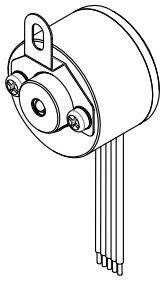
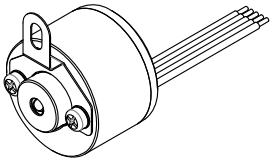
# K18 Specifications 1/3

## Incremental Type (Hollow shaft,blind hole)

- Feature: microminiature,logical compact configuration and easy to install
- Application: subminiature motor,small instrument,etc,for automation control
- External dimensions: external diameter Ø18mm,thickness 15.3mm,diameter of shaft Ø2.5mm
- Resolution: up to 1600P/R
- Supply voltage: DC5V; DC8-30V
- Protection: IP50
- Cable length: 150mm
- Weight: 20g



K18-J



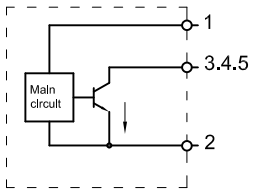
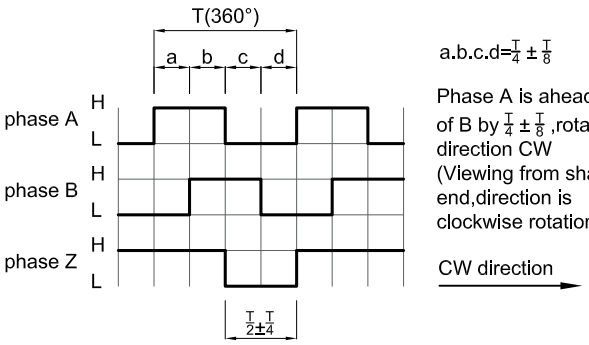
K18-L

## Model Guide

- Model form (filled required parameters in the box as following)
- Must choose supply voltage: DC5V; DC8-30V
- leaf spring Please refer to accessory at specifications 2/2

| K18– | J | 3 | N | 1024 | | |
|---|---|---|---|---|---|---|
| Product model series | J=Radial cable<br>L=Axial cable | Output phase<br>1=A<br>2=A+B<br>3=A+B+Z | Output type<br>N=OC<br>(low level effective)<br>NH=OC<br>(high level effective) | Pulse per revolution (P/R)<br>250; 256;<br>360; 400;<br>500; 512;<br>720; 800;<br>1000; 1024;<br>1440; 1600 | Diameter of shaft<br>Blank=Ø2.5mm<br>(depth 8mm) | Special requirement |

## ■ Output Mode

| Output type | Output circuit | Output wave form | Connection |
|---|---|---|---|
| OC |  |  | 1=red=DC5V; DC8-30V<br>2=black=OV<br>3=white=A<br>4=green=B<br>5=yellow=Z |

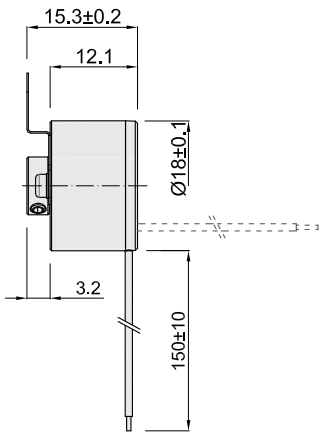
## ■ Electrical Characteristics

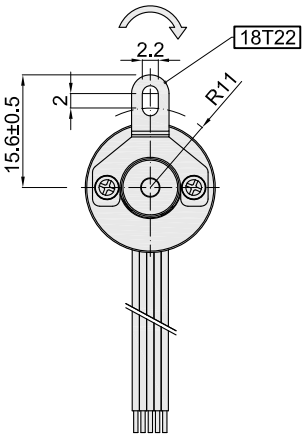
| | | |
|---|---|---|
| Supply voltage | | DC+5V±5%; DC8V-30V±5% |
| Consumption current | | 50mA Max |
| Output form | OC | Input current：≤30mA<br>Residual voltage：less than 0.5V |
| Rise.Fall time | | 100nsec Max |
| Top response frequency | | 100kHz Max |
| Output phase difference | | Phase A is ahead of B by 90°±45° |

## ■ Mechanical Characteristics

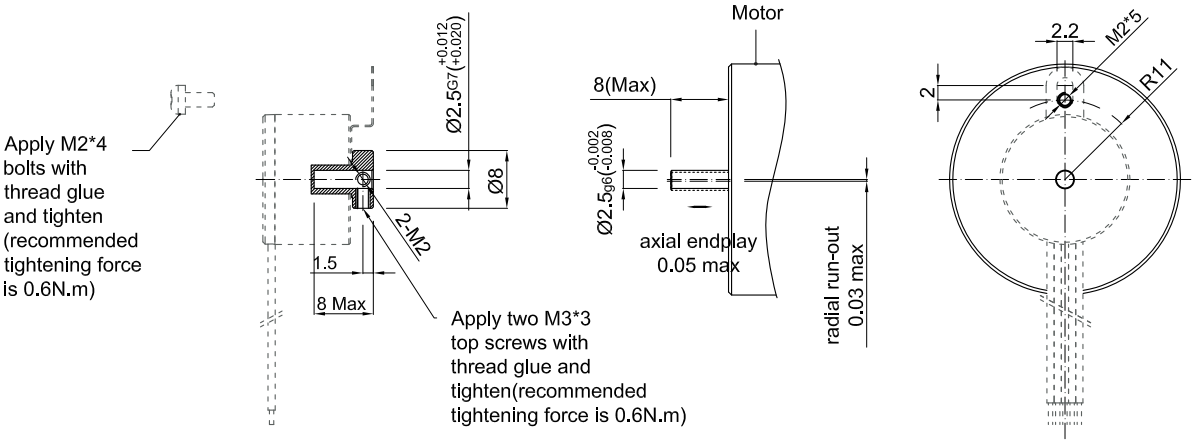
| | |
|---|---|
| Starting torque | Less than $5x10^{-4}$ N·M |
| Inertia moment | Less than $0.3\times10^{-6}$ kg·m² |
| Shaft load | Radial : 2N; axial : 2N |
| Top rev | 5000 rpm |
| Environmental temperature | Operating:－10～+70℃; storage:－15～+75℃ |
| Environmental humidity | Operating and storage: 35～85%RH (noncondensing) |
| Vibration (endure) | Amplitude 0.75mm,10～50Hz,1h for X,Y,Z direction individually |
| Shock (endure) | 49m/s²,three times for X,Y,Z direction individually |
| Material | Main body: aluminium alloy shaft: 304 |
| Weight | About 20g (with package) |

## Basic Dimensions



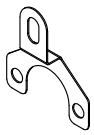



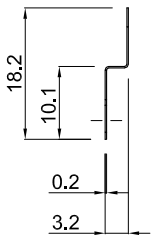

## Assembling requirement

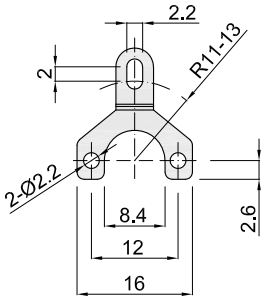



## Accessory(Need purchase additionally)

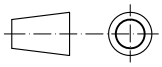
18T22
No:3700144






Unit: mm



18T22 = Leaf Spring

= Rotate direction of signal output shaft