

Incremental encoders

Resolution up to 0.001 mm



FNC FLM2 Series



Features

- Resolution up to 0.001 mm
- Robust mechanical and electrical construction
- Protection to IP67
- Periodic reference signal

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 (steps/turn)	see part number selection
Reference signal	Zero pulse, width 90°, 180°
Output frequency	<300 kHz
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 ratings

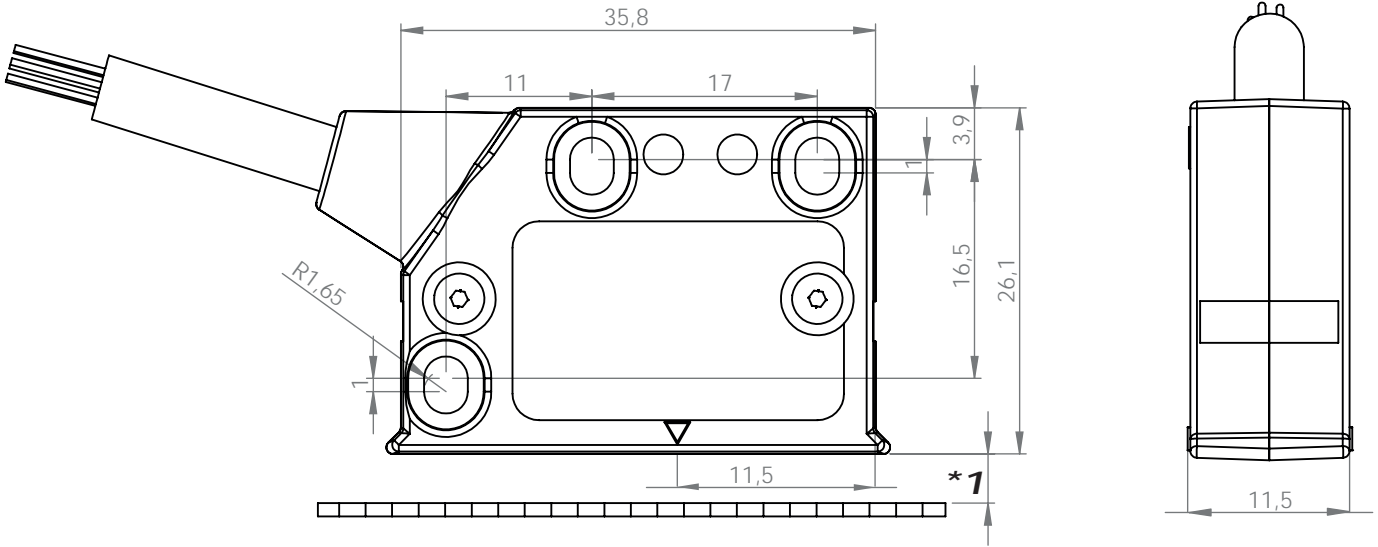
Sensor/tape reading distance	0.1...1 mm
Pole length	2 mm
Protection DIN EN 60529	IP67
Travel speed	3 m/s
Materials	Housing: Zinc die cast
Operating temperature	-20...+85°C
Storage temperature	-30°C up to +90°C
Weight approx.	700 g

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Mechanical Dimensions
Cable Wiring, Pulse Diagram








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Mechanical Dimensions

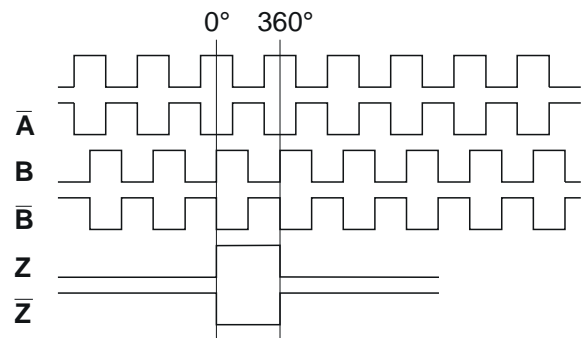


* Mounting gap between sensor head and magnetic band

Cable Connection

Function	Color	Renk	Farbe	
+VB		Brown	Kahve	Braun
GND		White	Beyaz	Weiß
A		Green	Yeşil	Grün
A'		Red	Kırmızı	Rot
B		Yellow	Sarı	Gelb
B'		Pink	Pembe	Rosa
Z		Gray	Gri	Grau
Z'		Blue	Mavi	Blau
Shield		Black	Siyah	Schwarz

Pulse Diagram



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Part Number



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Encoder Part Number

FLM **2** **005** **2** **30V** - **R2**

Tape type

2 : 2 mm

Resolution options

001 : 1µm 008 : 8µm
002 : 2µm 010 : 10µm
004 : 4µm 016 : 16µm
005 : 5µm 020 : 20µm

**0XX : for other resolution consult the factory

Output Channels

1 : A
2 : AB
3 : ABZ
4 : AB+A'B'
6 : ABZ+A'B'Z'

Electrical Connections

Cable

R2 : radial 2m, shield not connected (standard)

Supply Voltage and Output Circuit

5V : 5V in / out
245V : 5-30V in / 5V out
30V : 5-30V in / out