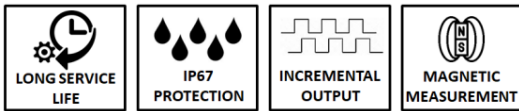




- High accuracy and repeatability
- Magnetic measurement
- Contactless / non-friction system
- High tolerance to vibration and shocks
- Measuring up to 20 meters
- Resistant to dust, oil and moisture
- No maintenance required
- Robust aluminum body
- IP67 protection class
- Easy installation

MLC 310 magnetic linear encoder systems measure non-contactly and gives the output signal as an incremental encoder pulse.

They are not affected by external factors due to its compact design. MLC 310 sensor is housed along the aluminum profile. Extra protection from dust, dirt and chips is provided by having a double seal protection system. It is the ideal solution for machining environments. It can be produced up to a measuring length of 20.000mm.



#### MLC 310 Series Linear Encoders Are Mainly Used In:

- Lathes, Milling, Drilling, Grinding Machines
- Sheet Metal Working Machines
- Welding Machines
- Bending Machines
- Robotics/Materials Handling
- Marble Machines
- Wood Cutting Machines
- PVC Profile Cutting Machines
- Glass Working Machinery
- Etc...

### Technical Specifications

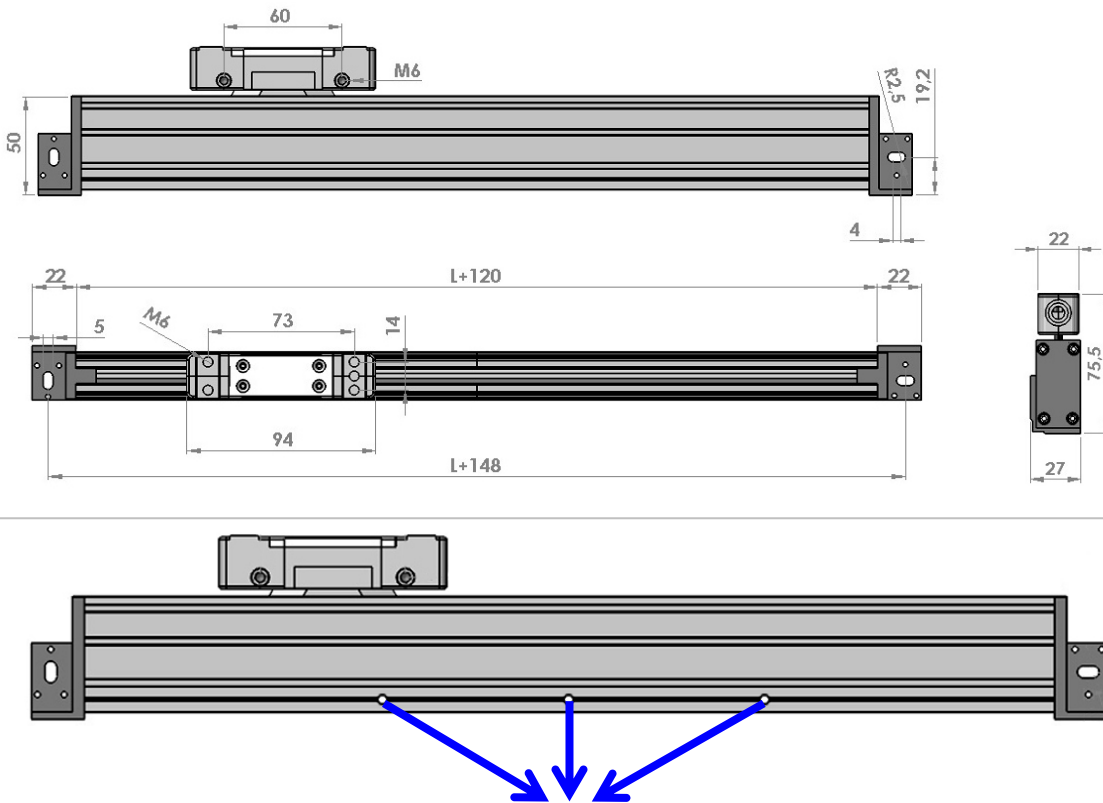
<b>Resolution</b>	5µm, 10µm, 25µm, 50 µm, 62.5µm, 100µm (optional other resolutions)
<b>Measuring Principle</b>	Magnetic
<b>Output Type</b>	Push-Pull or TTLRS422 Line Driver
<b>Output Signals</b>	A, /A, B, /B, Z, /Z
<b>Input Current</b>	Maximum 40 mA per channel
<b>Supply Voltage</b>	PPL: 10..30 VDC or TTL: 5 VDC
<b>Body Material</b>	Sensor: Nickel Plated Aluminum Scale Profile: Anodized Aluminum
<b>Electrical Connection</b>	D-Sub9 Pin, 5 or 8 x 0,14 mm <sup>2</sup> shielded cable
<b>Tape Reading Distance</b>	0,1 mm to 2 mm
<b>Accuracy</b>	±40 µm/m
<b>Operating Speed</b>	3 m/s
<b>Repeatability</b>	±1 Pulse
<b>Operating Temperature</b>	25°C...+85°C
<b>Protection Class</b>	IP67

### Standard Stroke Lengths (mm)

100	120	150	170	200	220	250	270	300	320
350	370	400	420	450	470	500	520	550	570
600	650	700	750	800	850	900	950	1000	1100
1200	1300	1400	1500	1600	1700	1800	2000	3000	4000

\*Please contact for other strokes.

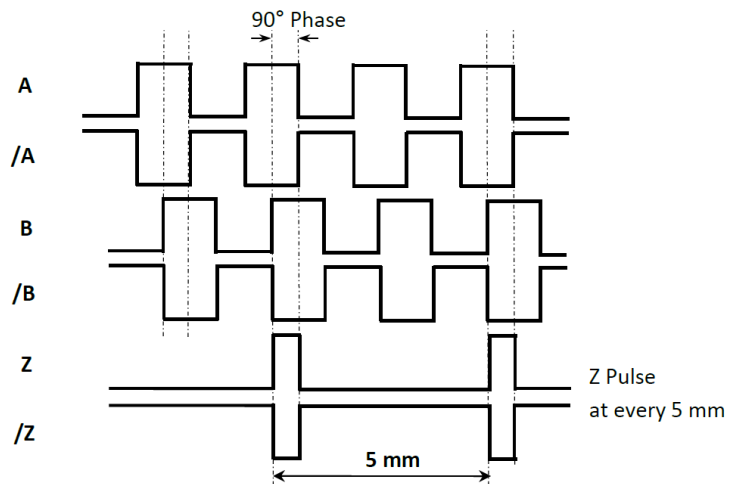
## Mechanical Dimensions



For long scale installations, generally it is not enough to fix the scale in 2 ends. In such cases, mounting holes can be opened over the lowest line on the ruler profile. Mounting holes can be opened from the desired location along the line with a diameter of 6 mm. Thus, long rulers can be secured in a healthy way.

## Electrical Connections

SIGNAL	CABLE COLOR	D-SUB9 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



## Order Details

### Magnetic Tape

B5

MLC310 - X X - X X - X X X - X - X X - X X - X X X mm

### Power Supply and Output

TTL: 5VDC Supply Voltage,  
5 VDC TTLRS422 Line Driver Signal Output  
PP: 10...30VDC Supply Voltage,  
10...30VDC Push-Pull Signal Output  
HTL: 10...30VDC Supply Voltage,  
5 VDC TTLRS422 Line Driver Signal Output  
HPL: 5...30VDC Supply Voltage,  
5...30VDC 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

### Measuring Stroke

See standard stroke lengths table, contact for other stroke lengths.

### Model

### Resolution

05 : 5µm | 10 : 10µm  
25 : 25µm | 50 : 50µm  
62 : 62,5µm | 100 : 100µm

### Signal Output Types

2 : A, B | 3 : A, B, Z  
4 : A, /A, B, /B | 6 : A, /A, B, /B, Z, /Z  
Z : Standard, Z Signal at every 5 mm

### Cable Type

C : PUR Cable  
S : Spiral