



- Very Small Structure
- Easy Installation
- Resolution from 1 μm to 100 μm
- High Accuracy and Repeatability
- Measuring up to 100 meters
- Dust, oil and nourishment insensitive
- Robust Aluminum Body
- IP67 Protection Class

The MLS 130 magnetic reader sensors can be installed in even the smallest areas due to very small dimensions.

In the orders, the reader sensor is sent as standard, followed by a 30 cm long cable, a soldered male connector to the cable and a female connector to the socket.

Orders can optionally be supplied with a cable of the desired size and this cable can be soldered to the socket. A socket can be soldered to the other end of the cable.

Examples of uses for the MLS 130 magnetic reader sensors include lathe, milling, bohrwerk, vargel, pvc cutting machines, woodworking machines, presses, textile machines, marble machines, saws, robots and etc.

### Technical Specifications

<b>Resolution</b>	1μm, 5μm, 10μm, 25μm, 50μm, 62.5μm, 80μm, 100μm (or on request)
<b>Output Signal Type</b>	Push-Pull or TTL RS422 Line Driver
<b>Output Signals</b>	A, /A, B, /B, Z, /Z
<b>Current</b>	Maximum 40 mA per Channel
<b>Supply Voltage</b>	10..30 VDC or 5 VDC
<b>Body Material</b>	Aluminum
<b>Gap Between Tape and Sensor (max)</b>	0,1 mm to 2 mm
<b>Operating Speed</b>	3 m/s
<b>Repeatability</b>	± 1 Pulse
<b>Operating Temperature Range</b>	-25 to +85°
<b>Protection Class</b>	IP67

### Standard Order

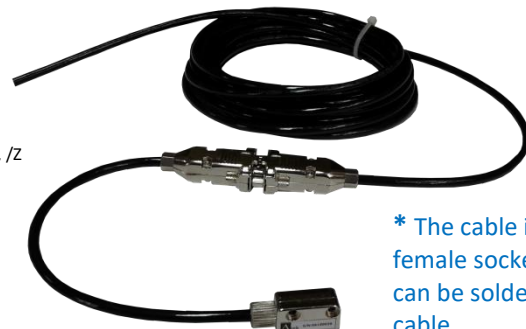


#### Signal Output Type

2 : A, B | 3 : A, B, Z  
4 : A, /A, B, /B | 6 : A, /A, B, /B, Z, /Z

Optional: One Reference Z Signal

### Optional Order \*



\* The cable is soldered to the female socket. Another socket can be soldered to the end of cable.

### Order Specifications

#### Magnetic Tape

B5  
B2

#### 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

MLS130 - X X - X X - X X X - X - X X - X

#### Model

#### Resolution

01 : 1μm | 05 : 5μm  
10 : 10μm | 25 : 25μm  
62 : 62,5μm | 80 : 80μm  
100 : 100μm

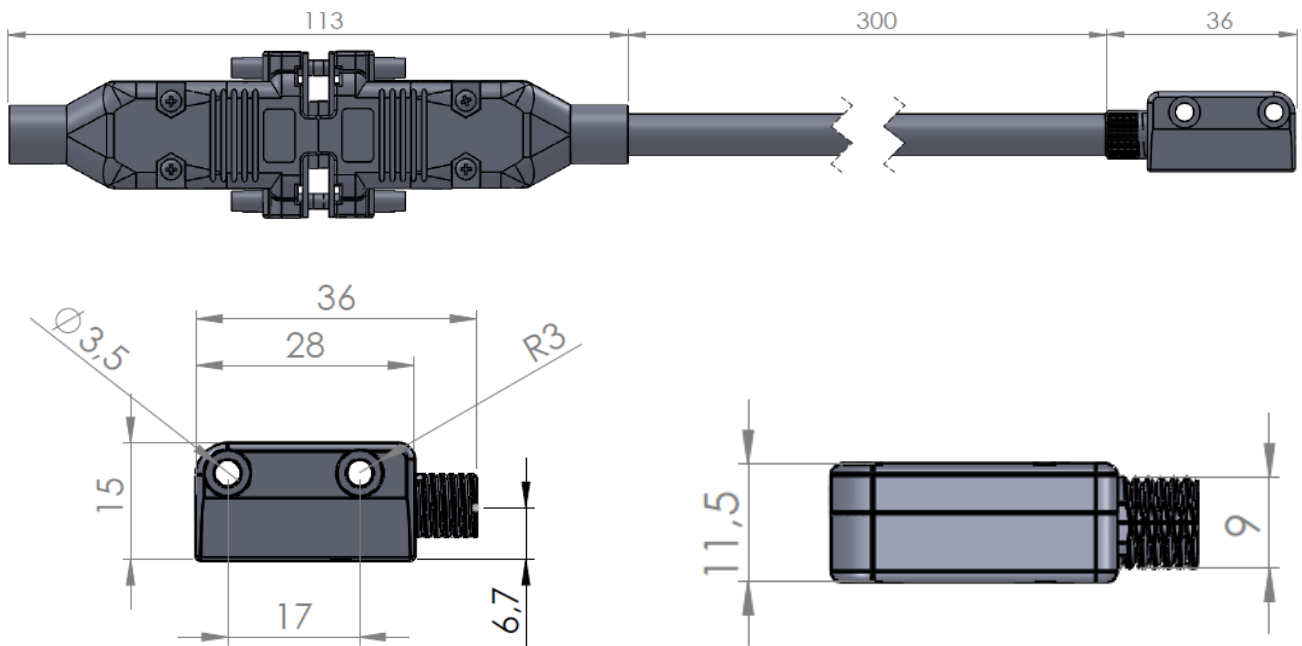
#### Signal Output Type

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 for B5 Tape or every 2 mm for B2 tape  
Optional: One Z Reference Signal

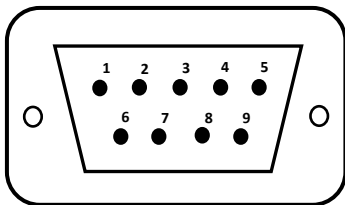
#### Cable Type

C : Pure Cable  
S : Shielded Spiral

## Mechanical Dimension



## Pin Connections



\*ask for other socket

Pin Number	Cable Colour	Signal
1	Yellow	A
2	White	/B
3	Red	SUPPLY VOLTAGE
4	Black	0 V
5	Blue	/A
6	Green	B
7	Grey	/Z
8	Pink	Z
9	Shield	GROUND

MLS 130 + B Series Magnetic Tape



MLS 130 + PS2 Slim Profile



\*Other Socket Connections

S41 Socket

Pin Number	Cable Color	Signal
1	RED	POWER SUPPLY
2	BLACK	GROUND
3	YELLOW	A
4	PINK	Z
5	GREEN	B
6	WHITE	/B
7	GREY	/Z
8	BLUE	/A
9	-	-

S87 Socket

Pin Number	Cable Color	Signal
1	-	-
2	RED	POWER SUPPLY
3	BLACK	GROUND
4	BLUE	/A
5	YELLOW	A
6	WHITE	/B
7	GREY	/Z
8	PINK	Z
9	GREEN	B

S86 Socket

Pin Number	Cable Color	Signal
1	PINK	Z
2	GREEN	B
3	YELLOW	A
4	-	-
5	BLACK	GROUND
6	GREY	/Z
7	WHITE	/B
8	BLUE	/A
9	RED	POWER SUPPLY

S71 Socket

Pin Number	Cable Color	Signal
1	BLACK	GROUND
2	BLUE	/A
3	WHITE	/B
4	GREY	/Z
5	RED	POWER SUPPLY
6	YELLOW	A
7	GREEN	B
8	PINK	Z
9	-	-

S50 Socket

Pin Number	Cable Color	Signal
1	PINK	Z
2	GREY	/Z
3	RED	POWER SUPPLY
4	-	-
5	BLACK	GROUND
6	YELLOW	A
7	BLUE	/A
8	WHITE	/B
9	GREEN	B

S42 Socket (SINO Connection)

Pin Number	Cable Color	Signal
1	BLUE	/A
2	BLACK	GROUND
3	WHITE	/B
4	-	-
5	GREY	/Z
6	YELLOW	A
7	RED	POWER SUPPLY
8	GREEN	B
9	PINK	Z

## S57 Socket

Pin Number	Cable Color	Signal
1	YELLOW	A
2	BLUE	/A
3	-	-
4	PINK	Z
5	GREY	/Z
6	-	-
7	-	-
8	BLACK	GROUND
9	-	-
10	GREEN	B
11	WHITE	/B
12	-	-
13	-	-
14	-	-
15	RED	POWER SUPPLY

## S43 Socket

Pin Number	Cable Color	Signal
1	YELLOW	A
2	BLUE	/A
3	GREEN	B
4	WHITE	/B
5	PINK	Z
6	GREY	/Z
7	-	-
8	-	-
9	RED	POWER SUPPLY
10	-	-
11	BLACK	GROUND
12	-	-
13	-	-
14	-	-
15	SHIELD	GND