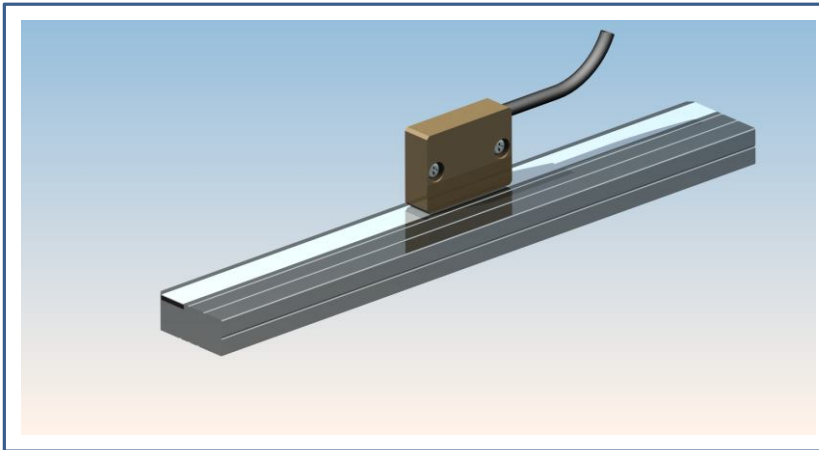


Linear Magnetic Scale

(Model: MSO / MSS)

- Resolution 0.01mm
- Repeating accuracy ± 1 increment
- Small sensor with integrated translator
- High speed operation
- High reliability of non contact sensing technique



Jenix linear magnetic scale (model: MSO / MSS) is a contactless high-speed linear magnetic scale designed for use in harsh environments. It is a compact sealed read head that rides at up to 1.5mm from the self-adhesive magnetic strip scale, which brings up to 50m travel.

Technical specifications of magnetic tape

Environmental Conditions

Operating temperature	-40°C to +120°C
Storage Temperature	-40°C to +120°C
Water protection	CrNi 17 7 stainless steel carrier Nitrile rubber high temperature magnetic tape

Mechanical properties

Width	10mm
Thickness	1.3mm
Maximum Length	Rolls of 25m and 50m
Pole pitch	2mm
Accuracy	±0.02mm/m up to 50m length
Linear expansion coefficient	~ $17 \pm 10^{-6} /K$

Technical specifications

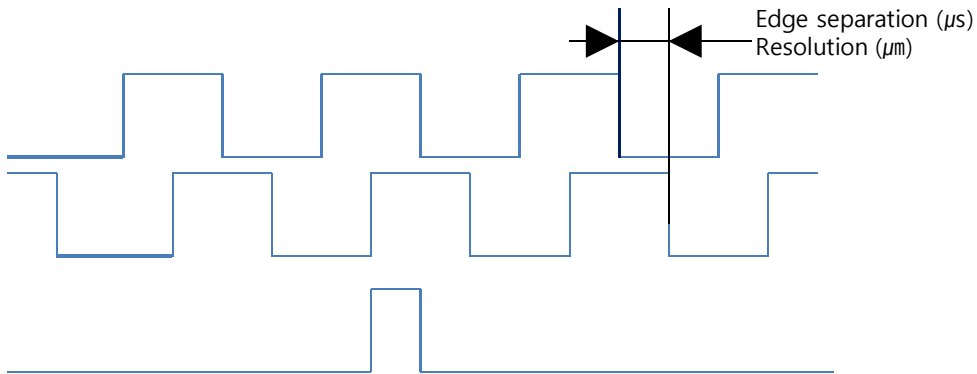
Measurement principle	Incremental
Resolution at 4 edge multiplier	0.01mm
Repeat accuracy	± 1 increment
Accuracy in mm	± (0.01+0.02×L)
Protection class	IP67
Working temperature	-40°C to +120°C
Stock temperature	-40°C to +120°C
Output levels	5V TTL
Output currency per channel	± 4mA
DC power supply	5V ± 2.5%
Output frequency (5V-TTL level)	10KHz per channel A or B (edge rate 40MHz)
Maximum measuring length	25m, 50m

Digital output signals

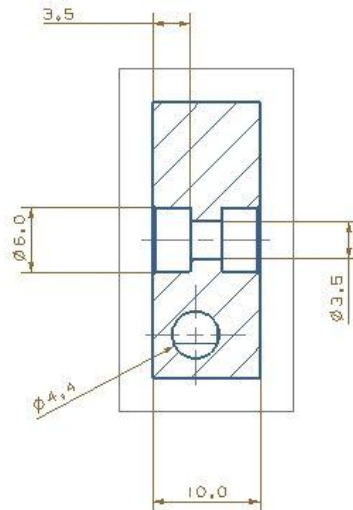
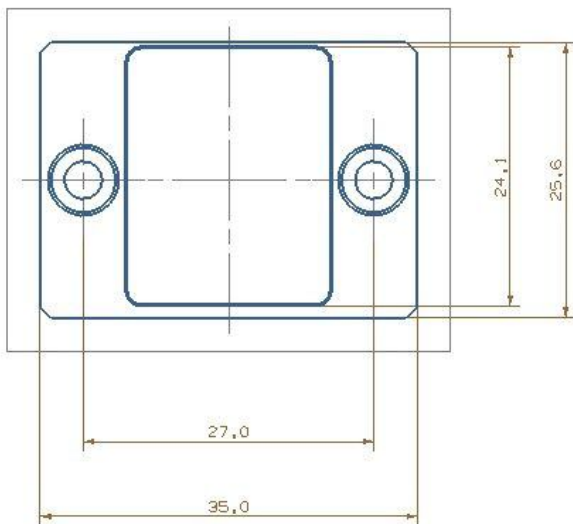
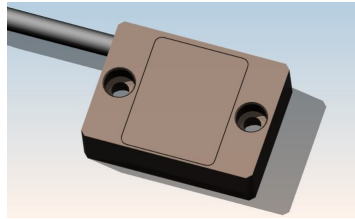
Output signals

Power supply voltage	4.5V to 5.0V
Incremental signals	2 square wave signals A,B
Reference mark signal	square wave pulses Z
Cable	6 wires, standard 2m

Timing diagram



Dimensions



Connections

Function	Signal	Color	6-pin round / female
			
Power	5V	Red	1
	0V	Black	5
Incremental signals	A+	Yellow	2
	B+	Brown	3
Reference mark	Z+	Green	4
Shield	-	<Case>	6