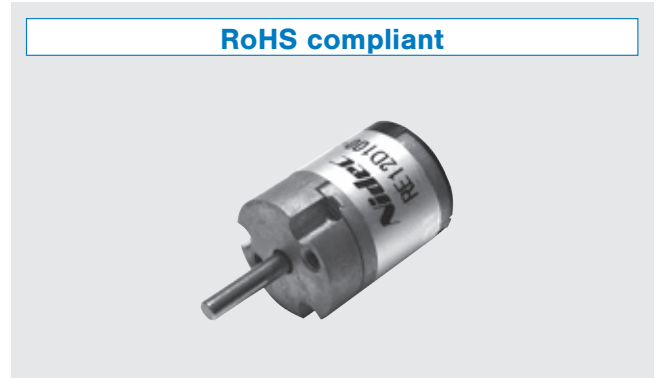


# OPTICAL ENCODERS

# RE12D

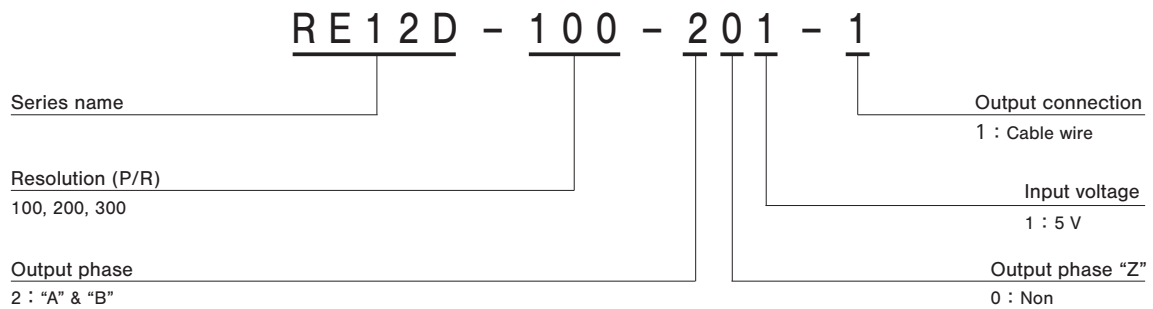
## FEATURES

- $\phi$ 12 mm, 2 phases square wave
- High resolution 100 to 300 P/R
- Low torque, low inertia
- Cost effective
- RoHS compliant



RoHS compliant

## PART NUMBER DESIGNATION



## LIST OF PART NUMBERS

Resolution	Item	Part number
100 (P/R)		RE12D-100-201-1
200 (P/R)		RE12D-200-201-1
300 (P/R)		RE12D-300-201-1

※ Verify the above part numbers when placing orders.

## MECHANICAL CHARACTERISTICS

Starting torque		0.05 mN·m {0.5 gf·cm} maximum
Inertia		0.01 g·cm <sup>2</sup>
Shaft loading (When mounting)	Radial	1.96 N {200 gf} maximum
	Axial	1.96 N {200 gf} maximum
Net weight		10 g

## ELECTRICAL CHARACTERISTICS

Input voltage	DC5 V $\pm$ 5 %	
Input current	50 mA maximum	
Output wave form	Square wave	
Output phases	A, B	
Resolution (P/R)	100, 200, 300	
Phase difference of A & B outputs	90° $\pm$ 45°	
Maximum frequencies response	10 kHz	
Output signal	"1 (High)"	+ 4.5 V minimum
	"0 (Low)"	+ 0.5 V maximum
Output impedance	1 k $\Omega$	
Light source	LED	

## Environmental characteristics

Operating temp. range	0 ~ 50 °C
Storage temp. range	- 20 ~ 80 °C
Protection grade	IP40

