

Economy Types



- Replacement for type RIS and RI 31
- The economical encoder for small appliances
- High efficiency by means of ball bearing
- Small torque
- Application e.g.
 - laboratory equipment
 - training equipment
 - crimping machines
 - tampon printing machines
 - miniature grinding machines

NUMBER OF PULSES

5 / 10 / 20 / 25 / 30 / 50 / 60 / 100 / 120 / 128 / 200 / 250 / 256 / 288 / 300 / 360 / 400 / 500 / 512 / 600 / 720 / 900 / 1,000 / 1,024 / 1,250 / 1,500
 Other numbers of pulses available on request

TECHNICAL DATA mechanical

| | |
|--------------------------------|--|
| Shaft diameter | 5 mm / 6 mm |
| Absolute max. shaft load | radial 30 N (6.5 lbs), axial 15 N (3.3 lbs) |
| Absolute maximum speed | max. 6,000 RPM |
| Torque | ≤ 0.05 Ncm |
| Protection class (EN 60529) | Housing IP 50, bearings IP 40 |
| Operating temperature | -10 ... +60 °C |
| Storage temperature | -25 ... +85 °C |
| Vibration proof (IEC 68-2-6) | 100 m/s ² (10 ... 2,000 Hz) |
| Shock resistance (IEC 68-2-27) | 1,000 m/s ² (6 ms) |
| Type of connection | 1.5 m cable axial/radial ¹⁾ |
| Material | Housing: plastic; Flange: aluminium |
| Flange | Round flange |
| Weight | ca. 50 g |
| Bearing life | 2.4 x 10 ⁹ revolutions (typ.) at 35% of full rated shaft load 2.4 x 10 ⁸ revolutions (typ.) at 75% of full rated shaft load 2.4 x 10 ⁷ revolutions (typ.) at 100% of full rated shaft load For example 10,000 h at 4,000 RPM with a 2 lb radial load |

¹⁾ Other cable length on request

TECHNICAL DATA electrical

| | |
|--|---|
| General design | as per DIN VDE 0160, protection class III, contamination level 2, overvoltage class II |
| Supply voltage (SELV) | with push-pull (D): 5 VDC ± 10% with push-pull (K): 5 VDC ¹⁾ ± 10% oder 10 ... 30 VDC ¹⁾ |
| Power consumption | 40 mA (5 VDC), 60 mA (10 VDC), 30 mA (24 VDC) |
| Standard-Output versions ²⁾ | push-pull (K, D): A, B, N, \overline{A} alarm |

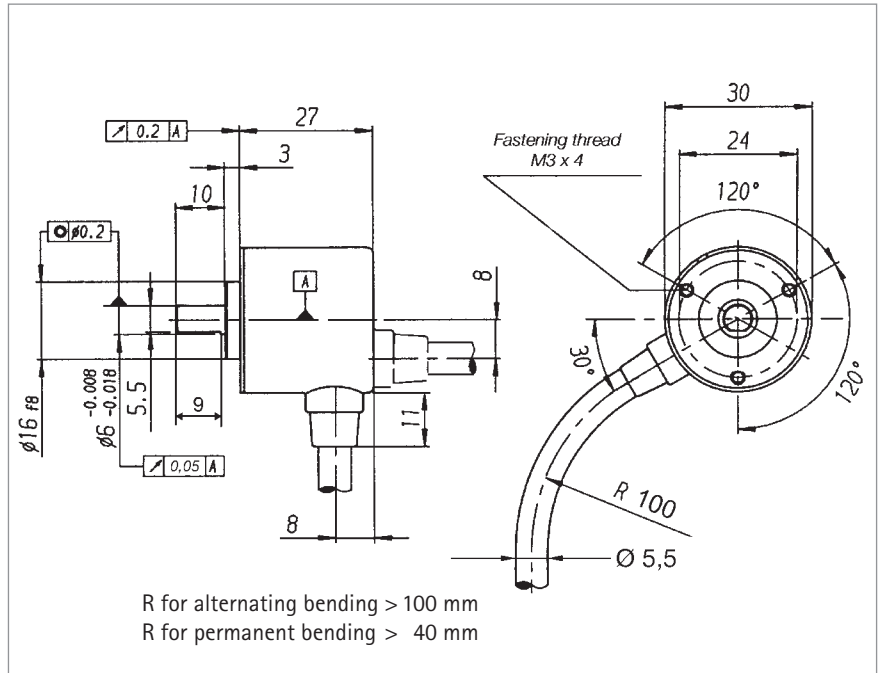
¹⁾ Pole protection

²⁾ Output description and technical data see section „Output“

Incremental Shaft Encoders Type RI 32

Economy Types

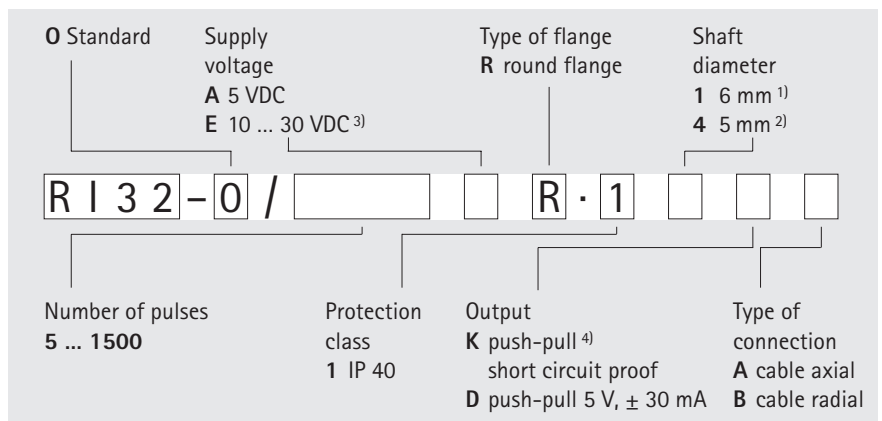
DIMENSIONED DRAWING



CONNECTION DIAGRAM

| Description (push-pull) | Lead Ø mm ² | Colour |
|-------------------------|------------------------|--------------|
| 5 VDC/10-30 VDC | 0,5 | red |
| Channel A | 0,14 | white |
| Channel B | 0,14 | green |
| Channel N | 0,14 | yellow |
| GND | 0,5 | black |
| Alarm | 0,14 | yellow/black |

ORDERING DATA



¹⁾ flattened, see dimensioned drawing

²⁾ not flattened

³⁾ only with output K

⁴⁾ ± 10 mA at 5 V, ± 30 mA at 10 ... 30 V