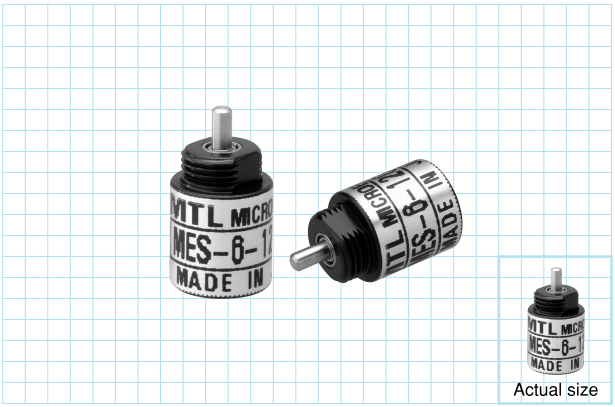
# MES-6-P series

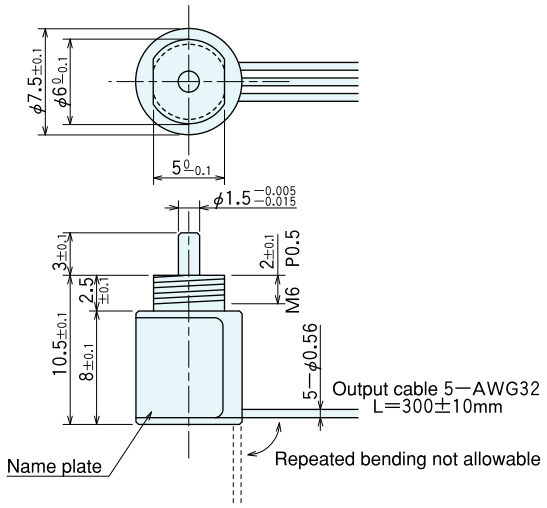
[Square Wave/Incremental]



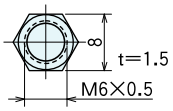

KANAGAWA HIGH-TECH. GRAND-PRIX

19th Kanagawa High-tech Grand-prix
Product that won the grand prize

## Outside dimensions




Accessory (lock nut)

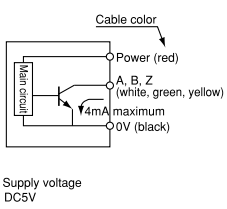



## Specifications

| Item | | Type name: MES-6-□PC (□: Pulse number) |
|---|---|---|
| Supply voltage | | DC5V ±10% |
| Current consumption | | 30mA or less (under no load) |
| Detection system | | Incremental |
| Output | Output pulse number (Standard) [Pulse number/rotation] | 100<br>120<br>200<br>300<br>360 |
| Output | Output phase | A, B, Z phase |
| Output | Output form | Square wave, open collector output |
| Output | Output capacity | Sink current: 4mA (output voltage resistance 7V)<br>Residual voltage: 0.4V or less |
| Output | Maximum response frequency (response pulse number) | 100kHz |
| Output | Output phase difference | A, B phase difference 90°±45° (T/4±T/8)<br>Z phase T±T/2(see Output Waveform) |
| Output | Waveform rise/fall time | 2μs or less (output cable 300mm or less) |
| Starting torque | | 0.3×10⁻³N·m (3gf·cm) or less |
| Allowable load of shaft (electrical) | Radial | 1.9N (200gf) |
| Allowable load of shaft (electrical) | Thrust | 0.98N (100gf) |
| Maximum allowable revolutions (mechanical) | | 6000r/min |
| Working ambient temperature/ humidity | | 0°C~60°C<br>RH35%~90% no dewing |
| Storing ambient temperature | | -20°C~80°C |
| Vibration resistance | | Durability 55Hz, double amplitude 1.5mm<br>2 hours each in X, Y, and Z directions |
| Impact resistance | | Durability 500m/s² (about 50G)<br>3 times each in X, Y, and Z directions |
| Cable | | Vinyl wire (AWG32)<br>Cable length 300mm |
| Mass | | 5g |

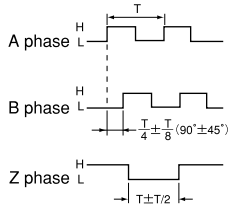
## Output circuit diagram

Open collector output

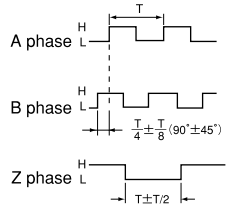



## Output waveform

CW rotation (CW rotation as seen from fit surface)




CCW rotation (CCW rotation as seen from fit surface)




*The position of Z phase against A, B phase is not specified.