### Specifications

**Model name**
- RU77-4096A

**Output wave number**
4,096 waves/revolution

**Accuracy (at 20°C)**
±2.5"

**Output signal**
Absolute serial bidirectional signal, compliant with EIA-485

**Compatible controllers**
- FANUC
- Mitsubishi Electric
- Yaskawa Electric

**Maximum resolution**
- 25bit (33,554,432 pulse/revolution)
- 21bit (2,097,152 pulse/revolution)

**Maximum response revolutions**
- 2,000 min⁻¹
- 3,000 min⁻¹

**Legal compliance**
- FCC Part15 Subpart B Class A and ICES-003 Class A Digital Device
- EN55011 Group 1 Class A
- EN 61000-6-2

**Impact resistance**
- 1,000 m/s² (11 ms)

**Dimensions**
- Air injection hole (M5)
- 4-M6 (when installing from bottom)

**Power supply voltage range**
DC4.75-5.25 V (with connecting terminal)

**Consumption current**
- 200mA

**Moment of inertia**
- 0.1 Nm² or less

**Starting torque (at 20°C)**
9.4×10⁻⁵ kgm² or less

**Maximum mechanical revolutions**
- 3,000 min⁻¹

**Dimensions**
- 4-M6 (when installing from bottom)
- Air injection hole (M5)

**Magnetic system**
- Enables use even in environments with condensation, oil, and other adverse conditions
- Enables direct communication using the protocol of each supporting manufacturer without the requirement of an amplifier
- Internal coupling allows for design and mounting flexibility

**Functional safety**
- Protective design grade
- IP65

**FANUC**
- Mitsubishi Electric
- Yaskawa Electric

### Details of model designation

**Scale**
- RU77-4096A

**Cable**
- CE28

**Installation dimensions**
- Installation nut (supplied by the customer)

**Cable length**
- CH33 - 30 m, CE28 - 15 m

**Reference mark**
- This is the position at which the absolute position is zero.

**Installation method**
- When scale axis rotates counter clockwise, addition is performed.

**Absolute angle encoder**
- Enclosed type
- RU77-4096A

- Magnetic system enables use even in environments with condensation, oil, and other adverse conditions
- Enables direct communication using the protocol of each supporting manufacturer without the requirement of an amplifier
- Internal coupling allows for design and mounting flexibility

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*Magnescale reserves the right to change product specifications without prior notice.*
## List of Adapter Cables

<table>
<thead>
<tr>
<th>Scale</th>
<th>Controller side Connector</th>
<th>List of Adapter Cables</th>
<th>Scale side Connector</th>
<th>Maximum cable length</th>
<th>Cable bending radius</th>
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### SR27A SR67A
- Controller side Honda Taunus: JZ51010PLZ
- Scale side Original of Magnasonic: CH28-***U
- Scale side Original of Magnasonic: CH28-***VF
- Combined total: 30 m
- 20 mm flat, without conduit: 30 mm flat, with conduit: 60 mm flat, box-shaped bend

### RU97
- Controller side Honda Taunus: JZ51010PLZ
- Scale side Original of Magnasonic: CH28-***U
- Scale side Original of Magnasonic: CH28-***VF
- Combined total: 30 m
- 20 mm flat, without conduit: 30 mm flat, with conduit: 60 mm flat, box-shaped bend

### RU77
- Controller side Honda Taunus: JZ51010PLZ
- Scale side Original of Magnasonic: CH28-***U
- Scale side Original of Magnasonic: CH28-***VF
- Combined total: 30 m
- 20 mm flat, without conduit: 30 mm flat, with conduit: 60 mm flat, box-shaped bend

### SR74 SR84
- Controller side Honda Taunus: JZ51010PLZ
- Scale side Original of Magnasonic: CH28-***U
- Scale side Original of Magnasonic: CH28-***VF
- Combined total: 30 m
- 20 mm flat, without conduit: 30 mm flat, with conduit: 60 mm flat, box-shaped bend

### RS97
- Controller side Honda Taunus: JZ51010PLZ
- Scale side Original of Magnasonic: CH28-***U
- Scale side Original of Magnasonic: CH28-***VF
- Combined total: 30 m
- 20 mm flat, without conduit: 30 mm flat, with conduit: 60 mm flat, box-shaped bend

### Cables

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<table>
<thead>
<tr>
<th>CH22 -</th>
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<th>CH33 -</th>
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### Notes
- Cable lengths: 0.5 m to 20 m.
- Cable bending radius: 10 mm flat, without conduit: 20 mm flat, with conduit: 40 mm flat, box-shaped bend.