BGE16-256-AB-G-SA-WD WATERTIGHT ENCODER WITHOUT PUSHBUTTON

PART NO. 2109139-00



DESCRIPTION

Electronic rotary pulse generator in a very compact design for quick and easy adjustment of digital values. Also suitable for motion and angle tracking. Recognition of rotation sense via AB-track signals. Watertight between frontpanel and encoder up to IP65.

EBE Elektro-Bau-Elemente GmbH
Sielminger Straße 63
70771 Leinfelden-Echterdingen

TECHNICAL DATA

CONSTRUCTION AND MECHANICAL DATA (TYPICAL VALUES, T=23 °C)

DETENT GRADUATION	n.a.
MOUNTING	central mounting 3/8''-32UNEF2B
PROTECTION CLASS	IP65
DETENT MECHANISM	n.a.
BEARING	friction
FASTENING TORQUE MAX.	2 Nm
LIFE EXPECTANCY	typically > $1x10^6$ revolutions
SHAFT LENGTH	acc. drawing
SHAFT DESIGN	acc. drawing
PUSHBUTTON / SWITCHING FUNCTION	n.a.
REACH AND ROHS	conform

ELECTRICAL DATA (TYPICAL VALUES, T=23 °C)

OPERATION VOLTAGE	5 VDC ± 10 %
CURRENT CONSUMPTION	< 25 mA
OUTPUT SIGNAL	TTL: high > Vcc -0,5 V, low < Vss +0,5 V max. 4 mA per output
RESOLUTION	256 pulses per turn per track
CONNECTOR	open wire (length ca. 150 mm)

ENVIRONMENTAL CONDITIONS

OPERATING TEMPERATURE	-40°C to +85°C
STORAGE TEMPERATURE	-40°C to +105°C

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PINOUT AND DRAWING

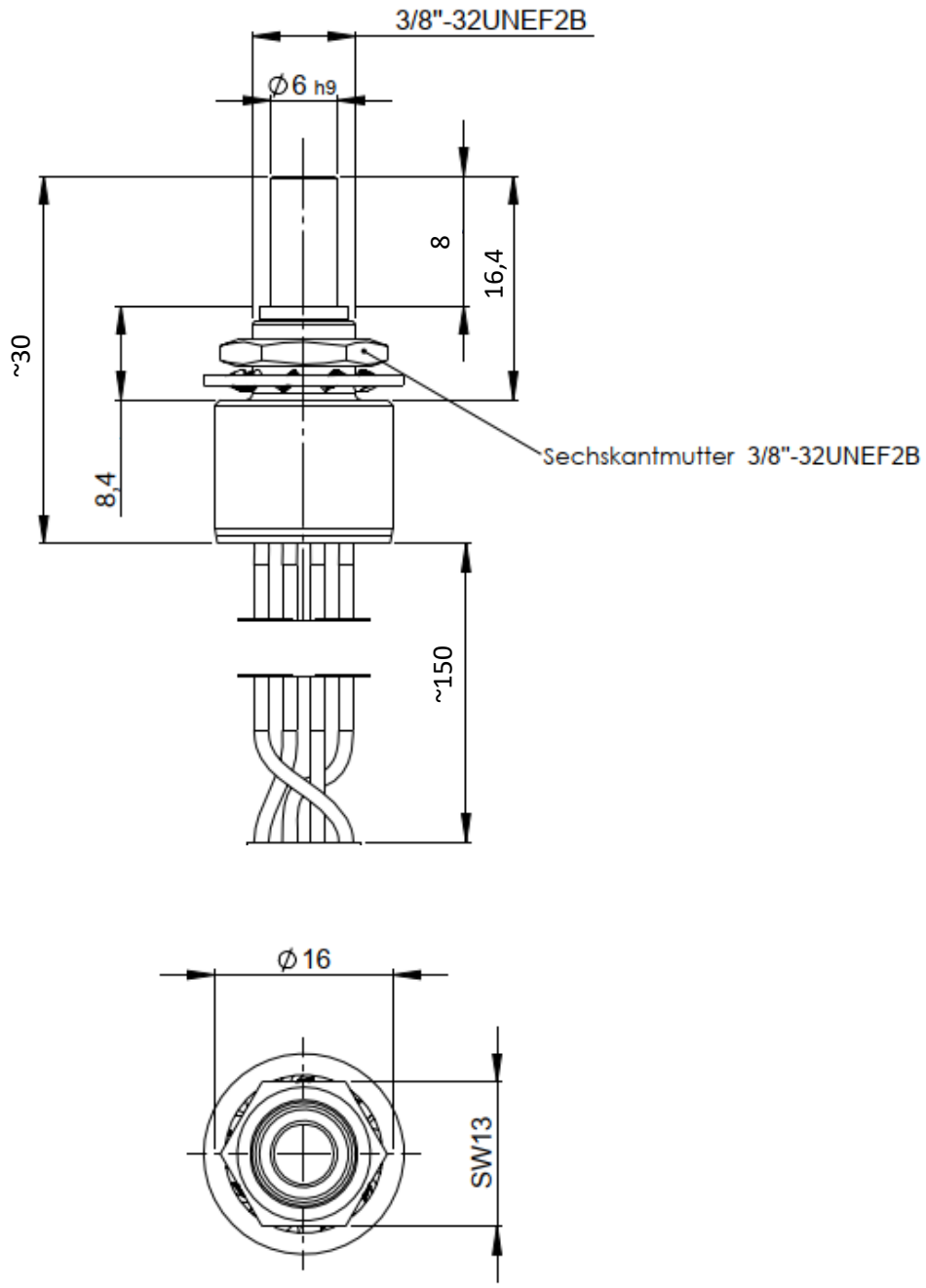
PINOUT

COLOR	SIGNAL	DESCRIPTION
RED	+5 Vcc	Positive power supply
WHITE	track B	Output track B
GREEN	track A	Output track A
BLACK	GND	Ground power supply

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DRAWING

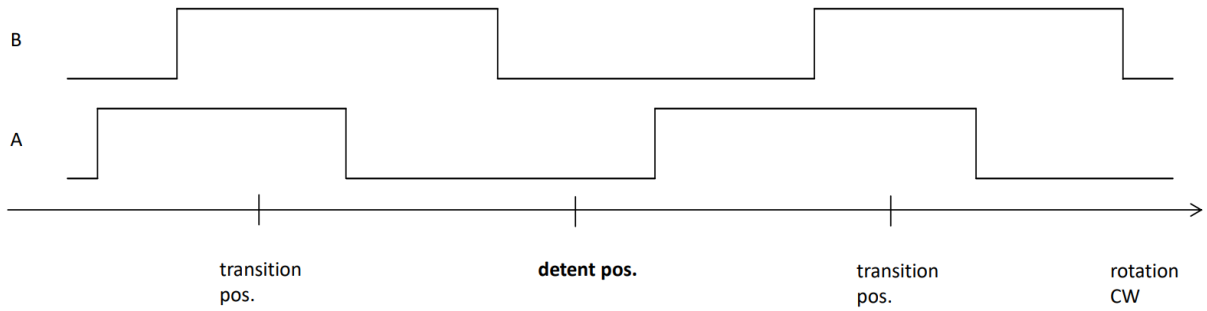
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Units in mm

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OUTPUT SIGNAL



The rotary encoder outputs pulses that are directly correlated to angular position. Therefore, the timing of the A/B track signals depends on the rotational speed.

SAFETY AND WARNING NOTES

The components are solely for use by technically qualified, professional electronics experts who are familiar to the dangers and application risks associated with handling electrical mechanical components, systems and subsystems. User assumes all responsibility and liability for proper and safe handling and use and agrees with the restrictions and disclaimer at the end of this document.

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DISCLAIMER

The information contained in this document is for general guidance only. The user is responsible for determining the suitability of the technical information referred herein for his application. On delivery of the component, EBE is only obliged to implement those properties set out and agreed upon in this document. Further properties are not included. No guarantee is given. The component has been designed for installation in our customer's products. Manufacturer of the resulting product and consequent liability according to the Product Liability Act lies with the customer. Warranty is limited to below mentioned extent.

The component is not intended for installation in end products for medical, life-saving, or safety-related applications. The use of the component is also not permitted and expressly prohibited in vehicles of any kind (including trailers and watercraft), as a component in aerospace products (including radio transmitter for aerospace purposes), or in offshore structures.

User assumes all responsibility and liability to determine whether the component is subject to any applicable international, federal, state, or local laws and regulations related to user's handling and use of the component and, if applicable, user assumes all responsibility and liability for compliance in all respects with such laws and regulations.

Disclaimer for improper use

The manufacturer accepts no liability for damage resulting from improper, inappropriate, or non-compliant use of the component. Any liability for direct or indirect damage, consequential damage or loss resulting from improper use is excluded. The Customer (user) is obliged to use the component exclusively in accordance with the instructions and information given in this document.

The limitation of liability described above does not apply in the case of mandatory statutory liability such as under the German Product Liability Act (Produkthaftungsgesetz) or in the case that a guarantee is given or in the case of willful deceit or fraudulent misrepresentation or with regard to claims for an injury of the life or limb or health or in the case of intentional or grossly negligent breach of fundamental contractual duties (“wesentliche Vertragspflichten”).

REVISION

REVISION	DATE	DESCRIPTION
1.1	29.04.2026	Update legal notices
1.0	15.10.2025	Initial Product Information Sheet BGE16-256-AB-G-SA-WD

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