



### Model Number

TRD-G

### Features

- Up to 100 ppr
- NAMUR interface in accordance with DIN EN 60947-5-6

### Description

An optical sampling system is used in incremental rotary encoders of the series TRD-G.

One special feature is the mechanical versatility of the flange. The rotary encoder has a centering collar with a diameter of 42 mm and one with a diameter of 56 mm. In addition to the four M4 holes, the incremental rotary encoder has a servo infeed on the circumference. This allows you to make a slight adjustment to the reference point of the incremental rotary encoder by turning the housing. The clamping element that grips into the servo infeed ensures that the incremental rotary encoder stays firmly in place without slipping out of adjustment.

## Technical data

### General specifications

Pulse count max. 100

### Electrical specifications

Operating voltage  $U_B$  8 V DC

### Output

Output type NAMUR

Load current max. per channel 3 mA, short-circuit protected

Output frequency max. 1 kHz

### Connection

Cable  $\varnothing 6$  mm, 4 x 0.38 mm<sup>2</sup>, 2 m

### Standard conformity

Protection degree DIN EN 60529, IP65

Shock resistance DIN EN 60068-2-27, 100 g, 3 ms

Vibration resistance DIN EN 60068-2-6, 10 g, 10 ... 2000 Hz

Standards DIN EN 60947-5-6 (NAMUR)

### Ambient conditions

Operating temperature

Plastic disk -10 ... 50 °C (14 ... 122 °F)

Storage temperature

Plastic disk -25 ... 85 °C (-13 ... 185 °F)

### Mechanical specifications

Material

Housing aluminum

Flange 3.1645 aluminum

Shaft Stainless steel 1.4305 / AISI 303

Mass

approx. 630 g

Rotational speed

max. 3000 min<sup>-1</sup>

Moment of inertia

100 gcm<sup>2</sup>

Starting torque

< 5 Ncm

Shaft load

Axial 50 N

Radial 100 N

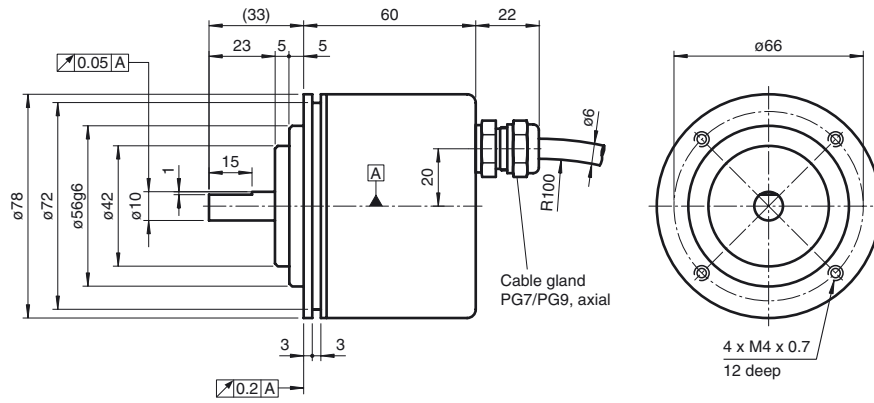
### Data for application in connection with

#### Ex-areas

EC-Type Examination Certificate ATEX approval is pending

Group, category, type of protection EEx ib IIC T6

**Dimensions**



**Accessories**

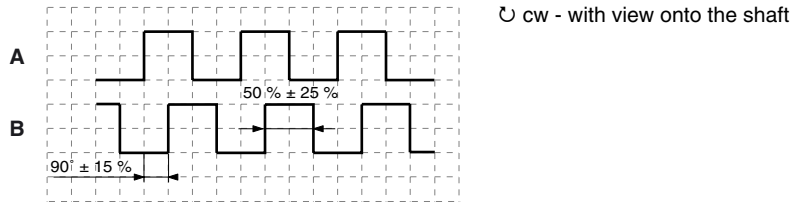
**9312-3**  
Synchro clamping element

**Electrical connection**

| Signal              | Cable Ø6 mm, 4-core |
|---------------------|---------------------|
| A <sub>NAMUR+</sub> | White               |
| A <sub>NAMUR-</sub> | Yellow              |
| B <sub>NAMUR+</sub> | Red                 |
| B <sub>NAMUR-</sub> | Black               |

The circuits A and B are not connected and not grounded.

**Signal outputs**



**Accessories**

| Accessories                                      | Name/defining feature       | Order code |
|--------------------------------------------------|-----------------------------|------------|
| Couplings                                        | D1: Ø10 mm, D2: Ø10 mm      | 9401       |
|                                                  | D1: Ø10 mm, D2: Ø10 mm      | 9404       |
|                                                  | D1: Ø10 mm, D2: Ø10 mm      | 9409       |
|                                                  | D1: Ø10 mm, D2: Ø10 mm      | KW         |
| Measurement wheels* with circumference of 500 mm | Plastic                     | 9101, 10   |
|                                                  | Pimpled rubber              | 9102, 10   |
|                                                  | Knurled aluminium           | 9103, 10   |
|                                                  | Knurled plastic             | 9112, 10   |
| Measurement wheels* with circumference of 200 mm | Plastic                     | 9108, 10   |
|                                                  | Pimpled rubber              | 9109, 10   |
|                                                  | Knurled aluminium           | 9110, 10   |
|                                                  | Knurled plastic             | 9113, 10   |
| Mounting aid                                     | Eccentric clamping elements | 9213-3     |

\* Avoid any electrostatic discharges of the encoder when using measurement wheels.

For additional information on the accessories, please see the "Accessories" section.

**Order code**

