

Economy Types



- Replacement for type RIM
- Economical miniature encoder
- Up to 14,400 steps with 3,600 pulses
- High mechanical efficiency
- Application e.g.
 - wood working machines
 - FHP motors
 - graphic machines
 - table robots

NUMBER OF PULSES

5 / 10 / 20 / 25 / 28 / 32 / 50 / 60 / 72 / 100 / 128 / 144 / 200 / 250 / 256 / 288 / 300 / 360 / 400 / 500 / 512 / 600 / 720 / 900 / 1,000 / 1,024 / 1,250 / 1,500 / 2,000 / 2,048 / 2,500 / 3,000 / 3,600

Other numbers of pulses available on request

TECHNICAL DATA
mechanical

Shaft diameter	6 mm
Absolute max. shaft load	radial 30 N (6.5 lbs), axial 15 N (3.3 lbs)
Absolute maximum speed	max. 10,000 RPM
Torque	≤ 0.2 Ncm
Protection class (EN 60529)	Housing IP 50, bearings IP 40
Operating temperature	-10 ... +70 °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)	1000 m/s ² (6 ms)
Type of connection	1.5 m cable, radial ¹⁾
Housing	Aluminium
Flange	Round flange
Weight	ca. 60 g
Bearing life	1 x 10 ¹⁰ revolutions (typ.) at 35% of full rated shaft load 1 x 10 ⁹ revolutions (typ.) at 75% of full rated shaft load 1 x 10 ⁸ revolutions (typ.) at 100% of full rated shaft load For example 30,000 h at 6,000 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): 5VDC ± 10% with push-pull (K): 5VDC ¹⁾ ± 10% oder 10 ... 30VDC ¹⁾
Power consumption	40 mA (5VDC), 60 mA (10VDC), 30 mA (24VDC)
Standard-Output versions ²⁾	push-pull (K, D): A, B, N, Alarm

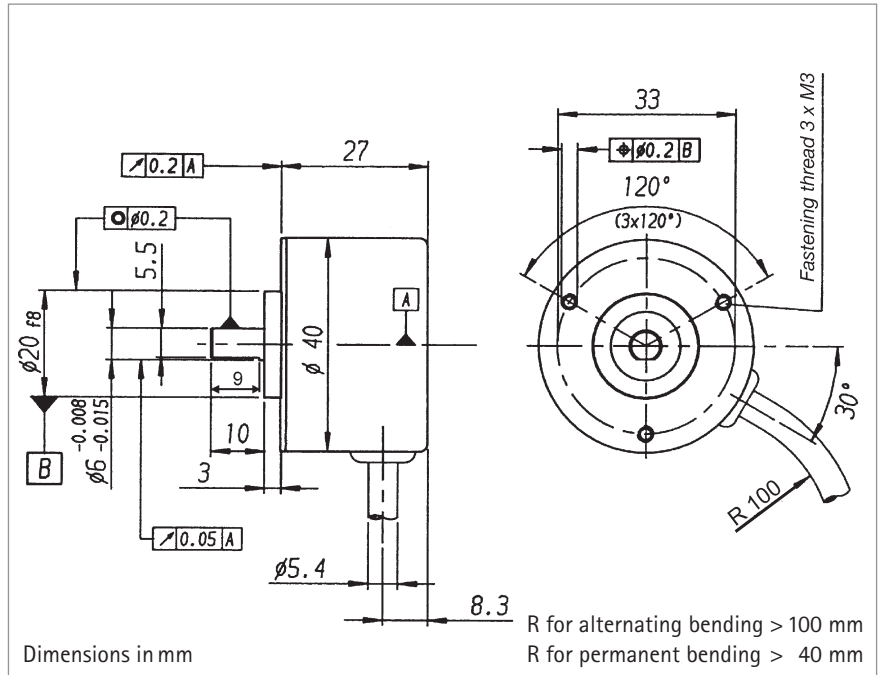
¹⁾ Pole protection

²⁾ Output description and technical data see section "Output"

Incremental Shaft Encoders Type RI 41

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DIMENSIONED DRAWING

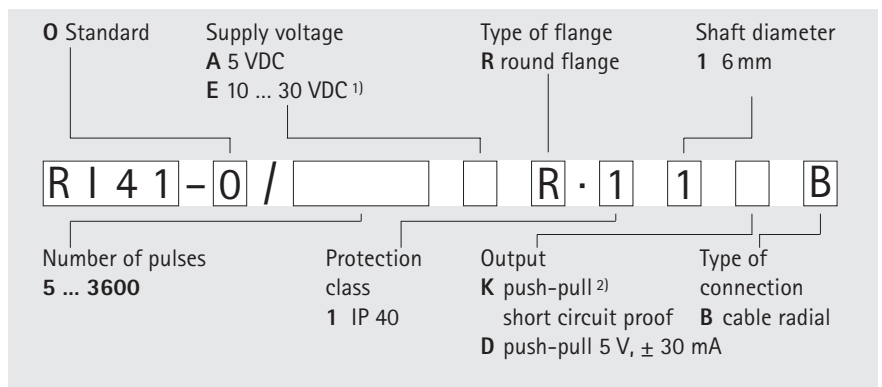


CONNECTION DIAGRAM

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
screen ¹⁾		screen ¹⁾

¹⁾ Not connected to encoder housing

ORDERING DATA



¹⁾ Only with output K

²⁾ ± 10 mA at 5 V, ± 30 mA at 10 ... 30 V