RF03-N

Rotary type / Limit rotation specification

CE compliance | Rotation range : 320°

Ordering method

RF03	N					
Model	Return-to-origin method	Bearing	Torque	Cable entry location	Rotation direction	Cable length Note 1
	N: Stroke end (Limit rotation)	N: Standard H: High rigidity	N: Standard torque H: High torque	R:From the right L: From the left	N: CCW Z: CW	1K: 1m 3K: 3m 5K: 5m 10K: 10m

S2

Robot positioner	I/O
S2: TS-S2 Note2	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board Note 3

SH

Robot positioner	I/O	Battery
SH: TS-SH	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board Note 3	B: With battery (Absolute) N: None (Incremental)

SD

Robot driver	I/O cable
SD: TS-SD	1: 1m

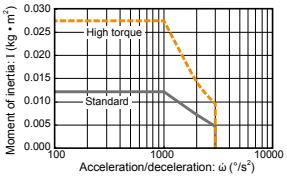
Note 1. The robot cable is flexible and resists bending.
Note 2. See P.522 for DIN rail mounting bracket.
Note 3. Select this selection when using the gateway function. For details, see P.66.

Basic specifications

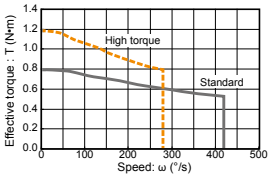
Motor	28 □ Step motor	
Resolution (Pulse/rotation)	4096	
Repeatability Note 1 (°)	+/-0.05	
Drive method	Special warm gear + belt	
Torque type	Standard	High torque
Maximum speed Note 2 (°/sec)	420	280
Rotating torque (N•m)	0.8	1.2
Max. pushing torque (N•m)	0.4	0.6
Backlash (°)	+/-0.5	
Max. moment of inertia Note 3 (kg•m²)	0.012	0.027
Cable length (m)	Standard: 1 / Option: 3, 5, 10	
Rotation range (°)	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.641.

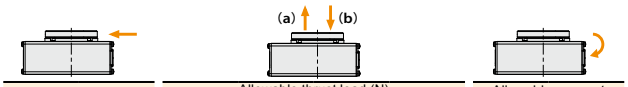
Moment of inertia Acceleration/deceleration



Effective torque vs. speed



Allowable load



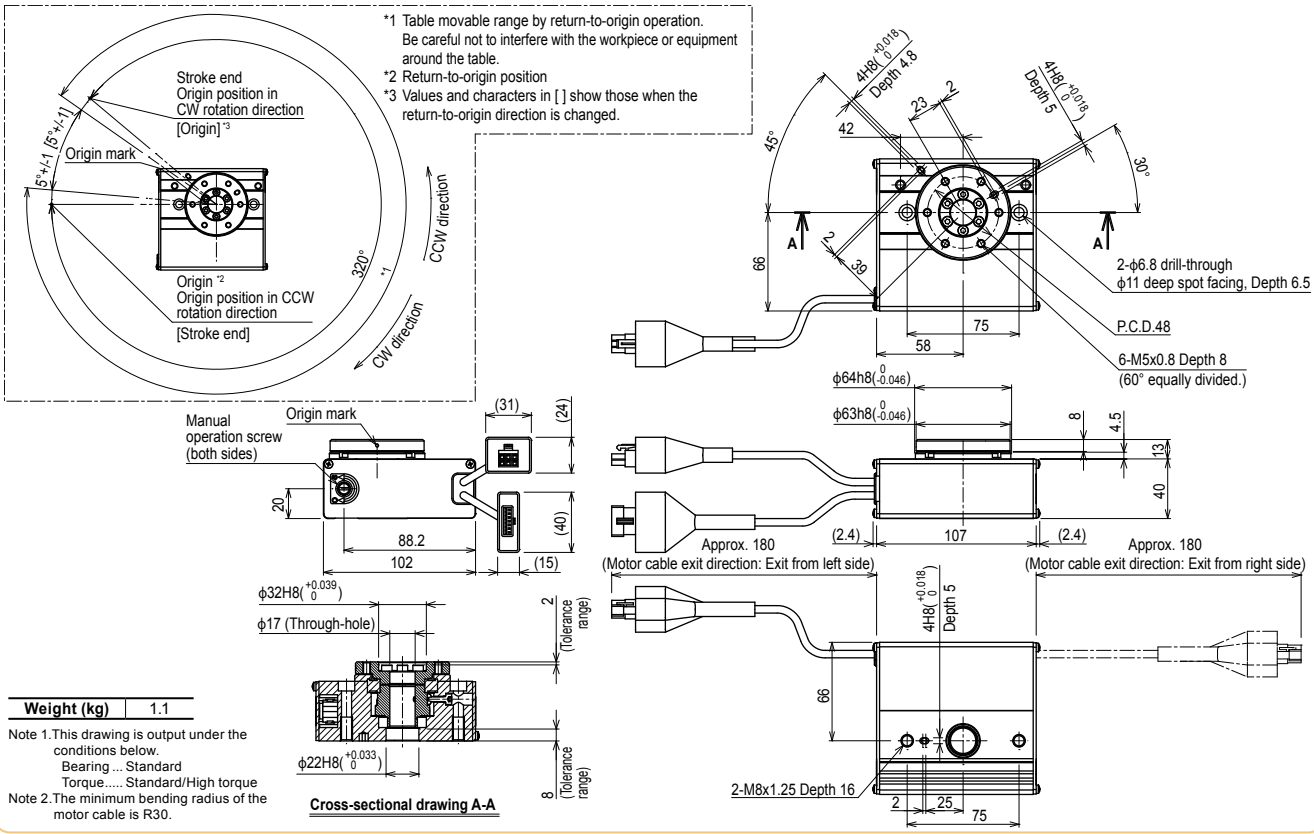
Allowable radial load (N)		Allowable thrust load (N)				Allowable moment (N•m)	
		(a)		(b)			
Standard model	High rigidity model	Standard model	High rigidity model	Standard model	High rigidity model	Standard model	High rigidity model
196	233	197		363	398	5.3	6.4

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 TRANSERVO Series User's Manual.

Controller

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

RF03-NN Limit rotation specification – Standard model

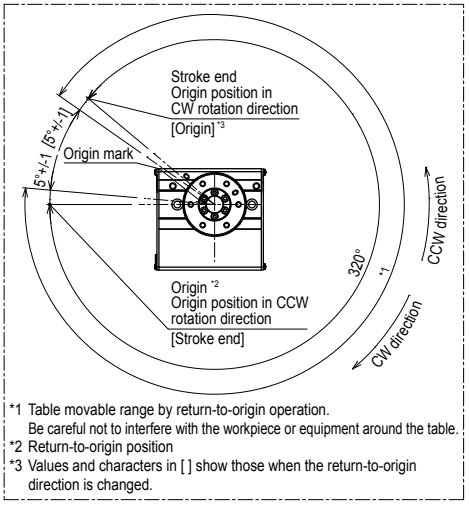


Weight (kg)	1.1

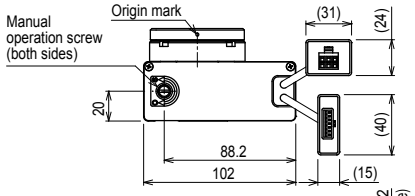
Note 1.This drawing is output under the conditions below.
Bearing ... Standard
Torque..... Standard/High torque
Note 2.The minimum bending radius of the motor cable is R30.

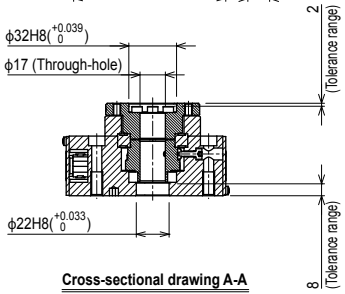
Controller TS-S2 ▸ 514 | TS-SH ▸ 514 | TS-SD ▸ 524

RF03-NH Limit rotation specification – High rigidity model

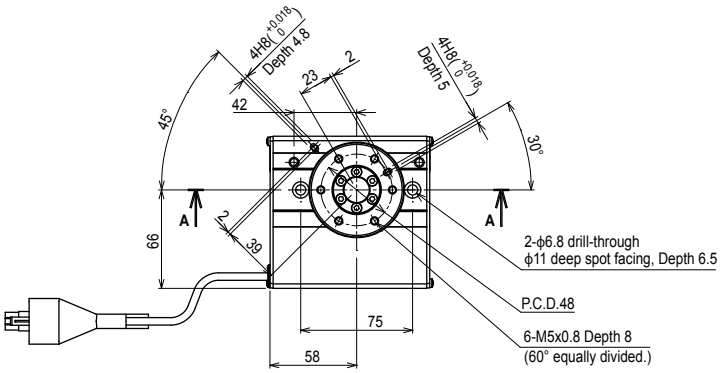


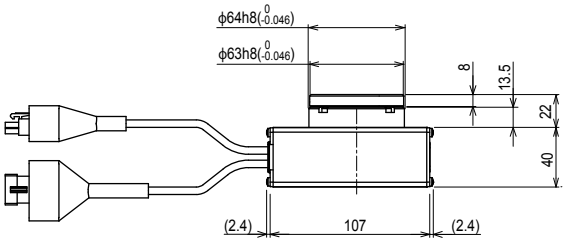
*1 Table movable range by return-to-origin operation.
Be careful not to interfere with the workpiece or equipment around the table.
*2 Return-to-origin position
*3 Values and characters in [ ] show those when the return-to-origin direction is changed.

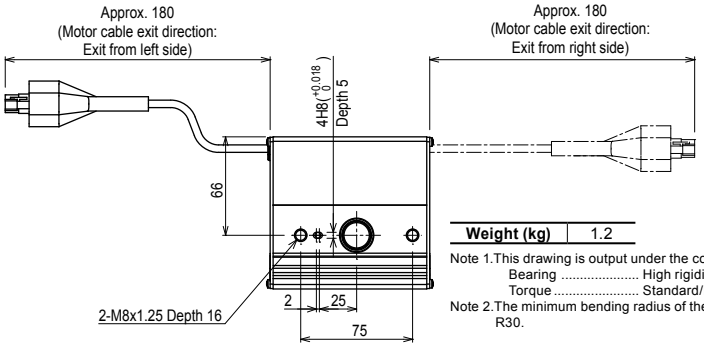




Cross-sectional drawing A-A







Weight (kg)	1.2

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.