

## Technical data sheet

### Rotary encoder

Part no.: 50140986

EI 1058-S08x20C-2500H-020A

#### Contents

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For illustration purposes only



## Technical data

### Basic data

|        |                            |
|--------|----------------------------|
| Series | EI 1xxx                    |
| Type   | Incremental rotary encoder |

### Measurement data

|                      |             |
|----------------------|-------------|
| Max. operating speed | 6,000 r/min |
| Resolution           | 2,500 p/r   |

### Electrical data

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| Protective circuit | Polarity reversal protection<br>Short circuit protected |
|--------------------|---------------------------------------------------------|

### Performance data

|                      |                |
|----------------------|----------------|
| Supply voltage $U_B$ | 5 ... 28 V, DC |
| Open-circuit current | 0 ... 150 mA   |

### Time behavior

|                     |            |
|---------------------|------------|
| Switching frequency | 300,000 Hz |
|---------------------|------------|

### Interface

|      |     |
|------|-----|
| Type | HTL |
|------|-----|

### Connection

|                      |                              |
|----------------------|------------------------------|
| Connection 1         |                              |
| Function             | Signal OUT<br>Voltage supply |
| Type of connection   | Cable                        |
| Cable length         | 2,000 mm                     |
| Connector            | Axial                        |
| Sheathing material   | PVC                          |
| Cable color          | Gray                         |
| Number of conductors | 8 -wire                      |
| Wire cross section   | 0.14 mm <sup>2</sup>         |

### Mechanical data

|                  |                 |
|------------------|-----------------|
| Housing material | Metal           |
| Metal housing    | Aluminum        |
| Flange type      | Clamping flange |

### Shaft

|                     |         |
|---------------------|---------|
| Design              | Shaft   |
| Dimension (Ø x L)   | 8 mm    |
| Dimension (Ø x L)   | 20 mm   |
| Start-up torque     | 0.5 N·m |
| Shaft load - axial  | 60 N    |
| Shaft load - radial | 120 N   |

### Environmental data

|                                |               |
|--------------------------------|---------------|
| Ambient temperature, operation | -40 ... 70 °C |
| Ambient temperature, storage   | -40 ... 70 °C |

### Certifications

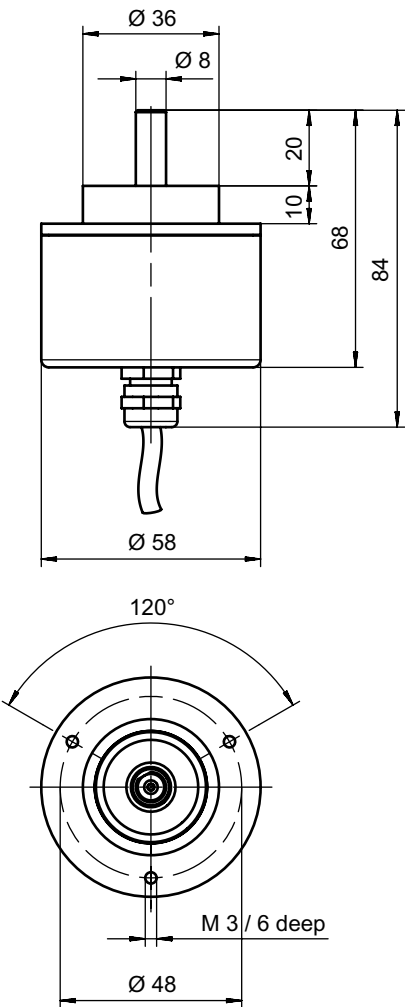
|                                                          |                                             |
|----------------------------------------------------------|---------------------------------------------|
| Degree of protection                                     | IP 65                                       |
| Standards applied                                        | IEC 61000-6-2:2016, IEC 61000-6-4:2016 + A1 |
| Test procedure for vibration in accordance with standard | 10g IEC 68-2-6 (10...2000 Hz)               |

### Classification

|              |          |
|--------------|----------|
| ECLASS 5.1.4 | 27270501 |
| ECLASS 8.0   | 27270501 |
| ECLASS 9.0   | 27270501 |
| ECLASS 10.0  | 27270501 |
| ECLASS 11.0  | 27270501 |
| ECLASS 12.0  | 27270501 |
| ECLASS 13.0  | 27270501 |
| ECLASS 14.0  | 27270501 |
| ECLASS 15.0  | 27270501 |
| ETIM 5.0     | EC001486 |
| ETIM 6.0     | EC001486 |
| ETIM 7.0     | EC001486 |
| ETIM 8.0     | EC001486 |
| ETIM 9.0     | EC001486 |
| ETIM 10.0    | EC001486 |

Dimensioned drawings

All dimensions in millimeters



Electrical connection

Connection 1

|                      |                |
|----------------------|----------------|
| Function             | Signal OUT     |
|                      | Voltage supply |
| Type of connection   | Cable          |
| Cable length         | 2,000 mm       |
| Connector            | Axial          |
| Sheathing material   | PVC            |
| Cable color          | Gray           |
| Number of conductors | 8 -wire        |
| Wire cross section   | 0.14 mm²       |

Electrical connection

| Conductor color | Conductor assignment |
|-----------------|----------------------|
| Brown           | V+                   |
| White           | GND                  |
| Green           | A                    |
| Yellow          | A inverted           |
| Pink            | B                    |
| Black           | B inverted           |
| Blue            | Z                    |
| Red             | Z inverted           |