

## MA131 - SERIES



### HEAVY DUTY INCREMENTAL ENCODER Ø 58 MM

*Encoder with square flange 63,5 x 63,5mm*

- Ø 58 mm
- 10 mm shaft without face
- Enlarged sturdy bearings
- Short circuit and reversed polarity proof
- Dust and splash proof IP65
- Standard
  - 5-30V power supply, 300KHz
  - 2 square wave signals
  - Marker pulse and inverted signals
- Options
  - 5V power supply, 300KHz
  - 7-35V power supply, 100KHz
  - Customization upon request

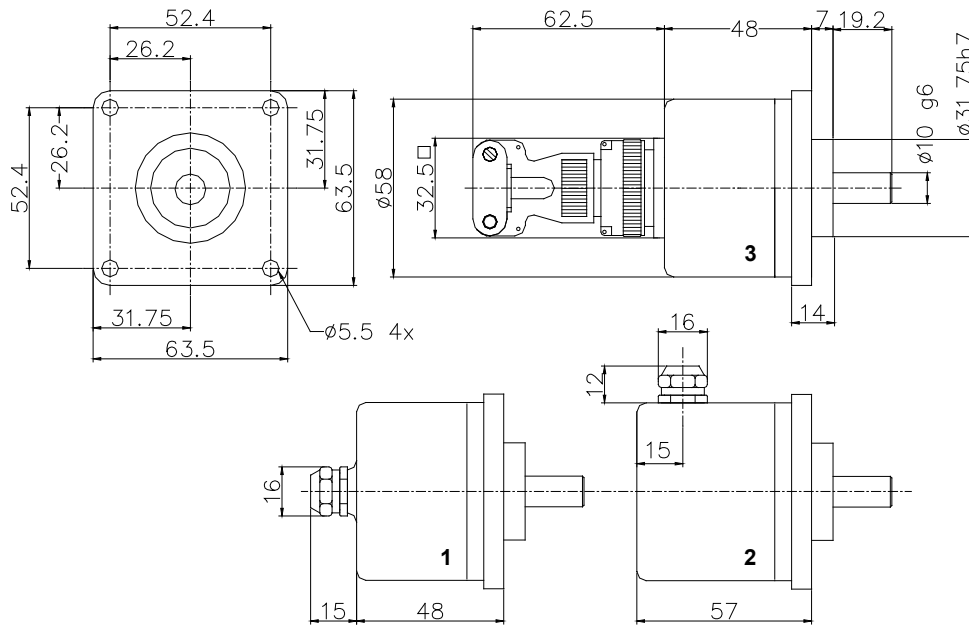
The logo for emeta encoders, featuring a stylized blue wave icon to the left of the text 'emeta' in a bold, black, sans-serif font, with 'encoders' in a smaller, blue, sans-serif font below it.

*Flexible and durable  
encoder for demanding  
applications*



Conforms to european EMC directive 89/336/EEC standards:  
EN61000-6-4 emission in industrial environments,  
EN61000-6-2 immunity in industrial environ

# INCREMENTAL ENCODER MODEL MA131

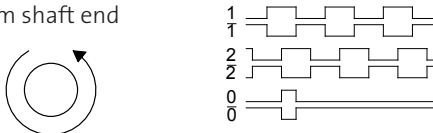


## ELECTRICAL SPECIFICATION, STANDARD

|                         |                                   |
|-------------------------|-----------------------------------|
| Supply voltage          | Vcc 5–30 V                        |
| Current consumption     | Max 40 mA without load            |
| Output circuit          | Linedriver RS422A compatible      |
| Low level output volt.  | Max <0,5 V at 20 mA load and 20°C |
| High level output volt. | Min >Vcc-1V at 20mA load and 20°C |
| Short circuit protected | Yes                               |
| Polarity protected      | Yes                               |
| Transient protected     | Yes                               |
| Max load                | 70 mA                             |

## OUTPUT SIGNALS, STANDARD

CCW rotation viewed from shaft end



## SIGNAL ACCURACY

|                       |                 |
|-----------------------|-----------------|
| Dividing error max    | ±50 el°         |
| Channel separation    | 90 ±25 el°      |
| Max frequency         | 300 KHz         |
| Operating temperature | -40° till +80°C |

## MECHANICAL SPECIFICATION

|                            |   |
|----------------------------|---|
| Housing                    | Aluminum, electrically conductive for increased interference protection |
| Sealing                    | IP65 dust and splash proof  |
| Bearings                   | Permanently greased   |
| Bearing load at 1 000 rpm: |   |
| Radial                     | 180 N Gives 50 000 hrs  |
| Axial                      | 130 N bearing life  |
| Max rpm                    | 6 000 (12 000)  |
| Vibration                  | 20g 20-2000 Hz  |
| Chock                      | 200g vid 11 ms  |
| Weight                     | ca: 300 gr. (without cable)   |

## CONNECTIONS

1. Axial cable, 1 m 8x0,22 with screen
2. Radial cable, 1 m 8x0,22 with screen
3. Axial 7-pin male connector MS3102E 16S-1P

## FUNCTION

|              | Cable 1-2 | Connector 3 |
|--------------|-----------|-------------|
| <b>1</b>     | Green     | A           |
| <b>2</b>     | Yellow    | -           |
| <b>0</b>     | Brown     | -           |
| <b>1 inv</b> | White     | C           |
| <b>2 inv</b> | Black     | -           |
| <b>0 inv</b> | Violet    | -           |
| <b>+V</b>    | Red       | D           |
| <b>0 V</b>   | Blue      | F           |
| <b>Gnd</b>   | Screen    | G           |

## ORDERING CODE

|                    |       |    |      |   |   |
|--------------------|-------|----|------|---|---|
| Model              | MA131 | 10 | 1000 | 1 | X |
| Shaft 10 mm        |       |    |      |   |   |
| Pulse rate 1-5 000 |       |    |      |   |   |
| Connection         |       |    |      |   |   |
| X= meter cable     |       |    |      |   |   |



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