



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

The MLS110 series sensors can be used with magnetic stripe tape as well as PS1 profile system and PS2 profile system. It moves position 0,1 - 2 mm without touching the magnetic band and reads the position information precisely and sends it as encoder pulse. Its small structure provides maximum installation convenience to the user. Spiral and 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...

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

Order Specifications

Magnetic Tape

B5
B2

Power Supply and Output

TTL : 5VDC \pm %5 Power Supply,
5 VDC TTL RS422 Line Driver Output
PP : 24 VDC \pm %20 Power Supply,
24 VDC Push-Pull Output
HTL : 24 VDC \pm %20 Power Supply,
5 VDC TTL RS422 Line Driver Output

Cable Length

3M : 3 Meters
5M : 5 Meters
8M : 8 Meters
10M: 10 Meters
* Optional between 5 to 100 Meters

MLS110 - X X - X X - X X X - X - X X

Model

Resolution

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

Signal Output Type

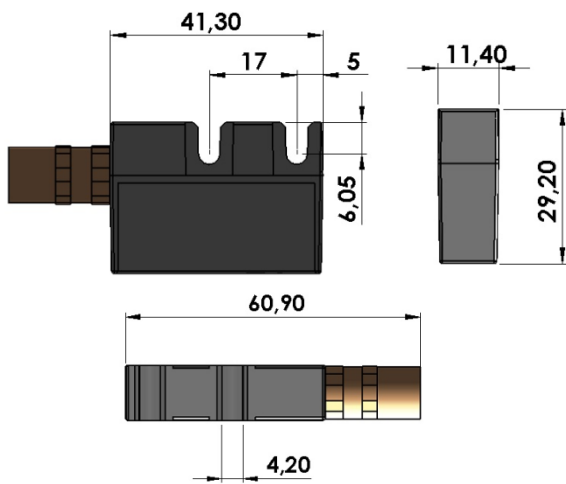
2 : A, B | 3 : A, B, Z
4 : A, /A, B, /B | 6 : A, /A, B, /B, Z, /Z
Optional: One Reference Z Signal

Cable Type

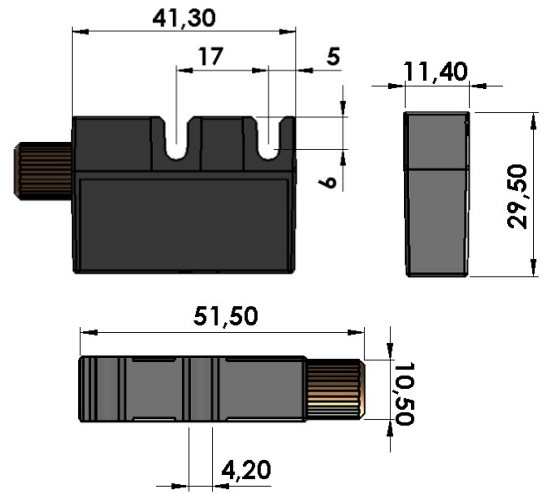
C : Pure Cable
S : Shielded Spiral



Mechanical Dimension

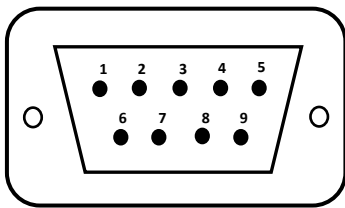


Cable Type: Shielded Spiral



Cable Type: Pure Cable

Pin Connections



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

Magnetic Tape and Profile Systems That Can Be Used With MLS 110 Reader Sensor:

- PS1 Profile System
- PS2 Profile System
- B2 or B5 Magnetic Tape



*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 and S58 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