

HP DS PLANETARY GEARBOX



- HIGH OUTPUT TORQUE
- HIGH PRECISION
- HIGH REDUCTION RATIO WITH COMPACT SIZE
- LOW BACKLASH
- COST EFFECTIVE

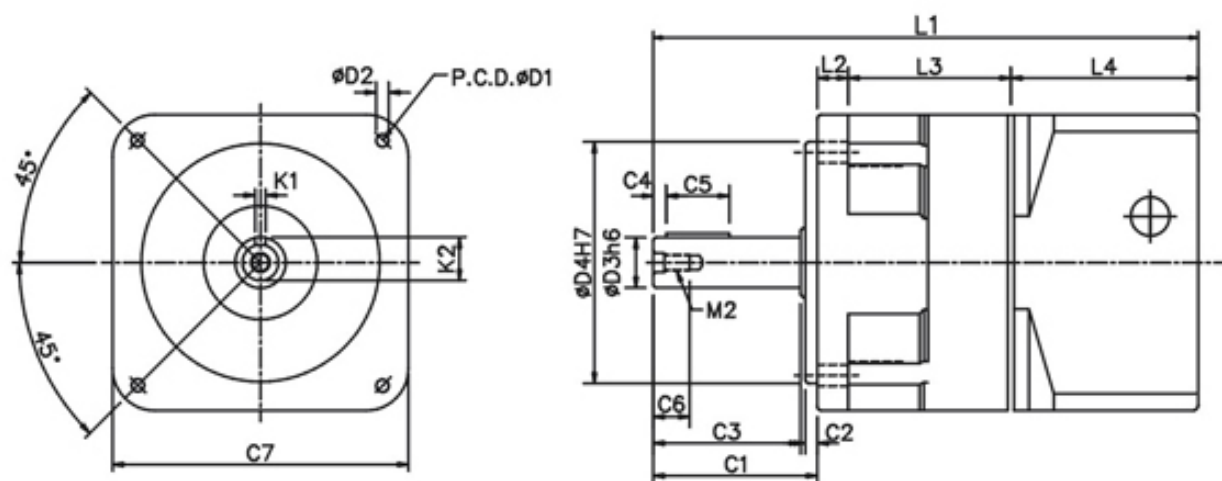
Specification

Item	Unit	Stage	DS060	DS070	DS090	DS120	DS150	DS180	DH060	DH090
Rated output torque T_n	Nm	1,2	48	60	176	285	520	1185	48	168
Allowable max. output torque T_p	Nm	1,2	$T_n \times 3$	$T_n \times 3$	$T_n \times 3$	$T_n \times 3$	$T_n \times 3$	$T_n \times 3$	$T_n \times 2$	$T_n \times 3$
Backlash	Arcmin	1	≤ 5	≤ 5	≤ 5	≤ 6	≤ 6	≤ 6	≤ 10	≤ 10
		2	≤ 6	≤ 6	≤ 6	≤ 8	≤ 8	≤ 7	≤ 12	≤ 12
Torsional Rigidity	Nm/Arcmin	1,2	6.5	6.5	13.7	27	48	115	7	11
Allowable Radial force FLR	N	1,2	1400	1400	6200	7500	14000	22000	840	6000
Allowable Axial force FLA	N	1,2	800	800	5200	3225	12000	20000	605	5000
Efficiency	%	1,2	95	95	95	95	95	92	95	95
Weight	Kg	1	1.4	1.3	3.2	4.6	13	36	1.2	3.5
		2	1.4	1.6	4.2	5.8	17	45.2	1.7	4.5
Operation Temperature	°C	1,2	-15~+90	-15~+90	-15~+90	-15~+90	-15~+90	-15~+90	-15~+90	-15~+90
Protection Level			IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
Noisy	dB	1,2	64	64	64	64	64	64	68	68

Reduction Ratio

Stage	L1	L2	L3
DS 060	3.4.5.7.10	9.12.15.20.21.25.28	
		30.35.40.49.50.70.100	
DS 070	3.4.5.7.10	9.12.15.20.21.25.28	
		30.35.40.49.50.70.100	
DS 090	3.4.5.7.10	9.12.15.16.20.21.25.28	36.45.60.75.80.90.150.200
		30.35.40.49.50.70.100	300.400.500.700.1000
DS 120	3.4.5.7.10	9.12.15.16.20.21.25	45.60.75.80.100.125
		28.35.49	140.175.245.343
DS 150	3.4.5.7.10	9.12.15.16.20.21.25.28	48.64.75.80.112.125.147
		30.35.40.49.50.70.100	160.175.196.245.250.300. 400.490.500.1000
DS 180	3.4.5.7.10	9.12.15.16.20.21.25.28	
		30.35.40.49.50.70.100	
DH 060	3.4.5.7.10	9.12.15.16.20.21.25.28	
		30.35.40.49.50.70.100	
DH 090	3.4.5.7.10	12.15.16.20.21.25.28	36.45.60.75.80.90.150.200
		30.35.40.49.50.70.100	300.400.500.700.1000

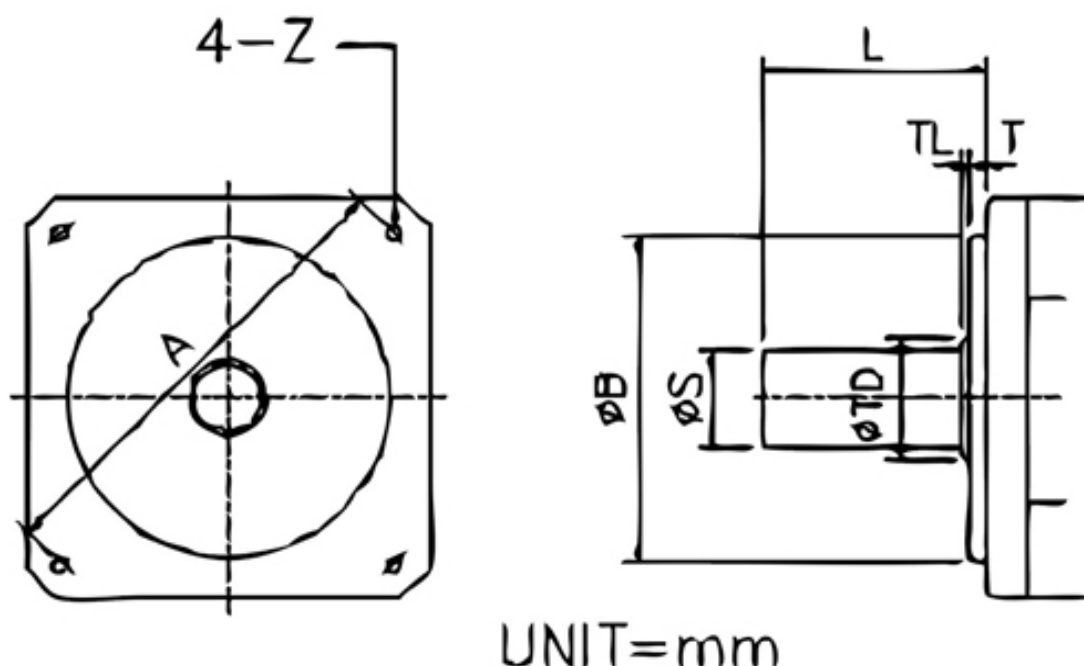
Dimension



UNIT=mm

DIMEN.	DS060		DS070		DS090			DS120			DS150			DS180		DH060		DH090		
	L1	L2	L1	L2	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L1	L2	L1	L2	L3
D1	70		75		105			130			165			215		70		105		
D2	5		5.5		6.8			9			11			13		5		6.8		
D3	16		16		20			32			42			55		16		20		
D4	50		60		80			110			130			160		50		80		
D5																				
C1	35		33		54.5			58			72			94		35		55		
C2	7		5		6			5			4			10		7		5		
C3	27		27		48.5			51			67			83		27		49		
C4	3		3		5			5			5			6		3		5		
C5	20		20		25			40			45			70		20		25		
C6	12		12		15			27			32			40		12		15		
C7	60		68		92			114			142			180		62		95		
L1	125	147	125	147	168	195.5	223	170	198	226	261	313	365	319	401	115	133	172	198	224
L2	10		10		12			11			15			25		8		10		
L3	40	62	40	62	51.5	79	106.5	48.5	76.5	104.5	66	118	170	90	172	46	64	51	77	103
L4	40		40		50			52			95			110		34		56		
M1																				
M2	M5 X0.8P		M5 X0.8P		M6 X P1.5			M8 X P1.25			M12 X 1.75P			M12X 1.75P		M5X 0.8P		M6 X P1.0		
K1	5		5		6			8			10			14		5		6		
K2	17		17		23			35			45			62		18		22.5		

Motor Output Shaft /Gearbox Input Shaft



Note of Ordering

			Type 60	Type 70	Type 90	Type 120	Type 150	Type 180
Input Shaft	φ S	mm	8~14	8~14	14~19	16~28	22~42	48~55
Length of Shaft	L	mm	≤30	≤30	≤40	≤56	≤85	≤95
Spigot	φ B	mm	30~50	30~60	50~80	55~110	95~130	95~155
Length of Spigot	T	mm	≤3.5	≤6	≤8	≤5	≤10	≤10
Bolt Hole	Z	mm	Any Size					
PCD	A	mm	46~70	46~70	70~100	70~145	115~145	115~145
Number of Screw Hole			4	4	4	4	4	4

Sample/Order Request Form

Gear Head Model	Type of Motor	Shaft Diameter φS	Shaft Length L	Spigot Diameter φB	Spigot Length T	PCD A	Bolt Hole Z