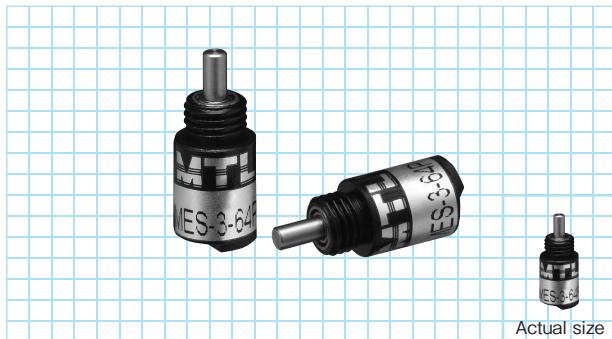


MES-3P series

[Square Wave/Incremental]

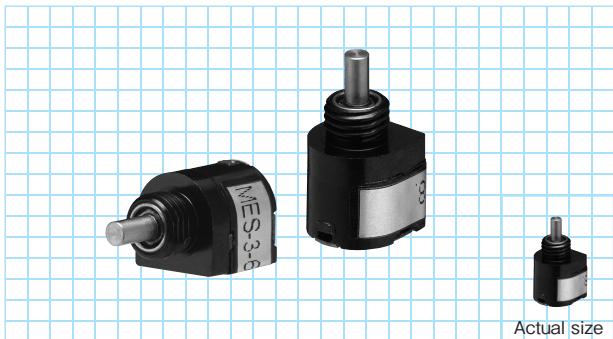


Specifications

| Type name | | MES-3-64P |
|---|--|---|
| Item | | |
| Supply voltage | | DC3.2±0.1V |
| Current consumption | | 15mA or less |
| Detection system | | Incremental |
| Output capacity | Output pulse number (Standard) (Pulse number/rotation) | 64P/R, 100P/R |
| Output phase | | A, B, Z phase |
| Output form | | Square wave, Voltage output |
| Output | Output capacity | Signal Type : C-MOS Compatible Current : IOL =+8mA, IOH=-2mA Voltage : VOL≤0.3V(at IOL=+1mA) VOH≥Vcc-0.3V (at IOL=-1mA) Load Voltage : 3.3V max(≤Vcc) |
| Maximum response frequency (response pulse number) | | 100kHz |
| Output phase difference | | A, B phase difference : T/4±T/8 Z phase:T±0.5T |
| Waveform rise/fall time | | 2μs or less (At150mm flex. cable +300mm AWG30 cable) |
| Starting torque | | 5×10 ⁻⁴ N·m or less(5gf·cm) or less |
| Allowable load of shaft (electrical) | Radial | 0.98N(100gf) |
| | Thrust | 0.98N(100gf) |
| Maximum allowable revolutions (mechanical) | | 6,000rpm |
| Working ambient temperature/ humidity | | 0°C~60°C RH35%~90% no dewing |
| Storing ambient temperature | | -20°C~80°C |
| Vibration resistance | | Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions |
| Impact resistance | | Durability 500m/s ² (about 50G) 3 times each in X, Y, and Z directions |
| Cable | | Flexible cable:About 150mm in length |
| Mass | | 5g(include a flexible cable) |

MES-3PST series

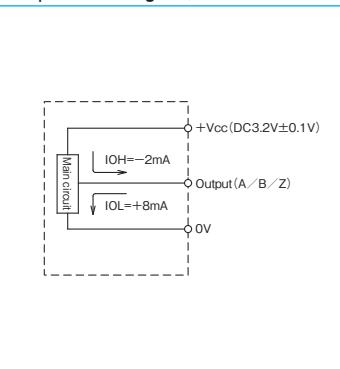
[Square Wave/Incremental]



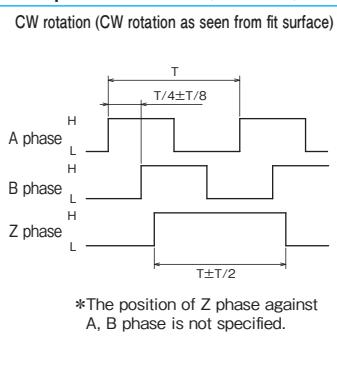
Specifications

| Type name | | MES-3-64PST16 |
|---|--|---|
| Item | | |
| Supply voltage | | DC3.2±0.1V |
| Current consumption | | 20mA or less |
| Detection system | | Incremental |
| Output capacity | Output pulse number (Standard) (Pulse number/rotation) | 1024P/R (64P/R × 16 inner interpolatory) |
| Output phase | | A, B, Z phase |
| Output form | | Square wave, Voltage output |
| Output | Output capacity | Signal Type : C-MOS Compatible Current : IOL =+8mA, IOH=-2mA Voltage : VOL≤0.3V(at IOL=+1mA) VOH≥Vcc-0.3V (at IOL=-1mA) Load Voltage : 3.3V max(≤Vcc) |
| Maximum response frequency (response pulse number) | | 100kHz |
| Output phase difference | | A/B phase difference : T/4±T/8 phase deviation : T±0.35T Z width : 1T |
| Waveform rise/fall time | | 2μs or less (At150mm flex. cable +300mm AWG30 cable) |
| Starting torque | | 5×10 ⁻⁴ N·m or less(5gf·cm) or less |
| Allowable load of shaft (electrical) | Radial | 0.98N(100gf) |
| | Thrust | 0.98N(100gf) |
| Maximum allowable revolutions (mechanical) | | 6,000rpm |
| Working ambient temperature/ humidity | | 0°C~60°C RH35%~90% no dewing |
| Storing ambient temperature | | -20°C~80°C |
| Vibration resistance | | Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions |
| Impact resistance | | Durability 500m/s ² (about 50G) 3 times each in X, Y, and Z directions |
| Cable | | Flexible cable:About 150mm in length |
| Mass | | 5g(include a flexible cable) |

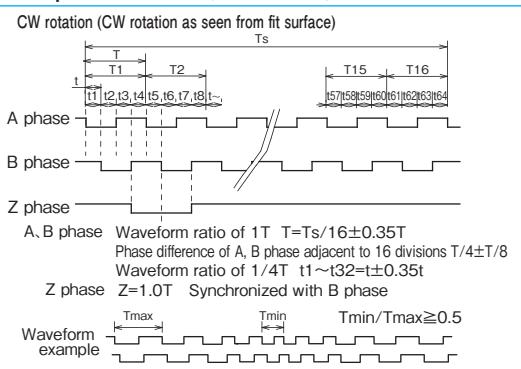
Output circuit diagram(ME-3P, ME-3PST)



Output waveform (ME-3P)

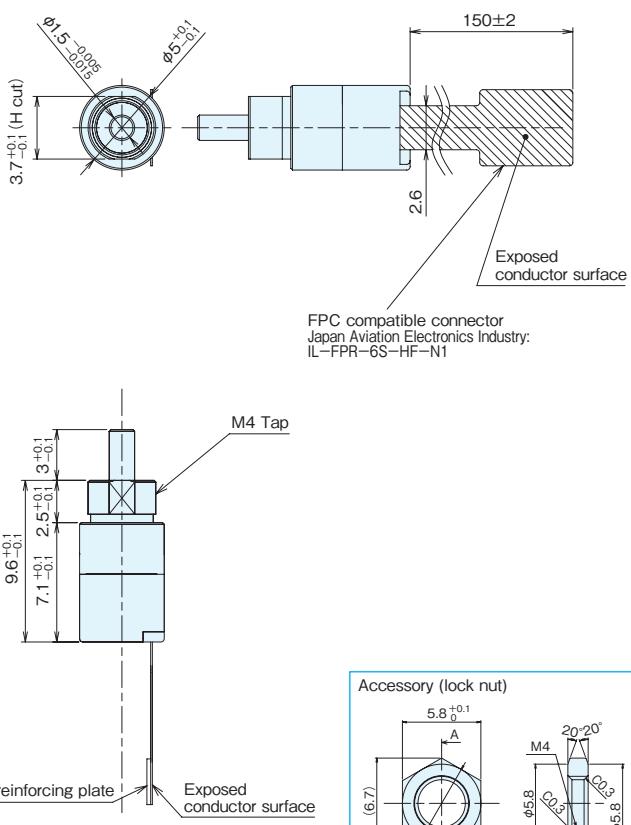


Output waveform (ME-3PST)



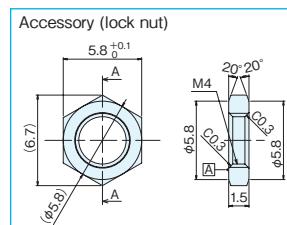
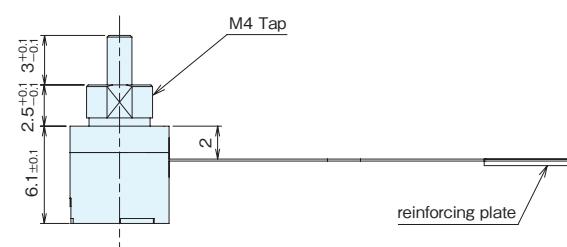
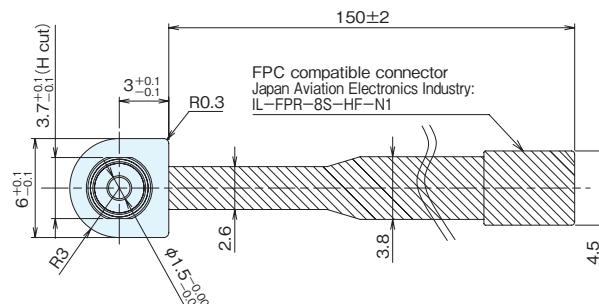
Outside dimensions

MES-3P

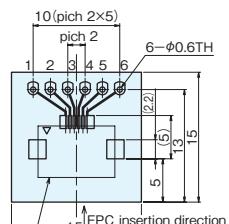


Outside dimensions

MES-3PST



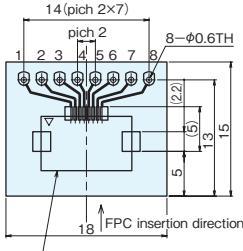
Connection board (accessory)



Connector
Japan Aviation Electronics Industry: IL-FPR-6S-HF-N1

| Wiring list | |
|-------------|------------------|
| TH No. | Signal name |
| 1 | Vcc(DC3.2V±0.1V) |
| 2 | Z phase |
| 3 | 0V |
| 4 | A phase |
| 5 | B phase |
| 6 | 0V |

Connection board (accessory)



Connector
Japan Aviation Electronics Industry: II -EPR-8S-HF-N1

| Wiring list | |
|-------------|------------------|
| TH No. | Signal name |
| 1 | Vcc(DC3.2V±0.1V) |
| 2 | No connection |
| 3 | No connection |
| 4 | Vcc(DC3.2V±0.1V) |
| 5 | Z phase |
| 6 | B phase |
| 7 | A phase |
| 8 | 0V |