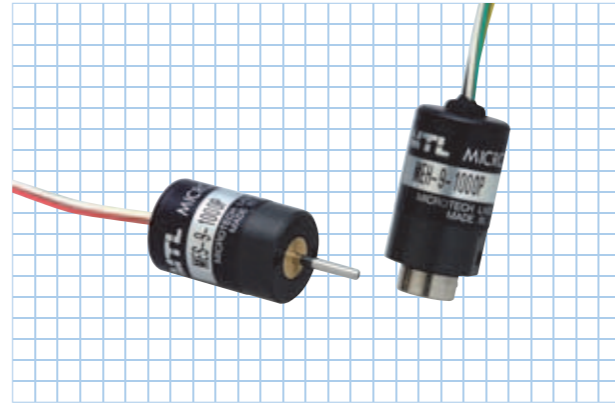


ME-9-P series

[Square Wave/Incremental]



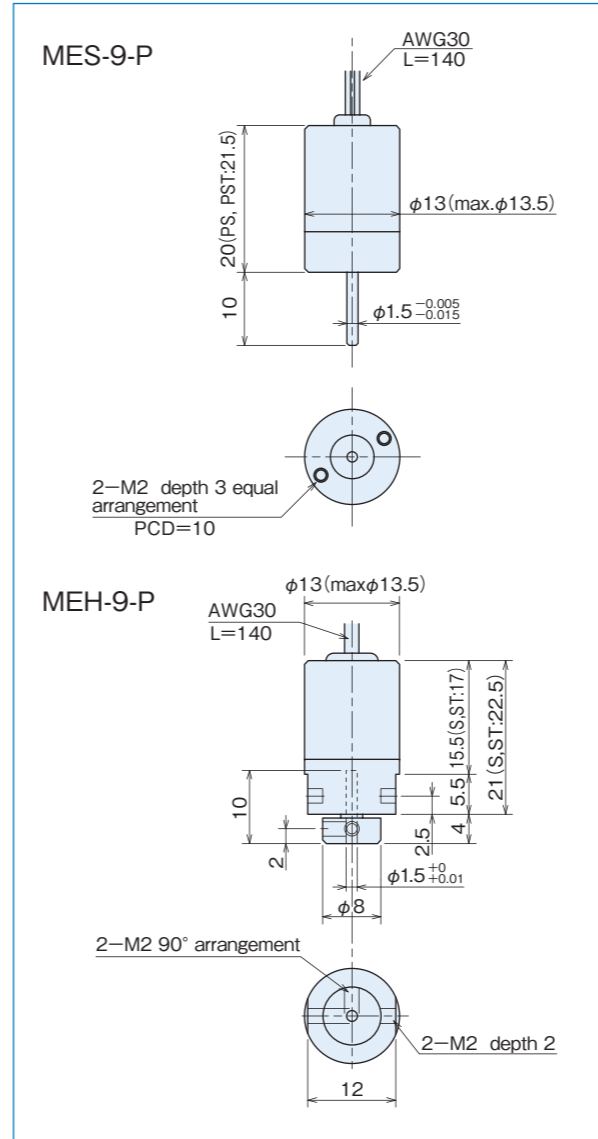
Specifications

Item	Type name		
	ME <input type="checkbox"/> -9- <input type="checkbox"/> P <input type="checkbox"/>		
	Shaft shape ●S=single shaft ●H=hollow shaft	Pulse number ●Noentry=Voltage output ●C=open collector output ●E=line driver output	
		Output circuit ●ST <input type="checkbox"/> (2-4-8-16)	
	Square wave	Built-in multiplication circuit (x2·x4·x8·x16)	
Supply voltage	DC5V ±10%	DC5V ±5%	
Current consumption	40mA or less (under no load)	50mA or less (under no load)	
Detection system	Incremental	Incremental	
Output pulse number (Standard)	32, 100, 200, 256	900 (*), 1,000 (*), 1,024	
[Pulse number/rotation]		EX 1,000×2 (2,000), 1,000×4 (4,000), 1,000×8 (8,000), 1,000×16 (16,000)	
Output phase	A, B, Z phase (Z="H")	A, B, Z phase	
Output form	Square wave	Square wave	
Output capacity	Sink current:20mA Residual voltage:0.5V or less (at 10mA) Open collector output:Load voltage DC13.2V max	Sink current:20mA max. Residual voltage:0.5V or less (at 10mA) Open collector output:Load voltage DC13.2V max	
Maximum response frequency (response pulse number)	100kHz	Open collector output:100kHz Line driver output:50kHz× (by multiplication)	
Output phase difference	A, B phase difference 90°±45° (T/4±T/8) Z phase T±T/2 (see Output Waveform)	Refer to the figure on the right	
Waveform rise/fall time	2μs or less (output cable 140mm or less)	1μs or less (output cable 140mm or less)	
Allowable load of shaft (electrical)	Radial	1.9N (200gf), 0.98N (100gf)	0.98N (100gf)
	Thrust	1.9N (200gf), 0.98N (100gf)	0.98N (100gf)
Maximum allowable revolutions (mechanical)	6,000r/min	6,000r/min	
Working ambient temperature/humidity	0°C~60°C RH35%~90% no dewing	0°C~60°C RH35%~90% no dewing	
Storing ambient temperature	-20°C~80°C	-20°C~80°C	
Vibration resistance	Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions	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	Durability 500m/s ² (about 50G) 3 times each in X, Y, and Z directions	
Cable	Voltage-Open collector:Vinyl wire (AWG30) Cable length 140mm Line driver-Vinyl wire (AWG32) Cable length 330	Open collector:Vinyl wire (AWG30) Cable length 140mm Line driver-Vinyl wire (AWG32) Cable length 330	
Mass	10g	20g	

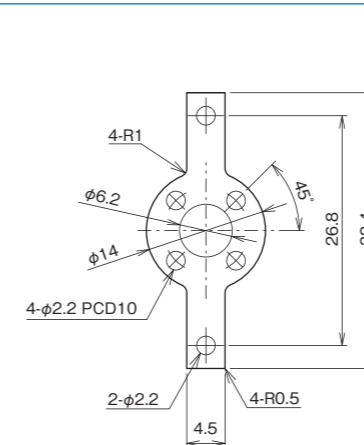
*Handled by built-in multiplier circuit

Note: Types with a built-in internal multiplier circuit do not support voltage output

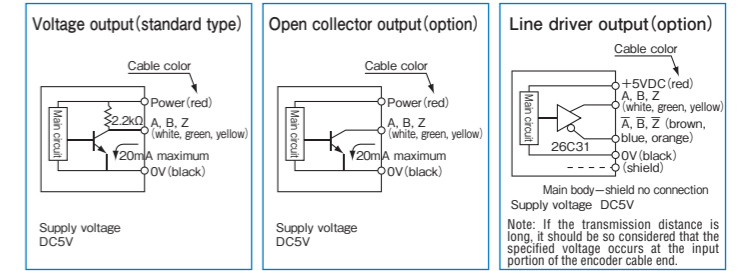
Outside dimensions



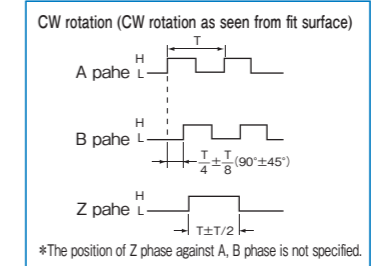
Spring flange MEH-9 (Included)



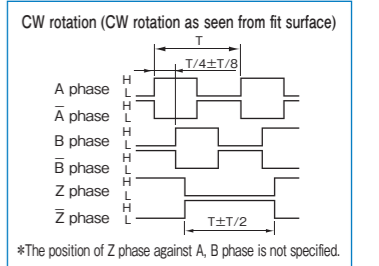
Output circuit diagram (Square wave)



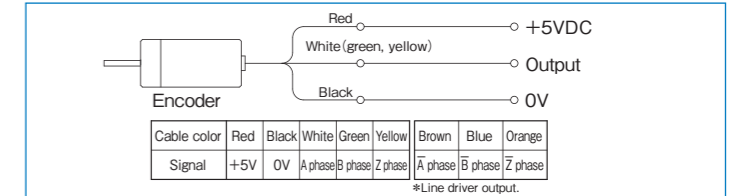
Output waveform (Square wave) Voltage/Open collector



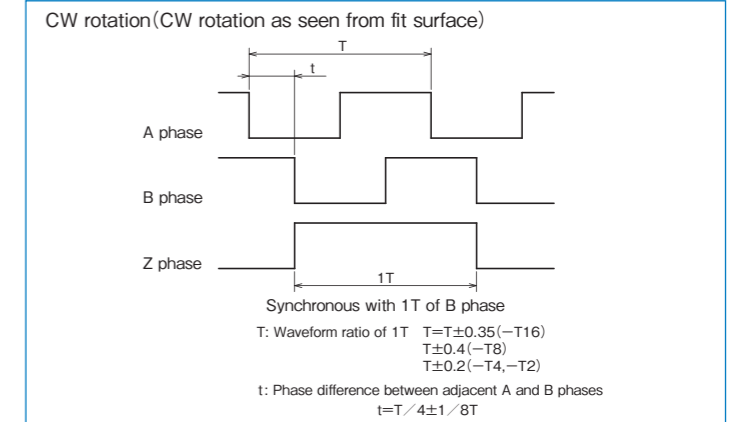
Output waveform (Square wave) Line driver



Output connection diagram / Built-in multiplication circuit (x2·x4·x8·x16)



Output waveform Open collector output / Built-in multiplication circuit (x2·x4·x8·x16)



Output waveform Line driver output / Built-in multiplication circuit (x2·x4·x8·x16)

