

Absolute angle encoder  
Enclosed type

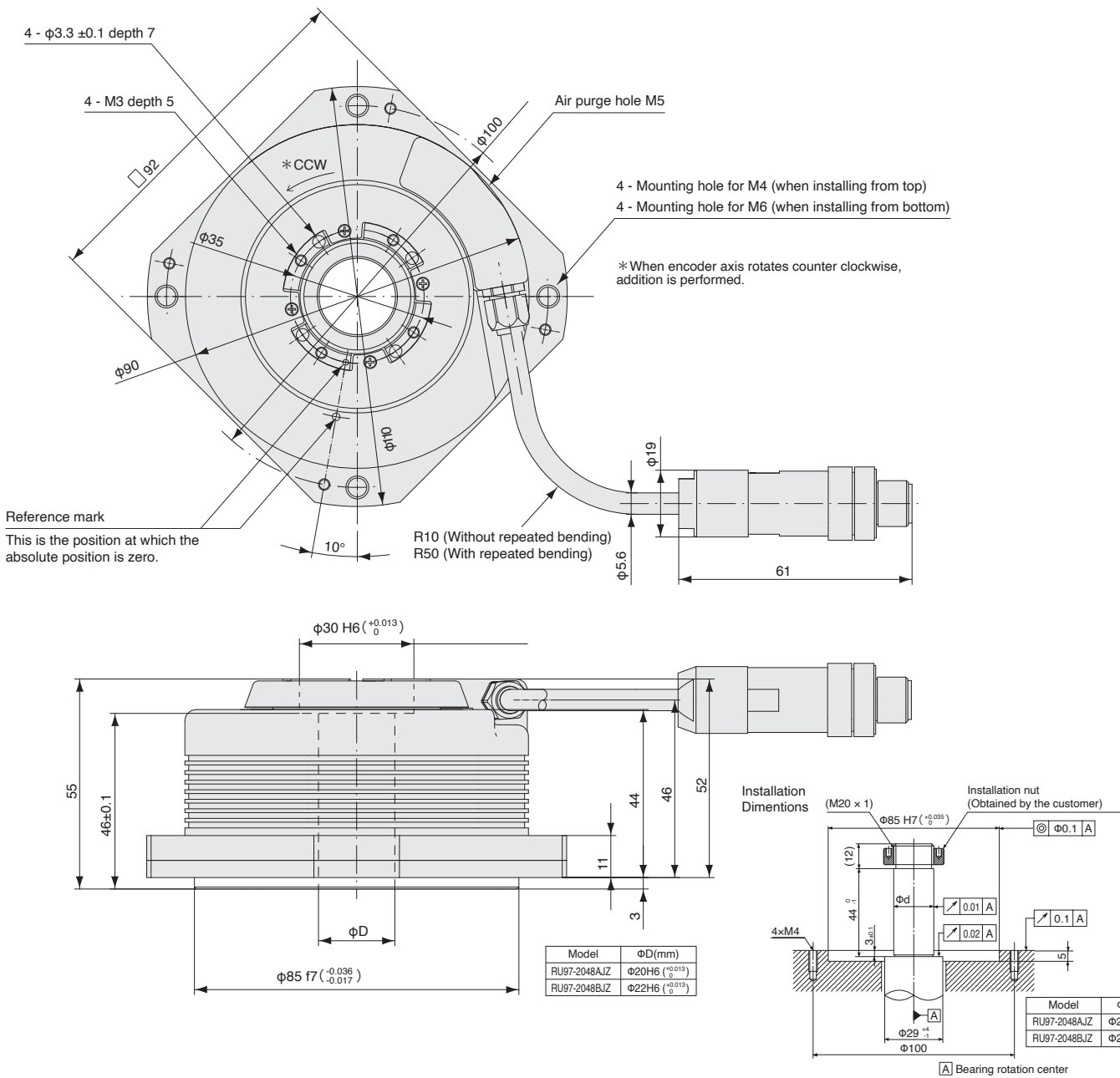
# RU97-2048

- Magnetic system enables use even in environments with condensation, oil, and other adverse conditions
- Internal coupling allows for design and mounting flexibility

SIEMENS



Dimensions



Specifications

Model name	RU97-2048AJZ ■ ■ RU97-2048BJZ ■ ■
Output wave number	2,048 waves/revolution
Through hole diameter	A: φ20 mm, B: φ22 mm
Accuracy (at 20°C)	±2.5"
Output signal	Compliant with DRIVE-CLiQ, single turn absolute type
Compatible controllers	SIEMENS AG
Resolution	25 bit (33,554,432 pulses/revolution)
Maximum response revolutions	2,000 min <sup>-1</sup>
Maximum mechanical revolutions	3,000 min <sup>-1</sup>
Functional safety	IEC 61508, EN/BS 62061 SIL 2 EN/BS/ISO 13849-1 Cat. 3 / PL d EN/BS 61800-5-2
Product Safety	FCC Part15 Subpart B Class A ICES-003 Class A Digital Device EN/BS 61000-6-2, EN/BS 61000-6-4
Product Environment	EN/BS 63000
Operating temperature	0 to +60°C
Storage temperature	-10 to +60°C
Vibration resistance	150 m/s <sup>2</sup> (50 Hz to 2,000 Hz)
Impact resistance	1,000 m/s <sup>2</sup> (11 ms)
Protective design grade	IP65
Power supply voltage	DC +17 to +30.8 V
Maximum consumption current	1.6 W or less (17 V or 30.8 V)
Consumption current	65 mA (with 24 V controller connection)
Moment of inertia	9.4×10 <sup>-5</sup> kg·m <sup>2</sup> or less
Starting torque (at 20°C)	0.08 N·m or less
Mass	Approx. 1.2 kg or less
Compatible cables (types without relay connectors) Maximum cable length	CH22-***NSFY 30 m
Compatible cables (types with relay connectors) Maximum cable length	CH22-***NSFF + CH22-***NSFY 30 m

Magnescape reserves the right to change product specifications without prior notice.

Details of model designation

Encoder

RU97-2048 ☆ JZ ■ ■

[☆] Drum inner diameter

Type	Drum inner diameter
A	φ20 mm
B	φ22 mm

[J] Resolution 25 bit

[Z] SIEMENS AG DRIVE-CLiQ

[■ ■] Head cable length

Type	Head cable length
01	1 m
02	2 m
03	3 m

Cables

CH22 - □ □ □ □ □ ▽ \* #

[□ □ □] Cable length

Written by flush right, indication in "m" units, up to 30 m, 0.5 m pitch (Example)

Type	Cable length
015	1.5 m
070	7 m
260	26 m

[○] Conduit specification

Type	Conduit specification
C	With conduit
N	Without conduit

[▽] Cable seath (covering)

Type	Cable specification
S	PU

[\*] Encoder side connector : a

Type	Specification	Remarks
M	Encoder head connector	Standard
F	M12 connector (Female) made by Phoenix Contact	Relay/ Waterproofing

[#] Controller side connector : b

Type	Specification	Remarks
None	Open-end	
Y	RJ45 connector made by YAMAICHI ELECTRONICS	Adopts NC machine tool
Z	RJ45 connector (water proof) made by YAMAICHI ELECTRONICS	Relay
F	M12 connector (Male) made by Phoenix Contact	Relay/ Waterproofing

