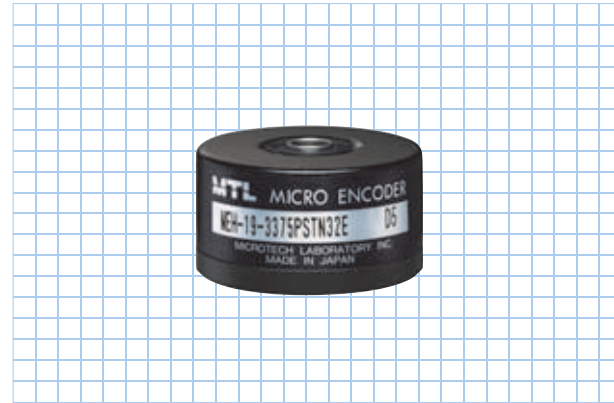


# MEH-19 series

[Square Wave/Incremental]

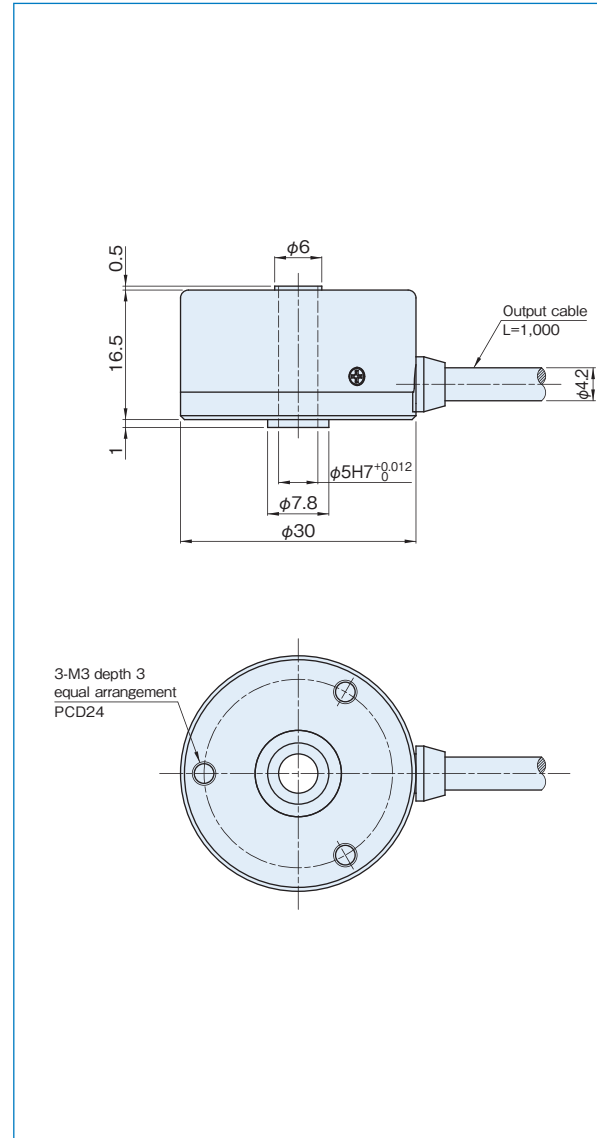
- Outside dimensions  $\phi 30 \times 16.5\text{mm}$
- Through Shaft



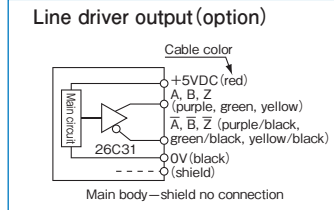
## Specifications

Type name	MEH-19-3375 PSTN□E
Item	
Detection system	Incremental
Output phase	A, $\bar{A}$ , B, $\bar{B}$ , Z, $\bar{Z}$ phase CS phase (U, U, V, $\bar{V}$ , W, $\bar{W}$ )
Output form	Square, Line driver output
Output pulse number (P/R)	3375, 6750 (3375×2), 13500 (3375×4) 16875 (3375×5), 27000 (3375×8), 33750 (3375×10) 54000 (3375×16), 67500 (3375×20), 108000 (3375×32)
Output	Phase difference between neighboring A/B phases: $T/4 \pm T/8$ Waveform ratio of 1T: $T \pm 0.3t$ Z phase width: $T \pm T/2$ (Synchronized with 1T of B phase)
Supply voltage	DC5V±5%
Current consumption	150mA or less
Maximum response frequency	50kHz×division ratio (2, 4, 5, 8, 10, 16, 20, 32)
Output capacity	Output current (Io): $\pm 20\text{mAmax.}$ Output voltage Vol: 0.5Vmax. VoH: 2.5Vmin.
Maximum allowable revolutions	6000r/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 50G 3 times each in X, Y, and Z directions
Cable	Outside diameter $\phi 4.2$ 8-cores shield cable (without CS phase: 14-cores) AWG30
Mass	57g (excluding cable)

## Outside dimensions



## Output circuit diagram

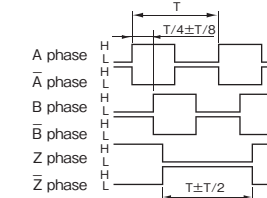


Note: If the transmission distance is long, it should be so considered that the specified voltage occurs at the input portion of the encoder cable end.

A capacitor (0.1  $\mu\text{F}$ ) is connected between 0V and FG (frame ground).

## Output waveform [×1]

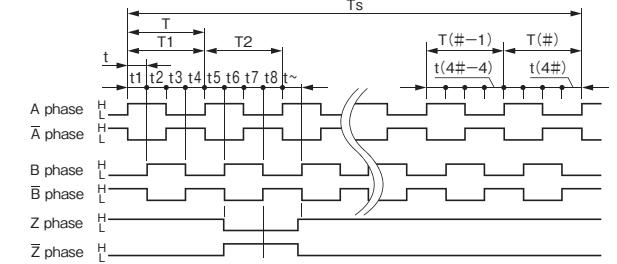
CW rotation (CW rotation as seen from fit surface)



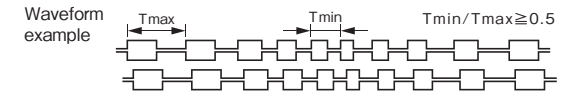
\*The position of Z phase against A, B phase is not specified.

## Output waveform / Built-in multiplication circuit (×2·×4·×5·×8·×10·×16·×20·×32)

CW rotation (CW rotation as seen from fit surface)



- 1T waveform rate:  $T = T_s / \# \pm 0.3T$
- Phase difference between neighboring A and B phases in # divisions:  $T/4 \pm T/8$
- T/4 waveform ratio:  $t_1$  to  $t_{(4\#)} = \pm 0.3t$
- Z = 1.0T (synchronized with B phase)



## Spring flange MEH-19 (Option)

