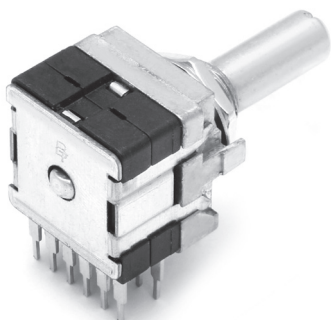


# ROTARY SWITCH

## BTSR16H SERIES

### General purpose rotary switch with compact ganged design



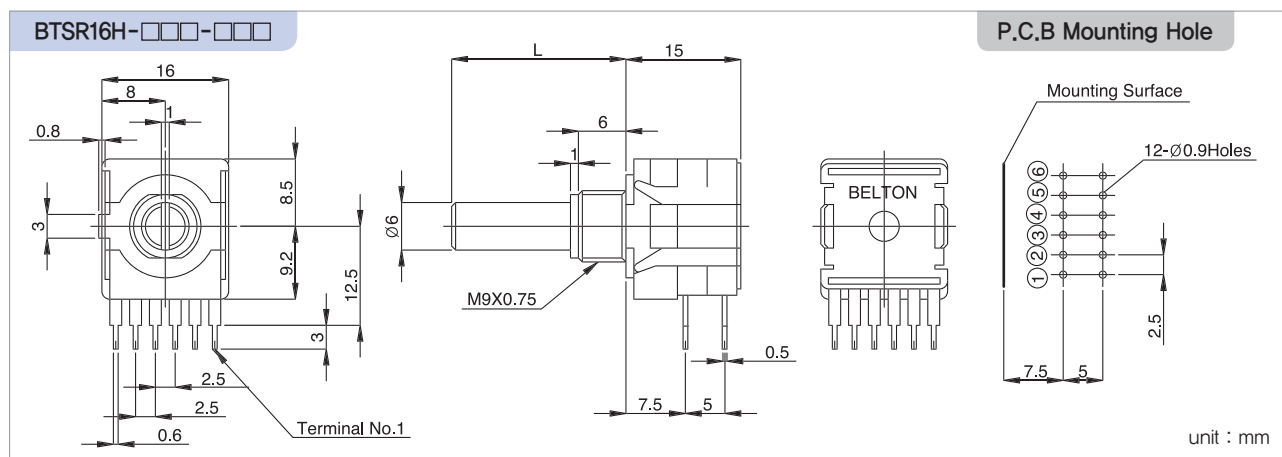
#### Features

- Designed for general purpose electric and electronic equipments
- P.C.Board mounting type and compact size (21mm : height × 16.2mm : width)
- 12.5mm height from shaft center to P.C.Board

#### Applications

- For all kinds of electric and electronic equipments, specially for measuring instruments and radio equipments

### Standard Dimensions



### Product Classifications

Shaft structure \ Product		Rotary switch	Pulse switch
Single shaft		○	○
Dual shaft	1 section rotary switch with out-shaft	○	-
	2 sections rotary switch with out-shaft	○	-
	3 sections rotary switch with out-shaft	○	-

### Rotational Torques

- Single shaft : 700 ± 300gf · cm
- Dual shaft : 700 ± 300gf · cm
- Rotational torque can be changeable by option

### Mechanical specifications

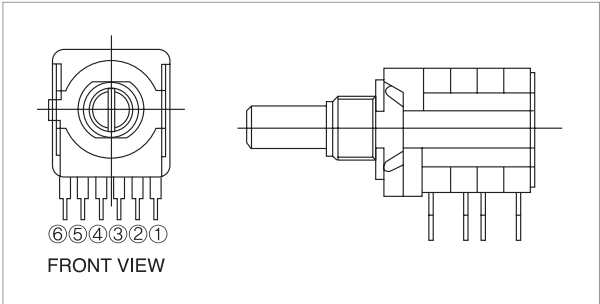
- Electrical life : 10,000 cycles min
- Terminal strength : 500gf · cm for 1min
- Solderability : 230 ± 5°C, 3 sec
- Contact timing : shorting and non-shorting
- Changeover angle : 30 ± 3°(2~6 positions)

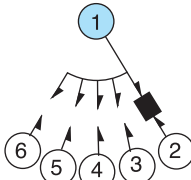
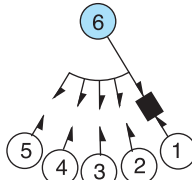
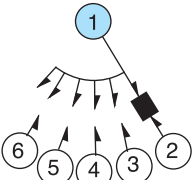
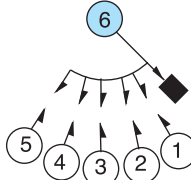
### Electrical specifications

- Electrical Rating : 0.3A, 16V DC
- Contact Resistance : 50 mohms(initial)
- Insulation Resistance : 100 Mohms, 500V DC
- Withstanding Voltage : 1min, at 500V AC
- Circuits : Refer to the next page

# ROTARY SWITCH

## Circuit Diagrams



1~5 Positions		6 Positions	
Front	Rear	Front	Rear
			

## Suggested Ordering Code

<b>BTSR16H</b>									<b>.</b>	<b>1</b>	<b>5</b>	<b>N</b>	<b>.</b>	<b>R</b>	<b>2</b>	<b>0</b>
Series			Number of wafer sections			Shaft length			Shaft style							
Number of sections			Code			Shaft length			Code			Shaft style				
1~3			1~3			15			15			18-tooth serration shaft				
						20			20			Round shaft with groove				
						25			25			Flat shaft				
						30			30							
						35			35							
						40			40							
Number of positions			Code													
2~6			2~6													
Changeover timing			Code													
Shorting			Non-shorting													
S			N													

# ROTARY SWITCH

## BTSR16H SERIES

### Typical Dimensions

Type	No. of section	Dimension	P.C.Board mounting
Single shaft	1 section rotary switch		
	2 sections rotary switch		
	3 sections rotary switch		
Dual shaft	1 to 3 sections rotary switch		

# ROTARY SWITCH

## BTR SERIES

### Summerized general specifications of Rotary Switches

#### Electrical specifications

No.	Typical Series	Electrical Rating	Contact Resistance	Insulation Resistance	Withstanding Voltage
1	BTNR 100	0.1A, 12V DC	100 mohms max.	100 Mohms at 500V DC	500V AC for 1 min.
2	BTSR 10H	0.1A, 16V DC	50 mohms max.	100 Mohms at 500V DC	500V AC for 1 min.
3	BTSR 16H	0.3A, 16V DC	50 mohms max.	100 Mohms at 500V DC	500V AC for 1 min.
4	BTSR 12V	0.1A, 16V DC	50 mohms max.	100 Mohms at 100V DC	100V AC for 1 min.
5	BTSR 18V	0.3A, 16V DC	50 mohms max.	100 Mohms at 500V DC	500V AC for 1 min.

#### Mechanical specifications

No.	Typical Series	Rotational Torgue	Operating Life	Others
1	BTNR 100	1,000 $\pm$ 500 gf · cm	10,000 cycles min.	* Operating Temp. range : -10~+60°C * Cold proof Temp. range : -20 $\pm$ 2°C for 96 hr * Hot proof Temp. range : +85 $\pm$ 2°C for 96hr * Solderability : 230 $\pm$ 5°C, 3 $\pm$ 0.5 sec * Solder heat resistance : 260 $\pm$ 5°C, 5 sec
2	BTSR 10H	500 $\pm$ 200 gf · cm	10,000 cycles min.	
3	BTSR 16H	500 $\pm$ 200 gf · cm	10,000 cycles min.	
4	BTSR 12V	100 $\pm$ 50 gf · cm	10,000 cycles min.	
5	BTSR 18V	600 $\pm$ 300 gf · cm	10,000 cycles min.	

