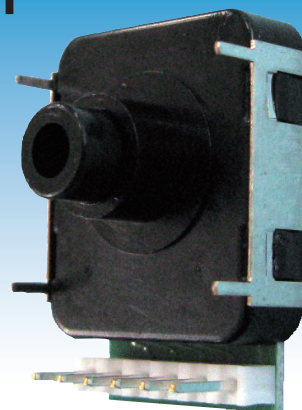


Ultra Slimline Rotary Encoder with Push Switch



RE29 Series



Outline

RE29 series pack compact rotary encoder with dual-functional resin shaft into the space-saving resin enclosure. RE29 is recommended for wide range of machines including measurement components, medical and telecommunication devices.

Features

- Extremely thin (6.6mm) and lightweight (7g)
- Multi-functional with 2 way acting – push switch function and rotating function – shaft
- Eco friendly:
 - 1) Low cost and lesser parts by VA design
 - 2) RoHS compliant
- Designed to be soldered to printed circuit board

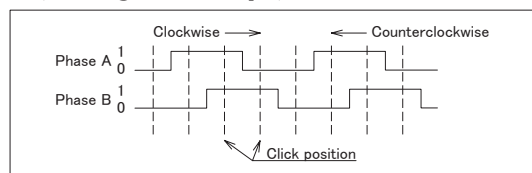
Specifications

| 1. Electrical and Mechanical specifications | | | |
|---|-------------------|--------------------------------------|---------------------------|
| Items | | Rated Value | |
| Rotary Encoder | Number of Pulses | 6 PPR | |
| | Number of Clicks | 24 Clicks | |
| | Supply Voltage | DC3.3V ± 5% ≤ 20mA 6mA TYP | |
| | | DC5V ± 5% ≤ 10mA 4mA TYP | |
| | Output Signals | Channel A/B: Square Wave CMOS chip | |
| | Output Voltage | High | (Supply Voltage – 2.5V) ≤ |
| | | Low | ≤ 0.5V |
| Response Frequency | 100Hz | | |
| Rotational Torque | 4 ± 2 mN · m | | |
| Push switch | Rating of contact | ≤ DC12V 0.1 ~ 10mA (Resistance load) | |
| | Travel of switch | 0.2 ± 0.1 mm | |
| | Operational Force | 5 ± 2 N | |
| Weight | | 7g | |

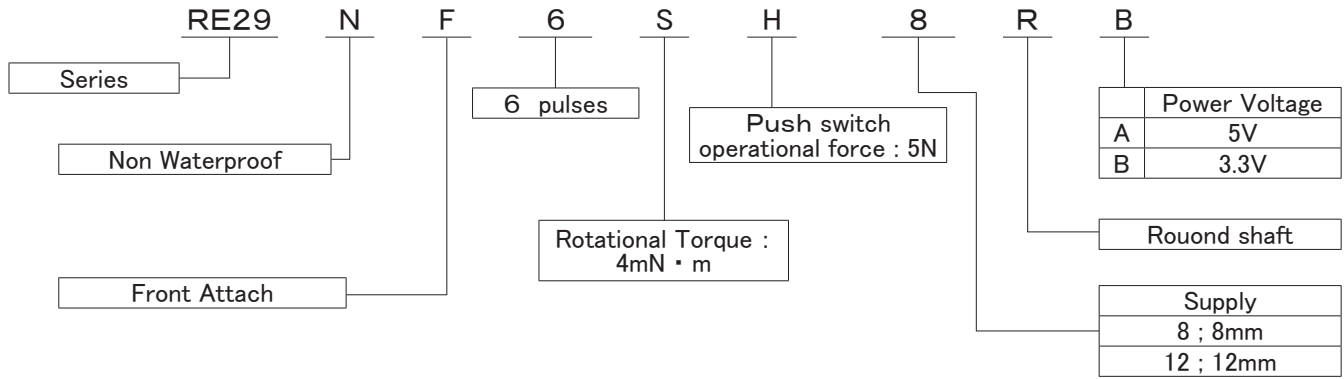
| 2. Reliability and Environmental Specifications | | |
|---|-----------------------------|------------------------------------|
| Items | | Rated Value |
| Durability of operating area | Thrust direction | 100N |
| | Push Pull | 50N |
| | Radial | 1N · m |
| Rotational durability | | 1 million strokes (No load) |
| Screw Torque | | Not more than 1N · m |
| Heat resistance of solder | Solder bit temp.: MAX 350°C | Within 3 seconds for each terminal |
| Operating temperature | | -0°C ~ +55°C 32F ~ 131F |
| Storage temperature | | - 40°C ~ +85°C - 40F ~ 185F |

Output Waveform

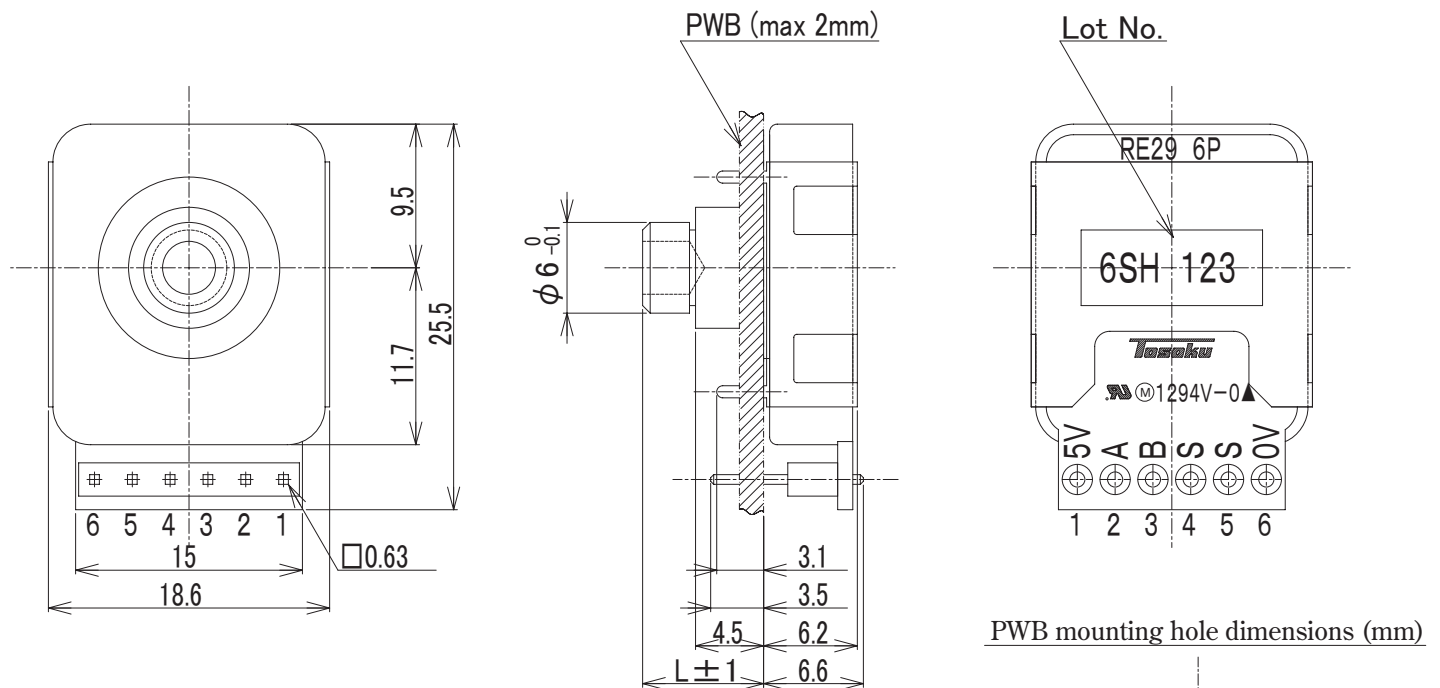
- 1) Turning the shaft clockwise will generate the signal A when the signal B outputs a low voltage (0);
- 2) Rotating the shaft counter-clockwise will generate the signal A when the signal B outputs a high voltage(1);
- 3) Either signal A or B switches from 0→1 or 1→0 for every single click (Quad edge evaluation spec).



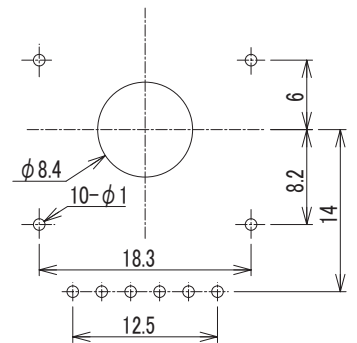
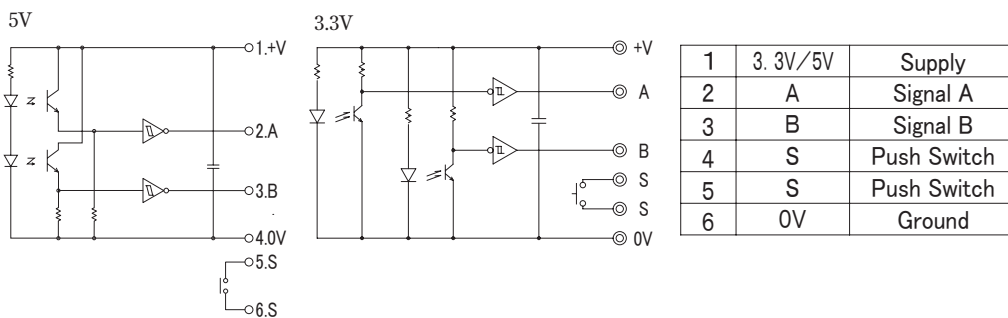
Part Number Designation



Dimensions (mm)



Circuitry



Precautions

| | |
|-----------|--|
| Wiring | Use buffering amplifier when extending lead wire over 30cm. |
| Soldering | Do not put a load on the terminal area during and immediately after soldering. |
| Operation | Do not use flow/reflow soldering machines. |
| Power | Use under specified power voltage and connect properly. |

Warranty

- 1 year from the date of shipment