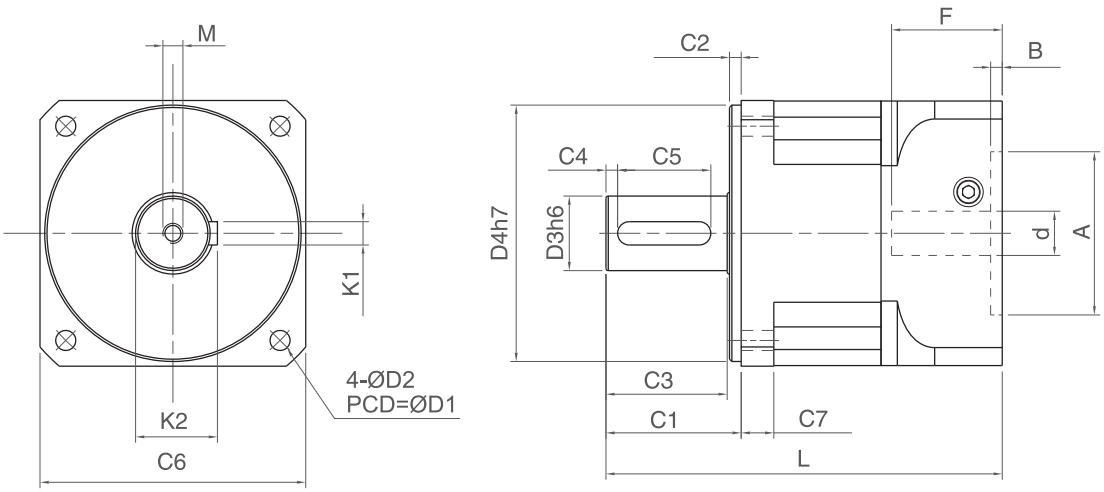
PHT | Vertex Precision

ElectroCraft powering innovation™

HIGH THERMAL DISSIPATION

DS series

PHT VERTEX PRECISION COMPONENTS CORP.



Unit: mm

Info.	DS060	DS070	DS090	DS120	DS150	DS180	DS220
D1	70.0	75.0	105.0	130.0	165.0	215.0	250.0
D2	5.50	5.50	6.80	8.60	10.5	13.0	17.0
D3	16 (12~16)	16 (12~16)	20 (16~22)	32 (24~35)	42 (38~45)	55 (50~60)	75 (50~75)
D4	50.0	60.0	80.0	110.0	130.0	160.0	180.0
C1	35.0	33.0	56.0	58.0	74.0	107.0	124.0
C2	7.00	5.00	6.00	5.00	4.00	10.0	15.0
C3	27.0	27.0	49.0	52.0	67.0	96.0	106.0
C4	3.00	3.00	5.00	5.00	5.00	6.00	7.00
C5	20.0	20.0	25.0	40.0	45.0	70.0	90.0
C6	60.0	68.0	94.0	114.0	142.0	180.0	220.0
C7	11.0	10.0	17.0	14.0	18.0	25.0	30.0
L L1	125.7	125.7	167.0	170.3	262.0	334.0	356.0
L L2	147.7	147.7	195.3	198.6	313.8	416.0	462.5
M	M4 x P0.7 x 15	M4 x P0.7 x 15	M6 x P1.0 x 20	M8xP1.25x27	M12xP1.75x32	M12xP2.0x40	M14xP2.0x40
K1	5.00	5.00	6.00	10.0	12.0	14.0	20.0
K2	18.0	18.0	22.5	35.1	45.0	58.5	79.5
d	≦ 14.0	≦ 14.0	≦ 24.0	≦ 28.0	≦ 42.0	≦ 55.0	≦ 69.7
A	30~50	30~60	50~80	55~110	95~130	95~155	180~250
B	6.00	6.00	6.00	5.00	10.0	11.0	12.0
F	≦ 35.0	≦ 35.0	≦ 47.5	≦ 47.5	≦ 66.5	≦ 82.5	≦ 88.5

Information	Stage	Ratio	DS060	DS070	DS090	DS120	DS150	DS180	DS220
Defined Output Torque (Nm)	1	3	44	48	168	260	476	987	1560
		4	54	60	188	306	560	1280	2200
		5	48	56	180	292	536	1248	2360
		7	46	52	176	285	520	1185	1880
		10	44	48	168	260	476	987	1560
	2	9	44	48	168	260	476	987	1560
		12	44	48	168	260	476	987	1560
		15	44	48	168	260	476	987	1560
		16	54	60	188	306	560	1280	2200
		20	48	56	180	292	536	1248	2360
		21	44	48	168	260	476	987	1560
		25	48	56	180	292	536	1248	2360
		28	46	52	176	285	520	1185	1880
		30	44	48	168	260	476	987	1560
		35	46	52	176	285	520	1185	1880
		40	44	48	168	260	476	987	1560
		50	44	48	168	260	476	987	1560
		70	44	48	168	260	476	987	1560
	3	100	48	56	180	292	536	1248	2360
Peak Output Torque (Nm)	1, 2, 3	3~100	**3 times of Defined Output Torque**						
Backlash (arc min)	1	3~10	≦ 5	≦ 5	≦ 5	≦ 5	≦ 5	≦ 5	≦ 5
	2	9~70	≦ 8	≦ 8	≦ 8	≦ 8	≦ 8	≦ 8	≦ 8
Defined Input Speed (RPM)	1	3, 4, 5	3300	3300	2600	2300	2200	1500	1500
		7, 10	4000	4000	2900	2700	2700	2400	2000
	2	9~40	4400	4400	3200	3000	3000	2800	2400
		50	4800	4800	3600	3300	3200	3000	2500
		70	5500	5500	4200	3900	3500	3200	2000
Weight (kg)	1	3~10	1.10	1.30	3.20	4.60	13.0	32.0	49.0
	2	9~70	1.40	1.60	4.20	5.80	17.0	41.0	61.0
Torsional Rigidity (Nm/arc min)	1, 2	3~70	6.50	7.00	14.00	27.00	48.0	115	218
Allowable Radial Force (N)			1400	1400	6200	7500	14000	22000	28800
Allowable Axial Force (N)			800	800	5200	6450	12000	20000	26000
Noise (dB)			65	65	64	64	64	64	64
Life Time (hrs)			20000						
Temperature (℃)			-15°C~+90°C						
Protection Rank			IP64						
Lubricant			Synthetic Lubricant, ISO VG220						
Mass Moments of Inertia (kg X cm²)	1	3	0.042	0.042	0.78	2.38	19.80	48.70	66.50
		4	0.030	0.030	0.60	2.00	17.00	45.00	63.20
		5	0.029	0.029	0.59	2.00	17.00	46.50	65.00
		7	0.028	0.028	0.73	2.00	16.80	45.50	65.80
		10	0.035	0.035	0.75	2.30	19.00	48.00	66.80
	2	9	0.042	0.042	0.78	2.38	19.80	19.80	24.50
		12	0.030	0.030	0.73	2.10	17.00	19.00	24.00
		16	0.030	0.030	0.60	2.10	17.00	17.00	22.00
		20	0.030	0.030	0.60	2.10	16.80	17.00	22.00
		25	0.029	0.029	0.75	2.10	17.00	17.00	21.50
		28	0.030	0.030	0.75	2.10	19.00	17.00	21.50
		35	0.030	0.030	0.73	2.38	19.00	19.00	21.00
		40	0.035	0.035	0.78	2.38	19.00	19.00	21.00
		50	0.035	0.035	0.78	2.38	19.00	19.00	21.00
		70	0.035	0.035	0.78	2.38	19.00	19.00	21.00
	3	100	0.035	0.035	0.78	2.38	19.80	19.80	20.60