

FLM Linear Magnetic Sensors

Resolution up to 0,001mm



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Features

- Resolution up to 0,001 mm
- Robust mechanical and electrical construction
- Protection to IP67
- Periodic reference signal.

Resolution Options :

2.5, 5, 10, 12.5, 20, 25, 40, 50, 80, 100, 200um for 5 mm tape
0.5, 1, 2, 4, 5, 8, 10, 16, 20, 25, 40, 50, 80um for 2 mm tape

Technical data - electrical ratings

Voltage supply	4.75VDC to 30VDC 4.75VDC to 5.5VDC
Protection:	Output short circuit protection. Reverse polarity protection (except 5V version)
Consumption w/o load	≤60 mA (24 VDC)
Resolution	See part number selection
Reference signal	Zero pulse, width 90° 180°, 360° optional
Output signals	90° shifted A and B, Z + inverted
Output circuit	Linedriver/RS422 Push-pull short-circuit proof
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	CE

Technical data - mechanical design

Sensor/tape reading distance	0.1...2mm
Pole Length	5mm for FMTL500 tape 2mm for FMTL200 tape
Protection DIN EN 60529	IP 67
Travel speed	≤10000 rpm
Starting torque	≤0.025 Nm (IP 67)
Materials	Housing: Zinc die cast
System accuracy	±0.025mm for linear ±1°
Repeat	±10um
Operating temperature	-10...+70 °C
Storage temperature	-30 °C up to +70 °C
Weight approx.	250 g

** 5 mm pole pitch magnetic band : **MB05**
** 2 mm pole pitch magnetic band : **MB02**

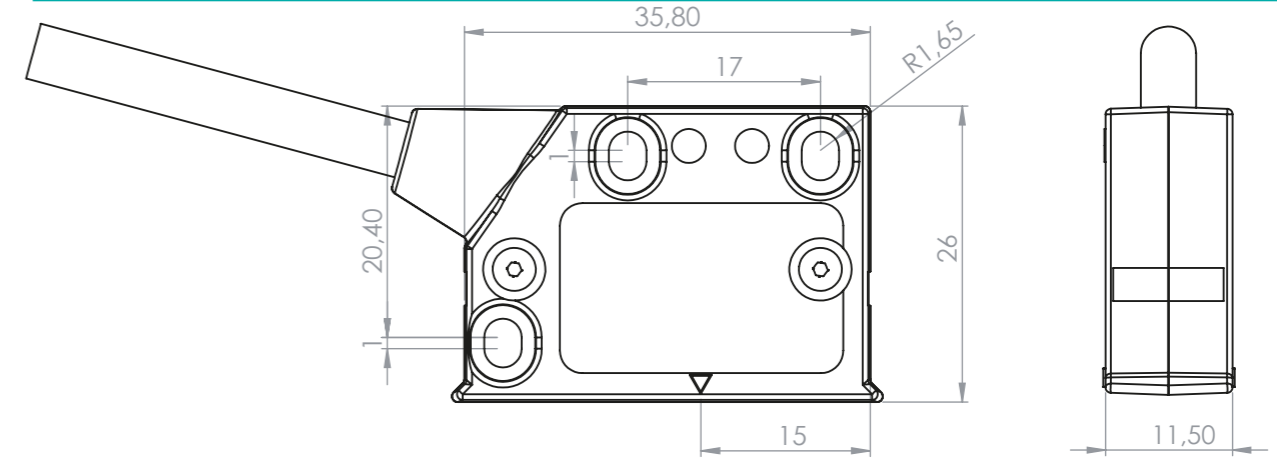
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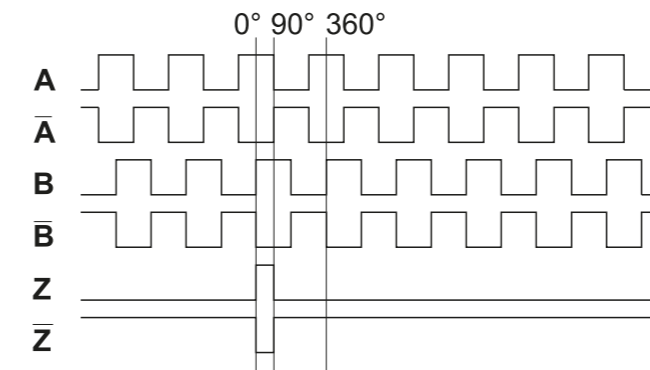


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Mechanical Dimensions



Pulse Diagram



Cable Wiring

Function	Color	Renk	Explanation
+VB	Brown	Kahve	Supply Voltage
GND	White	Beyaz	Ground
A	Green	Yeşil	A Channel
A'	Red	Kırmızı	A Inverted Channel
B	Yellow	Sarı	B Channel
B'	Pink	Pembe	B Inverted Channel
Z	Gray	Gri	Z Channel
Z'	Blue	Mavi	Z Inverted Channel
Shield	Black	Siyah	Shield

Encoder Part Number

