

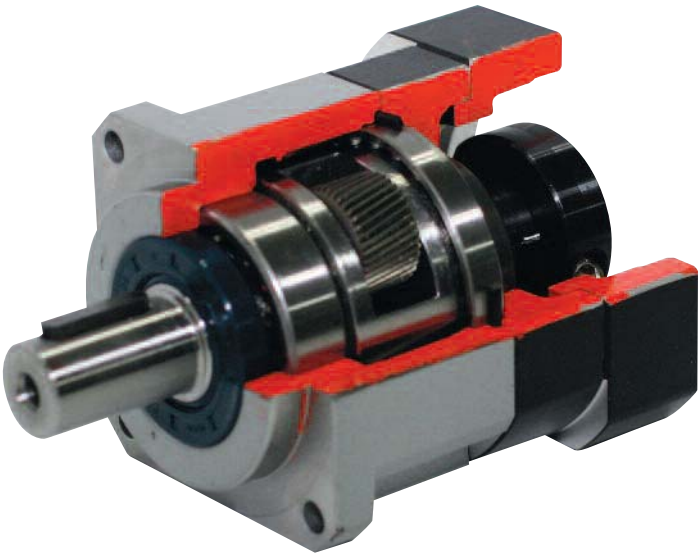


# PGX – H Type (Standard Helical Gear Type)

Single     Stage Backlash  $\leq$  10 arc-min  
Double    Stage Backlash  $\leq$  12 arc-min

## Indication of Model Numbers

PGX	90	–	H	10	–	Key Type
Type	Model		Helical Gear	Ratio		Output Shaft Keyway
PGX	44 62 90 120 142			Single Stage 3, 4, 5, 6, 7, 8, 9, 10  Double Stage 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100		<div>□    무표기 Standard (Keyway)</div> <div>N : 표 기 Solid Output Shaft (No Keyway)</div>

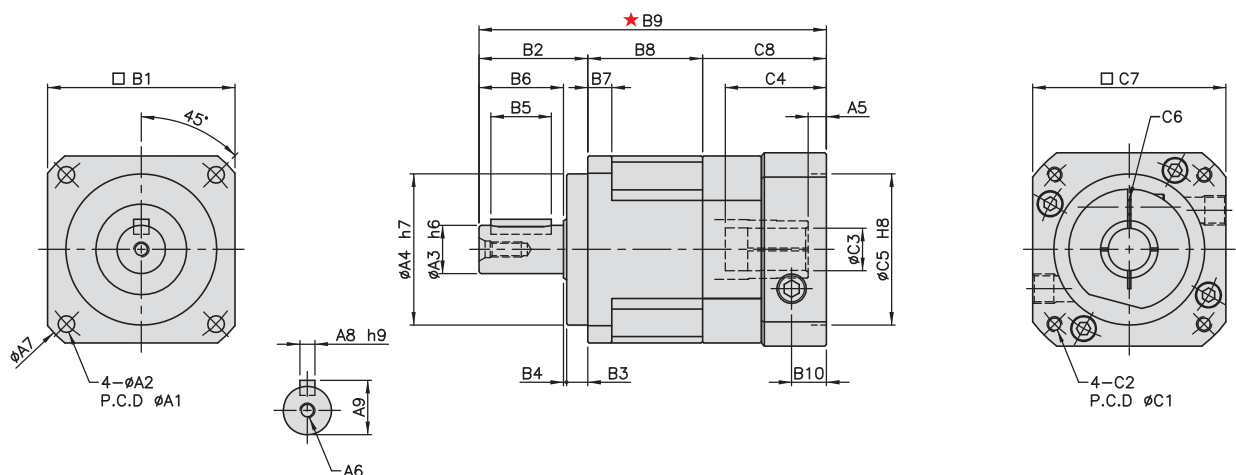




# MODEL : PGX (44~142) - H

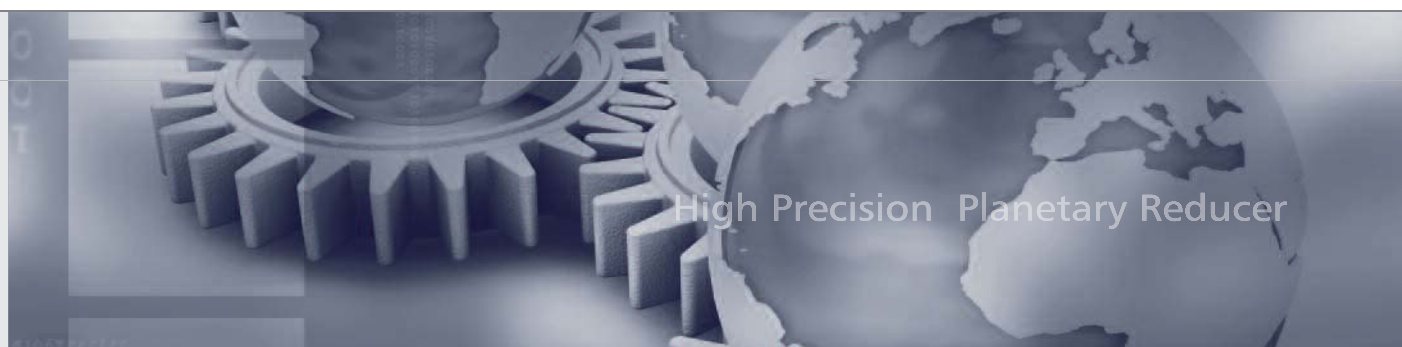
## Single Reduction

RATIO : 3.4.5.6.7.8.9.10



unit:mm

	Model code	44	62	90	120	142
A	A1	50	70	100	130	165
	A2	4.5	5.5	6.8	9	11
	A3	13	16	22	32	40
	A4	35	50	80	110	130
	A5	5	6	9	10	10
	A6	M4×P0.7	M5×P0.8	M8×P1.25	M10×P1.5	M12×P1.75
	A7	58	80	116	148	186
	A8	5	5	6	10	12
	A9	15	18	24.5	35	43
B	B1	44	62	90	120	142
	B2	26	36	48	65	92
	B3	5	7	10	12	15
	B4	1	1	2	3	3
	B5	15	20	30	40	65
	B6	20	28	36	50	74
	B7	5	8	10	12	15
	B8	31.5	38	49	61	70
	B9	95	115,123	164.5	205	260.5
	B10	9	11.5	16	19.5	20
C	C1	46, 60, 63, 70	46, 70, 75, 90	70, 90, 100 115, 145,165	90, 100 115, 145, 165	145, 165, 200, 215
	C2	M3, M4, M5	M4, M5, M6 6.35, 8, 11	M4, M5, M6, M8	M6, M8, M10	M8, M10, M12
	C3	5, 6.35, 8,(9, 11)	12, 14,(16, 19)	14, 16, 19,(22, 24)	19, 22, 24, 28,(32)	32, 35,(38)
	C4	26	33.5, 41.5	59	67	84.5
	C5	30, 40, 50	50, 60, 70	50, 70, 80 95, 110,130	70, 80 95, 110,130	110, 114.3, 130, 180
	C6	M3	M4, M5	M6	M8	M10
	C7	46, 55, 60, 76	64, 70, 80	92, 110, 130, 142	130, 150	146, 150, 180, 190
	C8	37.5	41, 49	67.5	79	98.5



## ■ Mass Moments of Inertia (kg · cm<sup>2</sup>)

Ratio	44	62	90	120	142
3	0.03	0.16	0.61	3.25	9.21
4	0.03	0.14	0.48	2.74	7.54
5	0.03	0.13	0.47	2.71	7.42
6	0.03	0.13	0.45	2.65	7.25
7	0.03	0.13	0.45	2.62	7.14
8	0.03	0.13	0.44	2.58	7.07
9	0.03	0.13	0.44	2.57	7.04
10	0.03	0.13	0.44	2.57	7.03

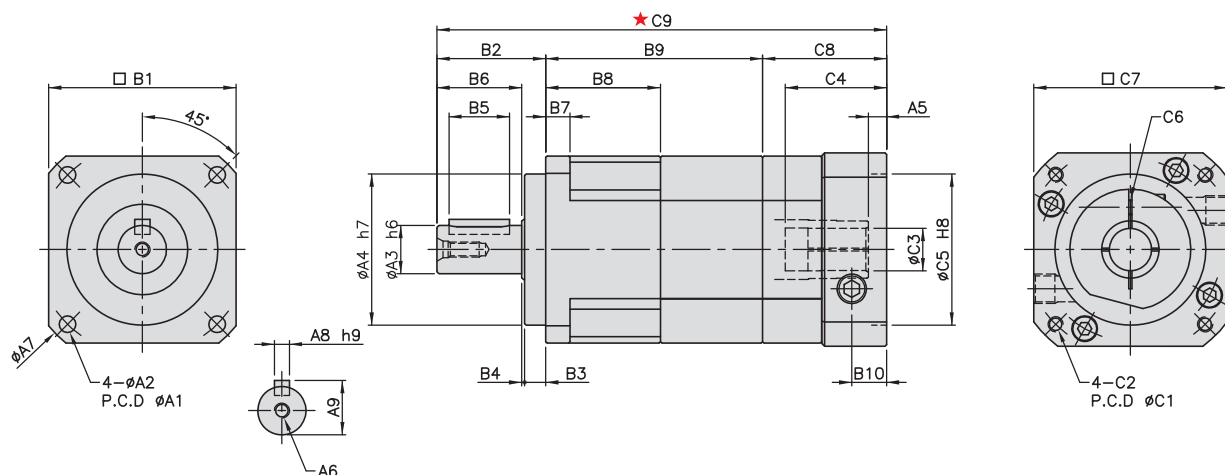
Model No.	Unit	Ratio	44	62	90	120	142
Rated Output Torque	Nm	3	17	54	145	301	553
		4	15	48	128	269	491
		5	14	45	132	278	510
		6	13	41	125	252	466
		7	13	41	123	258	473
		8	12	39	115	241	442
		9	11	40	120	227	412
		10	12	40	116	246	452
Max. Output Torque	Nm	3~10	3 Times of Rated Output Torque				
Rated Input Speed	rpm	3~10	3,000	3,000	3,000	3,000	3,000
Max. Input Speed	Nm	3~10	6,000	6,000	6,000	5,000	5,000
Torsional Rigidity	Nm/arc min	3~10	3	6	14	27	60
Max. Radial Force	N	3~10	360	1,120	3,040	6,460	8,830
Max. Axial Force	N	3~10	180	560	1,520	3,230	4,410
Service Life	hr	3~10	10,000 (Continuous Operation 4,000 hrs)				
Efficiency	%	3~10	≥97%				
Operating Temperature	℃	3~10	-25 ℃ ~ +90 ℃				
Lubrication		3~10	VIGO GREASE RE#0				
Degree of Gearbox Protection		3~10	IP65				
Mounting Position		3~10	Any				
Noise Level	dB	3~10	≤56	≤60	≤60	≤63	≤65
Weight ±3%	Kg	3~10	0.58	1.37	3.9	8	14.1



## MODEL : PGX (44~142) - H

Double Reduction

RATIO : 15.20.25.30.35.40.50.60.70.80.90.100



unit:mm

	Model code	44	62	90	120	142
A	A1	50	70	100	130	165
	A2	4.5	5.5	6.8	9	11
	A3	13	16	22	32	40
	A4	35	50	80	110	130
	A5	5	6	9	10	10
	A6	M4×P0.7	M5×P0.8	M8×P1.25	M10×P1.5	M12×P1.75
	A7	58	80	116	148	186
	A8	5	5	6	10	12
	A9	15	18	24.5	35	43
B	B1	44	62	90	120	142
	B2	26	36	48	65	92
	B3	5	7	10	12	15
	B4	1	1	2	3	3
	B5	15	20	30	40	65
	B6	20	28	36	50	74
	B7	5	8	10	12	15
	B8	31.5	38	49	61	70
	B9	57.5	71.8	92.5	117	136.5
	B10	9	11.5	16	19.5	20
C	C1	46, 60, 63, 70	46, 70, 75, 90	70, 90, 100 115, 145, 165	90, 100 115, 145, 165	145, 165, 200, 215
	C2	M3, M4, M5	M4, M5, M6	M4, M5, M6, M8	M6, M8, M10	M8, M10, M12
	C3	5, 6.35, 8,(9, 11)	6.35, 8, 11, 12, 14,(16, 19)	14, 16, 19,(22, 24)	19, 22, 24, 28,(32)	32, 35,(38)
	C4	26	33.5, 41.5	59	67	84.5
	C5	30, 40, 50	50, 60, 70	50, 70, 80 95, 110, 130	70, 80 95, 110, 130	110, 130 114.3, 180
	C6	M3	M4	M6	M8	M10
	C7	46, 55, 60, 76	64, 70, 80	92, 110, 130, 142	130, 150	146, 180, 190
	C8	37.5	41, 49	67.5	79	98.5
	C9	121	156.8, 148.8	208	261	327

# High Precision Planetary Reducer

## ■ Mass Moments of Inertia (kg · cm<sup>2</sup>)

Ratio	44	62	90	120	142
15	0.03	0.03	0.14	0.46	2.63
20	0.03	0.03	0.14	0.46	2.63
25	0.03	0.03	0.14	0.46	2.63
30	0.03	0.03	0.14	0.46	2.63
35	0.03	0.03	0.14	0.44	2.43
40	0.03	0.03	0.14	0.44	2.43
50	0.03	0.03	0.14	0.44	2.43
60	0.03	0.03	0.14	0.43	2.39
70	0.03	0.03	0.14	0.43	2.39
80	0.03	0.03	0.14	0.43	2.39
90	0.03	0.03	0.14	0.40	2.39
100	0.03	0.03	0.14	0.40	2.39

Model No.	Unit	Ratio	44	62	90	120	142
Rated Output Torque	Nm	15	17	54	145	301	553
		20	15	48	128	269	491
		25	14	45	132	278	510
		30	13	41	125	252	466
		35	13	41	123	258	473
		40	12	39	115	241	442
		50	14	45	132	278	510
		60	13	41	125	252	466
		70	13	41	123	258	473
		80	12	40	115	241	442
		90	11	40	120	227	412
		100	12	40	116	246	452
Max. Output Torque	Nm	15~100	3 Times of Rated Output Torque				
Rated Input Speed	rpm	15~100	3,000	3,000	3,000	3,000	3,000
Max. Input Speed	Nm	15~100	6,000	6,000	6,000	5,000	5,000
Torsional Rigidity	Nm/arc min	15~100	3	6	14	27	60
Max. Radial Force	N	15~100	360	1,120	3,040	6,460	8,830
Max. Axial Force	N	15~100	180	560	1,520	3,230	4,410
Service Life	hr	15~100	10,000 (Continuous Operation 4,000 hrs)				
Efficiency	%	15~100	≥94%				
Operating Temperature	℃	15~100	-25℃ ~ +90℃				
Lubrication		15~100	VIGO GREASE RE#0				
Degree of Gearbox Protection		15~100	IP65				
Mounting Position		15~100	Any				
Noise Level	dB	15~100	≤56	≤60	≤60	≤63	≤65
Weight ±3%	Kg	15~100	0.86	2.1	5.48	12.9	22.8