Direction-Changing Gearbox
轉向器

High Efficiency and high strength
高效率 高強度

+



+

Excellent load capacity
承載能力卓越

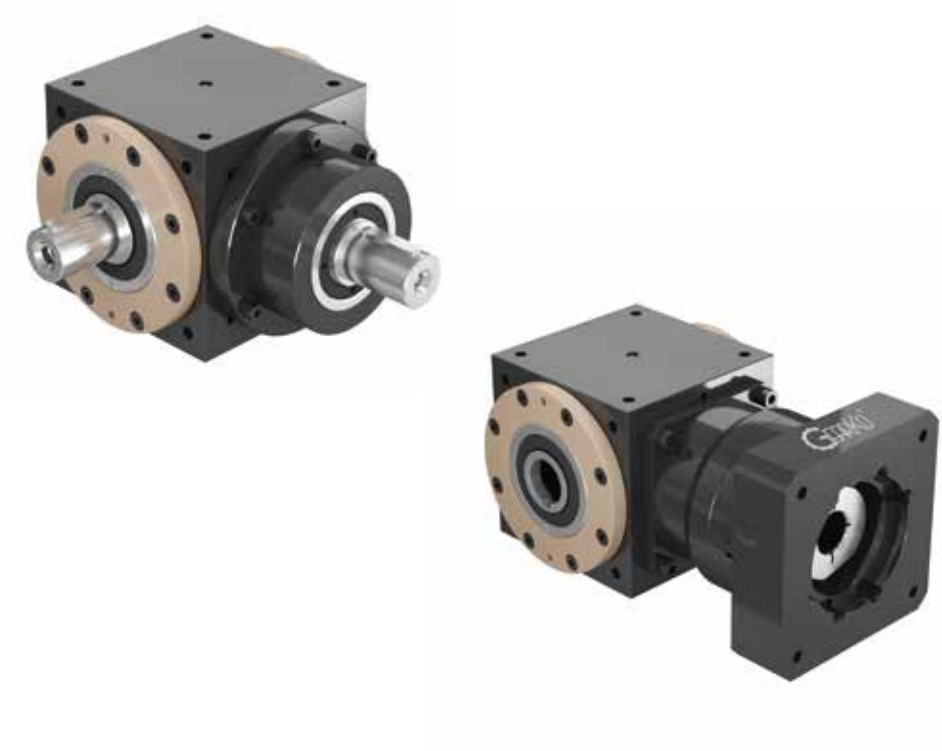
This direction-changing gearbox offers high strength, high efficiency, low backlash, and outstanding load capacity.
It operates smoothly with low noise and is available in various output configurations,
making it a well-rounded and reliable solution.

此款轉向器具備高強度、高效率、低背隙等特性，
承載能力大、運行平穩且噪音低，同時具備多元的輸出形式，是性能全面的可靠產品。

GEARKO®

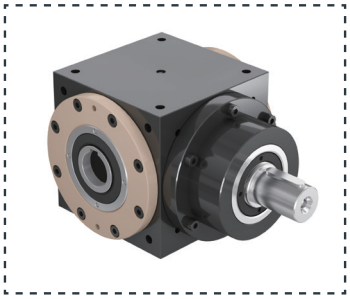
www.gearko-tw.com

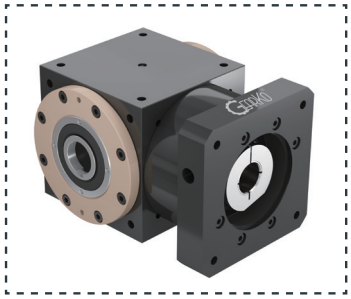
DRIVES THE PRECISION

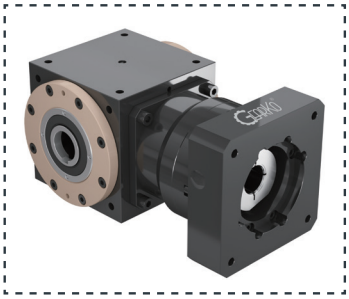


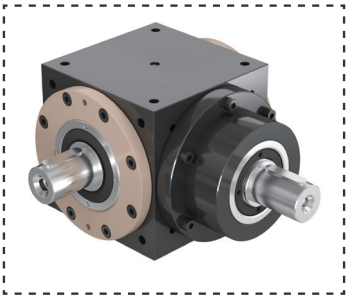
Direction-changing Gearbox Model Designation 轉向器型號表示

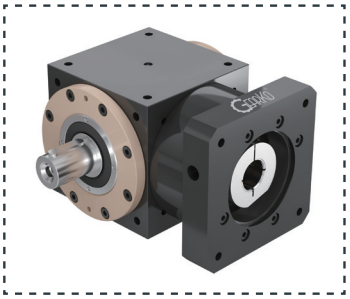
GST075	–	F	S	T	L	–	001	–	P0
Model 換向器型號		Type of the Input Interface 輸入端接口形式	Type of the Output Interface 輸出端接口形式	Bearing Form 軸承形式	Axial Direction 軸向		Overall reduction ratio 總減速比		Accuracy Level 精度等級
GST075 GST075 GST110 GST140 GST170 GST210		F: 法蘭輸入 Flange input R: 減速機輸入 Reducer Input D: 軸輸入 Axis Input	O: 孔輸出 Hole Output S: 單軸輸出 Single Axis Output V: 雙軸輸出 Dual Axis Output	T: 圓錐滾子軸承 Tapered Roller Bearing B: 深溝球軸承 Deep Groove Ball Bearings	L: Left Output 左側輸出 R: Right Output 右側輸出 (Empty): indicated Bilateral Output (空): 雙側輸出		001: 總減速比 Overall Reduction Ratio 007/L1/090: 7比/單段/90型減速機 Ratio 7/Single Stage/-Frame 90 Gearbox 025/L2/140: 25比/雙段/140型減速機 Ratio 25/Double Stage/-Frame 140 Gearbox		P0 P1 P2

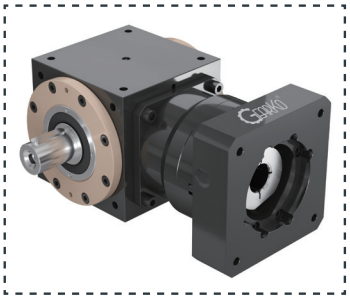

GST-DOT-001

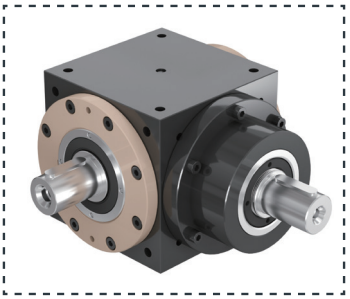

GST-FOT-001

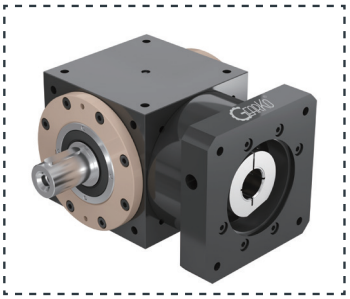

GST-ROT-L1

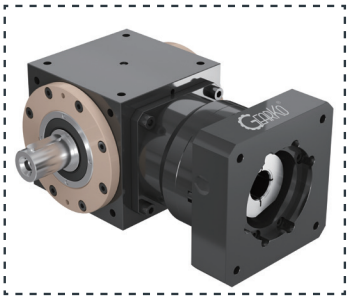

GST-DST-001


GST-FST-001


GST-RST-L1


GST-DVT-001


GST-FVT-001


GST-RVT-L1

Performance data 性能資料表

單段減速機 1-Stage

規格 Specification		代號 Symbol	速比 Speed Ratio	框 Frame						
				075	090	110	140	170	210	240
額定輸出力矩 Rated Output Torque	Nm	T2N	1	45	78	150	360	585	1300	2150
最大加速扭矩 Maximum Acceleration Torque	Nm	T2B	1	68	117	225	540	878	1950	3225
最大輸出扭矩 Maximum Output Torque	Nm	T2NOT	1	135	234	450	1080	1755	3900	6450
額定輸入轉速 Nominal Input Speed	rpm	n1N	1	3000	3000	2500	2500	2000	2000	2000
最大輸入轉速 Maximum Input Speed	rpm	n1B	1	6000	5500	4500	3500	3000	3000	3000
背隙 Backlash	arcmin	P0	1	≤3						
		P1	1	≤6						
		P2	1	≤9						
容許徑向力 Maximum Radial Force	N	F2rB	1	2400	3200	5000	6500	9100	13000	16000
容許軸向力 Maximum Axial Force	N	F2aB	1	1200	1600	2500	3250	4550	6500	8500
使用壽命 Service Life	hr	LH	1	20000						
效率 Efficiency	%	η	1	≥98						
使用溫度 Operating Temperature	°C		1	-20~90						
潤滑 Lubrication	-		1	合成潤滑油脂 Synthetic Grease						
噪音 Noise	dB		1	≤67	≤71	≤73	≤74	≤75	≤77	≤83
轉動慣量 Moment of Inertia	$Kg.cm^2$		1	1.8	4.9	12.5	36.8	85.9	287	365.38

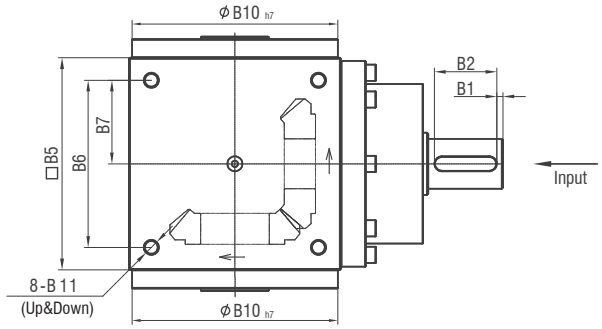
The above technical parameters are for reference only. The final specifications and dimensions will be confirmed and provided based on the data supplied by the customer.
上述技術參數僅供參考，最終技術參數與尺寸將依客戶提供之資料進行確認後提供。

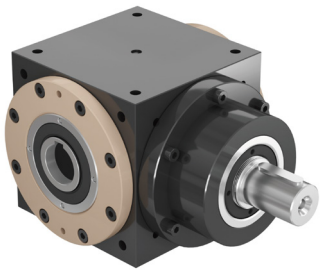
Performance data 性能資料表

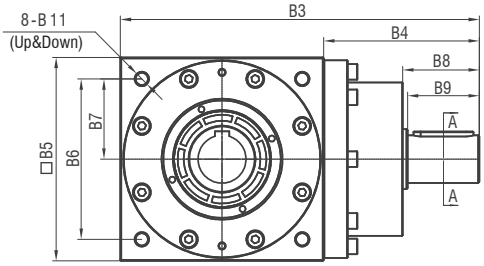
雙段減速機 2-Stage

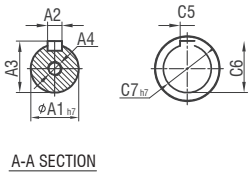
規格 Specification		代號 Symbol	速比 Speed Ratio	框 Frame						
				075	090	110	140	170	210	240
額定輸出力矩 Rated Output Torque	Nm	T2N	4	45	45	110	280	535	1020	1700
			5	55	55	150	320	650	1180	2008
			7	45	45	135	300	550	1050	1810
			10	35	35	100	220	445	870	1550
最大加速扭矩 Maximum Acceleration Torque	Nm	T2B	4	67.5	67.5	165	420	802.5	1530	2550
			5	82.5	82.5	225	480	975	1770	3012
			7	67.5	67.5	202.5	450	825	1575	2715
			10	52.5	52.5	150	330	667.5	1305	2325
最大輸出扭矩 Maximum Output Torque	Nm	T2NOT	4	135	135	330	840	1605	3060	5100
			5	165	165	450	960	1950	3540	6024
			7	135	135	405	900	1650	3150	5430
			10	105	105	300	660	1335	2610	4650
額定輸入轉速 Nominal Input Speed	rpm	n1N	4-50	3000	3000	3000	3000	3000	3000	2000
最大輸入轉速 Maximum Input Speed	rpm	n1B	4-50	6000	6000	6000	6000	5000	5000	4000
背隙 Backlash	arcmin	P0	4-50	≤4						
		P1	4-50	≤7						
		P2	4-50	≤10						
容許徑向力 Maximum Radial Force	N	F2rB	4-10	2400	3200	5000	6500	9100	13000	16000
容許軸向力 Maximum Axial Force	N	F2aB	4-10	1200	1600	2500	3250	4550	6500	8500
使用壽命 Service Life	hr	LH	4-10	20000						
效率 Efficiency	%	η	4-10	≥94						
使用溫度 Operating Temperature	°C		4-10	-20~90						
潤滑 Lubrication	-		4-10	合成潤滑油脂 Synthetic Grease						
噪音 Noise	dB		4-10	≤69	≤73	≤74	≤75	≤76	≤78	≤79
轉動慣量 Moment of Inertia	$Kg.cm^2$		4-10	0.15	0.18	0.5	2.8	7.14	22.5	50.8

GST-DOT-001 Specification 規格尺寸表

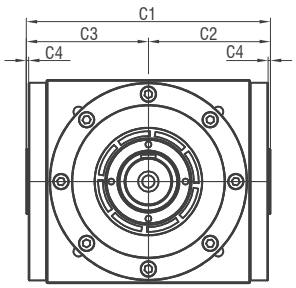






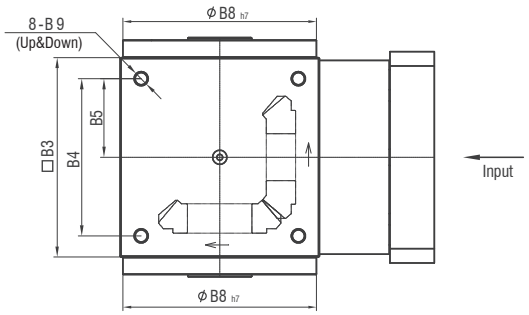


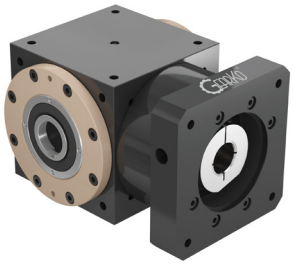
A-A SECTION

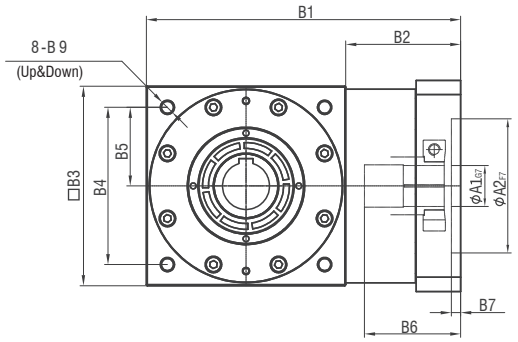


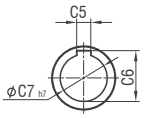
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	16	18	22	32	40	50	55
	A2	5	6	6	10	12	14	16
	A3	18	20.5	24.5	35	43	53.5	59
	A4	M5	M8	M8	M10	M12	M12	M16
B	B1	2.5	5	5	5	5	5	2.5
	B2	25	25	30	40	60	65	80
	B3	142.5	168.5	207	250	300	375	430
	B4	67.5	78.5	97	110	130	165	190
	B5	75	90	110	140	170	210	240
	B6	60	72	88	110	134	170	190
	B7	30	36	44	55	67	85	95
	B8	32	38	43	53.5	64	77	87
	B9	30	35	40	50	60	75	85
	B10	73	88	108	135	165	205	235
	B11	M6	M6	M8	M10	M12	M16	M16
C	C1	100	118	144	174	204	250	294
	C2	50	59	72	87	102	125	147
	C3	50	59	72	87	102	125	147
	C4	2	2	2	2	2	2	2
	C5	5	6	8	10	12	14	16
	C6	16.3	20.8	25.3	35.3	43.3	53.8	59.3
	C7	14	18	22	32	40	50	55

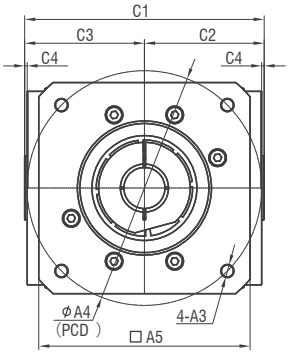
GST-FOT-001 Specification 規格尺寸表





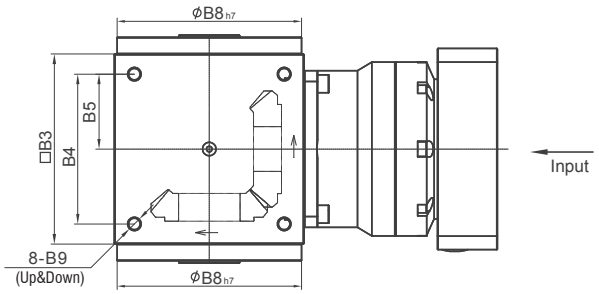


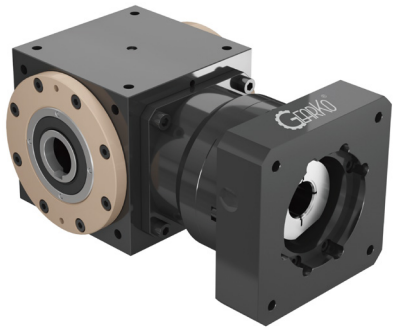


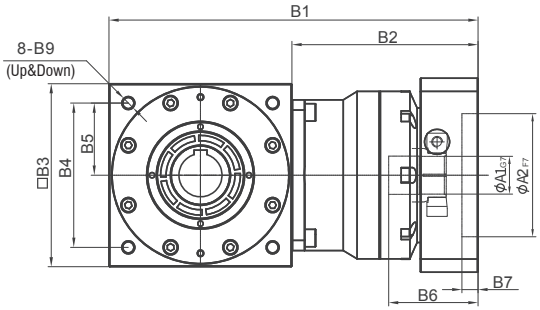


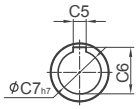
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	14	19	24	24	35	42	48
	A2	50	70	110	110	114.3	180	230
	A3	M4	M5	M8	M8	M12	M12	M14
	A4	70	90	145	145	200	215	265
	A5	60	90	130	130	180	200	265
B	B1	115	148	179.5	207.5	268	320	413.5
	B2	40	58	69.5	67.5	98	110	173.5
	B3	75	90	110	140	170	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	35	42	67	67	82	88	117.5
	B7	5	5	10	10	8	12	20
	B8	73	88	108	135	165	205	235
	B9	M6	M6	M8	M10	M12	M16	M16
C	C1	100	118	144	174	204	250	290
	C2	50	59	72	87	102	125	145
	C3	50	59	72	87	102	125	145
	C4	2	2	2	2	2	2	2
	C5	5	6	8	10	12	14	16
	C6	16.3	20.8	25.3	35.3	43.3	53.8	59.3
	C7	14	18	22	32	40	50	55

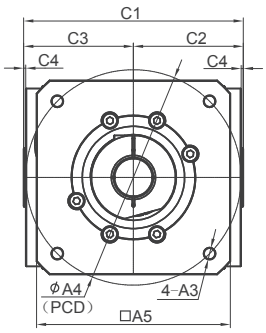
GST-ROT-L1 Specification 規格尺寸表





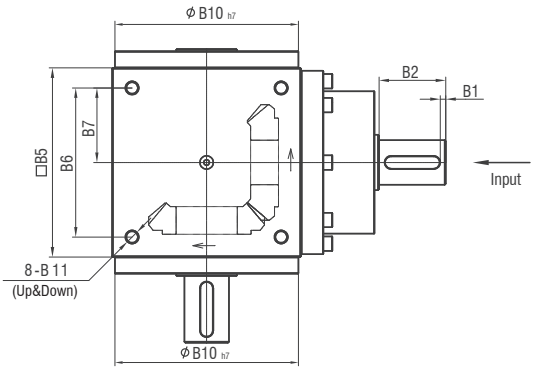


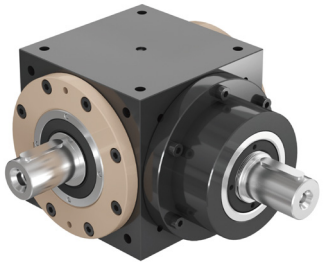


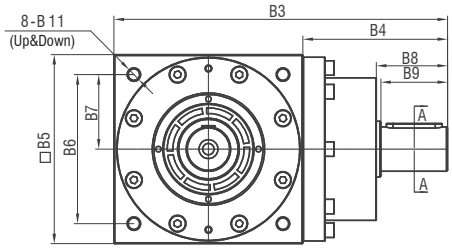


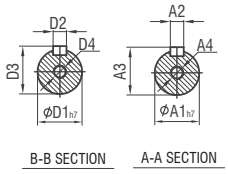
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	14	14	19	24	35	42	48
	A2	50	50	70	110	114.3	114.3	230
	A3	M4	M4	M6	M8	M12	M12	M14
	A4	70	70	90	145	200	200	265
	A5	60	60	90	130	180	180	265
B	B1	158.5	173.5	205	268.5	342.7	391	481
	B2	83.5	83.5	95	128.5	172.7	181	241
	B3	75	90	110	140	170	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	34	34	44	64	83	82	117.5
	B7	5	5	4	12	15	8	20
	B8	73	88	106	135	165	205	235
	B9	M6	M6	M8	M10	M12	M16	M16
C	C1	100	118	144	174	204	250	294
	C2	50	59	72	87	102	125	147
	C3	50	59	72	87	102	125	147
	C4	2	2	2	2	2	2	2
	C5	5	6	8	10	12	14	16
	C6	16.3	20.8	25.3	35.3	43.3	53.8	59.3
	C7	14	18	22	32	40	50	55

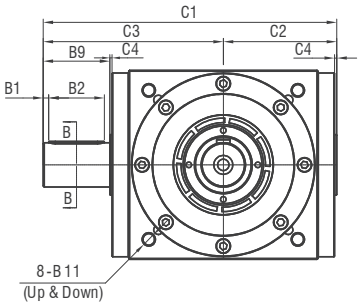
GST-DST-001 Specification 規格尺寸表





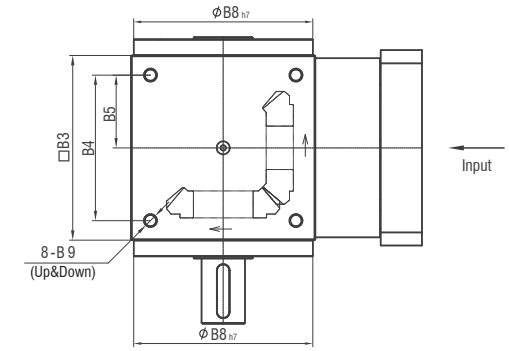


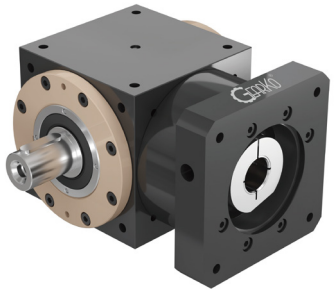


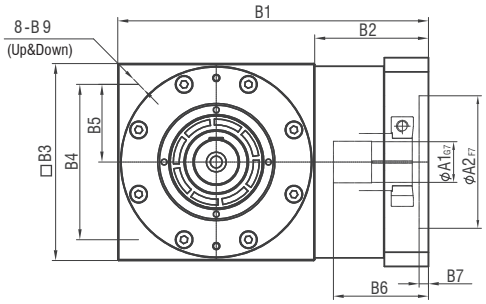


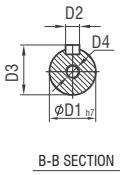
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	16	18	22	32	40	50	55
	A2	5	6	6	10	12	14	16
	A3	18	20.5	24.5	35	43	53.5	59
	A4	M5	M5	M8	M10	M12	M12	M16
B	B1	2.5	5	5	5	5	5	2.5
	B2	25	25	30	40	60	65	80
	B3	142.5	168.5	207	250	300	375	430
	B4	67.5	78.5	97	110	130	165	190
	B5	75	90	110	140	170	210	240
	B6	60	72	88	110	134	170	190
	B7	30	36	44	55	67	85	95
	B8	32	38	43	53.5	64	77	87
	B9	30	35	40	50	60	75	85
	B10	73	88	108	135	165	205	235
	B11	M6	M6	M8	M10	M12	M16	M16
C	C1	128	151	182	222	264	323	379
	C2	48	57	70	85	102	123	147
	C3	80	94	112	137	162	200	232
	C4	2	2	2	2	2	2	2
D	D1	16	18	22	32	40	50	55
	D2	5	6	6	10	12	14	16
	D3	18	20.5	24.5	35	43	53.5	59
	D4	M5	M5	M8	M10	M12	M12	M16

GST-FST-001 Specification 規格尺寸表

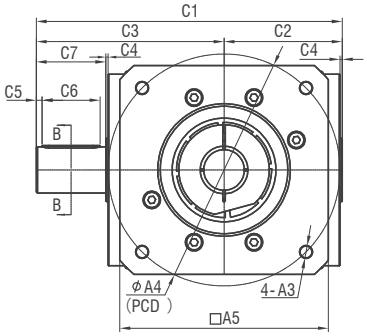






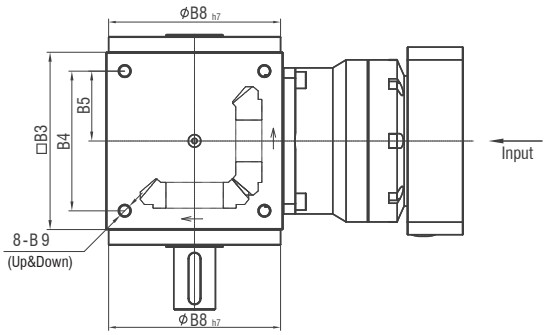


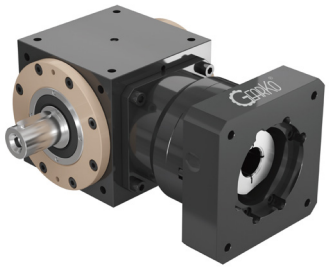
B-B SECTION

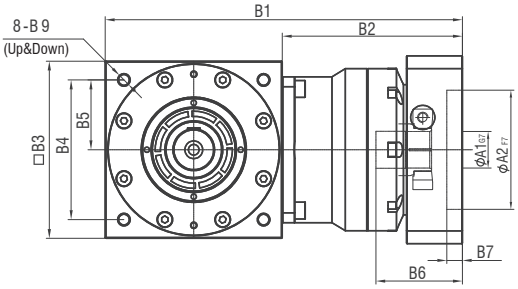


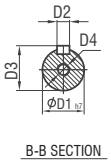
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	14	19	24	24	35	42	48
	A2	50	70	110	110	114.3	180	230
	A3	M4	M5	M8	M8	M12	M12	M14
	A4	70	90	145	145	200	215	265
	A5	60	90	130	130	180	200	265
B	B1	115	148	179.5	207.5	268	320	413.5
	B2	40	58	69.5	67.5	98	110	173.5
	B3	75	90	110	140	170	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	35	42	67	67	82	88	117.5
	B7	5	5	10	10	8	12	20
	B8	73	88	108	135	165	205	235
	B9	M6	M6	M8	M10	M12	M16	M16
C	C1	128	151	182	222	264	323	379
	C2	48	57	70	85	102	123	147
	C3	80	94	112	137	162	200	232
	C4	2	2	2	2	2	2	2
	C5	2.5	5	5	5	5	5	2.5
	C6	25	25	30	40	50	65	80
	C7	30	35	40	50	60	75	85
D	D1	16	18	22	32	40	50	55
	D2	5	6	6	10	12	14	16
	D3	18	20.5	24.5	35	43	53.5	59
	D4	M5	M5	M8	M10	M12	M12	M16

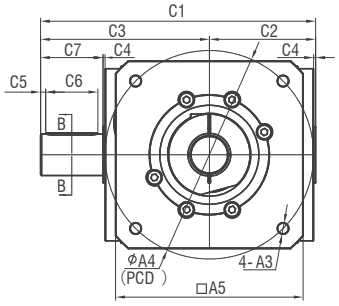
GST-RST-L1 Specification 規格尺寸表





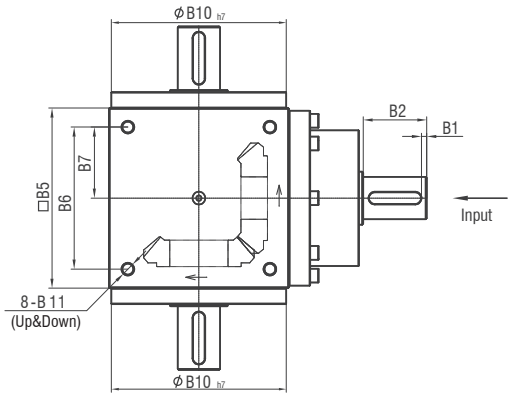


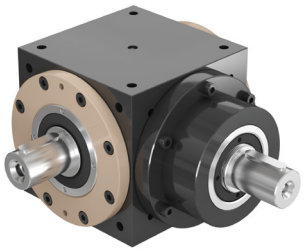


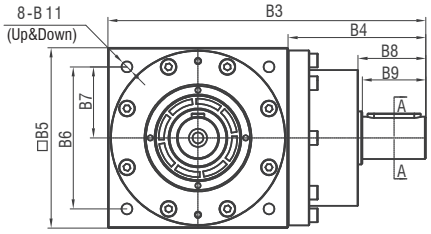


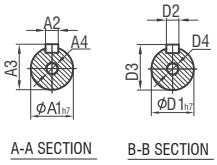
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	14	14	19	24	35	42	48
	A2	50	50	70	110	114.3	114.3	230
	A3	M4	M4	M6	M8	M12	M12	M14
	A4	70	70	90	145	200	200	265
	A5	60	60	90	130	180	180	265
B	B1	158.5	173.5	205	268.5	342.5	391	481
	B2	83.5	83.5	95	128.5	172.7	181	241
	B3	75	90	110	140	170	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	34	34	44	64	83	82	117.5
	B7	5	5	4	12	15	8	20
	B8	73	88	108	135	165	205	235
	B9	M6	M6	M8	M10	M12	M16	M16
C	C1	128	151	182	222	264	323	379
	C2	48	57	70	85	102	123	147
	C3	80	94	112	137	162	200	232
	C4	2	2	2	2	2	2	2
	C5	2.5	5	5	5	5	5	2.5
	C6	25	25	30	40	50	65	80
	C7	30	35	40	50	60	75	85
D	D1	16	18	22	32	40	50	55
	D2	5	6	6	10	12	14	16
	D3	18	20.5	24.5	35	43	53.5	59
	D4	M5	M5	M8	M10	M12	M12	M16

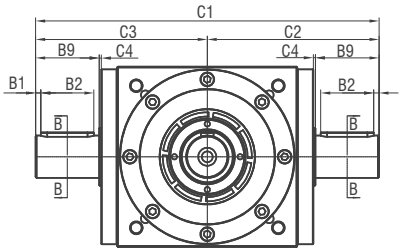
GST-DVT-001 Specification 規格尺寸表





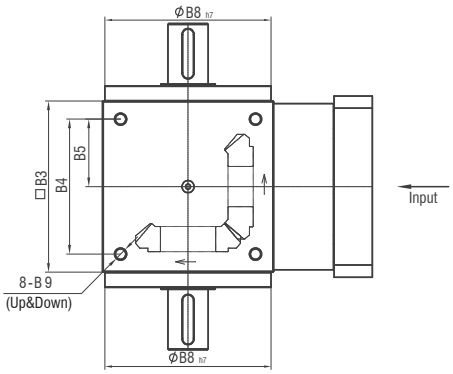


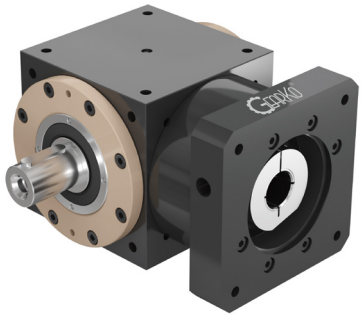


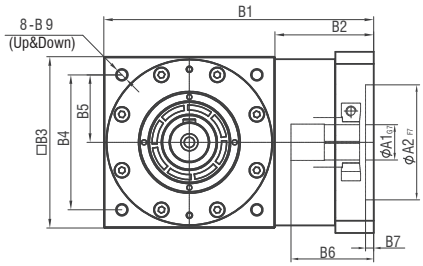


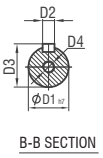
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	16	18	22	32	40	50	55
	A2	5	6	6	10	12	14	16
	A3	18	20.5	24.5	35	43	53.5	59
	A4	M5	M8	M8	M10	M12	M12	M16
B	B1	2.5	5	5	5	5	5	2.5
	B2	25	25	30	40	60	65	80
	B3	142.5	168.5	207	250	300	375	430
	B4	67.5	78.5	97	110	130	165	190
	B5	75	90	110	140	170	210	240
	B6	60	72	88	110	134	170	190
	B7	30	36	44	55	67	85	95
	B8	32	38	43	53.5	64	77	87
	B9	30	35	40	50	60	75	85
	B10	73	88	108	135	165	205	235
	B11	M6	M6	M8	M10	M12	M16	M16
C	C1	160	188	224	274	324	400	464
	C2	80	94	112	137	162	200	232
	C3	80	94	112	137	162	200	232
	C4	2	2	2	2	2	2	2
D	D1	16	18	22	32	40	50	55
	D2	5	6	6	10	12	14	16
	D3	18	20.5	24.5	35	43	53.5	59
	D4	M5	M5	M8	M10	M12	M12	M16

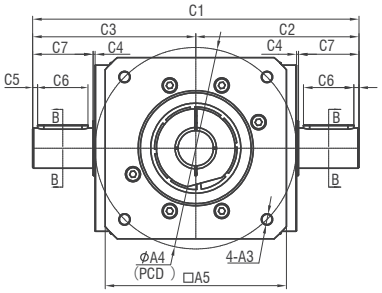
GST-FVT-001 Specification 規格尺寸表





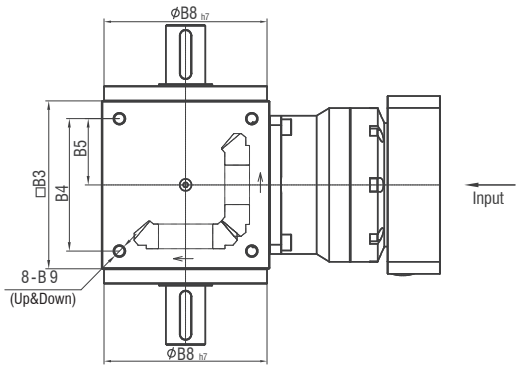


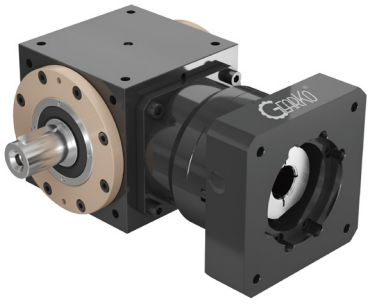


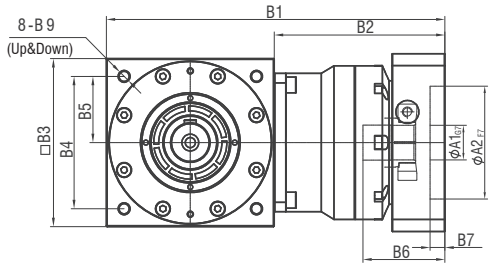


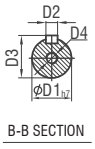
型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	14	19	24	24	35	42	48
	A2	50	70	110	110	114.3	180	230
	A3	M4	M5	M8	M8	M12	M12	M14
	A4	70	90	145	145	200	215	265
	A5	60	90	130	130	180	200	265
B	B1	115	148	179.5	207.5	268	320	413.5
	B2	40	58	69.5	67.5	98	110	173.5
	B3	75	90	110	140	170	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	35	42	67	67	82	88	117.5
	B7	5	5	10	10	8	12	20
	B8	73	88	108	135	165	205	235
	B9	M6	M6	M8	M10	M12	M16	M16
C	C1	160	188	224	274	324	400	464
	C2	80	94	112	137	162	200	232
	C3	80	94	112	137	162	200	232
	C4	2	2	2	2	2	2	2
	C5	2.5	5	5	5	5	5	2.5
	C6	25	25	30	40	50	65	80
	C7	30	35	40	50	60	75	85
D	D1	16	18	22	32	40	50	55
	D2	5	6	6	10	12	14	16
	D3	18	20.5	24.5	35	43	53.5	59
	D4	M5	M5	M8	M10	M12	M12	M16

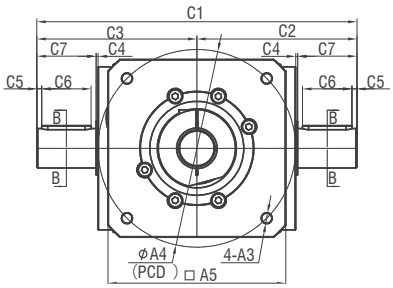
GST-RVT-L1 Specification 規格尺寸表











型號 Model / 單位 Unit:mm		075	090	110	140	170	210	240
A	A1	14	14	19	24	35	42	48
	A2	50	50	70	110	114.3	114.3	230
	A3	M4	M4	M6	M8	M12	M12	M14
	A4	70	70	90	145	200	200	265
	A5	60	60	90	130	180	180	265
B	B1	158.5	173.5	205	268.5	342.7	391	481
	B2	83.5	83.5	95	128.5	172.7	181	241
	B3	75	90	110	140	170	210	240
	B4	60	72	88	110	134	170	190
	B5	30	36	44	55	67	85	95
	B6	34	34	44	64	83	82	117.5
	B7	5	5	4	12	15	8	20
	B8	73	88	108	135	165	205	235
	B9	M6	M6	M8	M10	M12	M16	M16
C	C1	160	188	224	274	324	400	464
	C2	80	94	112	137	162	200	232
	C3	80	94	112	137	162	200	232
	C4	2	2	2	2	2	2	2
	C5	2.5	5	5	5	5	5	2.5
	C6	25	25	30	40	50	65	80
	C7	30	35	40	50	60	75	85
D	D1	16	18	22	32	40	50	55
	D2	5	6	6	10	12	14	16
	D3	18	20.5	24.5	35	43	53.5	59
	D4	M5	M5	M8	M10	M12	M12	M16