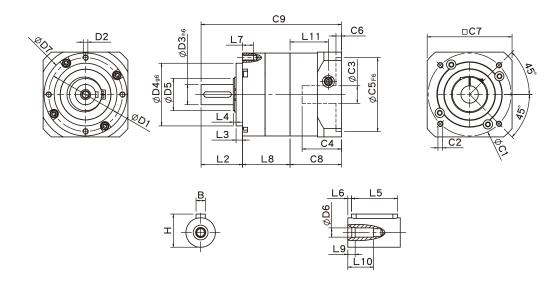


PBC Single Stage Dimensions



Specifications

Unit:mm

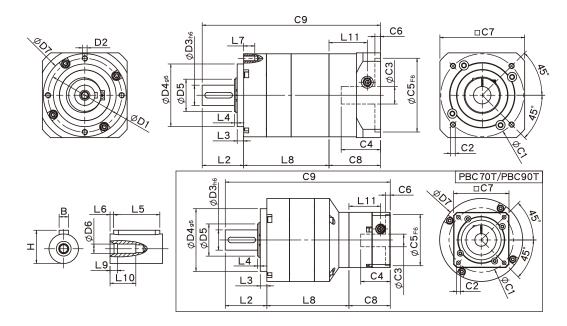
Dimensions	PBC50	PBC70	PBC90	
D1	44	62	80	
D2	M4x0.7P	M5x0.8P	M6x1.0P	
D3 h6	12	16	22	
D4 g6	35	52	68	
D5	15	20	35	
D6	M4x0.7P	M5x0.8P	M8x1.25P	
D7	50	70	90	
L2	26	36	45	
L3	5.5	5	7	
L4	2.6	2.7	3	
L5	15	25	30	
L6	2	2	3	
L7	8	10	12	
L8	32.4	49.6	54.4	
L9	4	4	4.5	
L10	14	16.5	20.5	
L11	26.9	34.3	41.55	
C1 ²	46	70	90	
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	
C3 ²	<u>≤</u> 8/ <u>≤</u> 11	<u>≤</u> 14/ <u>≤</u> 19	≦19/≦24/≦28	
C4 ²	26.5	33.5	41	
C5 ² F6	30	50	70	
C6 ²	4	4	6	
C7 ²	42.6	60	92	
C8 ²	36.4	44.8	55.8	
C9 ²	94.8	130.4	155.2	
В	4	5	6	
Н	13.5	18	24.5	

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

 $[\]star$ Specification subject to change without notice.

PLANETARY GEARHEADS

PBC Double Stage Dimensions



Specifications

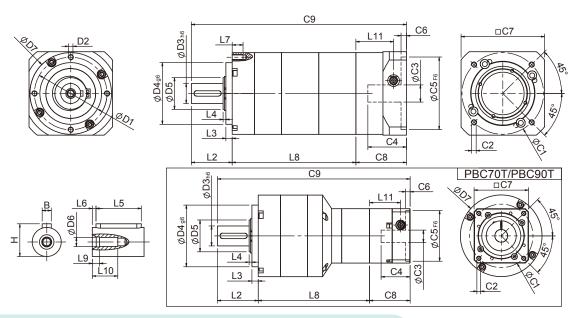
Unit:mm

Dimensions	PBC50	РВС70	PBC70T	PBC90	PBC90T
D1	44	62		80	
D2	M4x0.7P	M5x0.8P		M6x1.0P	
D3 h6	12	16		22	
D4 g6	35	5	52	68	
D5	15	20		35	
D6	M4x0.7P	M5x0.8P		M8x1.25P	
D7	50	70		90	
L2	26	36		45	
L3	5.5	5		7	
L4	2.6	2.7		3	
L5	15	25		30	
L6	2	2		3	
L7	8	10		12	
L8	57.3	80.3	75.9	95.4	92
L9	4	4		4.5	
L10	14	16.5		20.5	
L11	26.9	34.3 26.9		41.55	34.3
C1 ²	46	70	46	90	70
C2 ²	M4x0.7P	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P
C3 ²	≦8/≦11	≦14/≦19	≦8/≦11	≦19/≦24/≦28	<u>≤</u> 14/ <u>≤</u> 19
C4 ²	26.5	33.5	26.5	41	33.5
C5 ² F6	30	50	30 70		50
C6 ²	4	4	4	6	4
C7 ²	42.6	60	42.6	92	60
C8 ²	36.4	44.8	.8 36.4 55.8		44.8
C9 ²	119.7	161.1	148.3	196.2	181.8
В	4	5		6	
Н	13.5	18		24.5	

 $[\]star$ C1~C9 are motor specific dimensions (metric std shown). Size may vary according to motor flange.

 $[\]star$ Specification subject to change without notice.

PBC Triple Stage Dimensions



Specifications

Unit:mm

Dimensions	PBC50	PBC70T	PBC90T
D1	44	62	80
D2	M4x0.7P	M5x0.8P	M6x1.0P
D3 _{h6}	12	16	22
D4 _{g6}	35	52	68
D5	15	20	35
D6	M4x0.7P	M5x0.8P	M8x1.25P
D7	50	70	90
L2	26	36	45
L3	5.5	5	7
L4	2.6	2.7	3
L5	15	25	30
L6	2	2	3
L7	8	10	12
L8	82.2	100.8	122.7
L9	4	4	4.5
L10	14	16.5	20.5
L11	26.9	26.9	34.3
C1 ²	46	46	70
C2 ²	M4x0.7P	M4x0.7P	M5x0.8P
C3 ²	≦8/≦11	≦8/≦11	<i>≦</i> 14/ <i>≦</i> 19
C4 ²	26.5	26.5	33.5
C5 ² F6	30	30	50
C6 ²	4	4	4
C7 ²	42.6	42.6	60
C8 ²	36.4	36.4	44.8
C9 ²	144.6	173.2	212.5
В	4	5	6
Н	13.5	18	24.5

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

 $[\]star$ Specification subject to change without notice.

PLANETARY GEARHEADS

PBC Specifications Table

Specifications		Stage	Ratio	PBC-50	PBC-70	PBC-90
, , , , , , , , , , , , , , , , , , , ,			3	4.8	13.6	33.5
			4	6.3	21.6	58.6
			5	6.0	20.5	55.1
		1	7	5.6	19.2	51.8
			9	5.4	18.5	50.0
			10	5.4	17.0	48.0
		Stage	Ratio	PBC-50	PBC-70(T)	PBC-90(T)
		2	15	4.8	13.6	33.5
			20	6.3	21.6	58.6
			25	6.0	20.5	55.1
			35	6.0	20.5	55.1
Nominal Output Torque T _{2N}	N • m		45	6.0	20.5	55.1
Normal Sutput Forque 12N	14 - 111		49	5.6	19.2	51.8
			63	5.6	19.2	51.8
			81	5.4	18.5	50.0
		Stage	Ratio	PBC-50	PBC-70(T)	PBC-90(T)
			125	6.0	20.5	55.1
			175	6.0	20.5	55.1
			225	6.0	20.5	55.1
			245	6.0	20.5	55.1
		3	315	6.0	20.5	55.1
			405	6.0	20.5	55.1
			567	5.6	19.2	51.8
			729	5.4	18.5	50.0
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 Nan	rpm	1,2,3	3-729	4000 4000 3000		
Max. Input Speed N _{1max}	rpm	1,2,3	3-729	8000	6000	6000
	arcmin	1	3-10	≦ 9	≦ 8	≦ 7
Backlash		2	15-81	 ≦12	≤ 10	_ <i>,</i> ≦ 9
		3	125-729	≦ 15	≦ 12	≦ 12
Torsional Rigidity	N • m /arcmin	1,2,3	3-729	0.8	2.0	7.0
Max. Radial Load F _{2rB} ¹	N	1,2,3	3-729	540	1040	1700
Max. Axial Load F _{2aB} ¹	N	1,2,3	3-729	360	720	735
Operating Temp.	°C	1,2,3	3-729		-10 °C ~+90 °C	
Service Life	hr	1,2,3	3-729	20,000 (10,000/Continuous operation)		
Efficiency	1		3-10		≧ 95%	
	%	2	15-81		≧ 90%	
		3	125-729		≧ 85%	
Weight	kg 2	1	3-10	0.5	1.2	3.1
		2	15-81	0.7	1.7/1.5	4.7/3.6
		3	125-729	0.9	2.0/1.8	5.3/4.0
Mounting Position	-	1,2,3	3-729		Any direction	
Noise Level ²	dBA/1m	1,2,3	3-729	≦ 62	≦ 64	≦ 67
Protection Class	-	1,2,3	3-729		IP64	
Lubrication	center at 100	1,2,3	3-729	3-729 Synthetic Lubricant		

 $^{^{\}star}$ 1. Applied to the output shaft center at 100 rpm.

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

^{* 2.} Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (if nominal input speed is higher than 3000 rpm) with no load.

^{* 3.} The inertia value of input shaft is same as that of the PAE series.

^{*} The above figures/specifications are subject to change without prior notice.