

GT series

GT



Indication of Model Numbers

GT	60	B	10	MOTOR
Type	Model	Output Table Supporting Bearing	Ratio	Motor Type
GT	60 85 110 135 170 200 250	B: (60#~200#) Ball Bearing C: (60#~200#) Crossed Roller Bearing H: (60#) Ball Bearing Crossed Roller Bearing (85#~250#)	1-Stage : 5, 10, 18 2-Stage : 25, 50, 100 <hr/> H Output table supporting bearing type H 1-Stage : 10, 18 2-Stage : 50, 100	

Quiet operation

Grinding spiral bevel gear & Helical gears contribute to reduce vibration and noise.

High Rigidity & High Torque

High rigidity & high torque are achieved by crossed roller bearings.

High Efficiency

Efficiency exceeds 98%.

Characteristic of GT Series GT

Flexible Motor Connection

The modular design of motor connection plate is suitable for any brand servomotor and stepmotor. The input-end and the motor are coupled through a collet locking mechanism. It has passed dynamical balance analysis to assure concentricity and balance on the connection and no backlash for power transmission while running at high speed.

High Accuracy

Repetitive Positioning Accuracy ± 10 sec
Torsional Backlash ≤ 1 arcmin
Lost Motion 2 arcmin



Hollow Structure Design

Make it convenient for electric wiring or piping work.



Direct Mounting of Workpiece

The rotating table allows for direct mounting of workpiece for added convenience in workpiece loading.

Helical Gear Design

The speed reduction mechanism employs helical gears, which provides two times meshing rate of teeth when comparing with regular spur gears. In addition, it also Specification extremely smooth running, low noise, high torque output and low backlash.

High Precision Gear Machining

The housing of reducer is made by aluminum alloy, and precision machining by CNC machine.

Precision teeth grinding assures gear accuracy reaches DIN6 class and carburized to hardness 58-60 HRC.

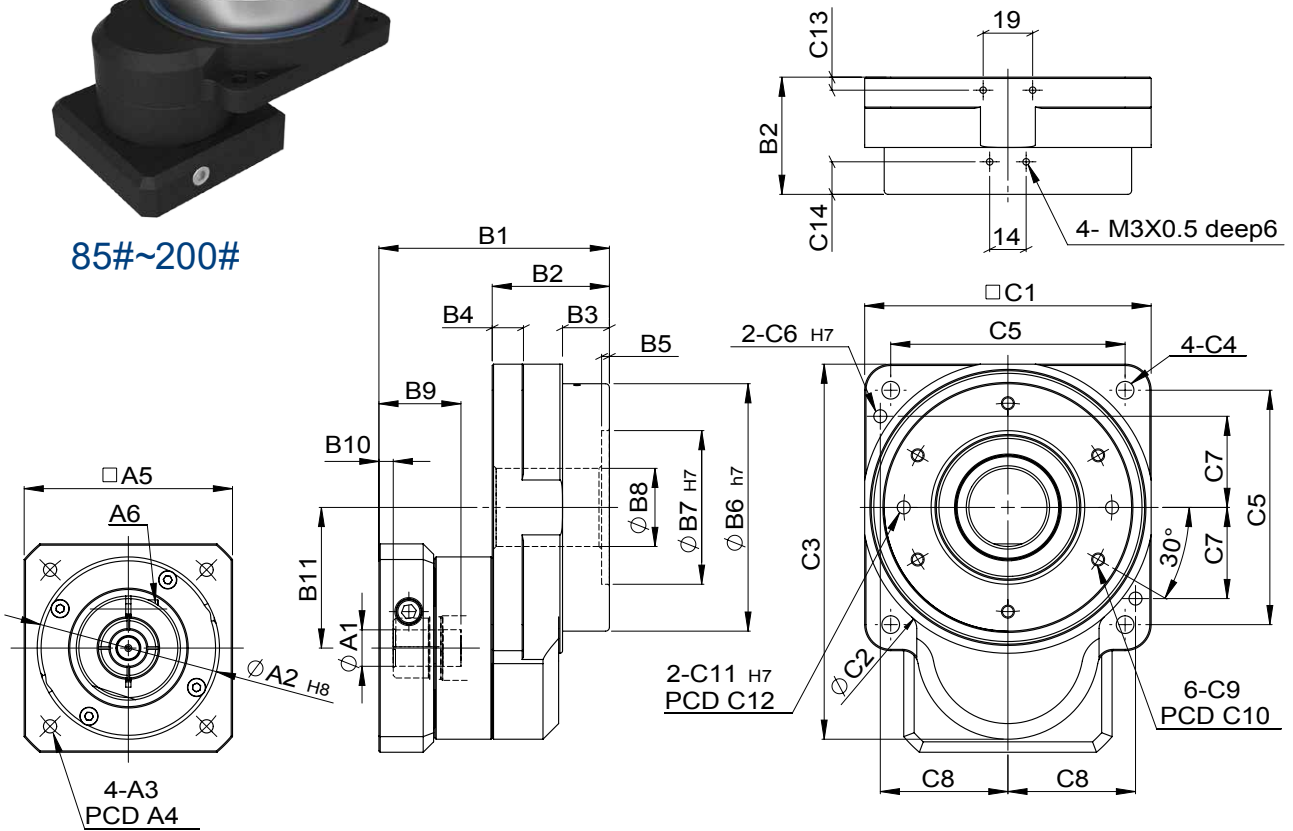
MODEL : GT-B

RATIO : 5.10.18 (1-Stage)

GT



85#~200#



unit: mm

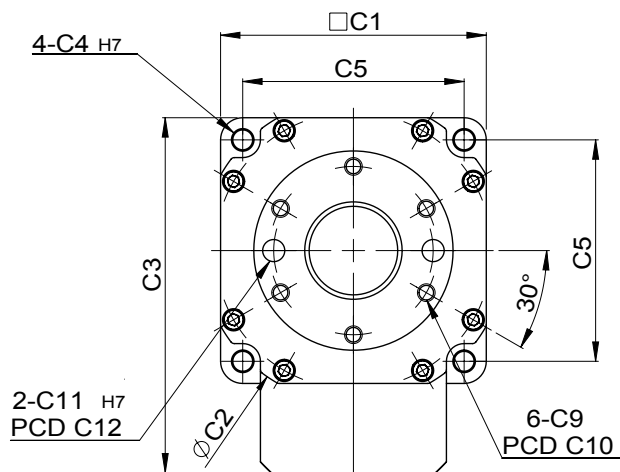
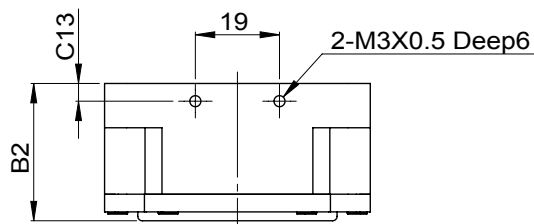
Model Code	60	85	110	135	200	
A	A1	8	8·14	14	14·19	19·24
	A2	30·40·50	30·40·50	50·60·70	50·60·70	70·80·95·110
	A3	M3·M4·M5	M3·M4·M5	M4·M5·M6	M4·M5·M6	M5·M6·M8
	A4	46·63·60	46·63·60	70·75·90	70·75·90	90·100·115·145
	A5	46·55	46·55	64·70·80	64·70·80	92·110·130
	A6	M4 x 0.7	M4 x 0.7	M5 x 0.8	M5 x 0.8	M6 x 1.0
B	B1	66	86.5	90.5	111	125.5·139.5
	B2	31	44.5	45	55	70
	B3	6	21.5	18	22	30
	B4	10	10	12	15	20
	B5	2	3	3	3	4
	B6	45	70	95	115	170
	B7	-	52	59	92	120
	B8	20	22	30	50	75
	B9	26.5	31	31.5	41	44.5·57.5
	B10	6.5	5	5.5	6	8.5·7.5
	B11	29.2	41.6	54	66.6	92.5
C	C1	60	85	110	135	200
	C2	69	87	112	138	202
	C3	80.2	110.1	144	169.1	242.5
	C4	4.5	5.5	6.8	9	11
	C5	50	70	90	110	170
	C6	-	4	5	5	8
	C7	-	28	35	45	68
	C8	-	38	49	60	85
	C9	M4 x 0.7	M4 x 0.7	M5 x 0.8	M5 x 0.8	M6 x 1.0
	C10	38	62.5	80	104	155
	C11	5 deep6	5 deep6	5 deep6	5 deep5	8 deep8
	C12	36	62.5	80	104	155
	C13	4	4	5	5.5	9
	C14	-	7.5	12.5	17	24

Characteristic of GT-B 1-Stage Series

GT-B



60#



GT-B 1-Stage

Characteristic		Unit	Ratio	60B	85B	110B	135B	200B
Output Table Supporting Bearing			5~18	/ Ball Bearing				
/ Rated Output Torque (Nominal output torque)	T_{2N}	Nm	5	5	18	33	43	142
			10	4	14	26	34	112
			18	3	10	19	25	85
/ Max. Acceleration Torque	T_{2B}	Nm	5~18	1.5 Times of Rated Output Torque				
/ Max. Output Torque / Emergency Stop Torque	T_{2NOT}	Nm	5~18	2 Times of Rated Output Torque				
/ Inertia Moment		kg.m ²	5~18	777 x 10 ⁻⁷	1268 x 10 ⁻⁶	1562 x 10 ⁻⁶	2918 x 10 ⁻⁶	29072 x 10 ⁻⁶
/ Output Permissible Speed		rpm	5~18	300	300	300	300	300
Torsional Backlash		arcmin	5~18	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
Lost Motion		arcmin	5~18	2(0.033°)				
Repetitive Positioning Accuracy		arcsec	5~18	±10(0.0028°)				
/ Permissible Thrust Load		N	5~18	350	600	800	1450	2500
/ Permissible Moment Load		Nm	5~18	7	12	16	30	50
/ Runout of Output Table Surface		mm	5~18	0.01	0.01	0.015	0.015	0.02
/ Runout of Output Table Inner / Outer Diameter		mm	5~18	0.01	0.01	0.015	0.015	0.02
/ Parallelism of Output Table		mm	5~18	0.02	0.02	0.025	0.025	0.03
/ Weight		Kg	5~18	0.54	1.17	2.54	3.83	10.09

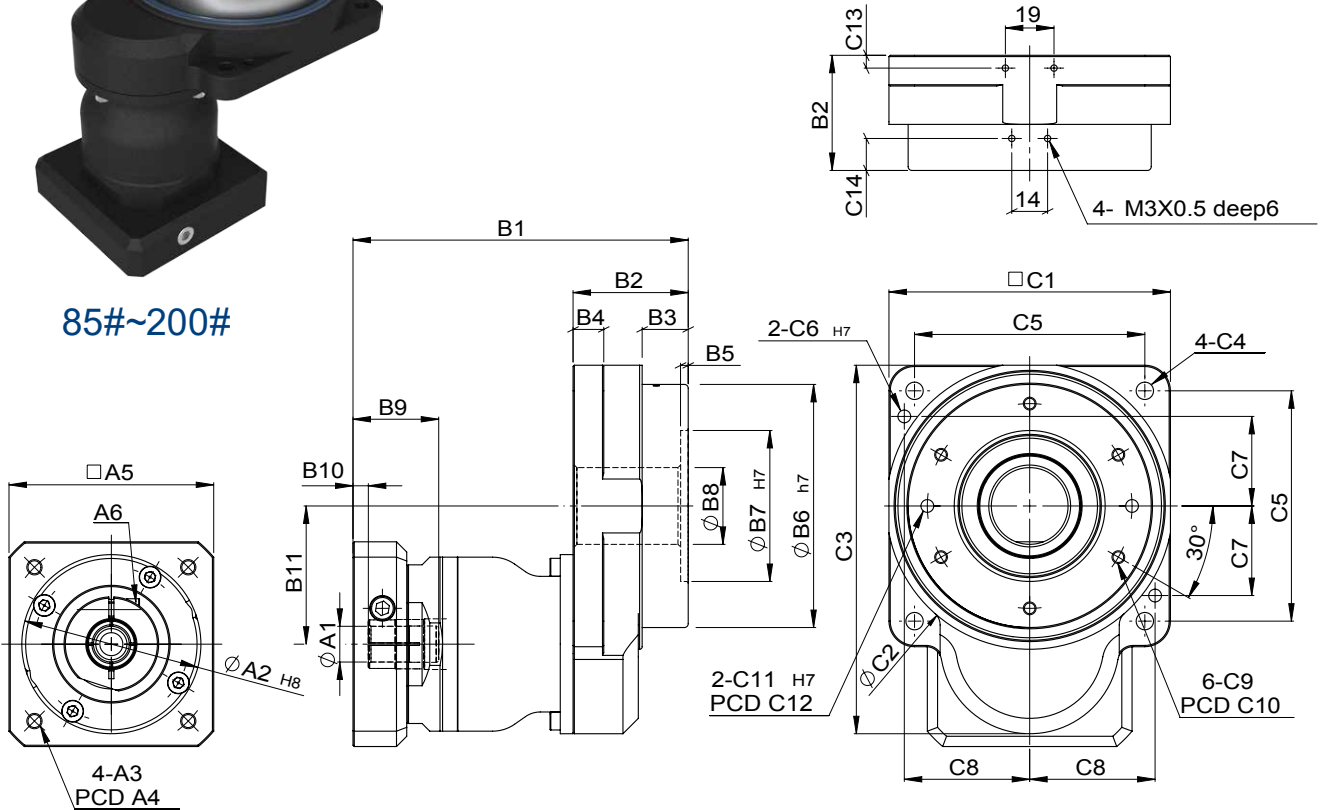
MODEL : GT-B

RATIO : 25.50.100 (2-Stage)

GT



85#~200#



unit: mm

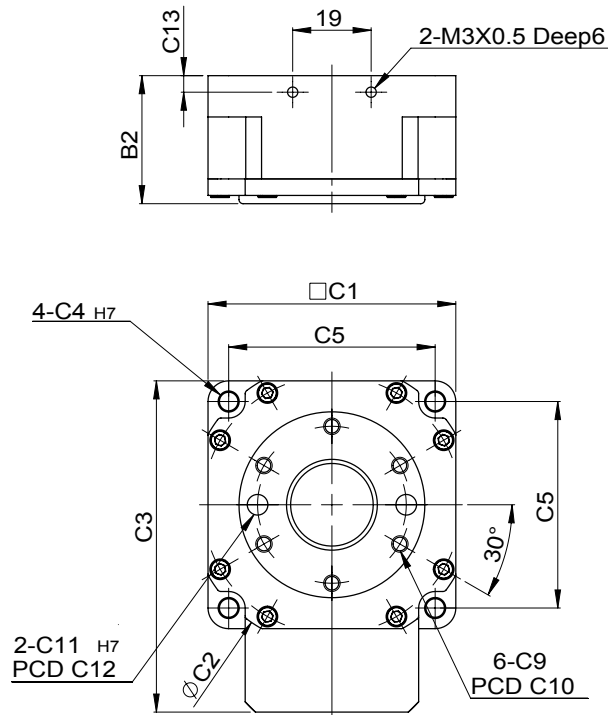
Model Code	60	85	110	135	200	
A	A1	8	14	14	19	
	A2	30 · 40 · 50	30 · 40 · 50	50 · 60 · 70	50 · 60 · 70	50 · 60 · 70
	A3	M3 · M4 · M5	M3 · M4 · M5	M4 · M5 · M6	M4 · M5 · M6	M4 · M5 · M6
	A4	46 · 63 · 60	46 · 63 · 60	70 · 75 · 90	70 · 75 · 90	70 · 75 · 90
	A5	46 · 55	46 · 55	64 · 70 · 80	64 · 70 · 80	64 · 70 · 80
	A6	M4 x 0.7	M4 x 0.7	M5 x 0.8	M5 x 0.8	M5 x 0.8
B	B1	103	116.5	131	141	166.5
	B2	31	44.5	45	55	70
	B3	6	21.5	18	22	30
	B4	10	10	12	15	20
	B5	2	3	3	3	4
	B6	45	70	95	115	170
	B7	-	52	59	92	120
	B8	20	22	30	50	75
	B9	32	32	33.5	33.5	45.5
	B10	4.5	5	6	6	10
	B11	29.2	41.6	54	66.6	92.5
C	C1	60	85	110	135	200
	C2	69	87	112	138	202
	C3	80.2	110.1	144	169.1	242.5
	C4	4.5	5.5	6.8	9	11
	C5	50	70	90	110	170
	C6	-	4	5	5	8
	C7	-	28	35	45	68
	C8	-	38	49	60	85
	C9	M4 x 0.7	M4 x 0.7	M5 x 0.8	M5 x 0.8	M6 x 1.0
	C10	38	62.5	80	104	155
	C11	5 deep6	5 deep6	5 deep6	5 deep5	8 deep8
	C12	36	62.5	80	104	155
	C13	4	4	5	5.5	9
	C14	-	7.5	12.5	17	24

Characteristic of GT-B 2-Stage Series

GT-B



60#



GT-B

2-Stage

Characteristic		Unit	Ratio	60B	85B	110B	135B	200B
Output Table Supporting Bearing			25~100	/ Ball Bearing				
/ Rated Output Torque (Nominal output torque)	T_{2N}	Nm	25	5	18	33	43	142
			50	4	14	26	34	112
			100	4	14	26	34	112
/ Max. Acceleration Torque	T_{2B}	Nm	25~100	1.5 Times of Rated Output Torque				
/ Max. Output Torque / Emergency Stop Torque	T_{2NOT}	Nm	25~100	2 Times of Rated Output Torque				
/ Inertia Moment		kg.m ²	25~100	777×10^{-7}	1268×10^{-6}	1562×10^{-6}	2918×10^{-6}	29072×10^{-6}
/ Output Permissible Speed		rpm	25~100	300	300	300	300	300
/ Torsional Backlash		arcmin	25~100	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
/ Lost Motion		arcmin	25~100	3(0.05°)				
Repetitive Positioning Accuracy		arcsec	25~100	±15(0.0042°)				
/ Permissible Thrust Load		N	25~100	350	600	800	1450	2500
/ Permissible Moment Load		Nm	25~100	7	12	16	30	50
/ Runout of Output Table Surface		mm	25~100	0.01	0.01	0.015	0.015	0.02
Runout of Output Table Inner / Outer Diameter		mm	25~100	0.01	0.01	0.015	0.015	0.02
/ Parallelism of Output Table		mm	25~100	0.02	0.02	0.025	0.025	0.03
/ Weight		Kg	25~100	1.1	1.95	3.76	4.92	11.8