

Specifications

Model name	RU97-2048AJZ RU97-2048BJZ
Output wave number	2,048 waves/revolution
Through hole diameter	A: ϕ 20 mm, B: ϕ 22 mm
Accuracy(at 20°C)	$\pm 2.5''$
Output signal	Compliant with DRIVE-CLiQ, single turn absolute type
Compatible controllers	SIEMENS AG
Resolution	25 bits (33,554,432 pulses/revolution)
Maximum response revolutions	2,000 min ⁻¹
Maximum mechanical revolutions	3,000 min ⁻¹
Functional safety	EN ISO13849-1:2008 Cat.3 EN 62061:2005 / IEC 61508:2010 / EN61800-5-2:2007
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/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 power consumption	1.6 W or less (17 V or 30.8 V)
Power consumption	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

Details of model designation

Scale

RU97 - 2048 ☆ J Z ■ ■

Head cable length	
Type	Head cable length
01	1 m
02	2 m
03	3 m
SIEMENS AG DRIVE-CLiQ	
Resolution 23 bit	
Drum inner diameter	
Type	Drum inner diameter
A	ϕ 20 mm
B	ϕ 22 mm

Cable

CH22 - x x x ○ □ △ #

Control side connector	
Type	
Y	RJ45 connector made by Yamaichi Electric
Z	RJ45 connector (water-proof) made by Yamaichi Electric
F	M12 connector (male) made by Phoenix Contact
Scale side connector	
Type	
M	Scale head connector
F	M12 connector (male) made by Phoenix Contact
E	M12 connector (female) with panel mount relay made by Phoenix Contact
Cable specification	
Type	Cable specification
S	SIEMENS Motion Connect 800Plus (green)
Conduit specification	
Type	Conduit specification
C	With conduit
N	Without conduit
Cable length (Example)	
Type	Cable length
010	1.0 m
105	10.5 m