SE-17 series

[Approximate Sine Wave/Incremental]

Outside dimensions

SES-17

2—M2 depth 4

$\phi16$

$\phi20$

$\phi2^{-0.01}_{-0.015}$
$\phi4^{-0.01}_{-0.015}$

10

12.5

130

SEH-17

2—M2 depth4

$\phi16$

$\phi20$

$\phi2^{+0.015}_{0}$

12.5

13.5

$\phi4$

130
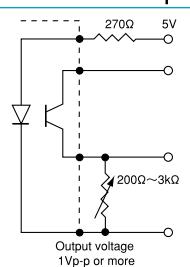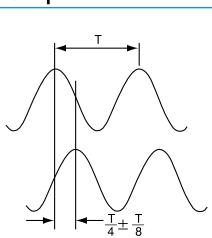
Specifications

Item		Type name	SE☐ -17- ☐ ☐
			Shaft shape ●S（2）＝$\phi2$ single shaft ●S（4）＝$\phi4$ single shaft ●H＝hollow shaft 　Pulse number 　Output phase ●A ＝single phase ●AB＝two-phase
Supply voltage			DC5V ±10％
Current consumption			30mA (LED: maximum 20mA)
Detection system			Incremental
Output	Output pulse number （Standard） 〔Pulse number/rotation〕		100 200 300 360 (single phase only)
	Output phase		A phase, A, B phase
	Output form		Approximate sine wave
	Output capacity		—
	Maximum response frequency (response pulse number)		20kHz
	Output phase difference		A, B phase difference 90˚±45˚
	Waveform rise/fall time		—
Starting torque			$0.3×10^{-3}$N・m（3gf・cm）or less
Allowable load of shaft (electrical)	Radial		（2）1.9N（200gf）／（4）4.9N（500gf）
	Thrust		（2）1.9N（200gf）／（4）4.9N（500gf）
Maximum allowable revolutions (mechanical)			6000r/min
Working ambient temperature/ humidity			0˚C～50˚C
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			Vinyl wire（AWG28）130mm
Mass			20g
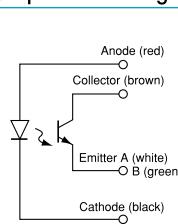
Connection example
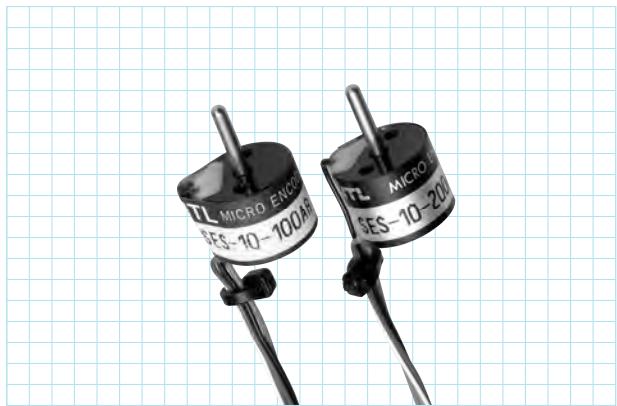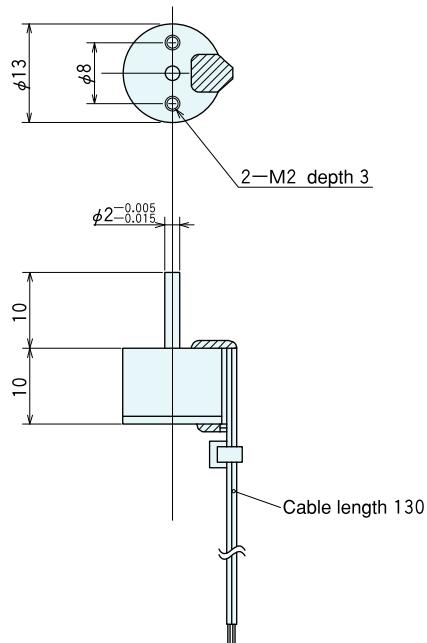
270Ω 5V

200Ω～3kΩ

Output voltage
1Vp-p or more

Output waveform

T

$\frac{T}{4}±\frac{T}{8}$

Output circuit diagram

Anode (red)

Collector (brown)

Emitter A (white)
　　　　B (green)

Cathode (black)

SES-10 series

[Approximate Sine Wave/Incremental]

Outside dimensions

φ13
φ8

2—M2 depth 3

$\phi 2^{-0.005}_{-0.015}$

10
10

Cable length 130
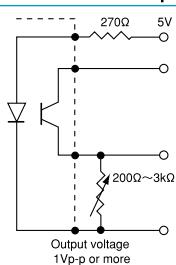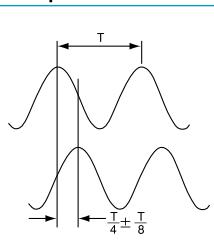
Specifications

Item	Type name	SES-10-☐ ☐ Pulse number Output phase ●A ＝single phase ●AB＝two-phase
Supply voltage		DC5V ±10％
Current consumption		30mA (LED: maximum 20mA)
Detection system		Incremental
Output	Output pulse number〔Standard〕〔Pulse number/rotation〕	100 200
	Output phase	A phase, A, B phase
	Output form	Approximate sine wave
	Output capacity	—
	Maximum response frequency (response pulse number)	20kHz
	Output phase difference	A, B phase difference 90˚±45˚
	Waveform rise/fall time	—
Starting torque		0.3×10^{-3}N・m (3gf・cm) or less
Allowable load of shaft (electrical)	Radial	1.9N (200gf)
	Thrust	1.9N (200gf)
Maximum allowable revolutions (mechanical)		6000r/min
Working ambient temperature/humidity		0˚C〜50˚C
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/s² (about 50G) 3 times each in X, Y, and Z directions
Cable		Vinyl wire (AWG30) 130mm
Mass		10g

Connection example

270Ω 5V

200Ω〜3kΩ

Output voltage
1Vp-p or more

Output waveform

T

$\frac{T}{4} \pm \frac{T}{8}$

Output circuit diagram

Anode (red)

Collector (brown)

Emitter A (white)
       B (green)

Cathode (black)