

Economy Types



- Economy encoder
- High protection IP 65
- Push-pull or NPN-O.C.
- Applications, e.g.
 - textile machinery

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 / 1000 / 1024
 Other numbers of pulses available on request

TECHNICAL DATA mechanical

Shaft diameter	6 mm
Balance tolerances	radial 10 N, axial 5 N
Absolute max. speed	10,000 min ⁻¹
Torque	≤ 1 Ncm
Protection class (EN 60529)	Housing IP 65, bearings IP 64
Operating temperature	0 ... +60 °C
Storage temperature	-25 ... +85 °C
Vibration performance (IEC 68-2-6)	100 m/s ² (10 ... 2000 Hz)
Shock resistance (IEC 68-2-27)	1000 m/s ² (6 ms)
Connection	1.5 m cable axial ¹⁾
Material	plastic, flange: aluminium
Flange	round flange
Weight	approx. 75 g

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 % or 10...30 VDC ¹⁾ with push-pull complementary (I): 10...30 VDC ¹⁾ with NPN-O.C. (S): 10...24 VDC ¹⁾
Power consumption	40 mA (5 VDC), 30 mA (24 VDC) with push-pull (K,I) 40 mA (24 VDC), bei NPN-O.C. (S)
Standard-Output versions ²⁾	push-pull ²⁾ / push-pull complementary ²⁾ / NPN-O.C. ³⁾

¹⁾ Pole protection

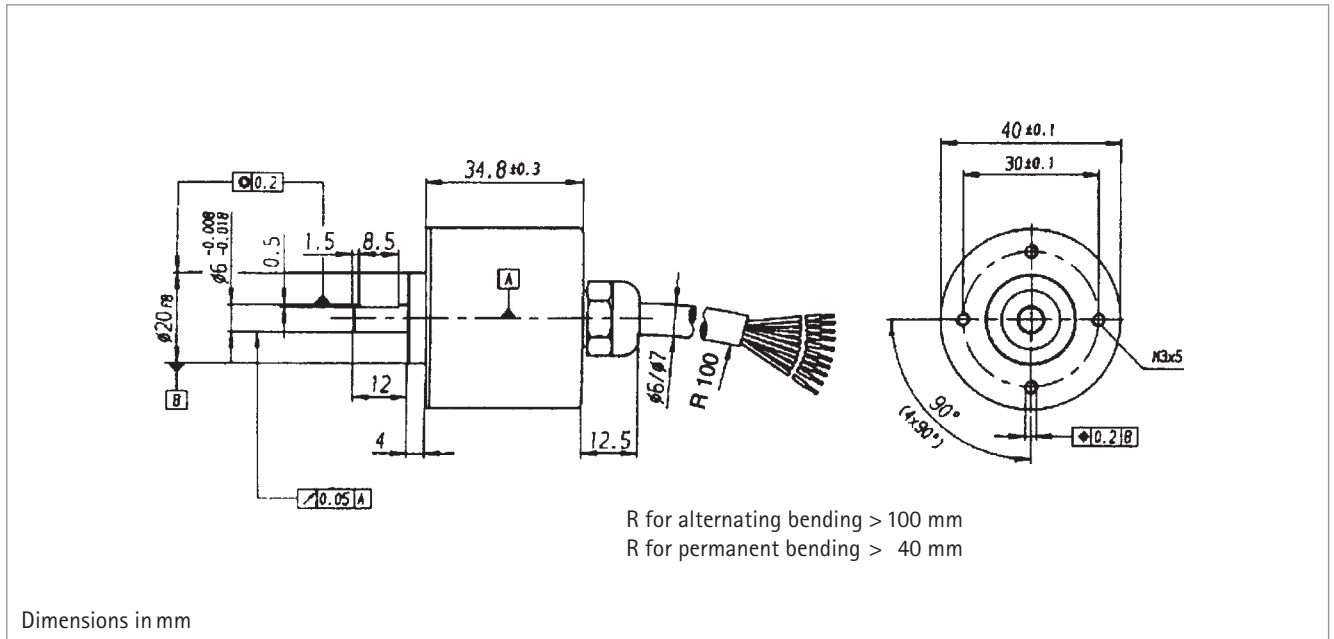
²⁾ Output description and technical data see section "output"

³⁾ NPN-O.C. with internal pull-up resistor = 10 KΩ, max. pulse frequency = 50 KHz, max. output lead = ± 30 mA, tolerance ≤ ± 30° electrical, delay time ≤ 4μs

Incremental Shaft Encoders Type RI 42

Economy Types

DIMENSIONED DRAWING



CONNECTION DIAGRAM

Colour (PVC)	Output Circuit push-pull (K, D), Open Collector (S)	push-pull complementary (I)
white	Channel A	Channel A
white/brown		Channel \bar{A}
green	Channel B	Channel B
green/brown		Channel \bar{B}
yellow	Channel N	Channel N
yellow/brown		Channel \bar{N}
yellow/black	Alarm	Alarm
yellow/red		Sense V_{CC}
red	5/10...30/10...24 VDC	10...30 V DC
black	GND	GND

ORDERING DATA

O Standard	Supply voltage A 5 VDC ¹⁾ E 10 ... 30 VDC ²⁾ C 10 ... 24 VDC ³⁾	Type of flange R Round flange	Shaft diameter 1 6 mm
-------------------	--	---	---------------------------------

RI 42 - 0 /		R · 4	1	A
--------------------	--	--------------	----------	----------

Number of pulses 5 ... 1024	Protection class 4 IP 64	Output K Push-pull short circuit proof ⁴⁾ D Push-pull 5 V, ± 30 mA S Open Collector NPN I Push-pull complementary	Type of connection A Cable axial
---------------------------------------	------------------------------------	--	--

¹⁾ only with output K, D
²⁾ only with output K, I
³⁾ only with output S
⁴⁾ ± 10 mA at 5 V, ± 30 mA at 10...30 V