

Rotary Encoder BG16



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

- Low-cost and space saving solution for quick adjustments.
- Adjustment forwards and backwards.
- Digit-exact precision adjustment by precise mechanical detent.
- Recognition of rotation sense by two separate outputs.
- High reliability due to gold contacts.

1.0 Construction

1.1 Function	Rotary encoder with detent mechanism
1.2 Detent angle	11° 15'
1.3 Detent graduation	32 detents per revolution
1.4 Indication of revolution direction*	2 independent outputs
1.5 Contacts	Soldering pins
1.6 Mounting	Central mounting

* See impulse diagram.

2.0 Electrical Data

2.1 Switching power max.	1,5 VA/W
2.2 Switching voltage max.	30 V
2.3 Switching current max.	50 mA
2.4 Rest current max. at ϑ_u 20°C	1 A
2.5 Test voltage at 50 Hz/1 min.	500 V
2.6 Life expectancy without electrical load	$\geq 6 \times 10^6$ detents
	$\geq 187\,000$ cycles
with power max.	$\geq 6 \times 10^6$ detents
	$\geq 187\,000$ cycles
2.7 Contact resistance	initial value $\leq 1 \Omega$
	after life expectancy $\leq 1 \Omega$
2.8 Insulation resistance	$\geq 10^{10} \Omega$
2.9 Capacity between open contacts	≤ 2 pF
2.10 Impulse per output	32 pulses per revolution

3.0 Mechanical Data

3.1 Detent mechanism	Mechanical
3.2 Operating torque	$0,3 \pm 0,2$ 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

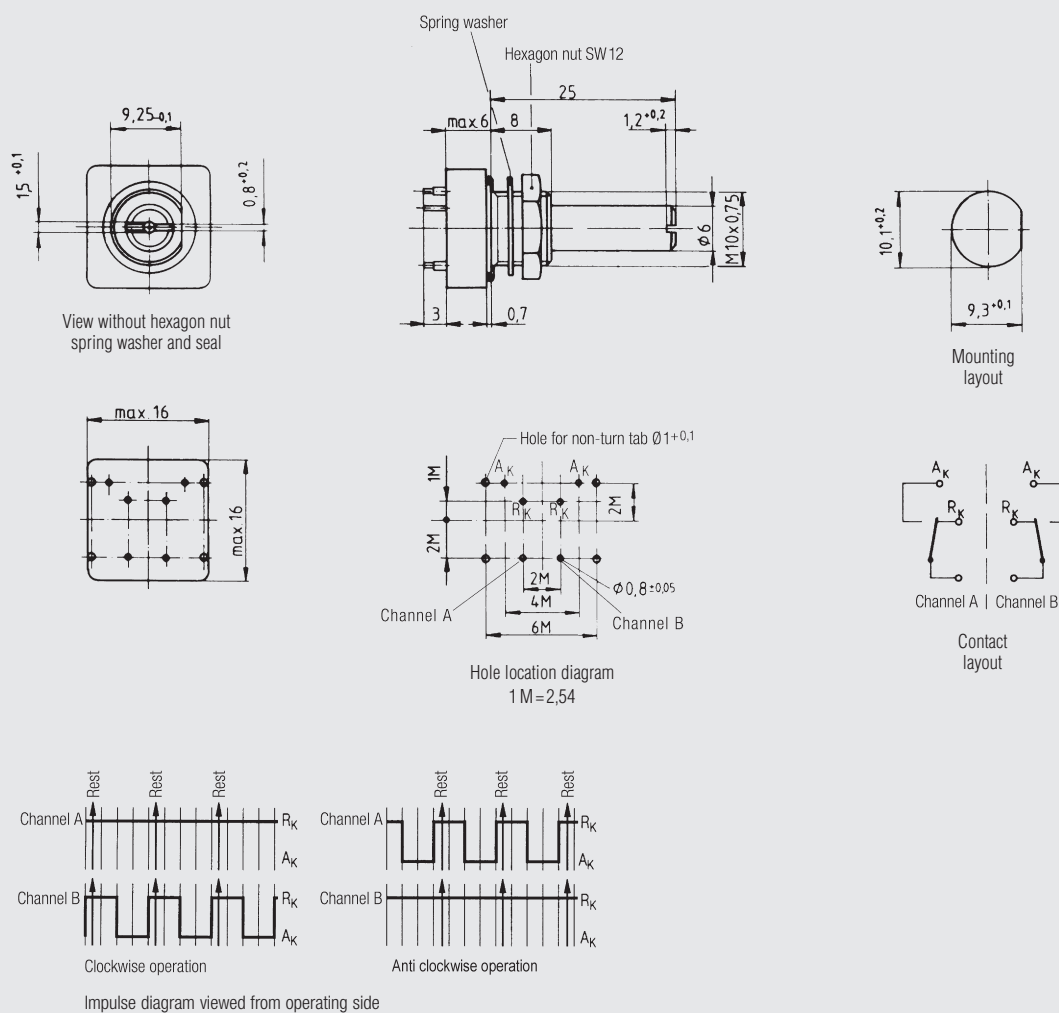
4.1 Contact material	Au
4.2 Insulating material	Polybutylenterephthalate, PBTP
4.3 Ambient temperature	–25 at 85°C
4.4 Soldering time and temperature max.	5 s at 260°C

Ordering Codes

Designation of type	BG 16
1. Detent graduations	32 per revolution
2. Shaft length	in mm
3. Shaft design	S = plastic shaft, standard

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



BG16 - **32** - **25** - **S**