

MGH series

[Square Wave/Incremental]

Can be easily attached to DC motors, AC motors, and stepping motors.



MGH-20, MGH-30

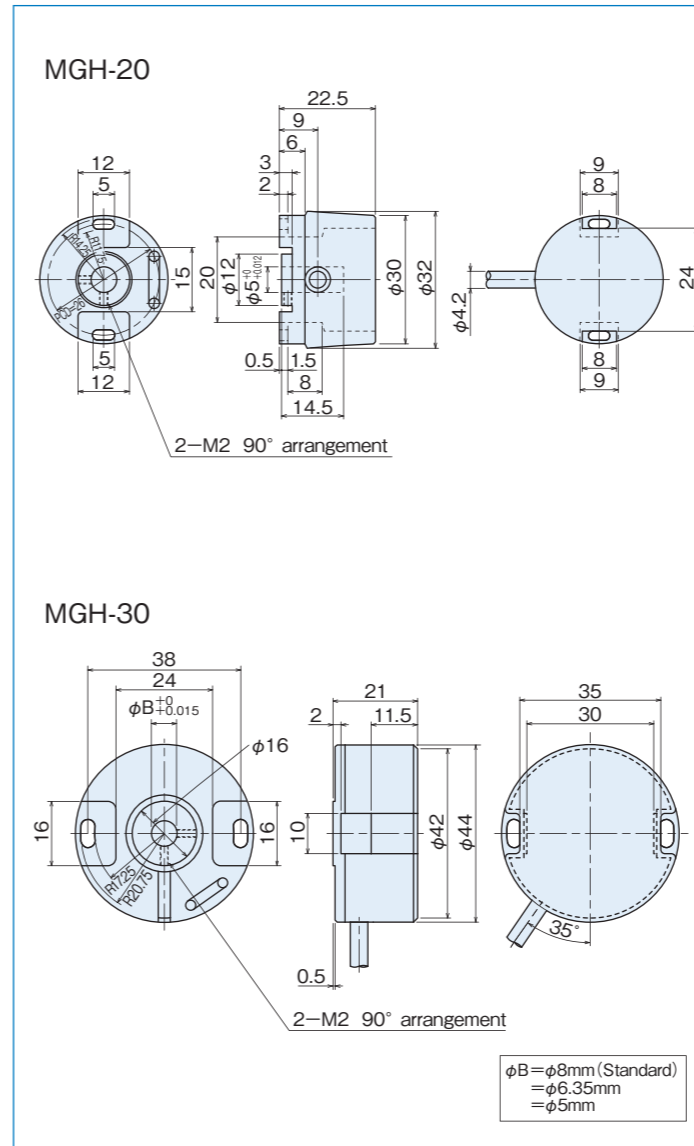
Specifications

Item	Type name MGH-20-□□			Type name MGH-30-□□		
	Pulse number	Output circuit		Pulse number	Output circuit	
		<ul style="list-style-type: none"> ●No entry=voltage output ●C=open collector output ●E=line driver output 			<ul style="list-style-type: none"> ●No entry=voltage output ●C=open collector output ●E=line driver output 	
Supply voltage	DC5V±10%					
Current consumption	60mA or less (under no load)					
Detection system	Incremental					
Output pulse number (Standard) [Pulse number/rotation]	40	300	1,000	40	400	1,000
	50	360	1,024	50	450	1,024
	60	400	1,200	60	500	1,200
	100	500		100	512	1,500
	125	512		200	600	1,800
	200	600		300	800	2,000
	250	800		360	900	
Output phase	A, B, Z phase					
Output form	Square wave					
Output capacity	Sink current:20mA Residual voltage:0.5V or less(at 10mA)			Sink current:20mA Residual voltage:0.5V or less(at 10mA)		
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					
Waveform rise/fall time	2µs or less (cable of 1m or less)					
Maximum allowable revolutions (mechanical)	6,000r/min					
Working ambient temperature/ humidity	-10°C~70°C RH35%~90% no dewing					
Storing ambient temperature	-20°C~80°C					
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	Outside diameter φ4.2 (φ6,8) 8-core (19-core) vinyl wire AWG 28 Insulated shield cable length 1m (length 0.5m)					
Mass	60g			150g		

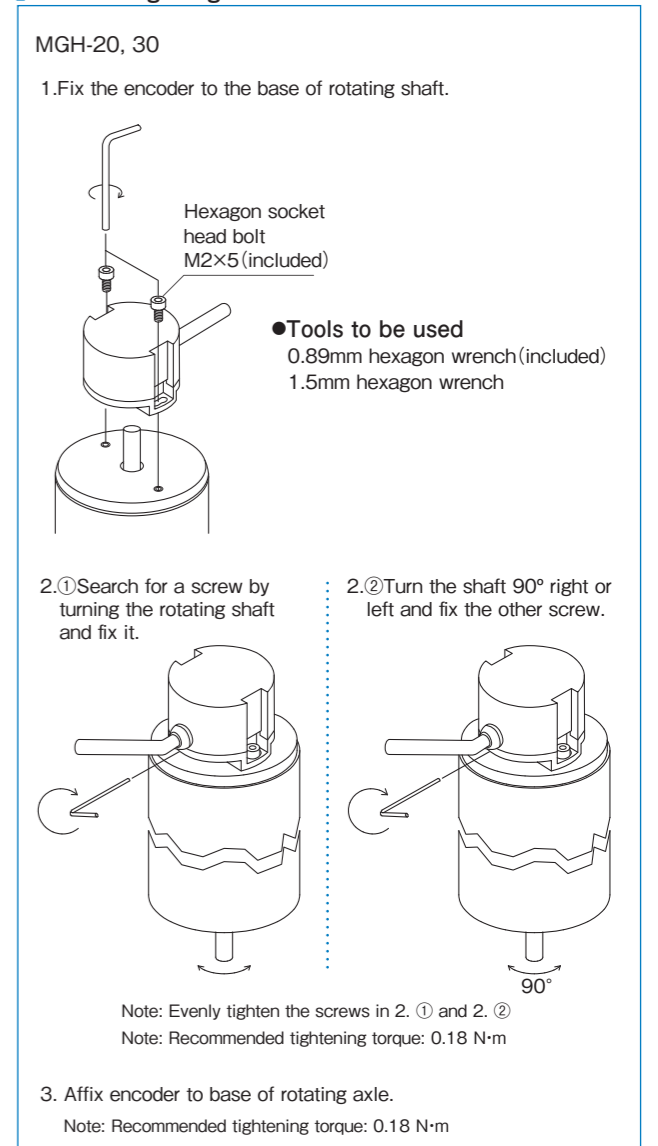
Allowable change amount of fitting shaft

Model	Pulse number	100~200	250~600	800~1,200
MGH-20	Pulse number	100~200	250~600	800~1,200
MGH-30	Pulse number	100~300	360~1,024	1,200~2,000
Allowable eccentricity	Radial	±0.02mm		
	Thrust	±0.1mm	±0.05mm	±0.02mm

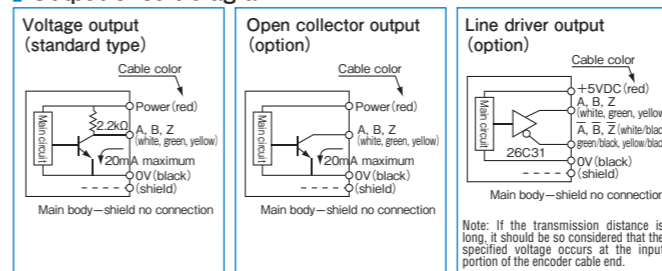
Outside dimensions



Assembling image of MGH series

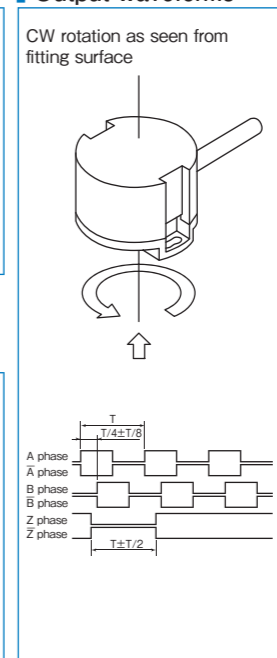


Output circuit diagram

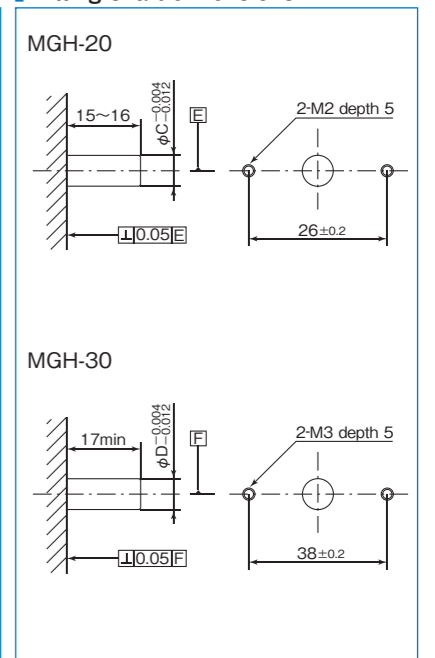


A capacitor (0.1µF) is connected between 0V and FG (frame ground).

Output waveforms



Fitting shaft dimensions



Output waveform (Square wave)

