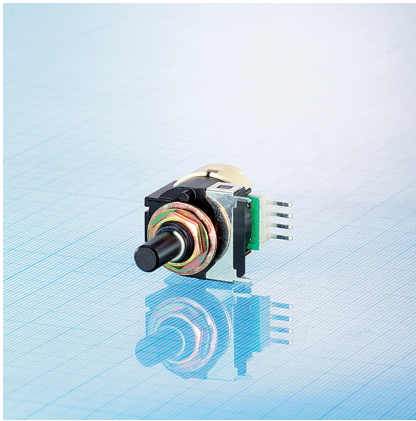


Rotary Encoder EC202



Optical rotary encoder for quick and simple adjustment of digital values.

- Mounting height 22,3 mm only.
- For direct soldering to printed circuits.
- 20, 50, 100 or 200 pulses per revolution.
- Version with 20 impulses per rotation also available with indexing and additional push button (impulse contact).
- Low wear through electronic impulse generation.
- Recognition of rotation sense via two output signals.
- Long life version on request.

1.0 Construction

1.1 Function	Optical rotary encoder
1.2 Distribution over 360°	20, 50, 100 or 200
1.3 Detent angle	18°; 7,2°; 3,6° or 1,8°
1.3 Contacts	Soldering pins
1.4 Mounting on the front panel	Central mounting

2.0 Electrical Data

2.1 Nominal voltage	5 V-
2.2 Input current max.	30 mA
2.3 Frequency	100 Hz
2.4 Life expectancy	without rest with rest (only T=20)
	2 x 10 ⁶ revolutions 1 x 10 ⁶ revolutions
2.5 Output signal	high
rectangular	low
	≤ +4 V ≤ +0,5 V
2.6 Impulse per output	20, 50, 100 or 200

3.0 Mechanical Data

3.1 Impulse generation	Optical
3.2 Operating torque	≥ 0,4 Ncm
3.3 Fly-wheel effect	0,023 Ncm ²
3.4 Dust protection	Sealed wafers

4.0 Impulse Contact Data

4.1 Switching power max.	24 V- / 30 mA
4.2 Contact resistance max.	200 mΩ
4.3 Operating force	1,5 to 4,5 N
4.4 Operating way	0,8 mm

5.0 Other Data

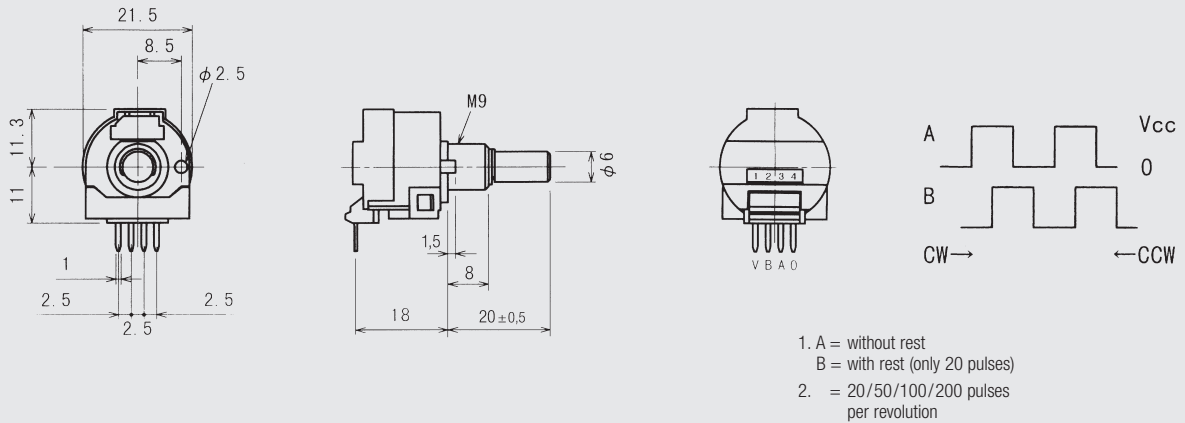
5.1 Ambient temperature	0 to +60°C
5.2 Storage temperature	-20 to +80°C
5.3 Soldering time and temperature	5 s to 260°C

Ordering Codes

Designation of type	EC 202
1. Detent graduations	20
2. Shaft length from seat	20 mm = standard
3. Shaft design	A = standard
4. Impulse contact	I = additional impulse contact (version with 20 pulses/revolution only)

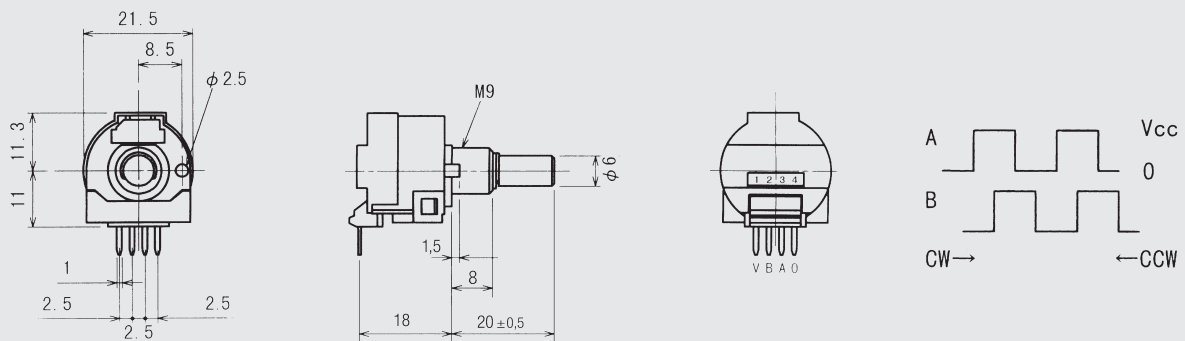
The bold-typed data in the yellow order blocks remain unchanged.
 Normal-typed data match the drawings and can be modified according to your wishes.
 Blanks need to be completed according to the ordering details on the previous page.

Dimensional Drawings · Dimensions in mm



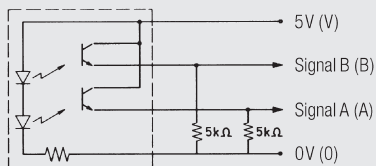
EC 202 - 1 - 2 - 3 - 4 - 4

EC 202 · Optical rotary encoder

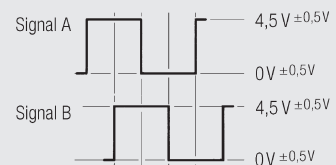


EC 202 - 1 - 2 - 3 - 15

EC 202 · Optical rotary encoder with 20 pulses and additional push button function



EC 202 · Circuit and contacts



EC 202 · Output signal