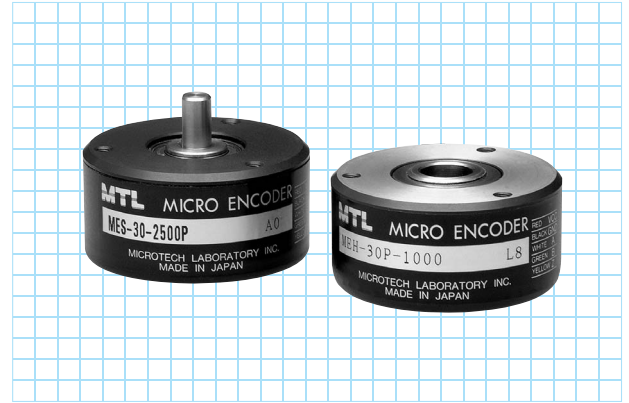


ME-30-P series

[Square Wave/Incremental]



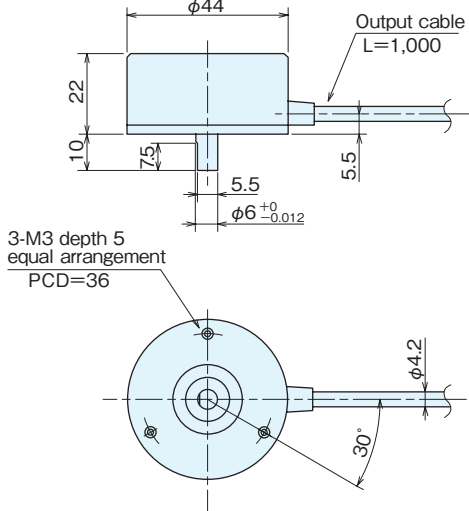
Specifications

Type name		ME□-30-□P□		
Item		Shaft shape ●S=single shaft ●H=hollow shaft ●D=double shaft	Pulse number Output circuit ●No entry=voltage output ●C=open collector output ●C4=open collector output DC24V	
		●E=line driver output ●S=sine wave 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~12V+10% Open collector C4:DC24V±10% Line driver:DC5V±5%	Voltage:DC5V-5%~12V+10% Open collector:DC5V-5%~24V+10% Line driver:DC5V±5%	
Current consumption		70mA or less (under no load)	100mA or less (under no load)	
Detection system		Incremental	Incremental	
input	Output pulse number (Standard) [Pulse number/rotation]	40 250 500 50 300 512 60 360 600 100 400 200 450	720 2,500(※) 800 3,600(※) 900 4,500(※) 1,000 5,000(※) 1,024 6,000(※) 1,200 8,192(※) 1,500 9,000(※) 1,800 9,000(※) 2,000 10,000(※) 2,048 10,800(※)	
	Output phase	A, B, Z phase	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 form	Square wave	A, B, Z phase	
	Output capacity	Sink current:20mA Residual voltage:0.5V or less (at 10mA)	Square wave	
	Maximum response frequency (response pulse number)	100kHz	—	
	Output phase difference	A, B phase difference 90°±45°(T/4±T/8) Z phase T±T/2 (see Output Waveform)	Line driver output:50kHz×(by multiplication) Voltage·Open collector output:100kHz	
	Waveform rise/fall time	2μs or less (output cable 1m or less)	Refer to the figure on the right	
	Allowable load of shaft (electrical)	Radial	19.6N(2kgf)	14.7N(1.5kgf)
		Thrust	9.8N(1kgf)	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 Insulated shield cable (length 1m)		Outside diameter φ4.2 5-core vinyl wire Insulated shield cable (length 1m)	
Mass	140g		140g	

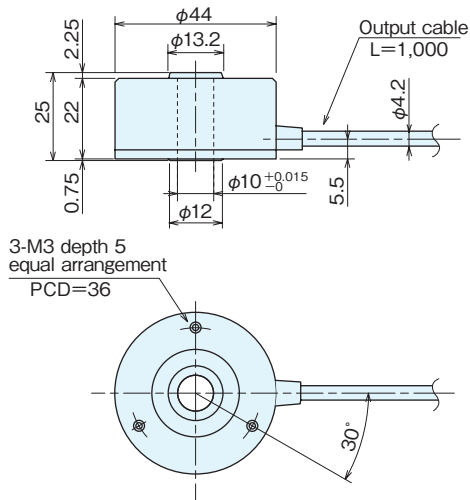
※Handled by built-in multiplier circuit

Outside dimensions

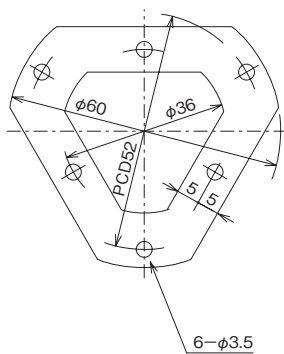
MES-30-P



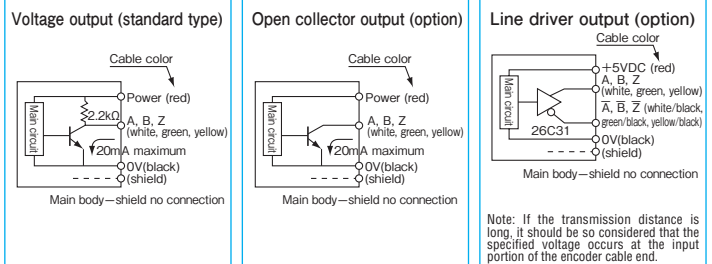
MEH-30-P



Spring flange MEH-30 (Option)

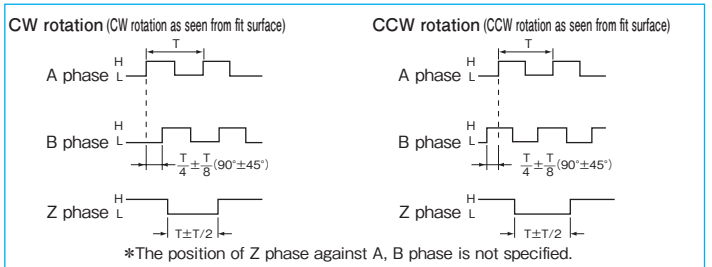


Output circuit diagram



A capacitor (0.1 μ F) 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)

