CS19D32B — Magnetic Incremental Rotary Encoder

Incremental magnetic rotary encoder for angle and speed measurement.

PART NUMBER CS19D32B

1 PRODUCT TYPE AND SCOPE

Incremental magnetic rotary encoder for angle and speed measurement.
This document specifies the technical requirements and environmental suitability of the product and serves as the primary basis for design, manufacture and acceptance.

2 TECHNICAL REQUIREMENTS

2.1 Supply voltage	5 V ±0.5 V
2.2 Signal output (interface)	Pulse output, channels A and B, with switch function.
2.3 Resolution	32 lines — 32 pulses per revolution. Pulse counts from 4 to 1024 lines are available as a custom configuration.
2.4 Terminals	2.54 mm pitch pin header.
2.5 Wiring	Pin 1: VDD (5 V). Pin 2: A signal. Pin 3: B signal. Pins 4–5: switch. Pin 6: GND. Pins 4 and 5 are connected while the switch is pressed.
2.6 Direction of rotation	Viewed facing the shaft: rotating clockwise, the A-pulse rising edge leads the B-pulse rising edge; rotating counter-clockwise, the B-pulse rising edge leads the A-pulse rising edge. Direction can be set at the factory.

3 PIN ASSIGNMENT

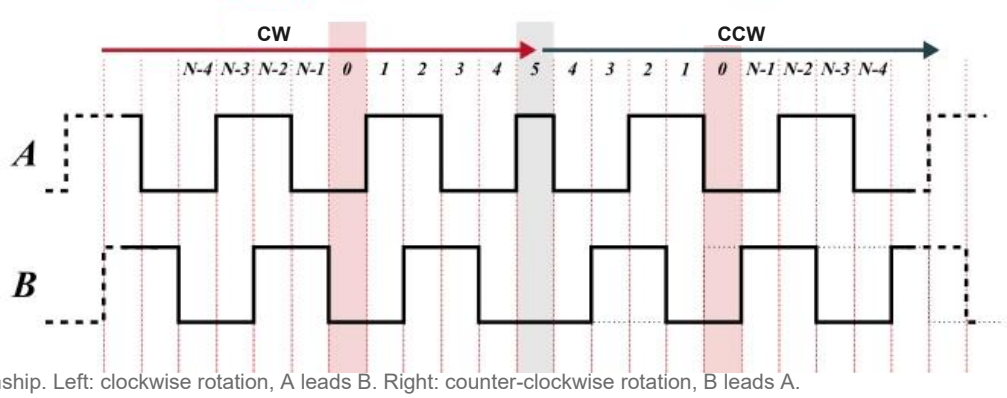
Pin 1	VDD (5 V)	**Pin 4**	Switch
Pin 2	A signal	**Pin 5**	Switch
Pin 3	B signal	**Pin 6**	GND

Pins 4 and 5 are connected while the switch is pressed.

4 ENVIRONMENT AND STORAGE

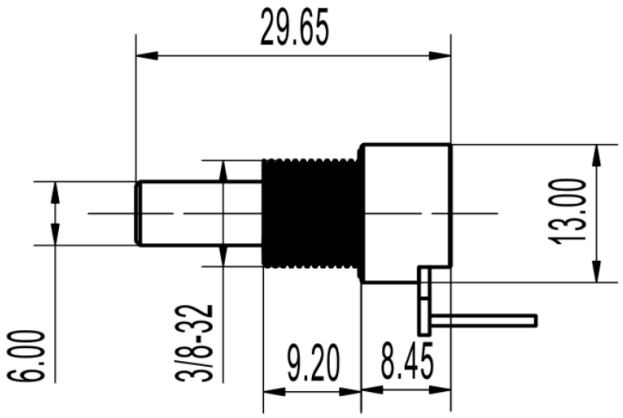
4.1 Operating temperature	−40 to 85 °C
4.2 Operating relative humidity	≤ 95 % at 25 °C
4.3 Storage temperature	−40 to 85 °C
4.4 Storage relative humidity	≤ 75 % at 25 °C
4.5 Storage life	≥ 10 years

5 OUTPUT WAVEFORM



A/B pulse relationship. Left: clockwise rotation, A leads B. Right: counter-clockwise rotation, B leads A.

6 STRUCTURE DRAWING





Product appearance. Terminal and cable arrangement may vary by configuration.