

Spiral Bevel Gearbox

High Torque Density, High Efficiency

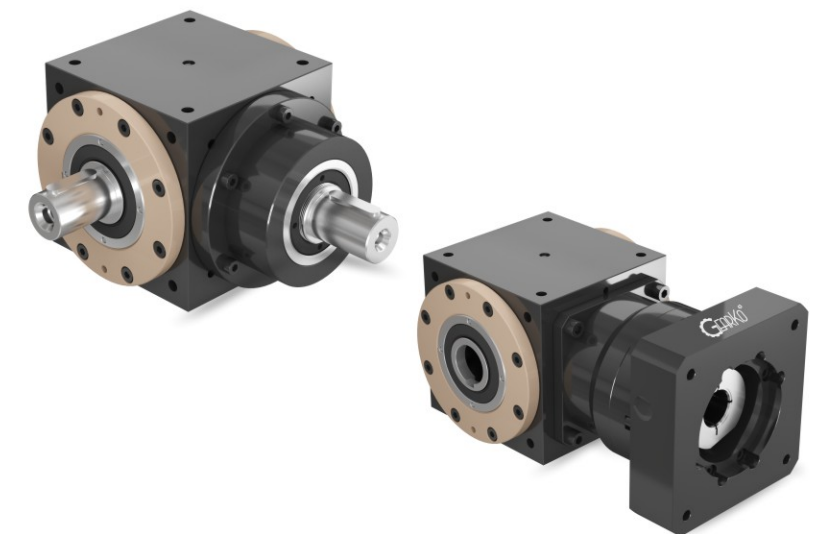


High Load Capacity, Smooth Operation, Low Noise.

Its advantages lie in: this gearbox has high strength, high efficiency, low backlash, large load capacity, smooth operation, low noise and diverse application output forms.

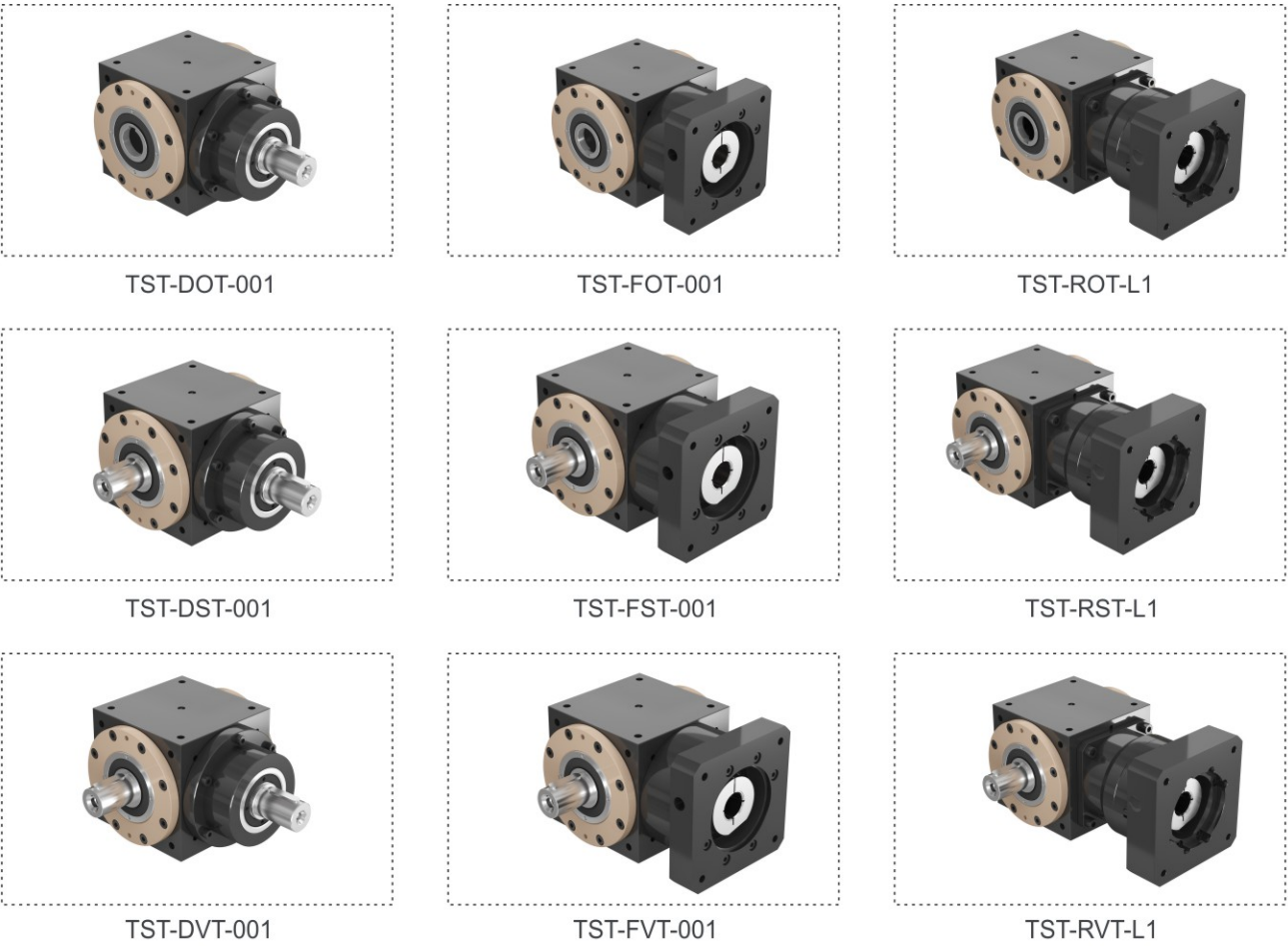
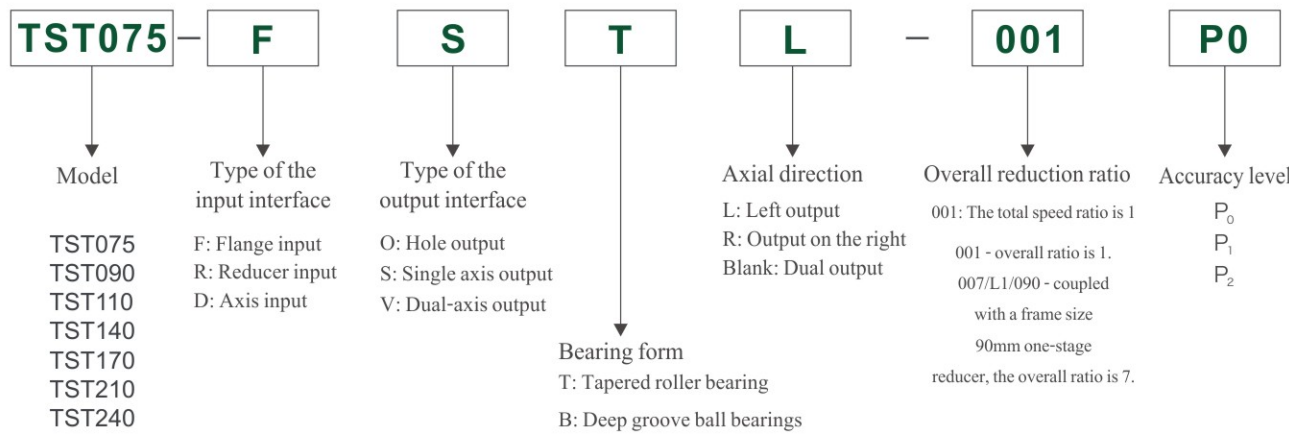
GEARKO[®]

DRIVES THE PRECISION



TST Series

Commutator model representation



Series product characteristics

Single-stage reducer 1

	Code name	Unit	Speed ratio	075	090	110	140	170	210	240
Rated Output Torque	T _{2N}	Nm	1	45	78	150	360	585	1300	2150
Maximum Acceleration Torque	T _{2B}	Nm	1	68	117	225	540	878	1950	3225
Maximum Output Torque	T _{2NOT}	Nm	1	135	234	450	1080	1755	3900	6450
Rated Input Speed	n _{1N}	rpm	1	3000	3000	2500	2500	2000	2000	2000
Maximum Input Speed	n _{1B}	rpm	1	6000	5500	4500	3500	3000	3000	3000
Backlash		P0		3						
		arcmin	P1	6						
		P2		9						
Allowable Radial Load	F _{2rB}	N	1	2400	3200	5000	6500	9100	13000	16000
Allowable Axial Load	F _{2aB}	N	1	1200	1600	2500	3250	4550	6500	8500
Service Life	L _H	hr	1	20000						
Efficiency	η	%	1	≥98%						
Operating Temperature		°C	1	-20°C ~ +90°C						
Lubrication			1	Synthetic Oil						
Noise Level		dB	1	≤67	≤71	≤73	≤74	≤75	≤77	≤83
Moment of Inertia		kgcm ²	1	1.8	4.9	125	36.8	85.9	287	365.38

The above technical parameters are for reference only. Actually, according to the data provided by the customer, relevant technical parameters and dimensions will be issued.

Series product characteristics

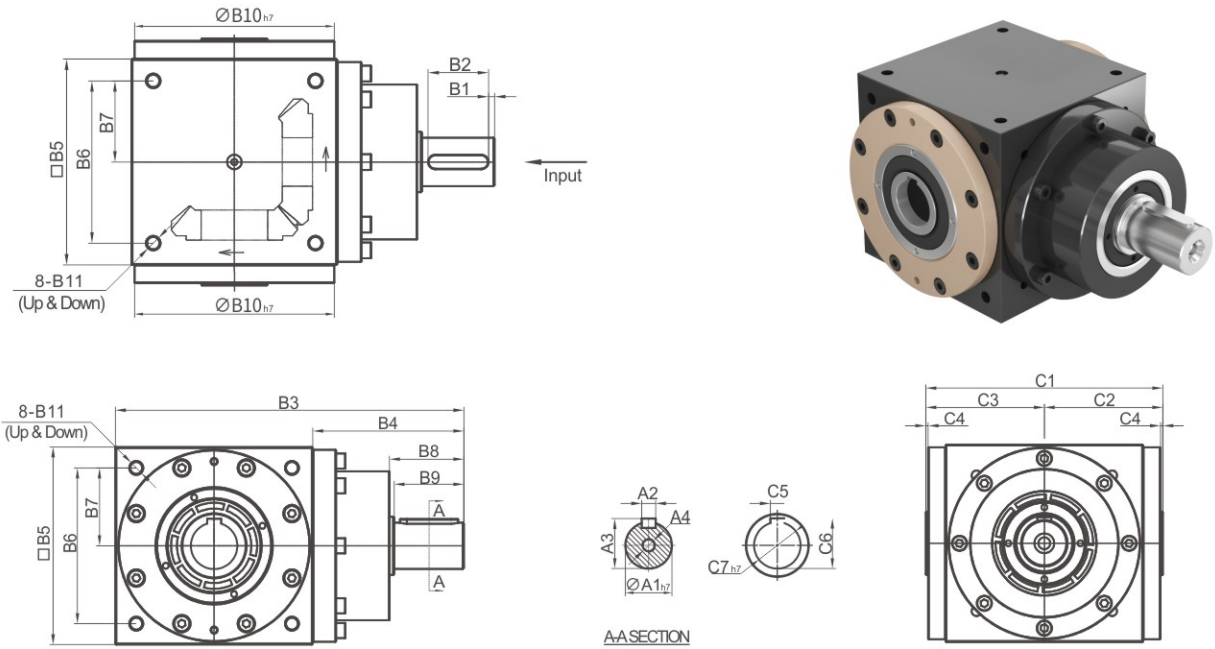
Two-stage reducer 2

	Code name	Unit	Speed ratio	075	090	110	140	170	210	240
Rated Output Torque	T _{2N}	Nm	4	45	48	110	280	535	1020	1700
			5	45	55	150	320	585	1180	2008
			7	45	45	135	300	550	1050	1810
			10	35	55	100	220	445	870	1550
Maximum Acceleration Torque	T _{2B}	Nm	4	67.5	72	165	420	802.5	1530	2550
			5	67.5	82.5	225	480	877.5	1770	3012
			7	67.5	67.5	202.5	450	825	1575	2715
			10	52.5	82.5	150	330	667.5	1305	2325
Maximum Output Torque	T _{2NOT}	Nm	4	135	144	330	840	1605	3060	5100
			5	135	165	450	960	1755	3540	6024
			7	135	135	405	900	1650	3150	5430
			10	105	165	300	660	1335	2610	4650
Rated Input Speed	n _{1N}	rpm	4-50	3000	3000	3000	3000	3000	3000	2000
Maximum Input Speed	n _{1B}	rpm	4-50	6000	6000	6000	6000	5000	5000	4000
Backlash		arcmin	P0	4						
			P1	7						
			P2	10						
Allowable Radial Load	F _{2rB}	N	4-50	2400	3200	5000	6500	9100	13000	16000
Allowable Axial Load	F _{2aB}	N	4-50	1200	1600	2500	3250	4550	6500	8500
Service Life	L _H	hr	4-50	20000						
Efficiency	η	%	4-50	≥94%						
Operating Temperature		°C	4-50	-20°C ~ +90°C						
Lubrication			4-50	Synthetic Oil						
Noise Level		dB	4-50	≤69	≤73	≤74	≤75	≤76	≤78	≤79
Moment of Inertia		kgcm ²	4-50	0.15	0.18	0.5	2.8	7.14	22.5	50.8

The above technical parameters are for reference only. Actually, according to the data provided by the customer, relevant technical parameters and dimensions will be issued.

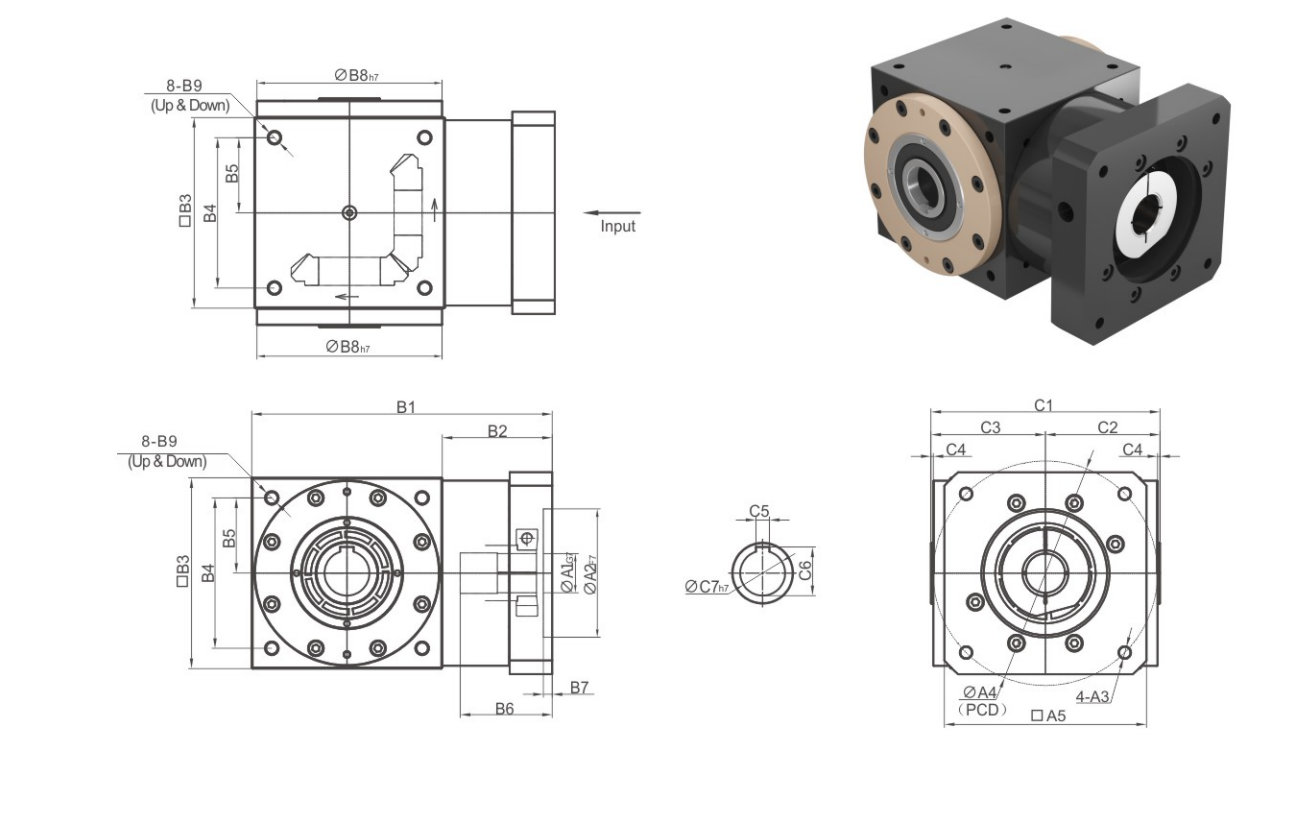
TST-DOT-001

External dimensions table



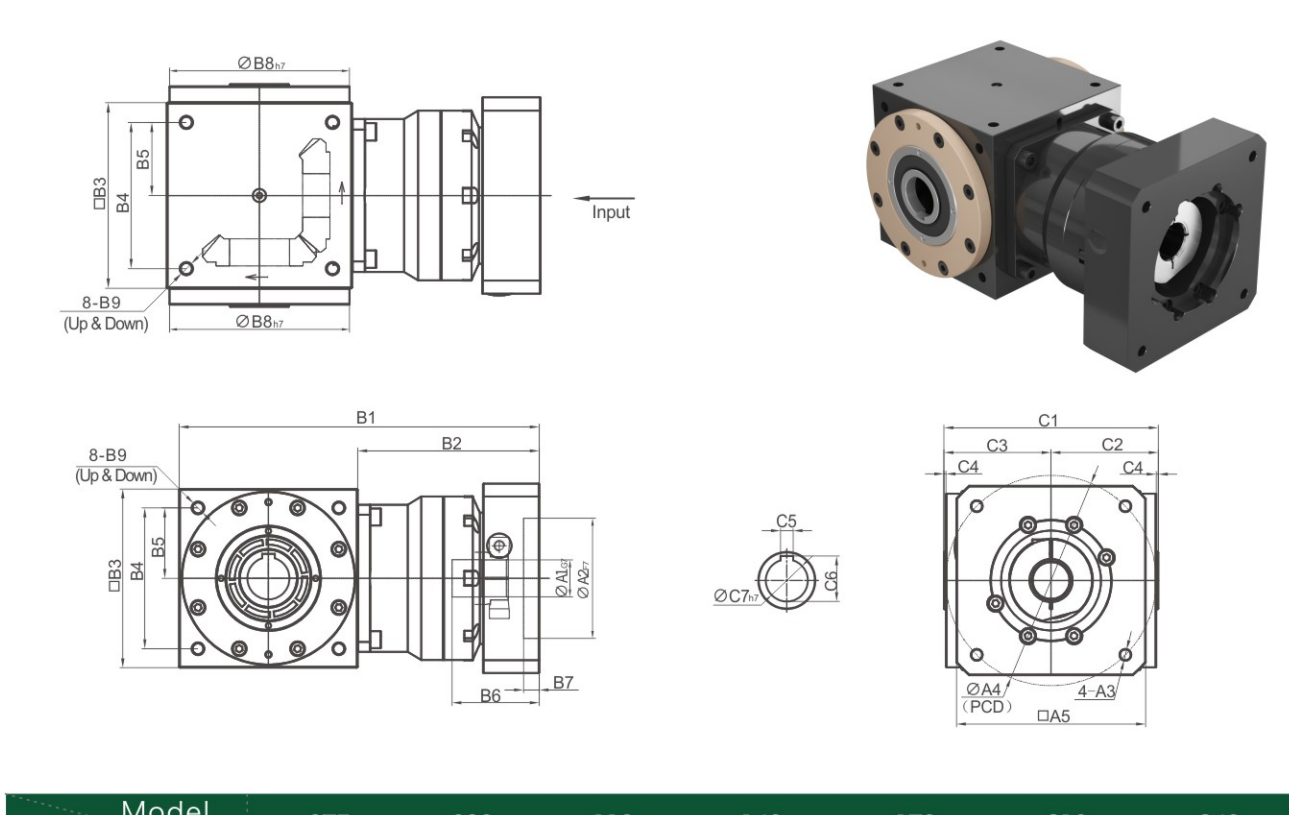
Code	Model	075	090	110	140	170	210	240
A	A1	16	18	22	32	40	50	55
	A2	5	6	6	10	12	14	16
	A3	18	20.5	24.5	35	43	53.5	59
	A4	M5	M8	M8	M10	M12	M12	M16
B	B1	2.5	5	5	5	5	5	2.5
	B2	25	25	30	40	60	65	80
	B3	142.5	168.5	207	250	300	375	430
	B4	67.5	78.5	97	110	130	165	190
	B5	75	90	110	140	170	210	240
	B6	60	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

TST-FOT-001 External dimensions table



Model		075	090	110	140	170	210	240
A	Code	A1	14	19	24	24	35	42
	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

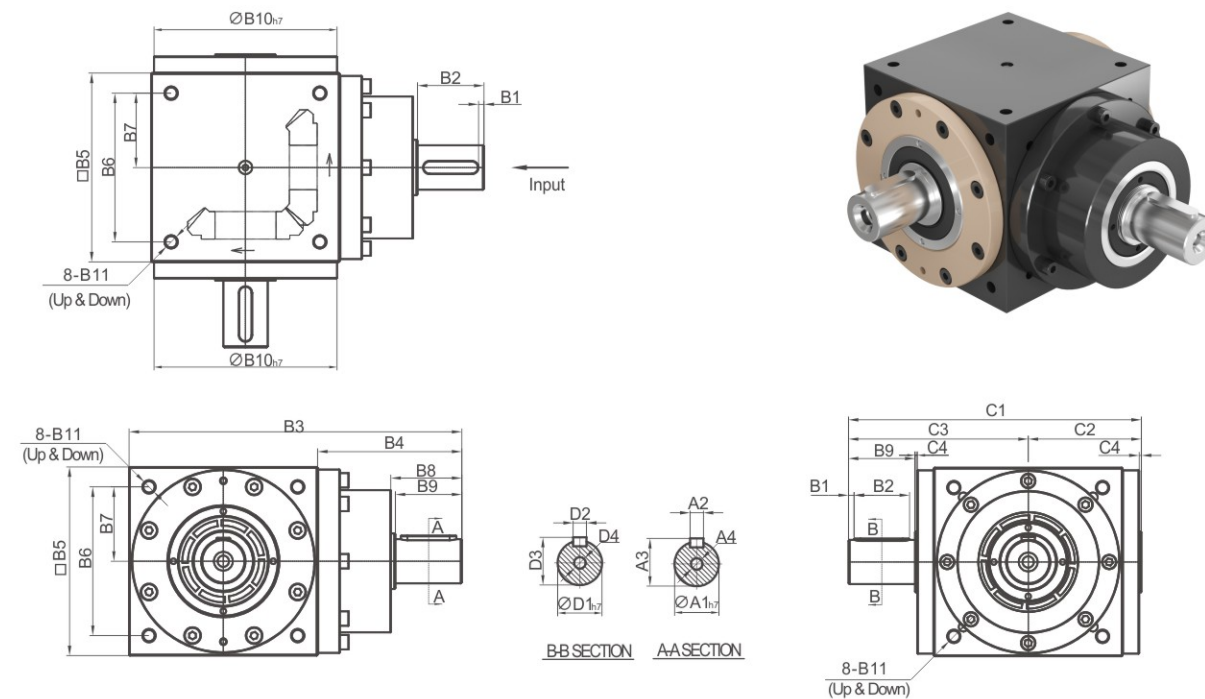
TST-ROT-L1 External dimensions table



Model		075	090	110	140	170	210	240
A	Code	A1	14	14	19	24	35	42
	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	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

TST-DST-001

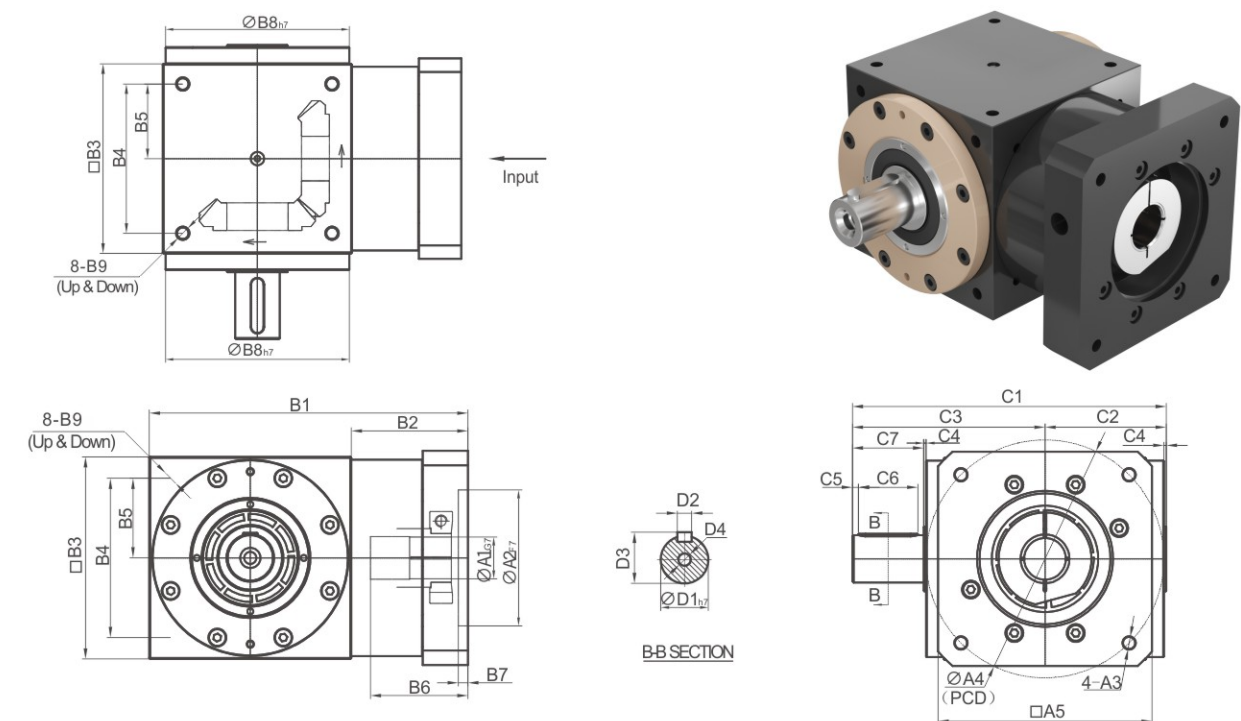
External dimensions table



Model		Model						
Code		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	25	5	5	5	5	5	25
	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

TST-FST-001

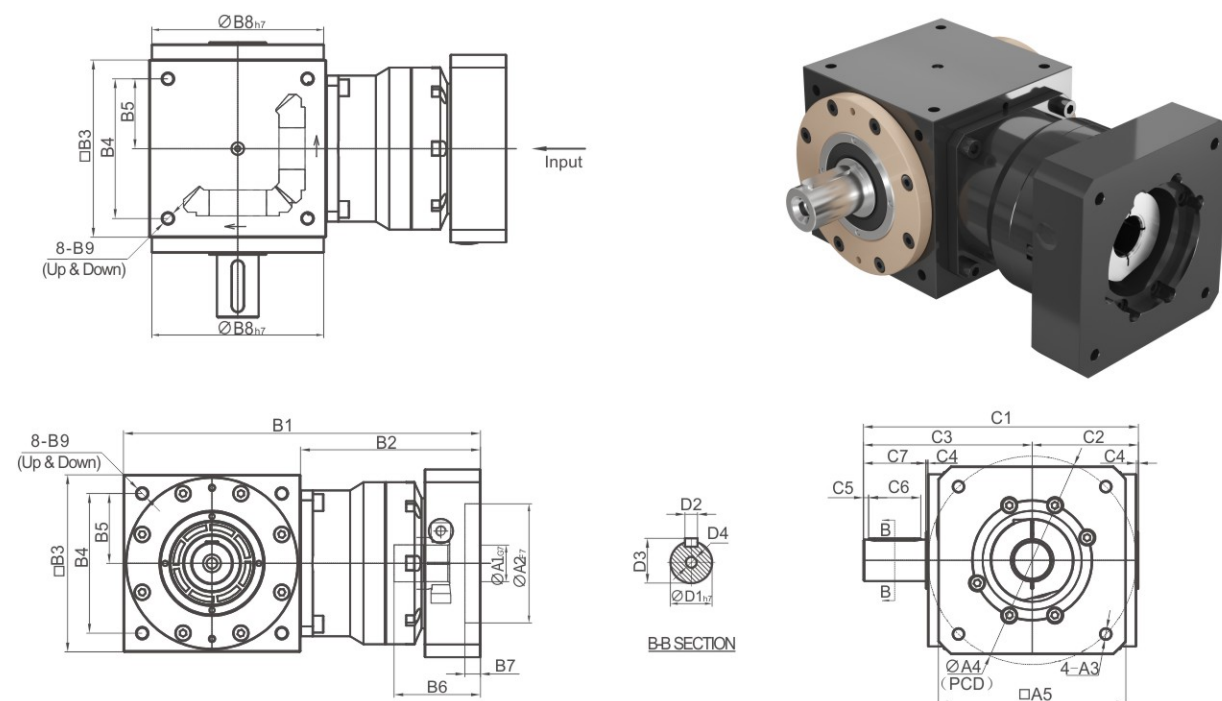
External dimensions table



Model		075	090	110	140	170	210	240
Code								
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

TST-RST-L1

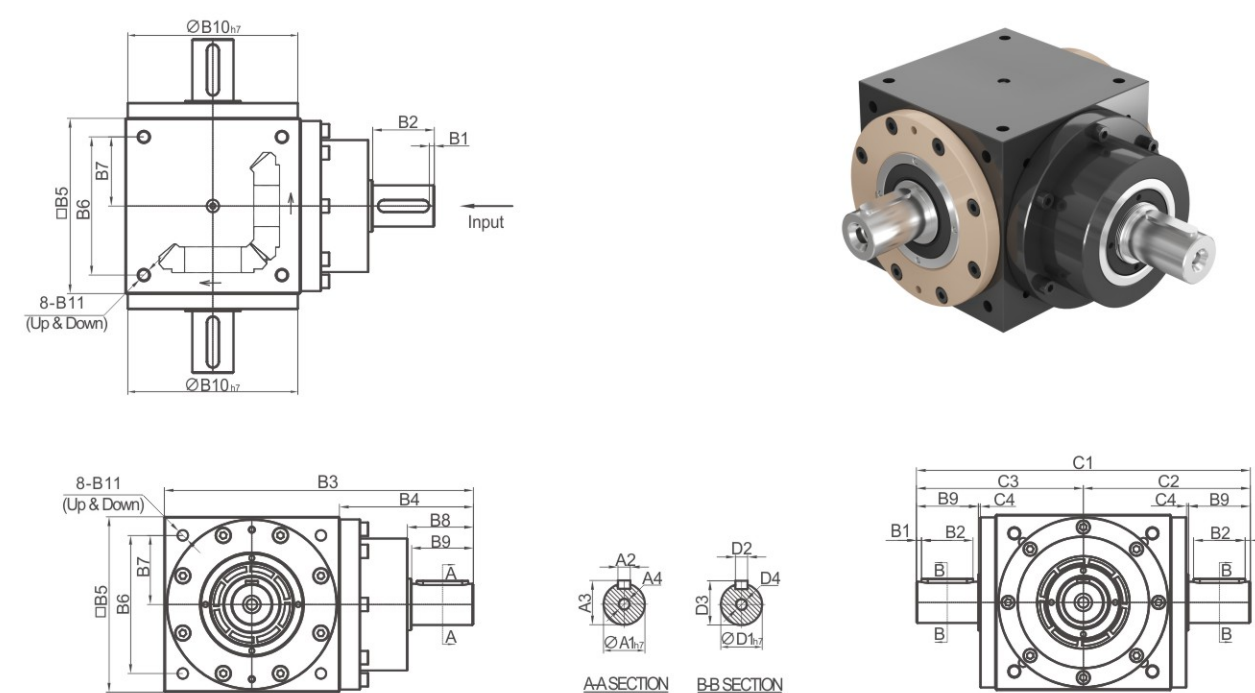
External dimensions table



Model		Model						
Code		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

TST-DVT-001

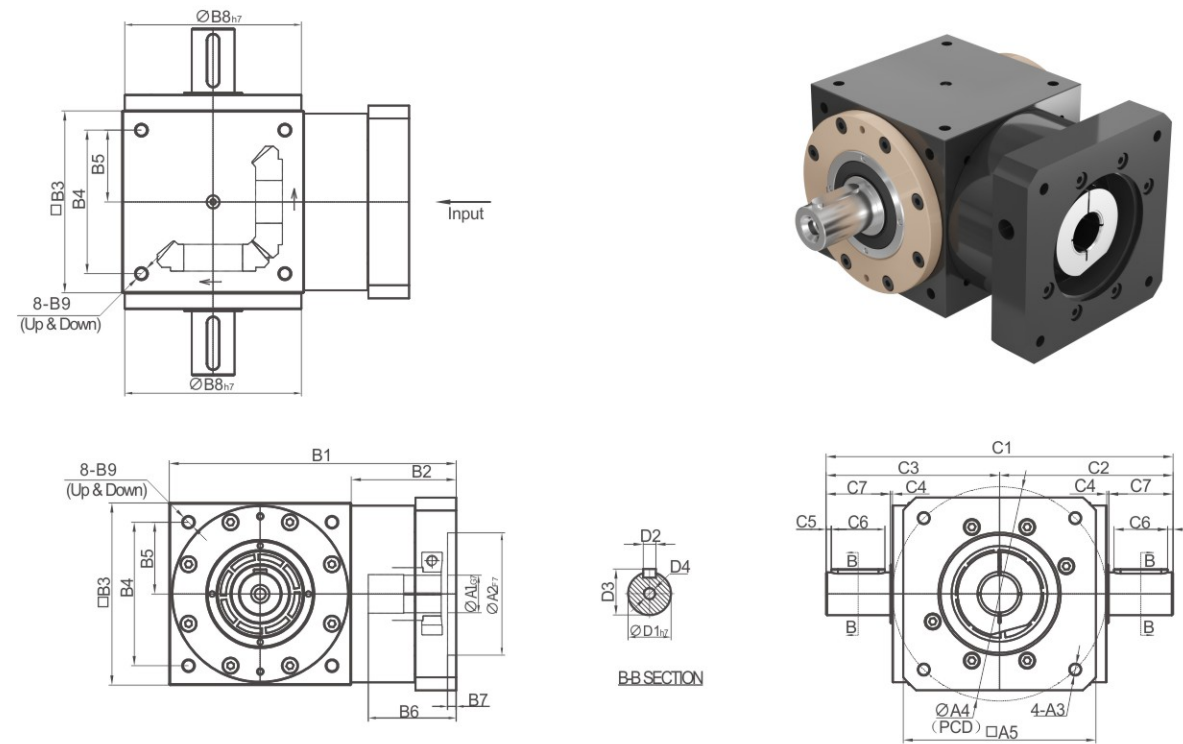
External dimensions table



Code	Model	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

TST-FVT-001

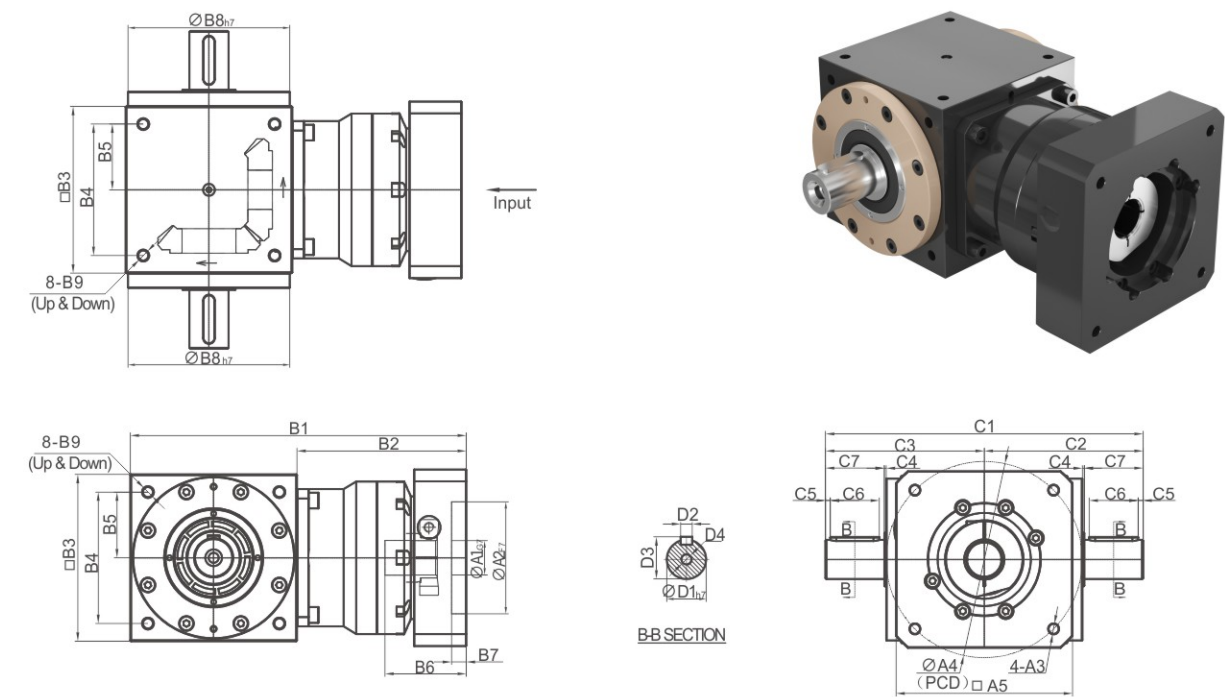
External dimensions table



Model		Code						
		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

TST-RVT-L1

External dimensions table



Code	Model	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	25	5	5	5	5	5	25
	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