

RF03-N

Rotary type / Limit rotation specification

- CE compliance
- Rotation range : 320°

Ordering method

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

S2	SH	SD
Robot positioner S2: TS-S2 <small>Note 2</small>	Robot positioner SH: TS-SH	Robot driver SD: TS-SD
I/O NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board <small>Note 3</small>	I/O NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board <small>Note 3</small>	I/O cable t: 1m
	Battery B: With battery (Absolute) N: None (Incremental)	
		1

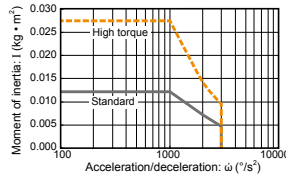
Note 1. The robot cable is flexible and resists bending.
 Note 2. See P.498 for DIN rail mounting bracket.
 Note 3. Select this selection when using the gateway function. For details, see P.60.

Basic specifications

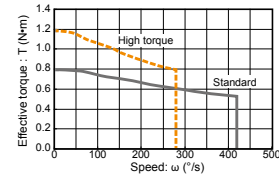
Motor	28 □ Step motor	
Resolution (Pulse/rotation)	4096	
Repeatability <small>Note 1</small> (°)	±0.05	
Drive method	Special warm gear + belt	
Torque type	Standard	High torque
Maximum speed <small>Note 2</small> (°/sec)	420	280
Rotating torque (N·m)	0.8	1.2
Max. pushing torque (N·m)	0.4	0.6
Backlash (°)	±0.5	
Max. moment of inertia <small>Note 3</small> (kg·m ²)	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.604.

Moment of inertia Acceleration/deceleration



Effective torque vs. speed



Allowable load

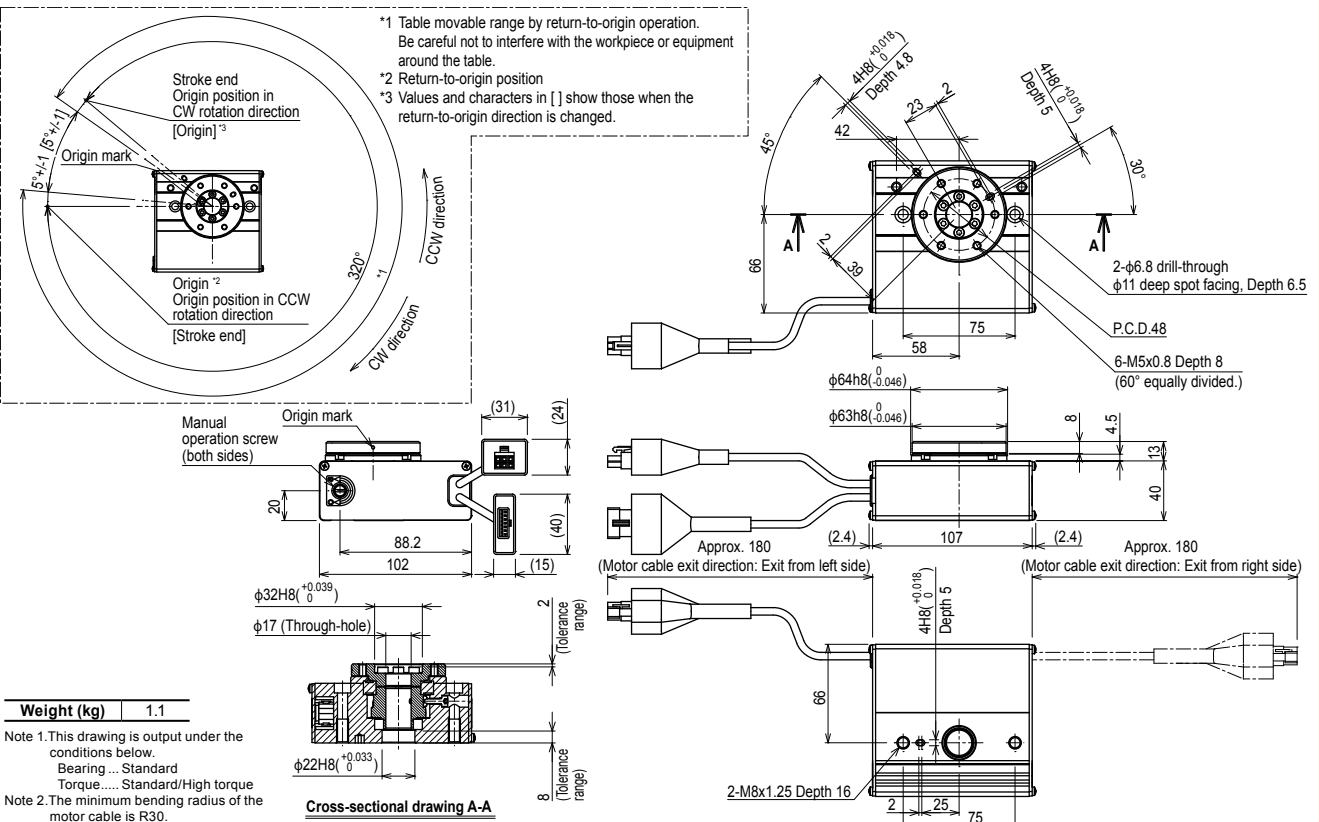
Allowable radial load (N)		Allowable thrust load (N)				Allowable moment (N·m)	
		(a)		(b)			
Standard model	High rigidity model	Standard model	High rigidity model	Standard model	High rigidity model	Standard model	High rigidity model
196	233	197	363	398		5.3	6.4

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.

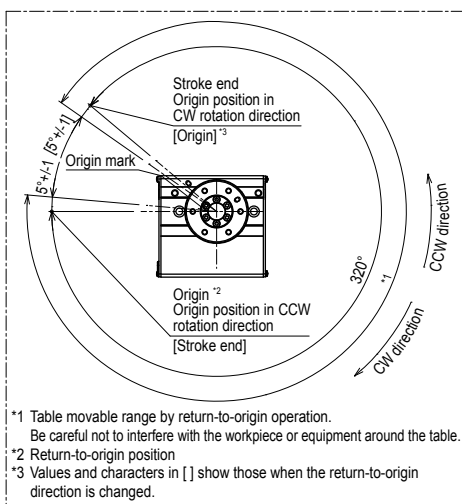
Controller

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

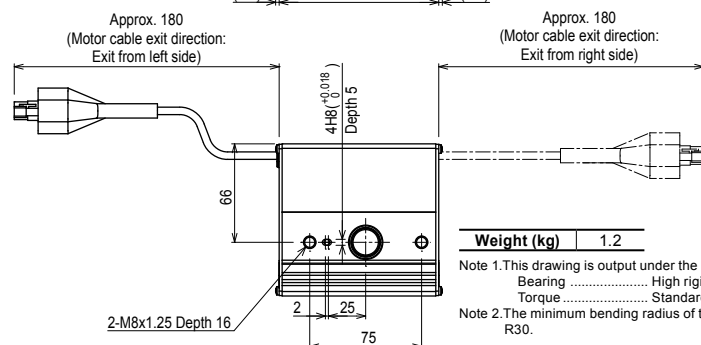
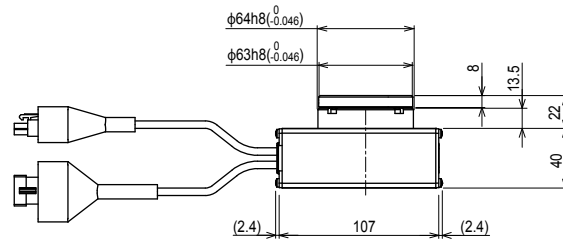
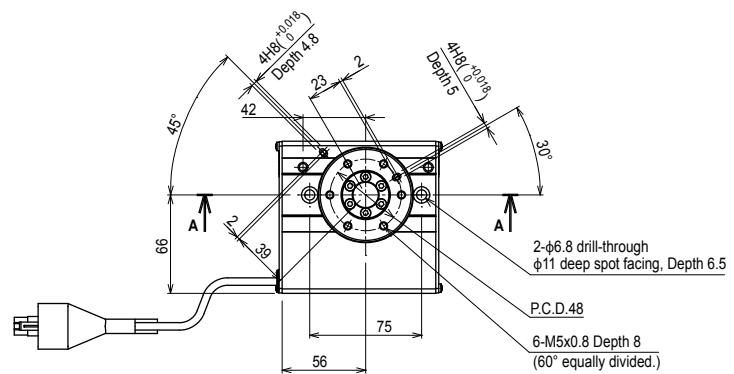
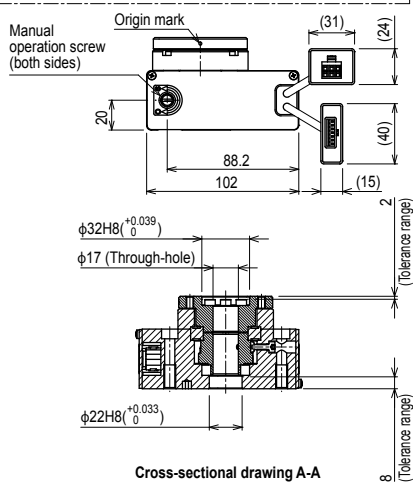
RF03-NN Limit rotation specification – Standard model



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.



Weight (kg)	1.2
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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.