

ACU-RITE®

LMF 9310

Multi-Section Inductive Encoder



The LMF 9310 Multi-Section Inductive Encoder is a guided measuring system that uses an LMK scanning head with TTL incremental signals and an inductive measuring tape clamped on an integrated guiderail. When properly installed to specifications, this encoder has an Ingress Protection Rating of 67 (IP67), leaving this measurement system virtually unaffected by environmental contaminants (i.e. oil, coolant, etc.). With the incorporation of the included mounting coupling on the scanning head, high mounting tolerances can be realized — especially for longer measuring lengths. Durable, dependable and affordable all-in-one package.

Product Features

Available in lengths from 3,150mm (124") to 18,270mm (719") in 180mm (7") increments

Accuracy Grade $\pm 20\mu\text{m}$

Distance Coded Reference Marks

5v Incremental TTL Signals

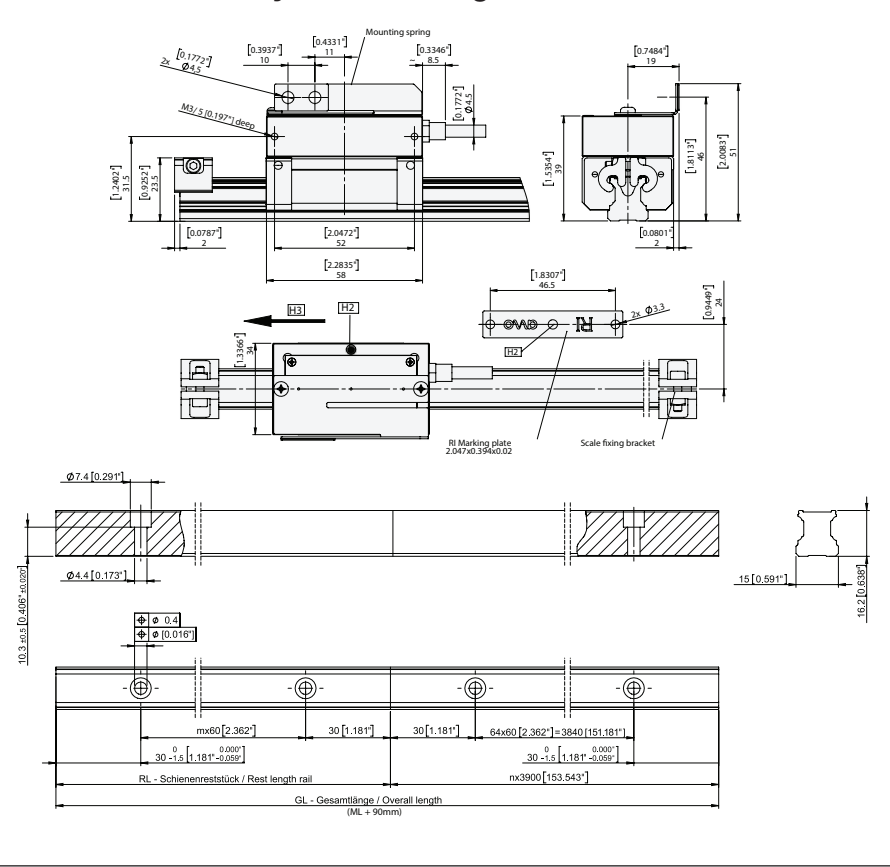
Durable and Rugged Scale Case

Traversing Speed = 3m/s

Overall width under 35mm (1.4") wide

IP67 Protection Rating

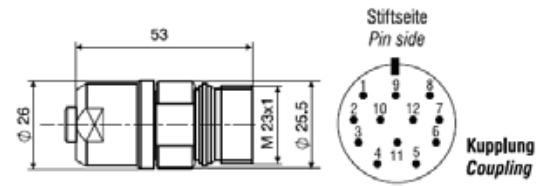
LMF 9310 Assembly and Mounting Dimensions



LMF 9310 Technical Data

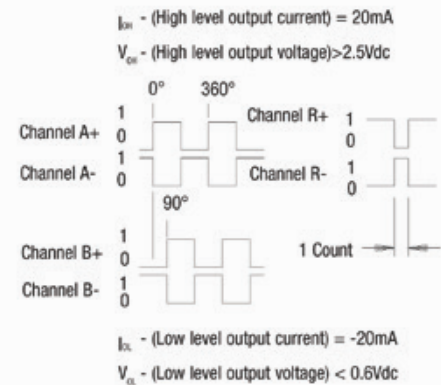
LMF 9310	
Measuring standard	Steel rail with inductive incremental scanning
Accuracy grade	±20µm
Measuring length ML*	3,150mm to 18,270mm in 180mm increments
Incremental signals	□ TTL
Grating period	1000µm
Integrated interpolation	50-fold
Signal period	5µm
Measuring step	5µm
Reference marks	Distance-coded
Voltage supply Without load	5V DC ±0.1 V/< 260mA
Electronic connection	PUR, with a M23, 12-pin male coupling
Cable length	0.3m fixed with a 2m - 12m extensions available
Traversing speed	3 m/s
Required moving force	≤ 5N
Operating conditions	0°C to 80°C
Conditions for storage	-20°C to 100°C
Protection EN 60529	IP67 when mounted as per Mounting Instructions
Mass	Rail 1.4 kg/m and head 0.2 kg

* Please indicate when ordering



12-Pin Male Coupling for TTL

PIN	SIGNAL	WIRE
1	B-	White
2	5V-Sensor	Red-White
3	RI+	Pink
4	RI-	Grey
5	A+	Green
6	A-	Yellow
7	LL	Violet
8	B+	Brown
9	LR	Black
10	0V	Blue
11	0V-Sensor	Blue-White
12	+5V	Red



Certifications

ISO-9001, UL, CSA, CE

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