

REI-43H42S-2B512-H1181  
Incremental Encoder  
Industrial Line



Technical data

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| Type                                   | REI-43H42S-2B512-H1181                  |
| ID                                     | 100011481                               |
| Measuring principle                    | Optical                                 |
| General data                           |                                         |
| Max. Rotational Speed                  | 6000 rpm                                |
| Moment of inertia of the rotor         | 220 × 10 <sup>-6</sup> kgm <sup>2</sup> |
| Starting torque                        | < 0.2 Nm                                |
| Output type                            | Incremental                             |
| Resolution incremental                 | 512 ppr                                 |
| Electrical data                        |                                         |
| Operating voltage U <sub>B</sub>       | 10...30 VDC                             |
| No-load current                        | ≤ 100 mA                                |
| Output current                         | ≤ 30 mA                                 |
| Short-circuit protection               | yes                                     |
| Wire break/reverse polarity protection | yes                                     |
| Pulse frequency max.                   | 300 kHz                                 |
| Signal level high                      | min. U <sub>B</sub> - 3 V               |
| Signal level low                       | max. 2.5 V                              |
| Output function                        | 8-wire, Push-Pull/HTL, invertable       |
| Mechanical data                        |                                         |
| Flange type                            | Flange without mounting element         |
| Flange diameter                        | Ø 100 mm                                |
| Shaft Type                             | Blind hole shaft                        |
| Shaft diameter D (mm)                  | 42                                      |
| Shaft material                         | Stainless steel                         |
| Housing material                       | Die-cast zinc                           |

Features

- Flange without mounting element, Ø 100 mm
- Hollow shaft, Ø 42 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP65 on housing and shaft side
- -40 ... +80 °C
- Max. 6000 rpm (at 60 °C: 2500 rpm)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 512 pulses per revolution

|    |                  |
|----|------------------|
| 1  | GND              |
| 2  | U <sub>B</sub> + |
| 3  | A                |
| 4  | A inv.           |
| 5  | B                |
| 6  | B inv.           |
| 7  | 0                |
| 8  | 0 inv.           |
| PH | shield           |

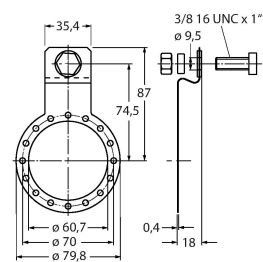


Technical data

|                                     |                               |
|-------------------------------------|-------------------------------|
| Electrical connection               | Connector, M12 × 1            |
|                                     | 8-pin                         |
| Axial shaft load                    | 100 N                         |
| Radial shaft load                   | 200 N                         |
| Environmental conditions            |                               |
| Ambient temperature                 | -40...+80 °C                  |
| Vibration resistance (EN 60068-2-6) | 10 g (100 m/s²), 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 200 g (2000 m/s²), 6 ms       |
| Protection class                    | IP65                          |
| Protection class shaft              | IP65                          |

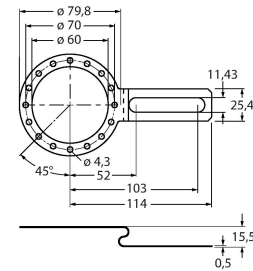
Accessories

RME-5 1544616



Stainless steel mounting panel for hollow shaft encoders, reference diameter 149 mm, for applications with axial play

RME-6 1544617



Stainless steel mounting panel for hollow shaft encoders, reference diameter 104...206 mm, for applications with fixing points on adjustable reference diameter

RME-10 1544621



Stainless steel mounting element for hollow shaft encoders, pitch diameter 110 mm, for applications with high axial play

RME-11 1544622



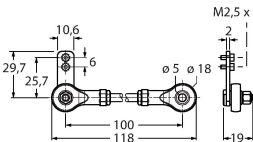
Stainless steel mounting element for hollow shaft encoders, pitch diameter 76 mm, for applications with limited mounting space

RME-15 1544626



Metal arm bracket, for hollow shaft encoders, length 70 mm; for applications with little axial and radial play; flexibly adjustable

RME-16 1544627



Metal arm bracket, for hollow shaft encoders, length 100 mm; for applications with little axial and radial play; flexibly adjustable

RME-171544628

Metal arm bracket, for hollow shaft encoders, length 150 mm; for applications with little axial and radial play; flexibly adjustable



RME-181544629

Stainless steel stator coupling for hollow shaft encoders, reference diameter 119 mm, for highly dynamic applications with axial and radial play



Accessories

| Dimension drawing | Type        | ID      |                                                                                                                         |
|-------------------|-------------|---------|-------------------------------------------------------------------------------------------------------------------------|
|                   | RKC8T-2/TXL | 6625142 | Connection cable, M12 female connector, straight, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |
|                   | WKC8T-2/TXL | 6625145 | Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval   |