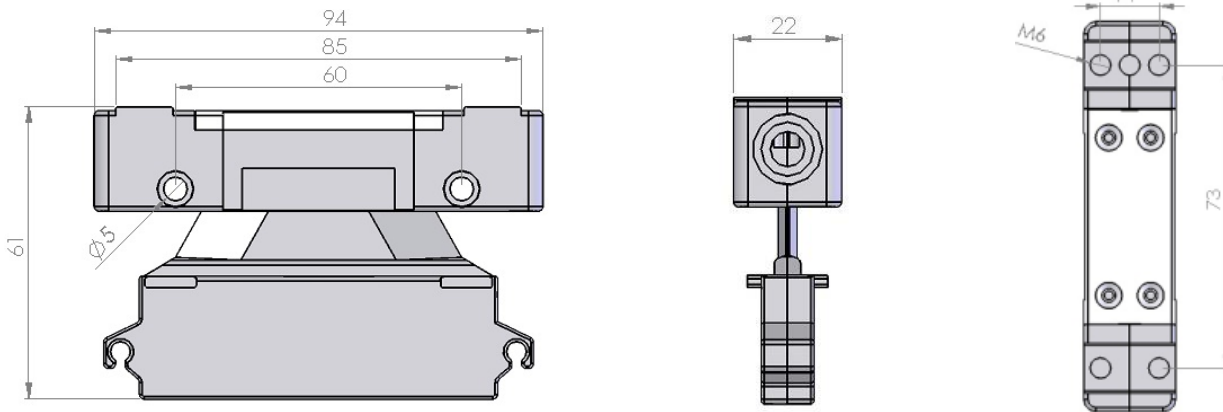
MLS 210 series reader sensors can be used with all magnetic tape and profile systems but we suggest you with PS1 profile system or PS3 profile system for the best harmony. The reader sensor glides contactless over the profile with gap up to 0,1 – 2 mm. MLS 210 reader sensors have models with scraper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

### Applications:

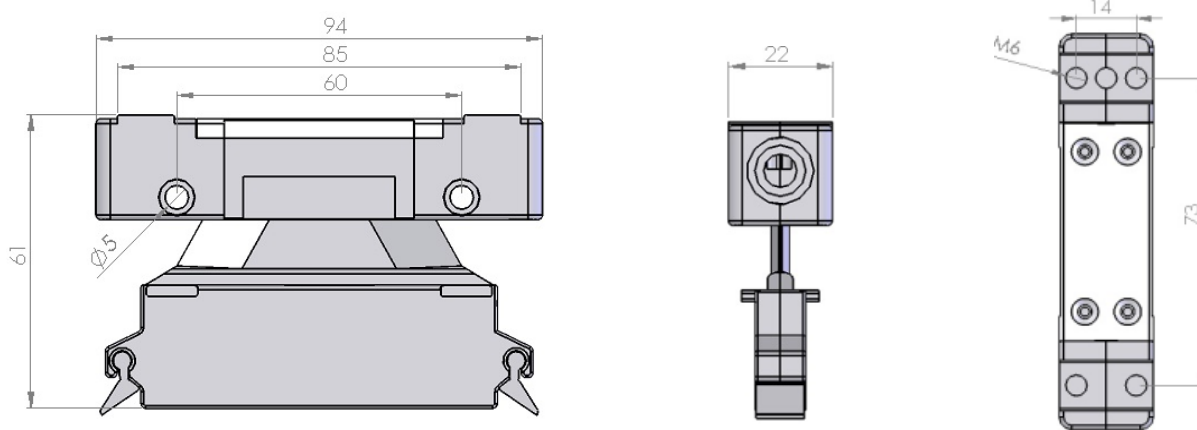
- Machining Centers
- PVC Cutting Machines
- Wood Cutting Machines
- Lathes, Milling, Drilling, Grinding Machines
- Sheet Metal Working Machines
- Marble Machines
- Welding Machines
- Bending Machines
- Electrical Discharge Machines
- Robotics / Material Handling
- Glass Working Machinery
- etc...

## MECHANICAL DIMENSIONS (mm)

### Model with scraper



### Model without scraper



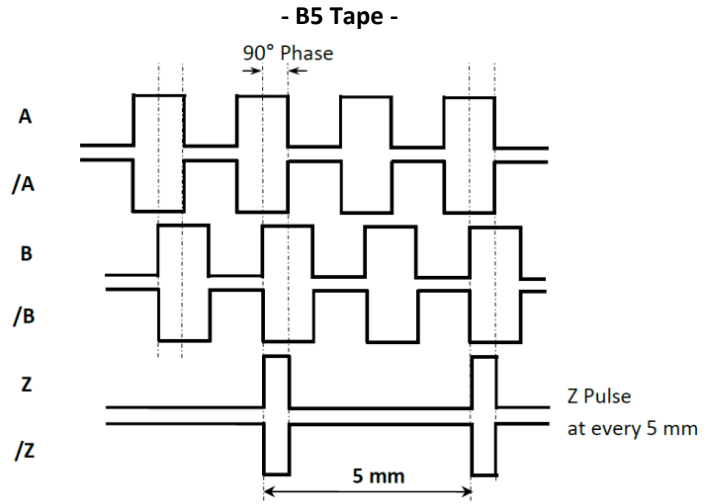
**WARNING (!)** The sensor and magnetic tape must be away from magnetic areas. The proximity of the band with comparator, magnet or similar instruments having a magnetic effect, disrupts the working structure of the band.

## 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</b>	10...30 VDC Push-pull	5 VDC TTL RS422 Line Driver	5 VDC TTL RS422 Line Driver	5...30 VDC Push-pull
<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

Magnetic Tape										Power Supply and Output										Cable Length										Z Signal									
B5										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										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										No code : Standard* Z : Single Z signal									
MLS210 - XX - XX - XXX - X - XX - XXX - X																																							
Model										Resolution										Signal Output Type										Sensor/Cable Type									
										05 : 5µm 10 : 10µm 25 : 25µm 62 : 62,5µm 100: 100µm										2 : A, B   3 : A, B, Z 4 : A, /A, B, /B   6 : A, /A, B, /B, Z, /Z  *Standard: Z reference signal at every 5 mm Optional, single Z reference signal										C : Pure Cable S : Shielded Spiral CSL : Cable and with Scraper SSL : Spiral and with Scraper									