RF02-N  Rotary type / Limit rotation specification

Note 1. The robot cable is flexible and resists bending.
Note 2. See P.522 for DIN rail mounting bracket.
Note 3. Select this selection when using the gateway function. For details, see P.66.

Basic specifications
- Motor: 20 [°] Step motor
- Resolution (Pulse/rotation): 4096
- Repeatability (°): +/-0.05
- Drive method: Special warm gear + belt
- Torque type: Standard/High torque
- Maximum speed (°/sec): 420/280
- Rotating torque (N•m): 0.22/0.32
- Max. pushing torque (N•m): 0.11/0.16
- Backlash (°): +/-0.5
- Max. moment of inertia (kg•m²): 0.0018/0.004
- Cable length (m): Standard: 1 / Option: 3, 5, 10

Rotation range (°)
- Standard: 310°
- Option: 150° (Motor cable exit direction: Exit from left side)

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.641.

Moment of inertia Acceleration/deceleration
- Standard (N•m²/°) / High rigidity (N•m²/°): 78 / 86
- Standard (°/sec²) / High rigidity (°/sec²): 74 / 107
- Acceleration/deceleration: w(°/s²)

Effective torque vs. speed
- Standard (N•m) / High rigidity (N•m): 2.4 / 2.9
- Graphs: Referring to the “Moment of inertia vs. Acceleration/deceleration” and “Effective torque vs. Speed” graphs.

Allowable load
- Allowable radial load (N): Standard: 78 / High rigidity: 86
- Allowable moment (N•m): Standard: 24 / High rigidity: 29

Controller
- Controller: TS-S2 / TS-SH / TS-S2
- Operation method: Remote command/Pulse train control

RF02-NN Limit rotation specification – Standard model
1. Table movable range by return-to-origin operation.
   Be careful not to interfere with the workpiece or equipment around the table.
2. Return-to-origin position
3. Values and characters in [ ] show those when the return-to-origin direction is changed.

Note 1. This drawing is output under the conditions below.
   Torque: Standard/High torque
   Note 2. Minimum bending radius of the motor cable is R36.5
   Note 3. The motor cable exit direction is only the left side.
RF02-N

Limit rotation specification – High rigidity model

Cross-sectional drawing A-A

Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque

Note 2. The minimum bending radius of the motor cable is R30.

Note 3. The motor cable exit direction is only the left side.

Approx. 170

3H8( +0.014 0 )
Depth 3.8
30°
3H8( +0.014 0 )
Depth 4

Weight (kg) 0.52

Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque
3. The motor cable exit direction is only the left side.

Approx. 170

3H8( +0.014 0 )
Depth 3.8
30°
3H8( +0.014 0 )
Depth 4

Weight (kg) 0.52

Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque
3. The motor cable exit direction is only the left side.

Approx. 170

3H8( +0.014 0 )
Depth 3.8
30°
3H8( +0.014 0 )
Depth 4

Weight (kg) 0.52

Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque
3. The motor cable exit direction is only the left side.

Approx. 170

3H8( +0.014 0 )
Depth 3.8
30°
3H8( +0.014 0 )
Depth 4

Weight (kg) 0.52

Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque
3. The motor cable exit direction is only the left side.

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Depth 3.8
30°
3H8( +0.014 0 )
Depth 4

Weight (kg) 0.52

Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque
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3H8( +0.014 0 )
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Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque
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Depth 3.8
30°
3H8( +0.014 0 )
Depth 4

Weight (kg) 0.52

Note 1. This drawing is output under the conditions below.
1. Bearing: High rigidity
2. Torque: Standard/High torque
3. The motor cable exit direction is only the left side.

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3H8( +0.014 0 )
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