

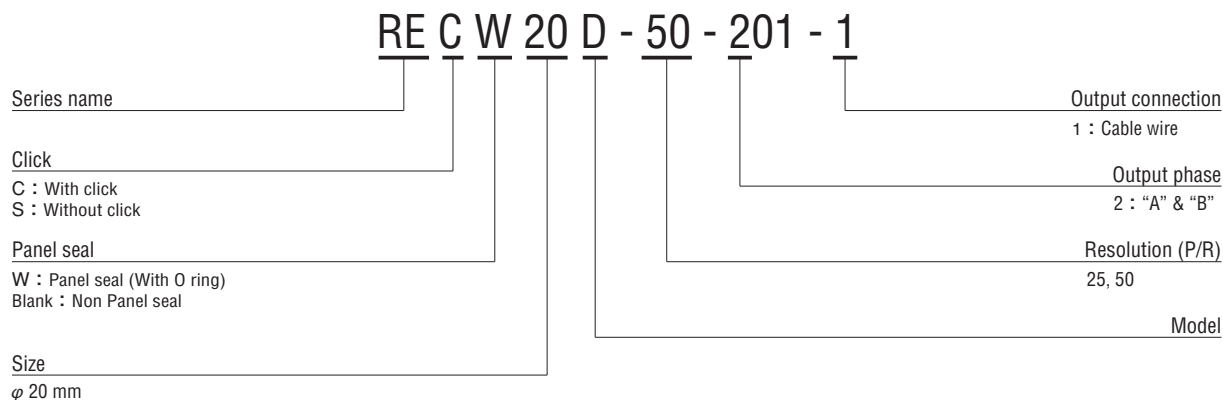
## FEATURES

- Contactless, manual adjustment only
- Compact, light weight
- With click (REC20, REC20C, REC20D, RECW20D)
- Panel seal type (RESW20D, RECW20D)
- RoHS compliant

RoHS compliant



## PART NUMBER DESIGNATION



## LIST OF PART NUMBERS

Resolution	Item	Output wave form	Output terminal	Click	Panel seal	Part number			
50 (P/R)		Saturated wave	Pin terminal	Without click	Non Panel seal	RES20-50-200			
100 (P/R)						RES20-100-200			
50 (P/R)		Pseudosquare wave				RES20-50-200-Z			
100 (P/R)						RES20-100-200-Z			
25 (P/R)		Square wave	Cable wire	Without click		RES20B-25-201-1 RES20D-25-201-1			
				With click		REC20-25-201-1 REC20D-25-201-1			
50 (P/R)				Without click		RES20D-50-201-1			
				With click		REC20C-50-201-1 REC20D-50-201-1			
25 (P/R)					Square wave	Cable wire	Without click	Panel seal	RESW20D-25-201-1
							With click		RECW20D-25-201-1
50 (P/R)							Without click		RESW20D-50-201-1
							With click		RECW20D-50-201-1

※ Verify the above part numbers when placing orders.  
The knob is available.



# REC/RES OPTICAL ENCODERS

## RELIABILITY TEST

The output shall satisfy the criteria below after the following tests.

Test item		Test conditions
Vibration	Power OFF	Amplitude : 1.52 mm or 98.1 m/s <sup>2</sup> (10 G) whichever is smaller. 10 ~ 500 Hz excursion 15 min/cycle, 8 cycles each for X, Z, directions.
Shock	Power OFF	3 times each in directions (X, Z) at 490 m/s <sup>2</sup> (50 G), 11 ms.
High temperature exposure	Power OFF	80 °C 96 h
	Power ON	50 °C 96 h
Low temperature exposure	Power OFF	-20 °C 96 h
	Power ON	0 °C 96 h
Humidity	Power OFF	40 °C Relative humidity 90 ~ 95 % 96 h (To be measured after wiping out moisture and leaving samples for 1 h at normal temperature and humidity after the test.)
Thermal shock	Power OFF	To be done 10 cycles with the following condition (To be measured after leaving samples for 1 h at normal temperature and humidity after the test.) 80 °C ± 2 °C 0.5 h、-20 °C ± 2 °C 0.5 h

## OUTLINE DIMENSIONS

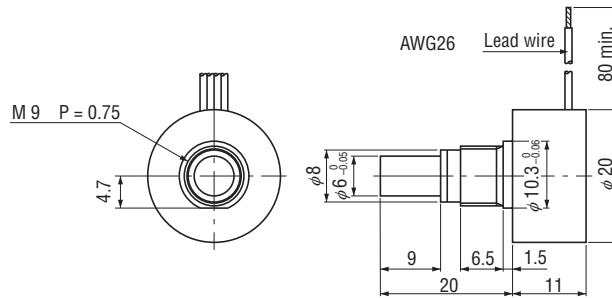
Unless otherwise specified, tolerance: ± 0.4 (Unit: mm)

### RES20D/RESW20D

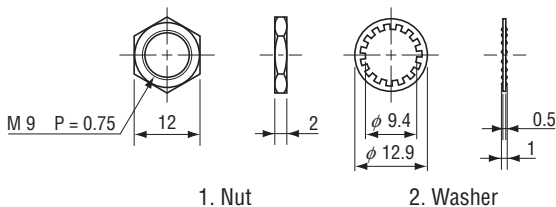
(Without click / Without click, With panel seal)

### REC20D/RECW20D

(With click / With click, With panel seal)



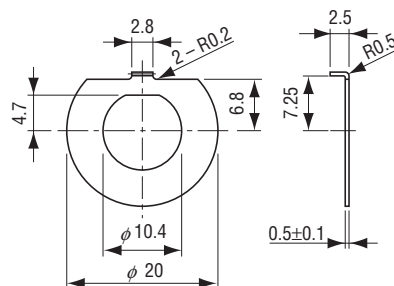
### < Attachment >



※Water resistant washer will be provided for panel seal type.  
Position stopper (metal piece) is available.

### < Option (Stopper) >

#### RES20D / REC20D / RESW20D / RECW20D



The stopper can be provided upon request.



# REC/RES

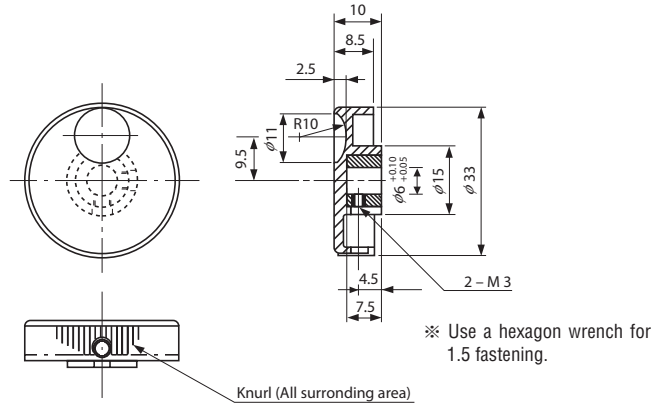
## OPTICAL ENCODERS

### ● KNOB FOR SETTING ENCODERS

The knobs are sold separately as an optional item.

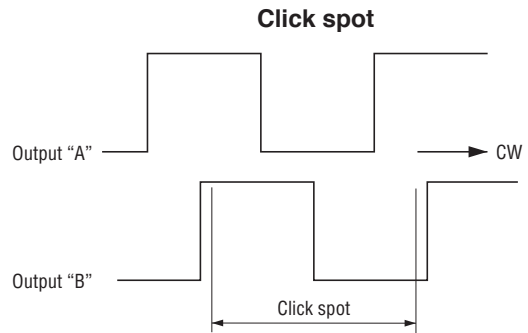
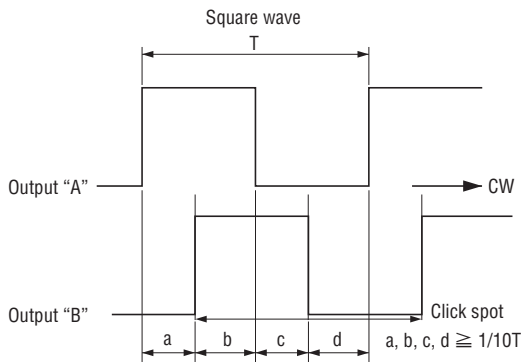


Unless otherwise specified, tolerance:  $\pm 0.4$  (Unit: mm)

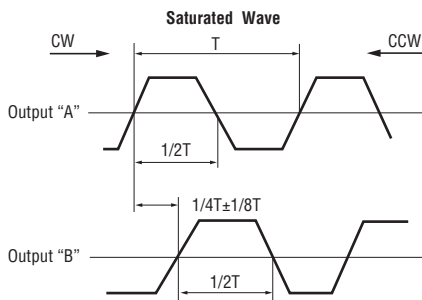


### ■ OUTPUT

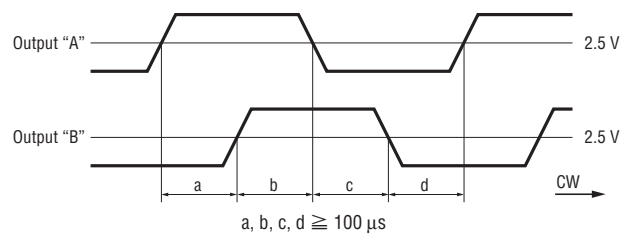
#### ● RES20D/REC20D/RESW20D/RECW20D



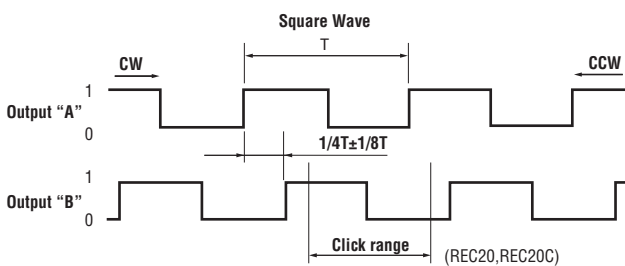
#### ● RES20



#### ● RES20 \*\*\* Z

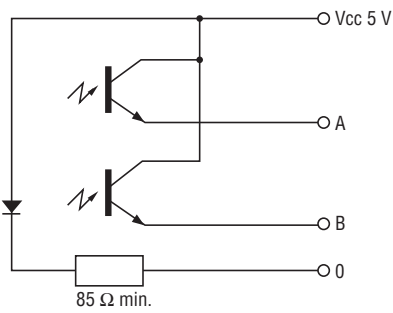


#### ● REC20/RES20B/REC20C

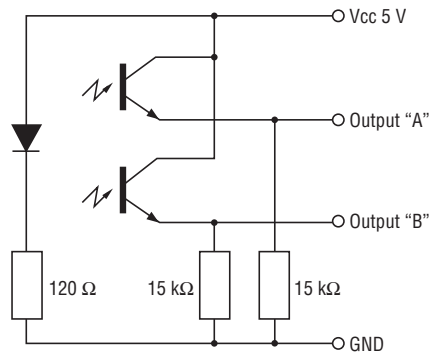


## OUTPUT CIRCUIT

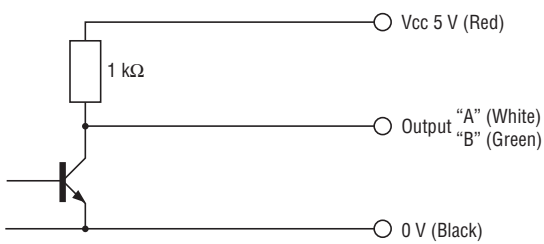
### RES20



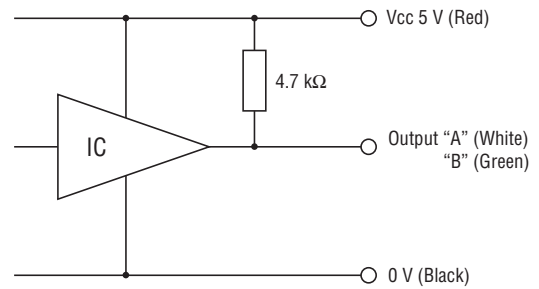
### RES20-Z



### REC20/RES20B/REC20C



### RES20D/REC20D/RESW20D/RECW20D



## EXTERNAL SCHEMATICS

### RES20

