JENIX®
Digital Readout System

Linear Magnetic Scale

마그네틱 스케일

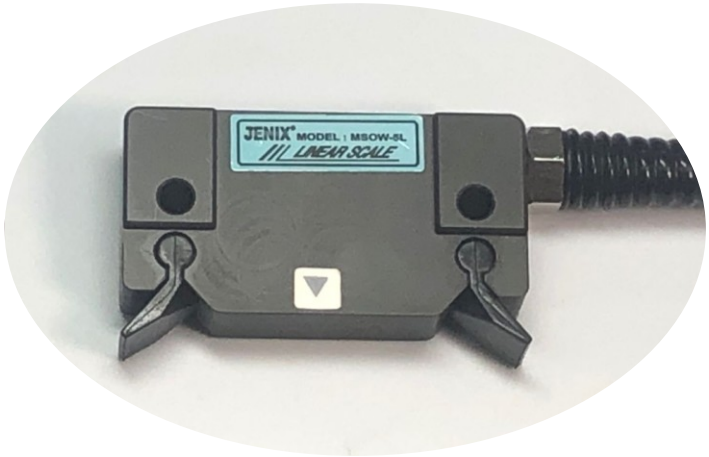
(Model: MSOW)

- ***RESOLUTION***

0.001mm
0.005mm
0.01mm

- ***Fast reading speed***

- ***High reliability by non-contact sensing techniques.***



The JENIX magnetic scale (model name: MSOW) is high-speed linear magnetic scales designed to be used in harsh environments.

Compact shielded magnetic encoder that travels up to 2.5mm(or 1mm) apart from magnetic adhesive magnetic tape can be used up to 50m.



SPECIFICATIONS

Condition of circumstance	
Operation Temperature	-40℃ to +120℃
Storage Temperature	-40℃ to +120℃
Water Proof	CrNi 17 7 stainless carrier Nitrile rubber high temperature magnetic tape

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Physical Features	
Width	10mm
Thickness	1.3mm
Maximum length	50m
Pole pitch	5mm or 2mm
Linear expansion coefficient	~ 17 ± 10^{-6} /K

Technical Specifications		
	5mm Pole Pitch(10L, 5L)	**2mm Pole Pitch (1L)**
Measurement method	Incremental	
Resolution(counter)	0.01mm & 0.005mm	0.001mm
Repeatability	± 1 increment	
Space of Sensor & Tape	Maximum 2.5mm	Maximum 1mm
Protective class	IP67	
Operation Temp.	-5℃ to +45℃	
Storage Temp.	-5℃ to +45℃	
Output level	5V TTL	
Output current per channel	± 4mA	
DC power	5V ± 2.5%	
Maximum measurable length	50m	50m

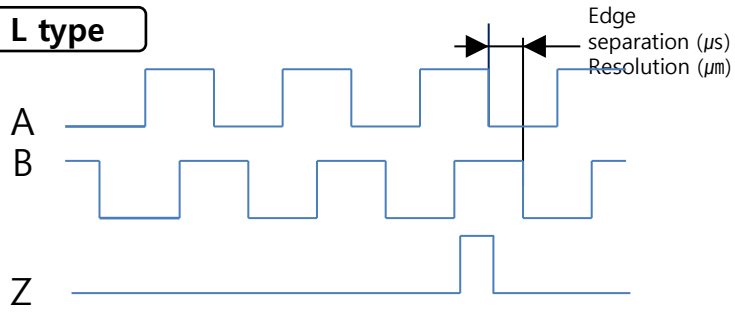
Digital Output Signal

Output Signals		
	L type	**LF type**
Power supply voltage	4.5V ~ 5.0V	
Incremental signals	Square wave A,B, Z	Square wave A, B, Z, A, B, Z,
Reference signals	2mm or 5mm period	
Cable	6 wires, standard 4m	9 wires, standard 4m

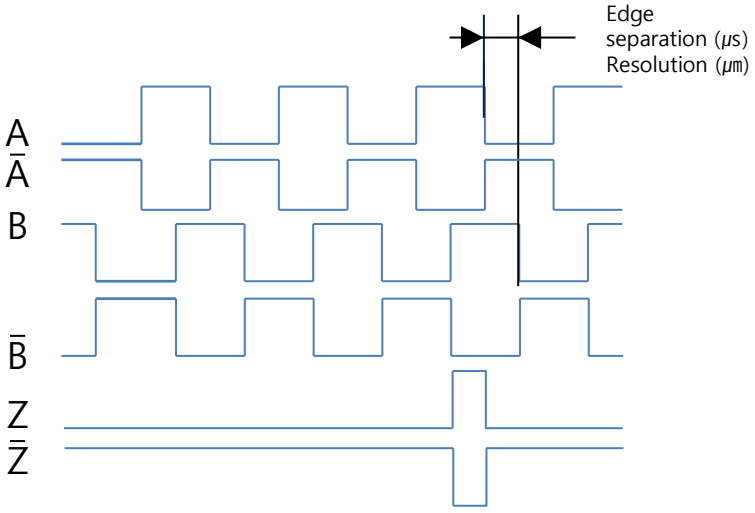
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Timing diagram

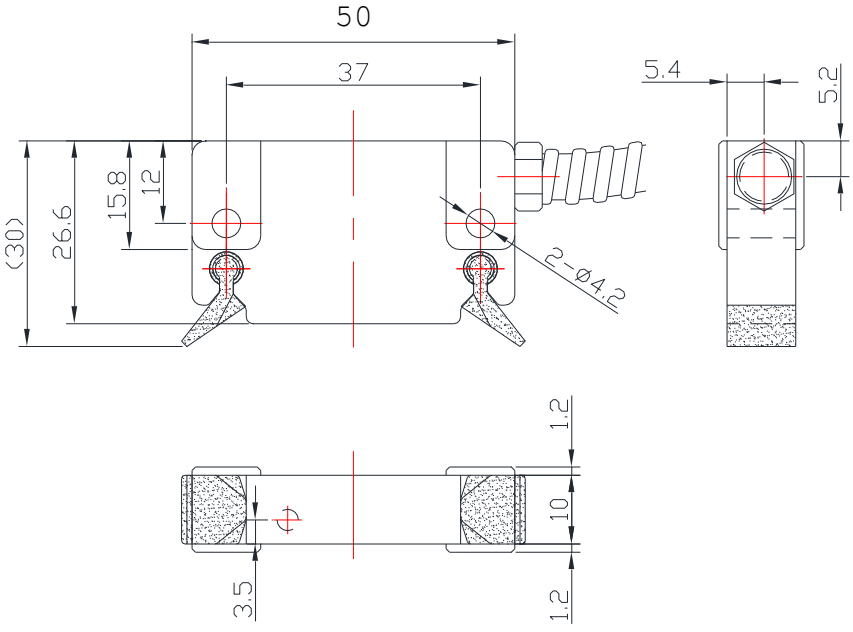
L type



LF type

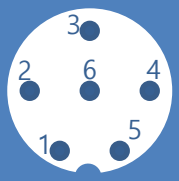
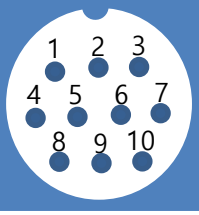


Dimensions

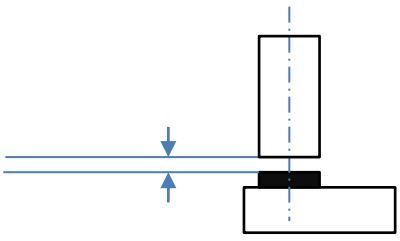


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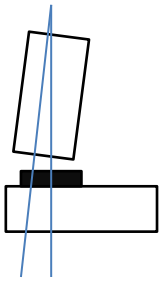
Connector

Function	Signal	6-pin/ female/color 	6-pin round / female 
Power	5V	1 .Red	1.Black
	0V	5. Black	9. Blue
Incremental signals	A+	2. Yellow	2. Yellow
	B+	3. White	3. White
Reference signals	Z+	4. Green	6. Pink
	A-		4. Green
	B-		5. Brown
	Z-		7. Gray
Shield	GND	6. Shield	8. Shield

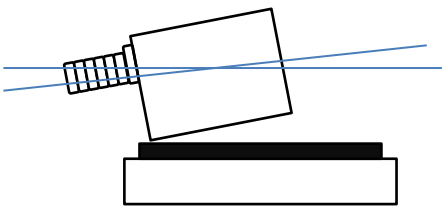
Encoder allowance angle



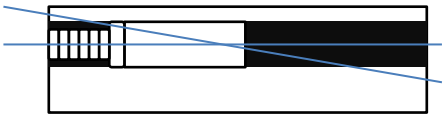
(1) Space
5mm pole pitch: Max. 2.5mm
2mm pole pitch: Max. 1mm



(2) <+/- 5˚

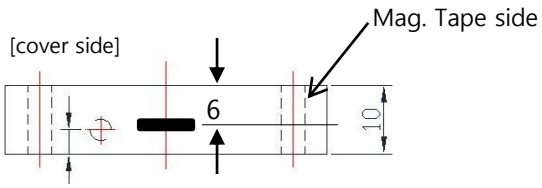


(3) <+/- 5˚



(4) <+/- 1.5˚

Position of a sensor



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