# Rotary exposed type

# RS97-1024

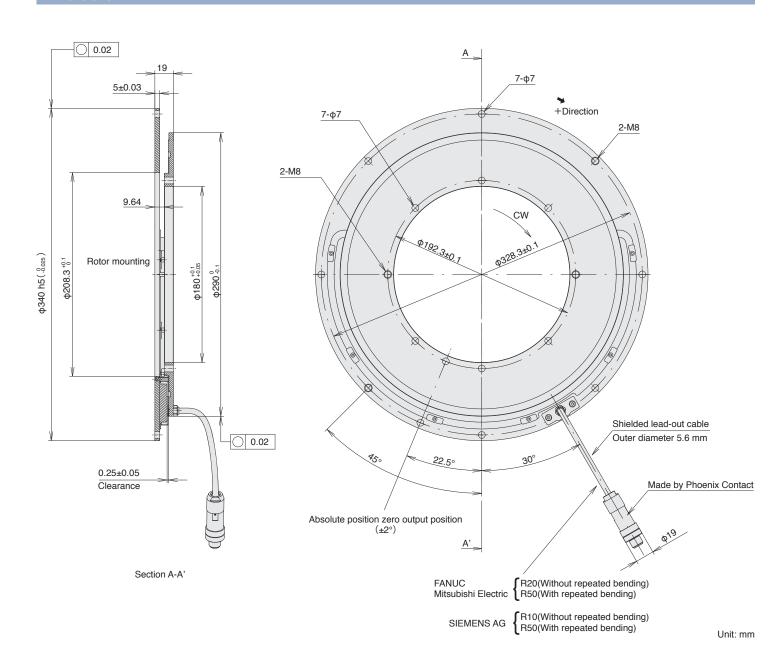
- Amp-less design enables direct communication using the protocol of each supporting manufacturer
- Magnetic system enables use even in environments with condensation and oil and other adverse conditions
- 180mm diameter through-hole allows for design and mounting flexibility
- Use of two heads provides resistance to axial runout

FANUC

Mitsubishi Electric

SIEMENS

### Dimensions



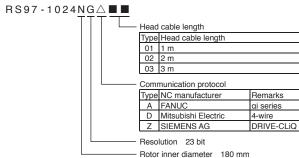
#### Specifications

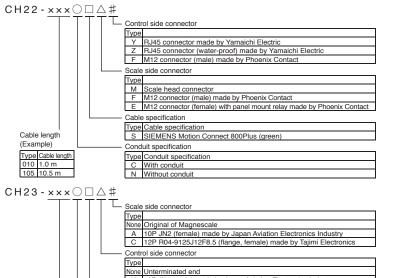
Model name	RS97-1024NGA	RS97-1024NGD	RS97-1024NGZ
Output wave number	1,024 waves/revolution		
Through hole diameter	φ180 mm		
Accuracy(at 20°C)	±2.5"		
Output signal	Absolute serial bidirectional signal, compliant with EIA-485		Compliant with DRIVE-CLiQ
Compatible controllers	FANUC	Mitsubishi Electric	SIEMENS AG
Resolution	23 bits (8,388,608 pulses/revolution)		
Maximum response revolutions	5,000 min <sup>-1</sup>		
Functional Safety	Please consult with each controller manufacturer regarding support for functional safety.		
Legal compliance	FCC Part15 Subpart B Class A ICES-003 Class A Digital Device EN55011 Gp1 Class A, EN61000-6-2		
Operating temperature range	0 to +60°C		
Storage temperature range	-10 to +60°C		
Vibration resistance	150 m/s² (50 Hz to 2,000 Hz)		
Impact resistance	1,000 m/s² (11 ms)		
Protective design grade	IP65		
Power supply voltage range	DC+4.75 to +5.25 V		DC+17 to +30.8 V
Maximum power consumption	1.35W or less (4.75V) 1.3W or less (5.25V)		2.5W or less (17V) 3.2W or less (30.8V)
Power consumption	260mA (5V) (when the controller is connected)		120mA (24V) (when the controller is connected)
Moment of inertia	8.8× 10 <sup>-3</sup> kg <sup>2</sup> or less		
Mass	Approx. 3.4kg (rotor: 0.6kg/ stator: 2.8kg) or less		
Compatible cables (types without relay connectors) Maximum cable length	CH23-***NPFA 30 m	CH23-***NPMA 30 m	CH22-***NSFY 30 m
Compatible cables (types with relay connectors) Maximum cable length	CH23-***NPKA + CH23-***NPFA 30 m	CH23-***NPKA + CH23-***NPMA 30 m	CH22-***NSFF + CH22-***NSFY 30 m

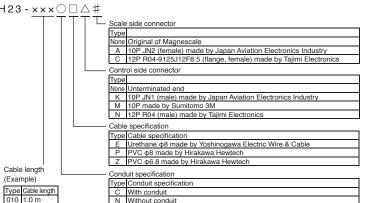
Cables

# Details of model designation

## Scale







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R74

SR84

RS97-1

RS97-1

RU97-2048

RU77-4096