

MES-3P series

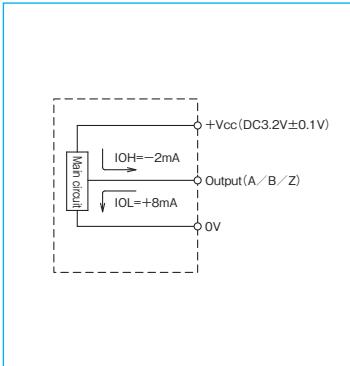
[Square Wave/Incremental]



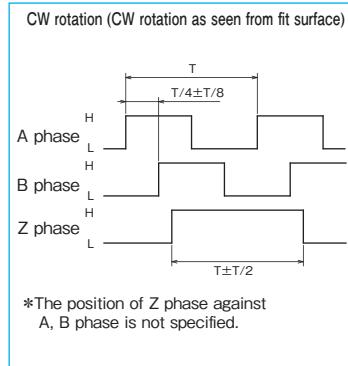
Specifications

Type name	MES-3-64P	
Item		
Supply voltage	DC3.2±0.1V	
Current consumption	15mA or less	
Detection system	Incremental	
Output		
Output pulse number (Standard) [Pulse number/rotation]	64P/R, 100P/R	
Output phase	A, B, Z phase	
Output form	Square wave, Voltage(C-MOS) output	
Output capacity	CMOS output: Output current $IOL=+8mA$, $IOH=-2mA$ Output voltage: $VOL\leq 0.3V$ (when $IOL=+1mA$) $VOH\geq Vcc-0.3V$ (when $IOH=-1mA$) Output withstand voltage: 3.3V or less (power supply voltage or less)	
Maximum response frequency (response pulse number)	100kHz	
Output phase difference	A, B phase difference: $T/4\pm T/8$ Z phase $T\pm 0.5T$	
Waveform rise/fall time	$2\mu s$ or less (When 150mm flexible cable extended using 300mm AWG30 cable)	
Allowable load of shaft (electrical)	Radial	0.98N(100gf)
	Thrust	0.98N(100gf)
Maximum allowable revolutions (mechanical)	6,000rpm	
Working ambient temperature/ humidity	$0^{\circ}C\sim 60^{\circ}C$ RH35%~90% no dewing	
Storing ambient temperature	$-20^{\circ}C\sim 80^{\circ}C$	
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: Length approx. 150mm	
Mass	5g (including flexible cable)	

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

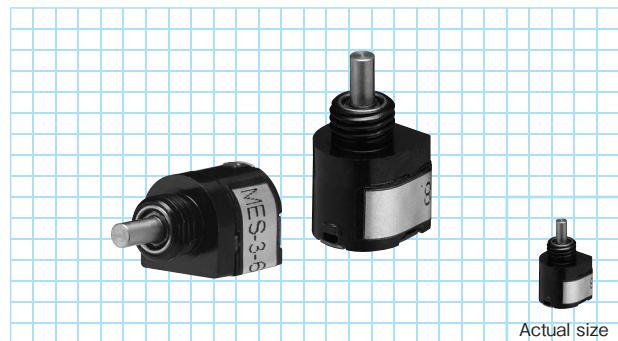


Output waveform (ME-3P)



MES-3PST series

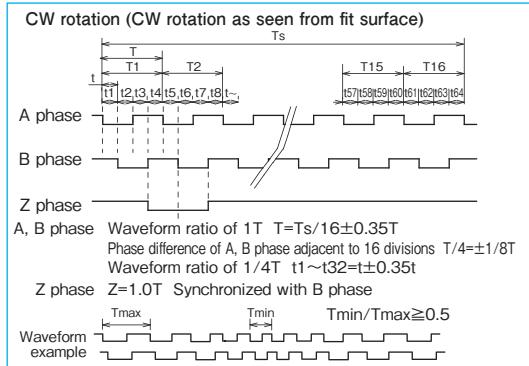
[Square Wave/Incremental]



Specifications

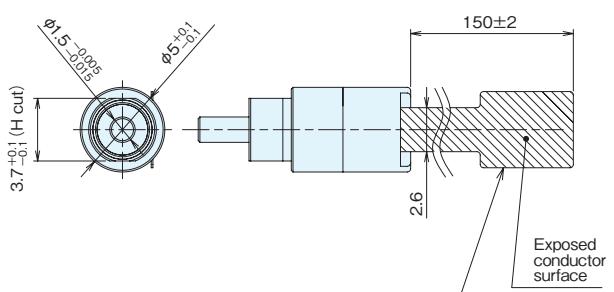
Type name	MES-3-64PST16	
Item		
Supply voltage	DC3.2±0.1V	
Current consumption	20mA or less	
Detection system	Incremental	
Output		
Output pulse number (Standard) [Pulse number/rotation]	1024 pulse/rotation (64 pulses/rotation multiplied ×16 electrically)	
Output phase	A, B, Z phase	
Output form	Square wave, Voltage(C-MOS) output	
Output capacity	CMOS output: Output current $IOL=+8mA$, $IOH=-2mA$ Output voltage: $VOL\leq 0.3V$ (when $IOL=+1mA$) $VOH\geq Vcc-0.3V$ (when $IOH=-1mA$) Output withstand voltage: 3.3V or less (power supply voltage or less)	
Maximum response frequency (response pulse number)	100kHz	
Output phase difference	Phase difference between neighboring A/B phases: $T/4\pm T/8$ Waveform ratio of 1T: $T\pm 0.35T$ Z phase width: 1T (Synchronized with 1T of B phase)	
Waveform rise/fall time	$2\mu s$ or less (When 150mm flexible cable extended using 300mm AWG30 cable)	
Allowable load of shaft (electrical)	Radial	0.98N(100gf)
	Thrust	0.98N(100gf)
Maximum allowable revolutions (mechanical)	6,000rpm	
Working ambient temperature/ humidity	$0^{\circ}C\sim 60^{\circ}C$ RH35%~90% no dewing	
Storing ambient temperature	$-20^{\circ}C\sim 80^{\circ}C$	
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: Length approx. 150mm	
Mass	5g (including flexible cable)	

Output waveform (ME-3PST)

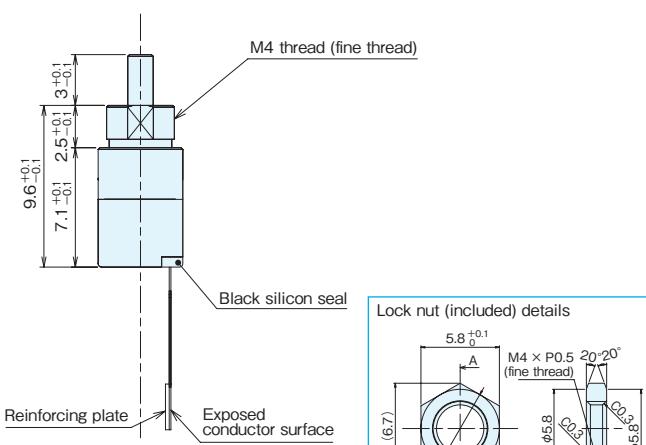


Outside dimensions

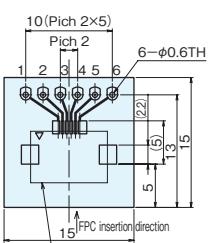
MES-3P



Connector for matching FPC connection
Japan Aviation Electronics Industry IL-FPR-6S-HF-N1



Terminal board (included) details



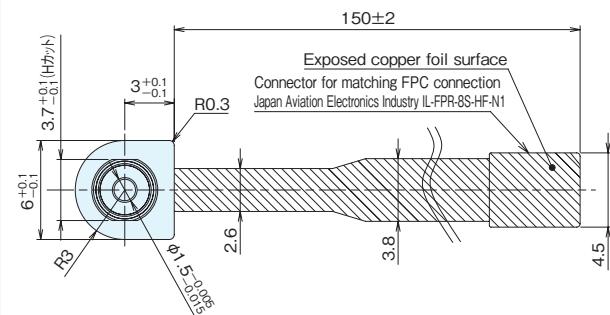
Connector: Japan Aviation Electronics Industry IL-FPR-6S-HF-N1

Wiring chart

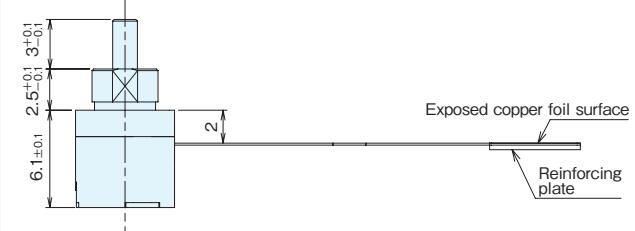
TH No.	Signal name
1	Vcc(DC3.2V±0.1V)
2	Z phase output
3	0V
4	A phase output
5	B phase output
6	0V

Outside dimensions

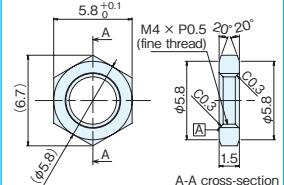
MES-3PST



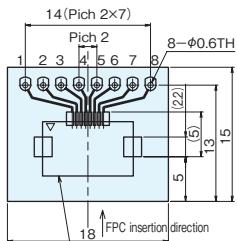
Exposed copper foil surface
Connector for matching FPC connection
Japan Aviation Electronics Industry IL-FPR-8S-HF-N1



Terminal board (included) details



Terminal board (included) details



Connector: Japan Aviation Electronics Industry IL-FPR-8S-HF-N1

Wiring chart

TH No.	Signal name
1	Vcc(DC3.2V±0.1V)
2	N.C. (Not connected)
3	N.C. (Not connected)
4	Vcc(DC3.2V±0.1V)
5	Z phase output
6	B phase output
7	A phase output
8	0V