

Absolute angle encoder
Enclosed type

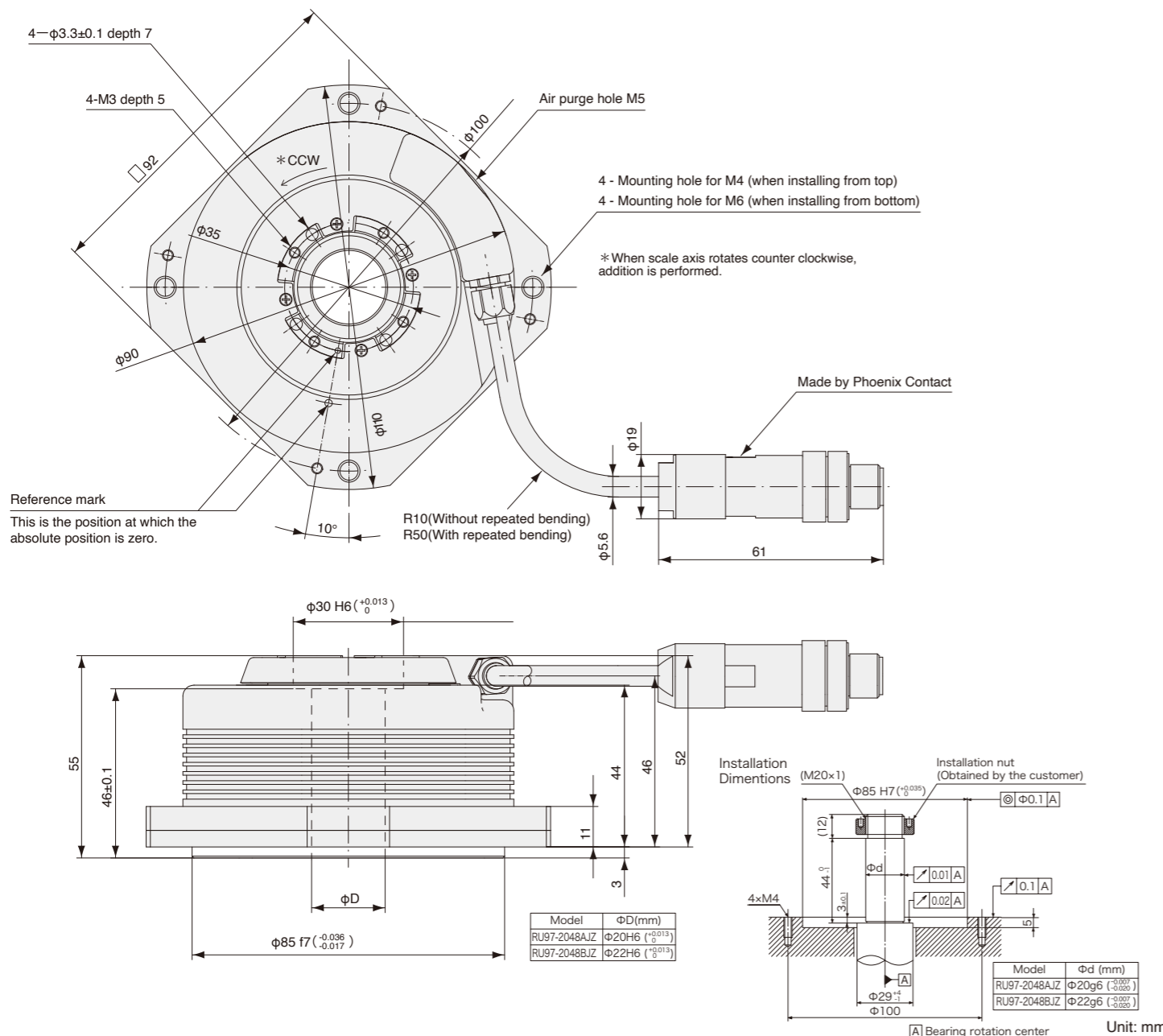
RU97-2048

- Enables direct communication using the SIEMENS DRIVE-CLiQ protocol without the requirement of an amplifier
- 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 ⁻¹
Maximum mechanical revolutions	3,000 min ⁻¹
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 range	0 to +60°C
Storage temperature range	-10 to +60°C
Vibration resistance	150 m/s ² (50 Hz to 2,000 Hz)
Impact resistance	1,000 m/s ² (11 ms)
Protective design grade	IP65
Power supply voltage range	DC+17 to +30.8 V
Maximum consumption current	1.6 W or less (17 V or 30.8 V)
Consumption current	65 mA (24 V) (when the controller is connected)
Moment of inertia	9.4×10 ⁻⁵ kgm ² or less
Starting torque (at 20°C)	0.08 Nm or less
Mass	Approx. 1.2kg 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

*Magnescale reserves the right to change product specifications without prior notice.

Details of model designation

Scale

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	1.5m
070	7m
260	26m

[○] Conduit specification

Type	Conduit specification
C	With conduit
N	Without conduit (standard)

[▽] Cable sheath (covering)

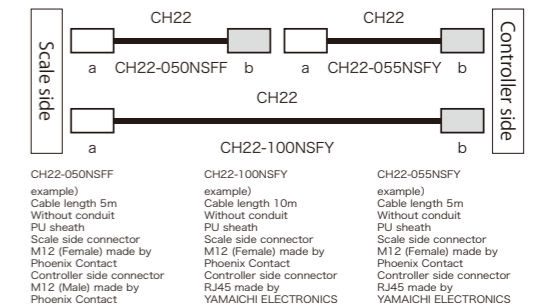
Type	Cable specification
S	PU (Polyurethane, Siemens Motion connect 800+)

[※] Scale side connector

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

[#] Controller side connector

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



SR67A SR7A SR74 SR84 RS97-100AE RS97-100AN RU97-2048 RU77-4098