RF04-S  Rotary type / Sensor specification

### Ordering method

**RF04**
- **Model:** RF04 S
- **Return-to-origin method:** Standard (Limitless rotation)
- **Bearings:** Standard
- **Torque:** High torque
- **Cable entry location:** From the left
- **Cable length:** 3000
- **Robot positioner:** Basic model

**SHS**
- **Robot positioner:** S2S
- **Robot positioner:** SHS

### Basic specifications

**Motor**
- 42 steps motor

**Resolution (Pulse/rotation)**
- 20480

**Repeatability**
- +/-0.05

**Drive method**
- Special warm gear + belt

**Maximum speed**
- 420°/sec

**Rotating torque (N•m)**
- 5

**Max. pushing torque (N•m)**
- 10

**Backlash**
- +/-0.05

**Max. moment of inertia (kg•m²)**
- 0.04

**Cable length (m)**
- Standard: 1, Option: 3, 5, 10

**Rotation range**
- 360°

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may vary depending on the moment of inertia. Check the maximum speed while referring to the "Moment of inertia vs. Acceleration/Deceleration" graph and the "Effective torque vs. Speed" graph (reference).
Note 3. For moment of inertia and effective torque details, see P.744.

### Moment of inertia Acceleration/deceleration

- **Moment of inertia (kg•m²)**
- 314

### Effective torque vs. speed

- **Effective torque (N•m)**
- 10

- **Speed (°/sec)**
- 6

### Allowable load

#### Rotational load

- **Allowable radial load (N)**
  - Standard model: 314
  - High rigidity model: 70

- **Allowable thrust load (N)**
  - Standard model: 296
  - High rigidity model: 398

- **Allowable moment (N•m)**
  - Standard model: 10
  - High rigidity model: 12

Note. When purchasing the product, set the controller acceleration while carefully checking the "Moment of inertia vs. Acceleration/Deceleration" and "Effective torque vs. Speed" graphs. Details, please refer to the TRANSERVO Series User's Manual.

### Controller

- **Controller Operation method**
- TS-S2S / TS-SHS
- 3D point trace / Remote command

### RF04-SN  Sensor specification – Standard model

**Sensor specification – Standard model**

- **Model:** RF04 SN
- **Controller Operation method**
- TS-S2S / TS-SHS
- 3D point trace / Remote command

Note 1. This drawing is output under the conditions below.
Bearings
- Standard
- Torque
- Standard/High torque

Note 2. The minimum bending radii of the motor cable and sensor cable are R30.
RF04-S  Sensor specification – High rigidity model

1. Table movable range by return-to-origin operation. Be careful not to interfere with the workplace or equipment around the table.
2. The return-to-origin position may differ from that shown in this drawing. To align with the position shown in this drawing, refer to the TS Series User's Manual and change the origin coordinates.

Weight (kg) 25
Note 1. This drawing is output under the conditions below.
- Bearing: High rigidity
- Torque: Standard/High torque

Note 2. The minimum bending radii of the motor cable and sensor cable are R30.