

**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.

## 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 <sup>6</sup> 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 > V <sub>cc</sub> -0,5 V, low < V <sub>ss</sub> +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

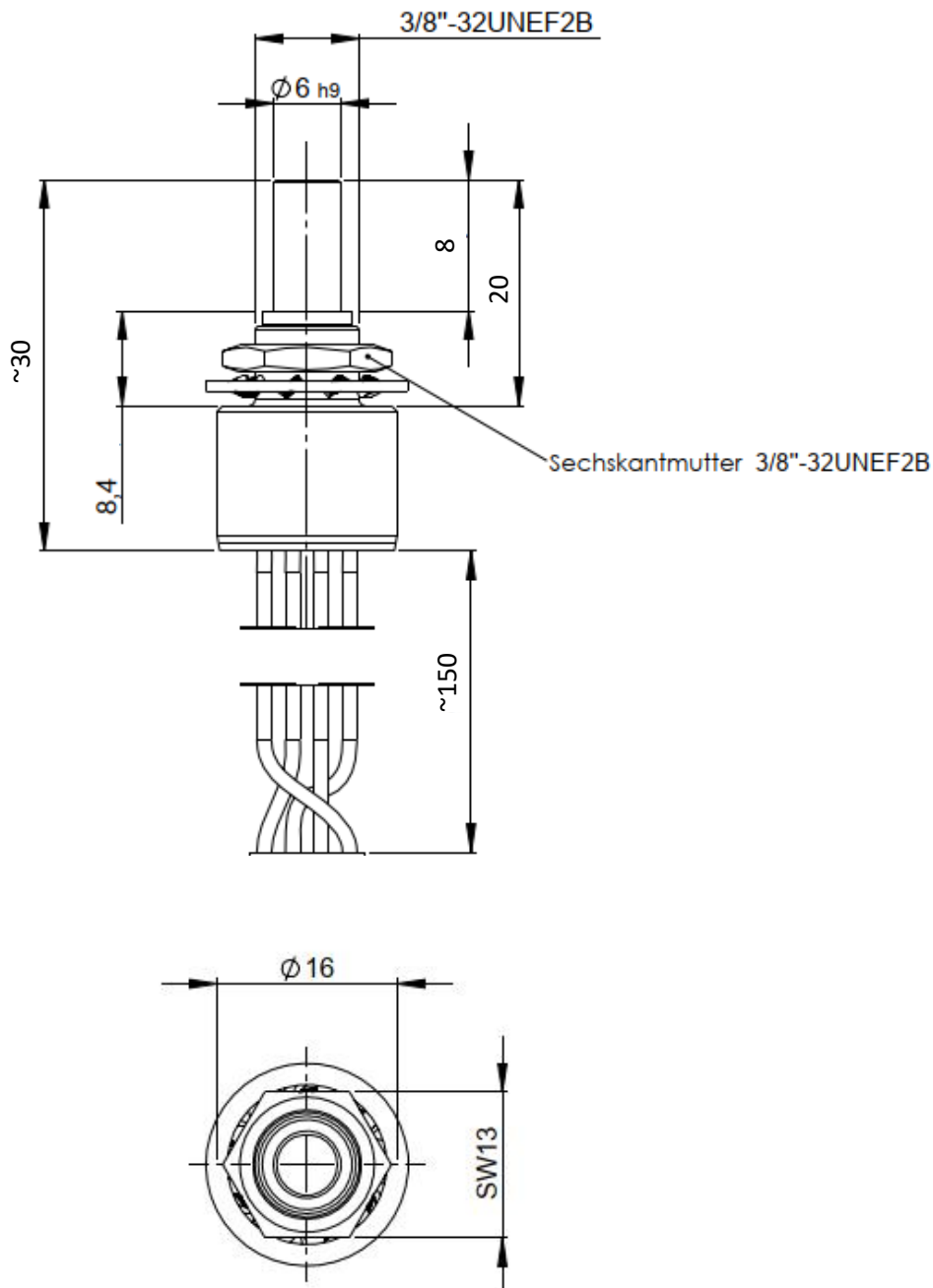
## PINOUT AND DRAWING

### 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

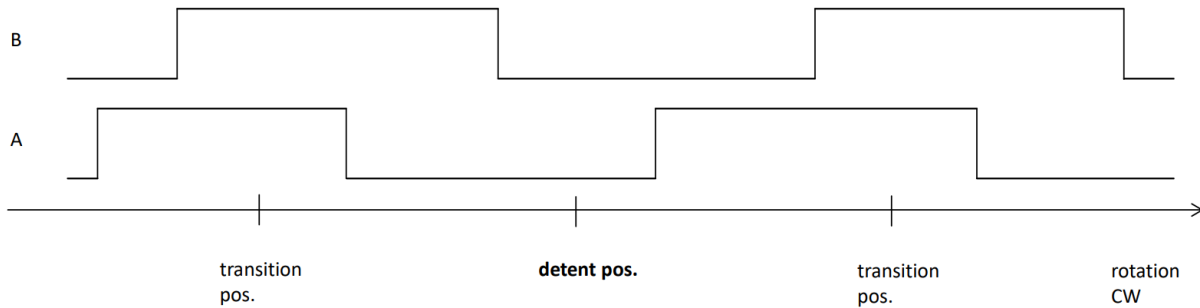
DRAWING

BGE16-256-AB-G-SA-WD



Units in mm

**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.

**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 to herein for his application. On delivery of the component, EBE is only obliged to implement those properties set out and agreed upon in this technical data sheet. 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.

**REVISION**

REVISION	DATE	DESCRIPTION
1.1	07.01.2026	Drawing update for "a-length"
1.0	15.10.2025	Initial Product Information Sheet BGE16-256-AB-G-SA-WD