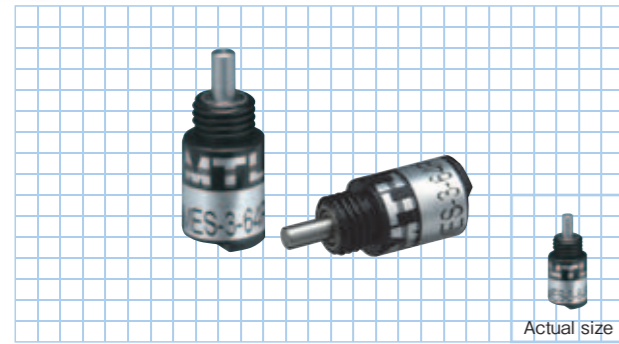


MES-3P series

[Square Wave/Incremental]



MES-3PST series

[Square Wave/Incremental]



Specifications

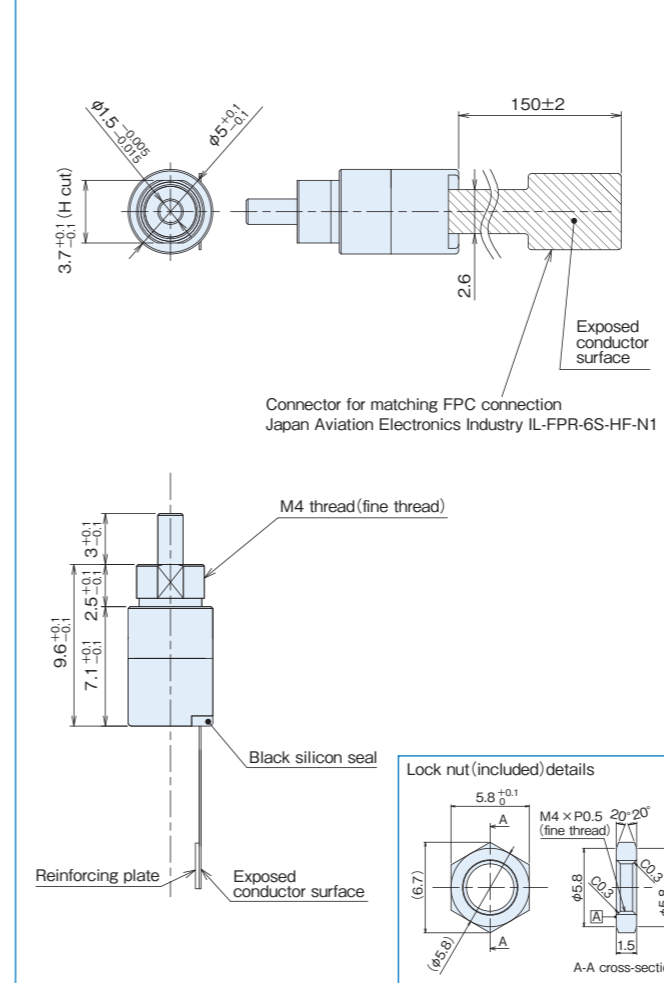
Item	Type name	MES-3-64P
Supply voltage		DC3.2±0.1V
Current consumption		15mA or less
Detection system		Incremental
Output pulse number (Standard) [Pulse number/rotation]		64P/R, 100P/R
Output phase		A, B, Z phase
Output form		Square wave, Voltage (C-MOS) output
Output capacity		CMOS output: Output current IOL=+8mA, IOH=-2mA Output voltage: VOL≤0.3V (when IOL=+1mA) VOH≥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±T/8 Z phase T±0.5T
Waveform rise/fall time		2μs 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)		6,000r/min
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: Length approx. 150mm
Mass		5g (including flexible cable)

Specifications

Item	Type name	MES-3-64PST16
Supply voltage		DC3.2±0.1V
Current consumption		20mA or less
Detection system		Incremental
Output pulse number (Standard) [Pulse number/rotation]		1,024 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≤0.3V (when IOL=+1mA) VOH≥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 ± T/8 Waveform ratio of 1T: T ± 0.35T Z phase width: 1T (Synchronized with 1T of B phase)
Waveform rise/fall time		2μs 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)		6,000r/min
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: Length approx. 150mm
Mass		5g (including flexible cable)

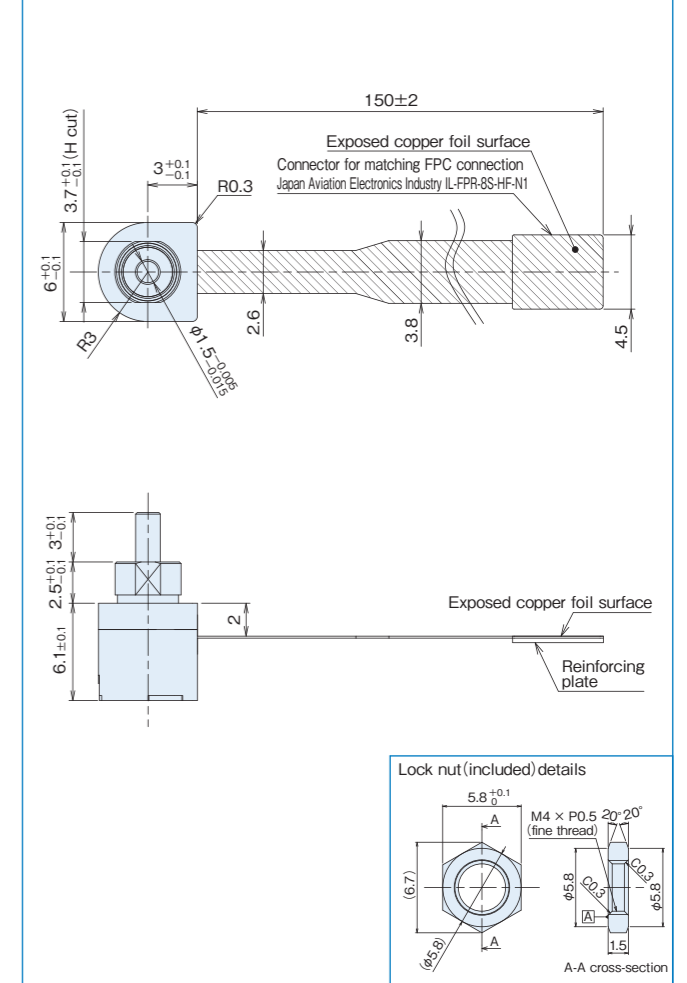
Outside dimensions

MES-3P

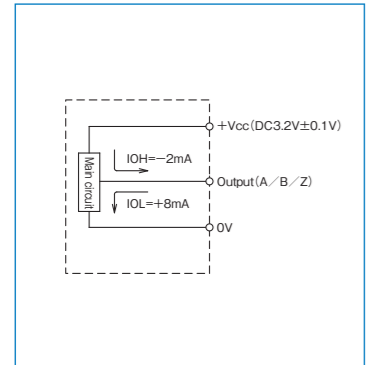


Outside dimensions

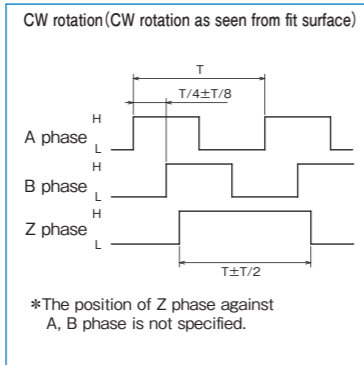
MES-3PST



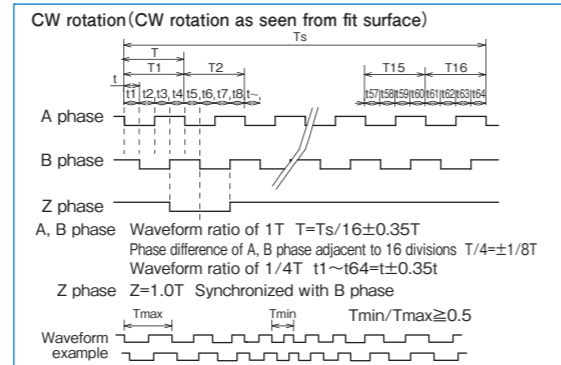
Output circuit diagram (ME-3P, ME-3PST)



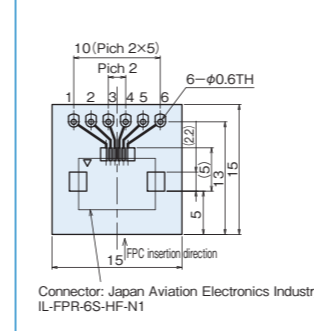
Output waveform (ME-3P)



Output waveform (ME-3PST)



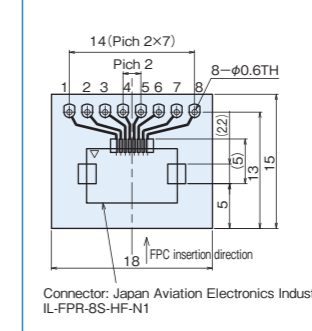
Terminal board (included) details



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

Terminal board (included) details



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