

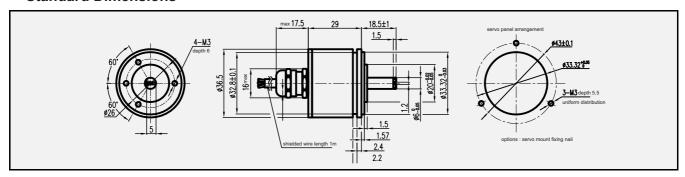
R36 Series Contactless potentiometer / Hall encoder (Patented)

# **R36**



- Hall effect
- High protection degree
- With 1 set of precision ball bearings

#### ■ Standard Dimensions



#### ■ Selection Guide

Example: R36 0505 P W360

R →	Series	R	High performance version	
36 →	Dimensions	36	Housing diameter Φ36mm	
	Absolute analog signal:			
	Input voltage / Output signal	0505	5V±10% / 0 ~ 100%Vcc	
0505 →		2410	15 ~ 30V / 0 ~ 10V	
_		2405	12 ~ 24V / 0 ~ 5V	
		2442	15 ~ 30V / 4 ~ 20mA	Note.1
P → Output characteristics	Output characteristics	None	Single output	
		Р	Dual parallel output	
	X	Dual cross output	Note.2	
W →	Output direction	W	Clockwise	
		С	Counterclockwise	
360 →	Electrical angle	360	Flactrical angle: 260°	Note.3
			Electrical angle: 360°	Note.4

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## ■ General Mechanical Specifications

Mechanical angle	360° (Endless)	
Protection degree	IP67	
Operating torque	<1mN.m	
Max.speed	6000rpm	
Life expectancy	100,000,000	
Mass	Approx.100g	
Housing material	Anodized aluminum alloy	
Shaft material	Stainless steel	

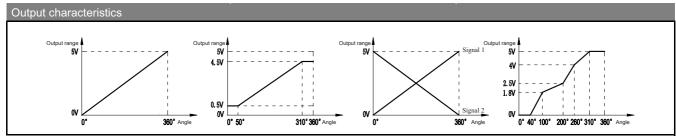
#### **■** Environmental Specifications

Operating temperature range	-40°C ~ + 85°C
Storage temperature range	-40°C ~ + 85°C
ESD durability	(Contact discharge) ± 8KV, (Aerial discharge) ± 15KV, EN61000-4-2:2009
EMS durability	10V/m (80MHz ~ 1GHz, 1KHz 80% Amplitude modulation) EN61000-4-3:2006+A1:2010

# General Electrical Specifications Absolute analog signal

Stand	ard model	R36 0505 W360	R36 2410 W360	R36 2405 W360	R36 2442 W360	
Applie	ed voltage	5V±10%	15 ~ 30V	12 ~ 24V	15 ~ 30V	
Outpu	ut signal	0 ~ 100%Vcc	0 ~ 10V	0 ~ 5V	4 ~ 20mA	
Curre	nt consumption (no-load)	<16mA	<25mA	<25mA	<35mA	
Outpu	ut deviation of both ends	<%1.VCC	<50mV	<50mV	<0.05mA	
Load	resistance	>10ΚΩ	>10KΩ	>10KΩ	<600Ω	
Electri	ical angle		36	60°		
Indepe	Independent linearity tolerance		±0.3%			
Resol	Resolution		4096 (12 Bit)			
Updat	Update rate		0.3	sms		

Terminal connection instructions			
Red	Black	Brown	
VCC	GND	OUT	



## ■ Special Specifications Available

Wide voltage input	Available for special wide voltage input (as 9 ~ 30V.etc)
Other output signals	Available for PWM signal product Available for Incremental signal product Available for SER, SSI, SPI and other digital signal products We can also provide bus signal products, you can followour encoder sample data for more informations
Special shaft	Special length of shaft, special diameter or special machining on shaft (like shaft slotted, fatted etc.)
Special mechanical angle	With stopper (Rotating angle becomes 345°, 270°, 180°, 90°). Other rotating angle can be customized.
Special torque	Low torque <0.5mN.m or high torque <30mN.m.

<sup>\*</sup> For other special requirements, please contact with us.