

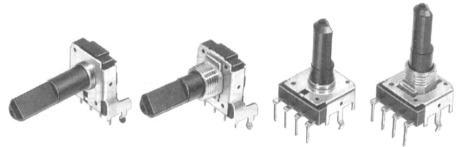
### 14 mm Square Encoders

Japan

Series: **EVQV**

#### ■ Features

- High accuracy and high reliability due to insert molded contact
- Incremental 24 pulses (12 pulses available), absolute 3-bit available
- Long rotation life: 50000 cycles



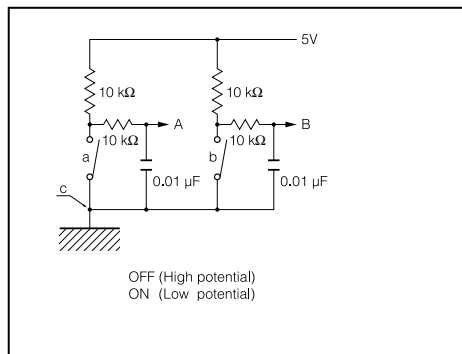
#### ■ Recommended Applications

- Audio Visual equipment, Microwave ovens
- Measurement instruments, Communication equipment, CATV tuners

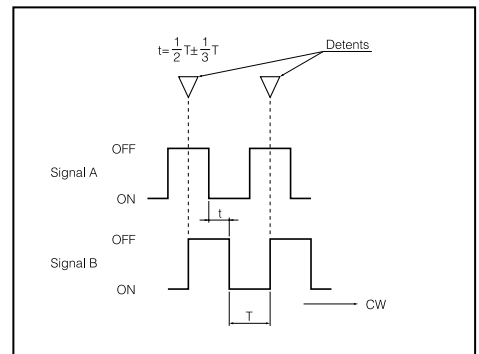
#### ■ Major Specifications

Mechanical	Rotation Angle	360 ° (Endless)
	Shaft Pull/Push Strength	80 N (8 kgf) min.
	Shaft Wobble	0.3xL/30 mm max. (Each side)
	Rotation Torque	2 to 25 mN·m (20 to 250 gf·cm) at 5 to 35 °C, Shaft rotatable at -10 °C
	Detents	24, 12, non-detent
Electrical	Output Signal	Phase A and B 24, 12 pulses/revolution
	Rating	1 mA 10 VDC (at each bit)
	Contact Resistance	1 Ω max.
	Insulation Resistance	10 MΩ min. (at 50 VDC)
	Dielectric Withstanding Voltage	100 VAC for 1 minute
Durability	Operating Temperature	-10 to +70 °C
	Soldering Heat	3 s at 300 °C
	Rotation Life	50000 cycles

#### ■ Test Circuit Diagram

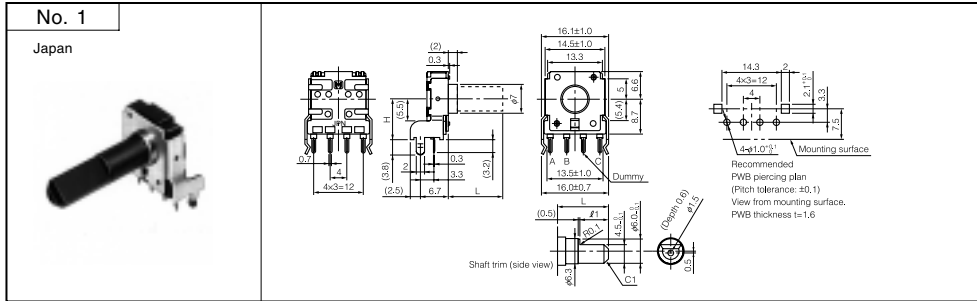


#### ■ Phase Difference



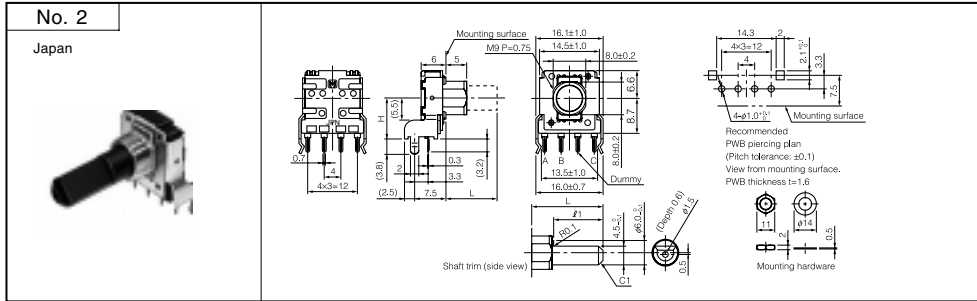
■ Dimensions in mm (not to scale)

- Horizontal, Without bushing ..... Type EVQVCA



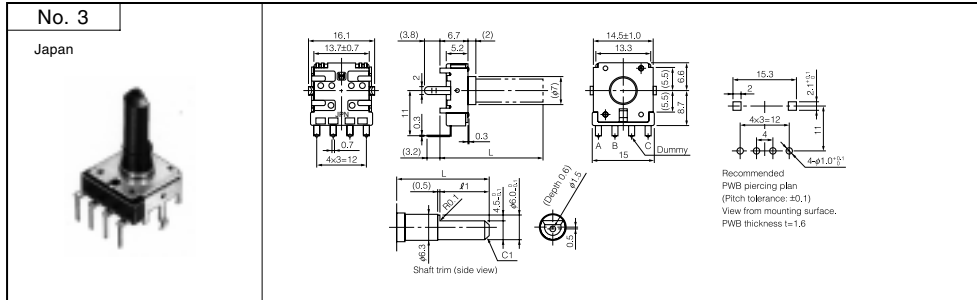
Note: H=12.5 mm, 10 mm available

- Horizontal, With bushing ..... Type EVQVCM

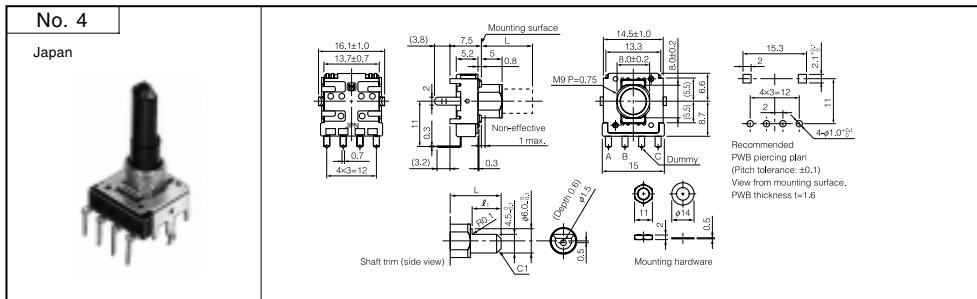


Note: H=12.5 mm, 10 mm available

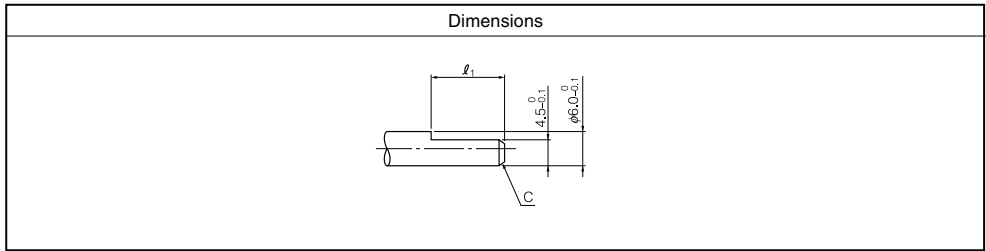
- Vertical, Without bushing ..... Type EVQVEC



- Vertical, With bushing ..... Type EVQVEM



■ Shaft Trims and Dimensions in mm



Style			Dimensions in mm			
			Shaft			Bushing
			L	$l_1$	Corner cut	$l_2$
without Bushing	Horizontal		20.0	7.0	C1.0	—
			25.0	12.0	C1.0	—
			30.0	12.0	C1.0	—
	Vertical		20.0	7.0	C1.0	—
			25.0	12.0	C1.0	—
			30.0	12.0	C1.0	—
with Bushing	Horizontal		12.5	7.0	C1.0	5
			17.5	12.0	C1.0	5
			22.5	12.0	C1.0	5 (7)
	Vertical		12.5	7.0	C1.0	5
			17.5	12.0	C1.0	5
			22.5	12.0	C1.0	5 (7)