MAGNETIC LINEAR GAUGE

MLG 112

"Magnetic Measurement, Compact and Spring Loaded System, High Resolution"

QUADRATURE SUQARE WAVE OUTPUT

MAGNETIC MEASUREMENT

SPRING LOADED STRUCTURE

LONG SERVICE LIFE

HIGH ACCURACY

- 5mm or 10mm measuring range
- Spring Loaded System
- 1 µm high resolution
- 20 µm linearity
- Quadrature square wave output
- Small structure, easy installation
- Robust aluminum housing
- IP54 protection class

MLG 112 series linear gauges of the are used for the measurement of various dimensions, displacements and travel distances. It reads position information sensitively and sends it as encoder pulse. With its compact structure, it provides maximum ease of installation to the user. It also has a long working life of up to 10 million times. It provides suitable solutions for areas such as cyclic position measurements, automatic dimension measurements, industrial measurement systems.

Part size measurement

X-Y stage measurement

Part height measurement

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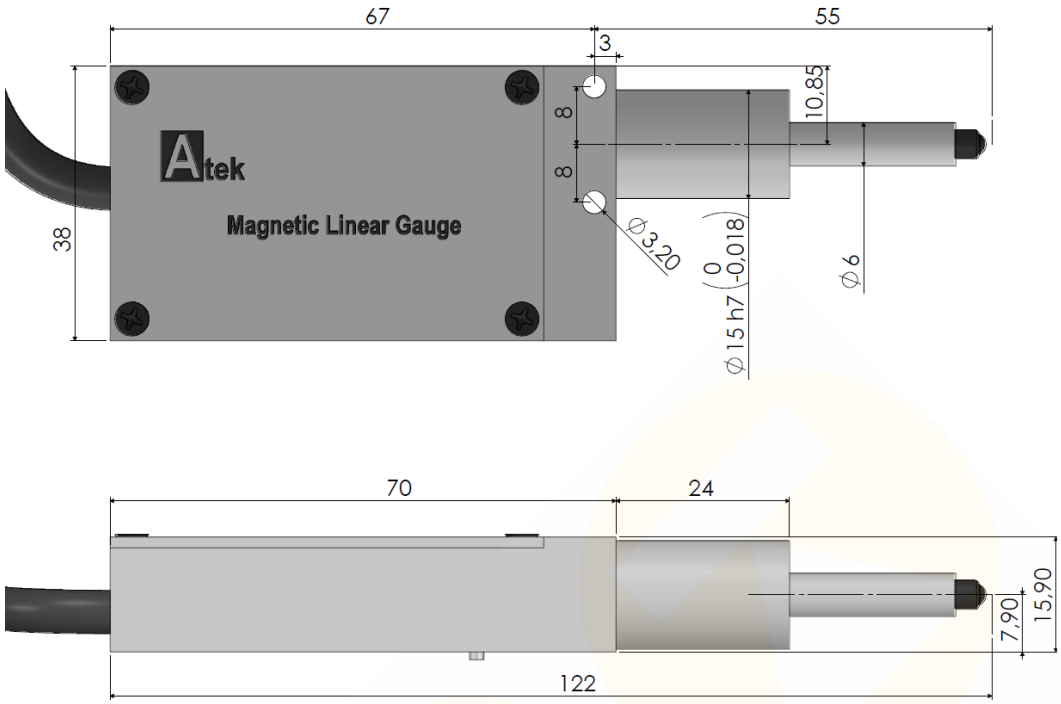
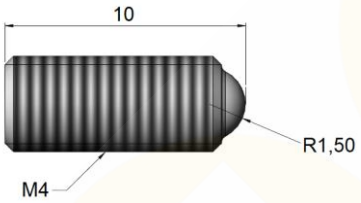
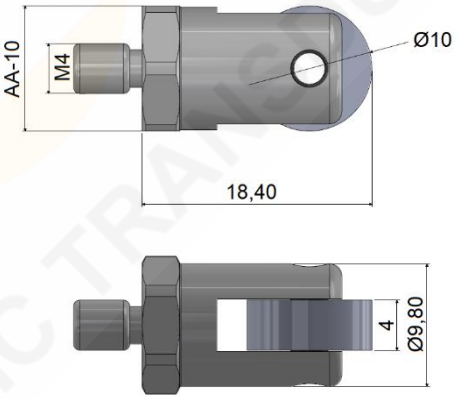
MECHANICAL DIMENSIONS (mm)



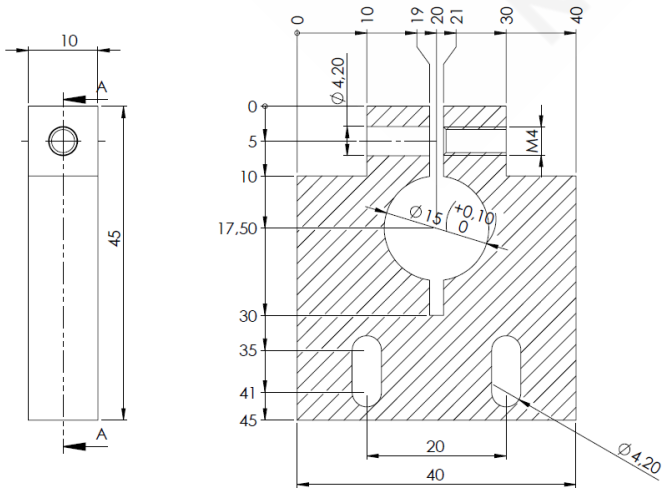
PB (Ball point) Probe Tip



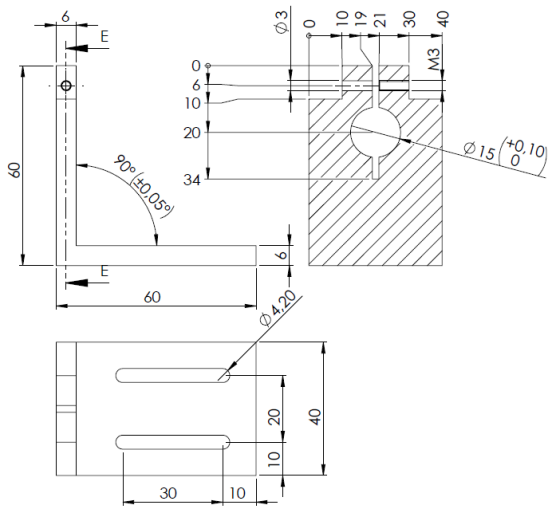
PR (Bearing) Probe Tip



MS (Standard) Mounting Part

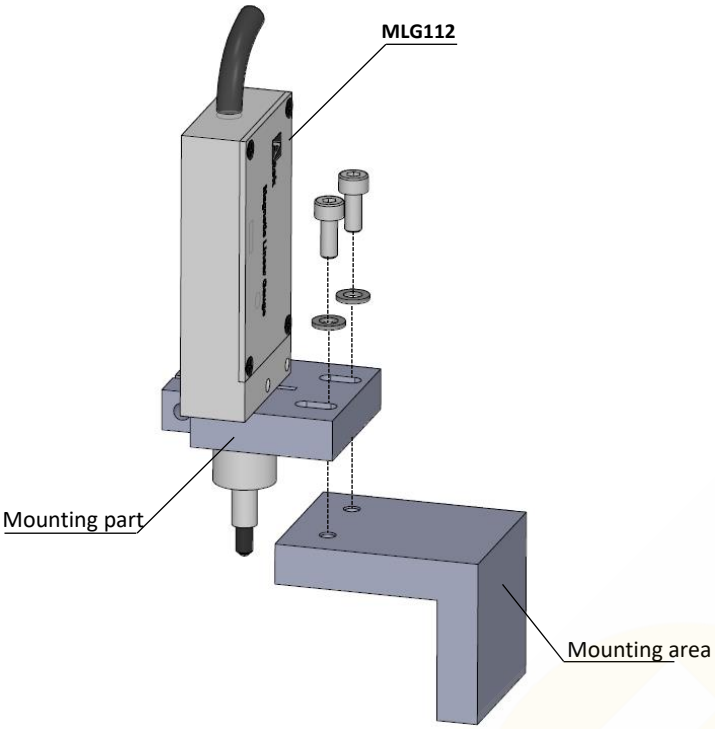


ML (L Type) Mounting Part

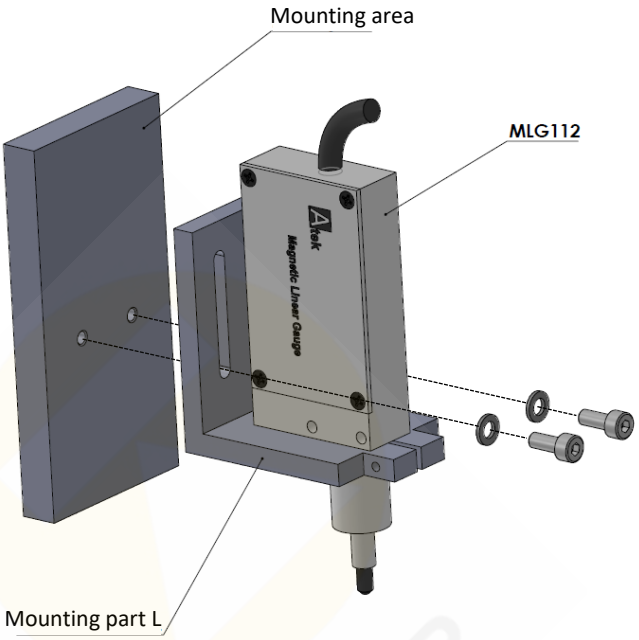


MOUNTING

Mounting with standard mounting part



Mounting with L type mounting part



TECHNICAL FEATURES

Measurement Principle	Magnetic, hall-effect				
Measurement Range	5mm or 10mm				
Distance to upper stop	+2mm				
Resolution	1µm				
Linearity	20µm				
Output Signal	Quadrature square wave				
Supply and Output Type		**PP**	**TTL**	**HTL**	**HPL**
	Supply	10…30 VDC	5 VDC	10…30 VDC	5…30 VDC
	Output	10…30 VDC Push-pull	5 VDC TTL RS422 Line Driver	5 VDC TTL RS422 Line Driver	5…30 VDC Push-pull
Output Signals	A, /A, B, /B				
Current Consumption	Max 40 mA / channel				
Repeatability	4µm max.				
Maximum operating speed	3 m/s				
Measurement Force	<2N				
Stem diameter	Ø15mm				
Mechanical life	~10 million times				
Operating temperature	-25...+85 °C				
Storage temperature	-40...+100 °C				
Electrical connection	0,14 mm^2 shielded cable				
Protection	IP54				
Housing material	Aluminum				

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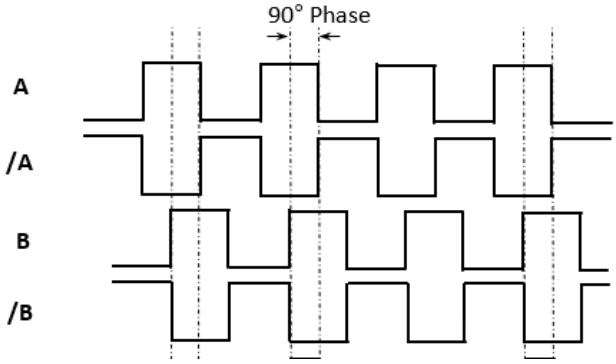
ELECTRICAL CONNECTION

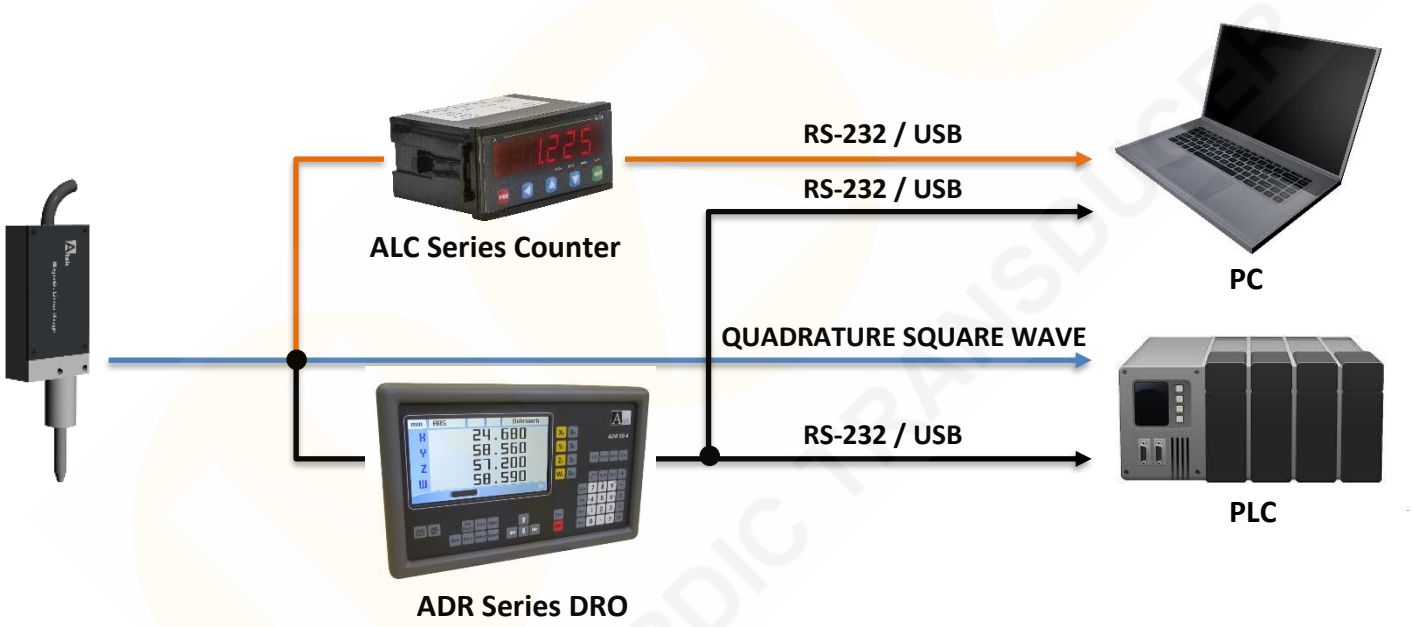
SIGNAL	CABLE COLOR
A	Yellow
/B	White
+V	Red
0V	Black
/A	Blue
B	Green
-	Shield



In the table above 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) have to be added to the system. If it is not suitable /A, /B signal cables must be fixed as insulated separately. Don't forget that these edges have electricity too.

WARNING (!) The sensor should be kept away from any magnetic field. If magnets or devices with similar magnetic effects come close to the product, it will disrupt the working structure of the sensor.

SYSTEM CONFIGURATION



BY PRODUCTS

ALC Series Counters
ALC 77
ALC 94

ADR Series Digital Readouts
ADR 10
ADR 50

ORDER CODE

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

Measurement Range

05 : 5mm
10 : 10mm

Electrical Connection

3M : 3 meters cable
***Optional others**

MLG 112	-	XX	-	XX	-	XXX	-	X	-	XX	-	XX

Model

Resolution

01 : 1µm

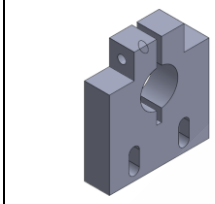
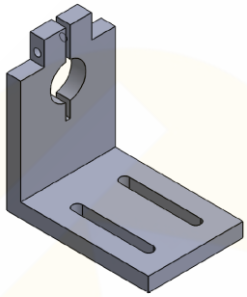
Signal Output Type

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

Probe Tip Option

PR : Bearing tip probe
PB : Ball point tip probe

OPTIONAL PRODUCTS

		
Product Code	**MS**	**ML**
Description	Standard mounting part	L type mounting part

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