



- Robust encoder with solid shaft
- Short-circuited protected outputs
- IP67 at housing, IP66 at shaft inlet



## Technical data

|                                      |                            |
|--------------------------------------|----------------------------|
| Operating temperature                | -40 °C .. +70 °C           |
| Ingress protection class [IEC 60529] | IP67 (IP66 at shaft inlet) |
| Vibration [IEC 60068-2-6]            | ≤ 300 m/s <sup>2</sup>     |
| Shock [IEC 60068-2-27]               | ≤ 2000 m/s <sup>2</sup>    |
| Cover material                       | Aluminium                  |
| Weight                               | 300 g                      |
| Shaft load (axial/radial)            | 50 N / 60 N                |
| Rotational speed max                 | 6000 rpm                   |
| Shaft material                       | Stainless steel            |
| Short circuit protected              | Yes                        |
| Polarity protected                   | No                         |
| Current consumption                  | 45 mA (Max. 75 mA)         |
| Output load                          | ± 20 mA                    |
| Output frequency max                 | 300 kHz                    |
| Cable length max                     | 50 m at 50 kHz             |
| Channel separation                   | 90° el ± 25° el            |
| Dividing error                       | ±50° el                    |

## Encoder configuration

|                      |                          |
|----------------------|--------------------------|
| Type                 | RSI                      |
| Model                | 503 Standard             |
| Shaft type           | Ø10 with partial flat    |
| Flange type          | Synchro flange (63-type) |
| Resolution           | 2048                     |
| Power supply         | 5 Vdc                    |
| Output signal        | TTL                      |
| Connection type      | Cable                    |
| Connecting direction | Radial                   |
| Cable length         | 5.00 m                   |

## Dimensions



## Output signals



## Pin configuration

| Function      | Colour |
|---------------|--------|
| S00           | Yellow |
| S00 inverted  | Black  |
| S90           | Green  |
| S90 inverted  | White  |
| Sref          | Brown  |
| Sref inverted | Violet |
| +E Volt       | Red    |
| 0V            | Blue   |
| Status        | Grey   |
| Chassis       | Shield |

## Ordering information

Part number

514510-20