

OPTICAL CONTACTLESS TYPE

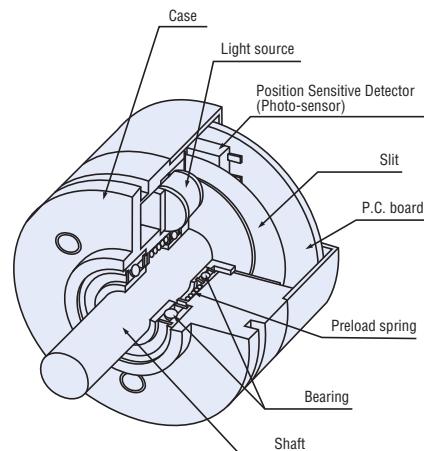
JT30 series



■ 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

Basic construction



Optical contactless single turn type

■ PART NUMBER DESIGNATION

J T 3 0 - 1 2 0 - 5 0 0

Series name

Effective electrical angle

120 : 120° 340 : 340°

Output

0 : 0.5 ~ 4.5 V (Standard)

Input voltage

5 : DC5 V C : DC12 V

■ 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.

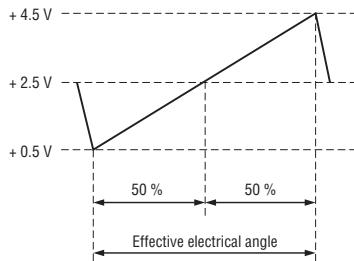
■ STANDARD SPECIFICATIONS

● Electrical characteristics

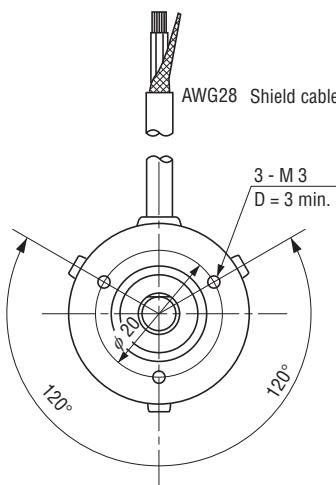
Input voltage	DC5 V ± 0.25 V	DC12 V ± 0.6 V		
Dissipation	40 mA maximum			
Effective electrical angle	120°	340°	120°	340°
Output voltage	+0.5 ~ +4.5 V			
Absolute linearity ※1	± 1.5 %FS	± 2.0 %FS	± 1.5 %FS	± 2.0 %FS
Temperature sensitivity	± 2.0 %FS ($\pm 1.0 \%FS/0 \sim 50^\circ C$)			
Temperature medium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

※1 At normal temp.

■ OUTPUT (cw)



■ OUTLINE DIMENSIONS



Cable length = 600 ± 20 minimum

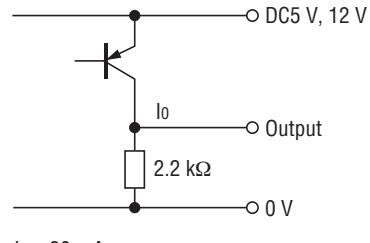
● Mechanical characteristics

Starting torque	0.245 mN·m {2.5 gf·cm} maximum (at normal temp.)
Maximum rotational speed	1500 min⁻¹
Mechanical angle	360° continuous
Rotational life	2×10^8 revolution (at 25 °C, 200 min⁻¹)
Vibration	294.2 m/s² {30 G} 30 ~ 200 Hz, 30 h
Shock	294.2 m/s² {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 CIRCUITRY



$I_o = 20$ mA max.

■ ELECTRICAL WIRING

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