

# RF04-N

Rotary type / Limit rotation specification



Articulated robots  
YA

Linear conveyor  
modules  
LCM100

Compact  
single-axis robots  
TRANSEROV

Single-axis robots  
FLIP-X

Linear motor  
single-axis robots  
PHASER

Cartesian  
robots  
XY-X

SCARA  
robots  
YK-X

Pick & place  
robots  
YP-X

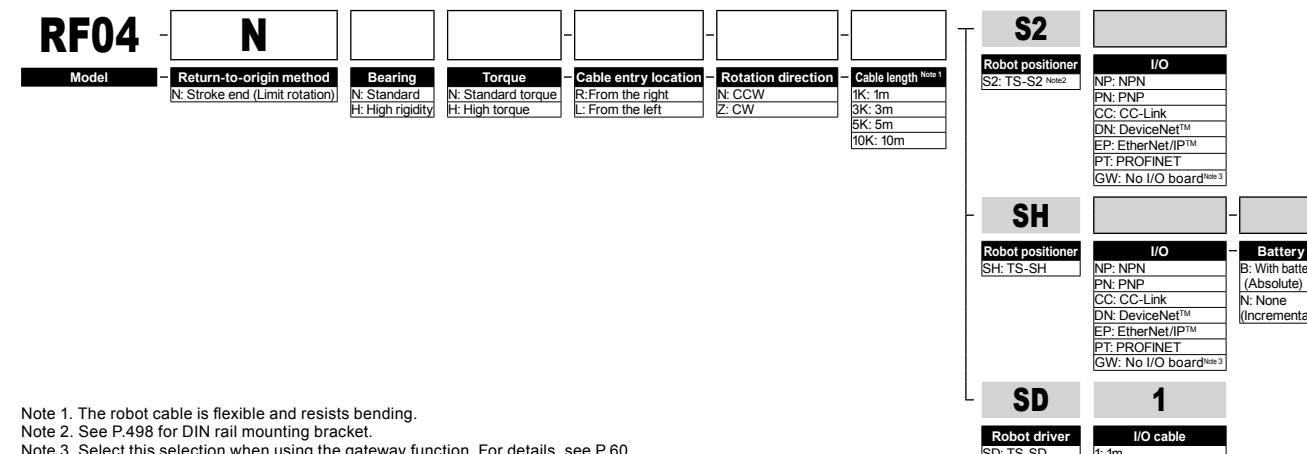
CLEAN

CONTROLLER

INFORMATION

● CE compliance ● Rotation range : 320°

## Ordering method



Note 1. The robot cable is flexible and resists bending.

Note 2. See P.498 for DIN rail mounting bracket.

Note 3. Select this selection when using the gateway function. For details, see P.60.

## Basic specifications

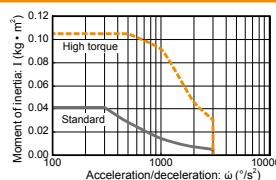
<b>Motor</b>	42 □ Step motor
<b>Resolution (Pulse/rotation)</b>	20480
<b>Repeatability Note 1 (")</b>	+/-0.05
<b>Drive method</b>	Special warm gear + belt
<b>Torque type</b>	Standard   High torque
<b>Maximum speed Note 2 (%/sec)</b>	420   280
<b>Rotating torque (N·m)</b>	6.6   10
<b>Max. pushing torque (N·m)</b>	3.3   5
<b>Backlash (")</b>	+/-0.5
<b>Max. moment of inertia Note 3 (kg·m²)</b>	0.04   0.1
<b>Cable length (m)</b>	Standard: 1   Option: 3, 5, 10
<b>Rotation range (")</b>	320

Note 1. Positioning repeatability in one direction.

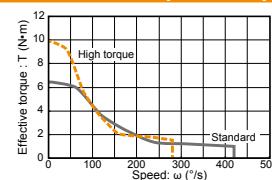
Note 2. The maximum speed may vary depending on the moment of inertia. Check the maximum speed while referring to the "Moment of inertia vs. Acceleration/deceleration" graph and the "Effective torque vs. speed" graph (reference).

Note 3. For moment of inertia and effective torque details, see P.604.

## Moment of inertia Acceleration/deceleration



## Effective torque vs. speed



## Allowable load

Allowable radial load (N)	Allowable thrust load (N)		Allowable moment (N·m)	
	(a)	(b)	Standard model	High rigidity model
314	378	296	398	517
314	378	296	9.7	12.0

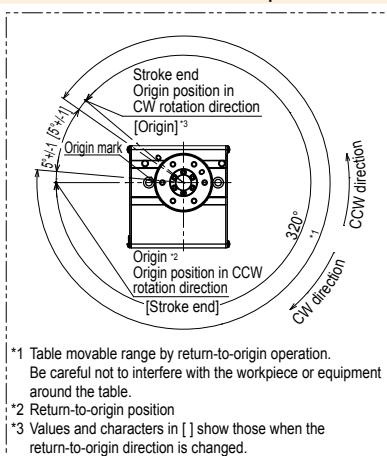
Note. When purchasing the product, set the controller acceleration while carefully checking the "Moment of inertia vs. Acceleration/Deceleration" and "Effective torque vs. Speed" graphs.

For details, please refer to the TRANSEROV Series User's Manual.

## Controller

Controller	Operation method
TS-S2	I/O point trace / Remote command
TS-SH	Pulse train control
TS-SD	Pulse train control

## RF04-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.

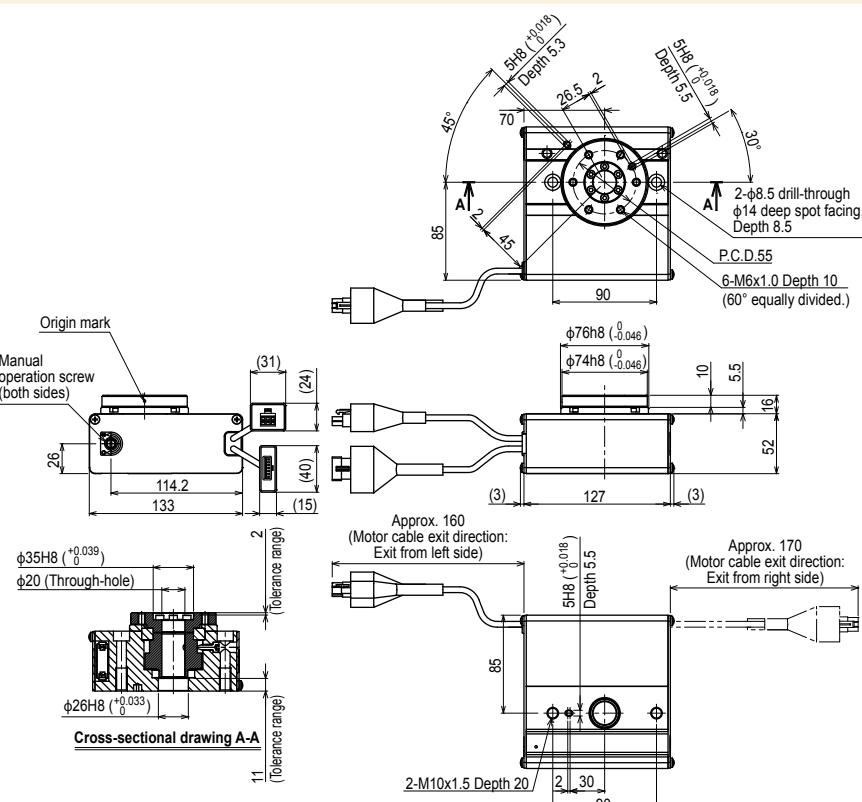
**Weight (kg)** 2.2

Note 1. This drawing is output under the conditions below.

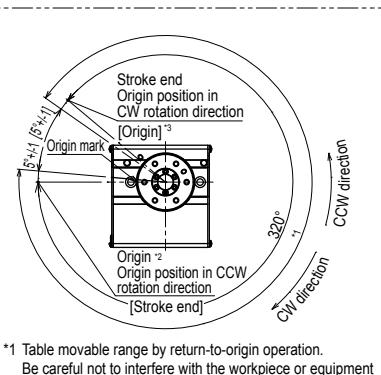
Bearing..... Standard

Torque..... Standard/High torque

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



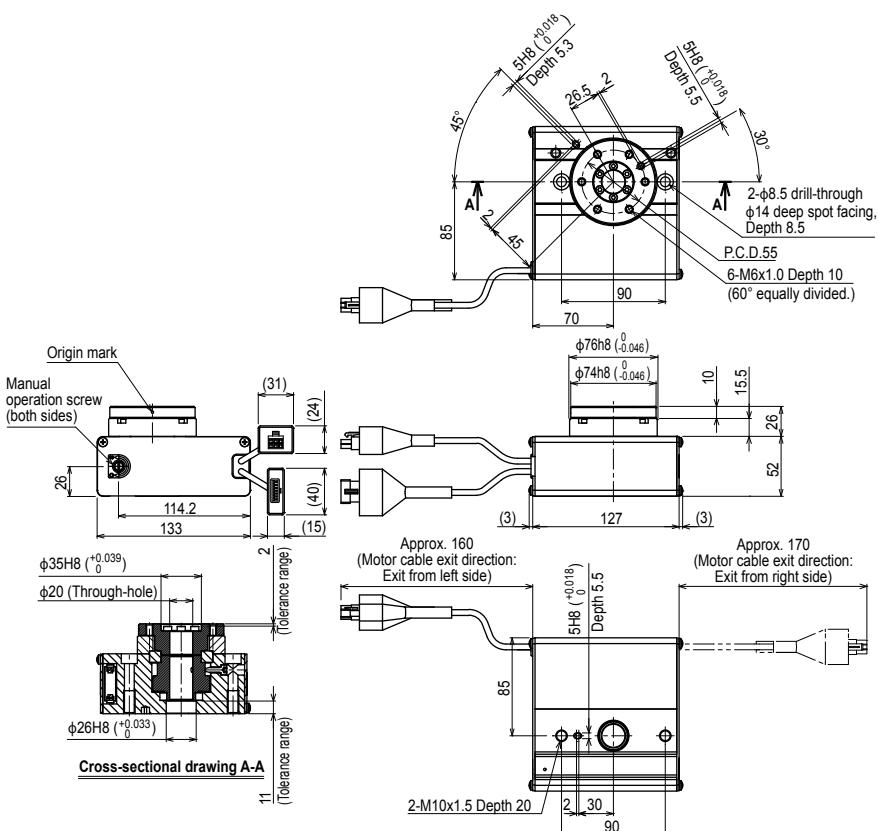
## RF04-NH Limit rotation specification – High rigidity model



\*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.



Weight (kg) 2.4

Note 1. This drawing is output under the conditions below.

Bearing ..... High rigidity

Torque ..... Standard/High torque

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