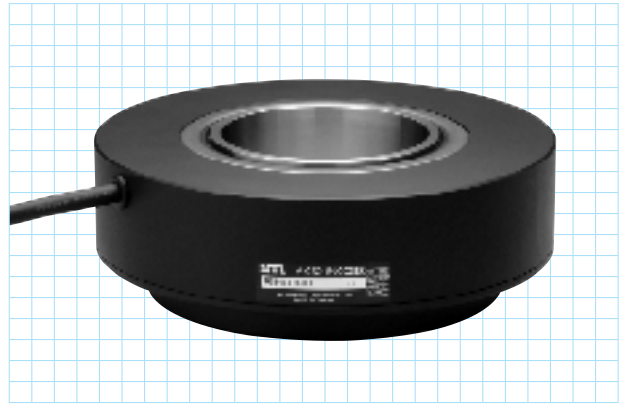
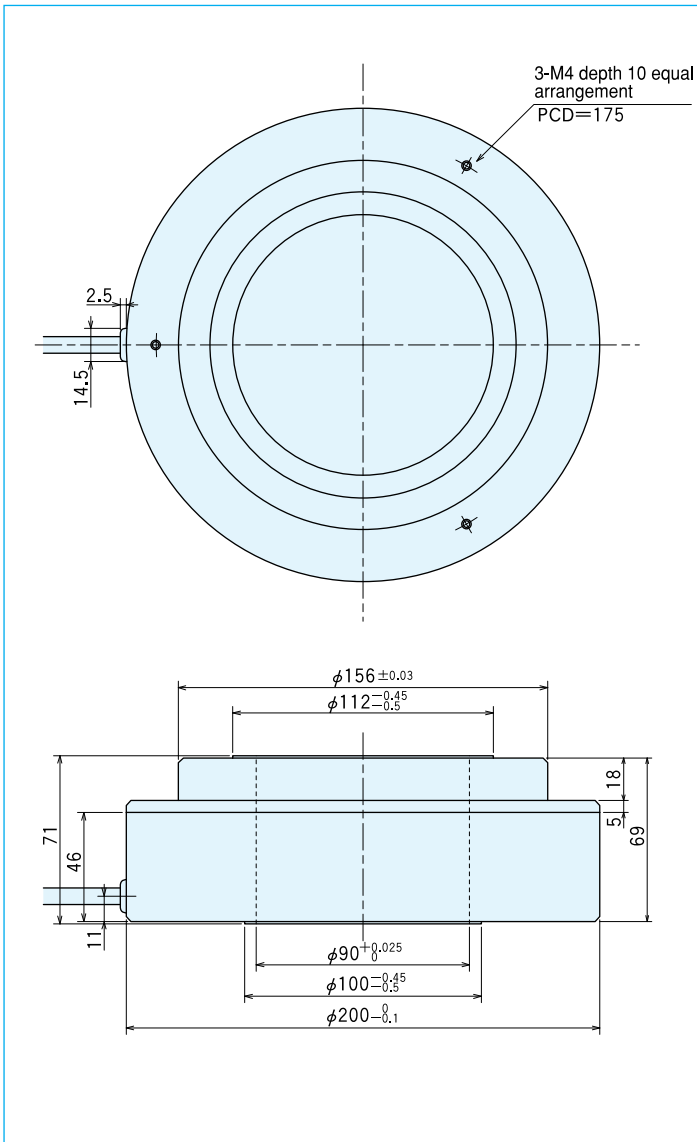


MEH-I80 series

[Square Wave/Incremental]



Outside dimensions

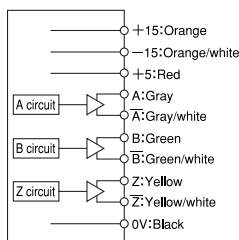


Output circuit diagram

Line driver output
Output IC
26LS31 (Mitsubishi)

Output line
φ8.2 composite 7 paired shield cables
Red, black AWG22
Others AWG28

Note: When the transmission distance is long, it should be so considered that the specified voltage occurs at the input portion of the encoder cable end.

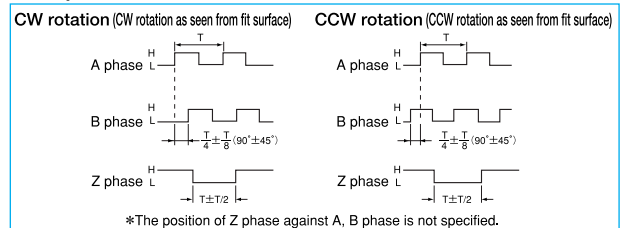


A capacitor (0.1 μF) is connected between 0V and FG (frame ground).

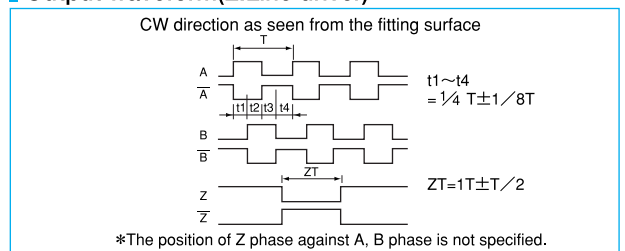
Specifications

Type name		MEH-180-□-□
Item		Pulse number
Supply voltage/ Current consumption		DC5~12V ±10% DC24V ±10% (option) Line driver: DC5V ±5%
Detection system		Incremental
Output	Output pulse number (Standard)	36,000
	[Pulse number/rotation]	54,000
	Output phase	A, B, Z phase
	Output form	Square wave Line driver output
	Output capacity	V _{oL} =0.5Vmax V _{oH} =2.5Vmin I _o =±20mA
	Maximum response frequency (response pulse number)	300kHz
Output phase difference		A, B phase difference 90° ±45° (T/4 ± T/8) Z phase T ± T/2 (see Output Waveform)
Waveform rise/fall time		0.5 μs or less (output cable 1m or less)
Starting torque		80 × 10 ⁻³ N·m (800gf·cm) or less (no oil seal)
Allowable load of shaft (electrical)	Radial	29.4N (3kgf)
	Thrust	19.6N (2kgf)
Maximum allowable revolutions (mechanical)		300r/min
Working ambient temperature/ humidity		0°C ~ 50°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 φ6.5 14-core Insulated shield cable (length 1m)
Mass		5kg

Output waveform



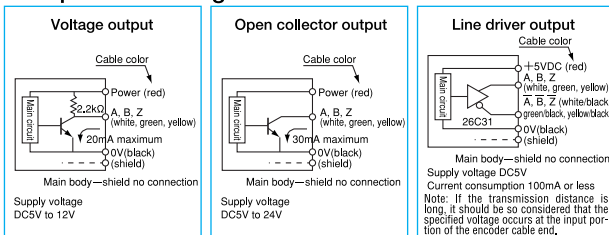
Output waveform(E:Line driver)



Specifications Built-in multiplication circuit (X2·X4·X8·X16) **NEW**

Supply voltage	Voltage:DC5V-5%~12V+10% Open collector:DC5V-5%~24V+10% Line driver:DC5V±5%	
Current consumption	150mA or less (under no load)	
Detection system	Incremental	
Output	Output pulse number (Standard) [Pulse number/rotation]	EX 36,000×2 (72,000) 36,000×4 (144,000) 36,000×8 (288,000) 36,000×16 (576,000)
	Output phase	A, B, Z phase
	Output form	Square wave
	Maximum response frequency	Line driver output:75kHz× (by multiplication) Voltage output·Open collector output:100kHz
	Output phase difference	See the diagram below.
Starting torque	$80 \times 10^{-3} \text{N} \cdot \text{m}$ (800gf·cm) or less	
Allowable load of shaft (electrical)	Radial	29.4N (3kgf)
	Thrust	19.6N (2kgf)
Maximum allowable revolutions (mechanical)	300r/min	
Working ambient temperature/humidity	0°C~50°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 $\phi 6.5$ 14-core vinyl wire Insulated shield cable (length 1m)	
Mass	5kg	

Output circuit diagram



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

Output waveform

