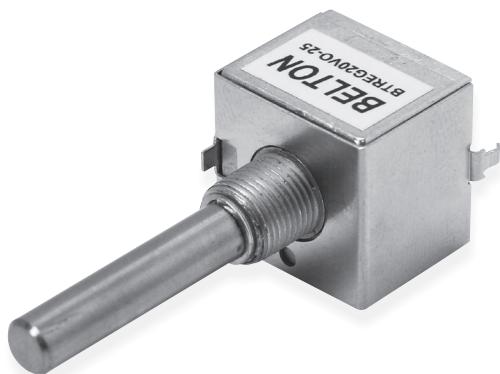


# OPTICAL ENCODER SWITCH

## BTRE20 SERIES

20mm highly reliable and long life Optical Encoder  
(Vertical mounting type)



### Features

#### BTREG20V Series :

- 20mm square size by Zn diecasting housing with metal shaft
- 2 million life of vertical mounting type
- Changeable output pulse from 25 to 250 by requirement
- Fine square wave of output by adopting proper IC and chip mounted circuits
- 25 steps of mechanical click is available if need

#### BTRES20V(Long life) Series :

- 20mm square size by Zn diecasting housing with metal shaft
- 10 million life with vertical mounting type
- Changeable output pulse from 25 to 250 by requirement
- Fine square wave of output by adopting proper IC and chip mounted circuits

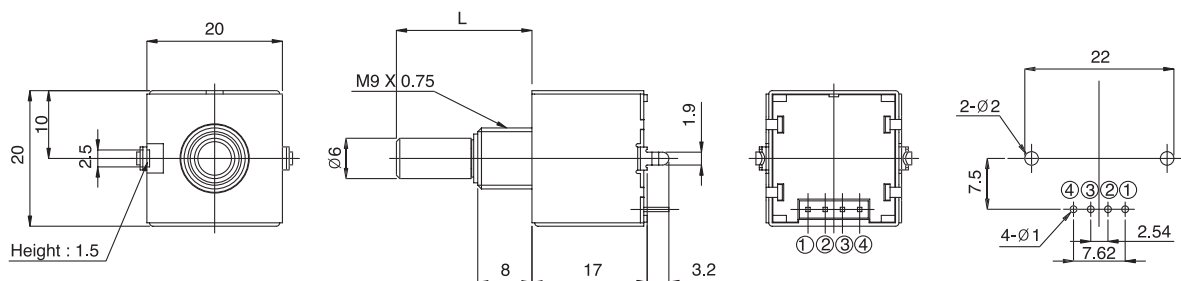
### Applications

- All kinds of level control, tuning and position setting in the digital, medical, measuring, radio equipments and communication equipments, etc.

### Standard Dimensions

BTRE□20V-□□□-□□□

P.C.B Mounting Hole



Unit : mm

Terminal	Connection
1	+5V
2	B Output
3	A Output
4	Ground

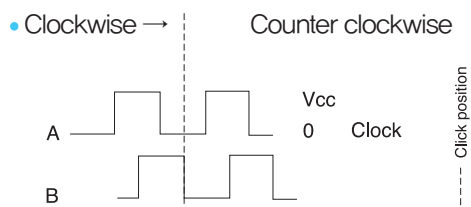
# OPTICAL ENCODER SWITCH

## BTRE20 SERIES

### Product Classifications

Classification	Mechanical Click	Mechanical Click	Pulse no.	Part no.
General use (BTREG20)	Horizontal (BTREG20H)	X	25-200	BTREG20H-025N-Shaft
		O	25-200	BTREG20H-025C-Shaft
	Vertical (BTREG20V)	X	25-200	BTREG20V-025N-Shaft
		O	25-200	BTREG20V-025C-Shaft
Special use (BTRES20)	Horizontal (BTRES20H)	X	25-200	BTRES20H-025N-Shaft
		O	25-200	BTRES20H-025C-Shaft
	Vertical (BTRES20V)	X	25-200	BTRES20V-025N-Shaft
		O	25-200	BTRES20V -025C-Shaft

### Output Wave



### Electrical specifications

- Supplying Voltage : DC 5V  $\pm$  5%
- Supplying Current : 30mA Max
- Phase difference :  $90^\circ \pm 45^\circ$
- Output Wave :  
Incremental with Rectangular Wave
- Resolution : 25 to 200 Pulses / rotation
- Frequency Response : 100 to 500 Hz
- Insulation Resistance : 100 Mohms on 250V DC
- Withstanding Voltage : 1min. at 300V AC
- Electrical Life :  
Over 1,000,000 to 20,000,000 cycles

### Mechanical specifications

- Rotational Torque : 50  $\pm$  20 gf · cm
- Mechanical Life :  
Over 1,000,000 to 10,000,000 cycles
- Soldering Temp. : 5sec. on the 260°C
- Temp. Range of Operating : 0°C~+50°C
- Panel mounting screw strength : 8 Kgf · cm

### Suggested Ordering Code

