

# RI-04T6S-1H200-C

## Incremental Shaft Encoder

### Industrial Line

#### Technical data

|                                |                                    |
|--------------------------------|------------------------------------|
| Type                           | RI-04T6S-1H200-C                   |
| ID                             | 100023569                          |
| Measuring principle            | Optical                            |
| <b>General data</b>            |                                    |
| Max. rotational speed          | 12,000 rpm                         |
| Moment of inertia of the rotor | $0.2 \times 10^{-6} \text{ kgm}^2$ |
| Starting torque                | < 0.05 Nm                          |
| Output type                    | Incremental                        |
| Resolution, incremental        | 200 ppr                            |
| <b>Electrical data</b>         |                                    |
| Operating voltage $U_B$        | 8...30 VDC                         |
| No-load current                | $\leq 40 \text{ mA}$               |
| Output current                 | $\leq 50 \text{ mA}$               |
| Short-circuit protection       | yes                                |
| Pulse frequency max.           | 200 kHz                            |
| Signal level high              | min. $U_B - 3 \text{ V}$           |
| Signal level low               | max. 0.5 V                         |
| Output function                | Push-Pull 7272, non-invertable     |
| <b>Mechanical data</b>         |                                    |
| Flange type                    | Synchro flange                     |
| Flange diameter                | $\varnothing 36.5 \text{ mm}$      |
| Shaft Type                     | Solid shaft                        |
| Shaft diameter D (mm)          | 6                                  |
| Shaft Length L [mm]            | 12.5                               |
|                                | Shaft with flat                    |
| Shaft material                 | Stainless steel                    |
| Housing material               | Aluminum chromated                 |
| Electrical connection          | Cable, M12 $\times$ 1              |
|                                | radial                             |
| cable length                   | 2 m                                |
| Axial shaft load               | 20 N                               |
| Radial shaft load              | 40 N                               |

#### Features

- Synchro flange,  $\varnothing 36.5 \text{ mm}$
- Solid shaft with flat,  $\varnothing 6 \text{ mm} \times 12.5 \text{ mm}$
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP50 on shaft side
- -20...+85 °C
- Max. 12000 rpm
- 8...30 VDC
- M12  $\times$  1 male, 8-pin
- Push-pull, with inversion
- Pulse frequency max. 200 kHz
- 200 pulses per revolution

#### Wiring diagram

|  |    |         |
|--|----|---------|
|  | WH | GND     |
|  | BN | $U_B$ + |
|  | GN | A       |
|  | YE | A inv.  |
|  | GY | B       |
|  | PK | B inv.  |
|  | BU | 0       |
|  | RD | 0 inv.  |

## Technical data

| Environmental conditions            |                                     |
|-------------------------------------|-------------------------------------|
| Ambient temperature                 | -20...+85 °C                        |
| Vibration resistance (EN 60068-2-6) | 100 m/s <sup>2</sup> , 55...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 1000 m/s <sup>2</sup> , 6 ms        |
| Protection class                    | IP65                                |
| Protection class shaft              | IP50                                |