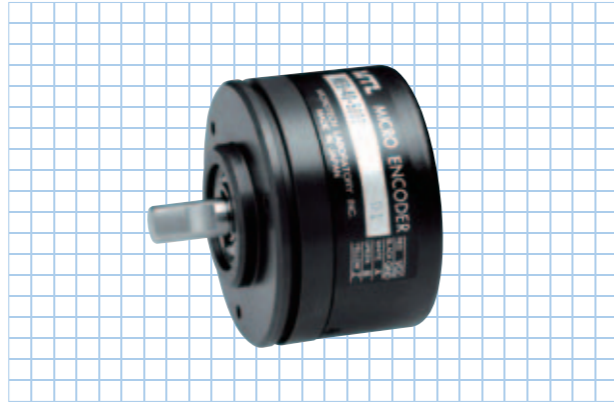


MES-40-P series

[Square Wave/Incremental]

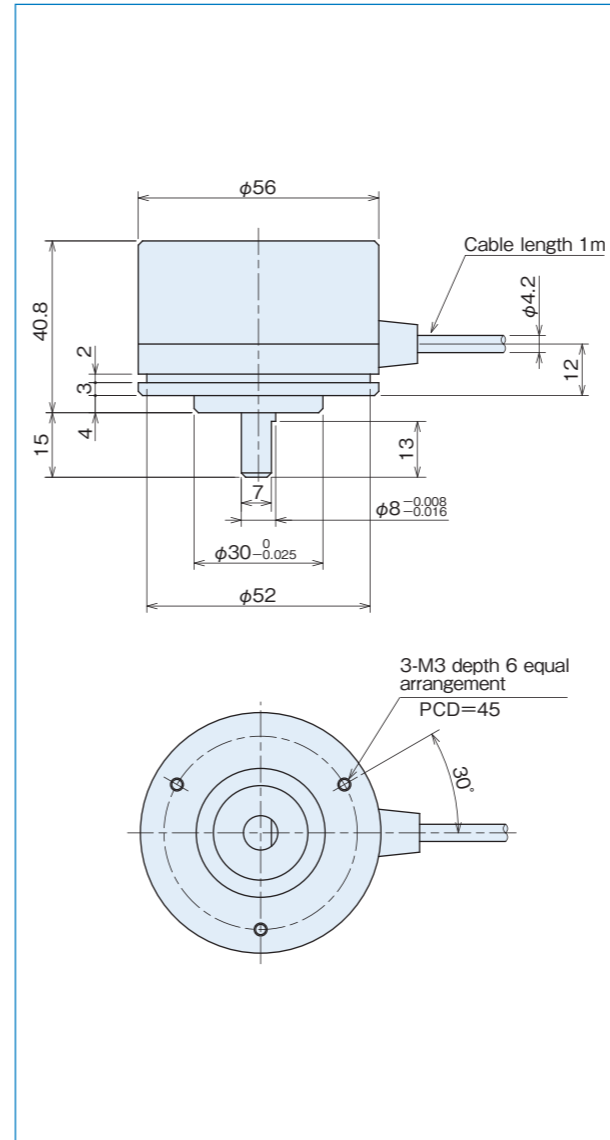


Specifications

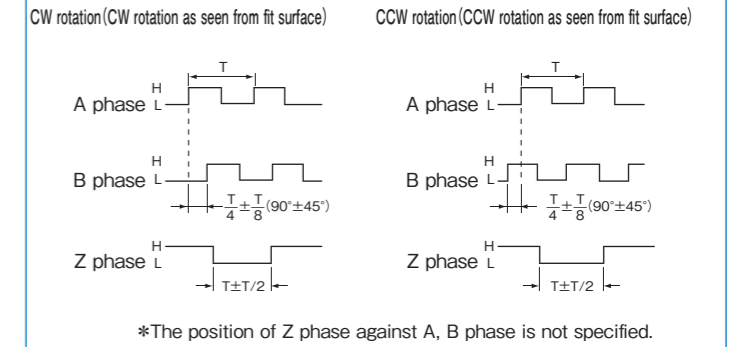
Item	Type name			
	MES-40-□P□	□		
	Pulse number Output circuit ●No entry=voltage output ●C=open collector output ●C4=open collector output DC24V	●E=line driver output ●ST□(2·4·5·8·10·16·20)		
	Square wave	Built-in multiplication circuit (x2·x4·x5·x8·x10·x16·x20)		
Supply voltage	Voltage/Open collector:DC5V-5%~12V+10% Open collector DC24V:DC24V±10% Line driver:DC5V±10%	Voltage:DC5V-5%~12V+10% Open collector:DC5V-5%~24V+15% Line driver:DC5V±5%		
Current consumption	50mA or less (under no load)	100mA or less (under no load)		
Detection system	Incremental	Incremental		
Output	Output pulse number (Standard) [Pulse number/rotation]	100 600 2,048 8,192(*) 200 720 2,500 9,000(*) 250 800 3,000 10,000(*) 256 1,000 3,600(*) 300 1,024 4,000(*) 360 1,200 4,096(*) 400 1,500 5,000(*) 500 1,800 5,400(*) 512 2,000(*) 6,000(*)	EX 10,000x2 (20,000) 10,000x4 (40,000) 10,000x5 (50,000) 10,000x8 (80,000) 10,000x10 (100,000) 10,000x16 (160,000) 10,000x20 (200,000)	
	Output phase	A, B, Z phase	A, B, Z phase	
	Output form	Square wave	Square wave	
	Output capacity	Sink current:20mA Residual voltage:0.5V or less (at 10mA)	-	
	Maximum response frequency (response pulse number)	100kHz	Line driver output:50kHz×(by multiplication) Open collector output:100kHz	
	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 1m or less)	-	
	Allowable load of shaft (electrical)	Radial	49N (5kgf)	49N (5kgf)
		Thrust	29.4N (3kgf)	29.4N (3kgf)
	Maximum allowable revolutions (mechanical)	6,000r/min	6,000r/min	
Working ambient temperature/humidity	-10°C~70°C RH35%~90% no dewing	-10°C~70°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	Outside diameter φ4.2 5-core vinyl wire AWG28 Insulated shield cable (length 1m)	Outside diameter φ4.2 5-core vinyl wire AWG28 Insulated shield cable (length 1m)		
Mass	200g	200g		

*Handled by built-in multiplier circuit

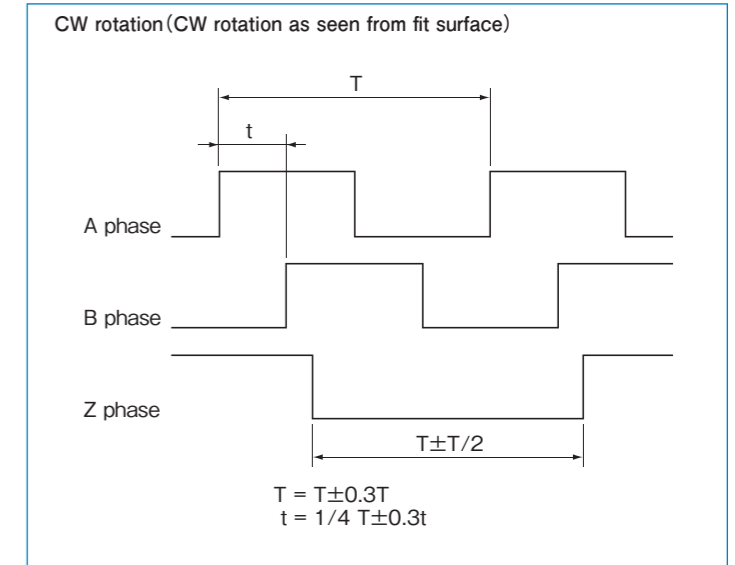
Outside dimensions



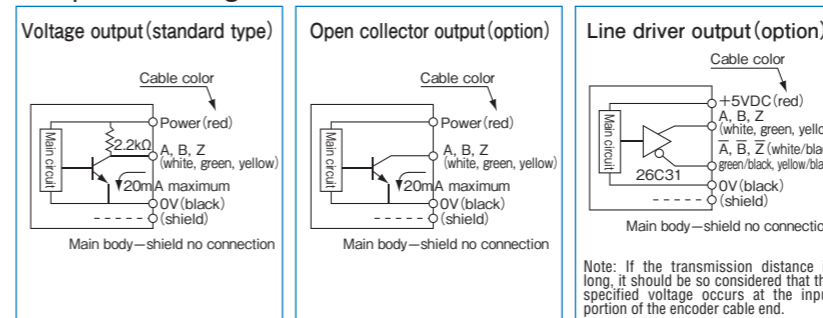
Output waveform (Square wave)



Output waveform/Built-in multiplication circuit (x2·x4·x5·x8·x10·x16·x20)



Output circuit diagram



A capacitor (0.1μF) is connected between 0V and FG (frame ground).