

## 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 / 1000 / 1024 / 1250 / 1500  
 Other number of pulses on request

TECHNICAL DATA  
mechanical

Shaft diameter	5 mm/ 6 mm
Absolute max. shaft load	radial 10 N, axial 5 N
Absolute max. speed	6 000 min <sup>-1</sup>
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 resistance (IEC 68-2-6)	100 m/s <sup>2</sup> (10 ... 2000 Hz)
Shock resistance (IEC 68-2-27)	1000 m/s <sup>2</sup> (6 ms)
Connection	1.5 m cable axial/radial <sup>1</sup>
Material	Housing: plastic; Flange: Aluminium
Flange	Pilot flange
Weight approx.	50 g

<sup>1</sup> Other cable length on request

TECHNICAL DATA  
electrical

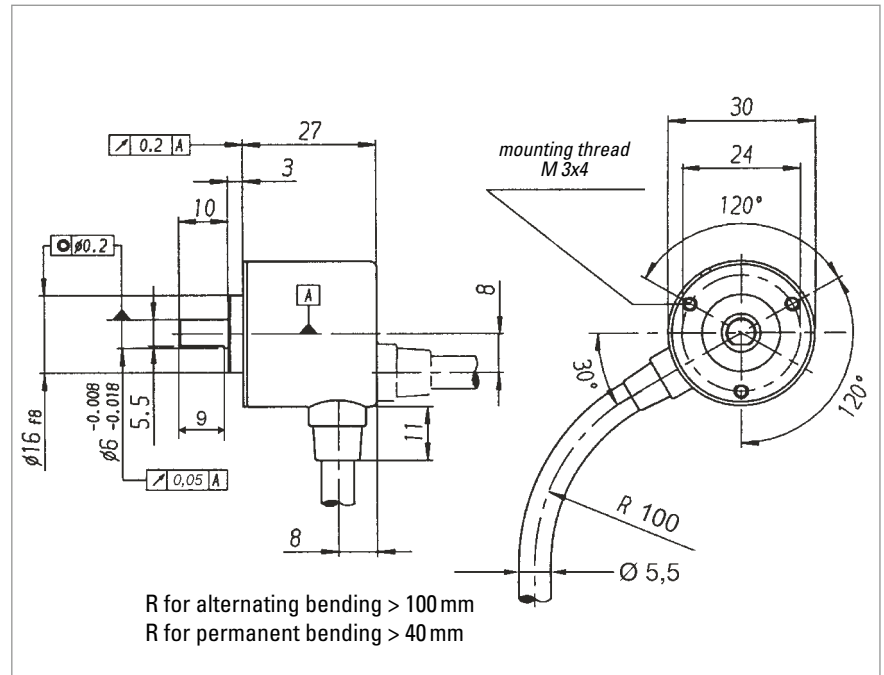
General design	as per DIN VDE 0160, protection class III, contamination level 2, over voltage class II	
Supply voltage (SELV)	with push-pull (D):	DC 5V ±10 %
	with push-pull (K):	DC 5V <sup>1</sup> ±10 % oder DC 10 - 30V <sup>2</sup>
Max. current w/o load	40 mA (DC 5V), 60 mA (DC 10V), 30 mA (DC 24V)	
Standard output versions <sup>3</sup>	push-pull (K, D):	A, B, N, Alarm

<sup>2</sup> Pole protection

<sup>3</sup> Output description and technical data see chapter "Technical basics"

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### DIMENSIONAL DRAWINGS



### PIN ASSIGNMENT

Description (push-pull)	Lead Ø mm <sup>2</sup>	Colour
DC 5 V/ 10 - 30 V	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 INFORMATION

Type	Model	Number of pulses	Supply voltage	Flange, Protection, Shaft	Output	Connection
<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>RI32-</b>	<b>0</b> Standard	<b>5 ... 1 500</b>	<b>A</b> DC 5 V <b>E</b> DC 10 - 30 V <sup>1</sup>	<b>R.11</b> Pilot, IP40, 6 mm * <b>R.14</b> Pilot, IP40, 5 mm **	<b>K</b> push-pull <sup>2</sup> short circuit proof <b>D</b> push-pull 5 V, ±30 mA	<b>A</b> Cable axial <b>B</b> Cable radial
<p>* flattened, see dimensional drawing                  ** not flattened  <sup>1</sup> only with output K  <sup>2</sup> ±10 mA at 5 V, ±30 mA at 10 - 30 V</p>						