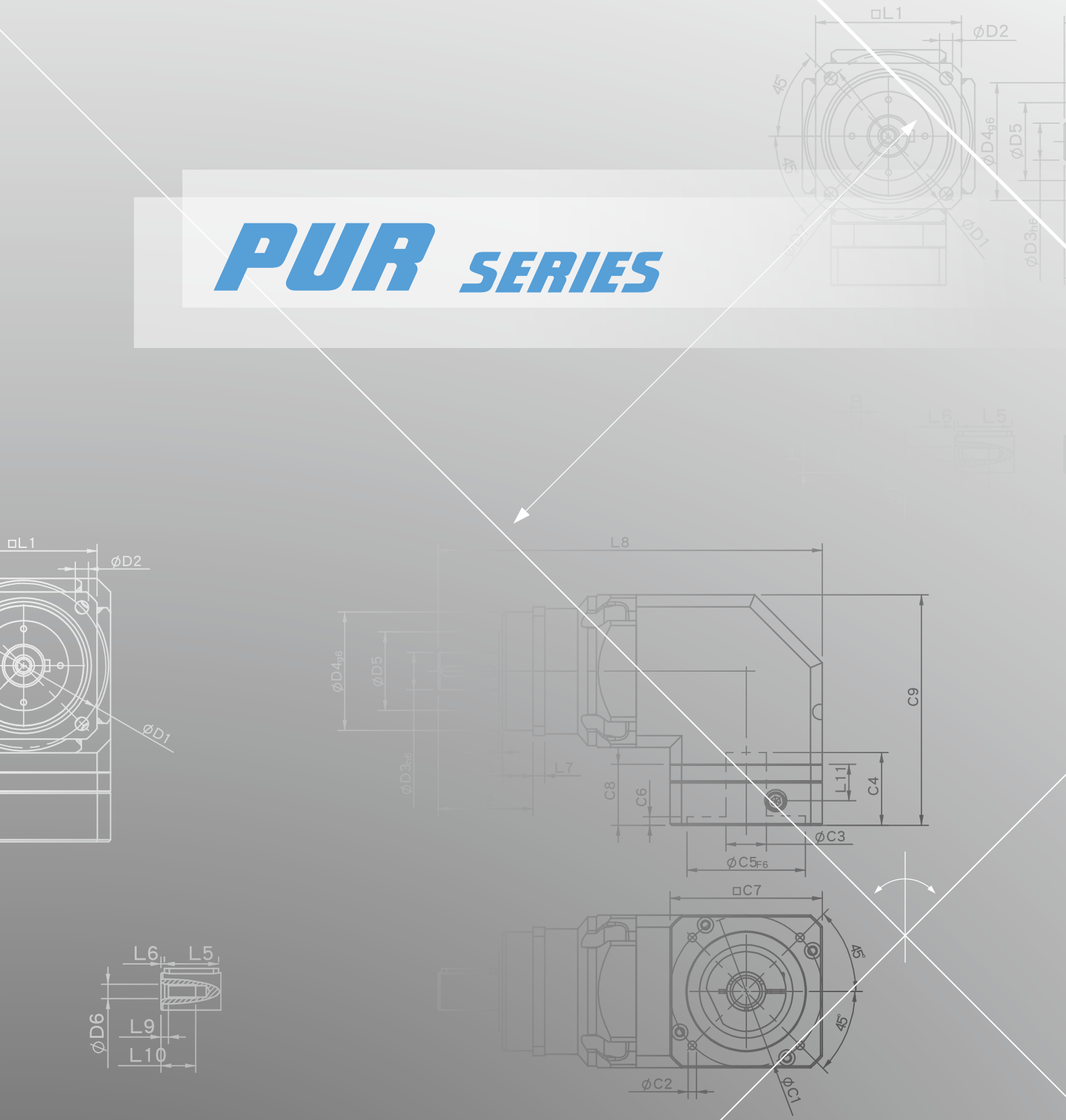


# PUR SERIES

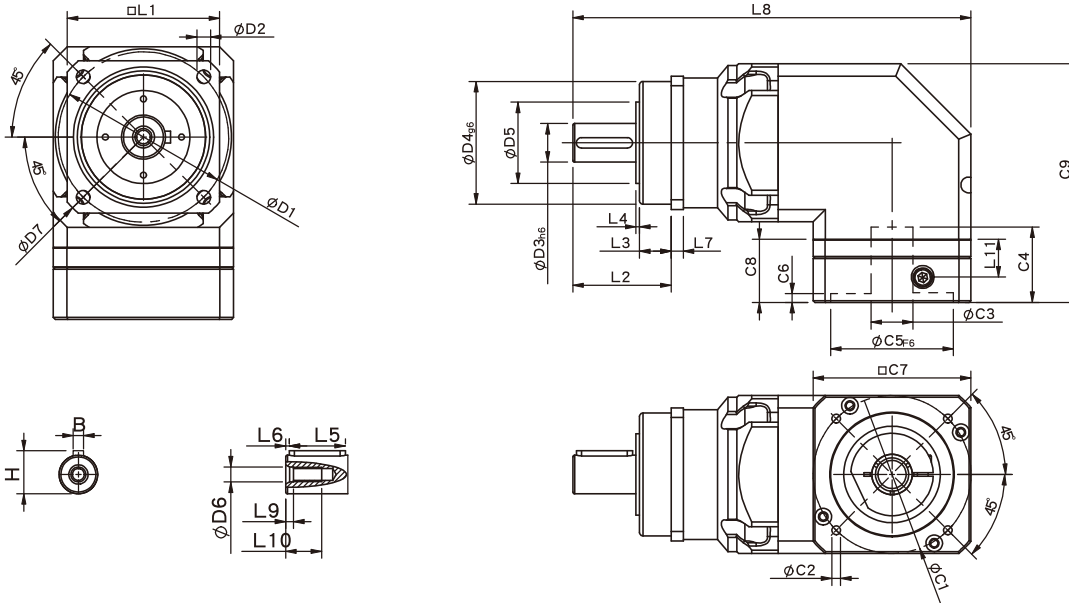


# SERVO MOTOR GEARHEADS



- PHL
- PHFR
- PHF
- PGH
- PUR**
- PUL
- PGLH
- PGL
- PGC
- PGE
- PGRH
- PCR
- PGFR
- PGF
- PBC
- PBE
- PAE
- PAC
- PAN
- PGS
- PNS

## PUR Single Stage Dimensions



## Specifications

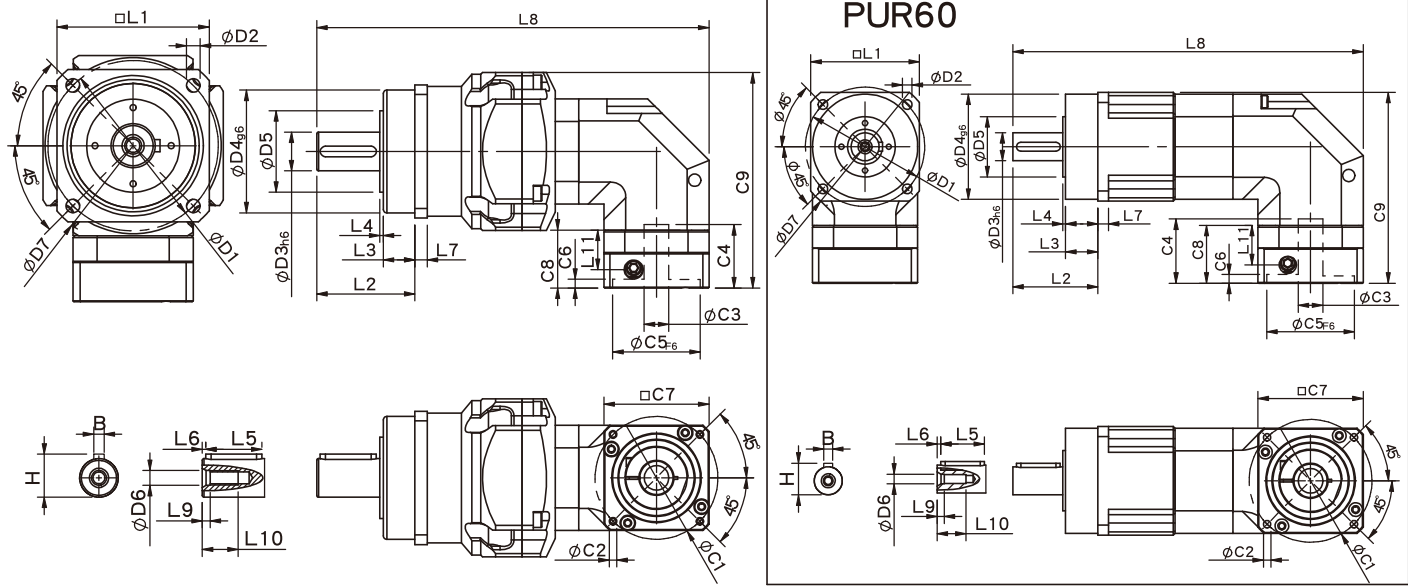
Unit:mm

Dimensions	PUR60	PUR75	PUR100	PUR140
D1	68	85	120	-
D2	5.5	6.8	9	-
D3 h6	16	22	32	-
D4 g6	60	70	90	-
D5	34.6	46.4	59.6	-
D6	M5x0.8P	M8x1.25P	M12x1.75P	-
D7	80	100	138	-
L1	62	76	105	-
L2	48.5	56	88	-
L3	18.5	18	28	-
L4	1.5	2	2	-
L5	25	32	40	-
L6	2	2	5	-
L7	6	7	10	-
L8	166.7	227	260.5	-
L9	4	4.5	6	-
L10	16.5	20.5	30	-
L11	22.5	21.5	31.8	-
C1 <sup>2</sup>	70	90	115	-
C2 <sup>2</sup>	M5x0.8P	M6x1.0P	M8x1.25P	-
C3 <sup>2</sup>	$\leq 14/\leq 19$	$\leq 14/\leq 19$	$\leq 24/\leq 32$	-
C4 <sup>2</sup>	34	45	53	-
C5 <sup>2</sup> F6	50	70	95	-
C6 <sup>2</sup>	4	4	6	-
C7 <sup>2</sup>	60	90	115	-
C8 <sup>2</sup>	33	36	48	-
C9 <sup>2</sup>	108.8	136	174.5	-
B	5	6	10	-
H	18	24.5	35	-

★ C1~C9 are motor specific dimensions(metric std shown ).Size may vary according to the motor flange chosen.

★ Specification subject to change without notice.

## PUR Double Stage Dimensions



## Specifications

Unit:mm

Dimensions	PUR60	PUR60T	PUR75T	PUR100T
D1	68	68	85	120
D2	5.5	5.5	6.8	9
D3 h6	16	16	22	32
D4 g6	60	60	70	90
D5	34.6	34.6	46.4	59.6
D6	M5x0.8P	M5x0.8P	M8x1.25P	M12x1.75P
D7	80	80	100	138
L1	62	62	76	105
L2	48.5	48.5	56	88
L3	18.5	18.5	18	28
L4	1.5	1.5	2	2
L5	25	25	32	40
L6	2	2	2	5
L7	6	6	7	10
L8	199.7	170.3	223.7	286.5
L9	4.5	4	4.5	6
L10	20.5	16.5	20.5	30
L11	22.5	15.5	22.5	21.5
C1 <sup>2</sup>	70	46	70	90
C2 <sup>2</sup>	M5x0.8P	M4x0.7P	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	≤14/≤19	≤8	≤14/≤19	≤19/≤24
C4 <sup>2</sup>	34	29	34	45
C5 <sup>2</sup> F6	50	30	50	70
C6 <sup>2</sup>	4	4	4	6
C7 <sup>2</sup>	60	42.6	60	90
C8 <sup>2</sup>	33	25	33	36
C9 <sup>2</sup>	108.8	80.5	122.8	148.5
B	6	5	6	10
H	24.5	18	24.5	35

\* C1~C9 are motor specific dimensions(metric std shown ), Size may vary according to the motor flange chosen.  
\* Specification subject to change without notice.

## PUR Specifications Table

Specifications		Stage	Ratio	PUR-60	PUR-75	PUR-100	PUR-140	PUR-180	PUR-220	
Nominal Output Torque $T_{2N}$	N • m	1	3	53	145	290	520	580	1100	
			4	55	150	300	550	1100	1700	
			5	54	140	290	530	1200	2000	
			6	46	135	280	490	1100	1850	
			7	44	125	270	450	1100	1750	
			8	41	110	240	390	1000	1550	
			9	37	95	220	360	900	1500	
			10	37	95	220	360	900	1450	
		2	14	44	125	270	450	1100	1750	
			20	37	95	220	360	900	1450	
			Stage	Ratio	PUR-60 (T)	PUR-75T	PUR-100T	PUR-140T	PUR-180T	PUR-220T
			15	53	145	290	520	580	2000	
			20	55	150	300	550	1100	2000	
			25	54	140	290	530	1200	2000	
			30	54	140	290	530	1200	2000	
			35	54	140	290	530	1200	2000	
			40	54	140	290	530	1200	2000	
			45	54	140	290	530	1200	2000	
			50	54	140	290	530	1200	2000	
			60	46	135	280	490	1100	1850	
70	44	125	270	450	1100	1750				
80	41	110	240	390	1000	1550				
90	37	95	220	360	900	1500				
100	37	95	220	360	900	1450				
120	46	135	280	490	1100	1850				
140	44	125	270	450	1100	1750				
160	41	110	240	390	1000	1550				
180	37	95	220	360	900	1500				
200	37	95	220	360	900	1450				
Emergency Stop Torque $T_{2NOT}$	N • m		3.0 times of Nominal Output Torque (*Max. Output Torque $T_{2B}$ = 60% of Emergency Stop Torque)							
Nominal Input Speed $n_{1N}$	rpm	1,2	3-200	5000	4000	4000	3000	3000	2000	
Max. Input Speed $n_{1max}$	rpm	1,2	3-200	10000	8000	8000	6000	6000	4000	
Micro Backlash P0	arcmin	1	3-20	-	≤ 3	≤ 2	≤ 2	≤ 2	≤ 2	
		2	15-200	-	≤ 5	≤ 4	≤ 4	≤ 4	≤ 4	
Precision Backlash P1	arcmin	1	3-20	≤ 5	≤ 5	≤ 4	≤ 4	≤ 4	≤ 4	
		2	15-200	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	
Standard Backlash P2	arcmin	1	3-20	≤ 7	≤ 7	≤ 6	≤ 6	≤ 6	≤ 6	
		2	15-200	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	
Torsional Rigidity	N • m /arcmin	1,2	3-100	7	14	25	50	150	220	
Max. Radial Load $F_{2rB}^1$	N	1,2	3-100	4130	5220	10650	17600	22000	27800	
Max. Axial Load $F_{2aB}^1$	N	1,2	3-100	2500	3300	5700	11300	14000	16200	
Operating Temp.	°C		3-100	-10 °C ~ +90 °C						
Service Life	hr		3-100	30,000 (15,000/Continuous operation)						
Efficiency	%	1	3-10	≥ 95%						
		2	12-100	≥ 92%						
Weight	kg	1	3-10	3.1	5.46	12.5	-	-	-	
		2	12-100	3.7/3.3	4.87	13.6	-	-	-	
Mounting Position	-	1,2	3-100	Any direction						
Noise Level <sup>2</sup>	dBA/1m	1,2	3-100	64	66	68	70	72	74	
Protection Class	-	1,2	3-100	IP65						
Lubrication	-	1,2	3-100	Synthetic Lubricant						
Inertia(J1)										
Stage	Ratio	unit		PUR-60	PUR-90	PUR-115	PUR-140	PUR-180	PUR-220	
1	3/4/5/7/9	Kg • cm <sup>2</sup>		0.40	2.28	6.87	24.2	69.8	138.2	
	6/8/10/14/20			0.30	1.45	4.76	14.5	50.3	103.6	
Stage	Ratio			PUR-60(T)	PUR-90T	PUR-115T	PUR-140T	PUR-180T	PUR-220T	
2	15/20/25/35/45			0.40(0.08)	0.72	3.02	7.83	27.7	80.3	
	others			0.30(0.06)	0.38	1.64	5.00	15.9	55.3	

\* 1. Applied to the output shaft center @100rpm.

\* 2. Measured at 3000rpm with no load

※ The above figures/specifications are subject to change without prior notice.

Products due to human error, natural disasters or other factors lead to poor or damaged, will not be covered under warranty.