

## Data Sheet

# ESC17 ENCODER WITH PUSHBUTTON



## DESCRIPTION

Electronic rotary encoder with wear-free HALL-sensing module for signal generation and integrated push button function. Digit-exact fine adjustment through precise mechanical detent with high rotational life. Perfect for use in harsh environments like dust, aggressive atmosphere, etc.

## Data Sheet

### TECHNICAL DATA

#### CONSTRUCTION AND MECHANICAL DATA

DETENT ANGLE	22,5°
DETENT GRADUATION	16
MOUNTING	central mounting
PROTECTION CLASS	IP65
DETENT MECHANISM	mechanic
DETENT TORQUE WITH INDEX	approx. 4,5 Ncm ±30%
BEARING	friction
SWITCHING BUTTON ACTUATION FORCE	approx. 7 N
SWITCHING PATH	approx. 1,0 mm
FASTENING TORQUE MAX.	2,5 Nm
MAX. LOAD ON SHAFT	axial: tbd. radial: tbd.
LIFE EXPECTANCY	> 100.000 turns
REVOLUTION SPEED MAX.	tbd.
SHAFT LENGTH	customizable
SHAFT DESIGN	customizable
PUSHBUTTON / SWITCHING FUNCTION	available
ROHS AND REACH	conform

#### ELECTRICAL DATA

OPERATION VOLTAGE	5 VDC ± 10%
CURRENT CONSUMPTION	16 mA typ., (max. 20 mA)
OUTPUT SIGNALS	low: < 0,6 V @ no load high: > Vcc -0,7 V @ no load max. 5 mA per output
INDICATOR OF REVOLUTION DIRECTION	A/B + direction signal
IMPULSES PER OUTPUT	16 pulses per revolution
CONNECTOR	Customizable (standard = cable without connector)

#### ENVIRONMENTAL CONDITIONS

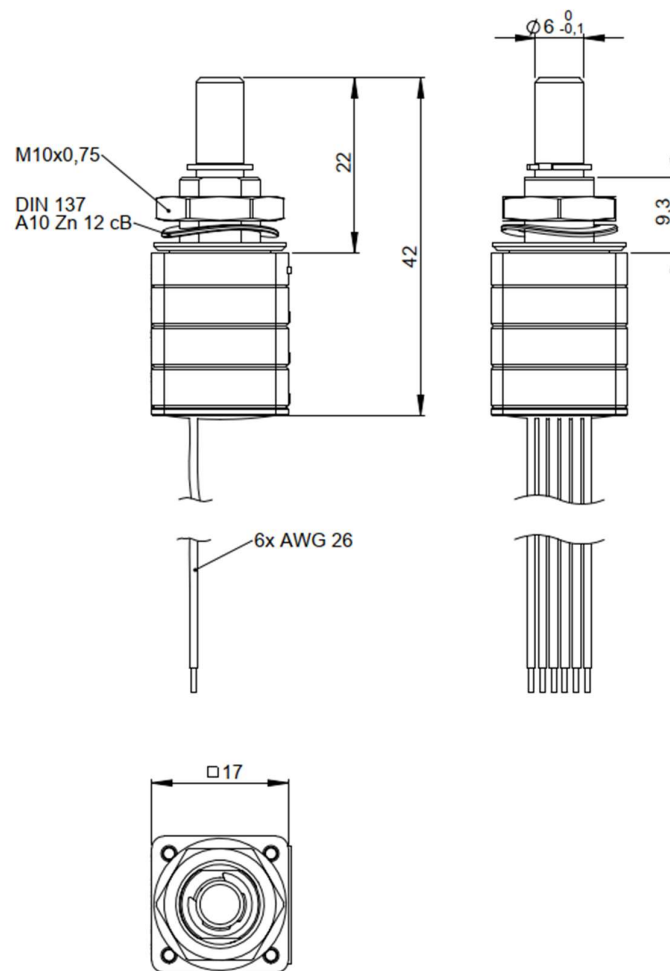
OPERATING TEMPERATURE	-20°C to +75°C
STORAGE TEMPERATURE	-40°C to +85°C

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### DRAWINGS / OTHER INFORMATION

#### SAMPLE PINOUT

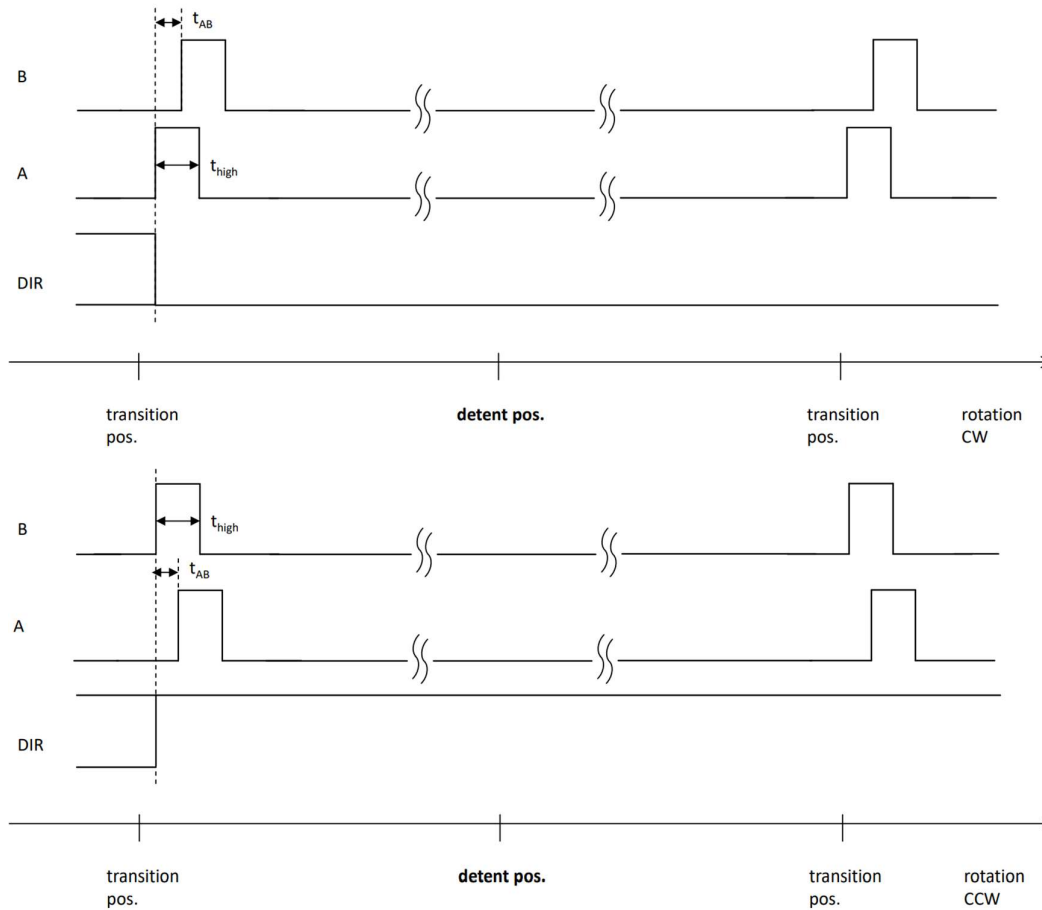
PIN	cable color	signal
1	yellow	B
2	green	A
3	blue	pushbutton
4	brown	direction
5	red	VCC
6	black	GND



units in mm

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### OUTPUT SIGNALS



Pushbutton: active low

SYMBOL	CHARACTERISTIC	VALUE
$t_{high}$	Duration of high status of A and B	2 ms +/- 5%
$t_{AB}$	Delay A -> B (CW) Delay B -> A (CCW)	1 ms +/- 5%

## 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.

## Data Sheet

### REVISION

REVISION	DATE	DESCRIPTION
1.0	11.04.2023	Initial Data sheet ESC17 standard