

Rotary Encoder BG10



Rotary pulse generator for quick and simple adjustment of digital values.

- Low-cost and space saving solution for quick adjustments.
- Adjustment forward and backward.
- Digit-exact precision adjustment by precise mechanical detent.
- Recognition of rotation sense by two separate outputs.
- High reliability because of silver contacts.
- Suitable for miniaturized equipment due to its small dimensions.

1.0 Construction

1.1 Function	Rotary encoder with detent mechanism
1.2 Detent angle	18°
1.3 Detent graduation	20 detents / revolution
1.4 Indication of revolution direction*	Through 2 selected outputs
1.5 Contacts	Soldering pins
1.6 Mounting	Central mounting

* See Impulse diagram.

2.0 Electrical Data

2.1 Switching power max.	25 mW
2.2 Switching voltage max.	10 V-
2.3 Switching current max.	2,5 mA
2.4 Test voltage at 50 Hz/1 min.	250 V
2.5 Life expectancy without electrical load	≥ 2 x 10 ⁶ detents
	≥ 100 000 cycles
2.6 Contact resistance	initial value after life expectancy
	Typical 40 mΩ; max.1 Ω Typical 80 mΩ; max.1 Ω
2.7 Insulation resistance	>10 ⁷ Ω
2.8 Pulse per output	20 pulses / revolution

3.0 Mechanical Data

3.1 Detent mechanism	Mechanical
3.2 Operating torque	0,3 to 2,0 Ncm
3.3 Fastening torque of mounting nut	≤ 70 Ncm
3.4 Vibratory strength	10 g, 10–500 Hz
3.5 Shock strength	50 g
3.6 Dust protection	Sealed

4.0 Other Data

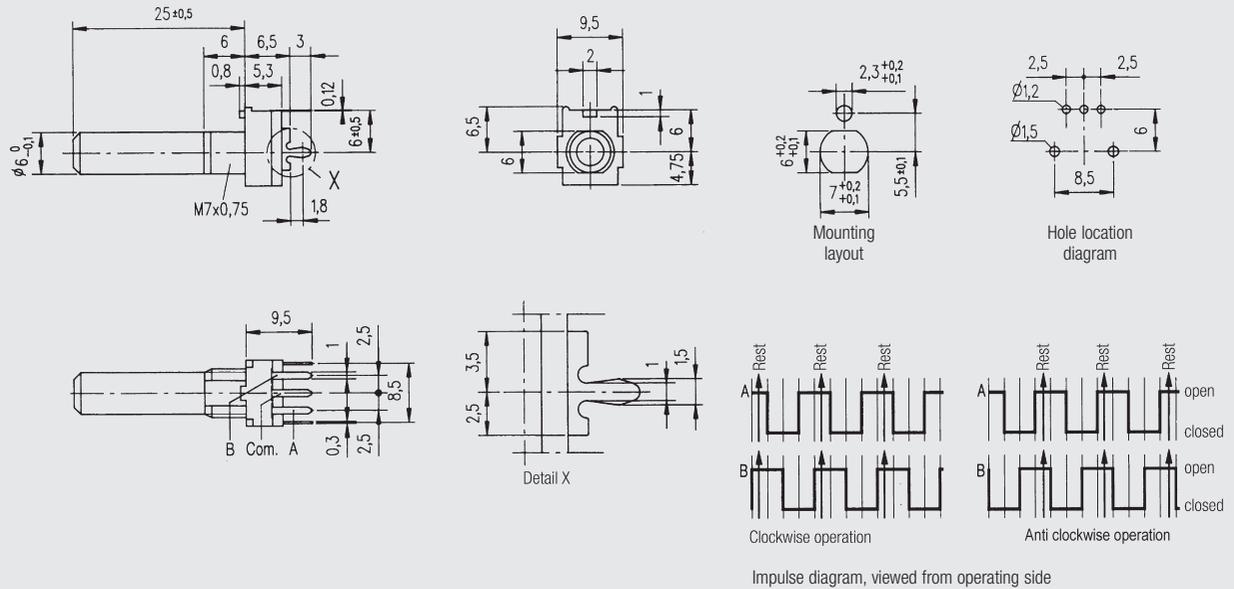
4.1 Contact material	Ag
4.2 Insulating material	Polyacetal, PM
4.3 Ambient temperature	-10 to 55°C
4.4 Soldering time and temperature max.	5 s to 260°C

Ordering Codes

Designation of type	BG 10
1. Detent graduations	20 per revolution
2. Shaft length	in mm
3. Shaft design	A = standard
4. Contact directions	A = axial, R = radial

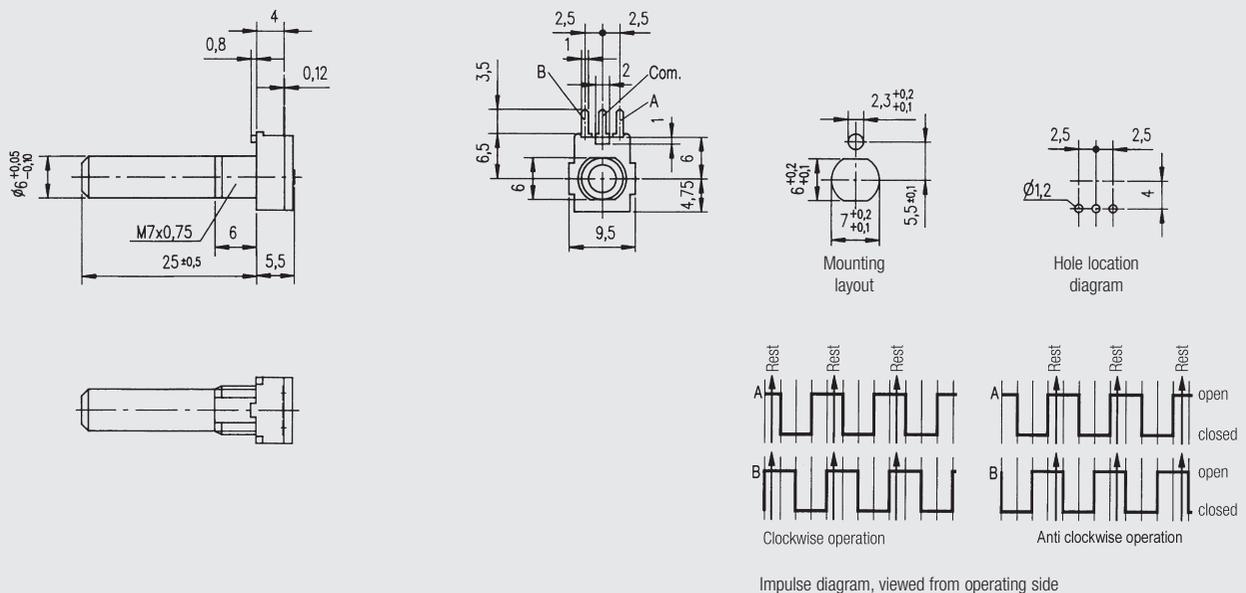
The bold-typed data in the yellow order blocks remain unchanged.
 Normal-typed data match the drawings and can be modified according to your wishes.
 Blanks need to be completed according to the ordering details on the previous page.

Dimensional Drawings · Dimensions in mm



BG10 - **20** - 25² - A³ - A⁴

BG10 · Axial



BG10 - **20** - 25² - A³ - R⁴

BG10 · Radial