Product Specifications

Grease lubrication type

Model		RGR063			RGR080			RGR100		
Main unit gear ratio		30			36			36		
Reducer gear ratio		1	3	5	1	3	5	1	3	5
Total gear ratio		30	90	150	36	108	180	36	108	180
Start / Stop limit torque	N·m	153			194			220		
Static output torque	N·m	209			272			310		
Maximum input speed	min⁻¹	1,800	5,400	6,000	1,600	4,800	6,000	1,400	4,200	6,000
Rated input speed	min⁻¹	900	2,700	3,000	800	2,400	3,000	700	2,100	3,000
Maximum output speed [1]	min⁻¹	60	60.0	36.0	44.4	44.4	26.7	38.9	38.9	23.3
Rated output speed [1]	min⁻¹	30	30.0	18.0	22.2	22.2	13.3	19.4	19.4	11.7
Internal moment of inertia at the input shaft [2]	× 10⁻⁴ kg·㎡	0.215			0.334			1.073		
Equivalent moment of inertia of motor shaft [3]	× 10⁻⁴ kg·㎡	0.44	0.30	0.20	0.56	0.31	0.21	1.30	0.39	0.24
Repeatability [4]	arc sec or less	± 7			± 5			± 5		
Allowable axial load (load weight)	N	1,112		1,236	1,243		1,381	3,507		3,897
Allowable radial load	N	745		828	833		926	2,350		2,611
Allowable moment load	N·m	73		80	117		127	353		385
Weight (not including motor) [5]	kg	6.1			8.3			16		

*1 Contact Sankyo in the case of output with continuous rotation at 360 degrees or more.
*2 Does not include coupling and reducer.
*3 Maximum value may vary depending on motor specifications.
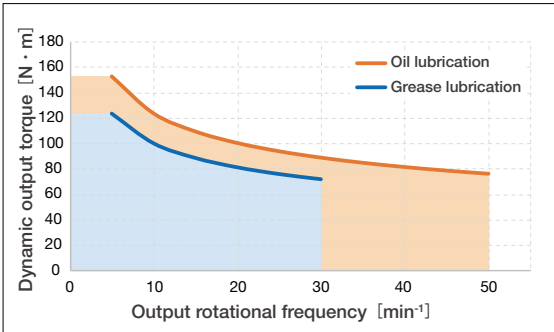*4 Indicates the accuracy for the main unit without the reducer.
*5 May vary slightly depending on reduction ratio and motor specifications/dimensions.

Oil lubrication type

Model		RGR063			RGR080			RGR100		
Main unit gear ratio		30			36			36		
Reducer gear ratio		—	3	5	—	3	5	—	3	5
Total gear ratio		30	90	150	36	108	180	36	108	180
Start / Stop limit torque	N·m	153			194			220		
Static output torque	N·m	209			272			310		
Maximum input speed	min⁻¹	3,000	6,000		2,800	6,000		2,400	6,000	
Rated input speed	min⁻¹	1,500	3,000		1,400	3,000		1,200	3,000	
Maximum output speed [1]	min⁻¹	100	66.7	40.0	77.8	55.6	33.3	66.7	55.6	33.3
Rated output speed [1]	min⁻¹	50	33.3	20.0	38.9	27.8	16.7	33.3	27.8	16.7
Internal moment of inertia at the input shaft [2]	× 10⁻⁴ kg·㎡	0.215			0.334			1.073		
Equivalent moment of inertia of motor shaft [3]	× 10⁻⁴ kg·㎡	0.44	0.30	0.20	0.56	0.31	0.21	1.30	0.39	0.24
Repeatability [4]	arc sec or less	± 7			± 5			± 5		
Allowable axial load (load weight)	N	1,112		1,236	1,243		1,381	3,507		3,897
Allowable radial load	N	745		828	833		926	2,350		2,611
Allowable moment load	N·m	73		80	117		127	353		385
Weight (not including motor) [5]	kg	6.5		8.1	9.1		10.7	17.3		18.7

*1 Contact Sankyo in the case of output with continuous rotation at 360 degrees or more.
*2 Does not include coupling and reducer.
*3 Maximum value may vary depending on motor specifications.
*4 Indicates the accuracy for the main unit without the reducer.
*5 May vary slightly depending on reduction ratio and motor specifications/dimensions.
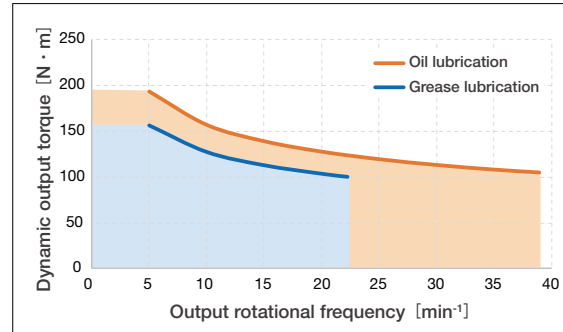
Dynamic output torque

The limit for the load torque acting on the output shaft is indicated to satisfy the expected lifetime (12,000 hours) of the RollerDrive. Dynamic output torque varies according to the output rotational frequency.
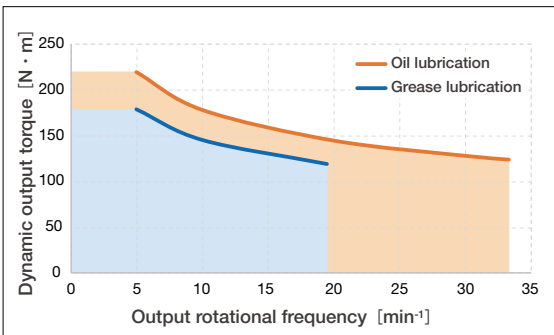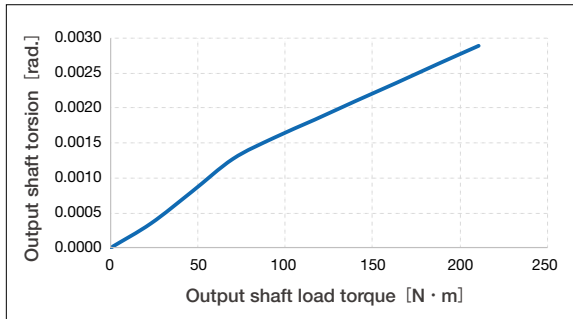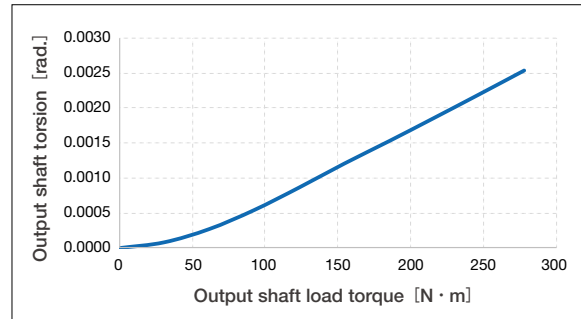
RGR063

RGR080

RGR100

Torsional Rigidity

Torsional rigidity is the degree of shaft torsion for the output shaft torque.
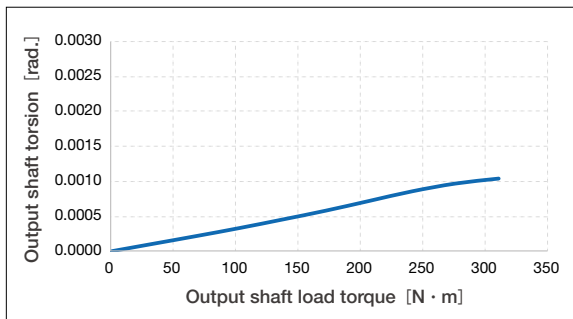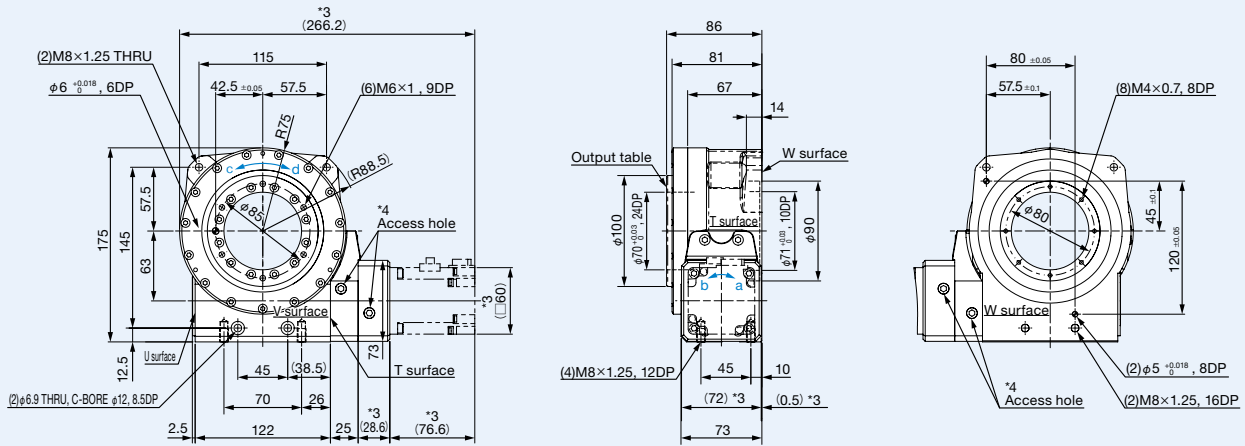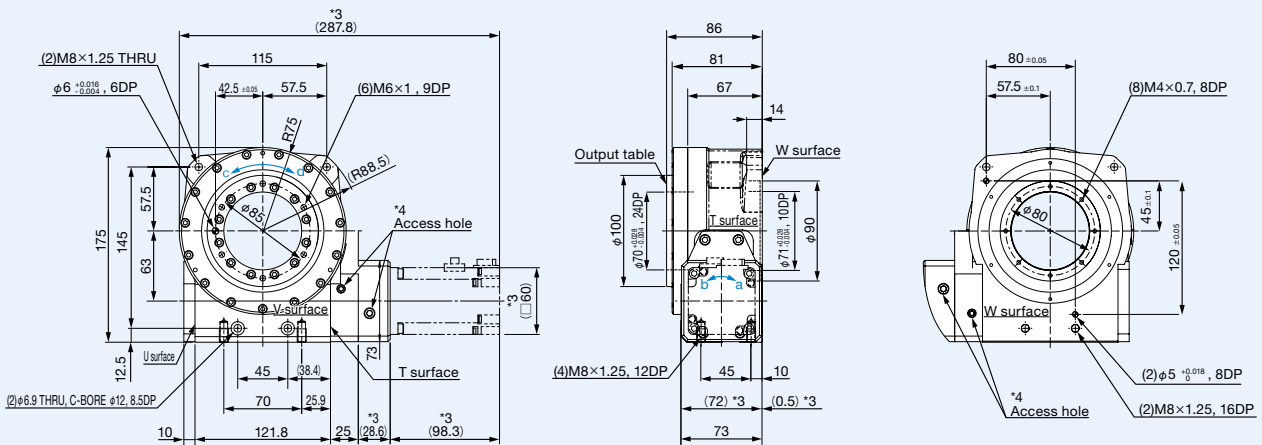Higher torsional rigidity means less torque deformation and higher natural frequency.

RGR063

RGR080

RGR100

RGR063 Dimensions of Standard Gear Ratio Models

▶Options: None

▶Options: A

▶Options: B

*1 This drawing is for a model where the motor is mounted on the T surface.   *2 The rotating directions of input-output axes are related as a-d and b-c.
*3 Dimensions in parentheses ( ) vary depending on the motor.   *4 There are two access holes on the V surface and two on the W surface.
7 *5 Due to its mounting position, the positions of the oil plug, oil level, and drain differ for the oil lubrication type. See P. 16.   *6 The servo motor will need to be prepared by the customer.
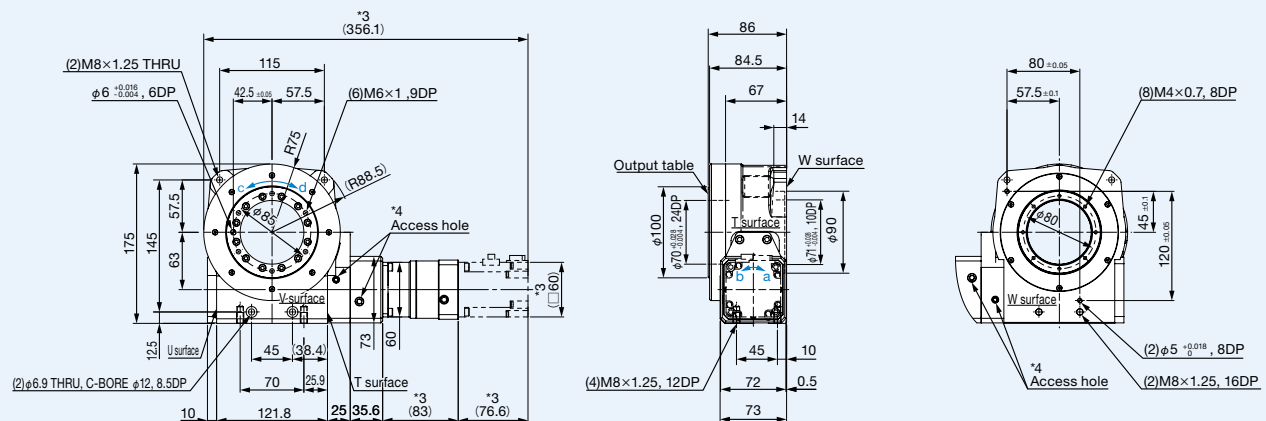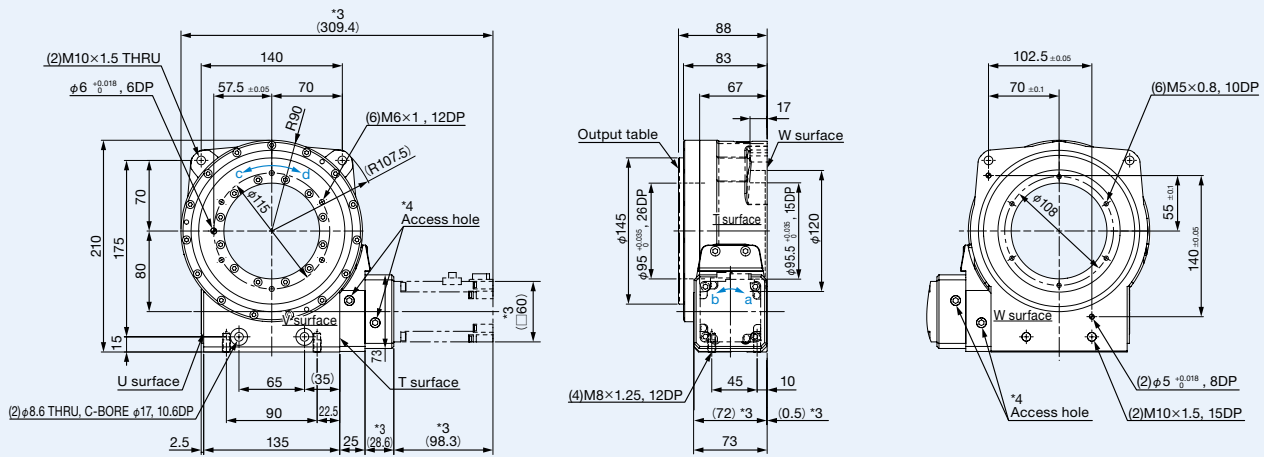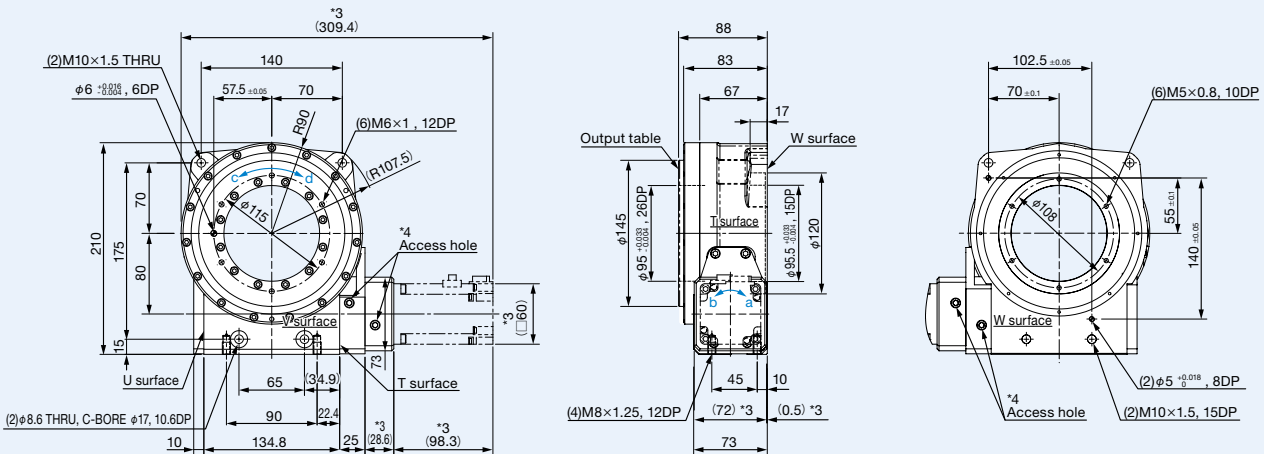
RGR063 Dimensions of High Gear Ratio Models

▶ Options: None

▶ Options: A

▶ Options: B

*1 This drawing is for a model where the motor is mounted on the T surface.   *2 The rotating directions of input-output axes are related as a-d and b-c.

*3 Dimensions in parentheses ( ) vary depending on the motor.   *4 There are two access holes on the V surface and two on the W surface.

*5 Due to its mounting position, the positions of the oil plug, oil level, and drain differ for the oil lubrication type. See P. 16.   *6 The servo motor will need to be prepared by the customer. 8

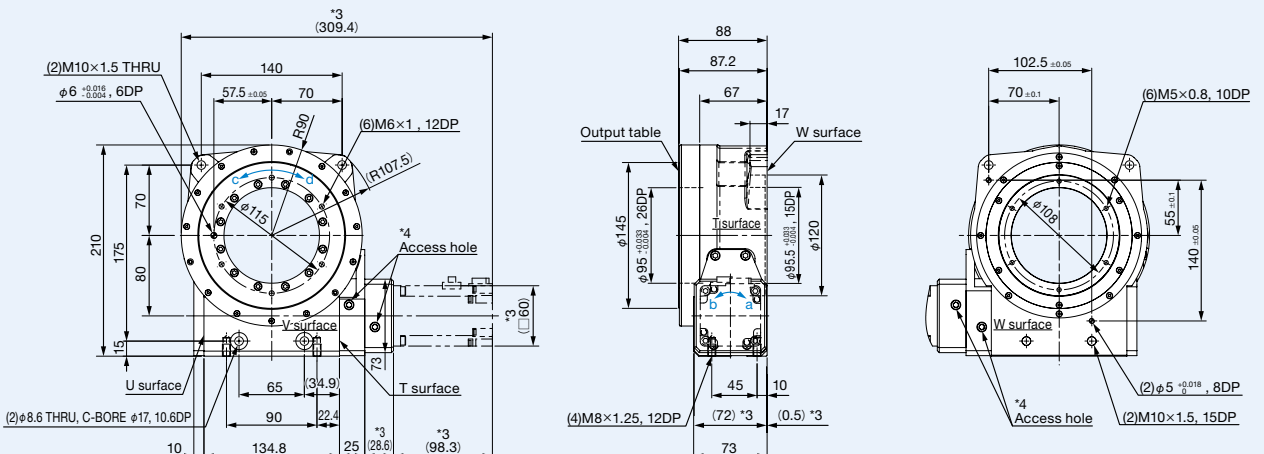# RGR080 Dimensions of Standard Gear Ratio Models

▶ Options: None

▶ Options: A

▶ Options: B

*1 This drawing is for a model where the motor is mounted on the T surface.   *2 The rotating directions of input-output axes are related as a-d and b-c.
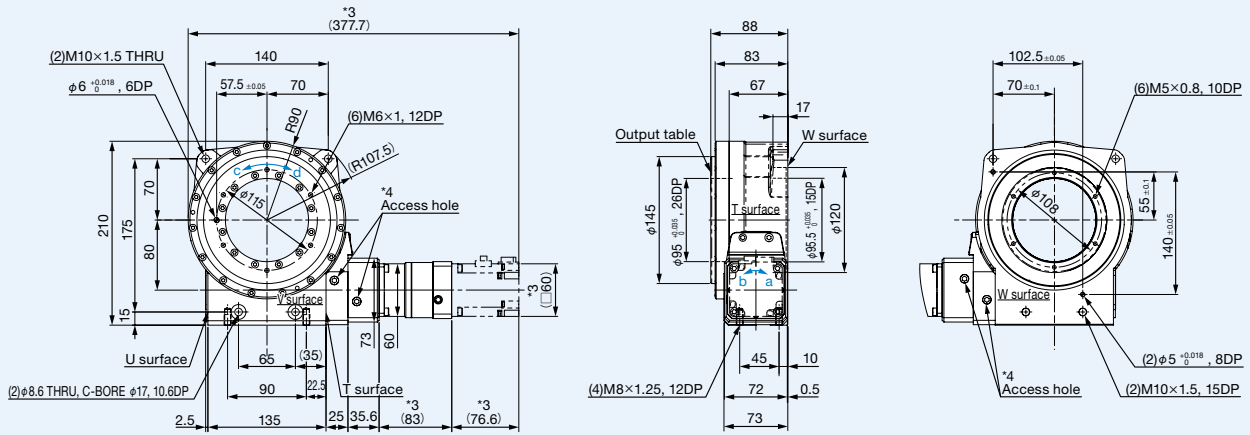
*3 Dimensions in parentheses ( ) vary depending on the motor.   *4 There are two access holes on the V surface and two on the W surface.

9 *5 Due to its mounting position, the positions of the oil plug, oil level, and drain differ for the oil lubrication type. See P. 16.   *6 The servo motor will need to be prepared by the customer.
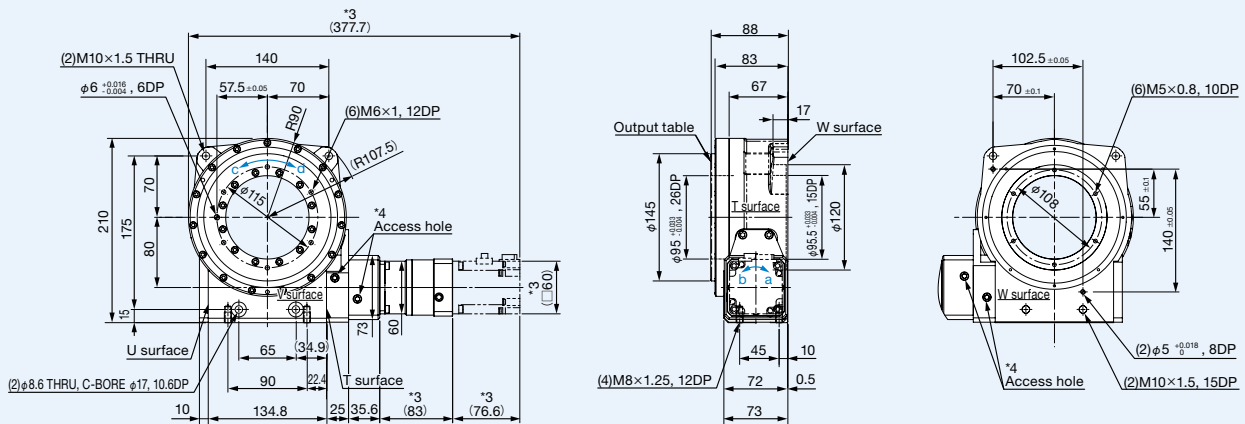
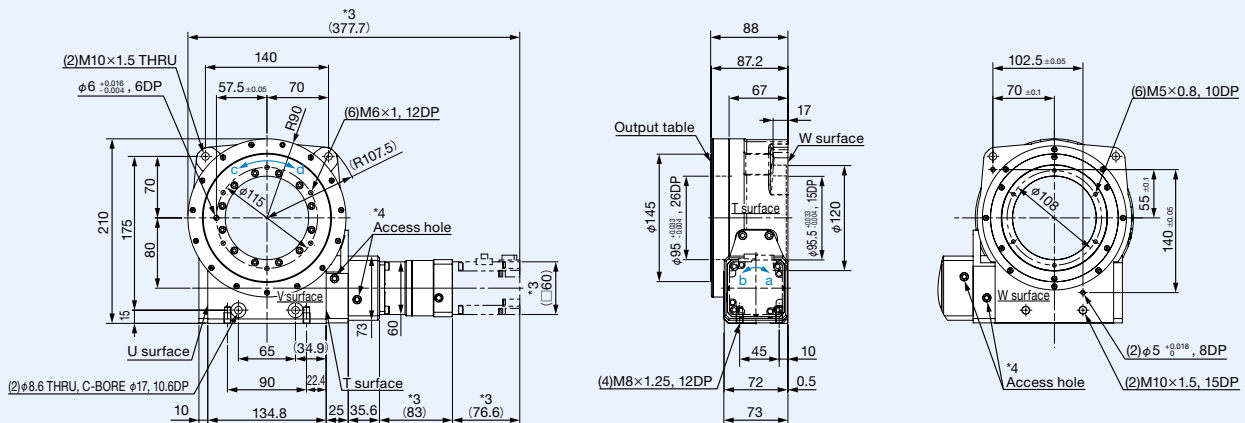# RGR080 Dimensions of High Gear Ratio Models

▶ Options: None

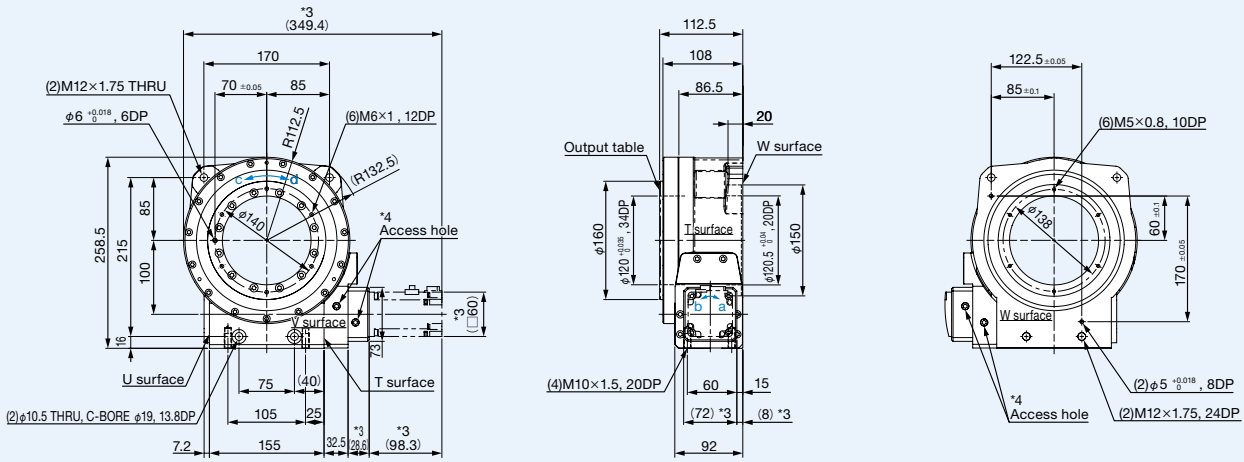▶ Options: A

▶ Options: B

*1 This drawing is for a model where the motor is mounted on the T surface.   *2 The rotating directions of input-output axes are related as a-d and b-c.
*3 Dimensions in parentheses ( ) vary depending on the motor.   *4 There are two access holes on the V surface and two on the W surface.
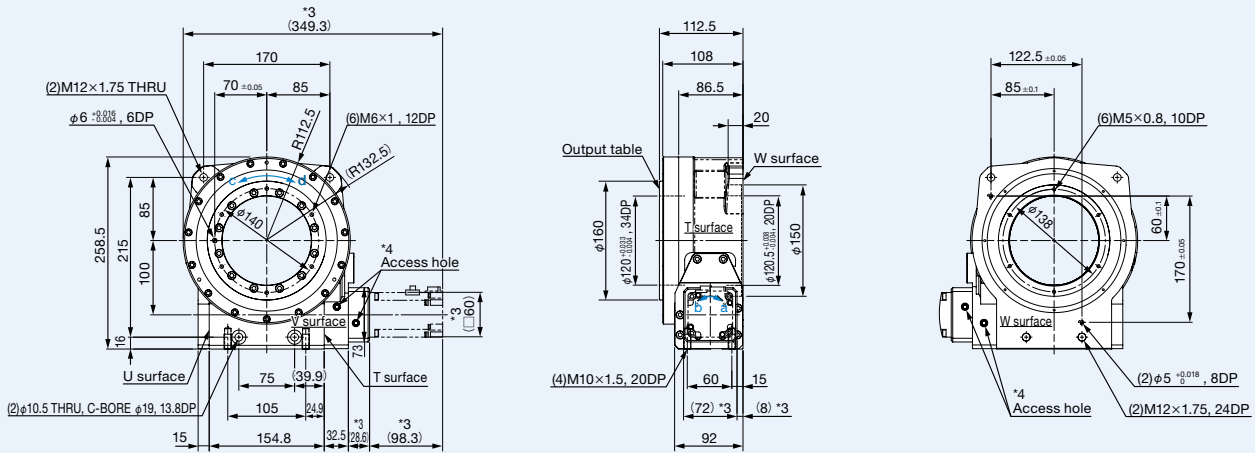*5 Due to its mounting position, the positions of the oil plug, oil level, and drain differ for the oil lubrication type. See P. 16.   *6 The servo motor will need to be prepared by the customer.   **10**
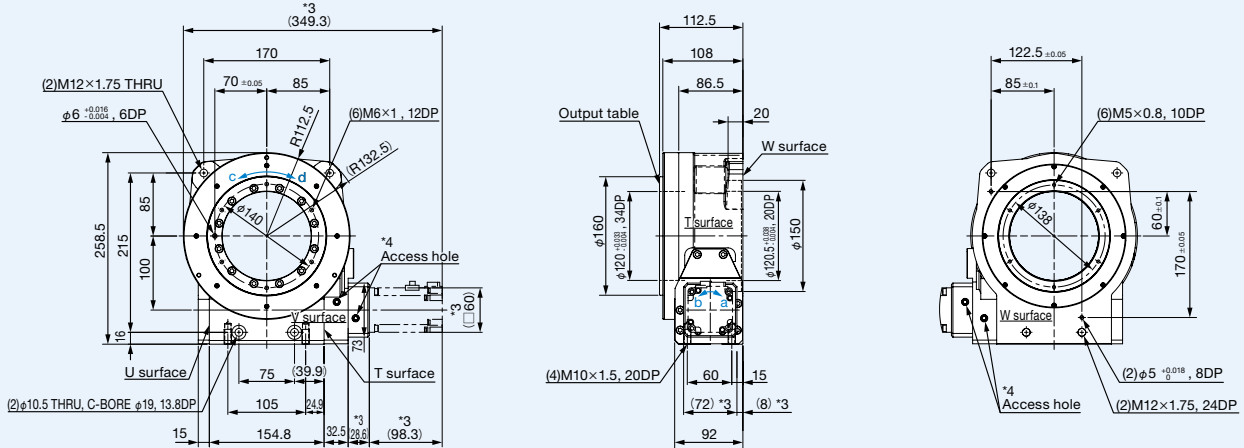
RGR0100 Dimensions of Standard Gear Ratio Models

▶Options: None

▶Options: A

▶Options: B

*1 This drawing is for a model where the motor is mounted on the T surface.   *2 The rotating directions of input-output axes are related as a-d and b-c.
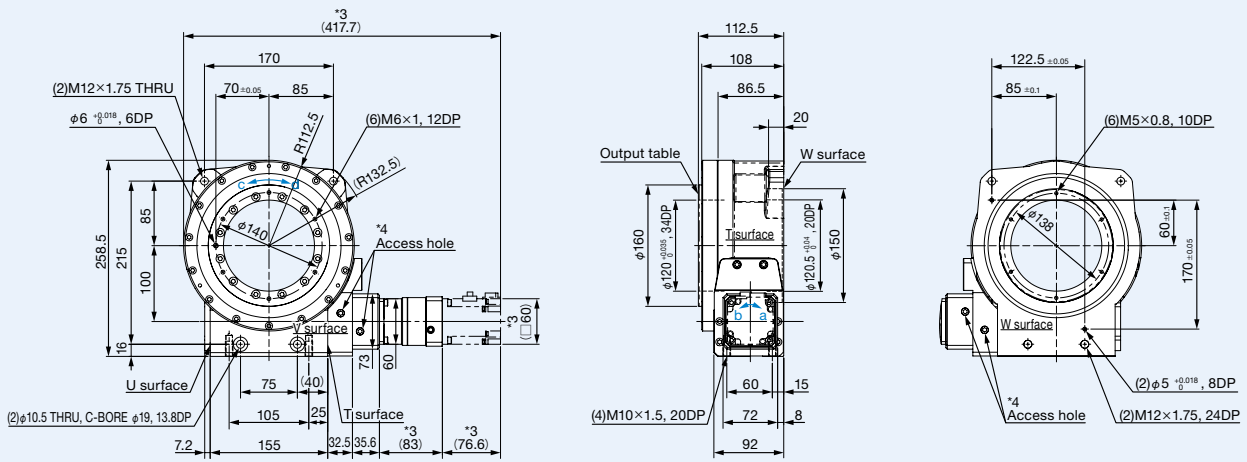*3 Dimensions in parentheses ( ) vary depending on the motor.   *4 There are two access holes on the V surface and two on the W surface.
11 *5 Due to its mounting position, the positions of the oil plug, oil level, and drain differ for the oil lubrication type. See P. 16.   *6 The servo motor will need to be prepared by the customer.
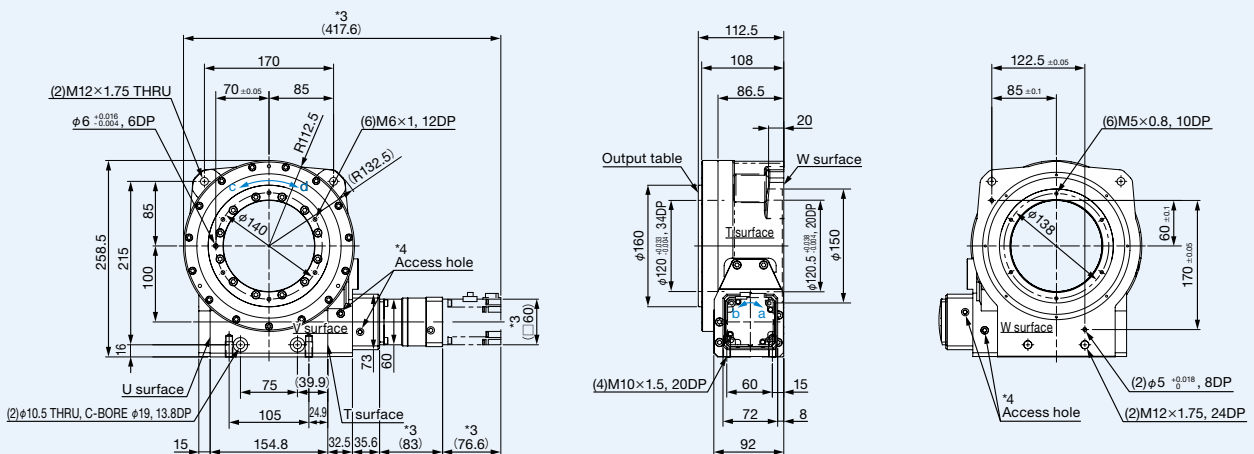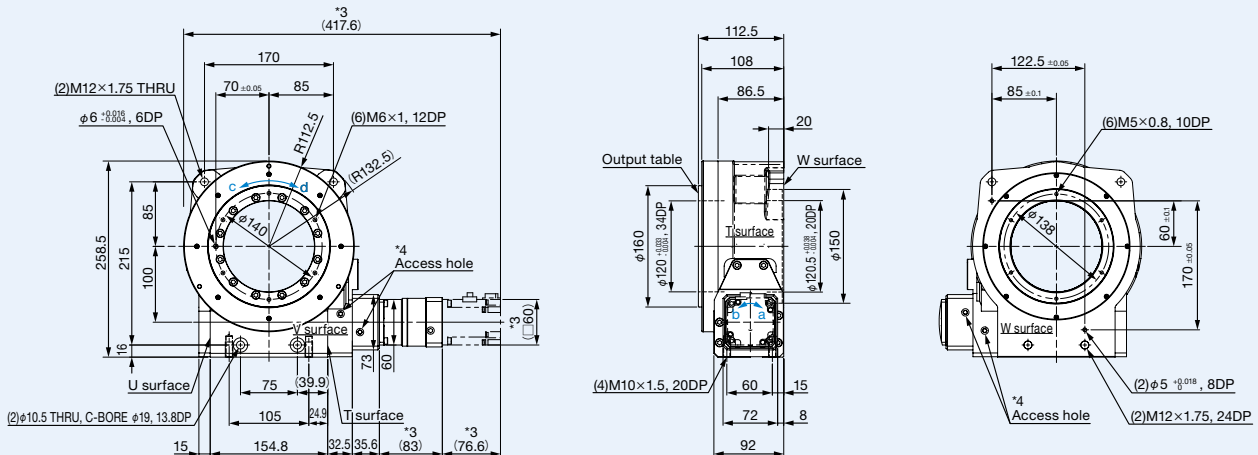
RGR0100 Dimensions of High Gear Ratio Models

▶ Options: None

▶ Options: A

▶ Options: B

*1 This drawing is for a model where the motor is mounted on the T surface.   *2 The rotating directions of input-output axes are related as a-d and b-c.
*3 Dimensions in parentheses ( ) vary depending on the motor.   *4 There are two access holes on the V surface and two on the W surface.
*5 Due to its mounting position, the positions of the oil plug, oil level, and drain differ for the oil lubrication type. See P. 16.   *6 The servo motor will need to be prepared by the customer.   12