

● CE compliance ● Rotation range : 310°

Ordering method

RF02	N			L			S2	
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 L: From the left	Rotation direction N: CCW Z: CW	Cable length ^{Note 1} 1L: 1m 3L: 3m 5L: 5m 10L: 10m	Controller S2: TS-S2	I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet EP: EtherNet/IP

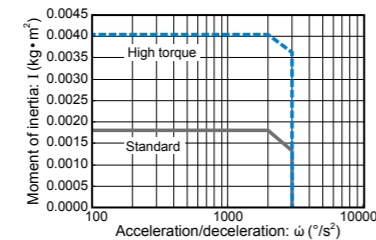
Note 1. The robot cable is flexible and resists bending.

Basic specifications

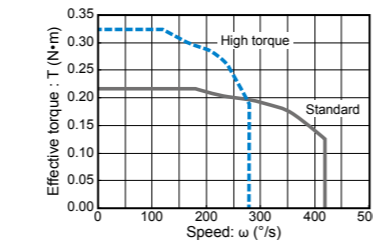
Motor	20 □ Step motor
Resolution (Pulse/rotation)	4096
Repeatability ^{Note 1} (°)	+/-0.05
Drive method	Special worm gear + belt
Torque type	Standard High torque
Maximum speed ^{Note 2} (°/sec)	420 280
Rotating torque (N·m)	0.22 0.32
Max. pushing torque (N·m)	0.11 0.16
Backlash (°)	+/-0.5
Max. moment of inertia ^{Note 3} (kg·m ²)	0.0018 0.004
Cable length (m)	Standard: 1 / Option: 3, 5, 10
Rotation range (°)	310

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.???

Moment of inertia Acceleration/deceleration



Effective torque vs. speed



Allowable load

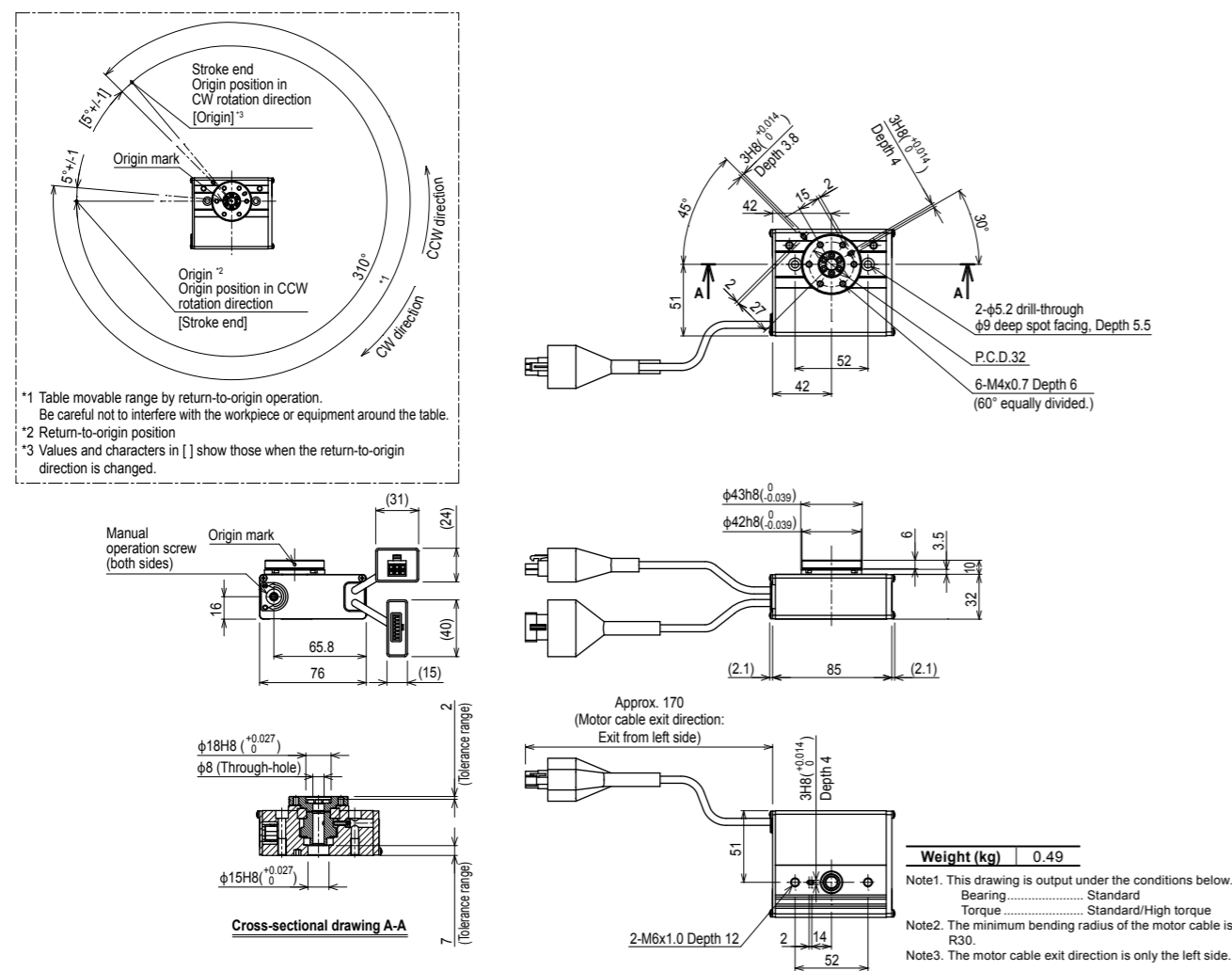
Allowable radial load (N)	Allowable thrust load (N)				Allowable moment (N·m)	
	(a)	(b)	(a)	(b)	Standard model	High rigidity model
Standard model: 78 High rigidity model: 86	Standard model: 74 High rigidity model: 78	Standard model: 78 High rigidity model: 107	Standard model: 2.4 High rigidity model: 2.9			

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.

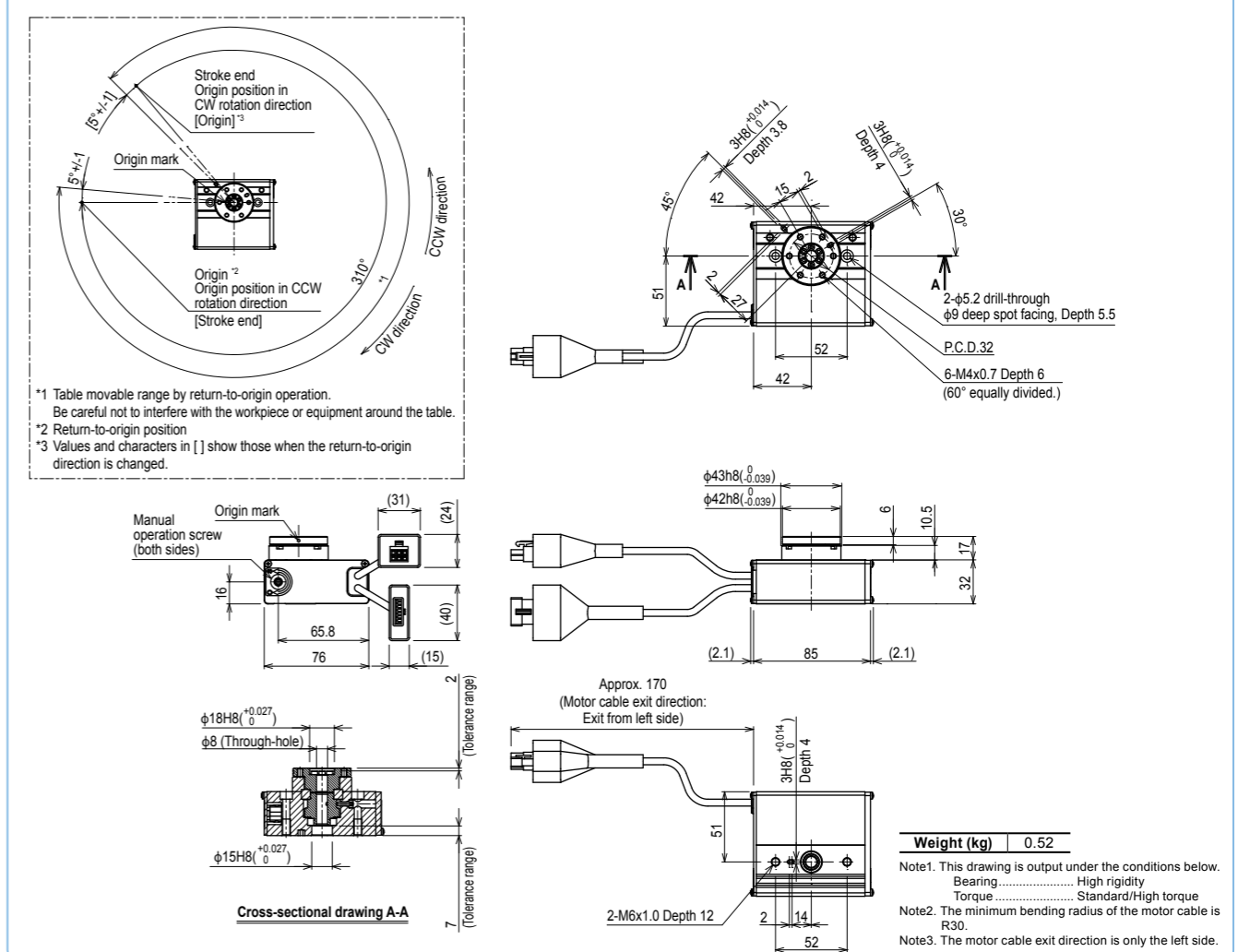
Controller

Controller	Operation method
TS-S2	I/O point trace / Remote command

RF02-NN Limit rotation specification – Standard model



RF02-NH Limit rotation specification – High rigidity model





● CE compliance ● Limitless rotation

Ordering method

RF02	S			L			S2	S	
Model	Return-to-origin method S: Sensor (Limitless rotation)	Bearing N: Standard H: High rigidity	Torque N: Standard torque H: High torque	Cable entry location L: From the left	Rotation direction N: CCW Z: CW	Cable length ^{Note 1} 1L: 1m 3L: 3m 5L: 5m 10L: 10m	Controller S2: TS-S2	Type S: Sensor	I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet EP: EtherNet/IP

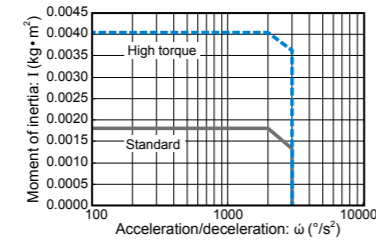
Note 1. The robot cable is flexible and resists bending.

Basic specifications

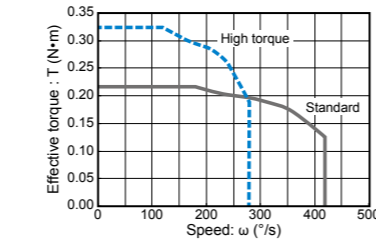
Motor	20 □ Step motor
Resolution (Pulse/rotation)	4096
Repeatability ^{Note 1} (°)	+/-0.05
Drive method	Special worm gear + belt
Torque type	Standard High torque
Maximum speed ^{Note 2} (°/sec)	420 280
Rotating torque (N·m)	0.22 0.32
Max. pushing torque (N·m)	0.11 0.16
Backlash (°)	+/-0.5
Max. moment of inertia ^{Note 3} (kg·m ²)	0.0018 0.004
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.???

Moment of inertia Acceleration/deceleration



Effective torque vs. speed



Allowable load

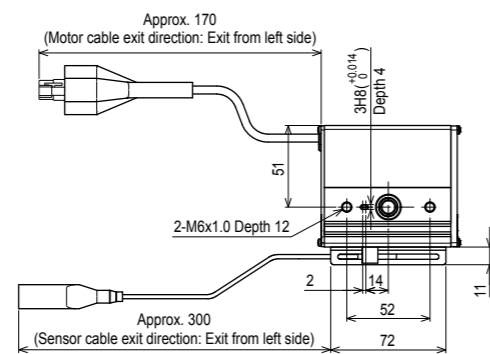
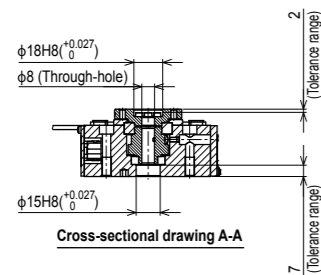
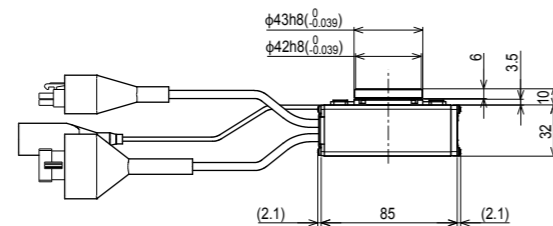
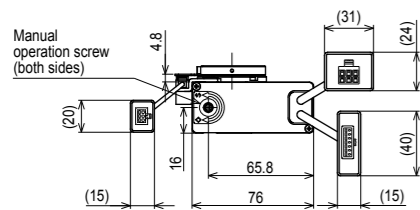
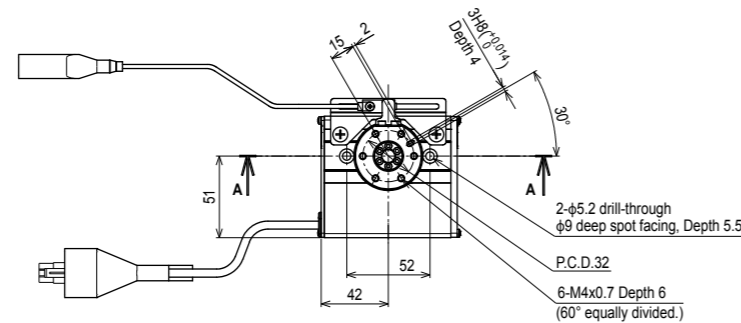
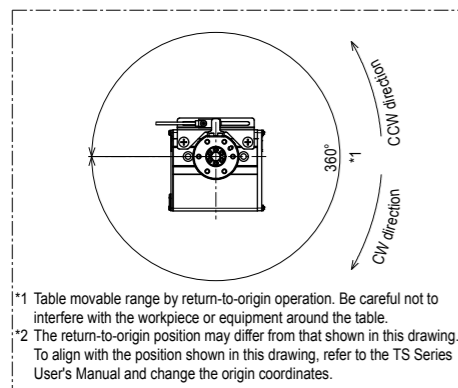
Allowable radial load (N)	Allowable thrust load (N)				Allowable moment (N·m)	
	(a)	(b)	(a)	(b)	Standard model	High rigidity model
Standard model: 78 High rigidity model: 86	Standard model: 74 High rigidity model: 78	Standard model: 78 High rigidity model: 107	Standard model: 2.4 High rigidity model: 2.9			

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-S2S	I/O point trace / Remote command

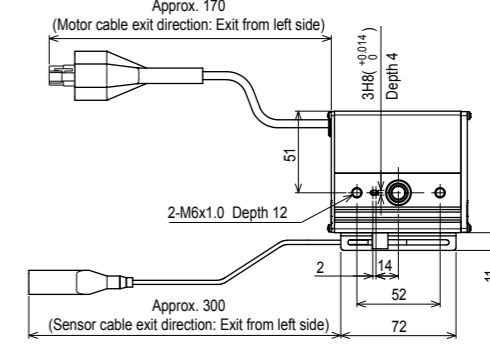
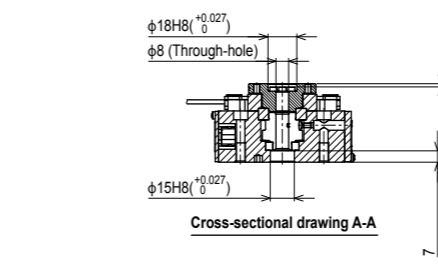
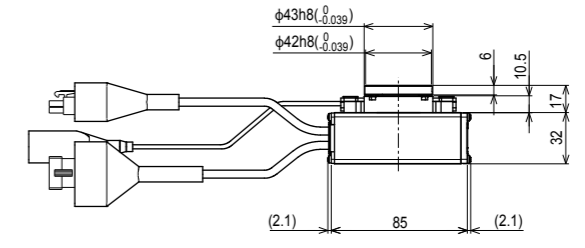
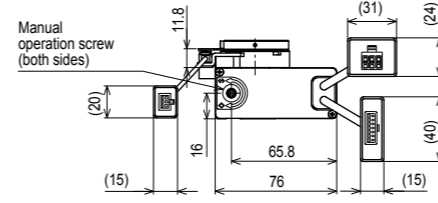
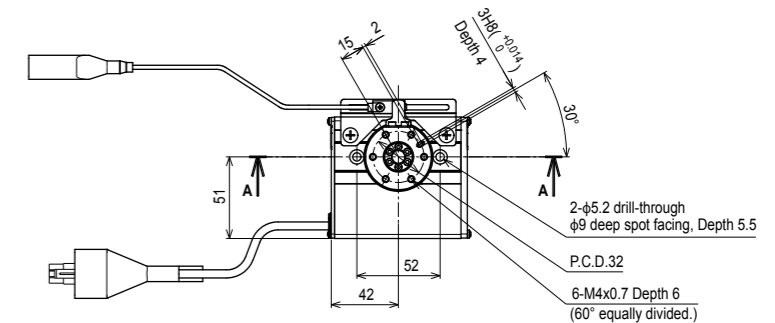
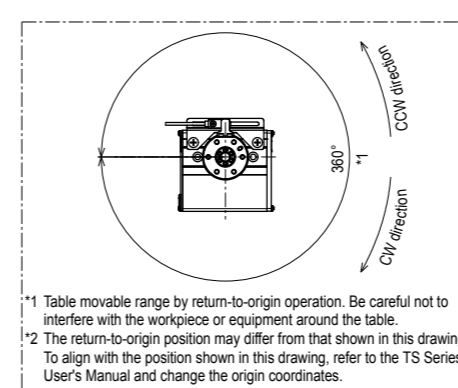
RF02-SN Sensor specification – Standard model



Weight (kg) 0.51

Note1. This drawing is output under the conditions below.
 Bearing..... Standard
 Torque..... Standard/High torque
 Note2. The minimum bending radii of the motor cable and sensor cable are R30.
 Note3. The motor cable exit direction is only the left side.

RF02-SH Sensor specification – High rigidity model



Weight (kg) 0.55

Note1. This drawing is output under the conditions below.
 Bearing..... High rigidity
 Torque..... Standard/High torque
 Note2. The minimum bending radii of the motor cable and sensor cable are R30.
 Note3. The motor cable exit direction is only the left side.