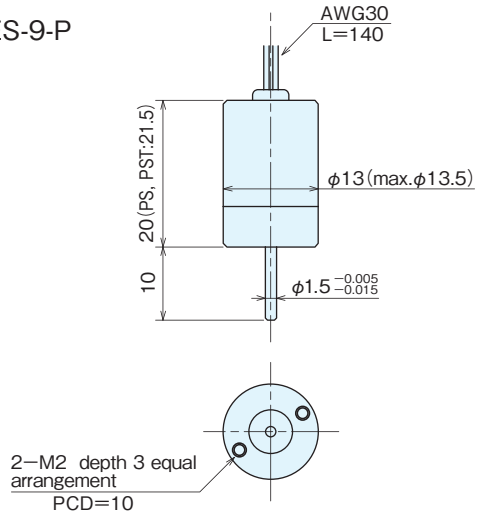
ME-9-P series

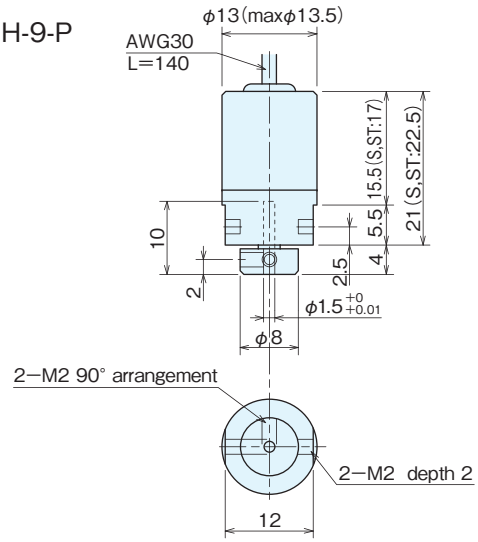
[Square Wave/Incremental]

Outside dimensions

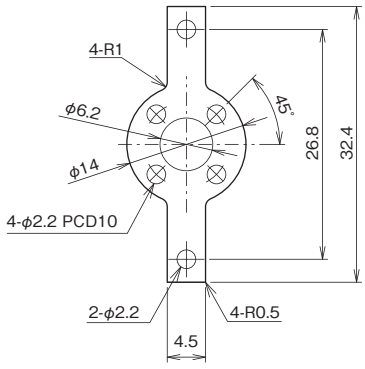
MES-9-P



MEH-9-P

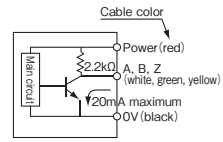


Spring flange MEH-9(Included)



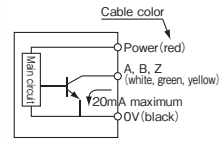
Output circuit diagram (Square wave)

Voltage output (standard type)



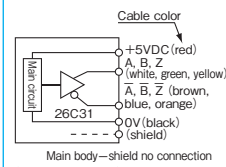
Supply voltage DC5V

Open collector output (option)



Supply voltage DC5V

Line driver output (option)



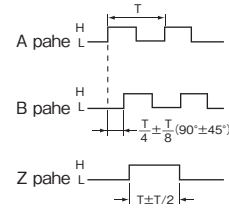
Main body—shield no connection

Supply voltage DC5V

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

Output waveform (Square wave) Voltage/Open collector

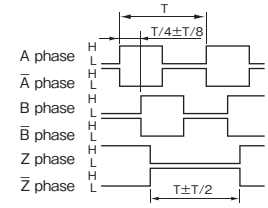
CW rotation (CW rotation as seen from fit surface)



*The position of Z phase against A, B phase is not specified.

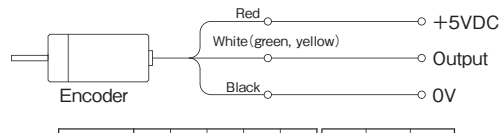
Output waveform (Square wave) Line driver

CW rotation (CW rotation as seen from fit surface)



*The position of Z phase against A, B phase is not specified.

Output connection diagram / Built-in multiplication circuit (×2·×4·×8·×16)

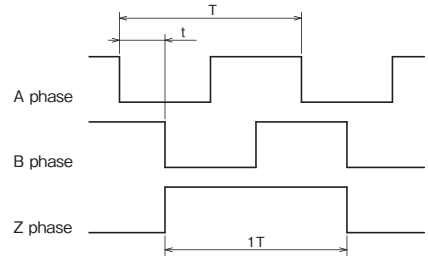


Cable color	Red	Black	White	Green	Yellow	Brown	Blue	Orange
Signal	+5V	0V	A phase	B phase	Z phase	Ā phase	B̄ phase	Z̄ phase

*Line driver output.

Output waveform Open collector output / Built-in multiplication circuit (×2·×4·×8·×16)

CW rotation (CW rotation as seen from fit surface)



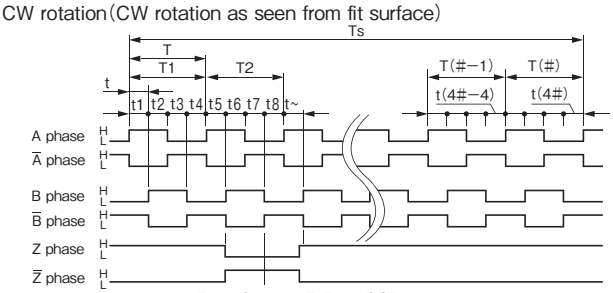
Synchronous with 1T of B phase

T: Waveform ratio of 1T T=T±0.35(−T16)
T±0.4(−T8)
T±0.2(−T4,−T2)

t: Phase difference between adjacent A and B phases
t=T/4±1/8T

Output waveform Line driver output / Built-in multiplication circuit (×2·×4·×8·×16)

CW rotation (CW rotation as seen from fit surface)



A, B phase
- 1T waveform rate: T=Ts/#±0.3T
- Phase difference between neighboring A and B phases in # divisions: T/4±T/8
- T/4 waveform ratio: t1 to t (4#)=t±0.3t

Z phase
- Z=1.0T (synchronized with B phase)

Waveform example