



- Widely used in the rolling mill industry
- Proven and reliable digital measuring system for use in metal processing environments
- Can be incorporated in a wide variety of applications
- Detector available with 2 or 4 axis

High reliability through waterproofing and shock resistance

Reading head HA-705LK

Protection class IP67

Vibration and shock resistant casing design

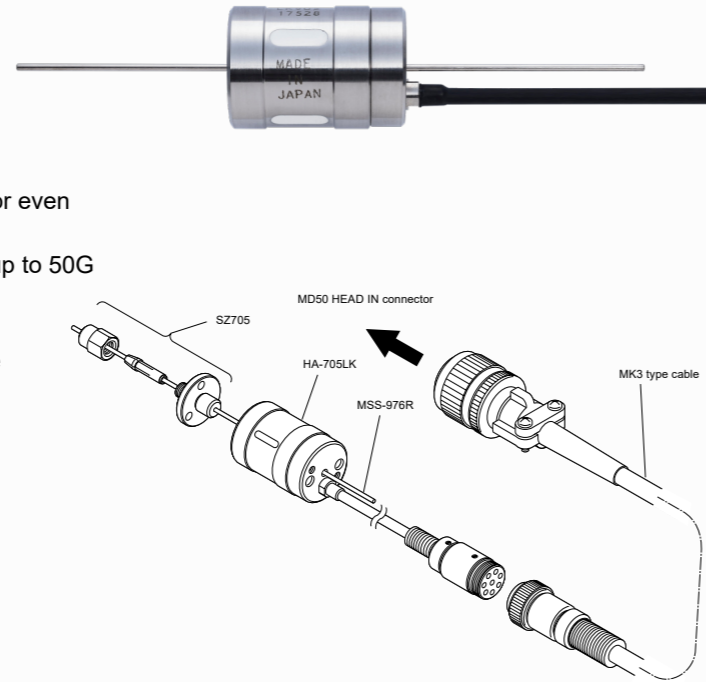
- The waterproofed reading head makes it suited for even the harshest of environments
- Internal tests have shown shock resistance with up to 50G acceleration and drop resistance up to 110G

Oil and water resistant extensions cables up to 150m are available (MK3 cable)

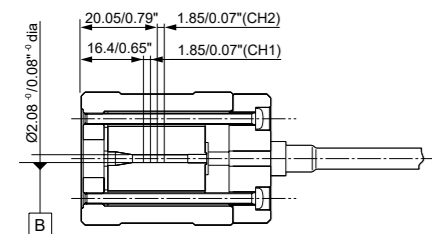
Scale rod MSS-976R

Accuracy: ±3µm

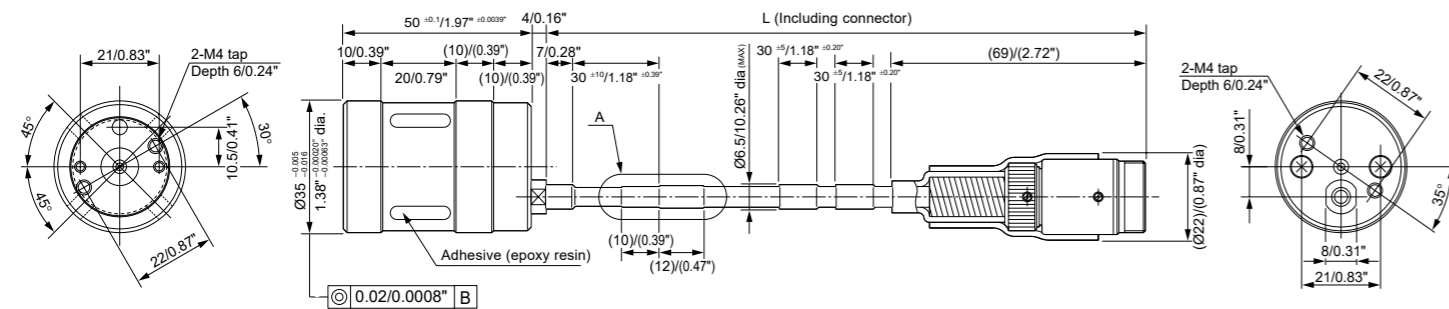
Measuring length: 40mm up to 1.250mm



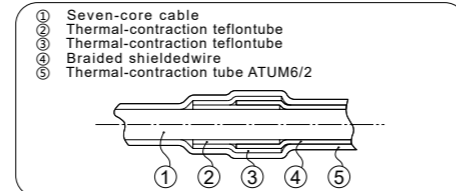
Dimensions



Special connection model	Cable terminal processing, description	L measurement	Special connection model	Cable terminal processing, description	L measurement
Standard	Preparing the cable end	500 ⁺⁵⁰ / ₊₁₀	906	Preparing the cable end	1000 ⁺⁵⁰ / ₊₁₀
901	Including connector	560 ⁺⁵⁰ / ₊₁₀	907	Preparing the cable end	1500 ⁺⁸⁰ / ₊₂₀
902	Vacant (combined with 907)	1500 ⁺⁵⁰ / ₊₁₀	908		
903	Including connector	1000 ⁺⁵⁰ / ₊₁₀	909		
904	Vacant (combined with 906)	1000 ⁺⁵⁰ / ₊₁₀	910	Including connector	1500 ⁺⁸⁰ / ₊₂₀
905	Including connector	2540 ⁺⁸⁰ / ₊₂₀	911		



Detail A Terminal shielding treatment



Unit : mm/inch

High reliability and numerous functions allow operation with a variety of machinery

Detector MD50-2N/4N

Max. Response speed of 100m/min

Output:

- A/B signal with resolution from 0.5 to 10µm
- Up/Down with pulse width from 0.1 to 4.0µs

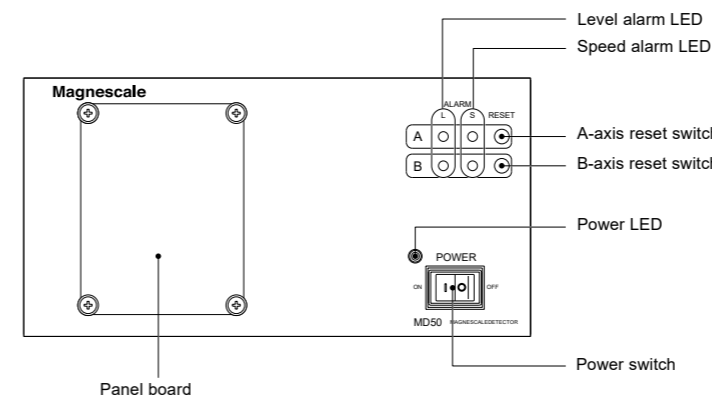
Several alarm outputs available to meet user's needs.

Easy maintenance as each of the up to 4 axis is assigned to an individual card.

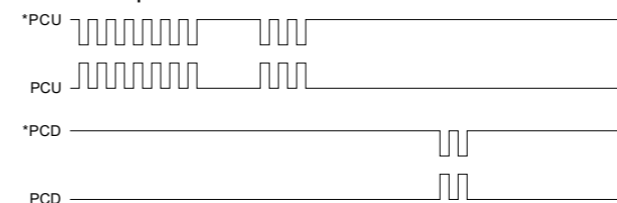
Power source: AC 100V to 240V



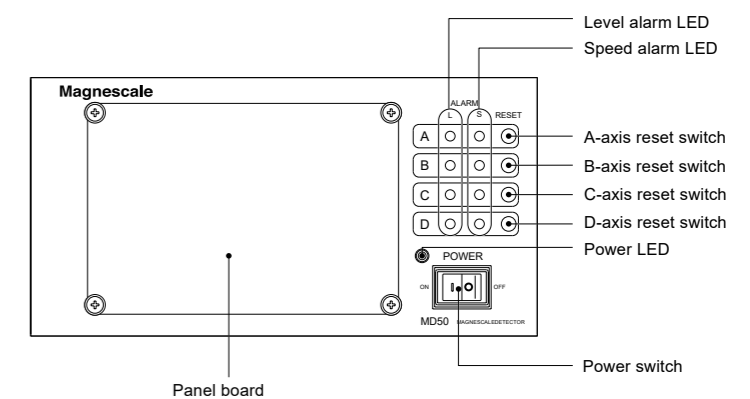
MD50-2N (2-axes input)



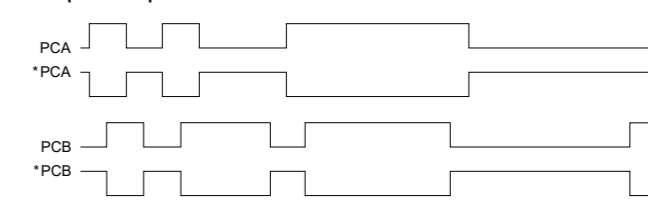
UP/DOWN output



MD50-4N (4-axes input)



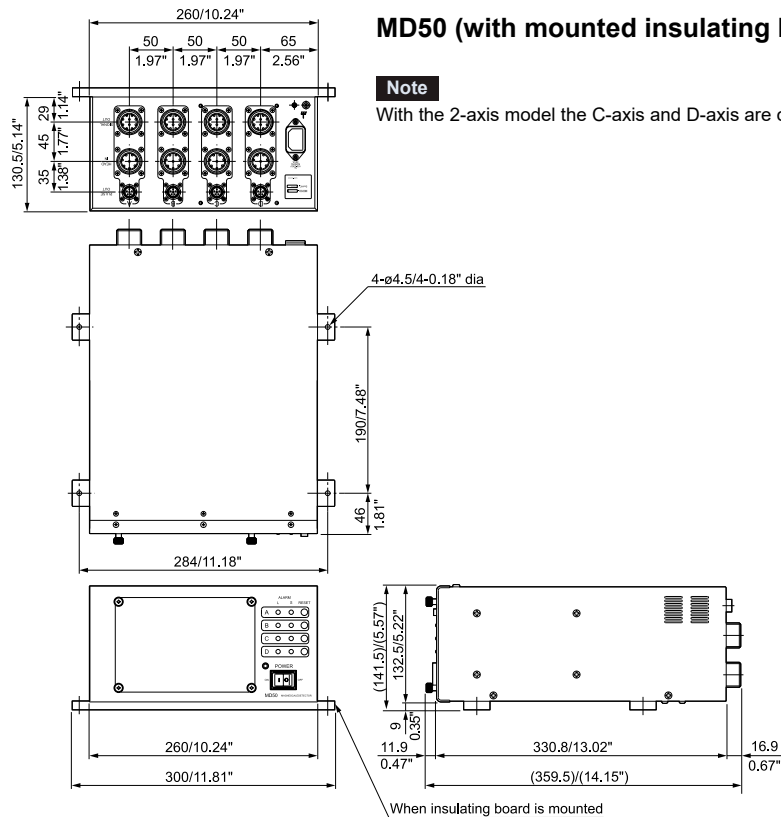
A/B phase output



Main specifications

Model name	MD50-2N	MD50-4N
Input axes	2 axes	4 axes
Scale to be connected	HA-705LK // MSS-976R	
Resolution	0.5, 1, 2, 5, 10 μ m (selectable)	
Output pulse width	0.1, 0.2, 0.4, 0.8, 1.0, 1.6, 2.0, 3.2, 4.0 μ s (selectable)	
Max. response speed	100m/min (depending on the resolution and output pulse width)	
Main output signal	A/B signal or Up/Down signal (selectable), Line driver output (equivalent to SN75183)	
Sub output signal	A/B signal or Up/Down signal (selectable), Line driver output (equivalent to SN75183)	
Alarm functions	Level alarm: Hi-level signal is output when the scale signal drops down Speed alarm: Hi-level signal is output when the maximum response speed of scale is exceeded	
Alarm reset functions	Manual reset operation: Push the RESET switch on the front panel Reset operation by external signal: 5V DCI	
Cable length	Max. 150m (MK3 -30, -50, -100, -120, -135, -150, offered separately)	
Operating temperature	0 to 40°C	
Storage temperature	-20 to 60°C	
Power consumption	Max. 70W	
Input power voltage	100 to 230V \pm 10% 50/60Hz	
Dimensions	260(W) x 359.5(D) x 141.5(H) mm	
Mass	Approx. 5.8kg	Approx. 7.0kg
Applicable standards	UL3101-1, FCC Part 15, Subpart B, Class A EMC Directive EN55011 Group 1, Class A EN50082-2, Low Voltage Directive EN61010-1	

Dimensions



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