

MLS110

MAGNETIC READER SENSORS “Small Size Reader Sensor”



- Small Structure
- Easy Installation
- Resolution from 1 μm to 25 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

HM 2002

MLS110 series for use together with magnetic stripe tape B5. 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. Shielded cable, option: spiral protecting hose.

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+B (others on request)
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°
Protection Class	IP67

Order Specifications

Power Supply and Output

PP : 10...30 VDC Supply Voltage,
10...30 VDC Push-Pull Signal Output

Option:
TTL : 5VDC Supply Voltage,
5 VDC TTL RS422 Line Driver Signal Output

Cable Length

5M : 5 Meters
Other length on request

Option:
C : Protecting spiral hose

MLS110 - B5 - XX - PP - 2 - 5M S

Resolution

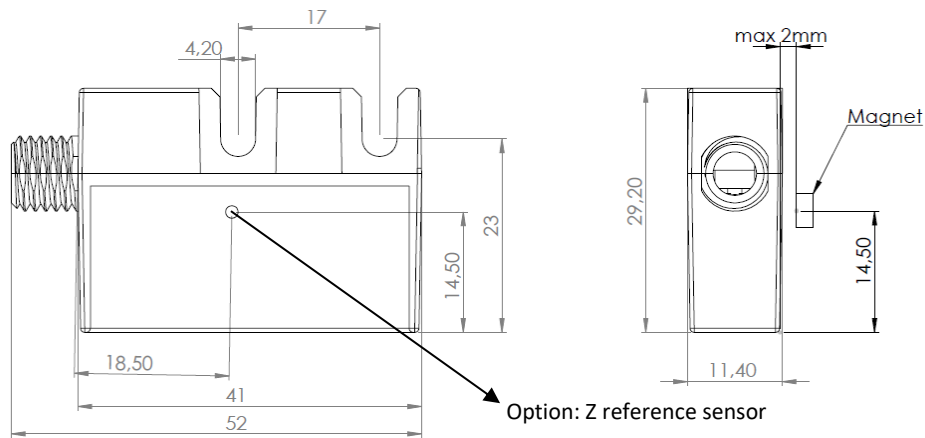
01 : 1 μm | 05 : 5 μm
10 : 10 μm | 25 : 25 μm

Signal Output Type

2 : A + B

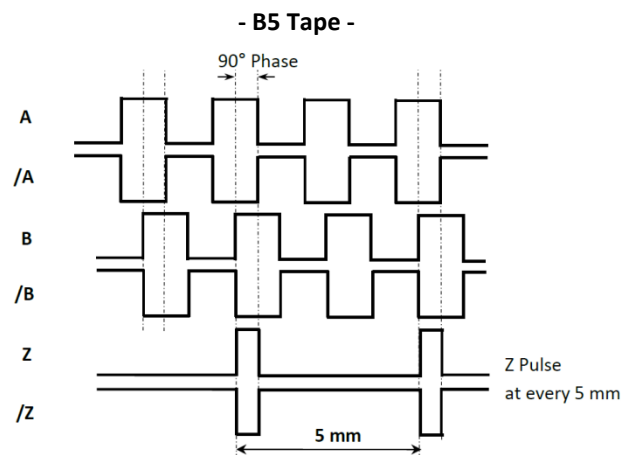
Option:
Inverted signal and Z Reference

Mechanical Dimensions



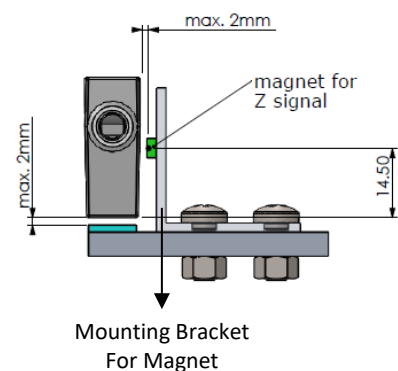
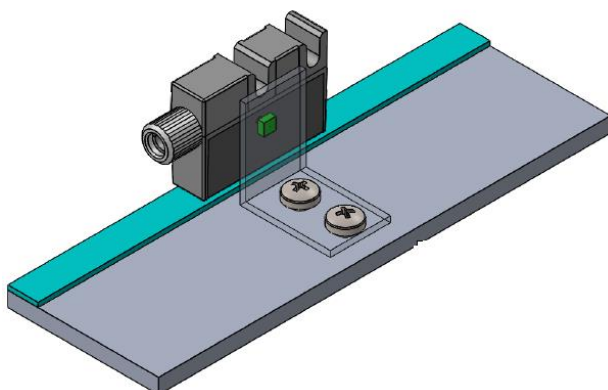
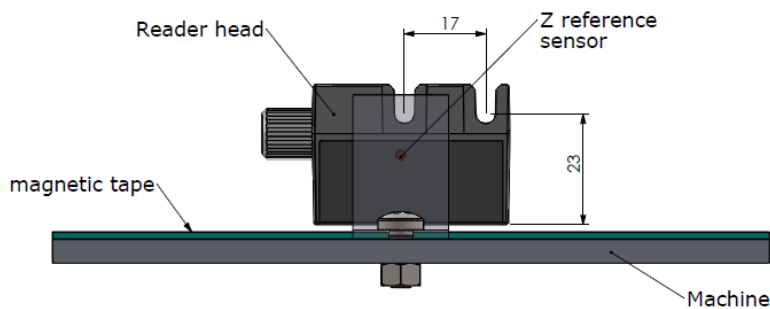
Wiring

YELLOW	A
RED	POWER SUPPLY
BLACK	0 V
GREEN	B
SHIELD	GROUND



Standard signal A + B (Option: Inverted signal and Z reference)

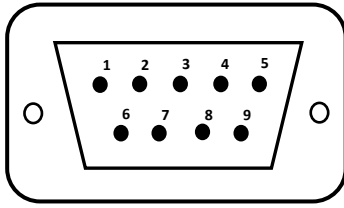
Option: External Z Reference Signal Settings



The magnet and Z reference sensor must be parallel to each other for the external Z reference signal.

Option: TTL Pin Connections

In the left tablet 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.



*ask for other socket

Pin No	Cable Color	Signal
1	YELLOW	A
2	WHITE	/B
3	RED	POWER SUPPLY
4	BLACK	0 V
5	BLUE	/A
6	GREEN	B
7	GREY	/Z
8	PINK	Z
9	SHIELD	GROUND

MAGNETIC TAPE B5-40



- Easy Installation
- Robust and flexible construction
- 5 mm pole distance
- Measuring up to 100 meters
- Dust, oil and moisture insensitive
- IP67 protection class
- Nitrile rubber

The magnetic tape is physically protected by a stainless steel shield with no magnetic properties. B series magnetic tape can be cut at desired dimensions. The magnetic tape consists of 3 layers:

1. **Flexible Nitrile Rubber Magnetic Tape:** Featured with equally spaced magnetic properties. It is measured by this feature.
2. **Steel Protection Sheet (Upper):** This sheet prevents the tape from being damaged due to external factors. There is adhesive tape on it to stick to magnetic tape. Used with magnetic tape.
3. **Sub Protection Sheet:** Layer 3 is the most solid layer and is therefore delivered separately for transport and application needs. The first layer is gummed by the user. The steel tape is magnetically neutral and is used to protect the magnetic tape from physical effects.

Technical Specifications

Operating temperature	- 40°C to +120°C
Ambient temperature	- 40°C to +120°C
Pole Distance	5 mm
Accuracy	± 20 µm/m
Temperature Coefficient	11 ± 1 µm / K
Protection	CrNi 17 7 Stainless Steel Sheet Oil, dust, etc. Insensitive

Order Details

B5 - 40 - **X,X**

Magnetic Tape Length

1,0m to 20,0 meters, user-defined

