

Specifications

Model name	RU77 - 4096A□△
Output wave number	4,096 waves/revolution
Through hole diameter	φ20 mm
Accuracy(at 20°C)	±2.5"
Output signal	Absolute serial bidirectional signal, compliant with EIA-485
Compatible controllers	FANUC Mitsubishi Electric Yaskawa Electric
Resolution	1/8,192 (Max. 25 bits output)
Maximum response revolutions	2,000 min ⁻¹
Maximum mechanical revolutions	3,000 min ⁻¹
Functional safety	—
Legal compliance	FCC Part15 Subpart B Class A and ICES-003 Class A Digital Device and EN55011 Gp 1 Class A, EN 61000-6-2 Safety standards not applicable (60 V DC or less)
Operating temperature range	0 to +60°C
Storage temperature range	-10 to +60°C
Vibration resistance	150 m/s ² (50 Hz to 2000 Hz)
Impact resistance	1,000 m/s ² (11 ms)
Protective design grade	IP65
Power supply voltage range	DC4.75-5.25 V (with connecting terminal)
Power consumption	200mA (at 120Ω termination)
Moment of inertia	9.4×10 ⁻⁵ kgm ² or less
Starting torque (at 20°C)	0.1 Nm or less
Mass	Approx. 1.2kg or less
Standard compatible cable	CE28-***J
Maximum cable length	15 m

Details of model designation

Scale

RU77 - 4096A□△

Communication protocol

Type	Number of wires	NC manufacturer
A	4-wire	FANUC
B	2-wire	Mitsubishi Electric
D	4-wire	Mitsubishi Electric
F	2-wire	Yaskawa Electric

Resolution

Type	Resolution	Number of pulses/revolution	Number of partitions	Type	Resolution	Number of pulses/revolution	Number of partitions
A	Approx. 2.5°/1,000	131,072	1/32	F	Approx. 1°/10,000	4,194,304	1/1,024
B	Approx. 1°/1,000	262,144	1/64	G	Approx. 4.5°/100,000	8,388,608	1/2,048
C	Approx. 7°/10,000	524,288	1/128	H	Approx. 2°/100,000	16,777,216	1/4,096
D	Approx. 3.5°/10,000	1,048,576	1/256	J	Approx. 1°/100,000	33,554,432	1/8,192
E	Approx. 2°/10,000	2,097,152	1/512				

Cable

CE28 - ***○#

Scale side connector

Conduit

Type	Conduit
C	With conduit (standard)
N	Without conduit

Cable length

Written by flush right, indication in "10 cm" units, up to 14 m, 1 m pitch
Note: 15 m or less including RU77 main unit head cable length