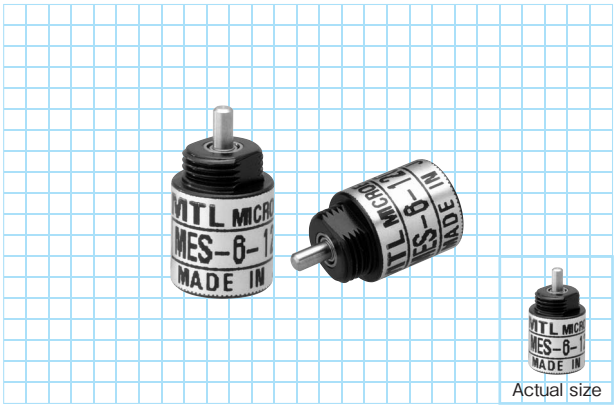
MES-6-P series

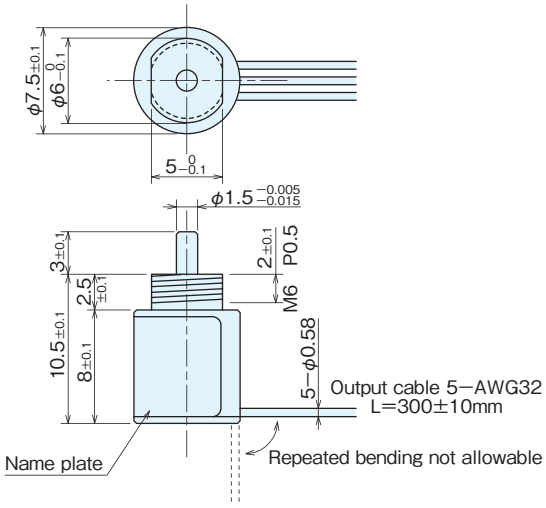
[Square Wave/Incremental]



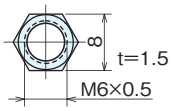
KANAGAWA HIGH-TECH. GRAND-PRIX

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

Outside dimensions



Accessory (lock nut)

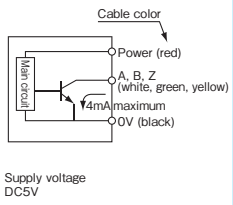


Specifications

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]	100 300 120 360 200 500
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) 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) Z phase T±T/2(see Output Waveform)
Output	Waveform rise/fall time	2μs or less (output cable 300mm or less)
Allowable load of shaft (electrical)	Radial	1.9N(200gf)
Allowable load of shaft (electrical)	Thrust	0.98N(100gf)
Maximum allowable revolutions (mechanical)		6,000r/min
Working ambient temperature/ humidity		0℃~60℃ RH35%~90% no dewing
Storing ambient temperature		−20℃~80℃
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		Vinyl wire (AWG32) Cable length 300mm
Mass		5g

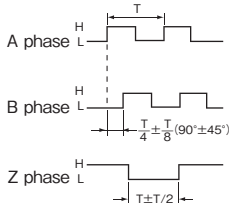
Output circuit diagram

Open collector output

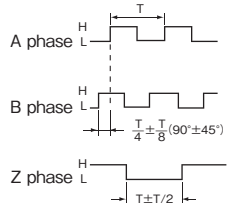


Output waveform

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.