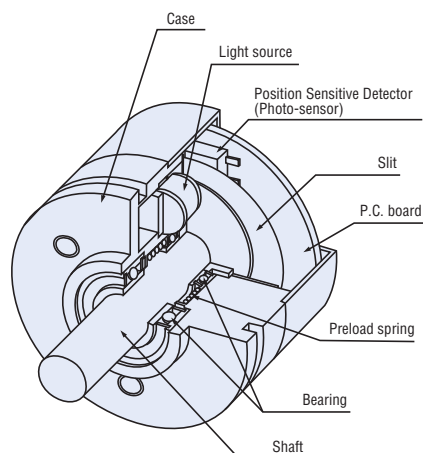


# OPTICAL CONTACTLESS TYPE **JT30 series**

RoHS compliant



### Basic construction

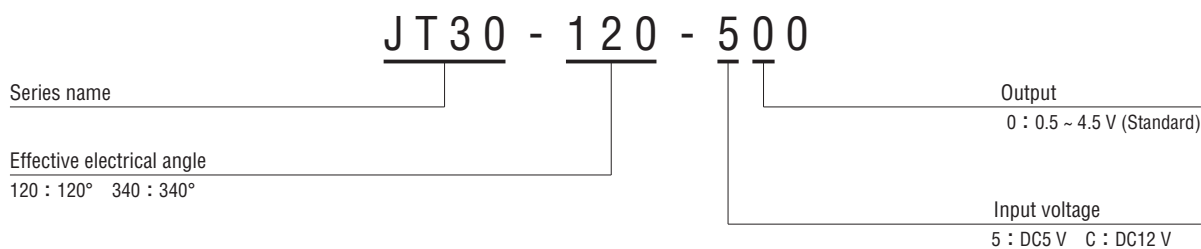


### FEATURES

- Contactless configuration offers much longer life
- Low torque 0.245 mN·m {2.5 gf·cm} maximum
- Superior temperature characteristic due to temperature compensation circuit incorporated
- RoHS compliant

### Optical contactless single turn type

### PART NUMBER DESIGNATION



### LIST OF PART NUMBERS

Effective electrical angle	Input voltage	Part number
120°	DC5 V	JT30-120-500
	DC12 V	JT30-120-C00
340°	DC5 V	JT30-340-500
	DC12 V	JT30-340-C00

※Verify the above part numbers when placing orders.

# JT30 POTENTIOMETERS

## STANDARD SPECIFICATIONS

### Electrical characteristics

Input voltage	DC5 V $\pm$ 0.25 V	DC12 V $\pm$ 0.6 V		
Dissipation	40 mA maximum			
Effective electrical angle	120°	340°	120°	340°
Output voltage	+0.5 ~ +4.5 V			
Absolute linearity ※1	$\pm$ 1.5 %FS	$\pm$ 2.0 %FS	$\pm$ 1.5 %FS	$\pm$ 2.0 %FS
Temperature sensitivity	$\pm$ 2.0 %FS ( $\pm$ 1.0 %FS/0 ~ 50 °C)			
Temperature medium drift	$\pm$ 40 mV ( $\pm$ 30 mV/0 ~ 50 °C)			
Insulation resistance	100 M $\Omega$ (at DC500 V) minimum			
Dielectric strength	AC500 V (1 min)			

※1 At normal temp.

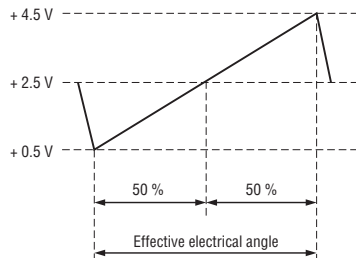
### Mechanical characteristics

Starting torque	0.245 mN·m {2.5 gf·cm} maximum (at normal temp.)
Maximum rotational speed	1500 min <sup>-1</sup>
Mechanical angle	360° continuous
Rotational life	2 × 10 <sup>8</sup> revolution (at 25 °C, 200 min <sup>-1</sup> )
Vibration	294.2 m/s <sup>2</sup> {30 G} 30 ~ 200 Hz, 30 h
Shock	294.2 m/s <sup>2</sup> {30 G} minimum

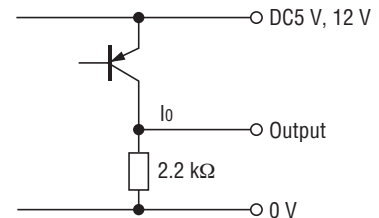
### Environmental characteristics

Operating temp. range	-30 ~ 80 °C
Storage temp. range	-40 ~ 100 °C
Humidity	Relative humidity 95 % maximum
Net weight	Approx. 40 g

## OUTPUT ( cw )



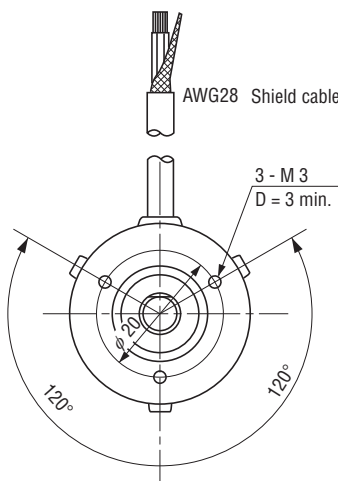
## OUTPUT CIRCUITRY



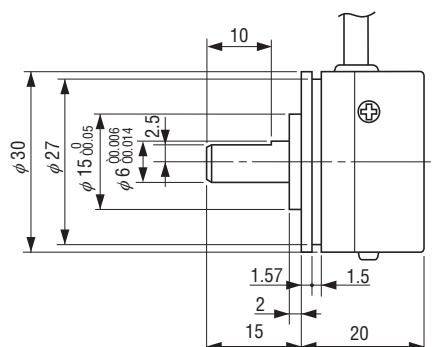
I<sub>o</sub> = 20 mA max.

## OUTLINE DIMENSIONS

Unless otherwise specified, tolerance:  $\pm$  0.3 (Unit: mm)



Cable length = 600  $\pm$  20 minimum



## ELECTRICAL WIRING

Red	Power ⊕
Blue	Power 0 (V)
White	Output
Green	Case ground
Cable shield	NC