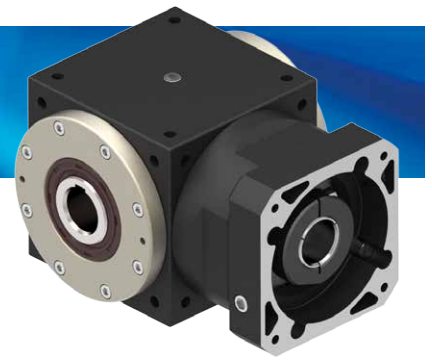


ST series



Indication of Model Numbers

ST	90	F	N	B	5	L	P0
Type	Model	Input	Output	Bearing	Ratio	Shaft Direction	Backlash Class
ST	65	F: Input Flange	O: Hollow Output Shaft	B: Ball Bearing	1-Stage	L: Left Shaft	P0
	75	R44: Reducer	N: Single Clamping	(65#~280#)	1, 2, 3, 4, 5	R: Right Shaft	P1
	90	1-Stage:	(Keyway)	(Ratio: 1~5)			P2
	110	R44、R62...	N1: Single Clamping				
	140	2-Stage:	(No Keyway)	T: Taper	With 1-Stage	1. Shaft	
	170	R62S...	M: Double Clamping	Bearing	Planetary	direction is	
	210	2-Stage (A-Type) :	S: Single Output Shaft	(75#~280#)	Reducer	optional for	
	240	R44A、R62A...	(Keyway)	(Ratio: 2~5)	10 ~ 50	output type N,	
	280	D: Single Input Shaft	S1: Single Output Shaft		With 2-Stage	S.	
		(Keyway)	(No Keyway)		Planetary	2. Output type	
	D1: Single Input Shaft	V: Double Output Shaft		Reducer	P only for R		
	(No Keyway)	(Keyway)		75 ~ 500	shaft.		
	Y: Double Input Shaft	V1: Double Output Shaft					
	(Keyway)	(No Keyway)					
	Y1: Double Input Shaft	P: Ball Screw (75#~210#)					
	(No Keyway)	Taper Bearing Only					

The Model & Ratio Table of Bevel Gear Reducer Assembly Planetary Reducer

Model	Ratio	Flange Model	Planetary Reducer Model	Ratio of 1-Stage Planetary Reducer 5 · 10	Ratio of 2-Stage Planetary Reducer 25 · 50 · 100
65	1 2 3 4 5	62	44	Ratio of Bevel Gear Reducer Fitted with 1-Stage Planetary Reducer 10 · 15 · 20 · 25 · 30 · 40 · 50	Ratio of Bevel Gear Reducer Fitted with 1-Stage Planetary Reducer 75 · 100 · 125 · 150 · 200 · 250 · 300 · 400 · 500
75		62	44 · 62		
90		90	62		
110		90	80		
140		120	90		
170		142	120		
210		180	142		
240		220	180		
280		220	220		

Selection of Type

Input Type

F
Input Flange

R
Reducer

D
Single Input Shaft

Y
Double Input Shaft

O
Hollow
Output
Shaft



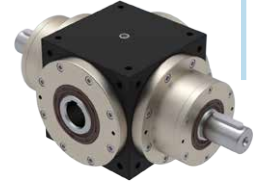
FO



RO



DO



YO

N
Single
Clamping



FN



RN

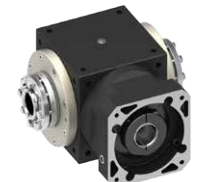


DN



YN

M
Double
Clamping



FM



RM



DM



YM

S
Single
Output
Shaft



FS



RS



DS

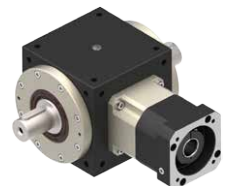


YS

V
Double
Output
Shaft



FV



RV



DV



YV

P
Ball
Screw



FP



RP



DP



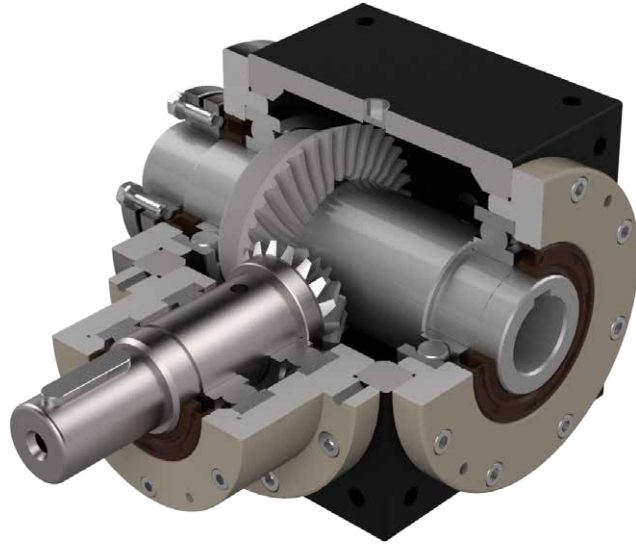
YP

Output Type

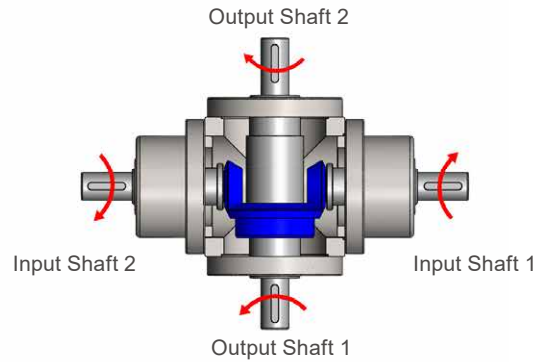
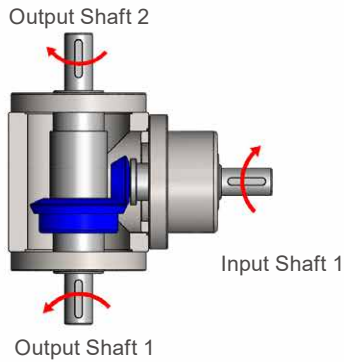
1. Shaft direction is optional for output type N, S.
2. Output type P only for R shaft.

Rotating Direction

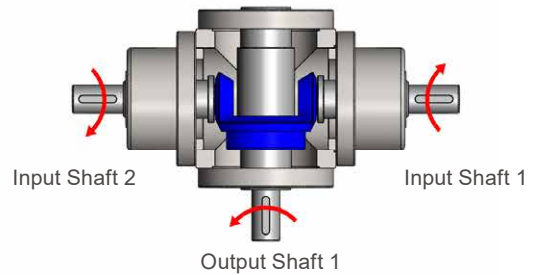
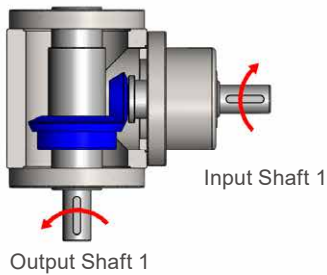
ST



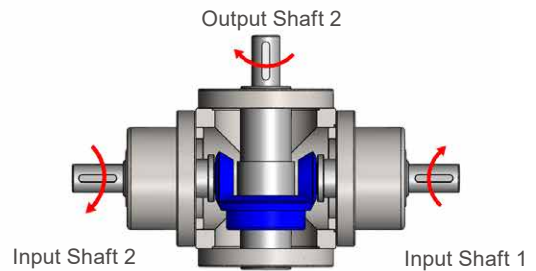
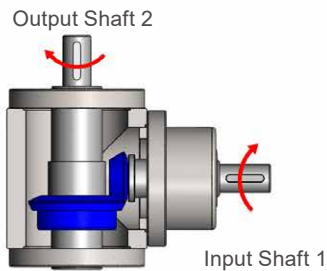
L
Shaft Direction



L
Shaft Direction



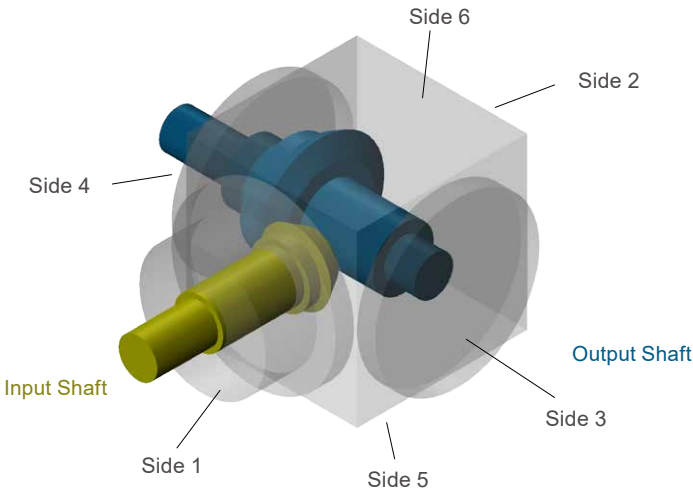
R
Shaft Direction

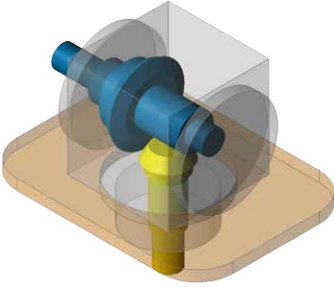
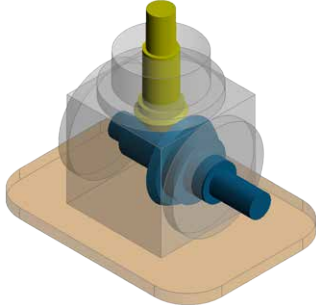
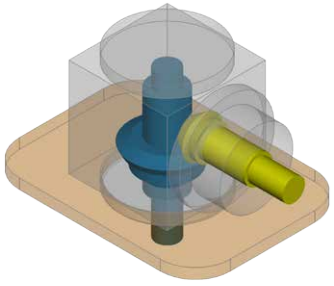
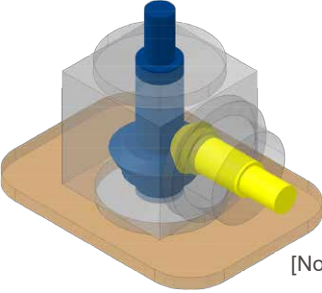
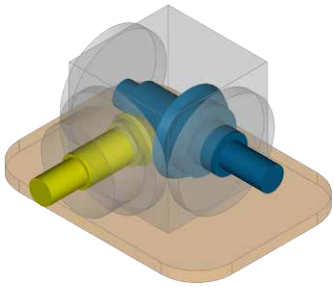
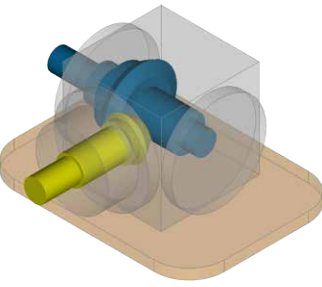


Note: Standard product is L shaft direction, R shaft direction is optional.

Selection Direction of Installation

ST

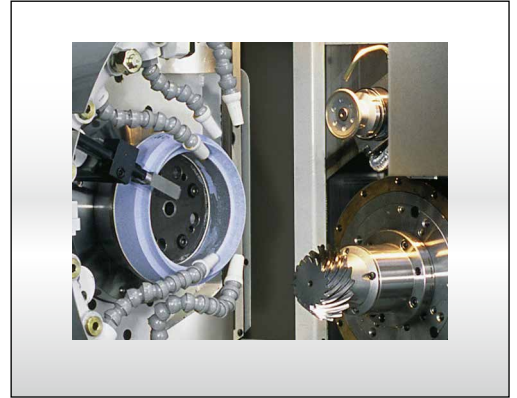
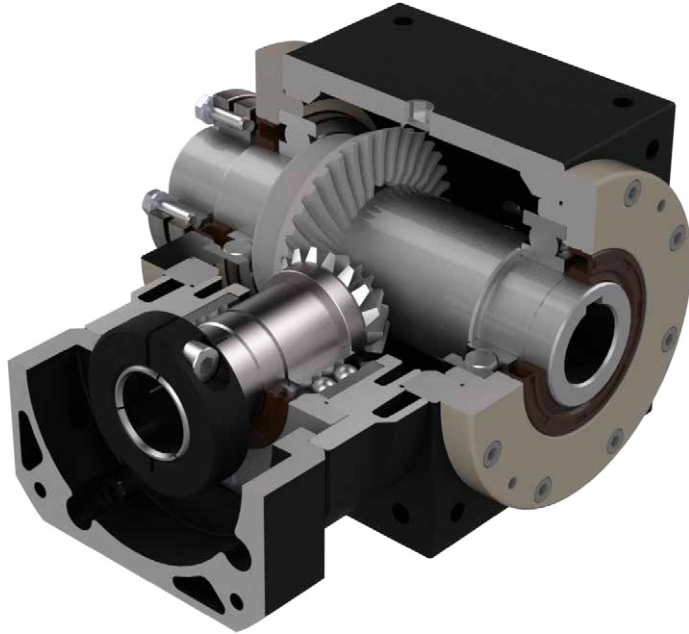


	
Side 1	Side 2
	 [Note 1]
Side 3	Side 4
	
Side 5	Side 6

[Note 1] Output type for R shaft.

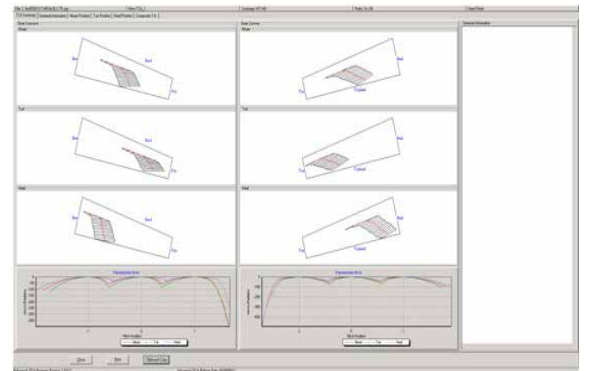
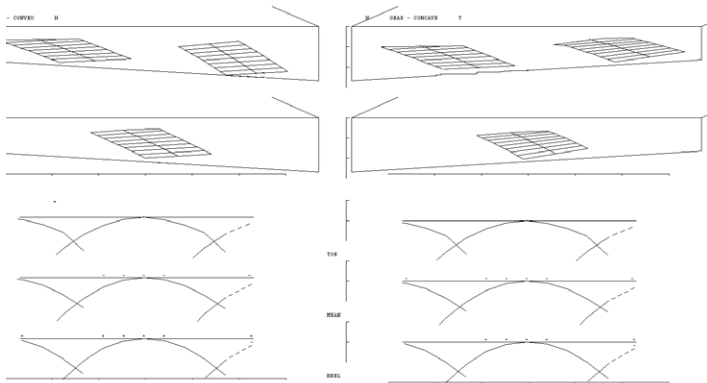
Features of ST Series

ST



High precision grinded and carburized spiral bevel gears

- High precision grinded and carburized spiral bevel gears to meet standard AGMA12.



Optimized Design and CAE Analysis

- Use Gleason's design software to design new spiral bevel gears. Through the ideal gear contact pattern for application, achieve high permissible output torque.
- Employs 3D-CAE software for analysis and design, the software allows for analyzing the strength of the entire gear reducer and helical teeth. Increasing the service life of gears and the gear reducer.

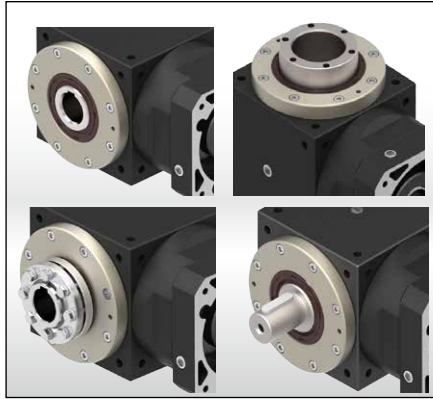
Features of ST Series

ST



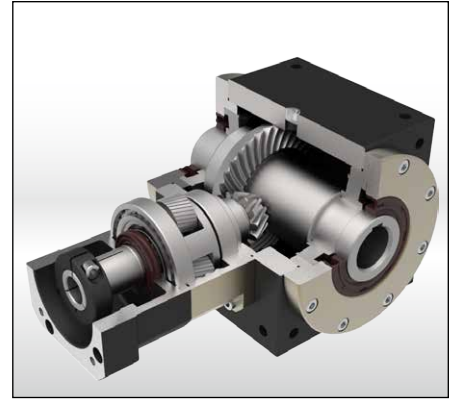
Low Backlash

- Using Gleason high precision CNC grinding machine to grinding the spiral bevel gears.
- Torsional backlash depending on design up to <math><2\text{ arcmin}</math>.



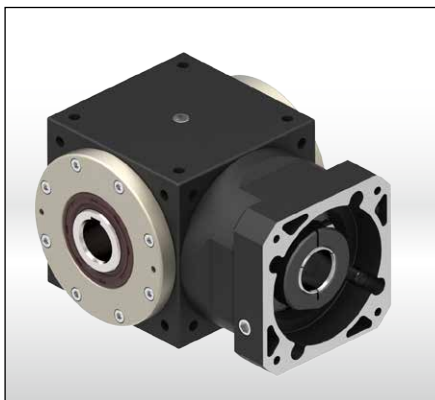
Mounting Position

- Multiple precision machined surface is easy for assembly, suitable for any optional mounting orientation.
- Output shaft and input shaft are designed to suit for various industries applications.



More High Gear Ratio

- High precision grinded and carburized spiral bevel gears with optimal designed planetary gear can do ratio 500: 1.



No Maintenance

- It features no maintenance and long service life.



High Output Torque

- The gear box is one-piece constructed to ensure the high rigidity and corrosion-resistant capability.



Collet Locking Mechanism

- 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.

Characteristic of ST Series

1-Stage

Parameter	Code	Unit	Ratio	65	75	90	110	140	170	210	240	280
Rated Output Torque (Nominal Output Torque)	T_{2N}	Nm	1	25	45	78	150	360	585	1,300	1,688	2,110
			2	24	42	68	150	330	544	1,220	1,510	2,666
			3	18	33	54	120	270	450	1,020	1,266	2,213
			4	13	28	52	100	224	376	860	1,048	2,026
			5	12	25	40	85	196	320	740	1,022	1,888
Max. Acceleration Torque	T_{2B}	Nm	1~5	1.5 Times of Rated Output Torque								
Max. Output Torque Emergency Stop Torque	T_{2NOT}	Nm	1~5	2 Times of Rated Output Torque								
Rated Input Speed	n_{1N}	rpm	1~5	3,000	3,000	3,000	2,500	2,500	2,000	2,000	2,000	2,000
Max. Input Speed	n_{1B}	rpm	1~5	6,000	6,000	5,500	4,500	3,500	3,000	3,000	3,000	3,000
Backlash		arcmin	P0	-	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3
			P1	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6
			P2	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9
Max. Radial Force Ball Bearing	F_{2rB}	N	1~5	700	1,050	1,500	2,360	3,080	4,800	6,400	8,200	9,500
Max. Axial Force Ball Bearing	F_{2aB}	N	1~5	350	525	750	1,180	1,540	2,400	3,200	4,100	4,750
Max. Radial Force Taper Bearing	F_{2rB}	N	2~5	-	2,400	3,200	5,000	6,500	9,100	13,000	17,000	19,300
Max. Axial Force Taper Bearing	F_{2aB}	N	2~5	-	1,200	1,600	2,500	3,250	4,550	6,500	8,500	9,650
Service Life	L_H	hr	1~5	65#~210# : S5 Cycle Operation: >30,000 (S1 Continuous Operation: >15,000 hrs) 240#~280# : S5 Cycle Operation: >20,000 (S1 Continuous Operation: >10,000 hrs)								
Efficiency	η	%	1~5	94% ~ 98%								
Operating Temperature		°C	1~5	-30°C ~ +100°C								
Lubrication			1~5	Synthetic Oil								
Noise Level		dB	1~5	≤ 65	≤ 67	≤ 71	≤ 73	≤ 74	≤ 75	≤ 77	≤ 80	≤ 82

Mass Moments of Inertia (kgcm²)

Ratio	65	75	90	110	140	170	210	240	280
1	0.51	1.79	4.93	12.5	36.8	85.9	287	428.4	668.7
2	0.44	0.95	2.78	7.41	15.6	39.3	123	250.8	526.5
3	0.43	0.78	2.34	6.18	10.9	28.5	84.1	183.5	357.0
4	0.43	0.72	2.18	5.71	9.19	24.5	69.9	157.4	309.2
5	0.43	0.69	2.10	5.48	8.32	22.6	62.7	137.4	267.7

Characteristic of ST Series

ST

2-Stage

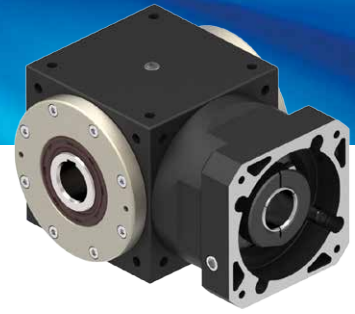
Parameter	Code	Unit	Ratio	65	75	90	110	140	170	210	240	280
Rated Output Torque (Nominal Output Torque)	T_{2N}	Nm	10	24	42	68	150	330	544	1,220	1,510	2,666
			15	18	33	54	120	270	450	1,020	1,266	2,213
			20	13	28	52	100	224	376	860	1,048	2,026
			25	12	25	40	85	196	320	740	1,022	1,888
			30	18	33	54	120	270	450	1,020	1,266	2,213
			40	13	28	52	100	224	376	860	1,048	2,026
			50	12	25	40	85	196	320	740	1,022	1,888
Max. Acceleration Torque	T_{2B}	Nm	10~50	1.5 Times of Rated Output Torque								
Max. Output Torque Emergency Stop Torque	T_{2NOT}	Nm	10~50	2 Times of Rated Output Torque								
Rated Input Speed	n_{1N}	rpm	10~50	3,000	3,000	3,000	3,000	3,000	3,000	3,000	2,500	2,500
Max. Input Speed	n_{1B}	rpm	10~50	6,000	6,000	6,000	6,000	6,000	5,000	5,000	4,000	4,000
Backlash		arcmin	P0	-	≤ 4	≤ 4	≤ 4	≤ 4	≤ 4	≤ 4	≤ 4	≤ 4
			P1	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7
			P2	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10
Max. Radial Force Ball Bearing	F_{2rB}	N	10~50	700	1,050	1,500	2,360	3,080	4,800	6,400	8,200	9,500
Max. Axial Force Ball Bearing	F_{2aB}	N	10~50	350	525	750	1,180	1,540	2,400	3,200	4,100	4,750
Max. Radial Force Taper Bearing	F_{2rB}	N	10~50	-	2,400	3,200	5,000	6,500	9,100	13,000	17,000	19,300
Max. Axial Force Taper Bearing	F_{2aB}	N	10~50	-	1,200	1,600	2,500	3,250	4,550	6,500	8,500	9,650
Service Life	L_H	hr	10~50	65#~210# : S5 Cycle Operation: >30,000 (S1 Continuous Operation: >15,000 hrs) 240#~280# : S5 Cycle Operation: >20,000 (S1 Continuous Operation: >10,000 hrs)								
Efficiency	η	%	10~50	90% ~ 94%								
Operating Temperature		°C	10~50	-30°C ~ +100°C								
Lubrication			10~50	Synthetic Oil								
Noise Level		dB	10~50	≤ 68	≤ 69	≤ 73	≤ 74	≤ 75	≤ 76	≤ 78	≤ 82	≤ 84

Mass Moments of Inertia (kgcm²)

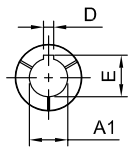
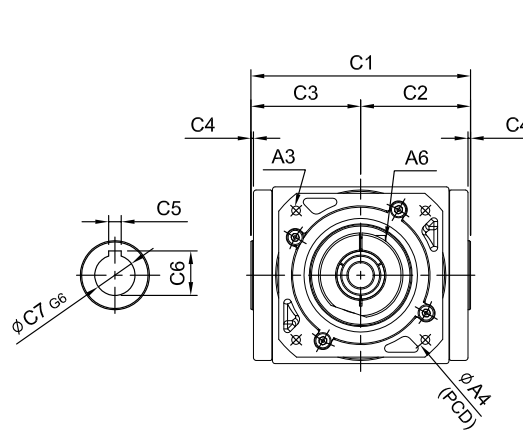
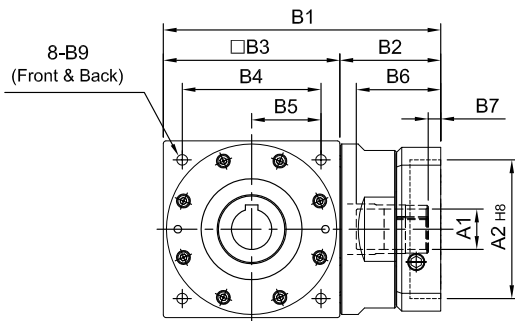
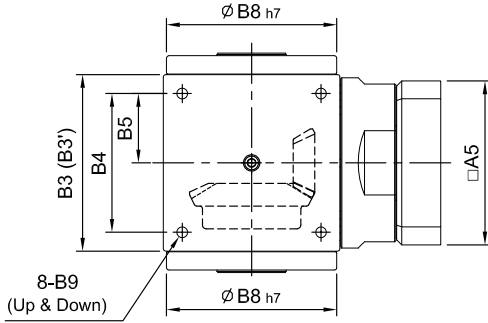
Ratio	65	75	90	110	140	170	210	240	280
10	0.05	0.15	0.18	0.41	0.56	3.25	8.9	23.29	53.27
15	0.05	0.15	0.18	0.41	0.56	3.25	8.9	23.29	53.27
20	0.05	0.15	0.18	0.41	0.56	3.25	8.9	23.29	53.27
25	0.05	0.15	0.18	0.41	0.56	3.25	8.9	23.29	53.27
30	0.05	0.15	0.16	0.38	0.53	3.09	8.4	22.51	50.56
40	0.05	0.15	0.16	0.38	0.53	3.09	8.4	22.51	50.56
50	0.05	0.15	0.16	0.38	0.53	3.09	8.4	22.51	50.56

ST-FO series

RATIO : 1.2.3.4.5 (1-Stage)



Input Flange - Hollow Output Shaft



(170#~280#)

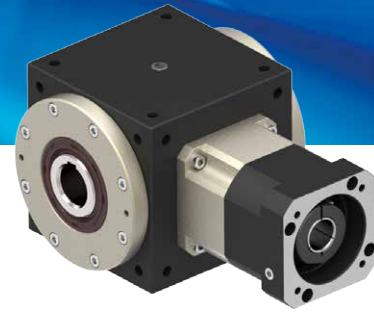
$\phi A1$	D	E
$\phi 35$	10	38.3
$\phi 38$	10	41.3
$\phi 42$	12	45.3
$\phi 48$	14	51.8
$\phi 55$	16	59.3
$\phi 60$	18	64.4
$\phi 65$	18	69.4

unit: mm

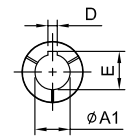
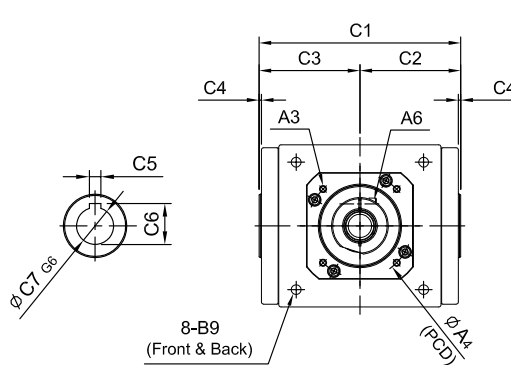
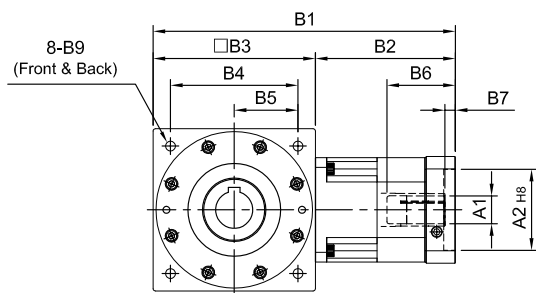
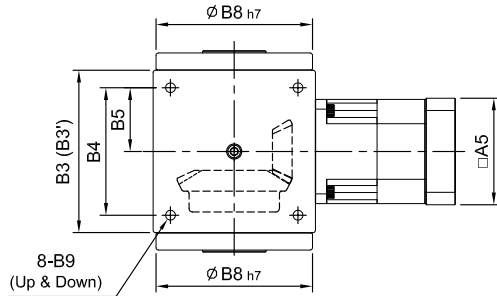
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
A	A1	9 · 11 · 14	14 · 19	16 · 19 · 22 · 24	19 · 22 · 24	24 · 28 · 32 · 35	35 · 38	35 · 38 · 42 · 48 · 55	48 · 55 · 60	55 · 60 · 65
	A2	50 · 60 · 70	50 · 60 · 70	70 · 80 · 95 · 110	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230	114.3 · 230 · 250	114.3 · 180 · 230 · 250
	A3	M4 · M5 · M6	M4 · M5 · M6	M5 · M6 · M8	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12	M10 · M12 · M16	M12 · M16	M12 · M16
	A4	70 · 75 · 90	70 · 75 · 90	90 · 100 · 115 · 145	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265	200 · 265 · 300	200 · 215 · 265 · 300
	A5	64 · 70 · 80	64 · 70 · 80	92 · 110 · 130	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250	222 · 250 · 265	222 · 220 · 250 · 265
	A6	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	110	115 · 124	148 · 162	177 · 191	224 · 238	274	357 · 359	394.5 · 421.5 · 424.5	453.5 · 483
	B2	45	40 · 49	58 · 72	67 · 81	84 · 98	104	147	154.5 · 181.5 · 184.5	173.5 · 203
	B3(B3')	65	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	72	88	110	134	170	190	220
	B5	26	30	36	44	55	67	85	95	110
	B6	36	36 · 42	51 · 65.5	51 · 65.5	68 · 81	84.5	117 · 119	115 · 142 · 145	112.5 · 142
	B7	7	7	9 · 23.5	9 · 23.5	9 · 10	9.5	14 · 16	12.5 · 15.5	12.5 · 42
	B8	62 64	73	88	106	135	164	205	228	275
	B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
C	C1	84 89	100	118	144	174	204	250	292	328
	C2	42 44.5	50	59	72	87	102	125	146	164
	C3	42 44.5	50	59	72	87	102	125	146	164
	C4	2	2	2	2	2	2	2	2	3
	C5	5	5	6	6	10	12	14	16	18
	C6	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4
	C7	14	14	18	22	32	40	50	55	60
Weight ±3% (kg)	1.7	2.4	4.3	7.1	14.9	24.5	46	60.7		

ST-RO series

RATIO : 10.15.20.25.30.40.50 (2-Stage)



Fitted with Planetary Reducer - Hollow Output Shaft



(210#~280#)

φA1	D	E
φ28	8	31.3
φ32	10	35.3
φ35	10	38.3
φ38	10	41.3

unit: mm

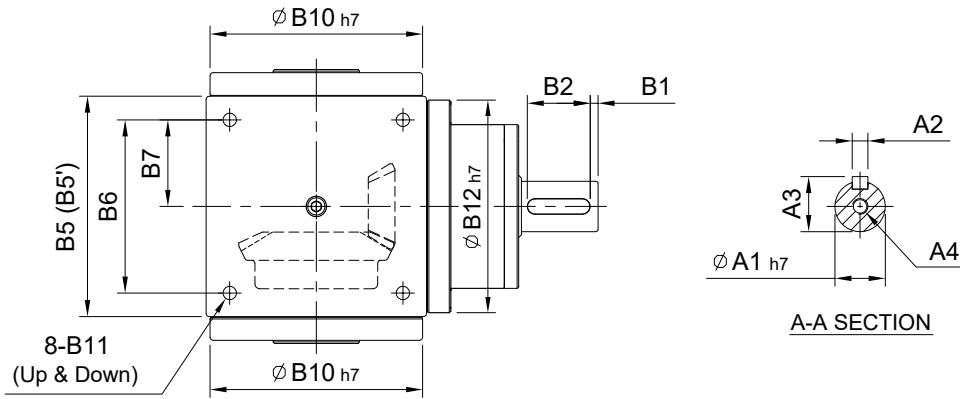
Model Code	65	75	90	110	140	170	210	240	280		
A	A1	8·9·11	8·9·11	11·14·16 19	11·14·16 19	(14)·16·19	16·19·22 24	22·24·28 32·35	28·32·35· 38	35·38·42· 48·55	38·42·48· 55
	A2	30·40·50	30·40·50	50·60·70	50·60·70	50·70·80· 95	70·80·95 110	95·110· 130	110·130· 180	114.3·180· 230·250	114.3·180· 230·250
	A3	M3·M4· M5	M3·M4· M5	M4·M5· M6	M4·M5· M6	M5·M6	M5·M6· M8	M6·M8· M10	M8·M10· M12	M10·M12· M16	M12·M16
	A4	46·60·63	46·60·63	70·75·90	70·75·90	70·90·100 115	90·100· 115·145	115·145· 165	145·165· 200	200·215· 265·300	200·215· 265·300
	A5	46·55	46·55	64·70·80	64·70·80	80·92·110	92·110· 130	122·130· 150	146·150· 190	182·200· 250·265	222·220· 250·265
	A6	M4 x P0.7	M4 x P0.7	M5 x P0.8	M5 x P0.8	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	132	137	149·157	165·173	(191)·203	260	313·334	399	479.5	580.5
	B2	67	62	74·82	75·83	(81)·93	120	143·164	189	239.5	300.5
	B3(B3')	65	75(74)	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	60	72	88	110	134	170	190	220
	B5	26	30	30	36	44	55	67	85	95	110
	B6	26	26	33.5·41.5	33.5·41.5	(33.5)·45.5	59	67·83	85	116.5	117.5
	B7	5	5	6	6	(6)·10	9	10·11	10	13.5	12.5
	B8	62	73	73	88	106	135	164	205	228	275
B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
C	C1	84	100	100	118	144	174	204	250	292	328
	C2	42	50	50	59	72	87	102	125	146	164
	C3	42	50	50	59	72	87	102	125	146	164
	C4	2	2	2	2	2	2	2	2	2	3
	C5	5	5	5	6	6	10	12	14	16	18
	C6	16.3	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4
	C7	14	14	14	18	22	32	40	50	55	60
Weight ±3% (kg)	1.9	3.6	3.4	4.8	8.5	14.2	24	52	73.7	117.7	

ST-DO series

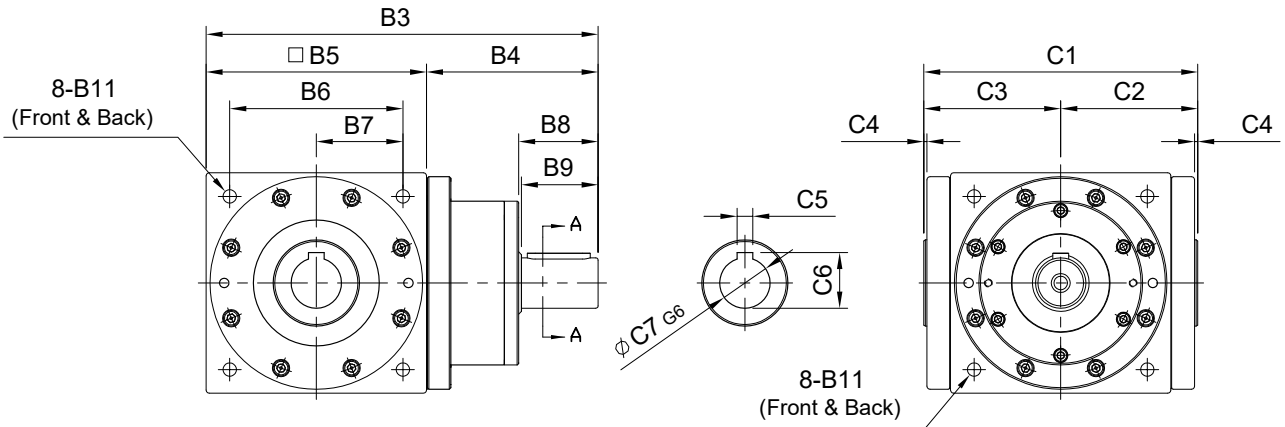
RATIO : 1.2.3.4.5 (1-Stage)



Single Input Shaft - Hollow Output Shaft



A-A SECTION

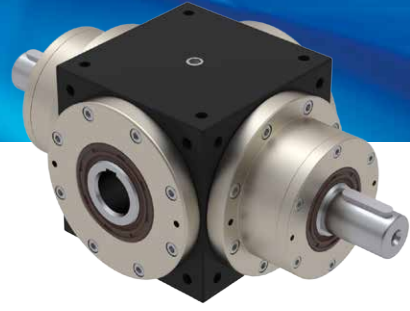


unit: mm

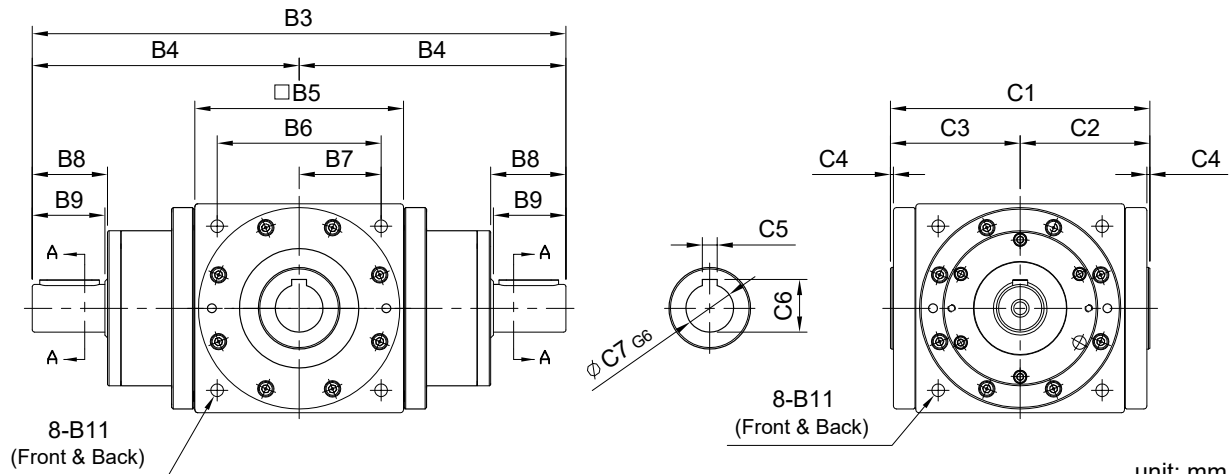
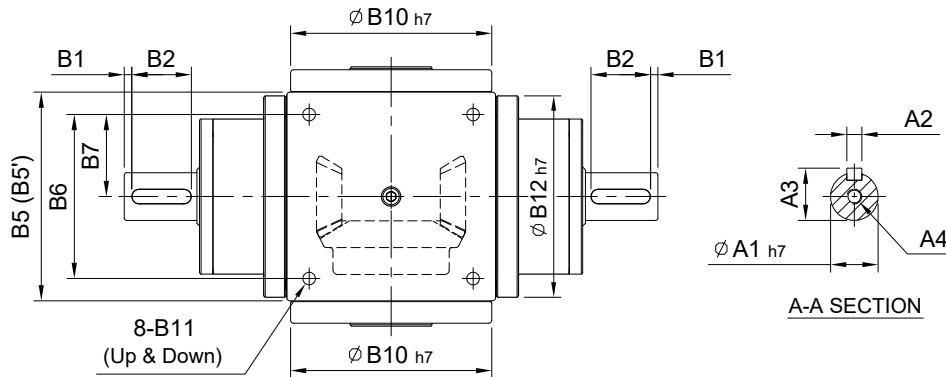
	Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
		A	A1	14	16	18	22	32	40	50	55
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	127.5	143	168.5	207	250	300	375	430	505	
	B4	62.5	68	78.5	97	110	130	165	190	225	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
	B12	-	73	88	106	135	164	205	228	219	
C	C1	84	89	100	118	144	174	204	250	292	328
	C2	42	44.5	50	59	72	87	102	125	146	164
	C3	42	44.5	50	59	72	87	102	125	146	164
	C4	2	2	2	2	2	2	2	2	2	3
	C5	5	5	6	6	10	12	14	16	18	
	C6	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4	
	C7	14	14	18	22	32	40	50	55	60	
Weight $\pm 3\%$ (kg)		2.1	2.8	4.9	9	15.5	25	53	73.4		

ST-YO series

RATIO : 1.2.3.4.5 (1-Stage)



Double Input Shaft - Hollow Output Shaft



unit: mm

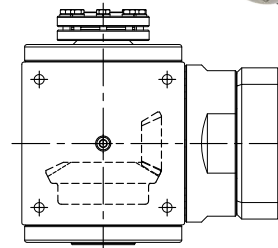
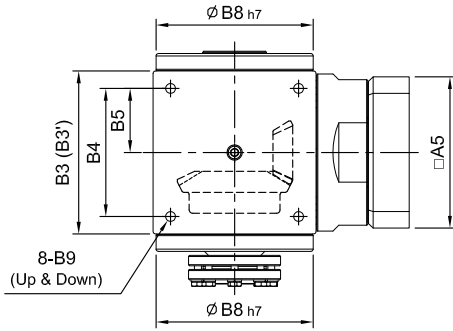
	Model Code									
	65	65 (1:1)	75	90	110	140	170	210	240	280
A	A1	14	16	18	22	32	40	50	55	60
	A2	5	5	6	6	10	12	14	16	18
	A3	16	18	20.5	24.5	35	43	53.5	59	64
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0
B	B1	2.5	2.5	5	5	5	5	5	5	5
	B2	15	25	25	30	40	50	65	70	90
	B3	190	210	247	304	360	430	540	620	730
	B4	95	105	123.5	152	180	215	270	310	365
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280
	B6	52	60	72	88	110	134	170	190	220
	B7	26	30	36	44	55	67	85	95	110
	B8	22	32	38	43	53.5	64	77	82	105
	B9	20	30	35	40	50	60	75	80	100
	B10	62 64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
	B12	-	73	88	106	135	164	205	228	219
C	C1	84 89	100	118	144	174	204	250	292	328
	C2	42 44.5	50	59	72	87	102	125	146	164
	C3	42 44.5	50	59	72	87	102	125	146	164
	C4	2	2	2	2	2	2	2	2	3
	C5	5	5	6	6	10	12	14	16	18
	C6	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4
	C7	14	14	18	22	32	40	50	55	60
Weight ±3% (kg)		2.85	3.6	6.2	11.5	18	28	57	95	

ST-FN series

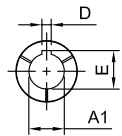
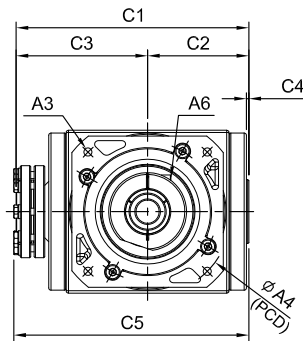
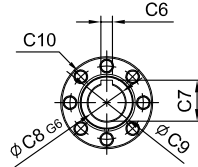
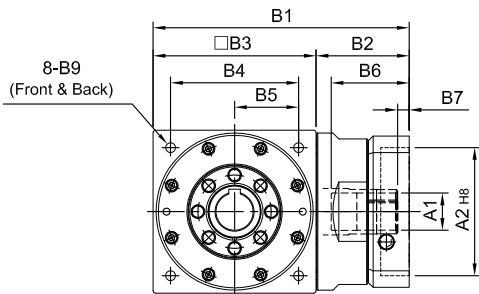
RATIO : 1.2.3.4.5 (1-Stage)



Input Flange - Single Clamping



R
Shaft Direction



(170#~280#)

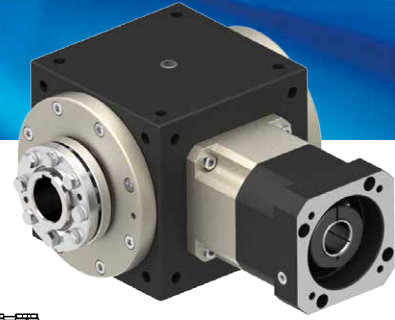
$\phi A1$	D	E
$\phi 35$	10	38.3
$\phi 38$	10	41.3
$\phi 42$	12	45.3
$\phi 48$	14	51.8
$\phi 55$	16	59.3
$\phi 60$	18	64.4
$\phi 65$	18	69.4

unit: mm

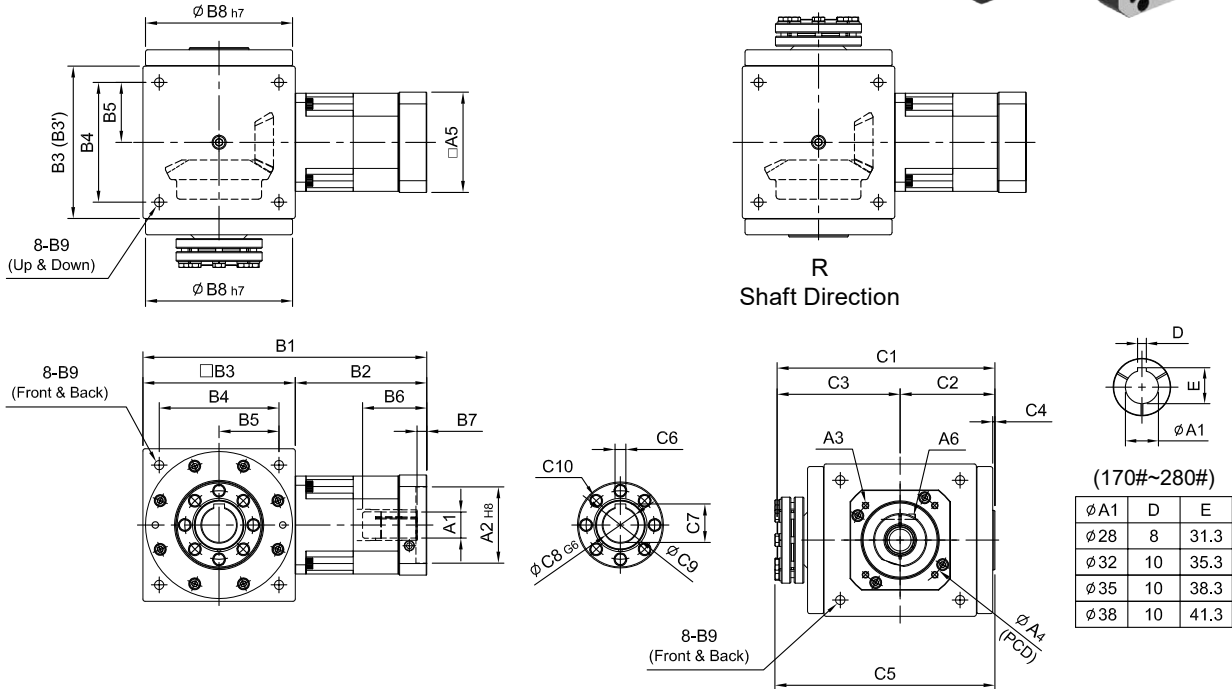
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
A	A1	9 · 11 · 14	14 · 19	16 · 19 · 22 · 24	19 · 22 · 24	24 · 28 · 32 · 35	35 · 38	35 · 38 · 42 · 48 · 55	48 · 55 · 60	55 · 60 · 65
	A2	50 · 60 · 70	50 · 60 · 70	70 · 80 · 95 · 110	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230	114.3 · 230 · 250	114.3 · 180 · 230 · 250
	A3	M4 · M5 · M6	M4 · M5 · M6	M5 · M6 · M8	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12	M10 · M12 · M16	M12 · M16	M12 · M16
	A4	70 · 75 · 90	70 · 75 · 90	90 · 100 · 115 · 145	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265	200 · 265 · 300	200 · 215 · 265 · 300
	A5	64 · 70 · 80	64 · 70 · 80	92 · 110 · 130	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250	222 · 250 · 265	222 · 220 · 250 · 265
	A6	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	110	115 · 124	148 · 162	177 · 191	224 · 238	274	357 · 359	394.5 · 421.5 · 424.5	453.5 · 483
	B2	45	40 · 49	58 · 72	67 · 81	84 · 98	104	147	154.5 · 181.5 · 184.5	173.5 · 203
	B3(B3')	65	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	72	88	110	134	170	190	220
	B5	26	30	36	44	55	67	85	95	110
	B6	36	36 · 42	51 · 65.5	51 · 65.5	68 · 81	84.5	117	115 · 142 · 145	112.5 · 142
	B7	7	7	9 · 23.5	9 · 23.5	9 · 10	9.5	14 · 16	12.5 · 15.5	12.5 · 42
	B8	62 64	73	88	106	135	164	205	228	275
	B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
C	C1	104 109	120	138	169	202	240	285	324	370
	C2	42 44.5	50	59	72	87	102	125	146	164
	C3	62 64.5	70	79	97	115	138	160	178	206
	C4	2	2	2	2	2	2	2	2	3
	C5	110 113	124	142	171	202	242	288	329	369.8
	C6	5	5	6	6	10	12	14	16	18
	C7	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4
	C8	14	14	18	22	32	40	50	55	60
	C9	22	22	28	34	44	52	65	73	83
	C10	6-M6	6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M8
Weight ±3% (kg)	1.7	2.4	4.3	7.1	14.9	24.5	46	61.2		

ST-RN series

RATIO : 10.15.20.25.30.40.50 (2-Stage)



Fitted with Planetary Reducer - Single Clamping



unit: mm

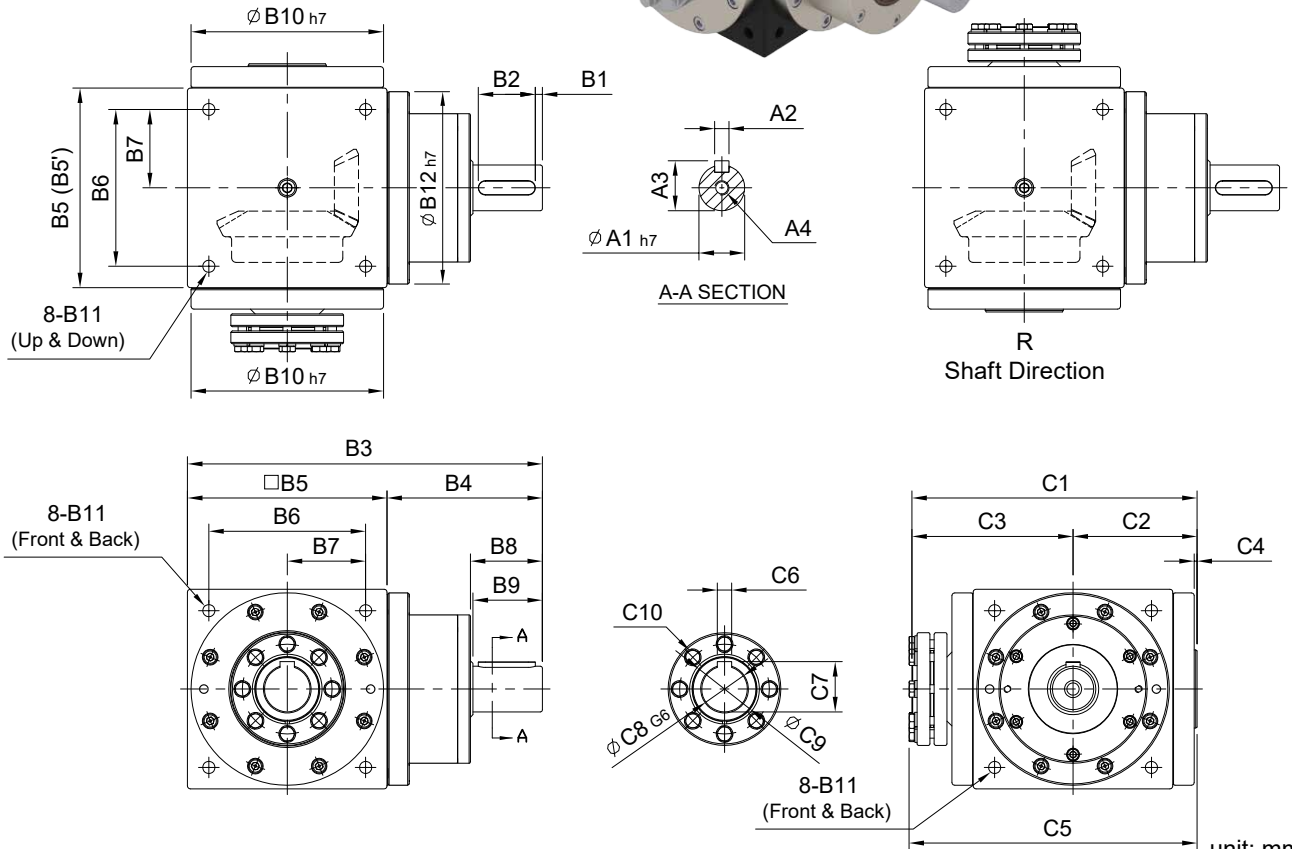
Model Code	65	75	90	110	140	170	210	240	280		
A	A1	8·9·11	8·9·11	11·14·16·19	11·14·16·19	(14)·16·19	16·19·22·24	22·24·28·32·35	28·32·35·38	35·38·42·48·55	
	A2	30·40·50	30·40·50	50·60·70	50·60·70	50·70·80·95	70·80·95·110	95·110·130	110·130·180	114.3·180·230·250	
	A3	M3·M4·M5	M3·M4·M5	M4·M5·M6	M4·M5·M6	M5·M6	M5·M6·M8	M6·M8·M10	M8·M10·M12	M10·M12·M16	M12·M16
	A4	46·60·63	46·60·63	70·75·90	70·75·90	70·90·100·115	90·100·115·145	115·145·165	145·165·200	200·215·265·300	200·215·265·300
	A5	46·55	46·55	64·70·80	64·70·80	80·92·110	92·110·130	122·130·150	146·150·190	182·200·250·265	222·220·250·265
	A6	M4 x P0.7	M4 x P0.7	M5 x P0.8	M5 x P0.8	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	132	137	149·157	165·173	(191)·203	260	313·334	399	479.5	580.5
	B2	67	62	74·82	75·83	(81)·93	120	143·164	189	239.5	300.5
	B3(B3')	65	75(74)	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	60	72	88	110	134	170	190	220
	B5	26	30	30	36	44	55	67	85	95	110
	B6	26	26	33.5·41.5	33.5·41.5	(33.5)·45.5	59	67·83	85	116.5	117.5
	B7	5	5	6	6	(6)·10	9	10·11	10	13.5	12.5
	B8	62	73	73	88	106	135	164	205	228	275
B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
C	C1	104	120	120	138	169	200	240	285	324	370
	C2	42	50	50	59	72	87	102	125	146	164
	C3	62	70	70	79	97	113	138	160	178	206
	C4	2	2	2	2	2	2	2	2	2	3
	C5	118	124	124	142	171	202	242	288	329	369.8
	C6	5	5	5	6	6	10	12	14	16	18
	C7	16.3	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4
	C8	14	14	14	18	22	32	40	50	55	60
	C9	22	22	22	28	34	44	52	65	73	83
	C10	6-M6	6-M6	6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M10
Weight $\pm 3\%$ (kg)	1.9	3.6	3.4	4.8	8.5	14.2	24	52	74.2		

ST-DN series

RATIO : 1.2.3.4.5 (1-Stage)



Single Input Shaft - Single Clamping

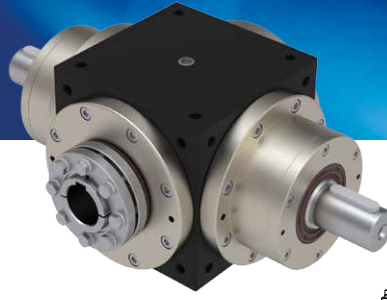


unit: mm

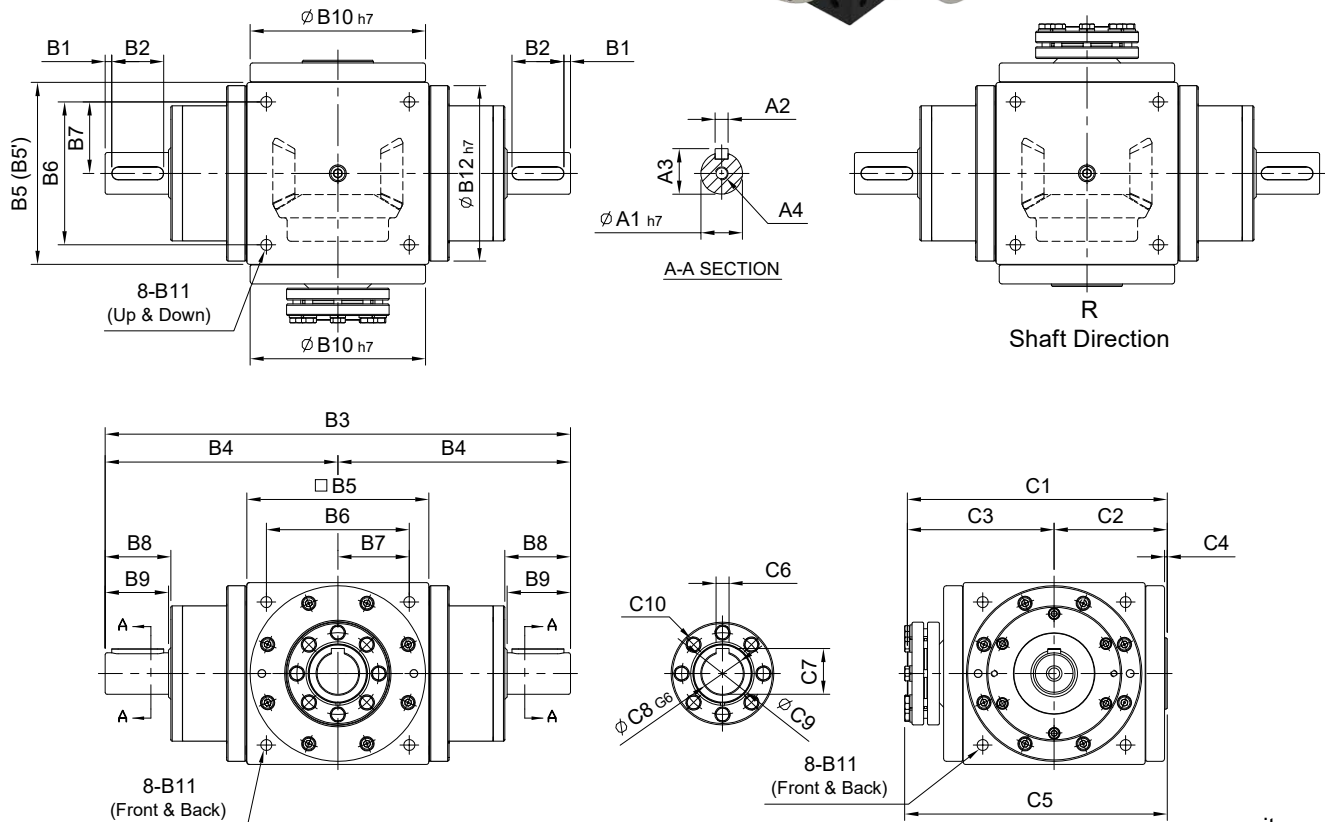
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280	
	A	A1	14	16	18	22	32	40	50	55	60
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	127.5	143	168.5	207	250	300	375	430	505	
	B4	62.5	68	78.5	97	110	130	165	190	225	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	M16 x P2.0
	B12	-	73	88	106	135	164	205	228	219	
C	C1	104	109	120	138	169	202	285	324	370	
	C2	42	44.5	50	59	72	87	125	146	164	
	C3	62	64.5	70	79	97	115	138	178	206	
	C4	2	2	2	2	2	2	2	2	3	
	C5	110	113	124	142	171	202	242	288	329	369.8
	C6	5	5	6	6	10	12	14	16	18	
	C7	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4	
	C8	14	14	18	22	32	40	50	55	60	
	C9	22	22	28	34	44	52	65	73	83	
	C10	6-M6	6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M8	8-M10
Weight $\pm 3\%$ (kg)		2.1	2.8	4.9	8.59	15.5	25	53	73.9		

ST-YN series

RATIO : 1.2.3.4.5 (1-Stage)



Double Input Shaft - Single Clamping



unit: mm

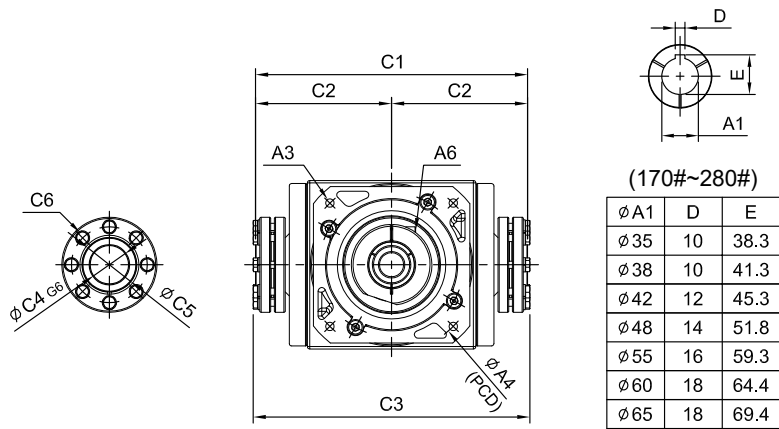
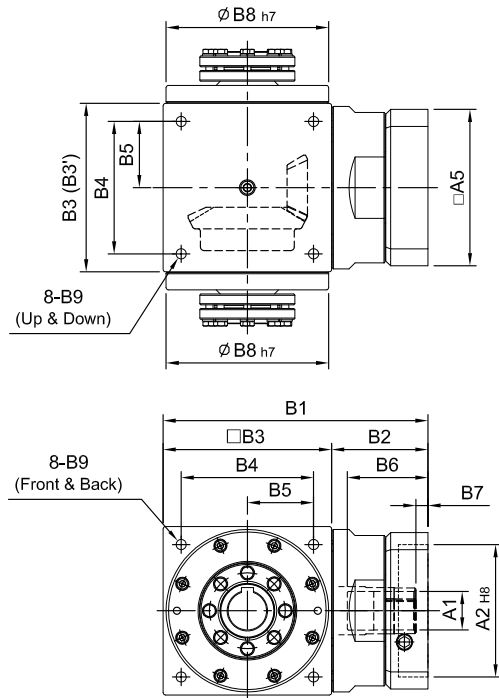
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280	
	A	A1	14	16	18	22	32	40	50	55	60
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	190	210	247	304	360	430	540	620	730	
	B4	95	105	123.5	152	180	215	270	310	365	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	M16 x P2.0
	B12	-	73	88	106	135	164	205	228	219	
C	C1	104	109	120	138	169	200	285	324	370	
	C2	42	44.5	50	59	72	87	102	125	146	164
	C3	62	64.5	70	79	97	113	138	160	178	206
	C4	2	2	2	2	2	2	2	2	2	3
	C5	110	113	124	142	171	202	242	288	329	369.8
	C6	5	5	6	6	10	12	14	16	18	
	C7	16.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4	
	C8	14	14	18	22	32	40	50	55	60	
	C9	22	22	28	34	44	52	65	73	83	
	C10	6-M6	6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M8	8-M10
Weight $\pm 3\%$ (kg)	2.85	3.6	6.2	11.5	18	28	57	95.5			

ST-FM series

RATIO : 1.2.3.4.5 (1-Stage)



Input Flange - Double Clamping



(170#~280#)

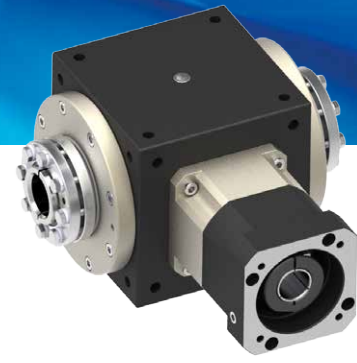
φA1	D	E
φ35	10	38.3
φ38	10	41.3
φ42	12	45.3
φ48	14	51.8
φ55	16	59.3
φ60	18	64.4
φ65	18	69.4

unit: mm

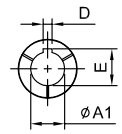
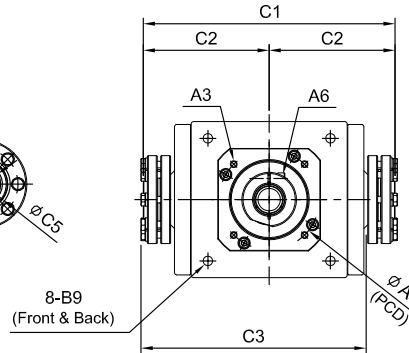
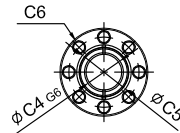
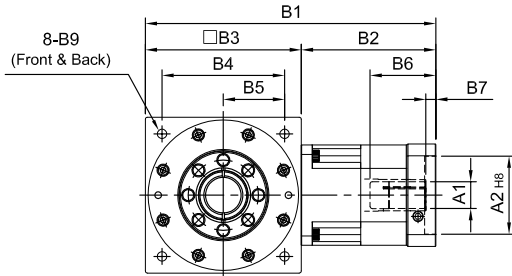
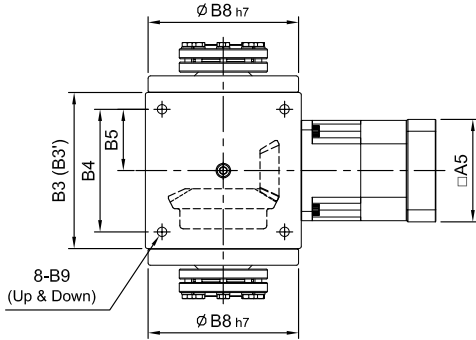
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
	A									
A1	9 · 11 · 14		14 · 19	16 · 19 · 22 · 24	19 · 22 · 24	24 · 28 · 32 · 35	35 · 38	35 · 38 · 42 · 48 · 55	48 · 55 · 60	55 · 60 · 65
A2	50 · 60 · 70		50 · 60 · 70	70 · 80 · 95 · 110	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230	114.3 · 230 · 250	114.3 · 180 · 230 · 250
A3	M4 · M5 · M6		M4 · M5 · M6	M5 · M6 · M8	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12	M10 · M12 · M16	M12 · M16	M12 · M16
A4	70 · 75 · 90		70 · 75 · 90	90 · 100 · 115 · 145	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265	200 · 265 · 300	200 · 215 · 265 · 300
A5	64 · 70 · 80		64 · 70 · 80	92 · 110 · 130	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250	222 · 250 · 265	222 · 220 · 250 · 265
A6	M5 x P0.8		M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5	M10 x P1.5
B										
B1	110		115 · 124	148 · 162	177 · 191	224 · 238	274	357 · 359	394.5 · 21.5 · 424.5	453.5 · 483
B2	45		40 · 49	58 · 72	67 · 81	84 · 98	104	147	154.5 · 181.5 · 184.5	173.5 · 203
B3(B3')	65		75(74)	90	110	140	170(168)	210	240	280
B4	52		60	72	88	110	134	170	190	220
B5	26		30	36	44	55	67	85	95	110
B6	36		36 · 42	51 · 65.5	51 · 65.5	68 · 81	84.5	117	115 · 142 · 145	112.5 · 142
B7	7		7	9 · 23.5	9 · 23.5	9 · 10	9.5	14 · 16	12.5 · 15.5	12.5 · 42
B8	62	64	73	88	106	135	164	205	228	275
B9	M5 x P0.8		M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
C										
C1	124	129	140	158	194	230	276	320	356	412
C2	62	64.5	70	79	97	115	138	160	178	206
C3	136	138	150	166	198	232	280	327	370	411.7
C4	14		14	18	22	32	40	50	55	60
C5	22		22	28	34	44	52	65	73	83
C6	6-M6		6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M10
Weight ±3% (kg)	1.7		2.4	4.3	7.1	14.9	24.5	46	61.8	

ST-RM series

RATIO : 10.15.20.25.30.40.50 (2-Stage)



Fitted with Planetary Reducer - Double Clamping



(210#~280#)

$\phi A1$	D	E
$\phi 28$	8	31.3
$\phi 32$	10	35.3
$\phi 35$	10	38.3
$\phi 38$	10	41.3

unit: mm

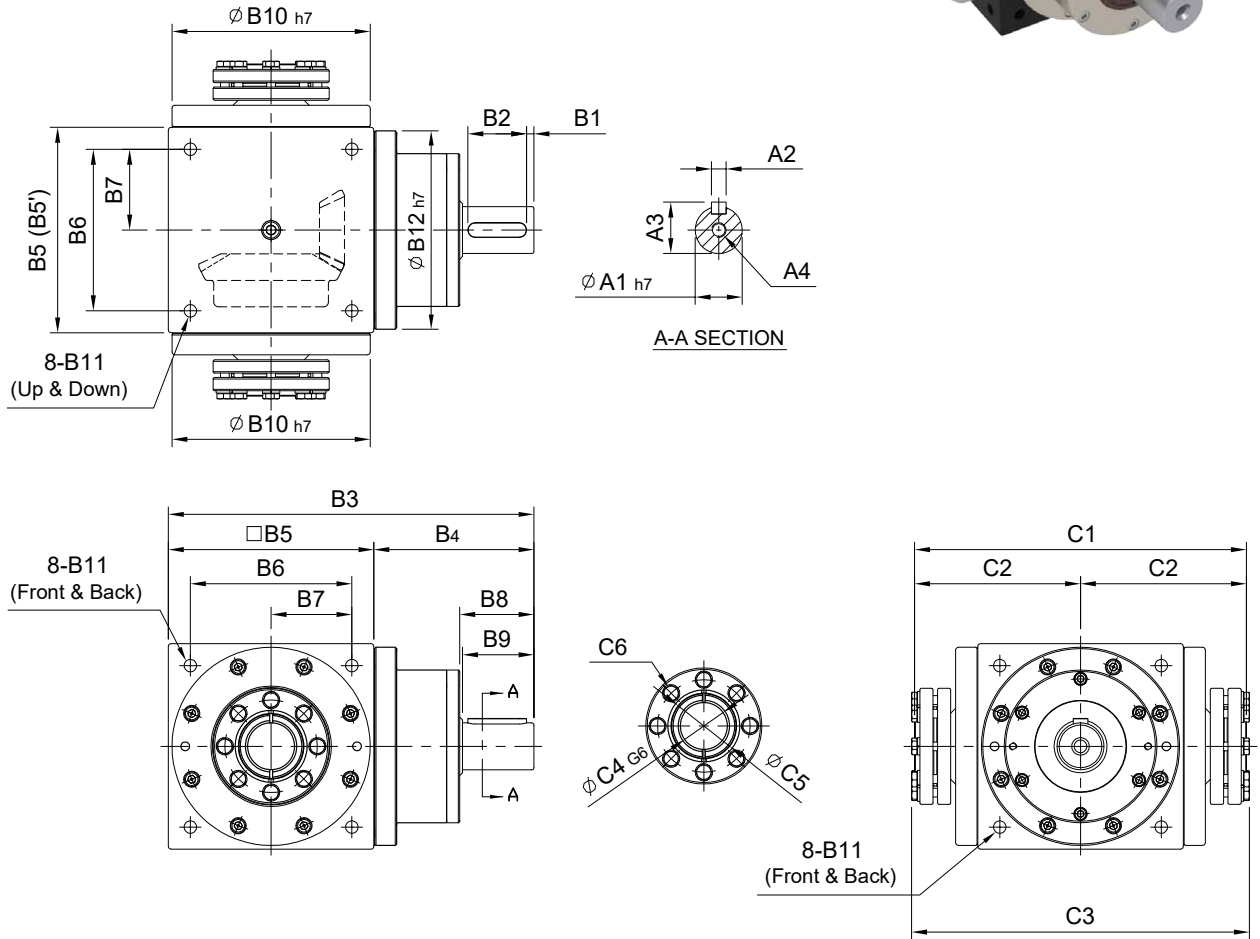
Model Code	65	75	90	110	140	170	210	240	280		
A	A1	8·9·11	8·9·11	11·14·16·19	11·14·16·19	(14)·16·19	16·19·22·24	22·24·28·32·35	28·32·35·38	35·38·42·48·55	38·42·48·55
	A2	30·40·50	30·40·50	50·60·70	50·60·70	50·70·80·95	70·80·95·110	95·110·130	110·130·180	114.3·180·230·250	114.3·180·230·250
	A3	M3·M4·M5	M3·M4·M5	M4·M5·M6	M4·M5·M6	M5·M6	M5·M6·M8	M6·M8·M10	M8·M10·M12	M10·M12·M16	M12·M16
	A4	46·60·63	46·60·63	70·75·90	70·75·90	70·90·100·115	90·100·115·145	115·145·165	145·165·200	200·215·265·300	200·215·265·300
	A5	46·55	46·55	64·70·80	64·70·80	80·92·110	92·110·130	122·130·150	146·150·190	182·200·250·265	222·220·250·265
	A6	M4 x P0.7	M4 x P0.7	M5 x P0.8	M5 x P0.8	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	132	137	149·157	165·173	(191)·203	260	313·334	399	479.5	580.5
	B2	67	62	74·82	75·83	(81)·93	120	143·164	189	239.5	300.5
	B3(B3')	65	75(74)	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	60	72	88	110	134	170	190	220
	B5	26	30	30	36	44	55	67	85	95	110
	B6	26	26	33.5·41.5	33.5·41.5	(33.5)·45.5	59	67·83	85	116.5	117.5
	B7	5	5	5	6	(6)·10	9	10·11	10	13.5	12.5
	B8	62	73	73	88	106	135	164	205	228	275
B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
C	C1	124	140	140	158	194	230	276	320	356	412
	C2	62	70	70	79	97	115	138	160	178	206
	C3	136	150	150	166	198	232	280	327	370	411.7
	C4	14	14	14	18	22	32	40	50	55	60
	C5	22	22	22	28	34	44	52	65	73	83
	C6	6-M6	6-M6	6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M8
Weight $\pm 3\%$ (kg)	1.9	3.6	3.4	4.8	8.5	14.2	24	52	78.6		

ST-DM series

RATIO : 1.2.3.4.5 (1-Stage)



Single Input Shaft - Double Clamping



unit: mm

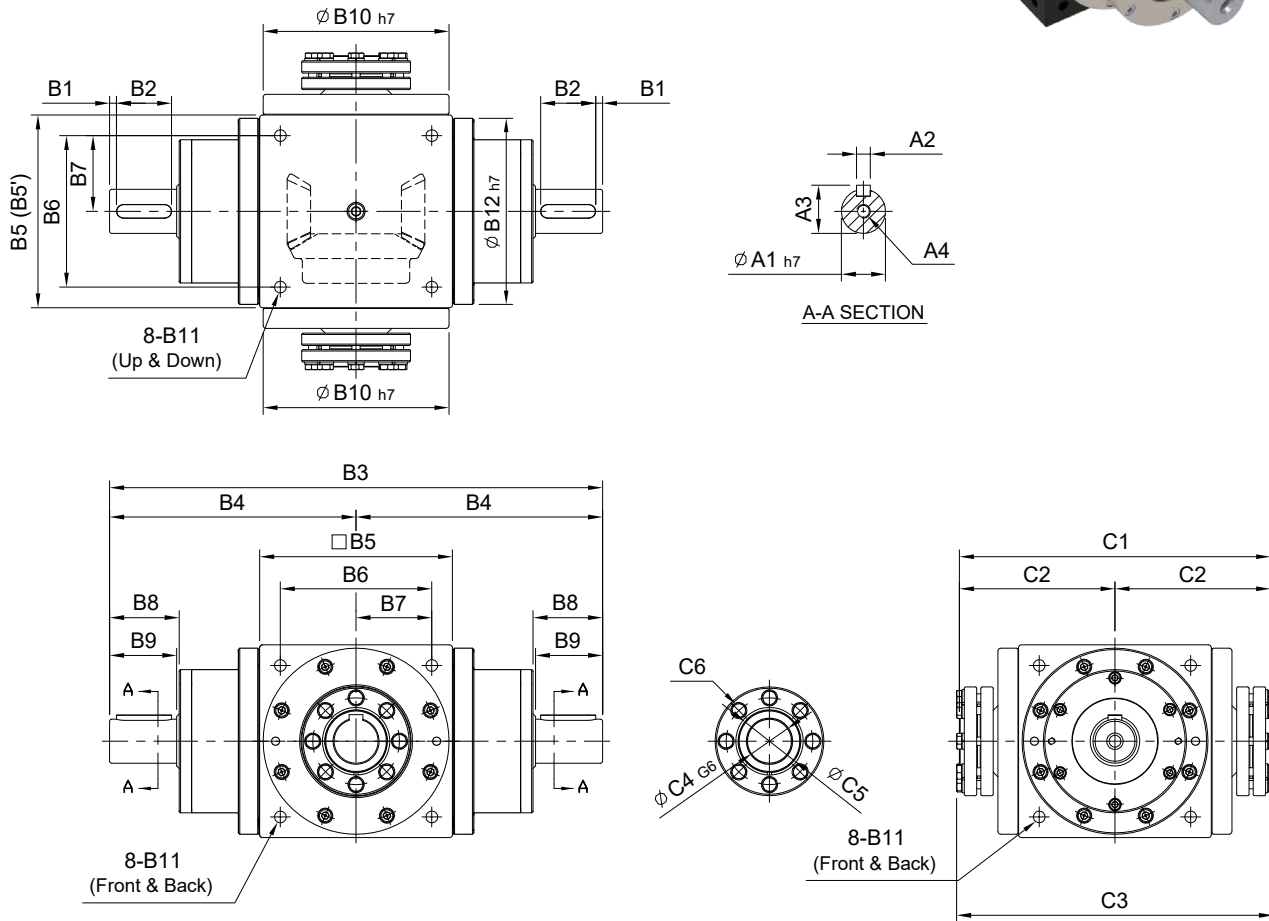
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280	
	A	A1	14	16	18	22	32	40	50	55	60
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	127.5	143	168.5	207	250	300	375	430	505	
	B4	62.5	68	78.5	97	110	130	165	190	225	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	M16 x P2.0
	B12	-	73	88	106	135	164	205	228	219	
C	C1	124	129	140	158	194	230	276	320	356	412
	C2	62	64.5	70	79	97	115	138	160	178	206
	C3	136	138	150	166	198	232	280	327	370	411.7
	C4	14	14	18	22	32	40	50	55	60	
	C5	22	22	28	34	44	52	65	73	83	
	C6	6-M6	6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M8	8-M10
Weight $\pm 3\%$ (kg)		2.1	2.8	4.9	8.59	15.5	25	53	74.4		

ST-YM series

RATIO : 1.2.3.4.5 (1-Stage)



Double Input Shaft - Double Clamping

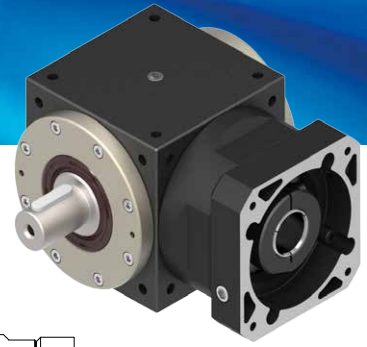


unit: mm

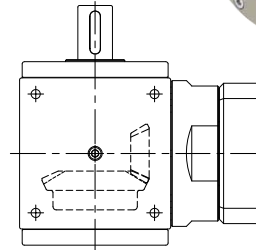
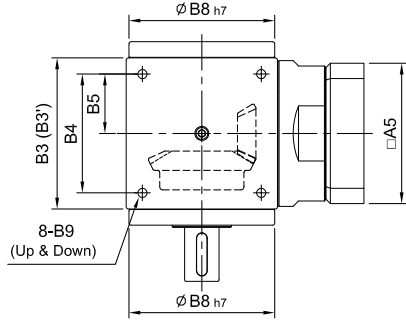
	Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
		A	A1	14	16	18	22	32	40	50	55
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	190	210	247	304	360	430	540	620	730	
	B4	95	95	123.5	152	180	215	270	310	365	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
	B12	-	73	88	106	135	164	205	228	219	
C	C1	124	129	140	158	194	230	276	320	356	412
	C2	62	64.5	70	79	97	115	138	160	178	206
	C3	136	138	150	166	198	232	280	327	370	411.7
	C4	14	14	18	22	32	40	50	55	60	
	C5	22	22	28	34	44	52	65	73	83	
	C6	6-M6	6-M6	6-M6	8-M6	8-M6	8-M8	8-M8	8-M8	8-M8	8-M10
Weight ±3% (kg)		2.85	3.6	6.2	11.5	18	28	57	96		

ST-FS series

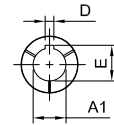
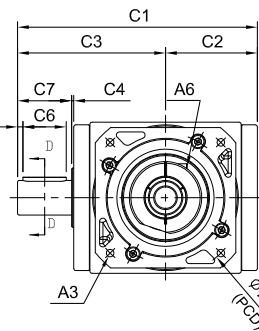
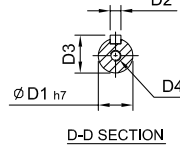
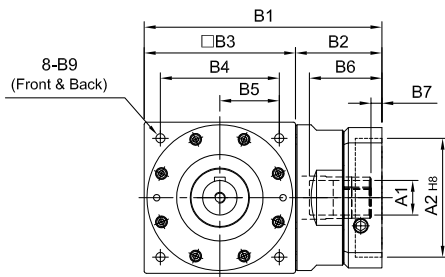
RATIO : 1.2.3.4.5 (1-Stage)



Input Flange - Single Output Shaft



R
Shaft Direction



(170#-280#)

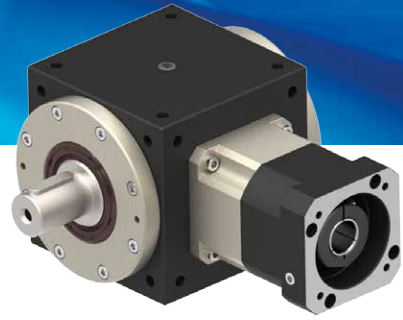
$\phi A1$	D	E
$\phi 35$	10	38.3
$\phi 38$	10	41.3
$\phi 42$	12	45.3
$\phi 48$	14	51.8
$\phi 55$	16	59.3
$\phi 60$	18	64.4
$\phi 65$	18	69.4

unit: mm

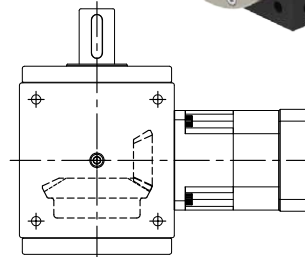
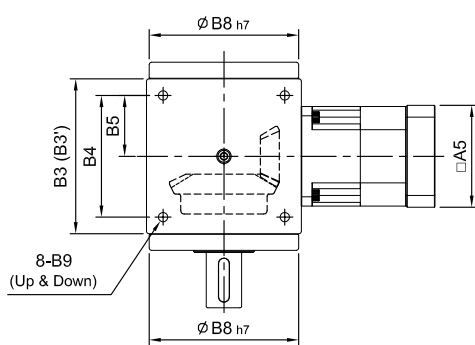
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
A	A1	9 · 11 · 14	14 · 19	16 · 19 · 22 · 24	19 · 22 · 24	24 · 28 · 32 · 35	35 · 38	35 · 38 · 42 · 48 · 55	48 · 55 · 60	55 · 60 · 65
	A2	50 · 60 · 70	50 · 60 · 70	70 · 80 · 95 · 110	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230	114.3 · 230 · 250	114.3 · 180 · 230 · 250
	A3	M4 · M5 · M6	M4 · M5 · M6	M5 · M6 · M8	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12	M10 · M12 · M16	M12 · M16	M12 · M16
	A4	70 · 75 · 90	70 · 75 · 90	90 · 100 · 115 · 145	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265	200 · 265 · 300	200 · 215 · 265 · 300
	A5	64 · 70 · 80	64 · 70 · 80	92 · 110 · 130	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250	222 · 250 · 265	222 · 220 · 250 · 265
	A6	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	110	115 · 124	148 · 162	177 · 191	224 · 238	274	357 · 359	394.5 · 421.5 · 424.5	453.5 · 483
	B2	45	40 · 49	58 · 72	67 · 81	84 · 98	104	147	154.5 · 181.5 · 184.5	173.5 · 203
	B3(B3')	65	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	72	88	110	134	170	190	220
	B5	26	30	36	44	55	67	85	95	110
	B6	36	36 · 42	51 · 65.5	51 · 65.5	68 · 81	84.5	117	115 · 142 · 145	112.5 · 142
	B7	7	7	9 · 23.5	9 · 23.5	9 · 10	9.5	14 · 16	12.5 · 15.5	12.5 · 42
	B8	62 64	73	88	106	135	164	205	228	275
	B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
C	C1	102 107	128	151	182	222	262	323	370	425
	C2	40 42.5	48	57	70	85	100	123	144	161
	C3	62 64.5	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	3
	C5	2.5	2.5	5	5	5	5	5	5	5
	C6	15	25	25	30	40	50	65	70	90
	C7	20	30	35	40	50	60	75	80	100
D	D1	14	16	18	22	32	40	50	55	60
	D2	5	5	6	6	10	12	14	16	18
	D3	16	18	20.5	24.5	35	43	53.5	59	64
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0
Weight ±3% (kg)	1.7	2.4	4.3	7.1	14.9	24.5	46	68.5		

ST-RS series

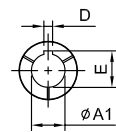
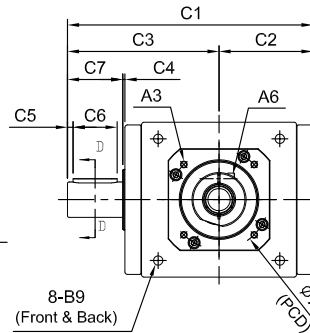
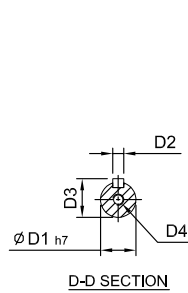
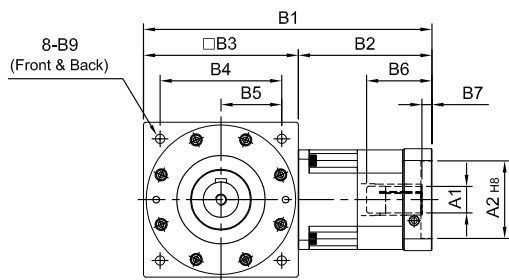
RATIO : 10.15.20.25.30.40.50 (2-Stage)



Fitted with Planetary Reducer - Single Output Shaft



R
Shaft Direction



(210#~280#)

$\phi A1$	D	E
$\phi 28$	8	31.3
$\phi 32$	10	35.3
$\phi 35$	10	38.3
$\phi 38$	10	41.3

unit: mm

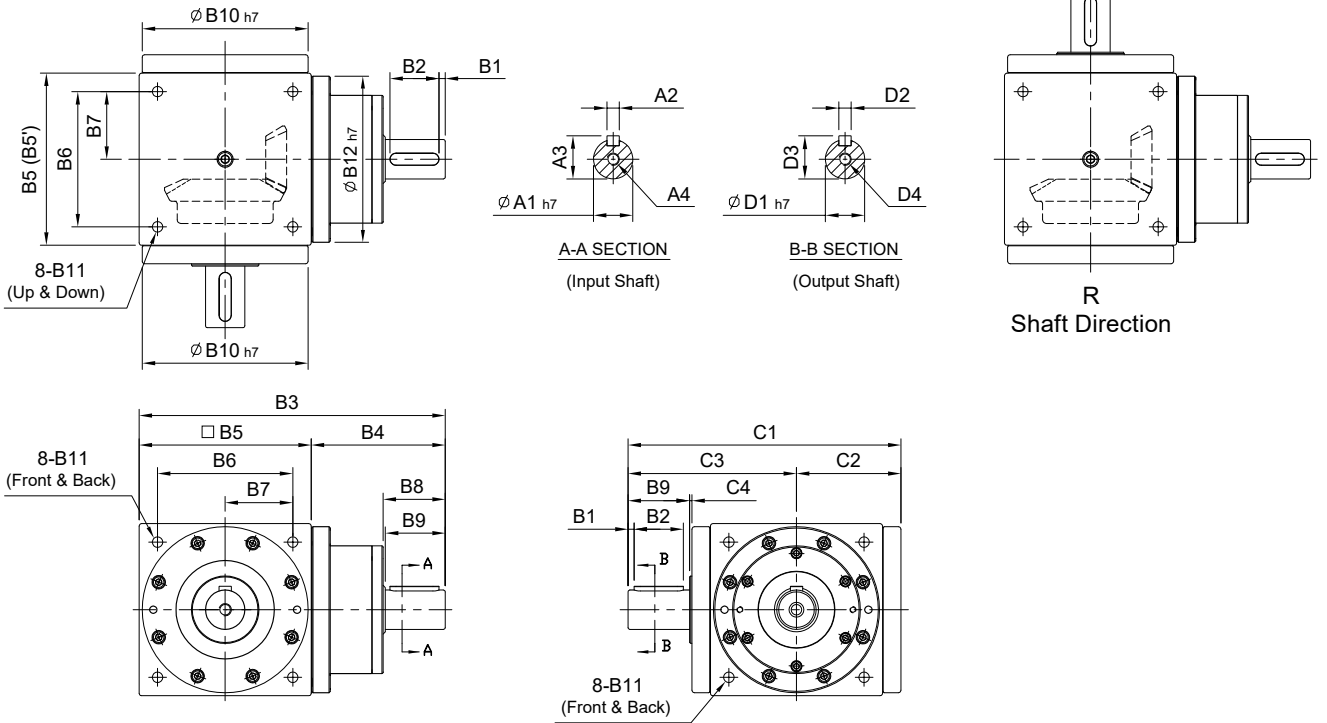
Model Code	Model										
	65	75	90	110	140	170	210	240	280		
A	A1	8 · 9 · 11	8 · 9 · 11	11 · 14 · 16 · 19	11 · 14 · 16 · 19	(14) · 16 · 19	16 · 19 · 22 · 24	22 · 24 · 28 · 32 · 35	28 · 32 · 35 · 38	35 · 38 · 42 · 48 · 55	38 · 42 · 48 · 55
	A2	30 · 40 · 50	30 · 40 · 50	50 · 60 · 70	50 · 60 · 70	50 · 70 · 80 · 95	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230 · 250	114.3 · 180 · 230 · 250
	A3	M3 · M4 · M5	M3 · M4 · M5	M4 · M5 · M6	M4 · M5 · M6	M5 · M6	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12	M10 · M12 · M16	M12 · M16
	A4	46 · 60 · 63	46 · 60 · 63	70 · 75 · 90	70 · 75 · 90	70 · 90 · 100 · 115	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265 · 300	200 · 215 · 265 · 300
	A5	46 · 55	46 · 55	64 · 70 · 80	64 · 70 · 80	80 · 92 · 110	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250 · 265	222 · 220 · 250 · 265
	A6	M4 x P0.7	M4 x P0.7	M5 x P0.8	M5 x P0.8	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	132	137	149 · 157	165 · 173	(191) · 203	260	313 · 334	399	479.5	580.5
	B2	67	62	74 · 82	75 · 83	(81) · 93	120	143 · 164	189	239.5	300.5
	B3(B3')	65	75(74)	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	60	72	88	110	134	170	190	220
	B5	26	30	30	36	44	55	67	85	95	110
	B6	26	26	33.5 · 41.5	33.5 · 41.5	(33.5) · 45.5	59	67 · 83	85	116.5	117.5
B7	5	5	5	6	(6) · 10	9	10 · 11	10	13.5	12.5	
B8	62	73	73	88	106	135	164	205	228	275	
B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
C	C1	102	128	128	151	182	222	262	323	370	425
	C2	40	48	48	57	70	85	100	123	144	161
	C3	62	80	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	2	3
	C5	2.5	2.5	2.5	5	5	5	5	5	5	5
	C6	15	25	25	25	30	40	50	65	70	90
C7	20	30	30	35	40	50	60	75	80	100	
D	D1	14	16	16	18	22	32	40	50	55	60
	D2	5	5	5	6	6	10	12	14	16	18
	D3	16	18	18	20.5	24.5	35	43	53.5	59	64
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0
Weight $\pm 3\%$ (kg)	1.9	3.6	3.4	4.8	8.5	14.2	24	52	79.8		

ST-DS series

RATIO : 1.2.3.4.5 (1-Stage)



Single Input Shaft - Single Output Shaft



unit: mm

Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280	
	A	A1	14	16	18	22	32	40	50	55	60
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	127.5	143	168.5	207	250	300	375	430	505	
	B4	62.5	68	78.5	97	110	130	165	190	225	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	M16 x P2.0
	B12	-	73	88	106	135	164	205	228	219	
C	C1	102	107	128	151	182	222	262	323	370	425
	C2	40	42.5	48	57	70	85	100	123	144	161
	C3	62	64.5	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	2	3
D	D1	14	16	18	22	32	40	50	55	60	
	D2	5	5	6	6	10	12	14	16	18	
	D3	16	18	20.5	24.5	35	43	53.5	59	64	
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
Weight ±3% (kg)		2.1	2.8	4.9	8.59	15.5	25	53	79.5		

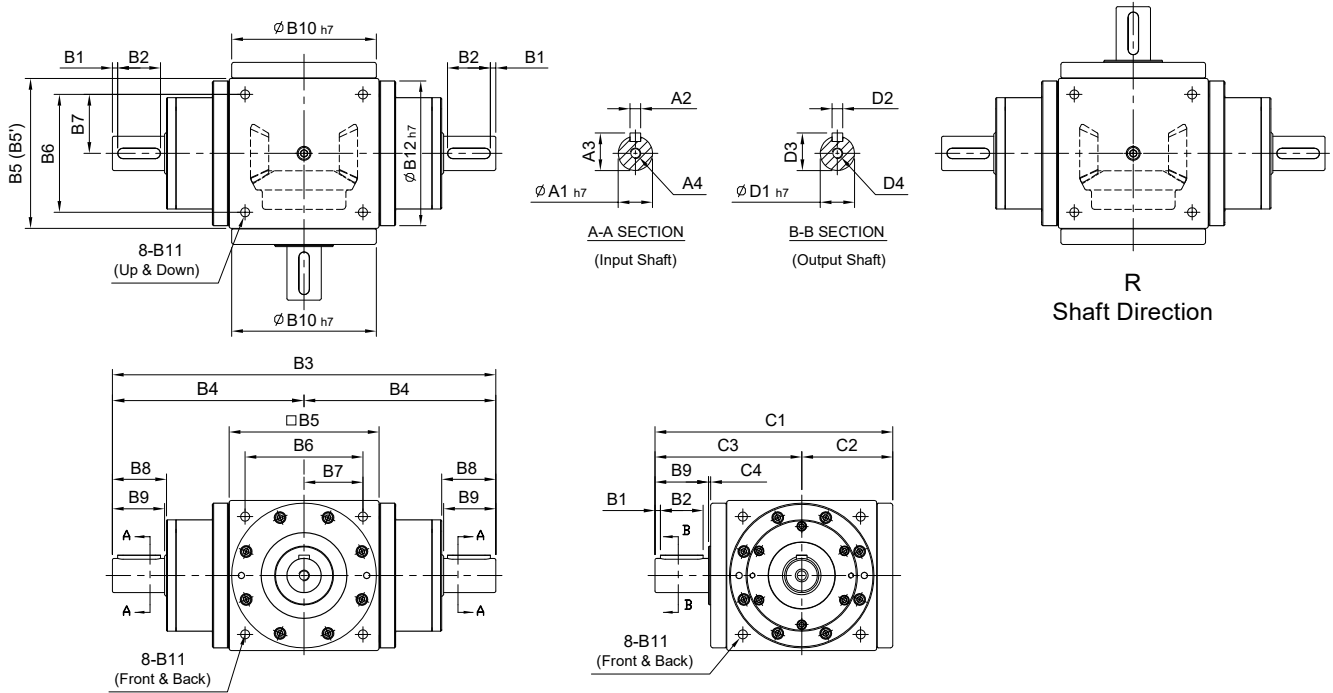
ST-YS series

RATIO : 1.2.3.4.5 (1-Stage)



Double Input Shaft - Single Output Shaft

ST

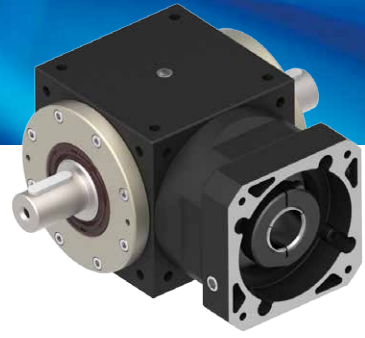


unit: mm

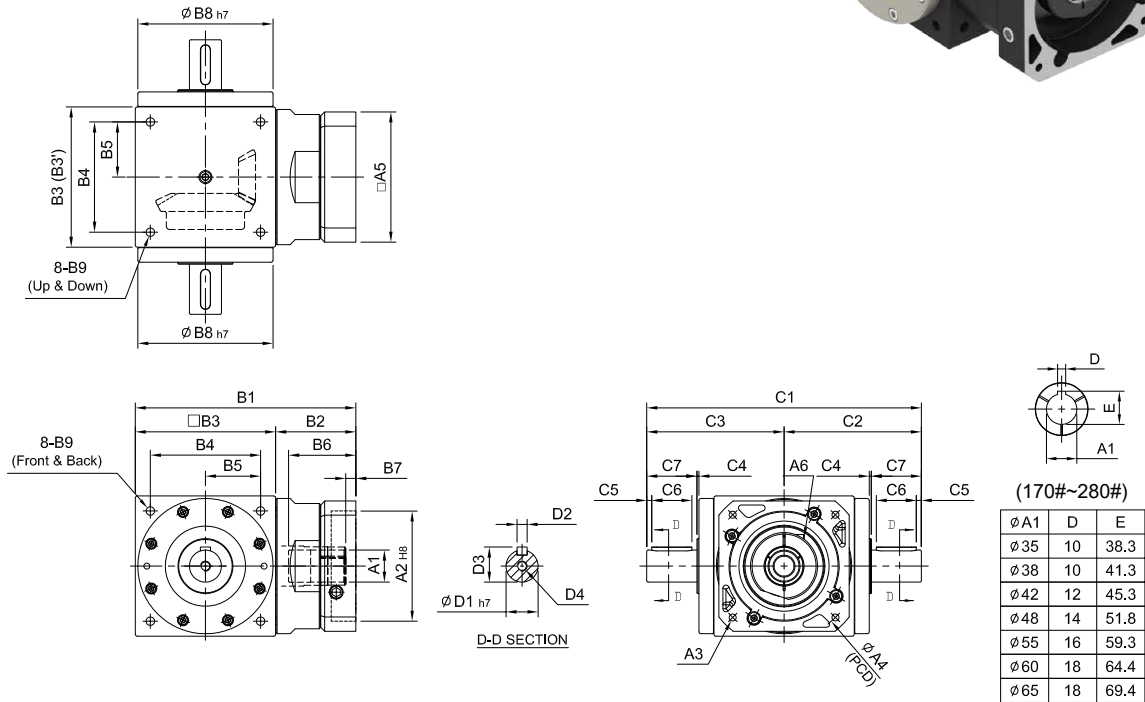
	Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
		A	A1	14	16	18	22	32	40	50	55
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	190	210	247	304	360	430	540	620	730	
	B4	95	105	123.5	152	180	215	270	310	365	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	M16 x P2.0
	B12	-	73	88	106	135	164	205	228	219	
C	C1	102	107	128	151	182	222	262	323	370	425
	C2	40	42.5	48	57	70	85	100	123	144	161
	C3	62	64.5	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	2	3
D	D1	14	16	18	22	32	40	50	55	60	
	D2	5	5	6	6	10	12	14	16	18	
	D3	16	18	20.5	24.5	35	43	53.5	59	64	
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
Weight $\pm 3\%$ (kg)		2.85	3.6	6.2	11.5	18	28	57	101.1		

ST-FV series

RATIO : 1.2.3.4.5 (1-Stage)



Input Flange - Double Output Shaft

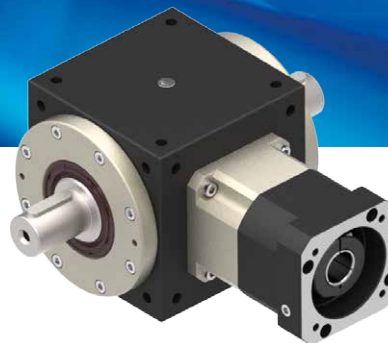


unit: mm

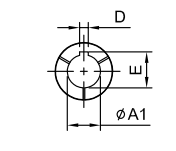
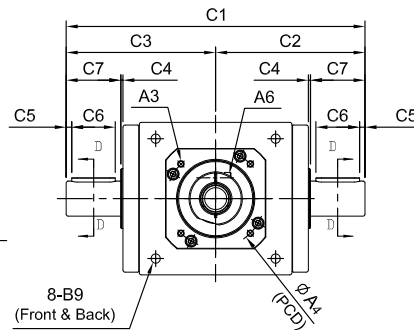
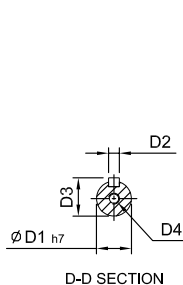
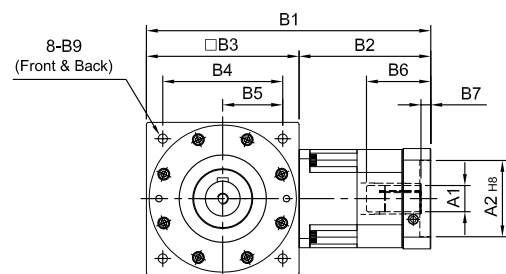
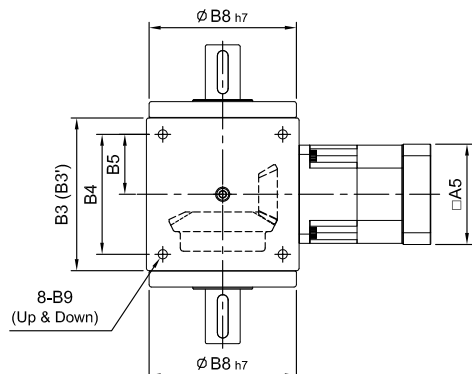
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280
	A	A1	9 · 11 · 14	14 · 19	16 · 19 · 22 · 24	19 · 22 · 24	24 · 28 · 32 · 35	35 · 38	35 · 38 · 42 · 48 · 55	48 · 55 · 60
	A2	50 · 60 · 70	50 · 60 · 70	70 · 80 · 95 · 110	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230	114.3 · 230 · 250	114.3 · 180 · 230 · 250
	A3	M4 · M5 · M6	M4 · M5 · M6	M5 · M6 · M8	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M120	M10 · M12 · M16	M12 · M16	M12 · M16
	A4	70 · 75 · 90	70 · 75 · 90	90 · 100 · 115 · 145	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265	200 · 265 · 300	200 · 215 · 265 · 300
	A5	64 · 70 · 80	64 · 70 · 80	92 · 110 · 130	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 265	222 · 250 · 265	222 · 220 · 250 · 265
	A6	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	110	115 · 124	148 · 162	177 · 191	224 · 238	274	357 · 359	394.5 · 421.5 · 424.5	453.5 · 483
	B2	45	40 · 49	58 · 72	67 · 81	84 · 98	104	147	154.5 · 181.5 · 184.5	173.5 · 203
	B3(B3')	65	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	72	88	110	134	170	190	220
	B5	26	30	36	44	55	67	85	95	110
	B6	36	36 · 42	51 · 65.5	51 · 65.5	68 · 81	84.5	117	115 · 142 · 145	112.5 · 142
	B7	7	7	9 · 23.5	9 · 23.5	9 · 10	9.5	14 · 16	12.5 · 15.5	12.5 · 42
	B8	62 64	73	88	106	135	164	205	228	275
	B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
C	C1	124 129	160	188	224	274	324	400	452	528
	C2	62 64.5	80	94	112	137	162	200	226	264
	C3	62 64.5	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	3
	C5	2.5	2.5	5	5	5	5	5	5	5
	C6	15	25	25	30	40	50	65	70	90
	C7	20	30	35	40	50	60	75	80	100
D	D1	14	16	18	22	32	40	50	55	60
	D2	5	5	6	6	10	12	14	16	18
	D3	16	18	20.5	24.5	35	43	53.5	59	64
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0
Weight ±3% (kg)		1.7	2.4	4.3	7.1	14.9	24.5	46	70.8	

ST-RV series

RATIO : 10.15.20.25.30.40.50 (2-Stage)



Fitted with Planetary Reducer - Double Output Shaft



(210#~280#)

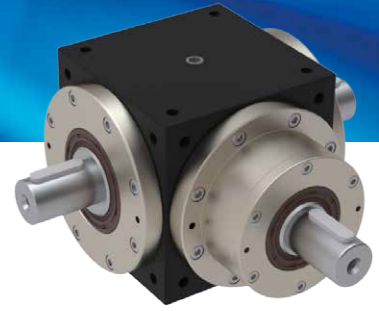
ØA1	D	E
Ø28	8	31.3
Ø32	10	35.3
Ø35	10	38.3
Ø38	10	41.3

unit: mm

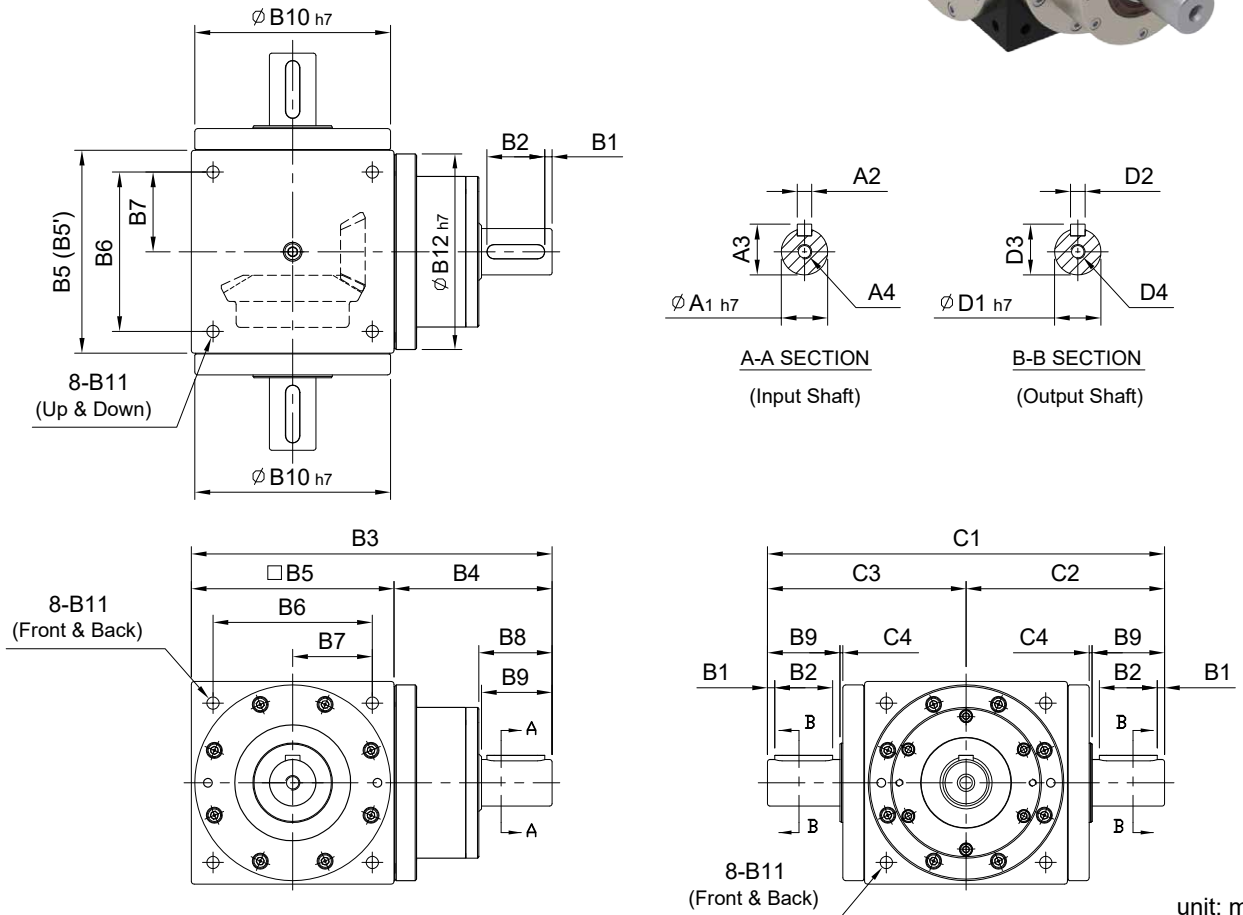
Model Code	Model										
	65	75	90	110	140	170	210	240	280		
A	A1	8 · 9 · 11	8 · 9 · 11	11 · 14 · 16 · 19	11 · 14 · 16 · 19	(14) · 16 · 19	16 · 19 · 22 · 24	22 · 24 · 28 · 32 · 35	28 · 32 · 35 · 38	35 · 38 · 42 · 48 · 55	38 · 42 · 48 · 55
	A2	30 · 40 · 50	30 · 40 · 50	50 · 60 · 70	50 · 60 · 70	50 · 70 · 80 · 95	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230 · 250	114.3 · 180 · 230 · 250
	A3	M3 · M4 · M5	M3 · M4 · M5	M4 · M5 · M6	M4 · M5 · M6	M5 · M6	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12	M10 · M12 · M16	M12 · M16
	A4	46 · 60 · 63	46 · 60 · 63	70 · 75 · 90	70 · 75 · 90	70 · 90 · 100 · 115	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265 · 300	200 · 215 · 265 · 300
	A5	46 · 55	46 · 55	64 · 70 · 80	64 · 70 · 80	80 · 92 · 110	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250 · 265	222 · 220 · 250 · 265
	A6	M4 x P0.7	M4 x P0.7	M5 x P0.8	M5 x P0.8	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	132	137	149 · 157	165 · 173	(191) · 203	260	313 · 334	399	479.5	580.5
	B2	67	62	74 · 82	75 · 83	(81) · 93	120	143 · 164	189	239.5	300.5
	B3(B3')	65	75(74)	75(74)	90	110	140	170(168)	210	240	280
	B4	52	60	60	72	88	110	134	170	190	220
	B5	26	30	30	36	44	55	67	85	95	110
	B6	26	26	33.5 · 41.5	33.5 · 41.5	(33.5) · 45.5	59	67 · 83	85	116.5	117.5
	B7	5	5	5	6	(6) · 10	9	10 · 11	10	13.5	12.5
	B8	62	73	73	88	106	135	164	205	228	275
B9	M5 x P0.8	M6 x P1.0	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
C	C1	124	160	160	188	224	274	324	400	452	528
	C2	62	80	80	94	112	137	162	200	226	264
	C3	62	80	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	2	3
	C5	2.5	2.5	2.5	5	5	5	5	5	5	5
	C6	15	25	25	25	30	40	50	65	70	90
	C7	20	30	30	35	40	50	60	75	80	100
D	D1	14	16	16	18	22	32	40	50	55	60
	D2	5	5	5	6	6	10	12	14	16	18
	D3	16	18	18	20.5	24.5	35	43	53.5	59	64
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0
Weight ±3% (kg)	1.9	3.6	3.4	4.8	8.5	14.2	24	52	82.1		

ST-DV series

RATIO : 1.2.3.4.5 (1-Stage)



Single Input Shaft - Double Output Shaft

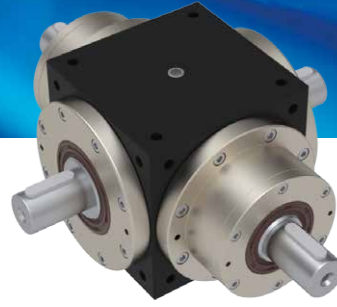


unit: mm

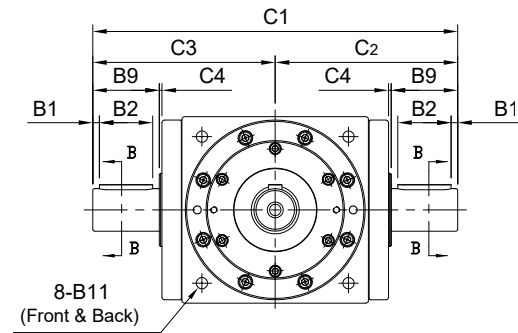
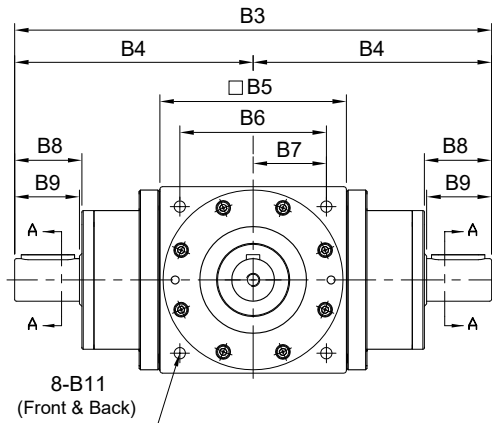
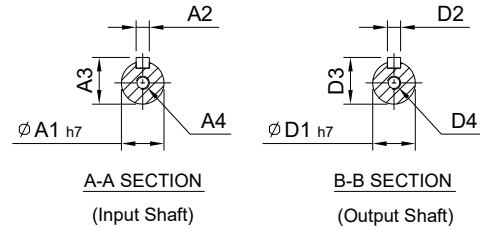
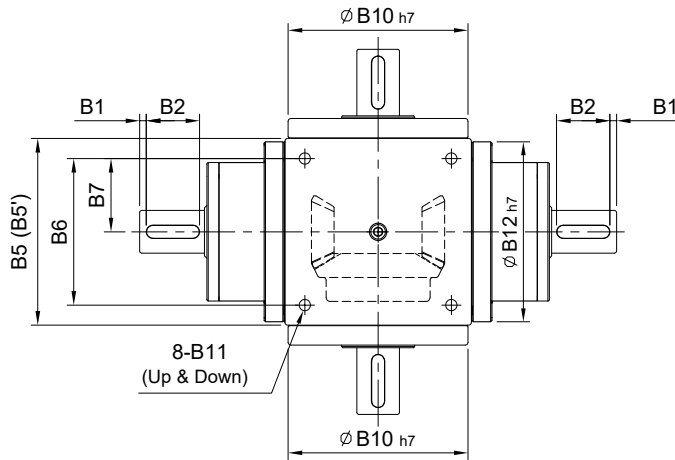
Model Code	65	65 (1:1)	75	90	110	140	170	210	240	280	
	A	A1	14	16	18	22	32	40	50	55	60
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	127.5	143	168.5	207	250	300	375	430	505	
	B4	62.5	68	78.5	97	110	130	165	190	225	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	M16 x P2.0
	B12	-	73	88	106	135	164	205	228	219	
C	C1	124	129	160	188	224	274	324	400	452	528
	C2	62	64.5	80	94	112	137	162	200	226	264
	C3	62	64.5	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	2	3
D	D1	14	16	18	22	32	40	50	55	60	
	D2	5	5	6	6	10	12	14	16	18	
	D3	16	18	20.5	24.5	35	43	53.5	59	64	
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0
Weight ±3% (kg)		2.1	2.8	4.9	8.59	15.5	25	53	81.8		

ST-YV series

RATIO : 1.2.3.4.5 (1-Stage)



Double Input Shaft - Double Output Shaft

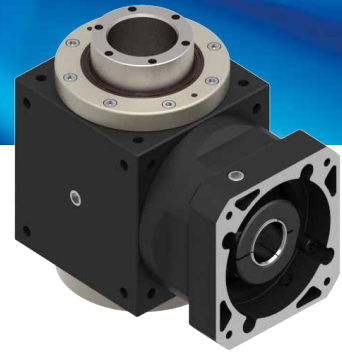


unit: mm

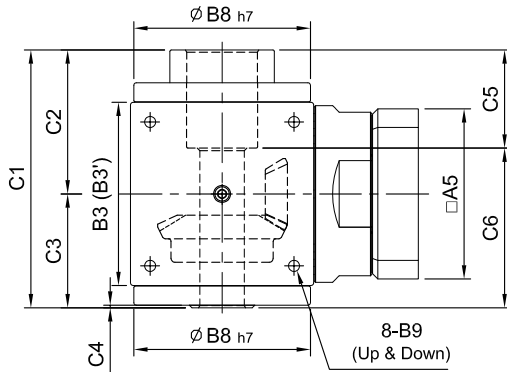
	Model Code	65	65	75	90	110	140	170	210	240	280
			(1:1)								
A	A1	14	16	18	22	32	40	50	55	60	
	A2	5	5	6	6	10	12	14	16	18	
	A3	16	18	20.5	24.5	35	43	53.5	59	64	
	A4	M5 x P0.8	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
B	B1	2.5	2.5	5	5	5	5	5	5	5	
	B2	15	25	25	30	40	50	65	70	90	
	B3	190	210	247	304	360	430	540	620	730	
	B4	95	105	123.5	152	180	215	270	310	365	
	B5(B5')	65	75(74)	90	110	140	170(168)	210	240	280	
	B6	52	60	72	88	110	134	170	190	220	
	B7	26	30	36	44	55	67	85	95	110	
	B8	22	32	38	43	53.5	64	77	82	105	
	B9	20	30	35	40	50	60	75	80	100	
	B10	62	64	73	88	106	135	164	205	228	275
	B11	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0	M16 x P2.0	
	B12	-	73	88	106	135	164	205	228	219	
C	C1	124	129	160	188	224	274	324	400	452	528
	C2	62	64.5	80	94	112	137	162	200	226	264
	C3	62	64.5	80	94	112	137	162	200	226	264
	C4	2	2	2	2	2	2	2	2	2	3
D	D1	14	16	18	22	32	40	50	55	60	
	D2	5	5	6	6	10	12	14	16	18	
	D3	16	18	20.5	24.5	35	43	53.5	59	64	
	D4	M5 x P0.8	M5 x P0.8	M5 x P0.8	M5 x P0.8	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0	M16 x P2.0	
Weight ±3% (kg)		2.85	3.6	6.2	11.5	18	28	57	103.4		

ST-FP series

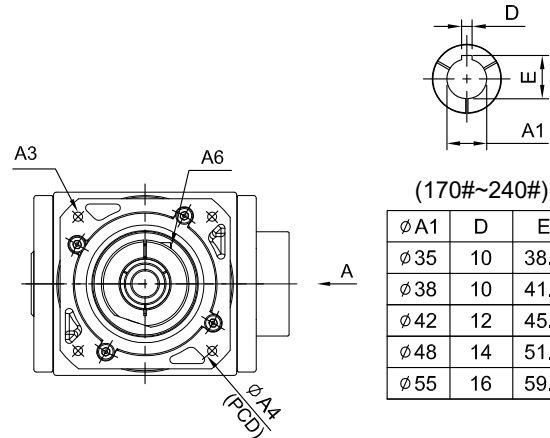
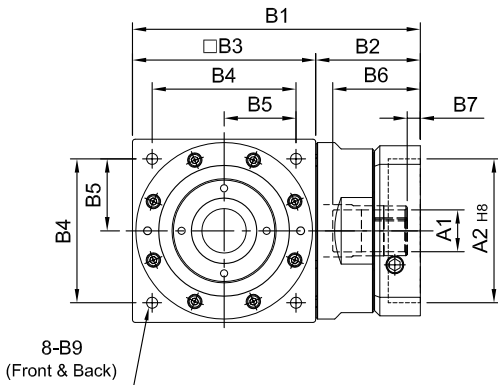
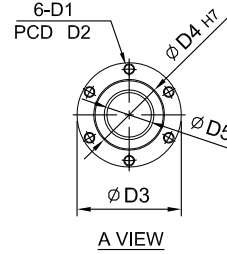
RATIO : 2.3.4.5 (1-Stage)



Input Flange - Ball Screw



R
Shaft Direction



unit: mm

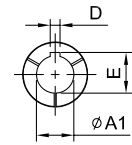
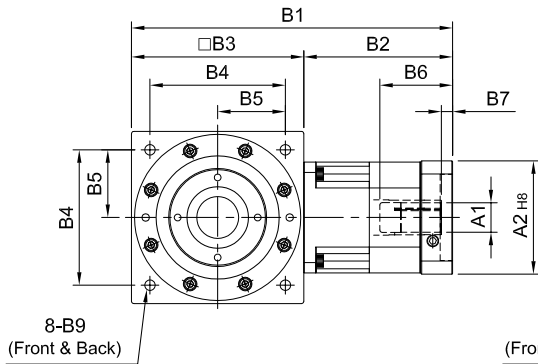
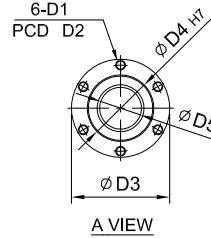
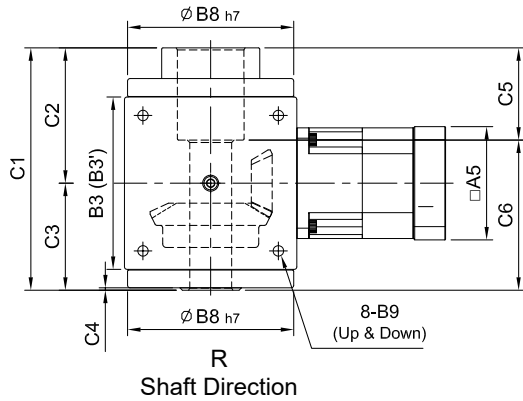
	Model Code	75	90	110	140	170	210	240
		A	A1	14 · 19	16 · 19 · 22 · 24	19 · 22 · 24	24 · 28 · 32 · 35	35 · 38
	A2	50 · 60 · 70	70 · 80 · 95 · 110	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230	114.3 · 230 · 250
	A3	M4 · M5 · M6	M5 · M6 · M8	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M120	M10 · M12 · M16	M12 · M16
	A4	70 · 75 · 90	90 · 100 · 115 · 145	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265	200 · 265 · 300
	A5	64 · 70 · 80	92 · 110 · 130	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250	222 · 250 · 265
	A6	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5
B	B1	115 · 124	148 · 162	177 · 191	224 · 238	274	357 · 359	394.5 · 421.5 · 424.5
	B2	40 · 49	58 · 72	67 · 81	84 · 98	104	147	154.5 · 181.5 · 184.5
	B3(B3')	75(74)	90	110	140	170(168)	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	36 · 42	51 · 65.5	51 · 65.5	68 · 81	84.5	117	115 · 142 · 145
	B7	7	9 · 23.5	9 · 23.5	9 · 10	9.5	14 · 16	12.5 · 15.5
	B8	73	88	106	135	164	205	228
	B9	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0
C	C1	106	127	156	197	223	267	309
	C2	57	68	84	109	121	142	162.5
	C3	49	59	72	88	102	125	146.5
	C4	1.25	2	2	2	2.25	2.25	2.5
	C5	33	44	55	75	72	82	92
	C6	73	83	101	122	153	185	217
D	D1	M4 x P0.7	M5 x P0.8	M5 x P0.8	M8 x P1.25	M10 x P1.5	M10 x P1.5	M12 x P1.75
	D2	36	40	45	70	77	84	97
	D3	41.7	46.7	57.7	79.7	89.7	99.7	117.7
	D4	26	30	36	54	58	64	75
	D5	15	18	22	34	38	42	54
Weight ±3% (kg)		2.4	4.3	7.1	14.9	24.5	46	

ST-RP series

RATIO : 10.15.20.25.30.40.50 (2-Stage)



Fitted with Planetary Reducer - Ball Screw



(210#~240#)

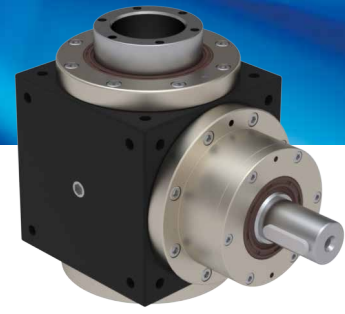
ØA1	D	E
Ø28	8	31.3
Ø32	10	35.3
Ø35	10	38.3
Ø38	10	41.3

unit: mm

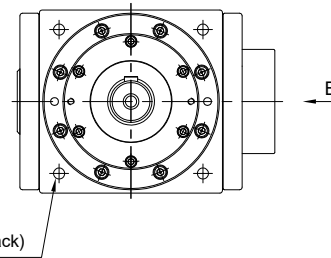
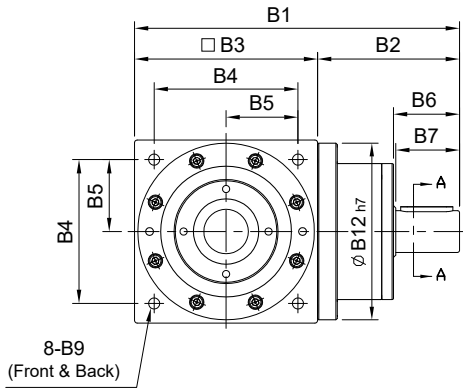
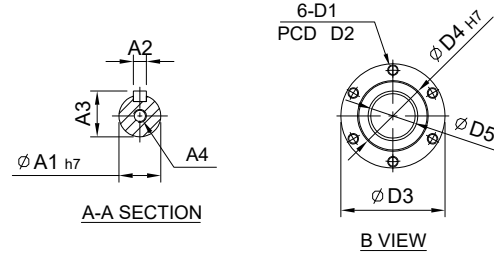
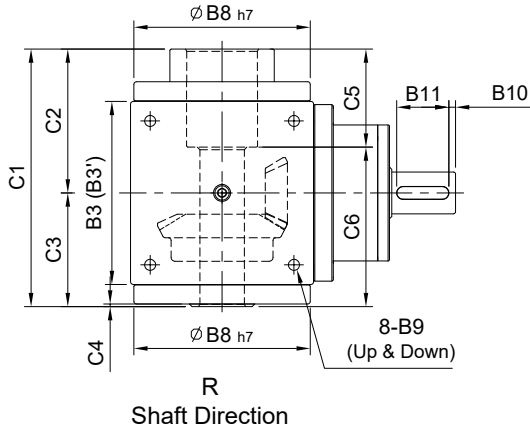
Model Code	75	90	110	140	170	210	240	
A1	8 · 9 · 11	11 · 14 · 16 · 19	11 · 14 · 16 · 19	(14) · 16 · 19	16 · 19 · 22 · 24	22 · 24 · 28 · 32 · 35	28 · 32 · 35 · 38	35 · 38 · 42 · 48 · 55
A2	30 · 40 · 50	50 · 60 · 70	50 · 60 · 70	50 · 70 · 80 · 95	70 · 80 · 95 · 110	95 · 110 · 130	110 · 130 · 180	114.3 · 180 · 230 · 250
A3	M3 · M4 · M5	M4 · M5 · M6	M4 · M5 · M6	M5 · M6	M5 · M6 · M8	M6 · M8 · M10	M8 · M10 · M12	M10 · M12 · M16
A4	46 · 60 · 63	70 · 75 · 90	70 · 75 · 90	70 · 90 · 100 · 115	90 · 100 · 115 · 145	115 · 145 · 165	145 · 165 · 200	200 · 215 · 265 · 300
A5	46 · 55	64 · 70 · 80	64 · 70 · 80	80 · 92 · 110	92 · 110 · 130	122 · 130 · 150	146 · 150 · 190	182 · 200 · 250 · 265
A6	M4 x P0.7	M5 x P0.8	M5 x P0.8	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5
B1	137	149 · 157	165 · 173	(191) · 203	260	313 · 334	399	479.5
B2	62	74 · 82	75 · 83	(81) · 93	120	143 · 164	189	239.5
B3(B3')	75(74)	75(74)	90	110	140	170(168)	210	240
B4	60	60	72	88	110	134	170	195
B5	30	30	36	44	55	67	85	95
B6	26	33.5 · 41.5	33.5 · 41.5	(33.5) · 45.5	59	67 · 83	85	116.5
B7	5	5	6	(6) · 10	9	10 · 11	10	13.5
B8	73	73	88	106	135	164	205	228
B9	M6 x P1.0	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0
C1	106	106	127	156	197	223	267	309
C2	57	57	68	84	109	121	142	162.5
C3	49	49	59	72	88	102	125	146.5
C4	1.25	1.25	2	2	2	2.25	2.25	2.5
C5	33	33	44	55	75	72	82	92
C6	73	73	83	101	122	153	185	217
D1	M4 x P0.7	M4 x P0.7	M5 x P0.8	M5 x P0.8	M8 x P1.25	M10 x P1.5	M10 x P1.5	M12 x P1.75
D2	36	36	40	45	70	77	84	97
D3	41.7	41.7	46.7	57.7	79.7	89.7	99.7	117.7
D4	26	26	30	36	54	58	64	75
D5	15	15	18	22	34	38	42	54
Weight ±3% (kg)	3.6	3.6	4.8	8.5	14.2	24	52	

ST-DP series

RATIO : 2.3.4.5 (1-Stage)



Single Input Shaft - Ball Screw



unit: mm

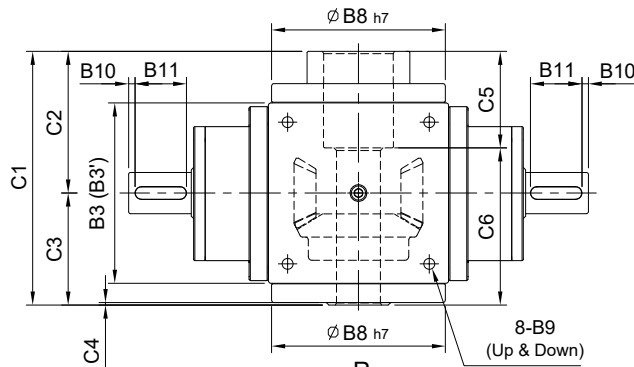
Model Code	75	90	110	140	170	210	240	
A	A1	16	18	22	32	40	55	
	A2	5	6	6	10	12	16	
	A3	18	20.5	24.5	35	43	59	
	A4	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0
B	B1	143	169	207	250	300	430	
	B2	68	79	97	110	130	190	
	B3(B3')	75(74)	90	110	140	170(168)	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	32	38	43	53.5	64	77	82
	B7	30	35	40	50	60	75	80
	B8	73	88	106	135	164	205	228
	B9	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0
	B10	2.5	5	5	5	5	5	5
B11	25	25	30	40	50	65	70	
B12	73	88	106	135	164	205	228	
C	C1	106	127	156	197	223	267	309
	C2	57	68	84	109	121	142	162.5
	C3	49	59	72	88	102	125	146.5
	C4	1.25	2	2	2	2.25	2.25	2.5
	C5	33	44	55	75	72	82	92
	C6	73	83	101	122	153	185	217
D	D1	M4 x P0.7	M5 x P0.8	M5 x P0.8	M8 x P1.25	M10 x P1.5	M10 x P1.5	M12 x P1.75
	D2	36	40	45	70	77	84	97
	D3	41.7	46.7	57.7	79.7	89.7	99.7	117.7
	D4	26	30	36	54	58	64	75
	D5	15	18	22	34	38	42	54
Weight ±3% (kg)	2.8	4.9	8.59	15.5	25	53		

ST-YP series

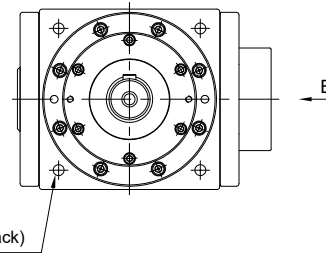
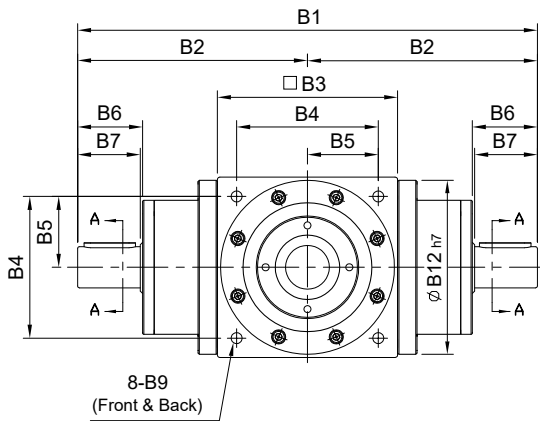
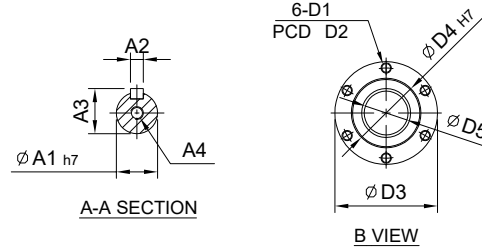
RATIO : 2.3.4.5 (1-Stage)



Double Input Shaft - Ball Screw



Shaft Direction

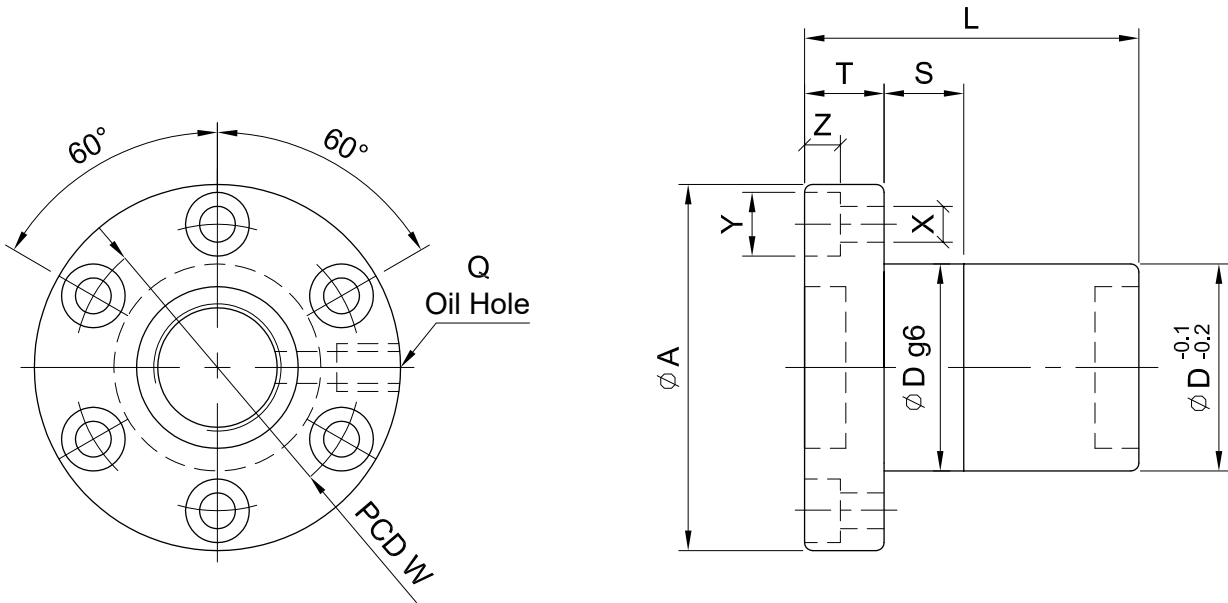
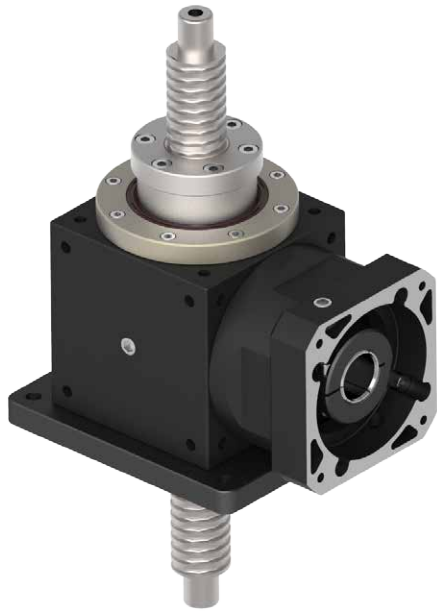


unit: mm

Model Code	75	90	110	140	170	210	240	
A	A1	16	18	22	32	40	50	55
	A2	5	6	6	10	12	14	16
	A3	18	20.5	24.5	35	43	54	59
	A4	M5 x P0.8	M8 x P1.25	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75	M16 x P2.0
B	B1	210	247	304	360	430	540	620
	B2	105	123.5	152	180	215	270	310
	B3(B3')	75(74)	90	110	140	170(168)	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	32	38	43	53.5	64	77	82
	B7	30	35	40	50	60	75	80
	B8	73	88	106	135	164	205	228
	B9	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M16 x P2.0	M16 x P2.0
	B10	2.5	5	5	5	5	5	5
	B11	25	25	30	40	50	65	70
	B12	73	88	106	135	164	205	228
C	C1	106	127	156	197	223	267	309
	C2	57	68	84	109	121	142	162.5
	C3	49	59	72	88	102	125	146.5
	C4	1.25	2	2	2	2.25	2.25	2.5
	C5	33	44	55	75	72	82	92
	C6	73	83	101	122	153	185	217
D	D1	M4 x P0.7	M5 x P0.8	M5 x P0.8	M8 x P1.25	M10 x P1.5	M10 x P1.5	M12 x P1.75
	D2	36	40	45	70	77	84	97
	D3	41.7	46.7	57.7	79.7	89.7	99.7	117.7
	D4	26	30	36	54	58	64	75
	D5	15	18	22	34	38	42	54
Weight $\pm 3\%$ (kg)	3.6	6.2	11.5	18	28	57		

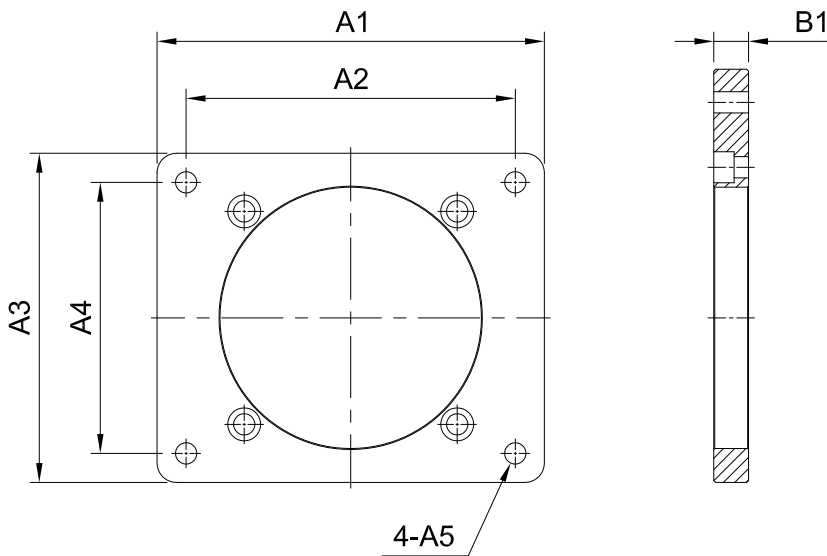
Reference Information of Ball Screw

ST



Model of Reducer	Screw Size		Basic Rate Load (kgf)		Nut		Flange			FIT	Screw Bolt			Oil Hole	Length
	O.D.	Lead	Dynamic	Static	Dg6	L	A	T	W	S	X	Y	Z	Q	
75	14	5	720	1010	26	42	46	10	36	10	4.5	8	4.5	M6 x P1.0	≤ 500
90	16	6	980	1650	30	55	54	12	40	12	5.5	9.5	5.5	M6 x P1.0	≤ 800
110	20	10	860	1710	36	66	57	12	45	12	5.5	9.5	5.5	M6 x P1.0	≤ 1000
140	32	10	3340	7080	54	90	88	16	70	15	9	14	8.5	M8 x P1	≤ 1200
170	36	10	3600	8280	58	89	98	18	77	20	11	17.5	11	M8 x P1	≤ 1500
210	40	10	4670	11830	64	99	106	18	84	20	11	17.5	11	M8 x P1	≤ 1500
240	50	12	5770	14870	75	111	121	22	97	20	14	20	13	1/8"PT	≤ 1500

Fixing Plate



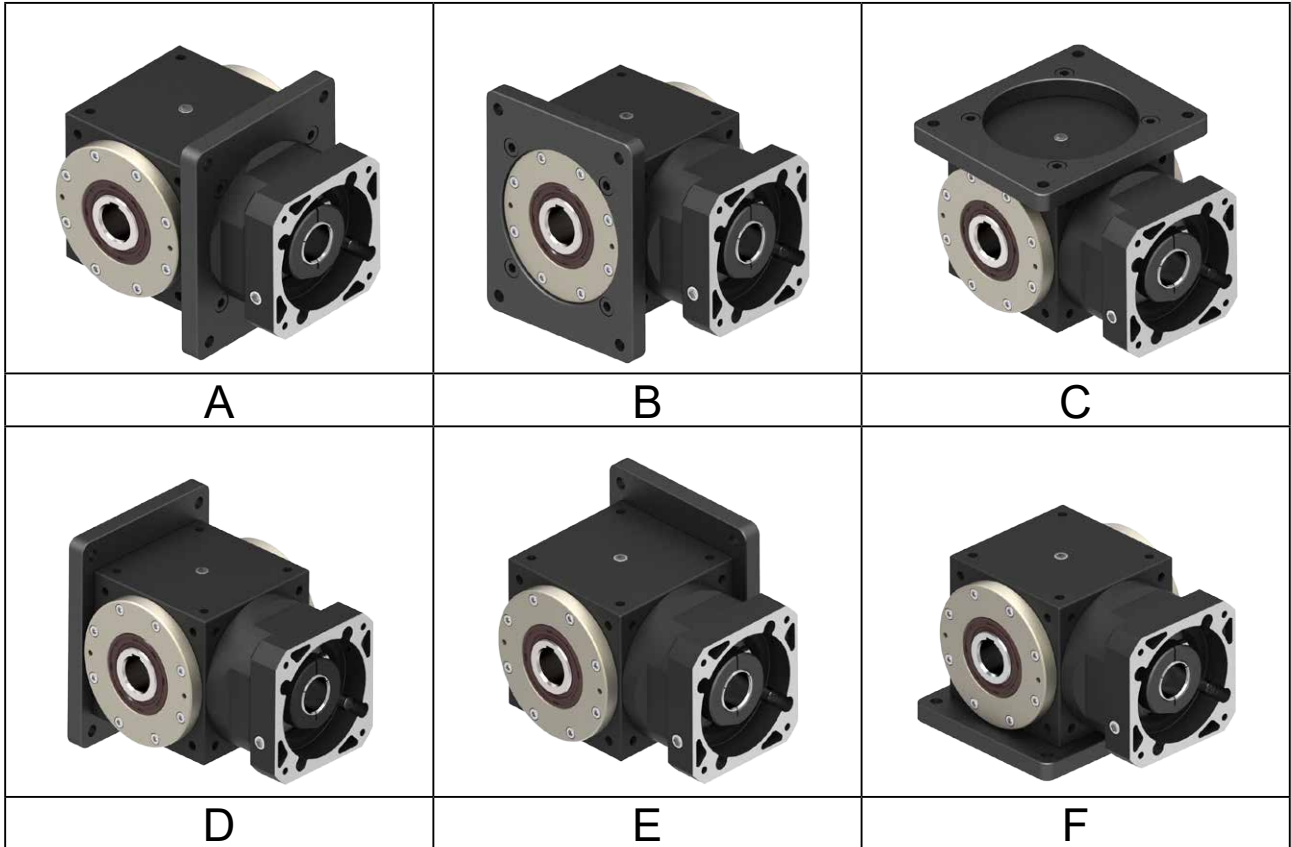
Indication of Fixing Plate

FP	90	F
Type	Model	Direction
FP	65、75、90、110、 140、170、210	A、B、C、D、E、F

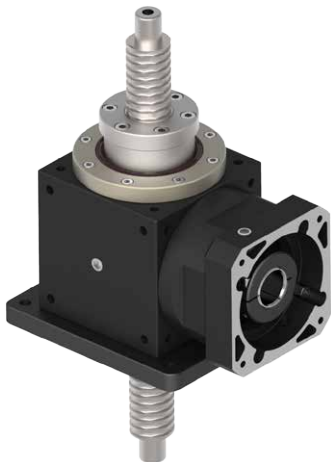
		unit:mm						
A	Model Code	65	75	90	110	140	170	210
	A1	100	110	130	160	200	230	280
A2	85	95	110	135	170	200	240	
A3	85	90	110	135	170	200	250	
A4	70	75	90	110	140	170	210	
A5	7	7	7	9	11	13	17	
B	B1	10	12	13	16	18	18	25

Selection Direction of Fixing Plate

ST



Installation Example of Fixing Plate



ST140-FPT-5 +
FP140-F



ST110-FSB-5 +
FP110-A