

**14 ~ 18 ARC MIN**

# RAHseries Specification

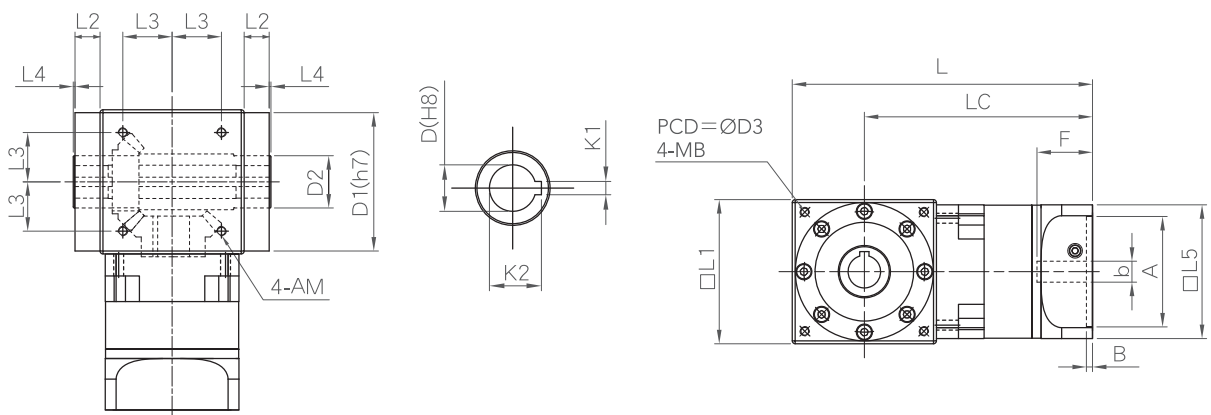
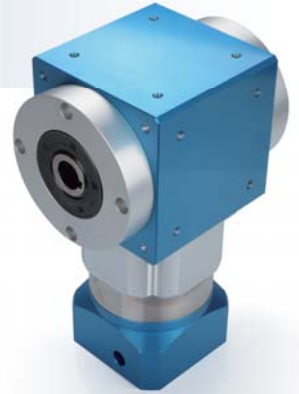
PHT VERTEX PRECISION COMPONENTS CORP.

Information	Stage	Ratio	RAH060	RAH090	RAH120	RAH150
Defined Output Torque (Nm)	1	3	40	140	260	476
		4	60	168	306	560
		5	55	155	292	536
		7	50	166	285	520
		10	40	140	260	476
	2	9	40	140	260	476
		12	40	140	260	476
		15	40	140	260	476
		16	60	168	306	560
		20	55	155	292	536
		21	40	140	260	476
		25	55	155	292	536
		28	50	166	285	520
		30	40	140	260	476
		35	50	166	285	520
		40	40	140	260	476
		49	50	166	285	520
		50	40	140	260	476
		70	40	140	260	476
Peak Output Torque (Nm)	1, 2	3~70	3 times of Defined Output Torque			
Backlash (arc min)	1	3~10	≤ 14	≤ 14	≤ 14	≤ 14
	2	9~70	≤ 18	≤ 18	≤ 18	≤ 18
Defined Input Speed (RPM)	1	3, 4, 5	3300	2600	2300	2200
		7, 10	4000	2900	2700	2700
	2	9~40	4400	3200	3000	3000
		49, 50 70	4800 5500	3600 4200	3300 3900	3200 3500
Efficiency (%)	1	3~10	≥ 91	≥ 91	≥ 91	≥ 91
	2	9~70	≥ 88	≥ 88	≥ 88	≥ 88
Noise (dB)	1, 2	3~70	65	65	65	65
Life Time (hrs)			20000			
Temperature (°C)			-15°C~+90°C			
Protection Rank			IP64			
Lubricant			Synthetic Lubricant, ISO VG220			

**DUAL HOLLOW SHAFTS**

# RAH-Hseries

PHT VERTEX PRECISION COMPONENTS CORP.



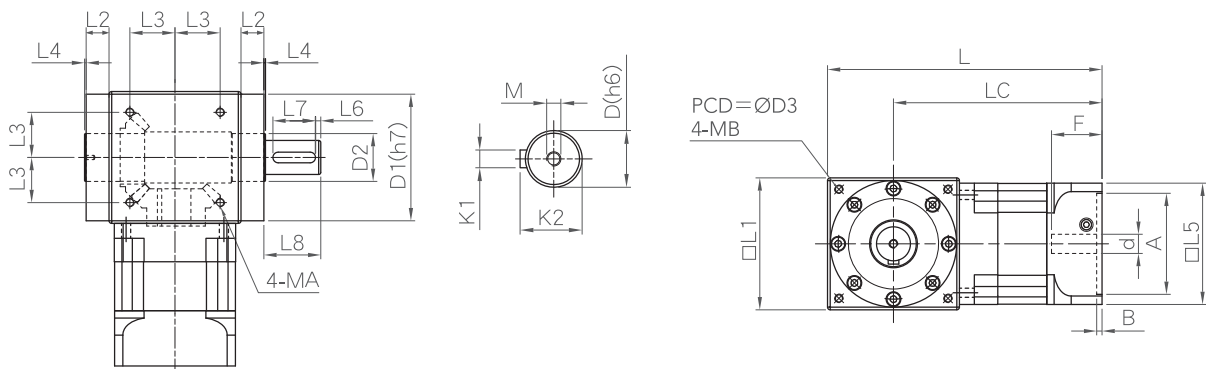
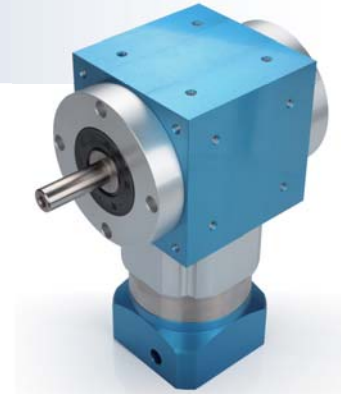
Unit: mm

Info.	RAH060 H	RAH090 H	RAH120 H	RAH150 H
L 1	83.0	114.0	124.0	154.0
L 2	17.0	21.5	21.5	21.0
L 3	28.284	33.587	38.890	45.962
MA	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
L 4	1.5	1.5	1.5	1.5
L 5	60.0	95.0	114.0	142.0
LC	Stage 1	135.7	184.8	282.5
	Stage 2	153.2	210.8	334.5
L	Stage 1	177.2	241.8	359.5
	Stage 2	194.7	267.8	411.5
D	16.0	20.0	28.0	40.0
D1	79.0	109.0	119.0	149.0
D2	25.0	30.0	45.0	55.0
D3	100.0	130.0	145.0	190.0
MB	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
K1	5.0	6.0	8.0	12.0
K2	18.3	22.8	31.3	43.3
d	≤ 14.0	≤ 24.0	≤ 28.0	≤ 42.0
A	30~50	50~80	55~110	95~130
B	6.0	8.0	5.0	10.0
F	≤ 32.0	≤ 40.0	≤ 47.5	≤ 66.5

**SINGLE SOLID SHAFT**

# RAH-Sseries

PHT VERTEX PRECISION COMPONENTS CORP.



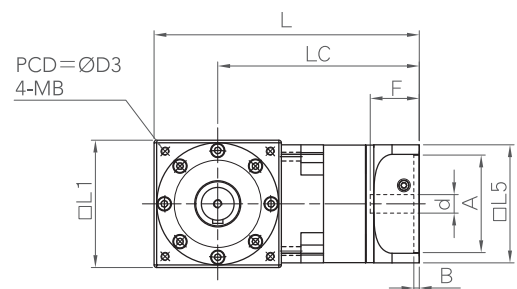
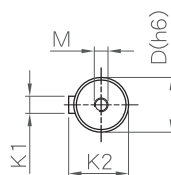
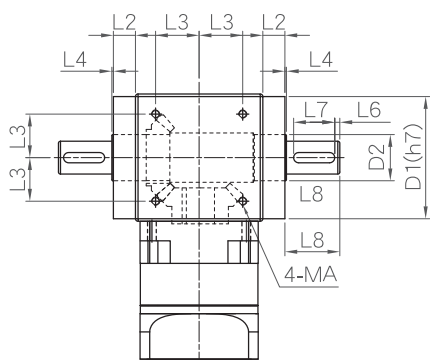
Unit: mm

Info.	RAH060 S	RAH090 S	RAH120 S	RAH150 S
L 1	83.0	114.0	124.0	154.0
L 2	17.0	21.5	21.5	21.0
L 3	28.284	33.587	38.890	45.962
MA	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
L 4	1.5	1.5	1.5	1.5
L 5	60.0	95.0	114.0	142.0
L 6	3.0	5.0	5.0	5.0
L 7	20.0	25.0	40.0	45.0
L 8	27.0	49.0	52.0	67.0
LC	Stage 1	135.7	184.8	282.5
	Stage 2	153.2	210.8	334.5
L	Stage 1	177.2	241.8	359.5
	Stage 2	194.7	267.8	411.5
D	16.0	20.0	32.0	42.0
D1	79.0	109.0	119.0	149.0
D2	25.0	30.0	45.0	55.0
D3	100.0	130.0	145.0	190.0
MB	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
M	M4 x P0.7 x 15	M6 x P1.0 x 20	M8 x P1.25 x 27	M12 x P1.75 x 32
K1	5.0	6.0	10.0	12.0
K2	18.0	22.5	35.0	45.0
d	≤ 14.0	≤ 24.0	≤ 28.0	≤ 42.0
A	30~50	50~80	55~110	95~130
B	6.0	8.0	5.0	10.0
F	≤ 32.0	≤ 40.0	≤ 47.5	≤ 66.5

**DUAL SOLID SHAFTS**

# RAH-2S series

PHT VERTEX PRECISION COMPONENTS CORP.



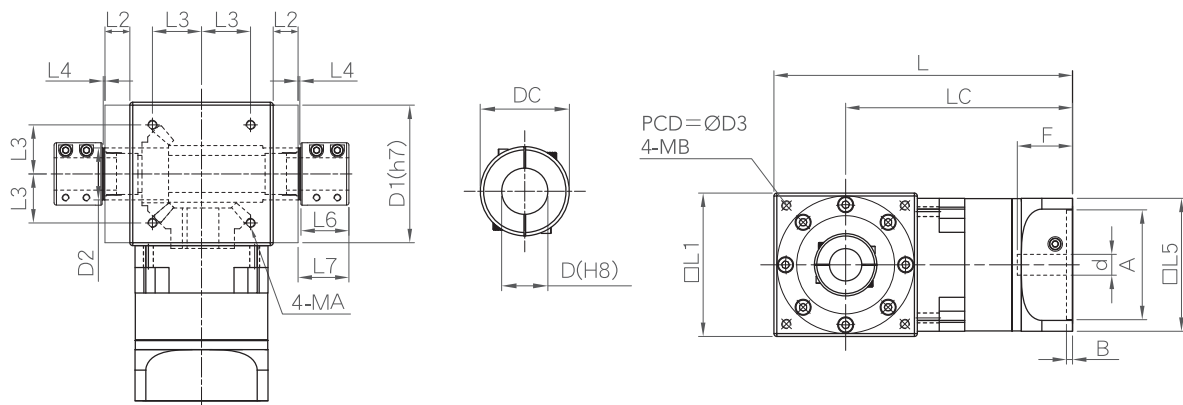
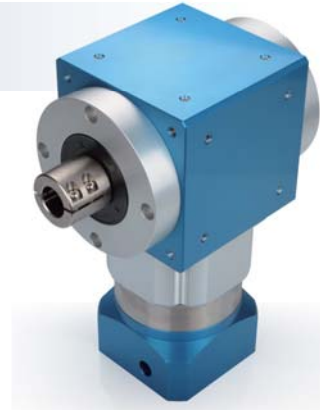
Unit: mm

Info.	RAH060 2S	RAH090 2S	RAH120 2S	RAH150 2S
L 1	83.0	114.0	124.0	154.0
L 2	17.0	21.5	21.5	21.0
L 3	28.284	33.587	38.890	45.962
MA	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
L 4	1.5	1.5	1.5	1.5
L 5	60.0	95.0	114.0	142.0
L 6	3.0	5.0	5.0	5.0
L 7	20.0	25.0	40.0	45.0
L 8	27.0	49.0	52.0	67.0
LC	Stage 1	135.7	184.8	282.5
	Stage 2	153.2	210.8	334.5
L	Stage 1	177.2	241.8	359.5
	Stage 2	194.7	267.8	411.5
D	16.0	20.0	32.0	42.0
D1	79.0	109.0	119.0	149.0
D2	25.0	30.0	45.0	55.0
D3	100.0	130.0	145.0	190.0
MB	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
M	M4 x P0.7 x 15	M6 x P1.0 x 20	M8 x P1.25 x 27	M12 x P1.75 x 32
K1	5.0	6.0	10.0	12.0
K2	18.0	22.5	35.0	45.0
d	≤ 14.0	≤ 24.0	≤ 28.0	≤ 42.0
A	30~50	50~80	55~110	95~130
B	6.0	8.0	5.0	10.0
F	≤ 32.0	≤ 40.0	≤ 47.5	≤ 66.5

**COLLAR CLAMP**

# RAH-D series

PHT VERTEX PRECISION COMPONENTS CORP.



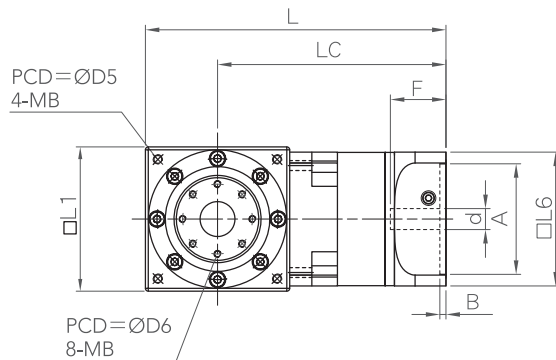
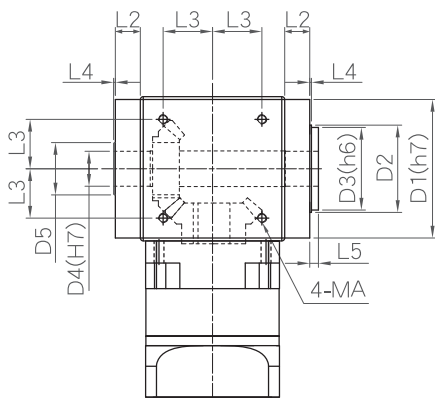
Unit: mm

Info.	RAH060 D	RAH090 D	RAH120 D	RAH150 D
L 1	83.0	114.0	124.0	154.0
L 2	17.0	21.5	21.5	21.0
L 3	28.284	33.587	38.890	45.962
MA	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
L 4	1.5	1.5	1.5	1.5
L 5	60.0	95.0	114.0	142.0
L 6	33.5	33.5	42.5	42.5
L 7	35.0	35.0	44.0	44.0
LC	Stage 1	135.7	184.8	196.3
	Stage 2	153.2	210.8	224.6
L	Stage 1	177.2	241.8	258.3
	Stage 2	194.7	267.8	286.6
DC	30.0	36.0	54.0	66.0
D	16.0	20.0	28.0	40.0
D1	79.0	109.0	119.0	149.0
D2	25.0	30.0	45.0	55.0
D3	100.0	130.0	145.0	190.0
MB	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
d	≤ 14.0	≤ 24.0	≤ 28.0	≤ 42.0
A	30~50	50~80	55~110	95~130
B	6.0	8.0	5.0	10.0
F	≤ 32.0	≤ 40.0	≤ 47.5	≤ 66.5

**FLANGE ROTATING**

# RAH-F series

PHT VERTEX PRECISION COMPONENTS CORP.



Unit: mm

Info.	RAH060 F	RAH090 F	RAH120 F	RAH150 F
L 1	83.0	114.0	124.0	154.0
L 2	17.0	21.5	21.5	21.0
L 3	28.284	33.587	38.890	45.962
MA	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.2 x 14	M10 x P1.5 x 22
L 4	1.5	1.5	1.5	1.5
L 5	7.5	7.5	7.5	7.5
L 6	60.0	95.0	114.0	142.0
LC	Stage 1	135.7	184.8	282.5
	Stage 2	153.2	210.8	334.5
L	Stage 1	177.2	241.8	359.5
	Stage 2	194.7	267.8	411.5
D1	79.0	109.0	119.0	149.0
D2	45.0	60.0	75.0	80.0
D3	44.0	59.0	71.0	79.0
D4	15.0	20.0	30.0	35.0
D5	25.0	30.0	45.0	55.0
D6	100.0	130.0	145.0	190.0
MB	M5 x P0.8 x 10	M6 x P1.0 x 12	M8 x P1.25 x 14	M10 x P1.5 x 22
D7	35.0	50.0	60.0	68.0
MC	8-M5 x P0.8 x 12	8-M5 x P0.8 x 15	8-M6 x P1.0 x 15	12-M6 x P1.0 x 15
d	≤ 14.0	≤ 24.0	≤ 28.0	≤ 42.0
A	30~50	50~80	55~110	95~130
B	6.0	8.0	5.0	10.0
F	≤ 32.0	≤ 40.0	≤ 47.5	≤ 66.5