

MLC 310 Compact System

MAGNETIC LINEAR SCALES



- CONTACTLESS AND WEAR-FREE SYSTEM
- HIGH TOLERANCE TO SHOCK AND VIBRATION
- MEASURING LENGTHS OF UP TO 20 METERS
- RESISTANT TO DIRT, HUMIDITY AND DUST
- REQUIRES NO CLEANING OR MAINTENANCE
- ROBUST SHIELDED METAL ENCLOSURE
- PROTECTION CLASS IP67
- COMPACT DESIGN

OPERATIONAL

MANUAL

Iran agent Tel: 021 66 3939 00 Mob: 0912 147 3023 www.IranAtek.ir

1. WARNINGS

1. Connections must be completed by only authorized personnel.

2. Consider the warnings when completing the connections and using the scale.

3. Pay attention about the sensors power supply. (For TTL sensor max. 5V, for Push-Pull sensor max. 30V). Don't energize the scale before all connections completed.

4. Distance between sensor and control unit must be short as possible.

5. Be away the sensor cable from high power cables, contactor, engine, or inductive and capacitive noise sources.

6. The screen cable must be connected to the earth line.

7. The magnetic tape must be away from magnetic areas.

8. Don't make any connection when the scale energized.

9. Please call the service for any problem about the scale.



2. GENERAL INFORMATION

The encoder forms a compact unit. The scanning unit is guided within the housing along scale.

Long life linear motion guide system. The scale, scanning unit and guide are protected against contamination by an aluminum extrusion and elastic sealing lips.

The coupling elements between the scanning carriage and transfer web are designed to transfer motion in the measuring direction only

Pitch or other motion of the connecting web in a direction perpendicular to measurement is compensated without affecting accuracy.



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...

PRODUCT CODE

	Ма 85 82	gneti	с Тар	e			5 VDC T PP 24 VDC	: 5VDC TL RS42 : 24 VD Push-P : 24 VE	± %5 Pc 22 Line I C ± %20 ull Outp DC ± %20	ower Su Driver C Power out D Power	pply utput Supply		3M 5M 8M 10N	ble Le : 3 Me : 5 Me : 8 Me I: 10 M ptional	ters ters ters eters	I en 5m to	o 50m	Opti (Sev Leng	easur onal, U eral Sta gths fro 00 mm	ser De Indard m 50m	fined
MLC310 -	X	Х	-	Х	Х	-	Х	Х	Х	-	X	-	Х	Х	-	X	-	X	Х	Х	mn
Model Resolution 01 : 1μm 10 : 10μm 10 : 10μm 62 : 62,5μm 100: 100μm 100: 100μm				05 25 n 80	Signal C 05 : 5μm 2 : Α, Β 25 : 25μm 3 : Α, Β, Ζ					C : C; S : Sp			able piral								

3. TECHNICAL SPECIFICATIONS

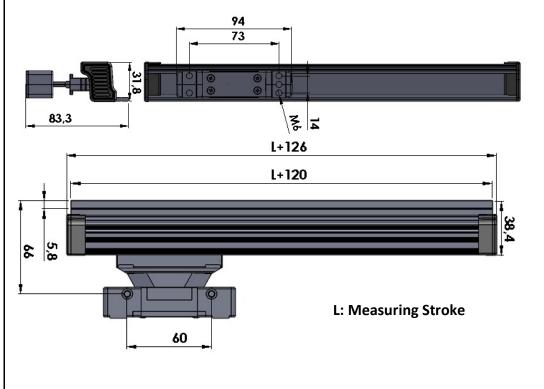
TECHNICAL

Operating Temperature	- 25 to 85 °C				
Storage Temperature	- 40 to 100 °C				
Protection Class	IP67				
Body	Aluminum				
Magnetic Tape	B5 or B2				
Tape Reading Distance	1,5 mm				
Travel Velocity	3 m/s max.				
Connection	D-Sub 9 Pin, 5 or 8 x 0,14 mm ² screen cable				
Accuracy	± 10 μm max.				
Repeatability	± 1 pulse				

ELECTRICAL

Power Supply	5 Vdc, +10 Vdc+30Vdc
Current	50 mA Nominal
Output	TTL, Push Pull Line Driver
Output Signals	A, /A, B, /B, Z, /Z
Output Current	100 mA max. (Every Channel)

MECHANICAL DIMENSIONS

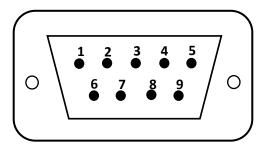


Meas	ureme	nt Stro	kes *
100	120	150	170
200	220	250	270
300	320	350	370
400	420	450	470
500	520	550	570
600	650	700	750
800	850	900	950
1000	1100	1200	1300
1400	1500	1600	1700
1800	2000	3000	4000

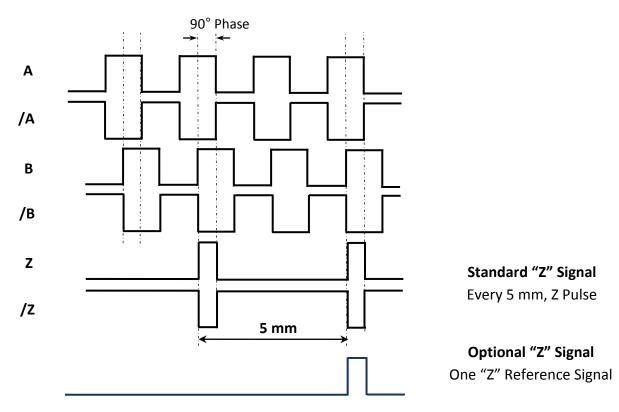
* Possible between 100 to 20.000 mm

4. CONNECTIONS

4.1. Pin Connections

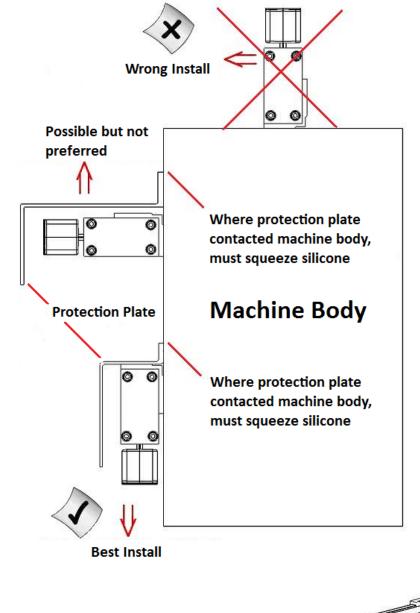


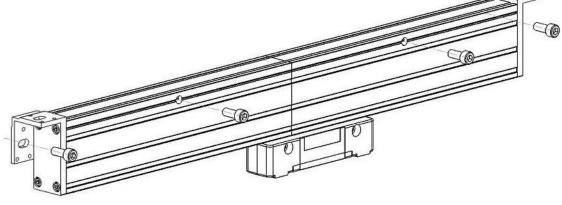
Pin Number	Cable Color	Signal
1	Yellow	А
2	White	/В
3	Red	POWER SUPPLY
4	Black	0 V
5	Blue	/A
6	Green	В
7	Grey	/Z
8	Pink	Z
9	Shield	GROUND



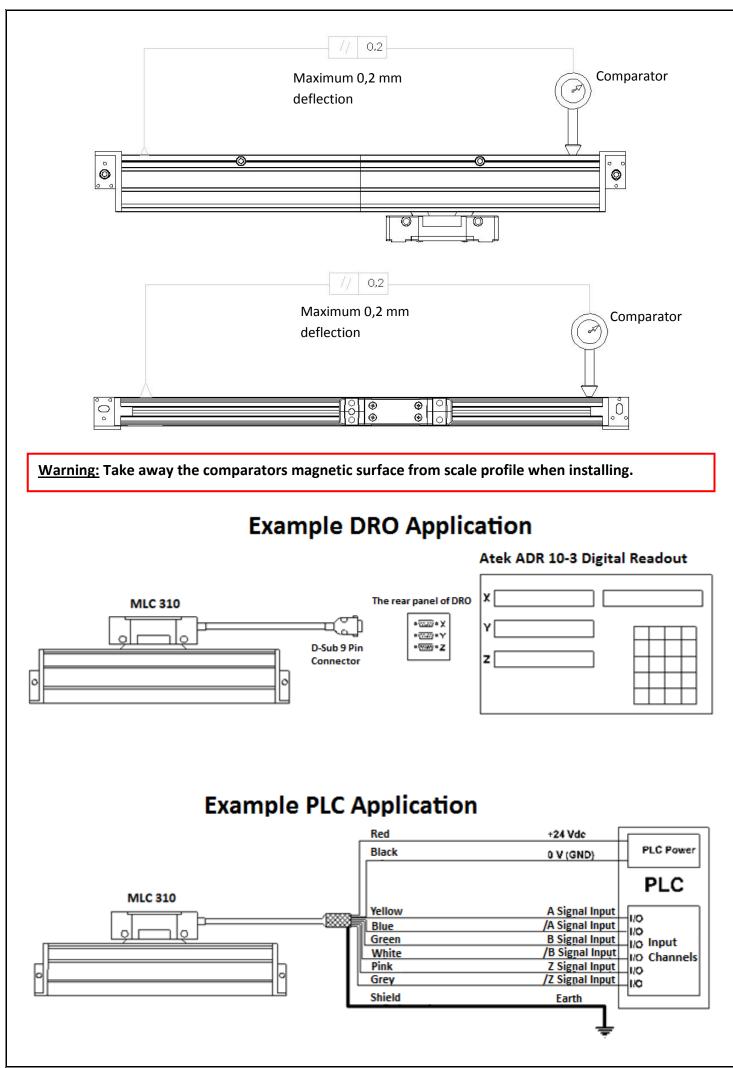
4.2. Installing

The proper installation of MLC 310 is very important issue in terms of the system work properly. The proper installation is shown down. Up surface of the sensor must be down for negative factors. Protection plate must be used. Reader sensor and profile must be parallel for all the stroke. Comparator must be used when installing the scale.





Fixing the scale profile with M4 Screw







ATEK SENSOR TECHNOLOGY A.S.

🗇 Tuzla Kimya Sanayicileri Org. San. Bolg., Melek Aras Bulvari No:67

TR-34956 Tuzla / Istanbul - TURKEY

🕾 Tel: +90 (216) 399 44 04

🚍 Fax : +90 (216) 399 44 02

Web: <u>www.ateksensor.com</u>

E-Mail: <u>info@ateksensor.com</u>

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