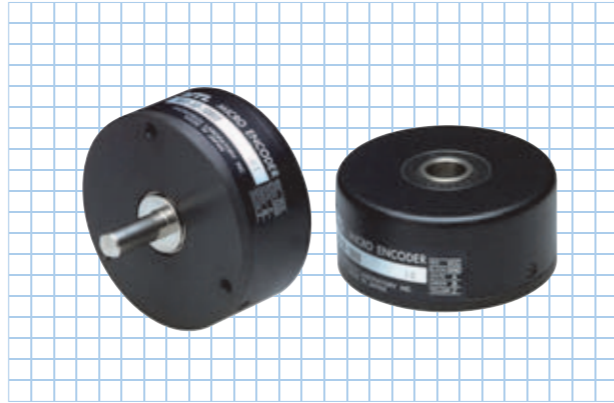


ME-50-P series

[Square Wave/Incremental]

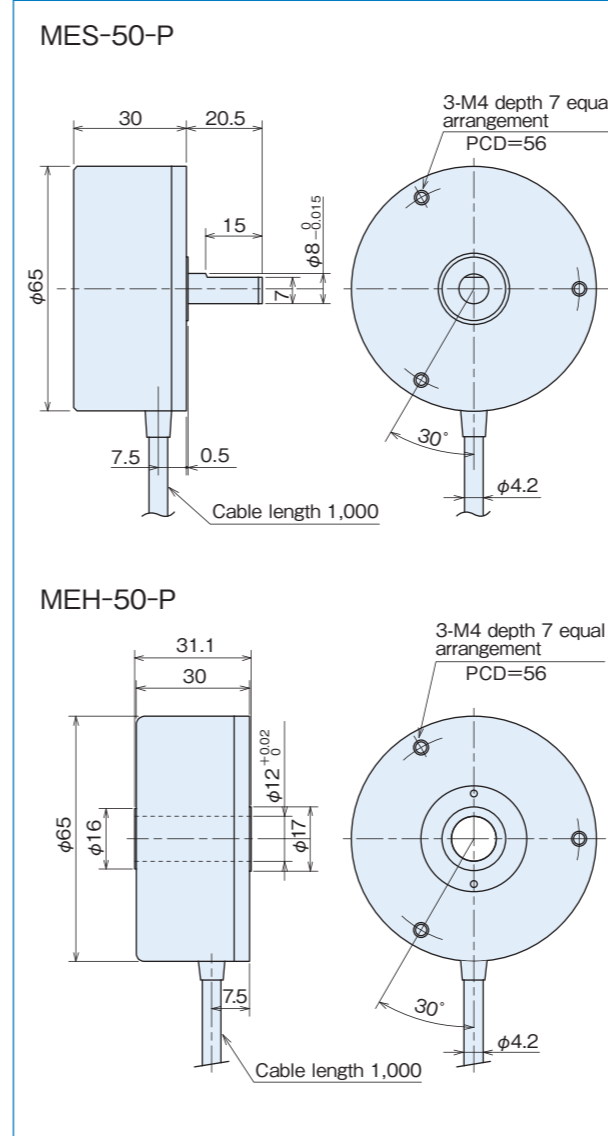


Specifications

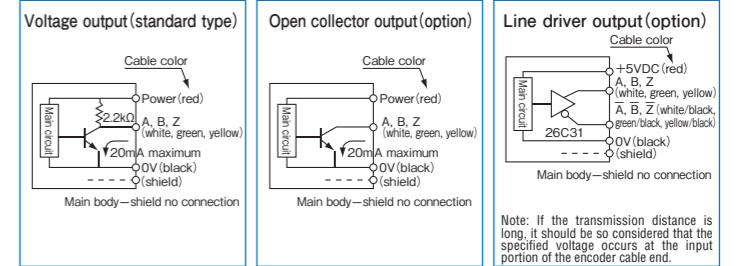
Type name		ME□-50-□P□							
Item		Shaft shape		Pulse number		Output circuit		ST□ (2·4·5·8·10·16·20)	
		●S=single shaft ●H=hollow shaft		●No entry=voltage output ●C=open collector output ●C4=open collector output DC24V		●E=line driver output		●ST□ (2·4·5·8·10·16·20)	
		Square wave				Built-in multiplication 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±5%				Voltage:DC5V-5%~12V+10% Open collector:DC5V-5%~24V+10% Line driver:DC5V±5%			
Current consumption		60mA or less (under no load)				100mA or less (under no load)			
Detection system		Incremental				Incremental			
Output pulse number (Standard) [Pulse number/rotation]		500	2,000	5,000(*)	10,800(*)	EX 10,000×2 (20,000) 10,000×4 (40,000) 10,000×5 (50,000) 10,000×8 (80,000) 10,000×10 (100,000) 10,000×16 (160,000) 10,000×20 (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		9.8N (1kgf)		9.8N (1kgf)		9.8N (1kgf)	
		Thrust		9.8N (1kgf)		4.9N (0.5kgf)		4.9N (0.5kgf)	
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		220g				220g			

*Handled by built-in multiplier circuit

Outside dimensions

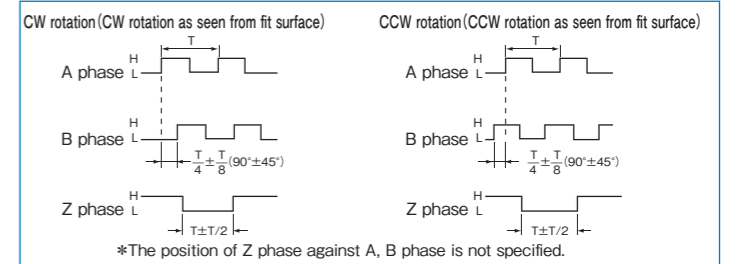


Output circuit diagram

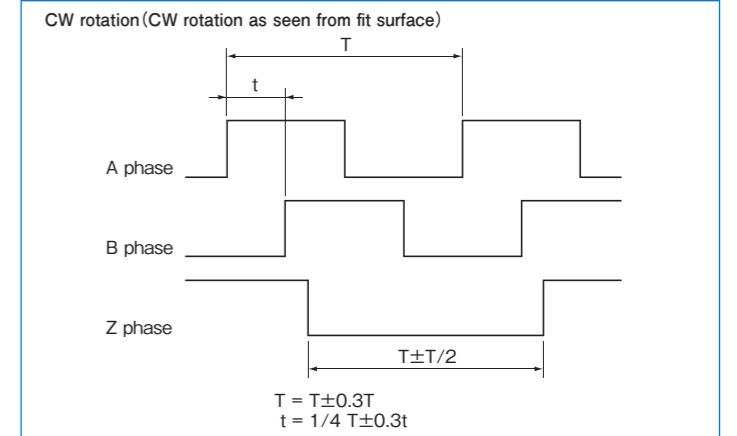


A capacitor (0.1μF) is connected between 0V and FG (frame ground).

Output waveform (Square wave)



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



Spring flange MEH-50 (Option)

