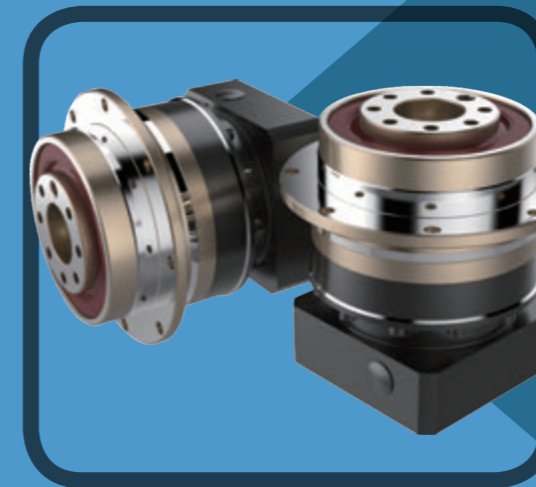
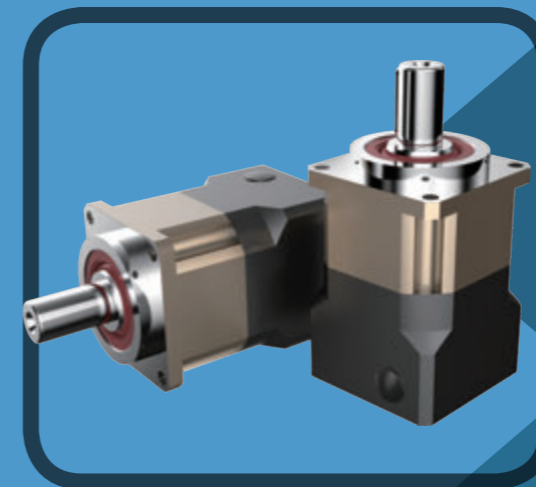



Product Catalogue

Planetary Gearboxes

Help you realize the desire of precision product conception



Sango Automation Limited

 F3, Bld3, Huanrong Tech Park, No. 1 Baima Xianfeng 2nd Road,
Nancheng Street, Dongguan, Guangdong, 523106, China.

 +86 769 82339002 +86 18575155906

 sales@sango-automation.com

 www.sango-automation.com

三工自动化（深圳）有限公司

Sango Automation Limited

www.sango-automation.com

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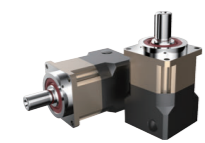
PGL Series



Precision Integrated Double Support

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PGH Series



High Precision Helical Gear

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High Precision Right Angle Helical Gear

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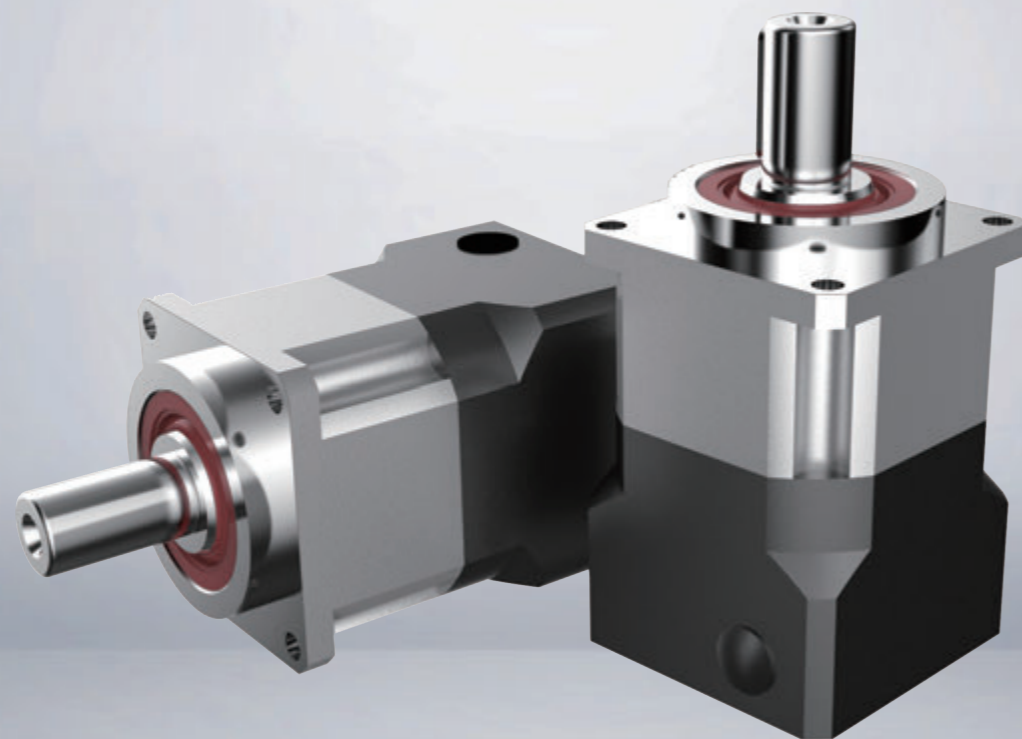




PGL Series

Precision Integrated Double Support

(精密一体式双支撑) 系列

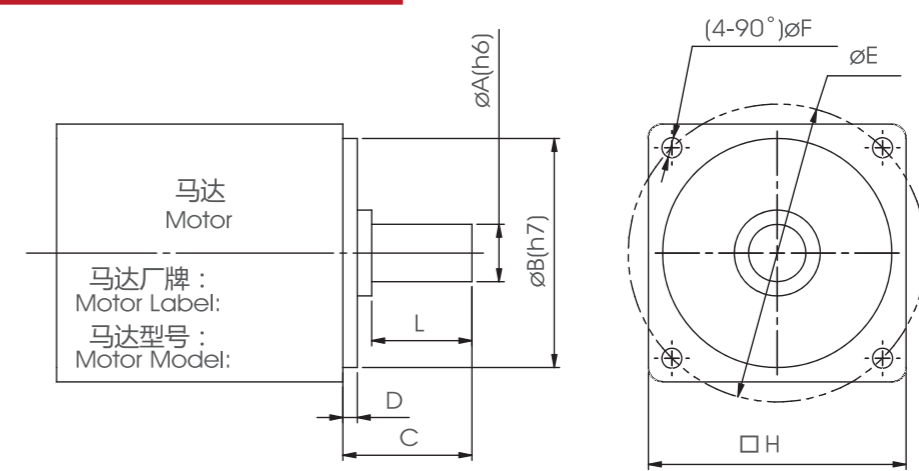


型号说明 / ORDER CODE

PGL060 - 10 - S2 - P2 / Motor

Reducer Size 减速机型式: PGL060、PGL090 PGL115	Output Shaft Type 输出轴型式 S1: Smooth Shaft 平滑光轴 S2: Shaft with Key 附带键轴	马达型号: Motor Model
Ratio 减速比: L1 单段: 3, 4, 5, 7, 9, 10 L2 双段: 12, 15, 20, 25, 30, 35, 40, 50, 70, 90, 100	Backlash: 超精密背隙: P0 精密背隙: P1 标准背隙: P2	Backlash: Ultraprecise Backlash: P0 Precise Backlash: P1 Standard Backlash: P2

FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
$\phi A(h6)$	$\phi B(h7)$	C	D	ϕE	ϕF	$\square H$	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

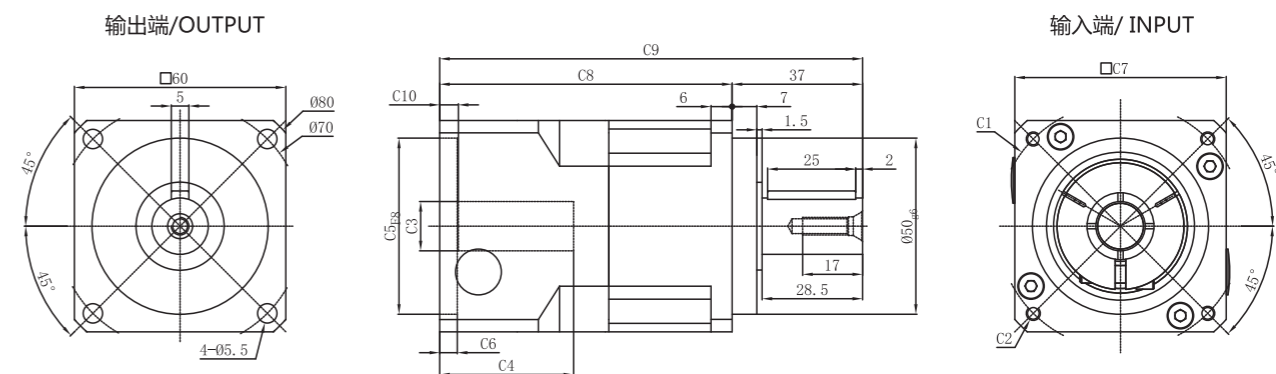
规格Specifications	单位unit	节数Stage	减速比Ratio	PGL060	PGL090	PGL115
额定输出力矩T2N Nominal Output Torque	N.m	1	3	44.2	95.2	283
			4	35.9	74.6	249
			5	43.0	95.2	238
			7	36.0	85.6	219
			9	28.7	85.0	210
		2	10	25.0	75.0	210
			12	44.2	95.2	283
			15	44.2	95.2	283
			20	35.9	74.6	249
			25	43.0	95.2	238
			30	43.0	95.2	238
			35	43.0	95.2	238
			40	43.0	95.2	238
			50	43.0	95.2	238
70	36.0	85.6	219			
90	28.7	80.0	210			
100	25.0	75.0	210			
急停力矩T2NOT Emergency Stop Torque	N.m	1、2	3 ~ 100	3倍额定输出力矩 (3.0 times of Nominal Output Torque)		
额定输入转速n1 Nominal Input Speed	rpm	1、2	3 ~ 100	3000	3000	2500
最大输入转速n1max Max.Input Speed	rpm	1、2	3 ~ 100	6000	6000	5000
超精密背隙P0 Ultraprecise Backlash	arcmin	1	-	-	-	-
		2	-	-	-	-
精密背隙P1 Precise Backlash	arcmin	1	-	-	-	-
		2	-	-	-	-
标准背隙P2 Standard Backlash	arcmin	1	3 ~ 10	≤9	≤9	≤7
		2	12 ~ 100	≤12	≤12	≤9
扭转刚性 Torsional Rigidity	N.m / arcmin	1、2	3 ~ 100	2.8	7.5	15.5
容许径向力F2rB Max.Radial Load	N	1、2	3 ~ 100	960	1630	3380
容许轴向力F2aB Max.Axial Load	N	1、2	3 ~ 100	900	1420	2930
使用温度 Operating Temp	° C	1、2	3 ~ 100	-10° C ~ +90° C		
使用寿命 Service Life	hr	1、2	3 ~ 100	20,000 (10,000/连续运转continui operatong)		
效率η Efficiency	%	1	3 ~ 10	≥96%		
		2	12 ~ 100	≥92%		
重量 Weight	kg	1	3 ~ 10	1.2	3.2	7.5
		2	12 ~ 100	1.9	5.3	12.0
安装方向 mounting Position		1、2	3 ~ 100	任意方向 Any direction		
噪音值 Noise Level	dBA/1m	1、2	3 ~ 100	62	65	65
防护等级 Protection Class		1、2	3 ~ 100	Ip65		
润滑 Lubrication		1、2	3 ~ 100	全合成润滑脂油 Synthetic Lubricant		

减速机转动惯量

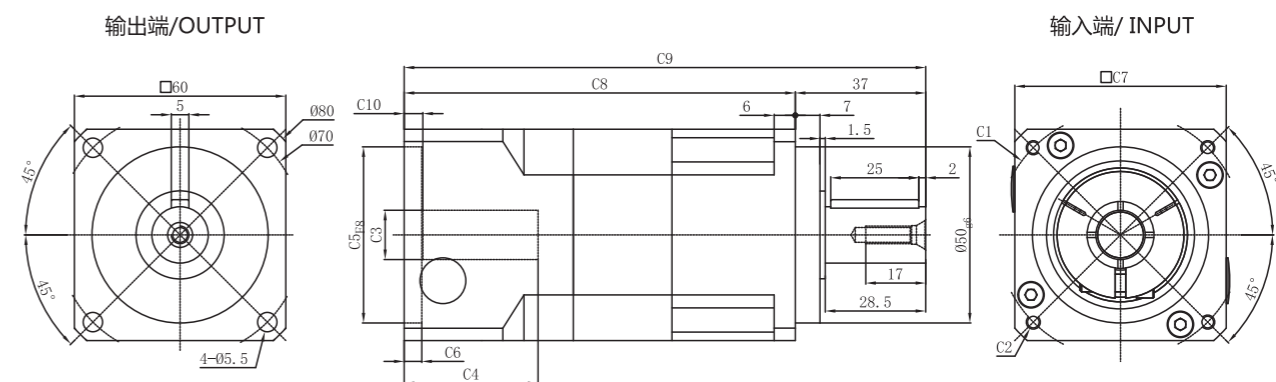
规格Specifications	单位unit	节数Stage	减速比Ratio	PGL060	PGL090	PGL115
转动惯量J1 Inertia	kg.cm ²	1	3	0.20	0.81	2.20
			4	0.16	0.65	1.80
			5	0.15	0.62	1.61
			7	0.14	0.60	1.55
			9	0.14	0.60	1.53
		2	10	0.14	0.60	1.53
			12	0.15	0.62	1.61
			15	0.15	0.62	1.61
			20	0.15	0.62	1.61
			25	0.15	0.62	1.61
			30	0.14	0.60	1.55
			35	0.14	0.60	1.55
			40	0.14	0.60	1.55
			50	0.14	0.60	1.53
70	0.14	0.60	1.53			
90	0.14	0.60	1.53			
100	0.14	0.60	1.53			

外形尺寸图表 / OUTLINE DIMENSION SHEET

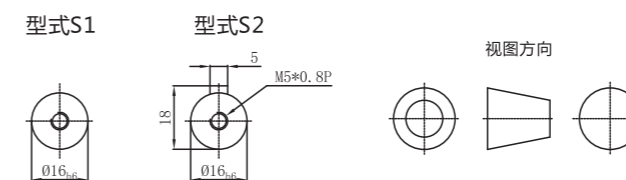
PGL060-L1



PGL060-L2



输出轴径/Output Diameter



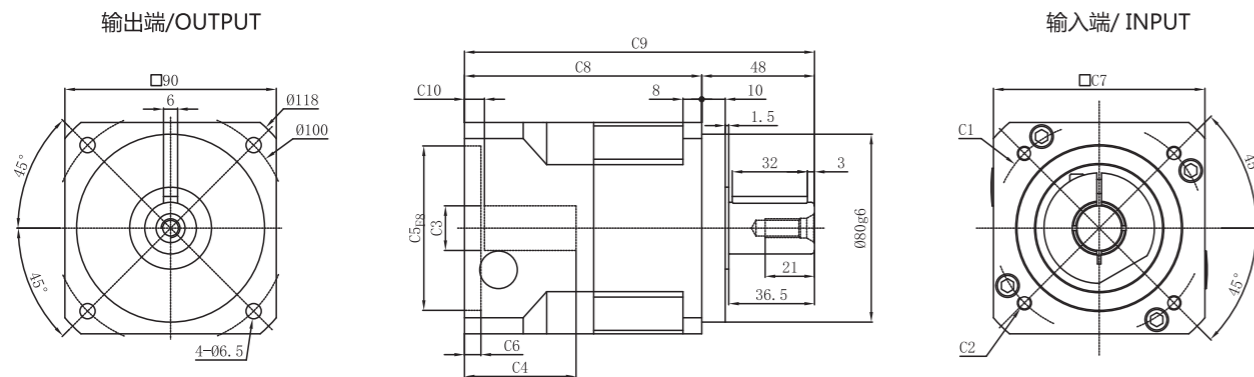
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGL060-L1	φ46	4-M4x12,4-M5x12	≤ φ8	44	φ30	9	60	91	126	10.3
	φ66.7	4-M4x12	≤ φ8	38	φ38.1	3	60	83	120	4.3
	φ70	4-M4x12,4-M5x12	≤ φ14	38	φ50	5	60	83	120	5.3
	φ75	4-M4x12,4-M5x12	≤ φ14	38.5	φ60	5	66	83.5	120	5.5
	φ90	4-M5x15,4-M6x15	≤ φ19	44	φ70	7	80	89	128	11
PGL060-L2	φ100	4-M6x15	≤ φ19	44	φ80	7	90	89	128	11
	φ46	4-M4x12, 4-M5x12	≤ φ8	44	φ30	9	60	117	154	10.3
	φ66.7	4-M4x12	≤ φ8	38	φ38.1	3	60	111	148	4.3
	φ70	4-M4x12,4-M5x12	≤ φ14	38	φ50	5	60	111	148	5.3
	φ75	4-M4x10,4-M5x12	≤ φ14	38.5	φ60	5	66	111.5	148	5.5
φ90	4-M5x15,4-M6x15	≤ φ19	44	φ70	7	80	117	156	11	
φ100	4-M6x15	≤ φ19	44	φ80	7	90	117	156	11	

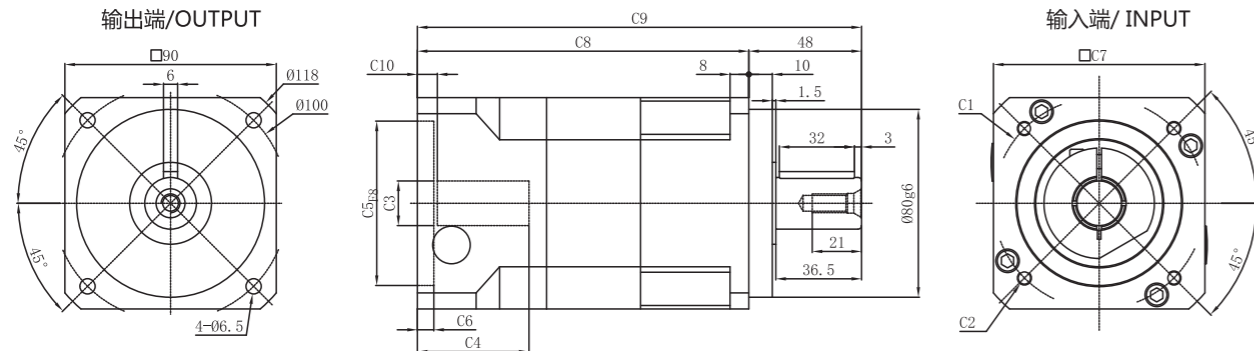
* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

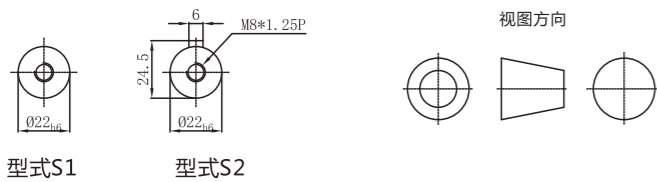
PGL090-L1



PGL090-L2



输出轴径/Output Diameter



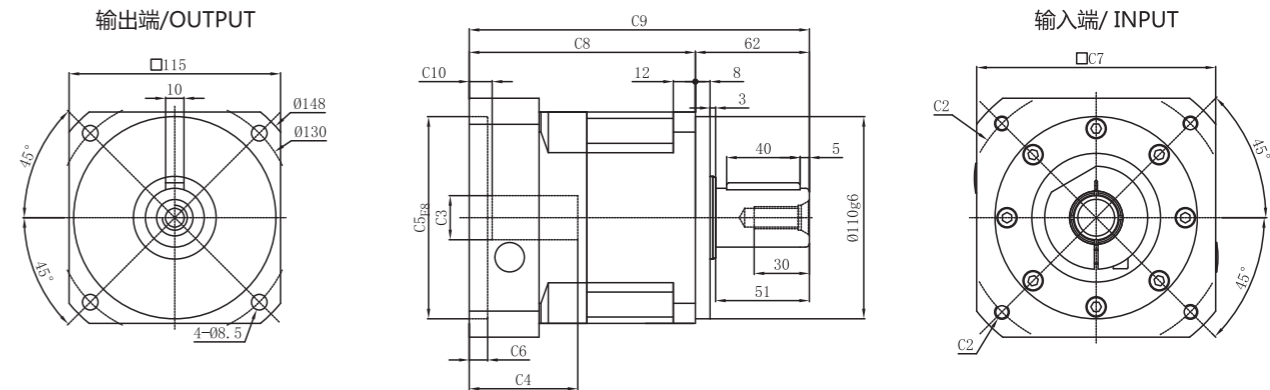
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGL090-L1	φ 70	4-M4x12,4-M5x12	≦ φ 14	47.5	φ 50	4	90	101	149	6
	φ 75	4-M4x12,4-M5x12	≦ φ 14	47.5	φ 60	5.5	90	101	149	6
	φ 90	4-M5x15,4-M6x15	≦ φ 19	47.5	φ 70	7	90	101	149	7
	φ 98.4	4-M6x15	≦ φ 14	47.5	φ 73	7	90	101	149	7
	φ 98.4	4-M6x15	≦ φ 14	47.5	φ 60	7	90	101	149	7
	φ 100	4-M6x15	≦ φ 19	47.5	φ 80	7	90	101	149	7
	φ 115	4-M8x20	≦ φ 24	61.5	φ 95	10	100	113	161	12.5
	φ 130	4-M8x20	≦ φ 24	61.5	φ 95	10	115	113	161	12.5
	φ 145	4-M8x20	≦ φ 24	61.5	φ 110	10	130	113	161	12.5
	φ 145	4-M8x20	≦ φ 24	70.5	φ 110	10	130	122	170	21.5
PGL090-L2	φ 70	4-M4x12,4-M5x12	≦ φ 14	47.5	φ 50	4	90	141	189	6
	φ 75	4-M4x12,4-M5x12	≦ φ 14	47.5	φ 60	5.5	90	141	189	6
	φ 90	4-M5x15,4-M6x15	≦ φ 19	47.5	φ 70	7	90	141	189	7
	φ 98.4	4-M6x15	≦ φ 14	47.5	φ 73	7	90	141	189	7
	φ 98.4	4-M6x15	≦ φ 14	47.5	φ 60	7	90	141	189	7
	φ 100	4-M6x15	≦ φ 19	47.5	φ 80	7	90	141	189	7
	φ 115	4-M8x20	≦ φ 24	61.5	φ 95	10	100	153	201	12.5
	φ 130	4-M8x20	≦ φ 24	61.5	φ 95	10	115	153	161	12.5
	φ 145	4-M8x20	≦ φ 24	61.5	φ 110	10	130	153	201	12.5
	φ 145	4-M8x20	≦ φ 24	70.5	φ 110	10	130	162	210	21.5

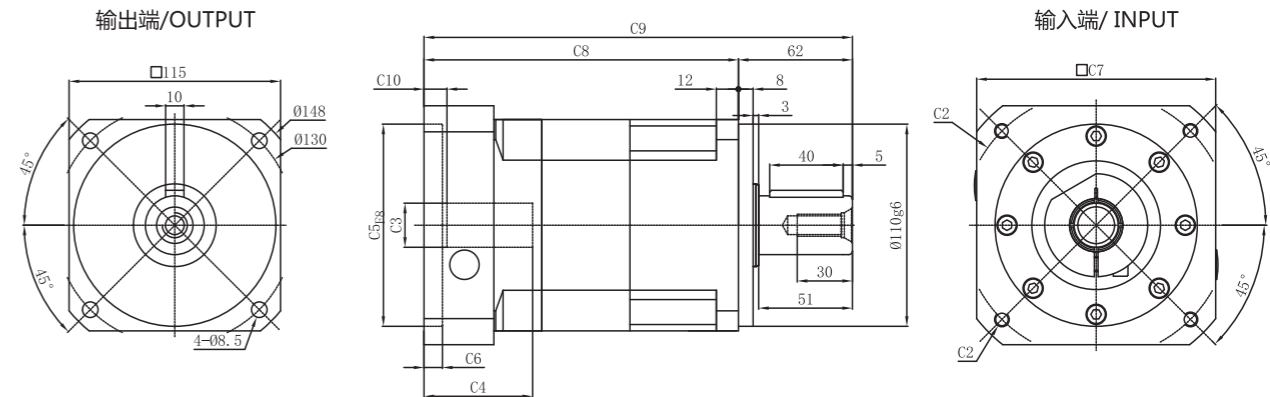
* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

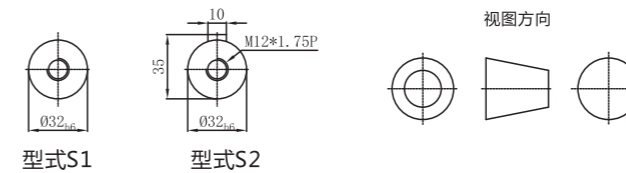
PGL115-L1



PGL115-L2



输出轴径/Output Diameter



*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGL115-L1	φ 90	4-M5x15,4-M6x15	≦ φ 19	48.5	φ 70	7	115	112.5	174.5	7
	φ 100	4-M6x15	≦ φ 19	48.5	φ 80	7	115	112.5	174.5	7
	φ 115	4-M8x20	≦ φ 24	58	φ 95	10	115	122	184	11.5
	φ 130	4-M8x20	≦ φ 24	58	φ 95	10	115	122	184	11.5
	φ 132	4-M8x20	≦ φ 24	58	φ 85	10	115	122	184	11.5
	φ 145	4-M8x20	≦ φ 24	59	φ 110	10	130	123	185	12.5
	φ 145	4-M8x20	≦ φ 24	68	φ 110	10	130	132	194	21.5
	φ 165	4-M10x30	≦ φ 32	80	φ 130	10	142	148.5	210.5	18.5
	φ 200	4-M12x35	≦ φ 35	82	φ 114.3	8	180	150.5	212.5	20.5
	φ 215	4-M14x35	≦ φ 38	82	φ 180	8	190	150.5	212.5	20.5
PGL115-L2	φ 90	4-M5x15,4-M6x15	≦ φ 19	48.5	φ 70	7	115	160.5	174.5	7
	φ 100	4-M6x15	≦ φ 19	48.5	φ 80	7	115	160.5	174.5	7
	φ 115	4-M8x20	≦ φ 24	58	φ 95	10	115	170	184	11.5
	φ 130	4-M8x20	≦ φ 24	58	φ 95	10	115	170	184	11.5
	φ 132	4-M8x20	≦ φ 24	58	φ 85	10	115	170	184	11.5
	φ 145	4-M8x20	≦ φ 24	59	φ 110	10	130	171	185	12.5
	φ 145	4-M8x20	≦ φ 24	68	φ 110	10	130	180	194	21.5
	φ 165	4-M10x30	≦ φ 32	80	φ 130	10	142	196.5	258.5	18.5
	φ 200	4-M12x35	≦ φ 35	82	φ 114.3	8	180	198.5	260.5	20.5
	φ 215	4-M14x35	≦ φ 38	82	φ 180	8	190	198.5	260.5	20.5

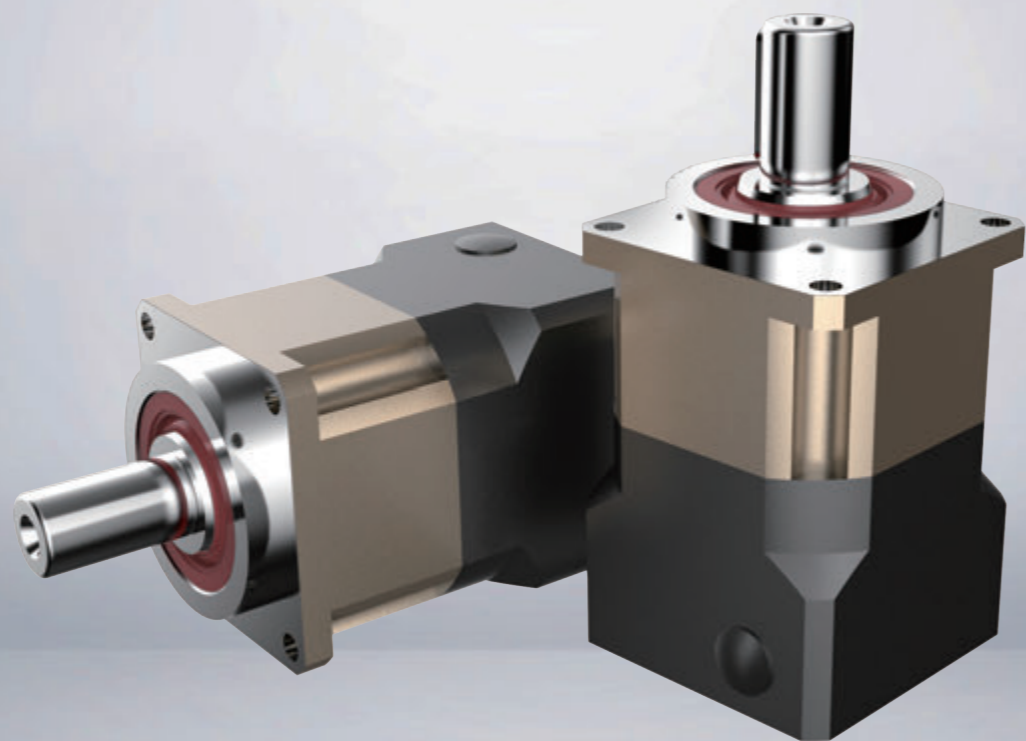
* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.



PGH Series

High Precision Helical Gear

(高精密斜齿) 系列

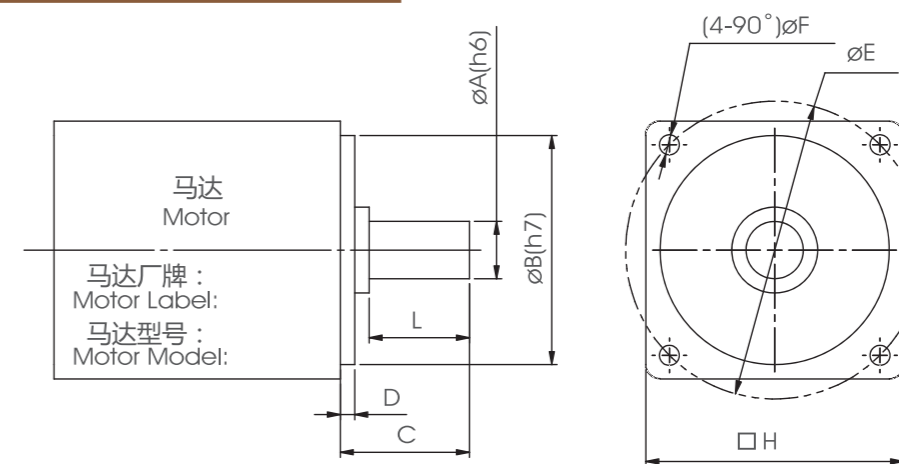


型号说明 / ORDER CODE

PGH060 - 10 - S2 - P2 / Motor

Reducer Size 减速机型式： PGH042、PGH060、 PGH090、PGH115、 PGH142、PGH180 PGH220	Output Shaft Type 输出轴型式 S1: Smooth Shaft 平滑光轴 S2: Shaft with Key 附带键轴	马达型号： Motor Model
Ratio 减速比： L1 单段：3、4、5、7、9、10 L2 双段：12、15、20、25、30、35、40、50、70、 90、100	Backlash: 超精密背隙：P0 精密背隙：P1 标准背隙：P2	Backlash: Ultraprecise Backlash: P0 Precise Backlash: P1 Standard Backlash: P2

FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
$\varnothing A(h6)$	$\varnothing B(h7)$	C	D	$\varnothing E$	$\varnothing F$	$\square H$	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

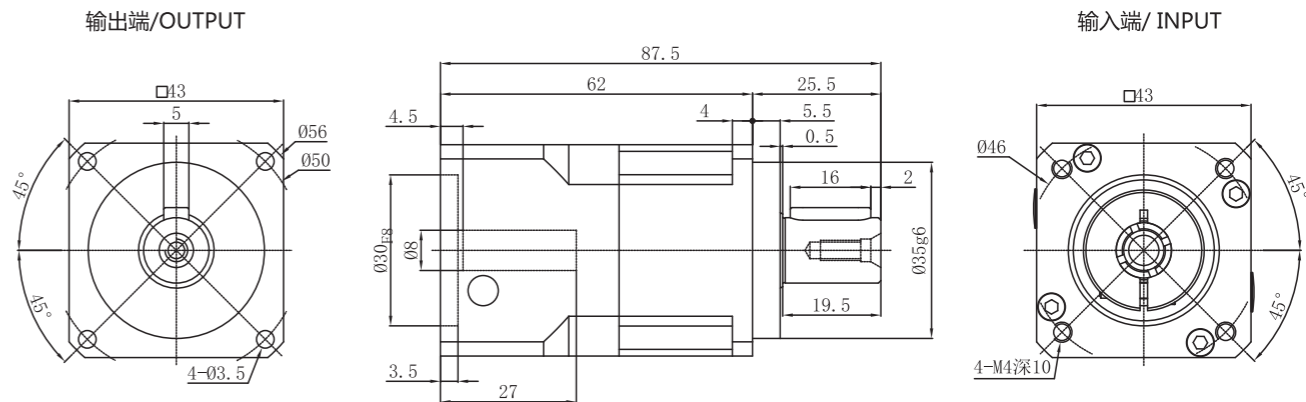
规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGH042	PGH060	PGH090	PGH115	PGH142	PGH180	PGH220
额定输出转矩 T2N Nominal Output Torque	N.m	1	3	19	53	145	290	520	950	1550
			4	20	55	150	300	550	1000	1650
			5	17	54	140	290	530	1050	1700
			7	14	44	125	270	450	960	1500
			9	11	37	95	220	360	-	-
			10	11	37	95	220	360	620	1250
		2	12	19	53	145	290	520	950	1550
			15	19	53	145	290	520	950	1550
			20	20	55	150	300	550	1000	1650
			25	17	54	140	290	530	1050	1700
			30	17	54	140	290	530	1050	1700
			35	17	54	140	290	530	1050	1700
			40	20	55	150	300	550	1000	1650
			50	17	54	140	290	530	1050	1700
			70	14	44	125	270	450	960	1500
			90	11	37	95	220	360	-	-
			100	11	37	95	220	360	800	1250
			急停力矩 T2NOT Emergency Stop Torque	N.m	1, 2	3 ~ 100	3倍额定输出力矩 (3.0 times of Nominal Output Torque)			
额定输入转速 n1 Nominal Input Speed	rpm	1, 2	3 ~ 100	5000	5000	4000	4000	3000	3000	2000
最大输入转速 n1max Max. Input Speed	rpm	1, 2	3 ~ 100	10000	10000	8000	8000	6000	6000	4000
超精密背隙 P0 Ultraprecise Backlash	arcmin	1	3 ~ 10	≤2	≤2	≤2	≤1	≤1	≤1	≤1
精密背隙 P1 Precise Backlash	arcmin	2	12 ~ 100	≤4	≤4	≤4	≤3	≤3	≤3	≤3
		1	3 ~ 10	≤4	≤4	≤4	≤3	≤3	≤3	≤3
标准背隙 P2 Standard Backlash	arcmin	2	12 ~ 100	≤6	≤6	≤6	≤5	≤5	≤5	≤5
		1	3 ~ 10	-	-	-	-	-	-	-
扭转刚性 Torsional Rigidity	N.m / arcmin	1, 2	3 ~ 100	2.5	6	12	23	45	148	220
容许径向力 F2rB Max. Radial Load	N	1, 2	3 ~ 100	515	1010	1780	3420	5380	8330	11120
容许轴向力 F2aB Max. Axial Load	N	1, 2	3 ~ 100	410	600	1500	2650	4670	6460	8560
使用温度 Operating Temp	°C	1, 2	3 ~ 100	-10° C ~ +90° C						
使用寿命 Service Life	hr	1, 2	3 ~ 100	20,000 (10,000/连续运转continui operationg)						
效率 η Efficiency	%	1	3 ~ 10	≥97%						
		2	12 ~ 100	≥94%						
重量 Weight	kg	1	3 ~ 10	0.6	1.3	3.5	7.8	16.1	30.0	58.0
		2	12 ~ 100	0.9	2.0	5.6	9.5	19.0	42.0	65.0
安装方向 mounting Position	-	1, 2	3 ~ 100	任意方向 Any direction						
噪音值 Noise Level	dBA/1m	1, 2	3 ~ 100	56	58	60	63	65	67	70
防护等级 Protection Class	-	1, 2	3 ~ 100	Ip65						
润滑 Lubrication	-	1, 2	3 ~ 100	全合成润滑脂油 Synthetic Lubricant						

减速机转动惯量

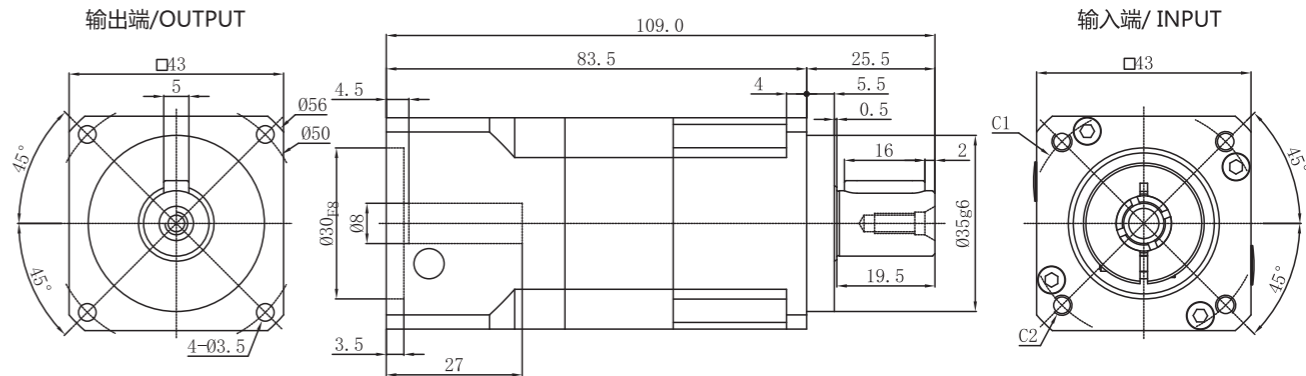
规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGH042	PGH060	PGH090	PGH115	PGH142	PGH180	PGH220
转动惯量 J1 Inertia	kg.cm ²	1	3	0.03	0.23	0.97	2.35	10.00	28.90	69.63
			4	0.02	0.18	0.67	1.66	7.17	24.00	54.25
			5	0.02	0.17	0.65	1.50	6.52	23.27	53.30
			7	0.02	0.14	0.60	1.45	6.17	22.42	51.00
			9	0.02	0.14	0.58	1.41	6.10	-	-
			10	0.02	0.14	0.58	1.41	6.10	22.50	50.62
		2	12	0.02	0.17	0.65	1.50	6.52	23.27	53.30
			15	0.02	0.17	0.65	1.50	6.52	24.27	54.37
			20	0.02	0.17	0.65	1.50	6.52	23.27	53.30
			25	0.02	0.17	0.65	1.50	6.52	24.27	54.37
			30	0.02	0.14	0.60	1.45	6.52	23.27	53.30
			35	0.02	0.14	0.60	1.45	6.52	24.27	54.37
			40	0.02	0.14	0.60	1.45	6.52	23.27	53.30
			50	0.02	0.14	0.58	1.41	6.10	22.50	52.45
			70	0.02	0.14	0.58	1.41	6.10	22.50	52.45
			90	0.02	0.14	0.58	1.41	6.10	-	-
			100	0.02	0.14	0.58	1.41	6.10	22.50	52.45

外形尺寸图表 / OUTLINE DIMENSION SHEET

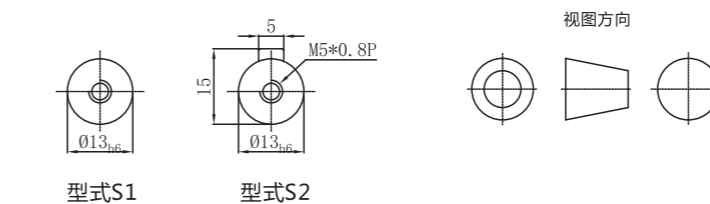
PGH042-L1



PGH042-L2



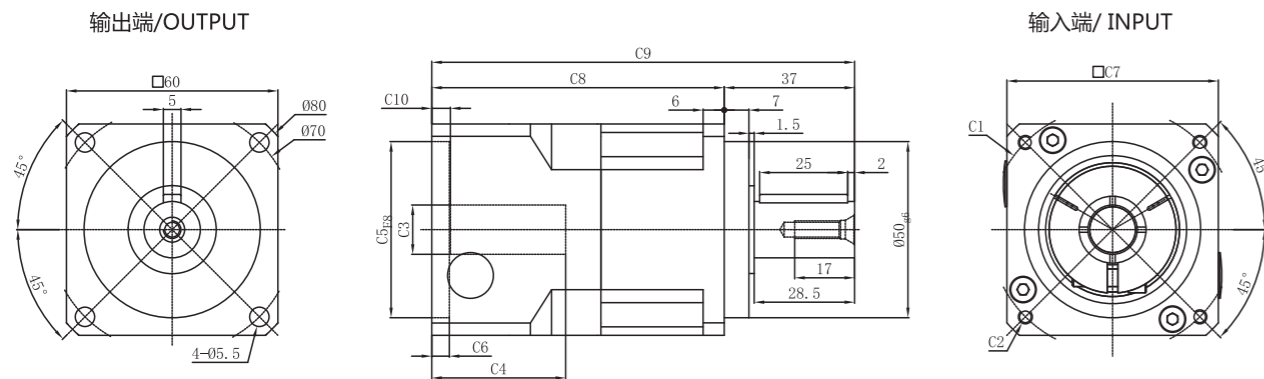
输出轴径/Output Diameter



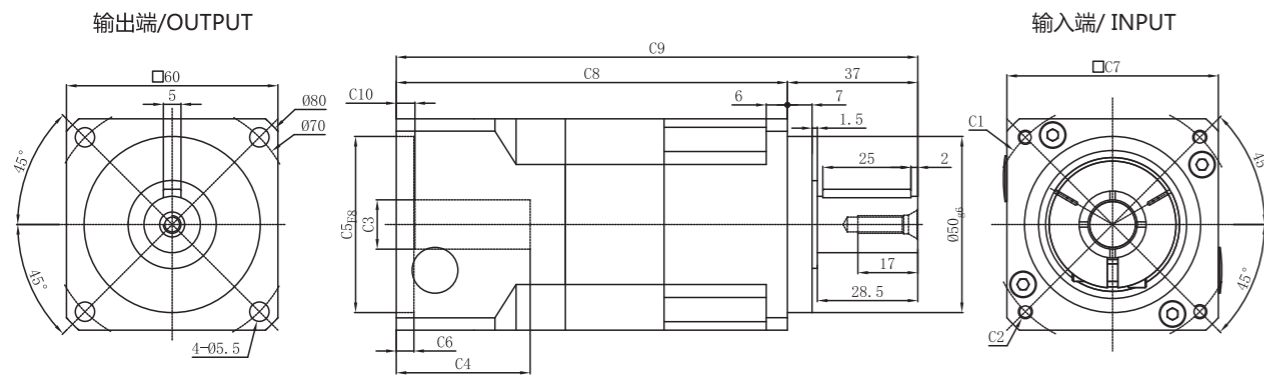
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

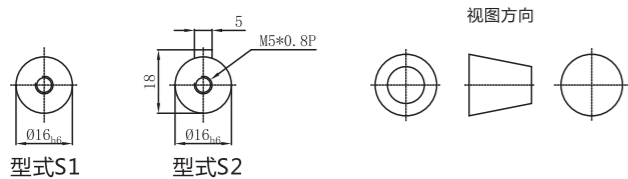
PGH060-L1



PGH060-L2



输出轴径/Output Diameter



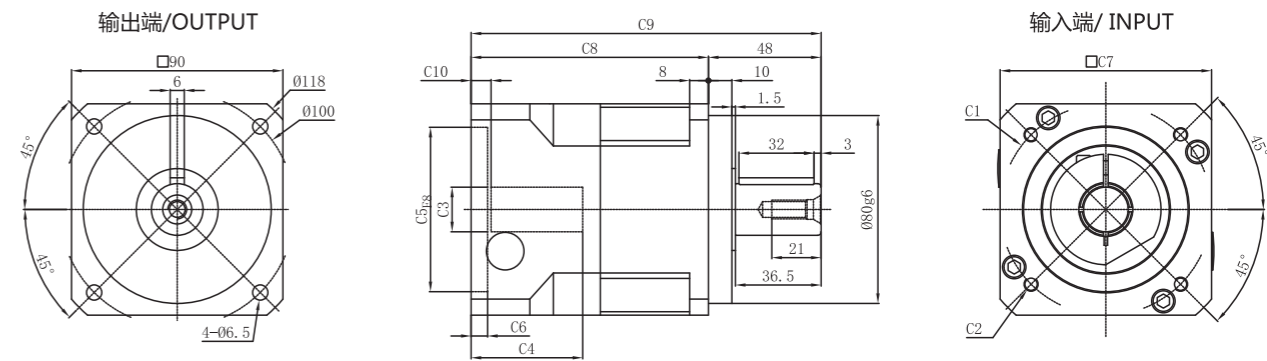
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGH060-L1	φ 46	4-M4x12,4-M5x12	≤ φ 8	44	φ 30	9	60	91	126	10.3
	φ 66.7	4-M4x12	≤ φ 8	38	φ 38.1	3	60	83	120	4.3
	φ 70	4-M4x12,4-M5x12	≤ φ 14	38	φ 50	5	60	83	120	5.3
	φ 75	4-M4x12,4-M5x12	≤ φ 14	38.5	φ 60	5	66	83.5	120	5.5
PGH060-L2	φ 90	4-M5x15,4-M6x15	≤ φ 19	44	φ 70	7	80	89	128	11
	φ 100	4-M6x15	≤ φ 19	44	φ 80	7	90	89	128	11
	φ 46	4-M4x12, 4-M5x12	≤ φ 8	44	φ 30	9	60	117	154	10.3
	φ 66.7	4-M4x12	≤ φ 8	38	φ 38.1	3	60	111	148	4.3
	φ 70	4-M4x12,4-M5x12	≤ φ 14	38	φ 50	5	60	111	148	5.3
	φ 75	4-M4x10,4-M5x12	≤ φ 14	38.5	φ 60	5	66	111.5	148	5.5
φ 90	4-M5x15,4-M6x15	≤ φ 19	44	φ 70	7	80	117	156	11	
φ 100	4-M6x15	≤ φ 19	44	φ 80	7	90	117	156	11	

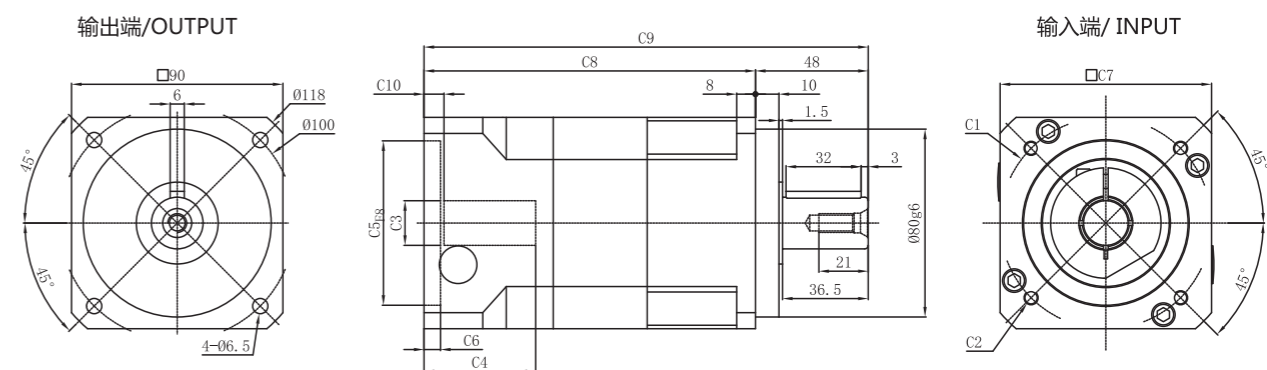
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

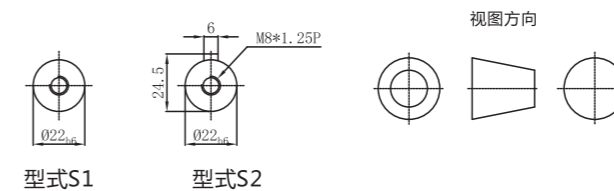
PGH090-L1



PGH090-L2



输出轴径/Output Diameter



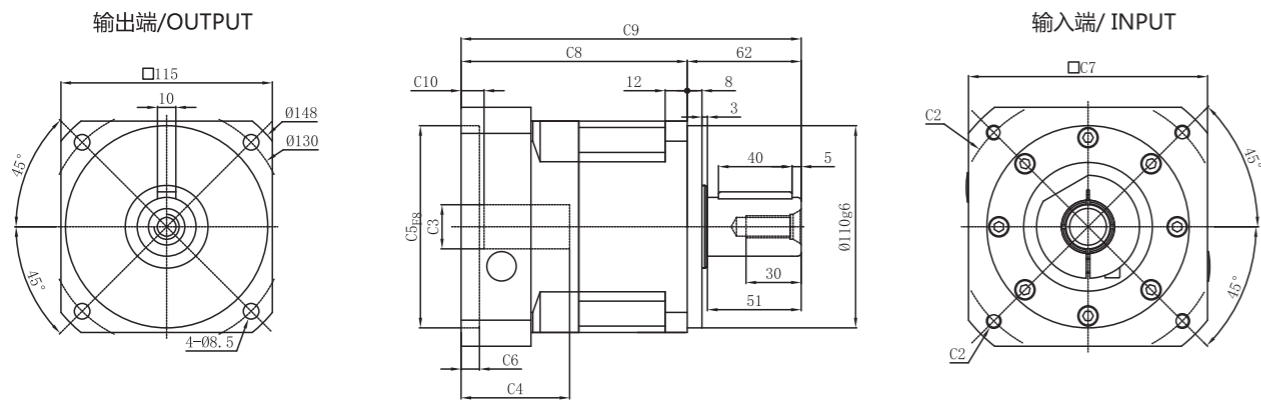
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGH090-L1	φ 70	4-M4x12,4-M5x12	≤ φ 14	47.5	φ 50	4	90	101	149	6
	φ 75	4-M4x12,4-M5x12	≤ φ 14	47.5	φ 60	5.5	90	101	149	6
	φ 90	4-M5x15,4-M6x15	≤ φ 19	47.5	φ 70	7	90	101	149	7
	φ 98.4	4-M6x15	≤ φ 14	47.5	φ 73	7	90	101	149	7
	φ 100	4-M6x15	≤ φ 19	47.5	φ 80	7	90	101	149	7
	φ 115	4-M8x20	≤ φ 24	61.5	φ 95	10	100	113	161	12.5
	φ 130	4-M8x20	≤ φ 24	61.5	φ 95	10	115	113	161	12.5
	φ 145	4-M8x20	≤ φ 24	61.5	φ 110	10	130	113	161	12.5
	φ 145	4-M8x20	≤ φ 24	70.5	φ 110	10	130	122	170	21.5
	PGH090-L2	φ 70	4-M4x12,4-M5x12	≤ φ 14	47.5	φ 50	4	90	141	189
φ 75		4-M4x12,4-M5x12	≤ φ 14	47.5	φ 60	5.5	90	141	189	6
φ 90		4-M5x15,4-M6x15	≤ φ 19	47.5	φ 70	7	90	141	189	7
φ 98.4		4-M6x15	≤ φ 14	47.5	φ 73	7	90	141	189	7
φ 100		4-M6x15	≤ φ 19	47.5	φ 80	7	90	141	189	7
φ 115		4-M8x20	≤ φ 24	61.5	φ 95	10	100	153	201	12.5
φ 130		4-M8x20	≤ φ 24	61.5	φ 95	10	115	153	201	12.5
φ 145		4-M8x20	≤ φ 24	61.5	φ 110	10	130	153	201	12.5
φ 145		4-M8x20	≤ φ 24	70.5	φ 110	10	130	162	210	21.5

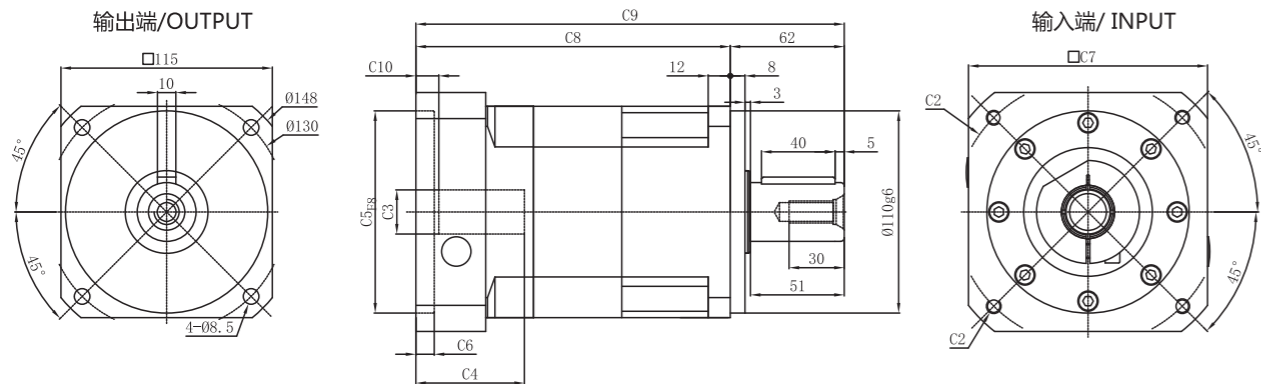
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

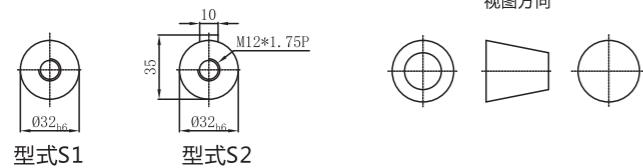
PGH115-L1



PGH115-L2



输出轴径/Output Diameter



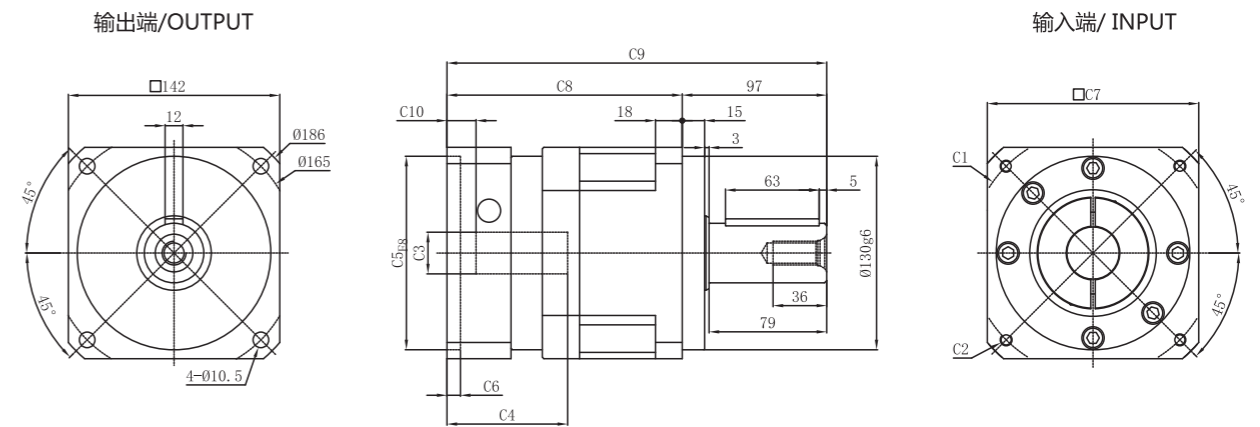
*输入马达连接板之尺寸,可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGH115-L1	φ 90	4-M5x15,4-M6x15	≤ φ 19	48.5	φ 70	7	115	112.5	174.5	7
	φ 100	4-M6x15	≤ φ 19	48.5	φ 80	7	115	112.5	174.5	7
	φ 115	4-M8x20	≤ φ 24	58	φ 95	10	115	122	184	11.5
	φ 130	4-M8x20	≤ φ 24	58	φ 95	10	115	122	184	11.5
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	123	185	12.5
	φ 145	4-M8x20	≤ φ 24	68	φ 110	10	130	132	194	21.5
	φ 165	4-M10x30	≤ φ 32	80	φ 130	10	142	148.5	210.5	18.5
	φ 200	4-M12x35	≤ φ 35	82	φ 114.3	8	180	150.5	212.5	20.5
φ 215	4-M14x35	≤ φ 38	82	φ 180	8	190	150.5	212.5	20.5	
PGH115-L2	φ 90	4-M5x15,4-M6x15	≤ φ 19	48.5	φ 70	7	115	160.5	174.5	7
	φ 100	4-M6x15	≤ φ 19	48.5	φ 80	7	115	160.5	174.5	7
	φ 115	4-M8x20	≤ φ 24	58	φ 95	10	115	170	184	11.5
	φ 130	4-M8x20	≤ φ 24	58	φ 95	10	115	170	184	11.5
	φ 132	4-M8x20	≤ φ 24	58	φ 85	10	115	170	184	11.5
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	171	185	12.5
	φ 145	4-M8x20	≤ φ 24	68	φ 110	10	130	180	194	21.5
	φ 165	4-M10x30	≤ φ 32	80	φ 130	10	142	196.5	258.5	18.5
φ 200	4-M12x35	≤ φ 35	82	φ 114.3	8	180	198.5	260.5	20.5	
φ 215	4-M14x35	≤ φ 38	82	φ 180	8	190	198.5	260.5	20.5	

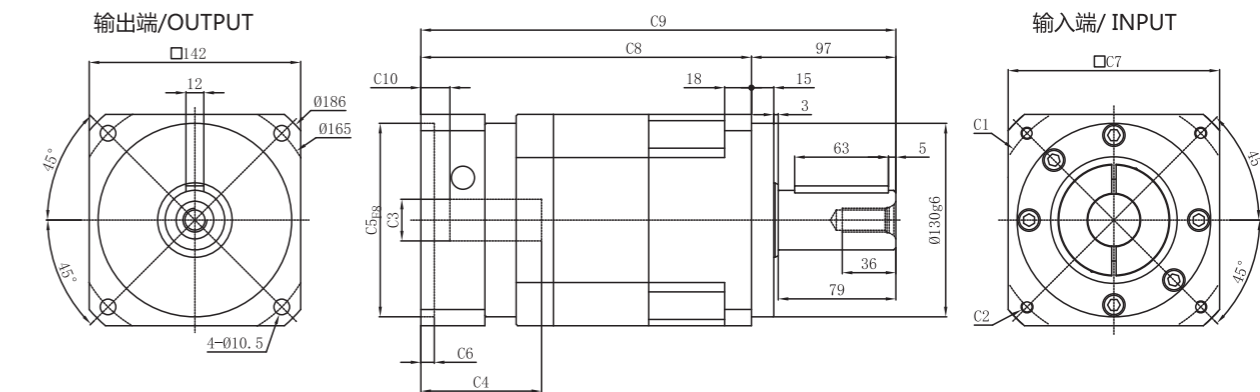
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

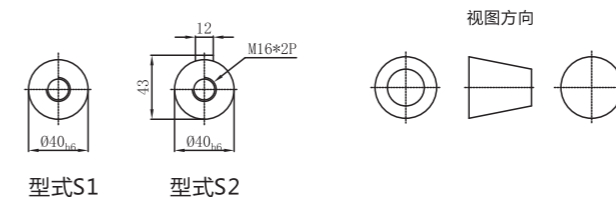
PGH142-L1



PGH142-L2



输出轴径/Output Diameter



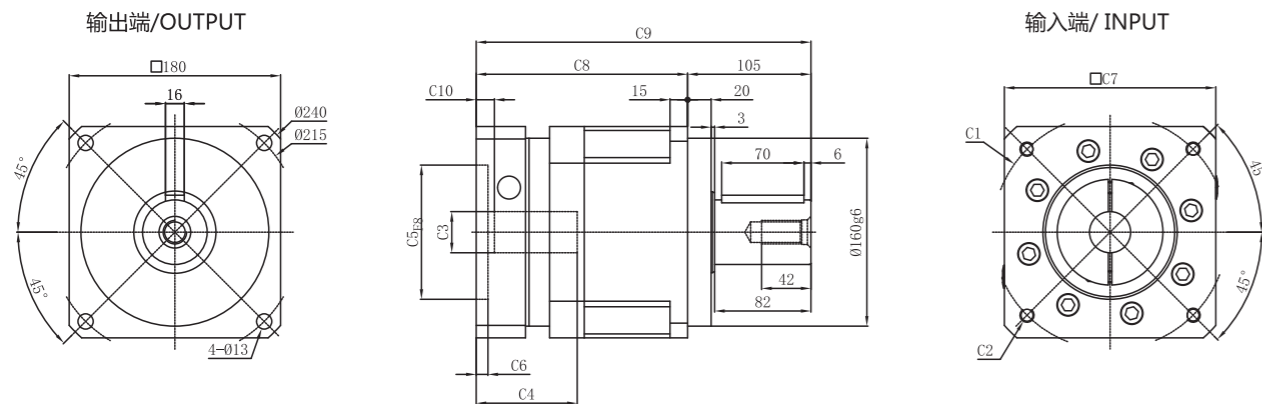
*输入马达连接板之尺寸,可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGH142-L1	φ 130	4-M8x20	≤ φ 24	81	φ 110	10	142	158	255	19.5
	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	158	255	19.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	158	255	19.5
	φ 175	4-M10x25	≤ φ 32	81	φ 130	10	150	158	255	19.5
	φ 185	4-M10x30	≤ φ 35	81	φ 150	8	160	158	255	19.5
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	160	257	21.5
	φ 200	4-M12x35	≤ φ 42	115	φ 114.3	8	180	192	289	53.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	83	φ 180	8	190	160	257	21.5
PGH142-L2	φ 130	4-M8x20	≤ φ 24	81	φ 110	10	142	222	319	19.5
	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	222	319	19.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	222	319	19.5
	φ 175	4-M10x25	≤ φ 32	81	φ 130	10	150	222	319	19.5
	φ 185	4-M10x30	≤ φ 35	81	φ 150	8	160	222	319	19.5
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	224	321	21.5
	φ 200	4-M12x35	≤ φ 42	115	φ 114.3	8	180	256	353	53.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	83	φ 180	8	190	224	321	21.5

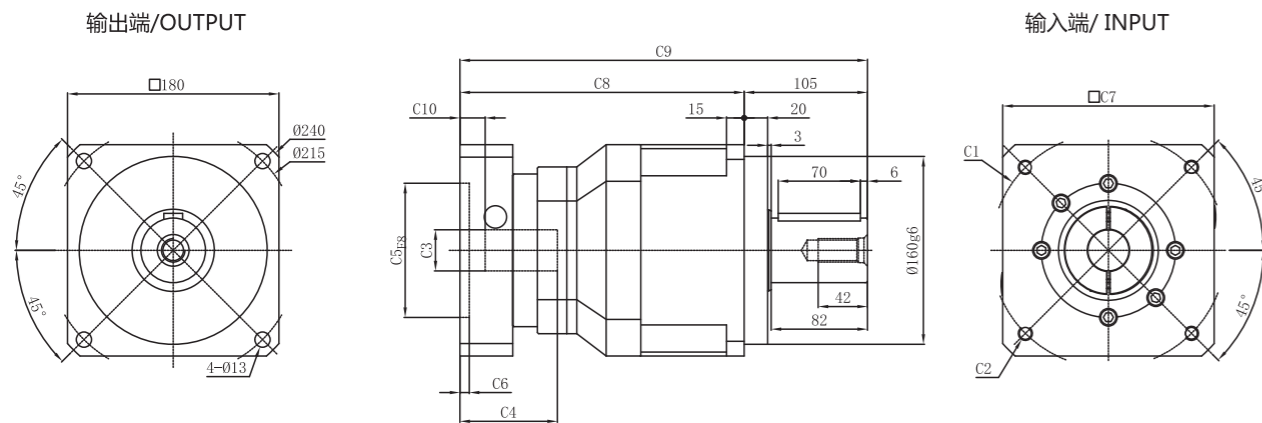
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

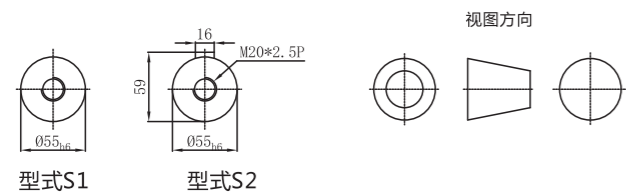
PGH180-L1



PGH180-L2



输出轴径/Output Diameter



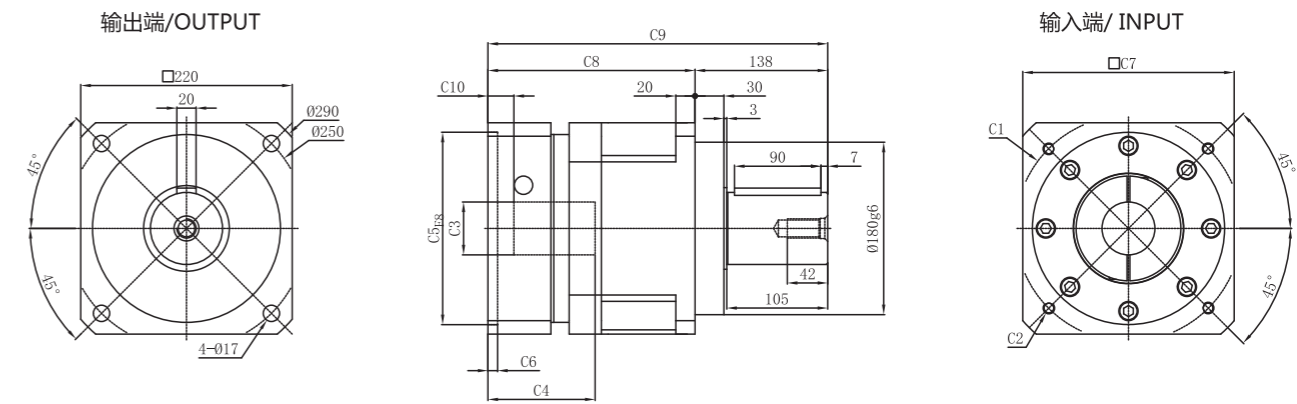
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGH180-L1	φ 165	4-M10x25, 4-M12x35	≤ φ 32	86	φ 130	10	180	180	285	15.5
	φ 200	4-M12x35	≤ φ 42	86	φ 114.3	10	180	180	285	15.5
	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	212	317	47.5
	φ 215	4-M14x35	≤ φ 42	86	φ 180	10	190	180	285	15.5
	φ 215	4-M14x35	≤ φ 42	118	φ 180	10	190	212	317	47.5
PGH180-L2	φ 235	4-M10x30, 4-M14x35	≤ φ 55	118	φ 200	10	220	212	317	47.5
	φ 130	4-M8x20	≤ φ 24	81	φ 110	10	142	240	345	19.5
	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	240	345	19.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	86	φ 130	8	180	242	347	21.5
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	242	347	21.5
	φ 200	4-M10x25, 4-M12x35	≤ φ 42	115	φ 114.3	8	180	274	379	53.5
	φ 215	4-M14x35	≤ φ 42	83	φ 180	8	190	242	347	21.5
	φ 215	4-M14x35	≤ φ 42	115	φ 180	8	190	274	379	53.5
	φ 235	4-M10x30, 4-M14x35	≤ φ 55	118	φ 200	10	220	274	379	47.5

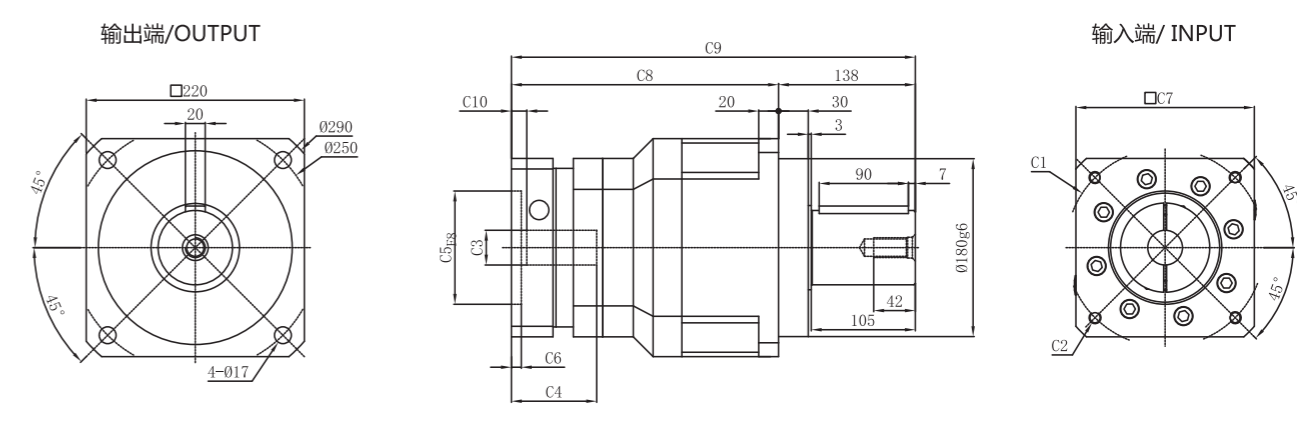
* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

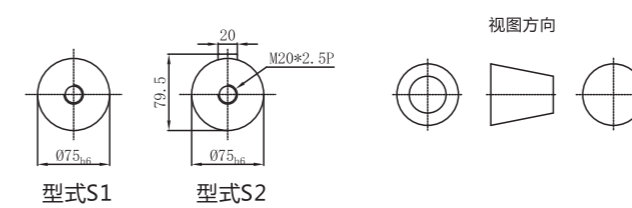
PGH220-L1



PGH220-L2



输出轴径/Output Diameter



*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGH220-L1	φ 200	4-M12x35	≤ φ 42	119	φ 114.3	10	220	215.5	353.5	27
	φ 215	4-M14x35	≤ φ 42	119	φ 180	10	220	215.5	353.5	27
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	119	φ 200	10	220	215.5	353.5	27
PGH220-L2	φ 165	4-M10x25, 4-M12x35	≤ φ 32	86	φ 130	10	180	269.5	407.5	15.5
	φ 200	4-M12x35	≤ φ 42	86	φ 114.3	10	180	269.5	407.5	15.5
	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	301.5	439.5	47.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	86	φ 180	10	190	269.5	407.5	15.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	118	φ 180	10	190	301.5	439.5	47.5
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	118	φ 200	10	220	301.5	439.5	47.5

* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10 are motor (metric standard) specific dimensions, which could be customised.



PGR Series

Right Angle Integrated Double Support

(转角一体式双支撑) 系列

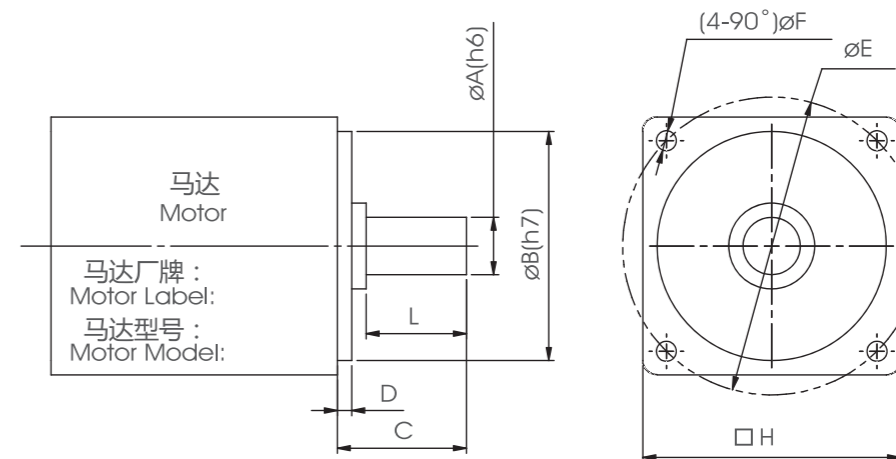


型号说明 / ORDER CODE

PGR060 - 10 - S2 - P2 / Motor

Reducer Size 减速机型式: PGR060、PGR090 PGR115	Output Shaft Type 输出轴型式 S1: Smooth Shaft 平滑光轴 S2: Shaft with Key 附带键轴	马达型号: Motor Model
Ratio 减速比: L1 单段: 3、4、5、7、9、10、14、20 L2 双段: 12、15、16、25、30、35、40 50、70、90、100	Backlash: 超精密 backlash: P0 精密 backlash: P1 标准 backlash: P2	Backlash: Ultraprecise Backlash: P0 Precise Backlash: P1 Standard Backlash: P2

FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D. of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
øA(h6)	øB(h7)	C	D	øE	øF	□H	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

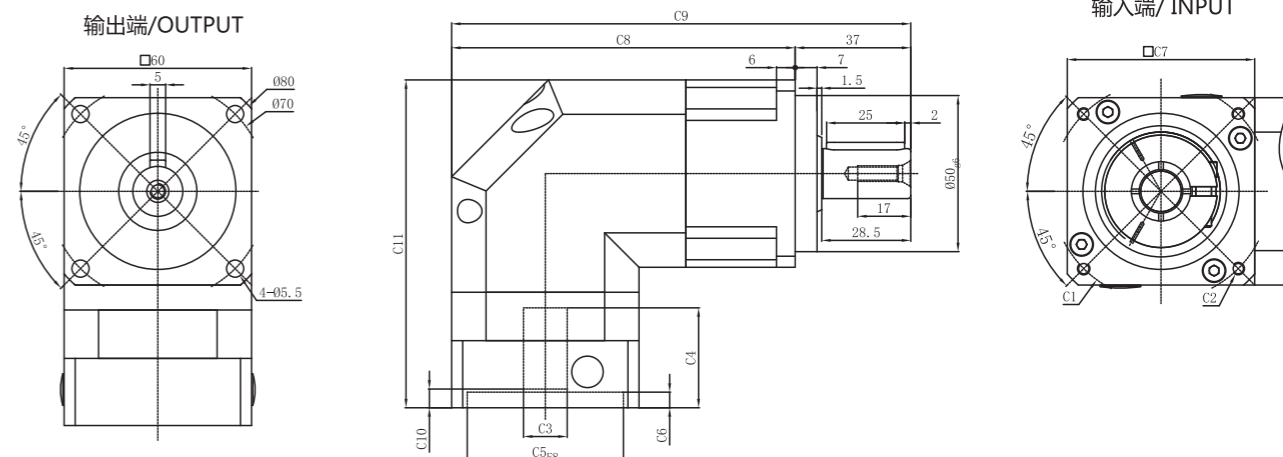
规格Specifications	单位unit	节数Stage	减速比Ratio	PGR 060	PGR 090	PGR115
额定输出力矩T2N Nominal Output Torque	N.m	1	3	44.2	95.2	283
			4	35.9	74.6	249
			5	43.0	95.2	238
			6	44.2	95.2	283
			7	36.0	85.6	219
			8	35.9	74.6	249
			9	28.7	85.0	210
			10	43.0	95.2	238
			14	36.0	85.6	219
			18	28.7	85.0	210
		2	20	25.0	75.0	210
			12	44.2	95.2	283
			15	44.2	95.2	283
			20	35.9	74.6	249
			25	43.0	95.2	238
			30	44.2	95.2	283
			35	43.0	95.2	238
			40	35.9	74.6	249
			45	43.0	95.2	238
			50	43.0	95.2	238
70	43.0	95.2	238			
90	43.0	95.2	238			
100	43.0	95.2	238			
急停力矩T2NOT Emergency Stop Torque	N.m	1、2	3 ~ 100	3倍额定输出力矩 (3.0 times of Nominal Output Torque)		
额定输入转速n1 Nominal Input Speed	rpm	1、2	3 ~ 100	3000	3000	2500
最大输入转速n1max Max.Input Speed	rpm	1、2	3 ~ 100	6000	6000	5000
超精密背隙P0 Ultraprecise Backlash	arcmin	1	3 ~ 10	-	-	-
		2	12 ~ 100	-	-	-
精密背隙P1 Precise Backlash	arcmin	1	3 ~ 10	≤9	≤9	≤9
		2	12 ~ 100	≤12	≤12	≤12
标准背隙P2 Standard Backlash	arcmin	1	3 ~ 10	≤12	≤12	≤12
		2	12 ~ 100	≤15	≤15	≤15
扭转刚性 Torsional Rigidity	N.m /arcmin	1、2	3 ~ 100	2.8	7.5	15.5
容许径向力F2rB Max.Radial Load	N	1、2	3 ~ 100	960	1630	3380
容许轴向力F2aB Max.Axial Load	N	1、2	3 ~ 100	900	1420	2930
使用温度 Operating Temp	° C	1、2	3 ~ 100	-10° C ~ +90° C		
使用寿命 Service Life	hr	1、2	3 ~ 100	20,000 (10,000/连续运转continui operationg)		
效率η Efficiency	%	1	3 ~ 10	≥95%		
		2	12 ~ 100	≥92%		
重量 Weight	kg	1	3 ~ 10	1.3	3.5	7.8
		2	12 ~ 100	2.0	5.6	9.5
安装方向 mounting Position		1、2	3 ~ 100	任意方向 Any direction		
噪音值 Noise Level	dBA/1m	1、2	3 ~ 100	63	65	68
防护等级 Protection Class		1、2	3 ~ 100	Ip65		
润滑 Lubrication		1、2	3 ~ 100	全合成润滑脂油 Synthetic Lubricant		

减速机转动惯量

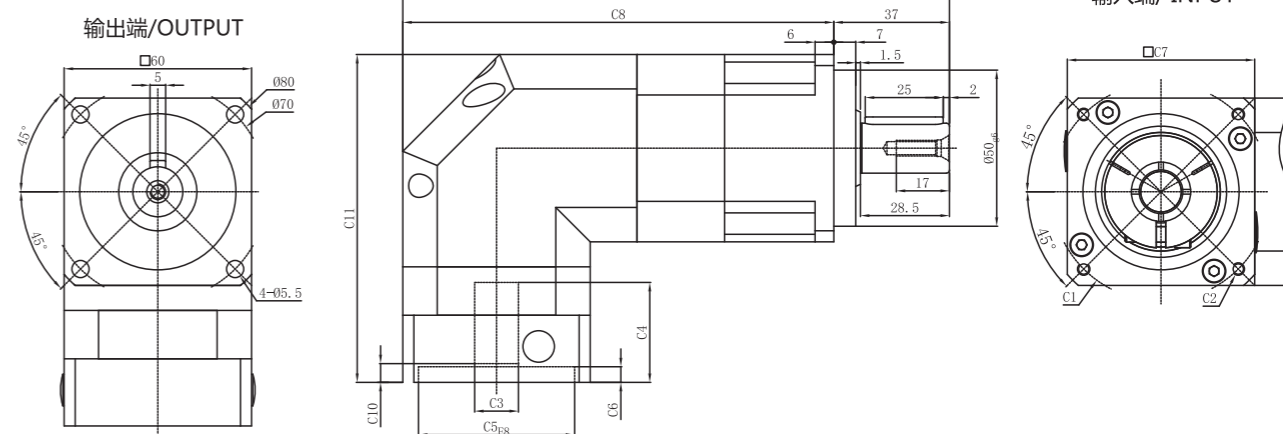
规格Specifications	单位unit	节数Stage	减速比Ratio	PGR 060	PGR 090	PGR115
转动惯量J1 Inertia	kg.cm ²	1	3	0.14	0.65	1.53
			4	0.18	0.68	1.68
			5	0.17	0.66	1.55
			6/7/8	0.15	0.60	1.48
			9/10/14/20	0.14	0.58	1.45
			15/18/20/25	0.18	0.68	1.61
		2	30/35/40	0.15	0.68	1.61
			45/50/70	0.15	0.60	1.55
			80/90/100	0.14	0.60	1.55

外形尺寸图表 / OUTLINE DIMENSION SHEET

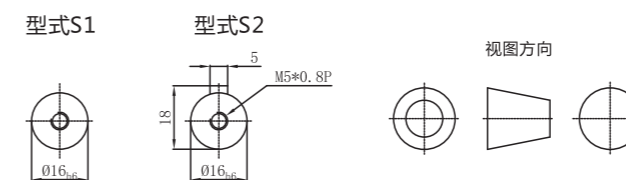
PGR060-L1



PGR060-L2



输出轴径/Output Diameter



*输入马达连接板之尺寸,可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

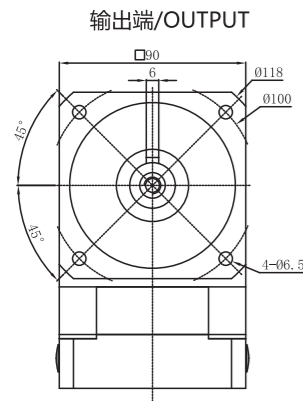
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGR 060-L1	φ 46	4-M4x12,4-M5x12	≤ φ 8	37.5	φ 30	10.5	60	110	147	11.5	110.5
	φ 66.7	4-M4x12	≤ φ 8	32	φ 38.1	5	60	110	147	5.5	105
	φ 70	4-M4x10,4-M5x12	≤ φ 14	32	φ 50	5	60	110	147	6	105
	φ 75	4-M4x12,4-M5x12	≤ φ 14	32	φ 60	5	66	113	150	6	105
PGR 060-L2	φ 90	4-M6x15	≤ φ 19	42	φ 70	7	80	120	160	11	117
	φ 100	4-M6x15	≤ φ 19	44	φ 80	7	90	120	160	11	117
	φ 46	4-M4x12,4-M5x12	≤ φ 8	37.5	φ 30	10.5	60	138	175	11.5	110.5
	φ 66.7	4-M4x12	≤ φ 8	32	φ 38.1	5	60	138	175	5.5	105
	φ 70	4-M4x10,4-M5x12	≤ φ 14	32	φ 50	5	60	138	175	6	105
	φ 75	4-M4x12,4-M5x12	≤ φ 14	32	φ 60	5	66	141	178	6	105
	φ 90	4-M6x15	≤ φ 19	42	φ 70	7	80	148	188	11	117
	φ 100	4-M6x15	≤ φ 19	44	φ 80	7	90	148	188	11	117

* C1~C11 是公制标准马达连接板之尺寸,可根据客户要求单独定做。

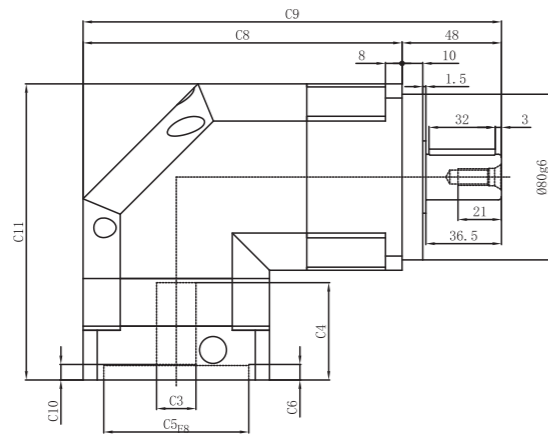
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

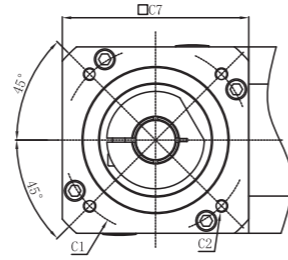
PGR090-L1



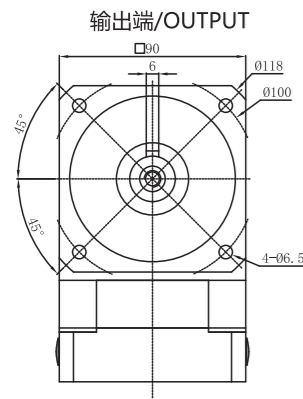
输出端/OUTPUT



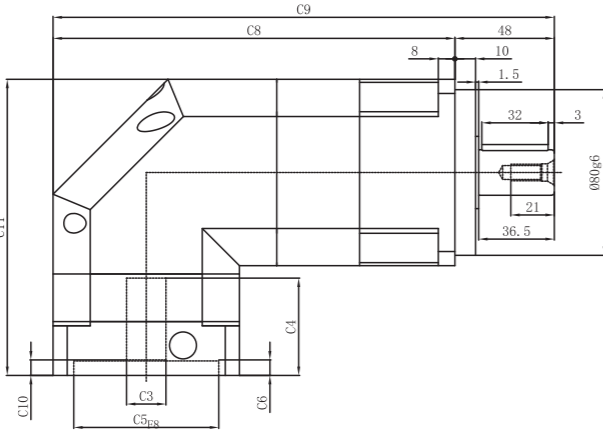
输入端/INPUT



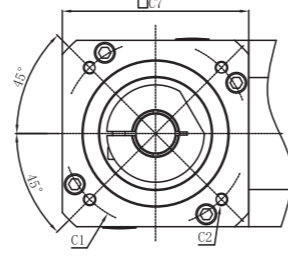
PGR090-L2



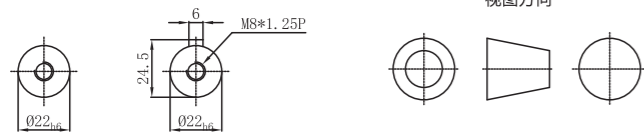
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



型式S1

型式S2

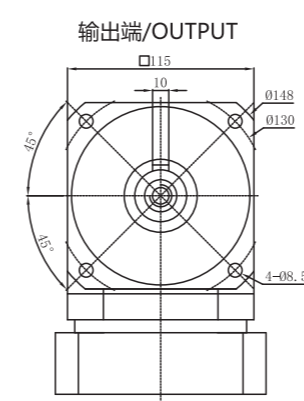
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGR090-L1	φ 70	4-M4x10,4-M5x12	≤ φ 14	47	φ 50	4	90	154	202	6.5	143
	φ 75	4-M4x12,4-M5x12	≤ φ 14	47	φ 60	5.5	90	154	202	6.5	143
	φ 90	4-M5x15,4-M6x15	≤ φ 19	47	φ 70	7	90	154	202	7.5	143
	φ 98.4	4-M5x15,4-M6x15	≤ φ 14	47.5	φ 73	7	90	154	202	7.5	143
	φ 98.4	4-M6x15	≤ φ 14	47.5	φ 60	7	90	154	202	7.5	143
	φ 100	4-M6x15	≤ φ 19	47.5	φ 80	7	90	154	202	12.5	143
	φ 115	4-M8x20	≤ φ 24	59	φ 95	10	100	159	207	12.5	155
PGR090-L2	φ 130	4-M8x20	≤ φ 24	59	φ 95	10	115	166.5	214.5	12.5	155
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	174	262	12.5	155
	φ 145	4-M8x20	≤ φ 24	68	φ 110	10	130	174	262	21.5	164
	φ 70	4-M4x10,4-M5x12	≤ φ 14	47	φ 50	4	90	194	262	6.5	143
	φ 75	4-M4x12,4-M5x12	≤ φ 14	47	φ 60	5.5	90	194	262	6.5	143
	φ 90	4-M5x15,4-M6x15	≤ φ 19	47	φ 70	7	90	194	262	7.5	143
	φ 98.4	4-M5x15,4-M6x15	≤ φ 14	47.5	φ 73	7	90	194	262	7.5	143
PGR090-L2	φ 98.4	4-M6x15	≤ φ 14	47.5	φ 60	7	90	194	262	7.5	143
	φ 100	4-M6x15	≤ φ 19	47.5	φ 80	7	90	194	262	12.5	143
	φ 115	4-M8x20	≤ φ 24	59	φ 95	10	100	199	267	12.5	155
	φ 130	4-M8x20	≤ φ 24	59	φ 95	10	115	206.5	254.5	12.5	155
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	214	272	12.5	155
	φ 145	4-M8x20	≤ φ 24	68	φ 110	10	130	214	272	21.5	164

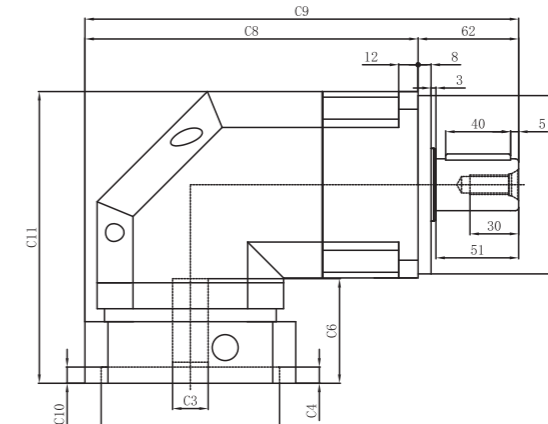
* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

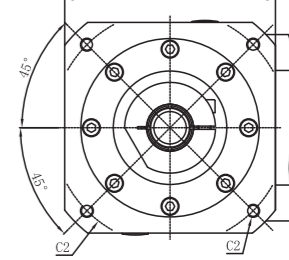
PGR115-L1



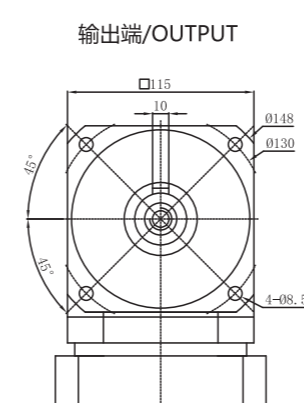
输出端/OUTPUT



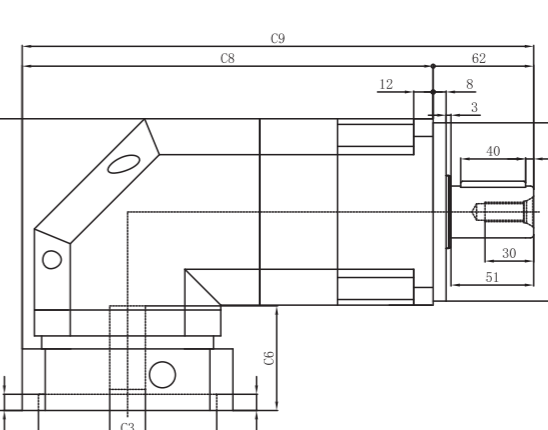
输入端/INPUT



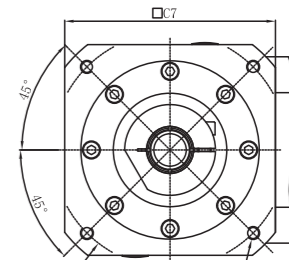
PGR115-L2



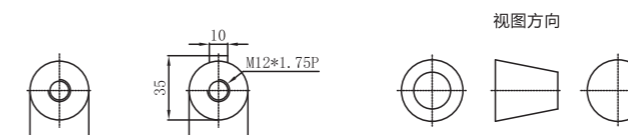
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



型式S1

型式S2

*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGR115-L1	φ 90	4-M5x15,4-M6x15	≤ φ 19	62	φ 70	7	115	198	260	12	180
	φ 100	4-M6x15	≤ φ 19	62	φ 80	7	115	198	260	12	180
	φ 115	4-M8x20	≤ φ 24	62	φ 95	10	115	198	260	13	180
	φ 130	4-M8x20	≤ φ 24	62	φ 95	10	115	198	260	13	180
	φ 132	4-M8x20	≤ φ 24	62	φ 95	10	115	198	260	13	180
PGR115-L2	φ 145	4-M8x20	≤ φ 24	62	φ 110	10	130	205.5	267.5	13	180
	φ 145	4-M8x20	≤ φ 24	62	φ 110	10	130	205.5	267.5	22	189
	φ 90	4-M5x15,4-M6x15	≤ φ 19	62	φ 70	7	115	246	260	12	180
	φ 100	4-M6x15	≤ φ 19	62	φ 80	7	115	246	260	12	180
	φ 115	4-M8x20	≤ φ 24	62	φ 95	10	115	246	260	13	180
	φ 130	4-M8x20	≤ φ 24	62	φ 95	10	115	246	260	13	180
	φ 132	4-M8x20	≤ φ 24	62	φ 95	10	115	246	260	13	180
PGR115-L2	φ 145	4-M8x20	≤ φ 24	62	φ 110	10	130	253.5	315.5	13	180
	φ 145	4-M8x20	≤ φ 24	71	φ 110	10	130	253.5	315.5	22	189

* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.



PGHR Series

High Precision Right Angle Helical Gear

(转角斜齿)系列

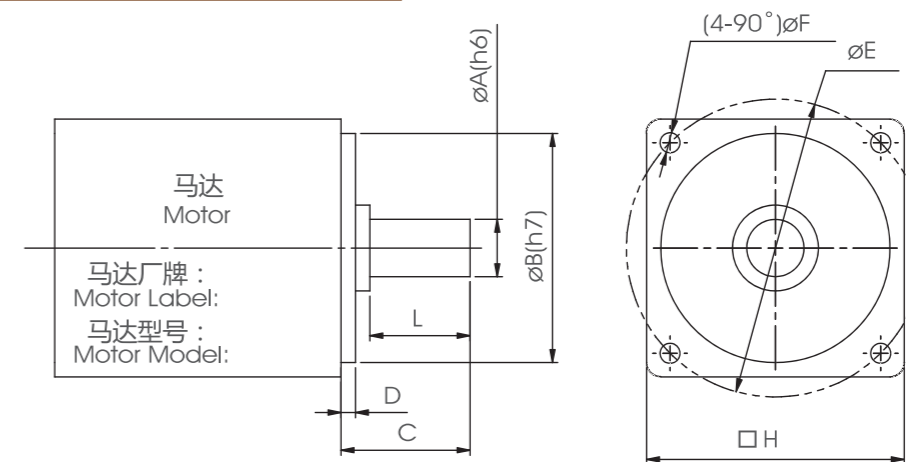


型号说明 / ORDER CODE

PGHR060 - 10 - S2 - P2 / Motor

Reducer Size 减速机型式: PGHR060、PGHR090 PGHR115、PGHR142 PGHR180、PGHR220	Output Shaft Type 输出轴型式 S1: Smooth Shaft 平滑光轴 S2: Shaft with Key 附带键轴	马达型号: Motor Model
Ratio 减速比: L1 单段: 3、4、5、7、9、10、14、20 L2 双段: 12、15、16、25、30、35、40 50、70、90、100	Backlash: 超精密背隙: P0 精密背隙: P1 标准背隙: P2	Backlash: Ultraprecise Backlash: P0 Precise Backlash: P1 Standard Backlash: P2

FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
$\phi A(h6)$	$\phi B(h7)$	C	D	ϕE	ϕF	$\square H$	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

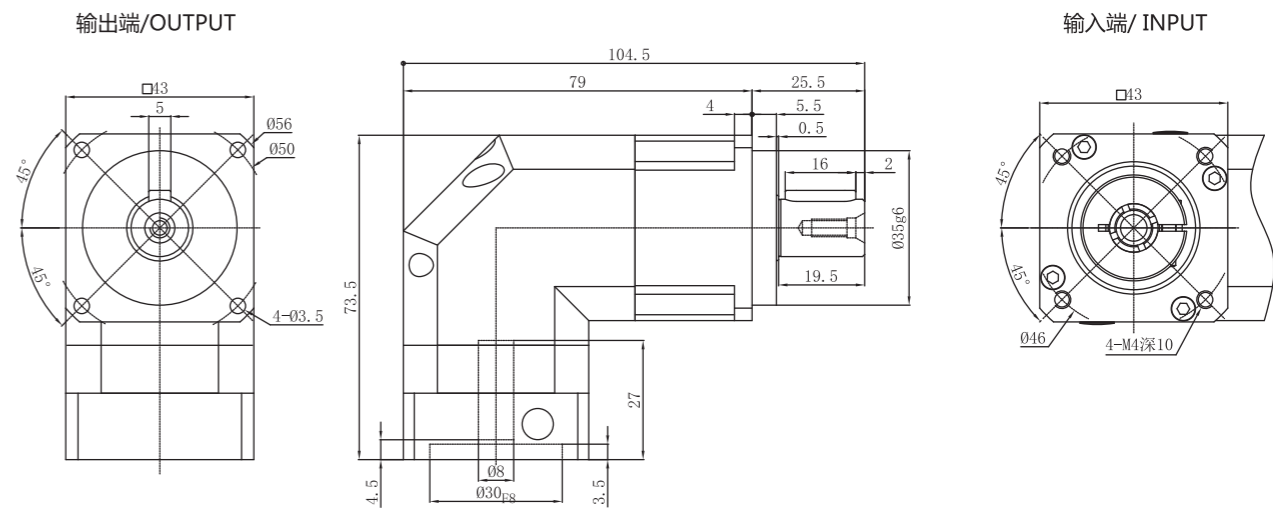
规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGHR042	PGHR060	PGHR090	PGHR115	PGHR142	PGHR180	PGHR220					
额定输出力矩 T2N Nominal Output Torque	N.m	1	3	19	53	145	290	520	950	1550					
			4	20	55	150	300	550	1000	1650					
			5	17	54	140	290	530	1050	1700					
			6	19	53	145	290	520	950	1550					
			7	14	44	125	270	450	960	1500					
			8	20	55	150	300	550	1000	1650					
			9	11	37	95	220	360	950	1550					
			10	11	37	95	220	360	1050	1700					
			14	14	44	125	270	450	960	1500					
			18	11	37	95	220	360	800	1250					
		20	11	37	95	220	360	800	1250						
		急停力矩 T2NOT Emergency Stop Torque	N.m	1, 2	3 ~ 100	3倍额定输出力矩 (3.0 times of Nominal Output Torque)									
					额定输入转速 n1 Nominal Input Speed	rpm	1, 2	3 ~ 100	5000	3000	3000	3000	3000	1500	1500
					最大输入转速 n1max Max. Input Speed	rpm	1, 2	3 ~ 100	10000	6000	6000	6000	6000	3000	3000
					超精密背隙 P0 Ultraprecise Backlash	arcmin	1	3 ~ 10	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5
					精密背隙 P1 Precise Backlash	arcmin	1	3 ~ 10	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7
							2	12 ~ 100	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10
					标准背隙 P2 Standard Backlash	arcmin	1	3 ~ 10	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9	≤ 9
							2	12 ~ 100	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12
					扭转刚性 Torsional Rigidity	N.m / arcmin	1, 2	3 ~ 100	2.5	6	12	23	45	148	220
容许径向力 F2rB Max. Radial Load	N				1, 2	3 ~ 100	515	1010	1780	3420	5380	8330	11120		
容许轴向力 F2aB Max. Axial Load	N	1, 2	3 ~ 100	410	600	1500	2650	4670	6460	8560					
使用温度 Operating Temp	°C	1, 2	3 ~ 100	-10° C ~ +90° C											
使用寿命 Service Life	hr	1, 2	3 ~ 100	20,000 (10,000/连续运转continuiu operating)											
效率 η Efficiency	%	1	3 ~ 10	≥ 95%											
		2	12 ~ 100	≥ 92%											
重量 Weight	kg	1	3 ~ 10	1	1.3	3.5	7.8	16.1	30.0	58.0					
		2	12 ~ 100	1.4	2.0	5.6	9.5	19.0	42.0	67.0					
安装方向 mounting Position	-	1, 2	3 ~ 100	任意方向 Any direction											
噪音值 Noise Level	dB(A)/1m	1, 2	3 ~ 100	62	63	65	70	70	73	75					
防护等级 Protection Class	-	1, 2	3 ~ 100	Ip65											
润滑 Lubrication	-	1, 2	3 ~ 100	全合成润滑脂油 Synthetic Lubricant											

减速机转动惯量

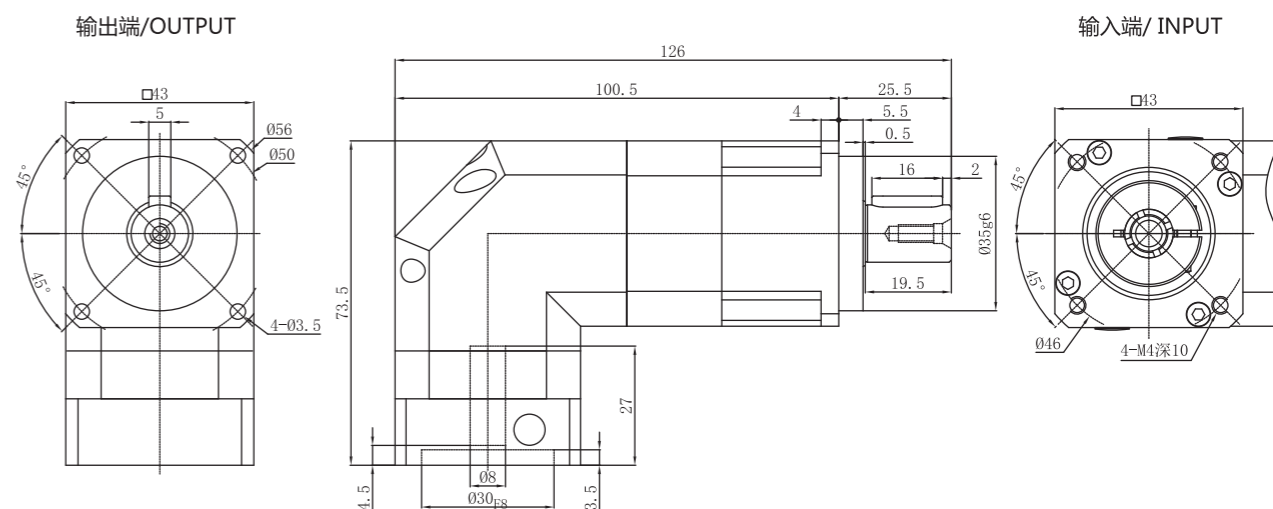
规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGHR042	PGHR060	PGHR090	PGHR115	PGHR142	PGHR180	PGHR220
转动惯量 J1 Inertia	kg.cm ²	1	3	0.06	0.23	0.98	2.36	10.10	31.00	79.63
			4	0.06	0.18	0.68	1.68	7.30	26.00	59.30
			5	0.06	0.17	0.66	1.55	6.58	23.80	54.86
			6/7/8	0.05	0.15	0.60	1.48	6.22	23.00	54.32
			9/10/14/18/20	0.06	0.14	0.58	1.45	6.15	22.90	54.00
		2	12/15/18/20/15	0.05	0.18	0.68	2.40	6.52	24.27	54.37
			30/35/40	0.05	0.15	0.68	1.68	6.52	23.82	54.37
			45/50/70	0.05	0.15	0.60	1.51	6.21	22.94	53.30
			80/90/100	0.05	0.14	0.60	1.41	6.10	22.75	52.45

外形尺寸图表 / OUTLINE DIMENSION SHEET

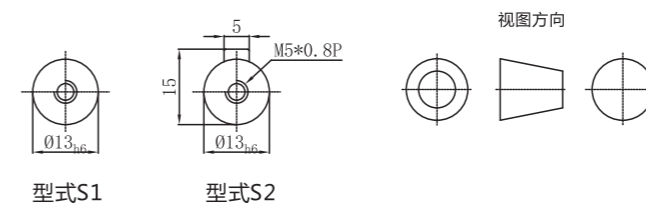
PGHR042-L1



PGHR042-L2



输出轴径/Output Diameter

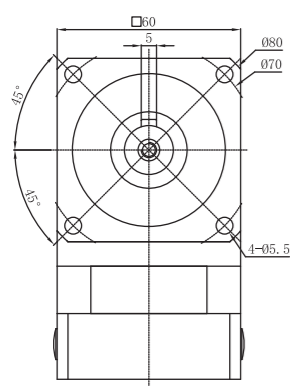


*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

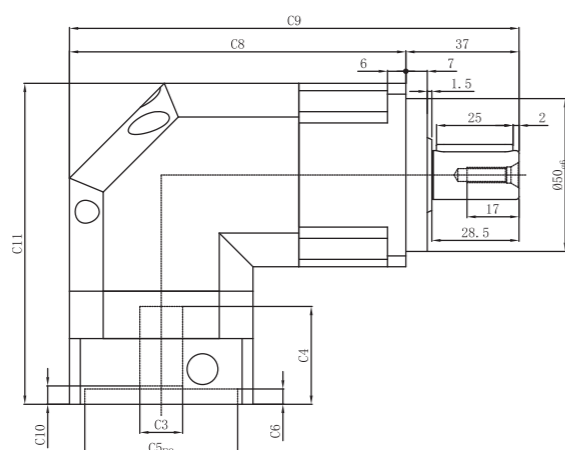
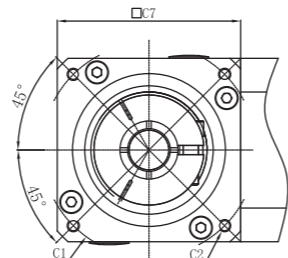
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGHR060-L1

输出端/OUTPUT

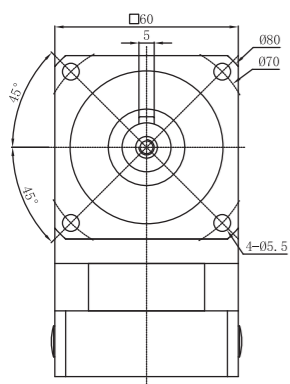


输入端/INPUT

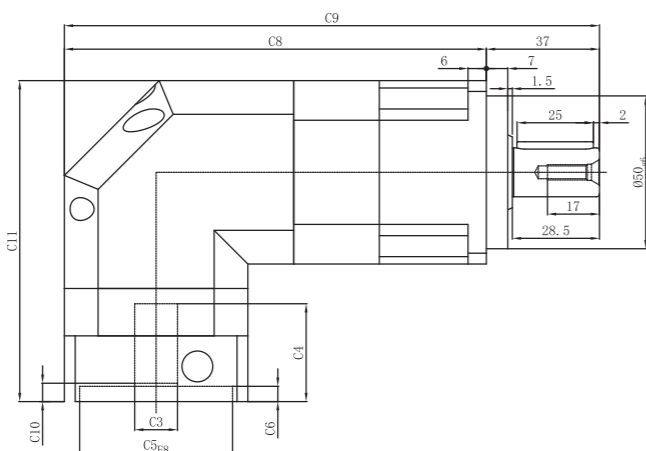
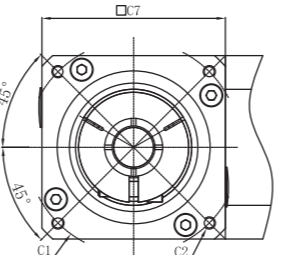


PGHR060-L2

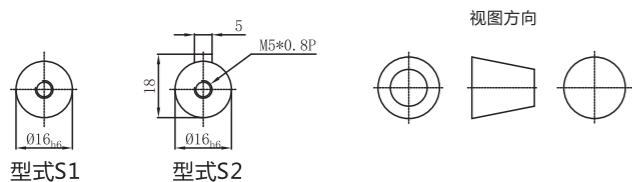
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



视图方向

*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

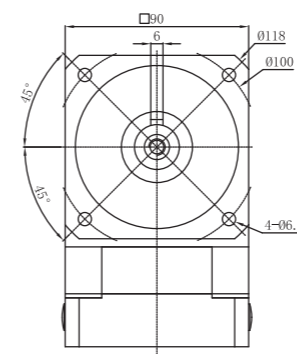
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGHR060-L1	φ 46	4-M4x12,4-M5x12	≦ φ 8	37.5	φ 30	10.5	60	110	147	11.5	110.5
	φ 66.7	4-M4x12	≦ φ 8	32	φ 38.1	5	60	110	147	5.5	105
	φ 70	4-M4x10,4-M5x12	≦ φ 14	32	φ 50	5	60	110	147	6	105
	φ 75	4-M4x12,4-M5x12	≦ φ 14	32	φ 60	5	66	113	150	6	105
	φ 90	4-M6x15	≦ φ 19	42	φ 70	7	80	120	160	11	117
PGHR060-L2	φ 46	4-M4x12,4-M5x12	≦ φ 8	37.5	φ 30	10.5	60	138	175	11.5	110.5
	φ 66.7	4-M4x12	≦ φ 8	32	φ 38.1	5	60	138	175	5.5	105
	φ 70	4-M4x10,4-M5x12	≦ φ 14	32	φ 50	5	60	138	175	6	105
	φ 75	4-M4x12,4-M5x12	≦ φ 14	32	φ 60	5	66	141	178	6	105
	φ 90	4-M6x15	≦ φ 19	42	φ 70	7	80	148	188	11	117
φ 100	4-M6x15	≦ φ 19	44	φ 80	7	90	148	188	11	117	

* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.

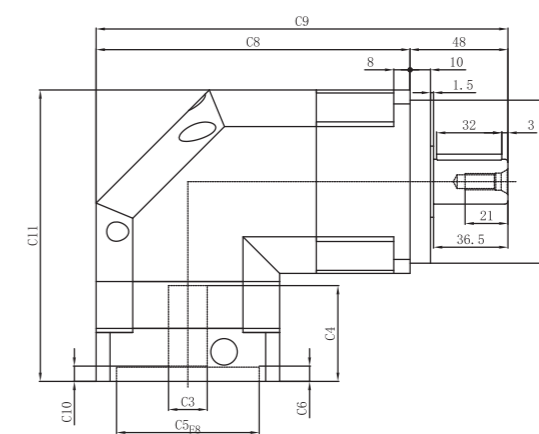
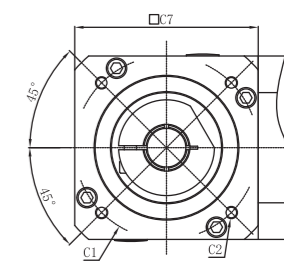
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGHR090-L1

输出端/OUTPUT

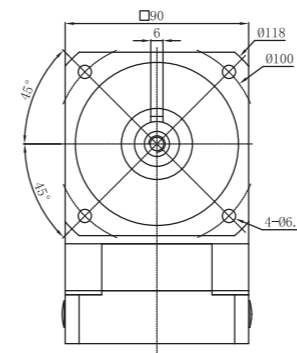


输入端/INPUT

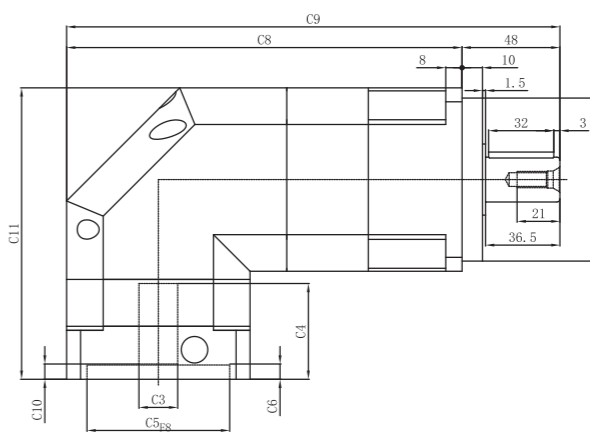
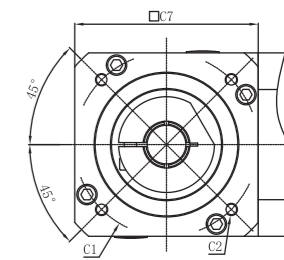


PGHR090-L2

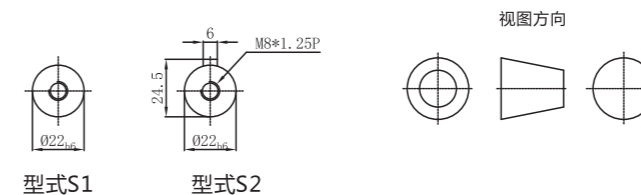
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



视图方向

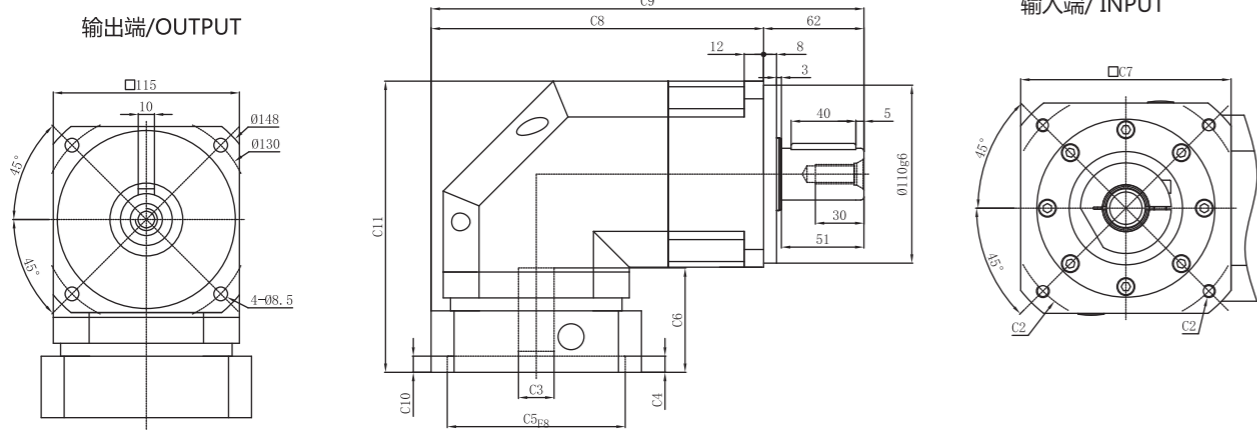
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGHR090-L1	φ 70	4-M4x10,4-M5x12	≦ φ 14	47	φ 50	4	90	154	202	6.5	143
	φ 75	4-M4x12,4-M5x12	≦ φ 14	47	φ 60	5.5	90	154	202	6.5	143
	φ 90	4-M5x15,4-M6x15	≦ φ 19	47	φ 70	7	90	154	202	7.5	143
	φ 98.4	4-M5x15,4-M6x15	≦ φ 14	47.5	φ 73	7	90	154	202	7.5	143
	φ 98.4	4-M6x15	≦ φ 14	47.5	φ 60	7	90	154	202	7.5	143
	φ 100	4-M6x15	≦ φ 19	47.5	φ 80	7	90	154	202	12.5	143
	φ 115	4-M8x20	≦ φ 24	59	φ 95	10	100	159	207	12.5	155
	φ 130	4-M8x20	≦ φ 24	59	φ 95	10	115	166.5	214.5	12.5	155
	φ 145	4-M8x20	≦ φ 24	59	φ 110	10	130	174	262	12.5	155
	φ 145	4-M8x20	≦ φ 24	68	φ 110	10	130	174	262	21.5	164
PGHR090-L2	φ 70	4-M4x10,4-M5x12	≦ φ 14	47	φ 50	4	90	194	262	6.5	143
	φ 75	4-M4x12,4-M5x12	≦ φ 14	47	φ 60	5.5	90	194	262	6.5	143
	φ 90	4-M5x15,4-M6x15	≦ φ 19	47	φ 70	7	90	194	262	7.5	143
	φ 98.4	4-M5x15,4-M6x15	≦ φ 14	47.5	φ 73	7	90	194	262	7.5	143
	φ 98.4	4-M6x15	≦ φ 14	47.5	φ 60	7	90	194	262	7.5	143
	φ 100	4-M6x15	≦ φ 19	47.5	φ 80	7	90	194	262	12.5	143
	φ 115	4-M8x20	≦ φ 24	59	φ 95	10	100	199	267	12.5	155
	φ 130	4-M8x20	≦ φ 24	59	φ 95	10	115	206.5	254.5	12.5	155
	φ 145	4-M8x20	≦ φ 24	59	φ 110	10	130	214	272	12.5	155
	φ 145	4-M8x20	≦ φ 24	68	φ 110	10	130	214	272	21.5	164

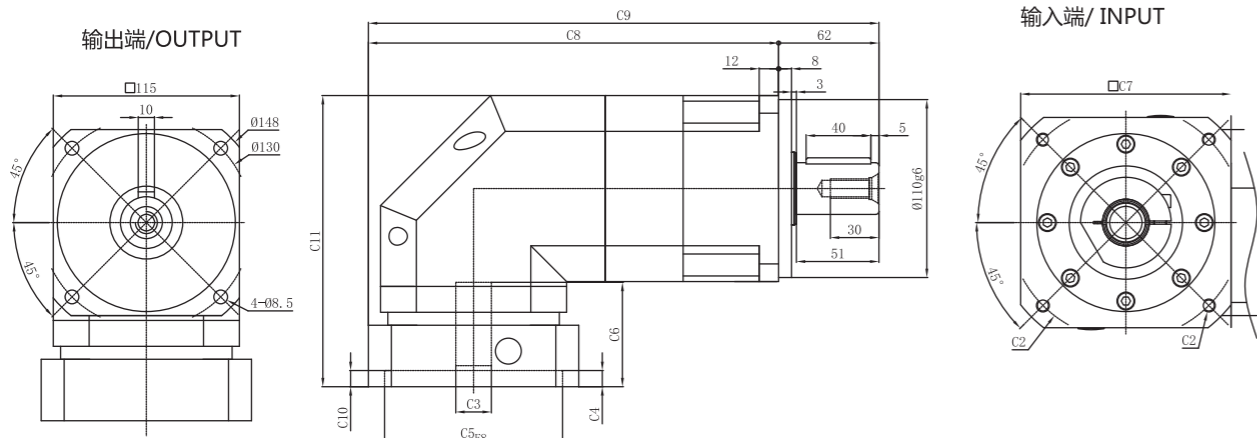
* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

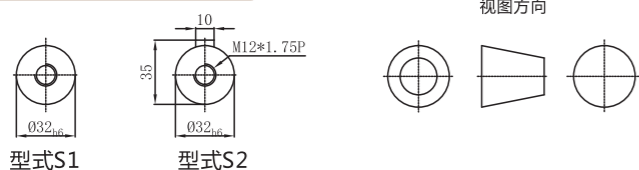
PGHR115-L1



PGHR115-L2



输出轴径/Output Diameter



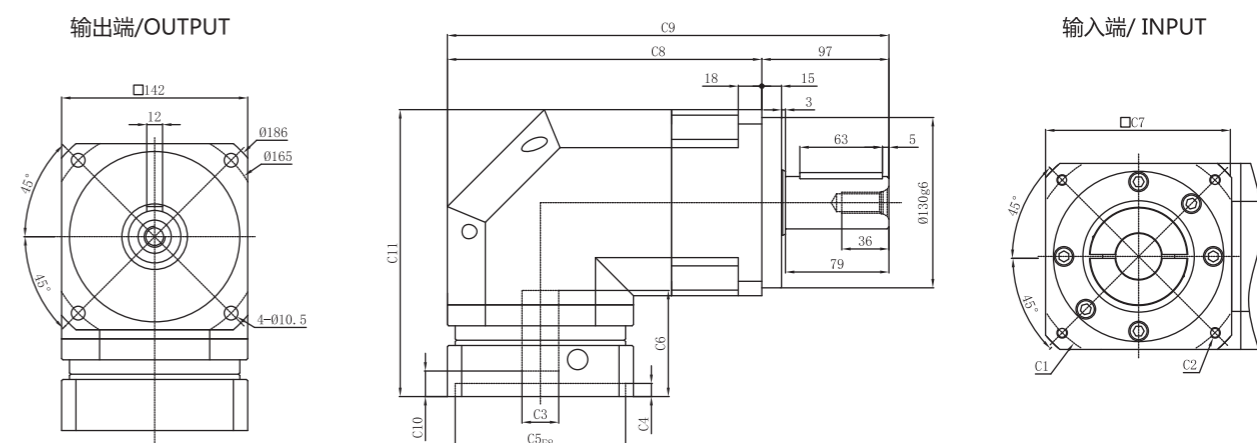
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGHR115-L1	φ 90	4-M5x15,4-M6x15	≦ φ 19	62	φ 70	7	115	198	260	12	180
	φ 100	4-M6x15	≦ φ 19	62	φ 80	7	115	198	260	12	180
	φ 115	4-M8x20	≦ φ 24	62	φ 95	10	115	198	260	13	180
	φ 130	4-M8x20	≦ φ 24	62	φ 95	10	115	198	260	13	180
	φ 132	4-M8x20	≦ φ 24	62	φ 95	10	115	198	260	13	180
	φ 145	4-M8x20	≦ φ 24	62	φ 110	10	130	205.5	267.5	13	180
PGHR115-L2	φ 90	4-M5x15,4-M6x15	≦ φ 19	62	φ 70	7	115	246	260	12	180
	φ 100	4-M6x15	≦ φ 19	62	φ 80	7	115	246	260	12	180
	φ 115	4-M8x20	≦ φ 24	62	φ 95	10	115	246	260	13	180
	φ 130	4-M8x20	≦ φ 24	62	φ 95	10	115	246	260	13	180
	φ 132	4-M8x20	≦ φ 24	62	φ 95	10	115	246	260	13	180
	φ 145	4-M8x20	≦ φ 24	62	φ 110	10	130	253.5	315.5	13	180
φ 145	4-M8x20	≦ φ 24	71	φ 110	10	130	253.5	315.5	22	189	

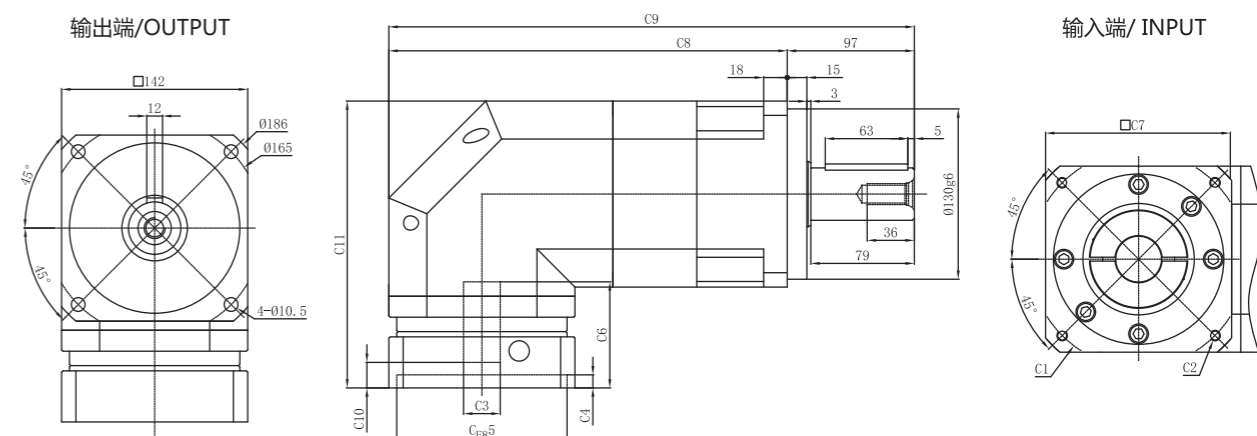
* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

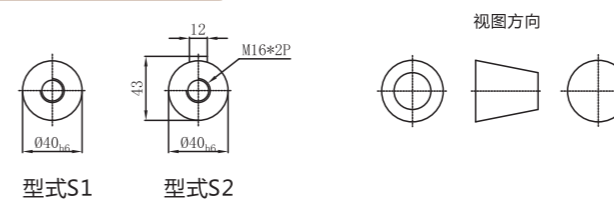
PGHR142-L1



PGHR142-L2



输出轴径/Output Diameter



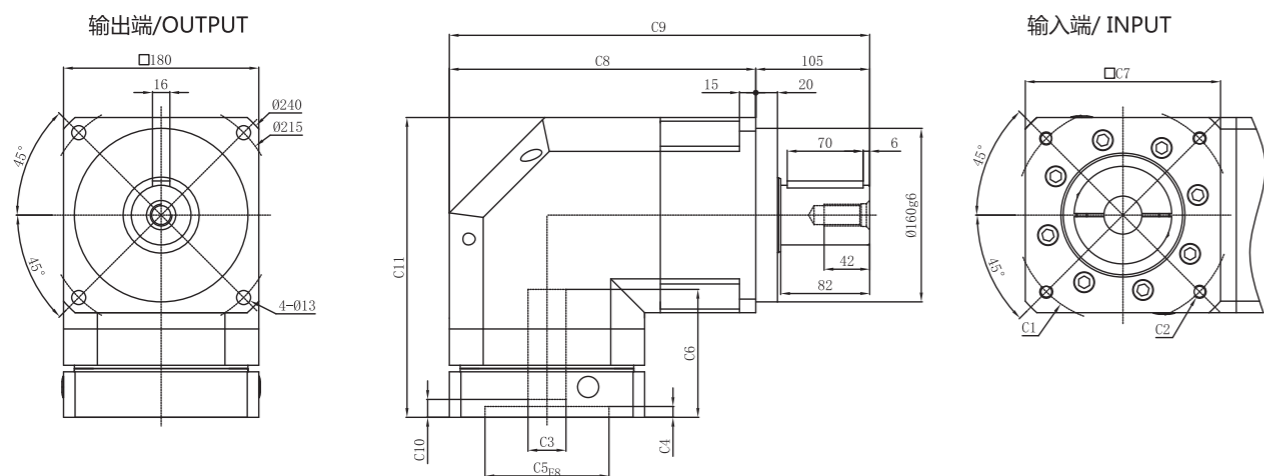
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGHR142-L1	φ 130	4-M8x20	≦ φ 24	81	φ 110	10	142	240	337	19.5	219
	φ 145	4-M8x20	≦ φ 28	81	φ 110	10	142	240	337	19.5	219
	φ 165	4-M10x25, 4-M12x35	≦ φ 32	81	φ 130	10	142	240	337	19.5	219
	φ 200	4-M12x35	≦ φ 42	83	φ 114.3	8	180	259	356	21.5	221
	φ 200	4-M12x35	≦ φ 42	115	φ 114.3	8	180	259	356	53.5	253
	φ 215	4-M12x35	≦ φ 42	83	φ 180	8	190	264	361	21.5	221
PGHR142-L2	φ 130	4-M8x20	≦ φ 24	81	φ 110	10	142	304	401	19.5	219
	φ 145	4-M8x20	≦ φ 28	81	φ 110	10	142	304	401	19.5	219
	φ 165	4-M10x25, 4-M12x35	≦ φ 32	81	φ 130	10	142	304	401	19.5	219
	φ 200	4-M12x35	≦ φ 42	83	φ 114.3	8	180	323	420	21.5	221
	φ 200	4-M12x35	≦ φ 42	115	φ 114.3	8	180	323	420	53.5	253
	φ 215	4-M12x35	≦ φ 42	83	φ 180	8	190	328	425	21.5	221

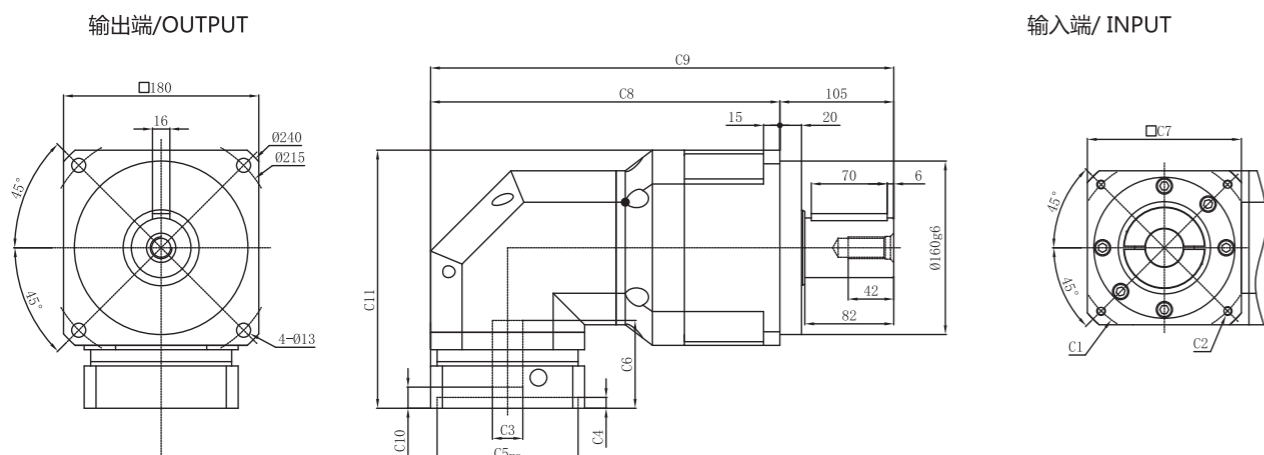
* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

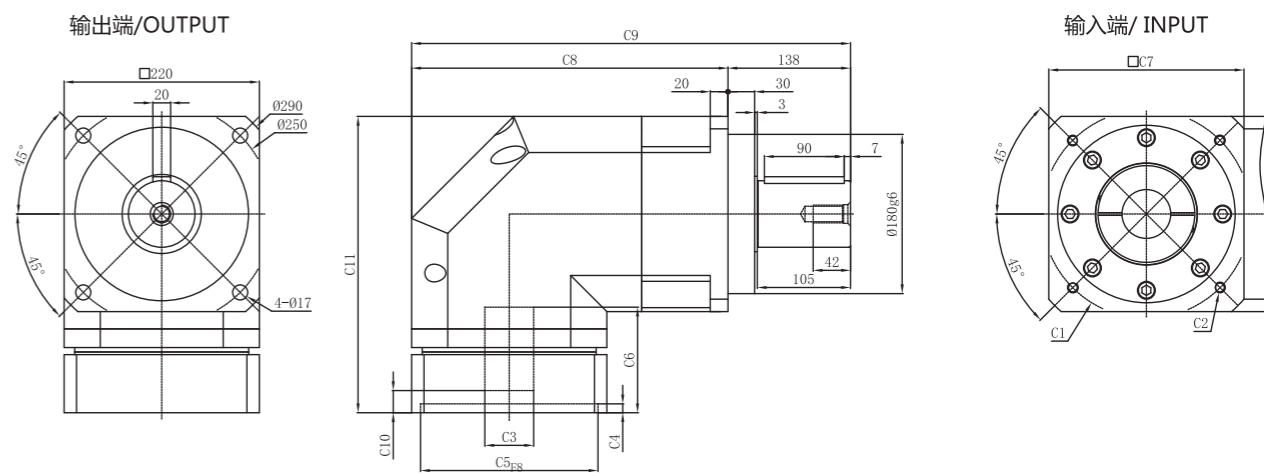
PGHR180-L1



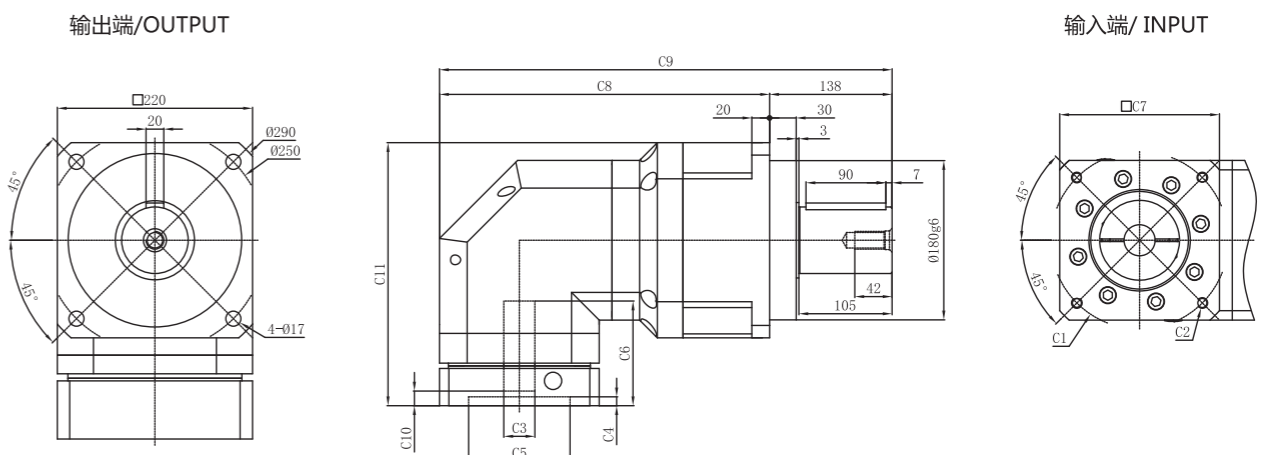
PGHR180-L2



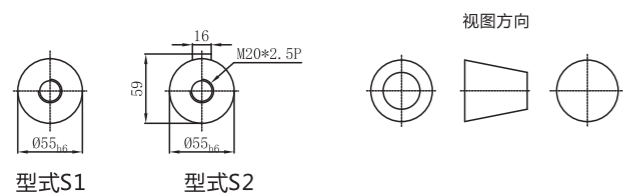
PGHR220-L1



PGHR220-L2

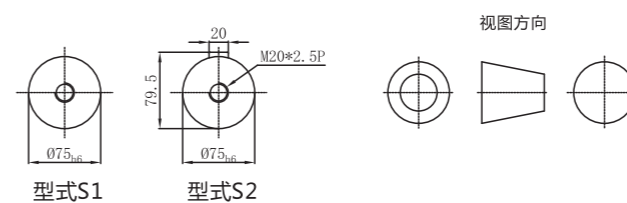


输出轴径/Output Diameter



*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

输出轴径/Output Diameter



*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGHR180-L1	φ 165	4-M10x25, 4-M12x35	≤ φ 32	118	φ 130	10	180	282.5	387.5	16.5	276.5
	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	282.5	387.5	16.5	276.5
	φ 215	4-M14x35	≤ φ 42	118	φ 180	10	190	287.5	392.5	16.5	276.5
	φ 235	4-M10x30, 4-M14x35	≤ φ 55	150	φ 200	10	220	302.5	407.5	48.5	308.5
PGHR180-L2	φ 130	4-M8x20	≤ φ 24	81	φ 110	10	142	322	427	19.5	238
	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	322	427	19.5	238
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	322	427	19.5	238
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	341	446	21.5	240
PGHR180-L2	φ 200	4-M10x25, 4-M12x35	≤ φ 42	115	φ 114.3	8	180	341	446	53.5	272
	φ 215	4-M14x35	≤ φ 42	83	φ 180	8	190	346	451	21.5	240

* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
PGHR220-L1	φ 200	4-M12x35	≤ φ 42	119	φ 114.3	10	220	356.5	494.5	25	334
	φ 215	4-M14x35	≤ φ 42	119	φ 180	10	220	356.5	494.5	25	334
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	119	φ 200	10	220	356.5	494.5	25	334
PGHR220-L2	φ 165	4-M10x25, 4-M12x35	≤ φ 32	118	φ 130	10	180	372	510	16.5	296.5
	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	372	510	16.5	296.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	118	φ 180	10	190	377	515	16.5	296.5
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	150	φ 200	10	220	392	530	48.5	328.5

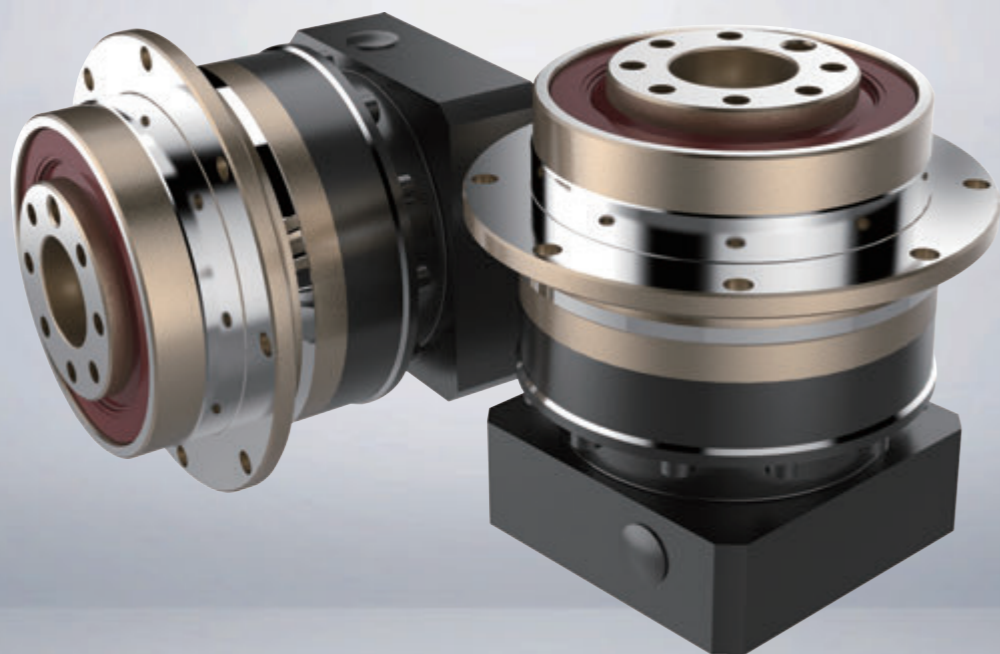
* C1~C11 是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C11 are motor (metric standard) specific dimensions, which could be customised.



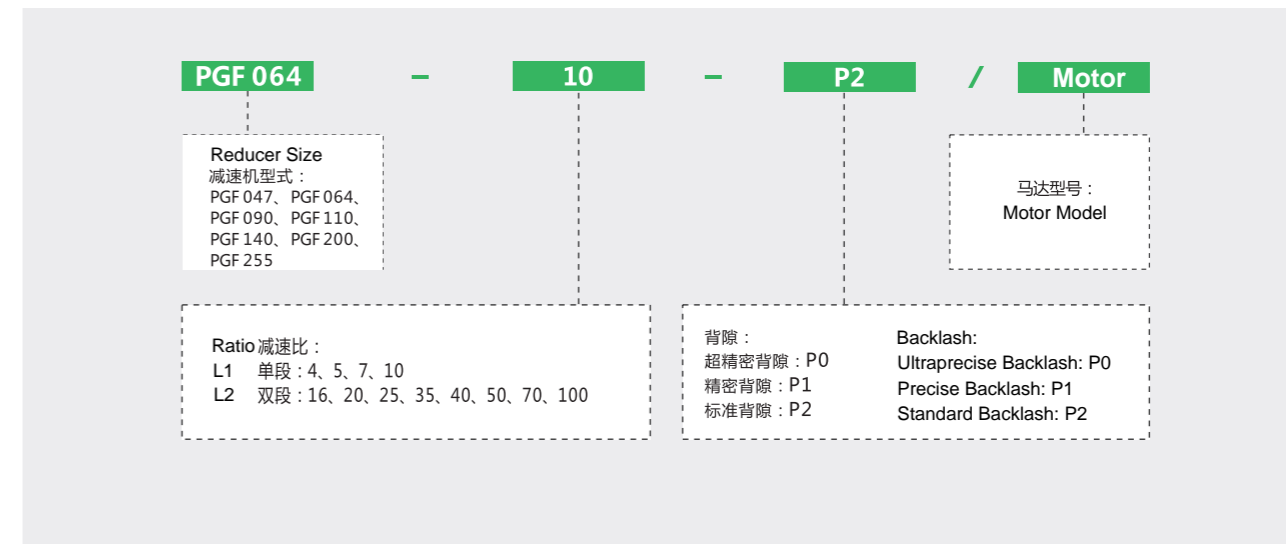
PGF Series

High Precision Disc Output Type

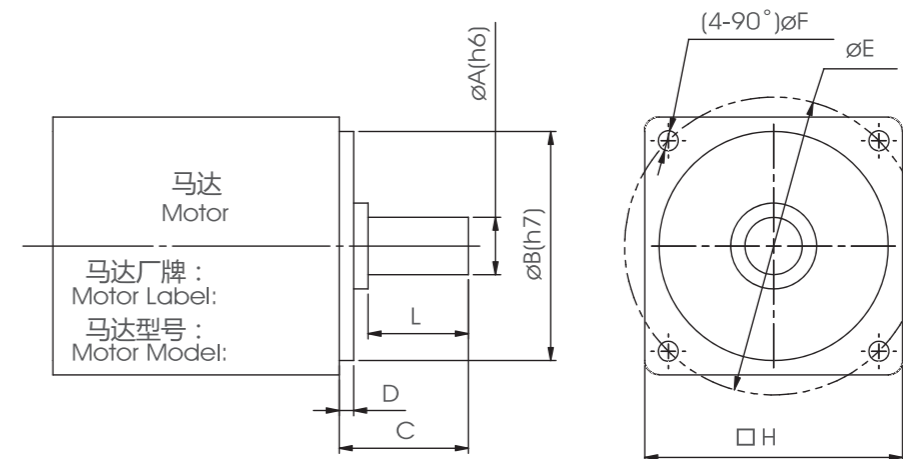
(高精精密盘形式输出) 系列



型号说明 / ORDER CODE



FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

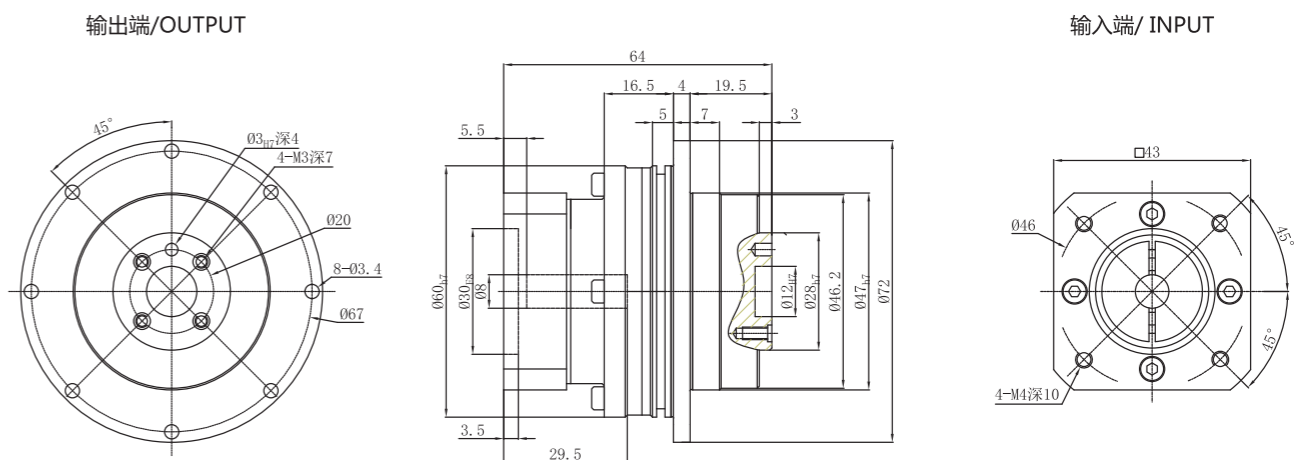
Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
$\varnothing A(h6)$	$\varnothing B(h7)$	C	D	$\varnothing E$	$\varnothing F$	□H	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

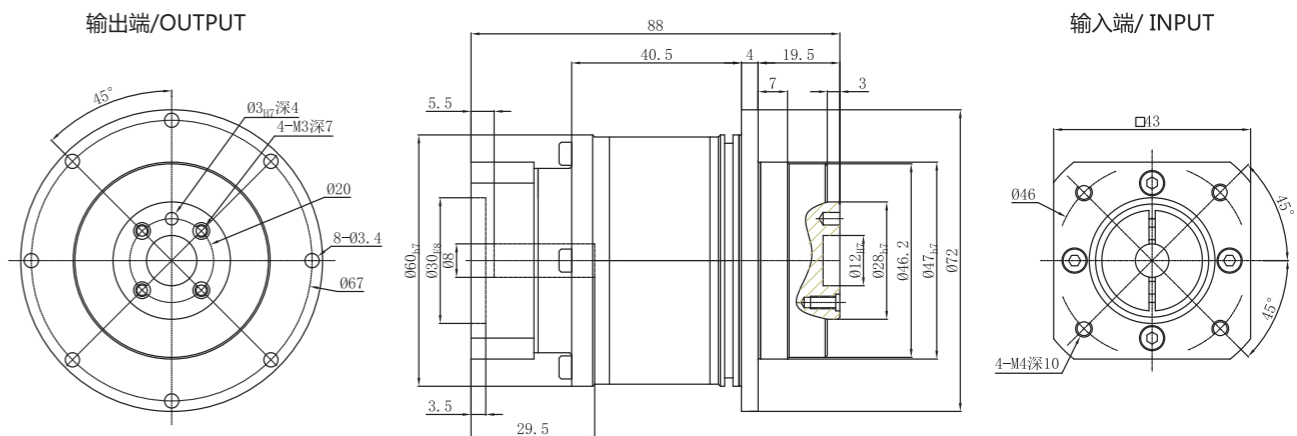
规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGF047	PGF064	PGF090	PGF110	PGF140	PGF200	PGF255
额定输出力矩 T2N Nominal Output Torque	N.m	1	4	21	50	142	285	582	1145	1650
			5	25	66	176	335	600	1220	1700
			7	21	54	145	310	540	1120	1500
			10	16	45	122	250	500	620	1250
		2	16	21	50	142	285	582	1060	1600
			20	21	50	142	285	582	1120	1700
			25	25	66	176	335	600	1220	2000
			35	25	66	176	335	600	1220	2000
			40	21	50	142	285	582	1145	1700
			50	25	66	176	335	600	1220	2000
70	21	54	145	310	540	1120	1800			
100	16	45	122	250	500	620	1250			
急停力矩 T2NOT Emergency Stop Torque	N.m	1, 2	4 ~ 100	3倍额定输出力矩 (3.0 times of Nominal Output Torque)						
额定输入转速 n1 Nominal Input Speed	rpm	1, 2	4 ~ 100	5000	5000	5000	4000	3000	3000	2000
最大输入转速 n1max Max. Input Speed	rpm	1, 2	4 ~ 100	10000	10000	10000	8000	6000	6000	4000
超精密背隙 P0 Ultra-precise Backlash	arcmin	1	4 ~ 10	≤2	≤2	≤2	≤1	≤1	≤1	≤1
		2	16 ~ 100	≤4	≤4	≤4	≤3	≤3	≤3	≤3
精密背隙 P1 Precise Backlash	arcmin	1	4 ~ 10	≤4	≤4	≤4	≤3	≤3	≤3	≤3
		2	16 ~ 100	≤6	≤6	≤6	≤5	≤5	≤5	≤5
标准背隙 P2 Standard Backlash	arcmin	1	4 ~ 10	≤6	≤6	≤6	≤5	≤5	≤5	≤5
		2	16 ~ 100	≤8	≤8	≤8	≤7	≤7	≤7	≤7
扭转刚性 Torsional Rigidity	N.m / arcmin	1, 2	4 ~ 100	6	11	30	84	150	435	1006
最大弯曲力矩 M2kB Max. Radial Load	N	1, 2	4 ~ 100	40	120	241	417	1320	3200	5900
容许轴向力 F2aB Max. Axial Load	N	1, 2	4 ~ 100	960	1800	2000	4550	6110	5300	10600
使用温度 Operating Temp	°C	1, 2	4 ~ 100	-10° C ~ +90° C						
使用寿命 Service Life	hr	1, 2	4 ~ 100	20000 (10000/连续运转)						
效率 η Efficiency	%	1	4 ~ 10	≥97%						
		2	16 ~ 100	≥94%						
重量 Weight	kg	1	4 ~ 10	0.8	1.2	3.3	7.5	14.6	32.4	
		2	16 ~ 100	1.1	1.8	4.5	9.2	18.7	37.5	
安装方向 mounting Position		1, 2	3 ~ 100	任意方向 Any direction						
噪音值 Noise Level	dBA/1m	1, 2	3 ~ 100	60	60	63	65	68	70	73
防护等级 Protection Class		1, 2	3 ~ 100	Ip65						
润滑 Lubrication		1, 2	3 ~ 100	全合成润滑脂油 Synthetic Lubricant						

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGF 047-L1



PGF 047-L2

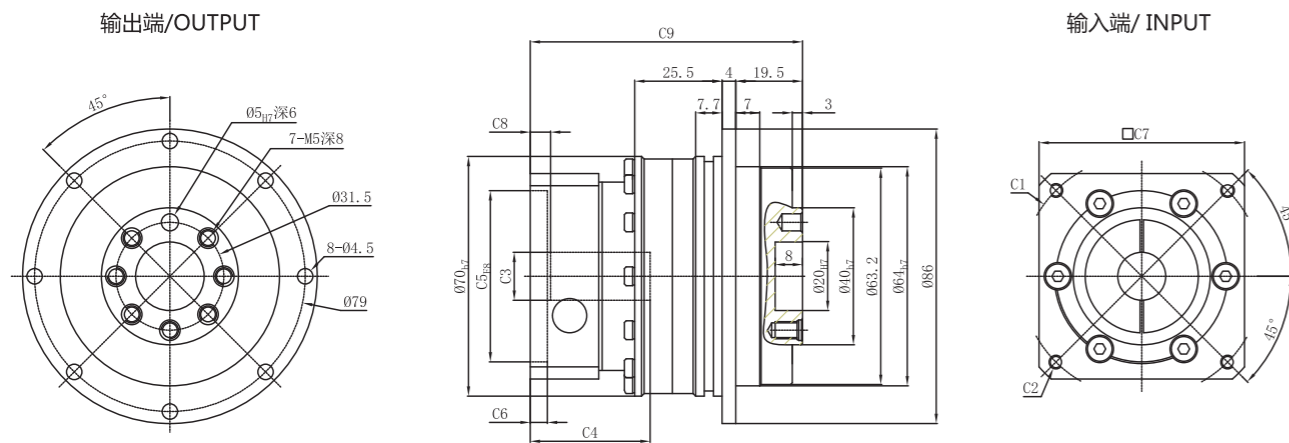


减速机转动惯量

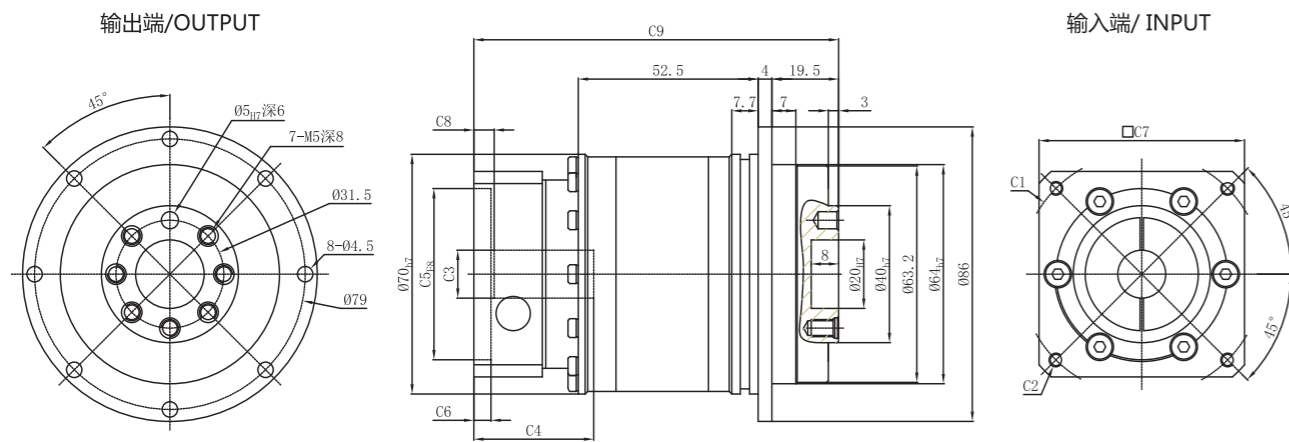
规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGF047	PGF064	PGF090	PGF110	PGF140	PGF200	PGF255
转动惯量 J1 Inertia	kg.cm2	1	4	0.04	0.18	0.67	1.66	7.17	24.92	58.30
			5	0.04	0.17	0.65	1.50	6.52	23.42	53.30
			7	0.04	0.14	0.60	1.45	6.17	22.64	51.02
			9	0.04	0.14	0.58	1.41	6.10	22.64	50.96
		2	10	0.04	0.14	0.58	1.41	6.10	22.72	50.55
			16	0.04	0.18	0.18	0.65	2.80	7.56	23.22
			20	0.04	0.17	0.17	0.65	2.80	7.56	23.22
			25	0.04	0.17	0.17	0.65	2.80	7.56	23.22
			35	0.04	0.14	0.14	0.60	2.59	7.56	23.22
			40	0.04	0.14	0.14	0.60	2.59	7.06	22.51
			50	0.04	0.14	0.14	0.58	2.54	7.06	22.51
			70	0.04	0.14	0.14	0.58	2.54	7.06	22.51
			90	0.04	0.14	0.14	0.58	2.54	7.06	22.51
			100	0.04	0.14	0.14	0.58	2.54	7.06	22.51

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGF064-L1



PGF064-L2

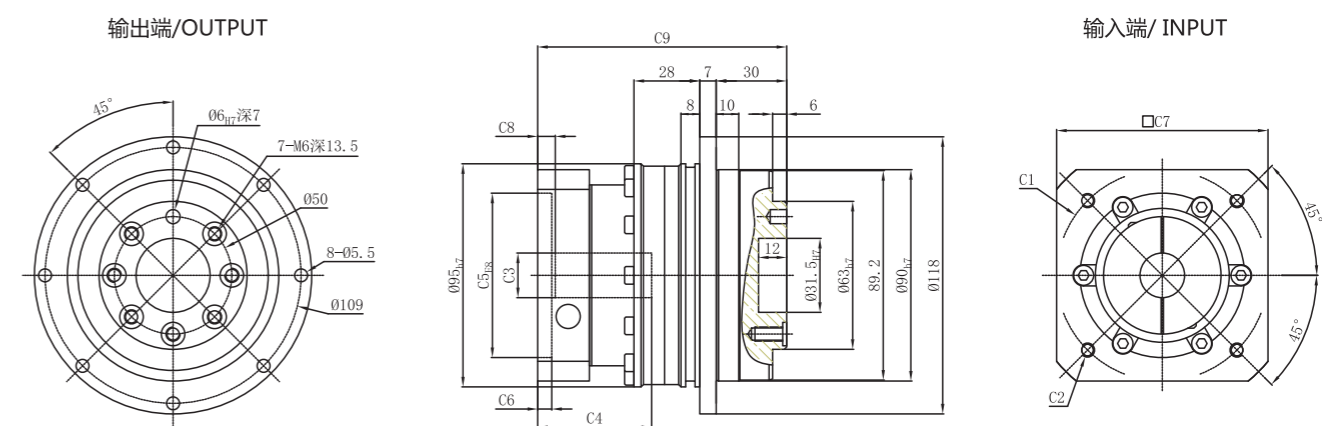


尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGF064-L1	φ46	4-M4x10	≤ φ8	35	φ30	5	60	5.5	79.5
	φ66.7	4-M4x10	≤ φ8	35	φ38.1	5	60	5.5	79.5
	φ70	4-M4x10,4-M5x10	≤ φ14	35	φ50	5	60	5.5	79.5
	φ75	4-M4x10,4-M5x10	≤ φ14	35	φ60	5	66	5.5	79.5
PGF064-L2	φ46	4-M4x10	≤ φ8	35	φ30	5	60	5.5	106.5
	φ66.7	4-M4x10	≤ φ8	35	φ38.1	5	60	5.5	106.5
	φ70	4-M4x10,4-M5x10	≤ φ14	35	φ50	5	60	5.5	106.5
	φ75	4-M4x10,4-M5x10	≤ φ14	35	φ60	5	66	5.5	106.5

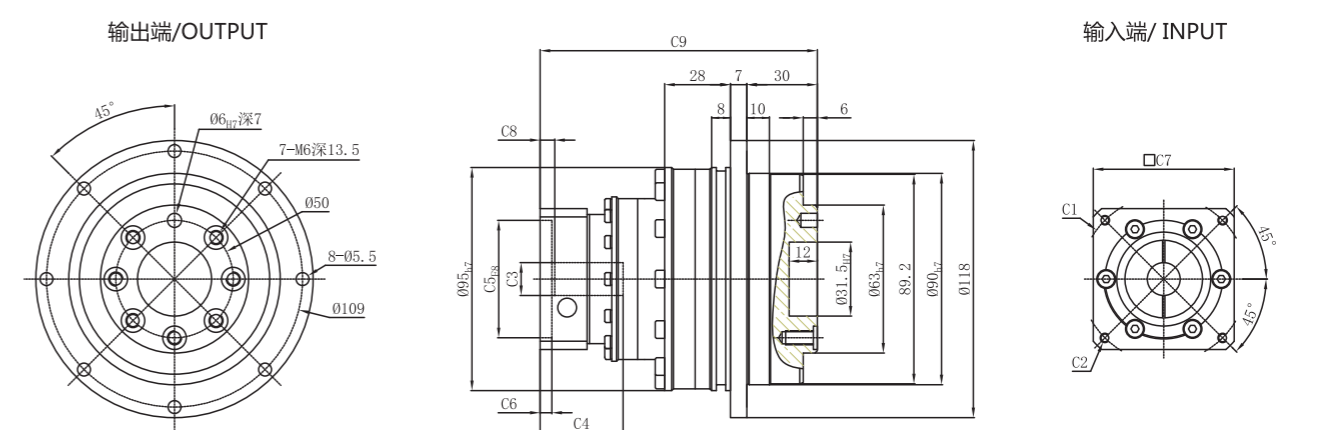
* C1~C9 是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C9 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGF090-L1



PGF090-L2



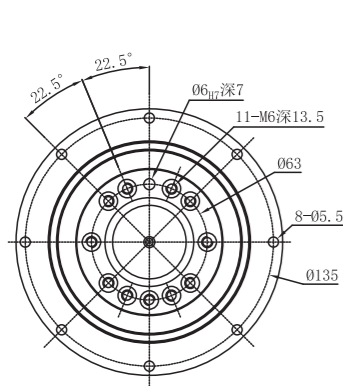
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGF090-L1	φ90	4-M5x15,4-M6x15	≤ φ24	47	φ70	6	90	7	106
	φ98.4	4-M5x15,4-M6x15	≤ φ14	47	φ73	6	90	7	106
	φ100	4-M6x15	≤ φ24	47	φ80	6	90	7	106
	φ115	4-M6x20,4-M8x20	≤ φ24	59	φ95	11	100	19	118
	φ130	4-M8x20	≤ φ24	59	φ95	11	115	19	118
	φ145	4-M8x20	≤ φ24	59	φ110	11	130	19	118
PGF090-L2	φ70	4-M4x10,4-M5x10	≤ φ14	35	φ50	5	60	5.5	118
	φ90	4-M5x15,4-M6x15	≤ φ24	47	φ70	6	90	7	139.5
	φ98.4	4-M5x15,4-M6x15	≤ φ14	47	φ73	6	90	7	139.5
	φ100	4-M6x15	≤ φ24	47	φ80	6	90	7	139.5
	φ115	4-M6x20,4-M8x20	≤ φ24	59	φ95	11	100	19	151.5
	φ130	4-M8x20	≤ φ24	59	φ95	11	115	19	151.5
PGF090-L2	φ145	4-M8x20	≤ φ24	59	φ110	11	130	19	151.5
	φ145	4-M8x20	≤ φ24	70	φ110	11	130	30	162.5

* C1~C9 是公制标准马达连接板之尺寸,可根据客户要求单独定做。
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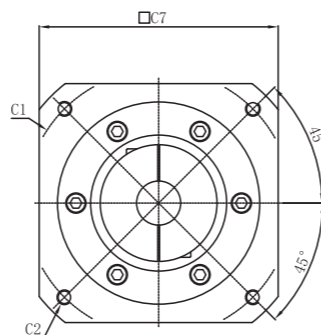
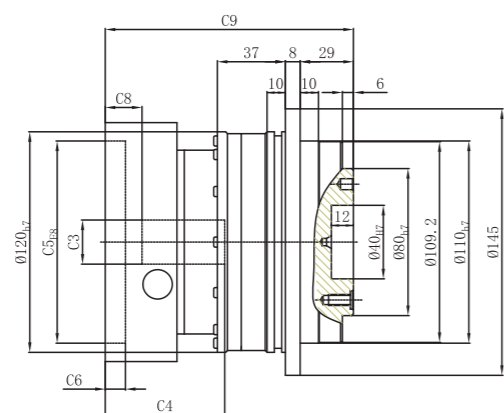
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGF110-L1

输出端/OUTPUT

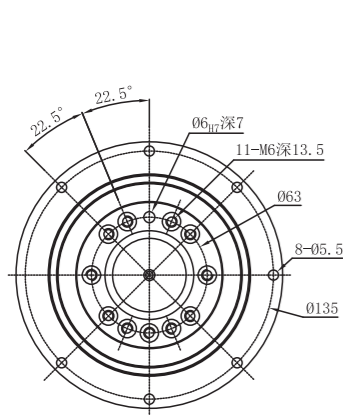


输入端/INPUT

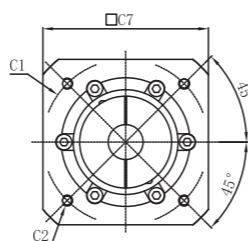
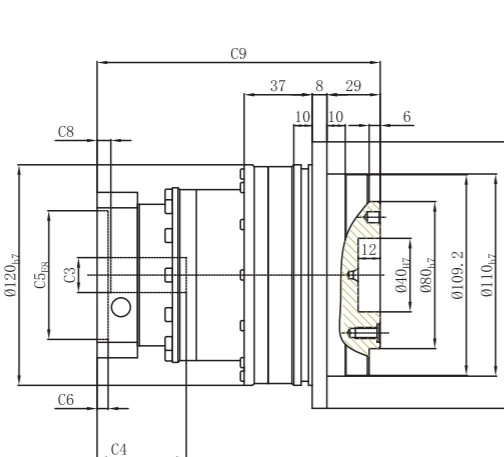


PGF110-L2

输出端/OUTPUT



输入端/INPUT



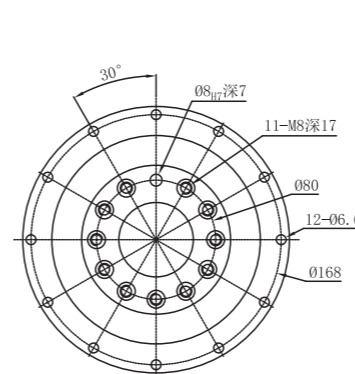
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGF110-L1	φ 115	4-M6x20,4-M8x20	≤ φ 24	61	φ 95	11	115	17	132
	φ 130	4-M8x20	≤ φ 24	61	φ 95	11	115	17	132
	φ 145	4-M8x20	≤ φ 24	64	φ 110	11	130	19	135
PGF110-L2	φ 145	4-M8x20	≤ φ 24	71	φ 110	11	130	26	142
	φ 90	4-M5x15,4-M6x15	≤ φ 19	47	φ 70	6	90	7	154
	φ 115	4-M8x20	≤ φ 24	59	φ 95	11	115	19	166
PGF110-L2	φ 130	4-M8x20	≤ φ 24	59	φ 95	11	115	19	166
	φ 145	4-M8x20	≤ φ 24	59	φ 110	11	130	19	166
	φ 145	4-M8x20	≤ φ 24	70	φ 110	11	130	30	177

* C1~C9 是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C9 are motor (metric standard) specific dimensions, which could be customised.

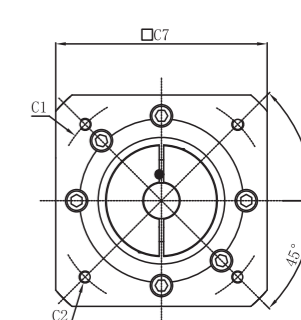
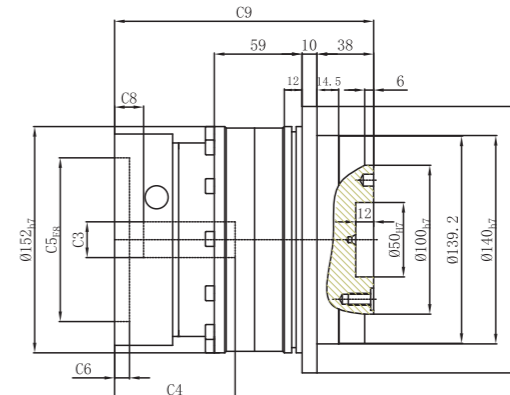
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGF140-L1

输出端/OUTPUT

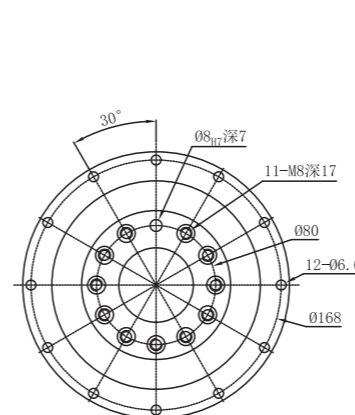


输入端/INPUT

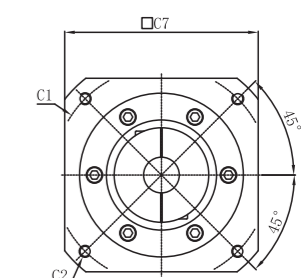
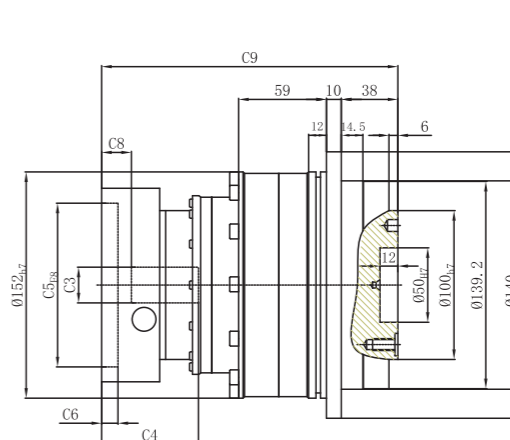


PGF140-L2

输出端/OUTPUT



输入端/INPUT



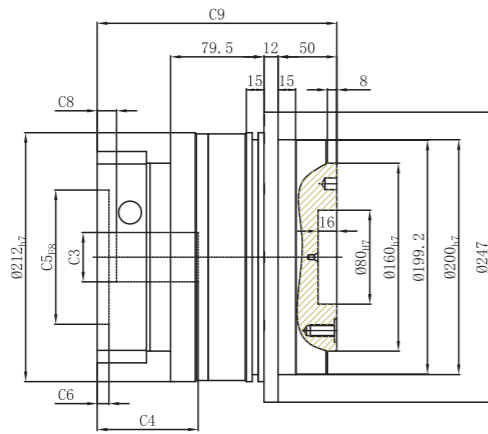
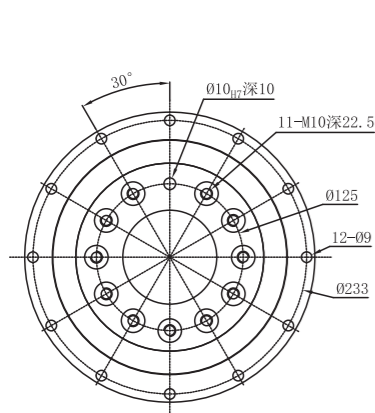
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGF140-L1	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	19.5	174
	φ 165	4-M10x30	≤ φ 28	81	φ 130	10	142	19.5	174
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	21.5	176
PGF140-L2	φ 145	4-M8x25	≤ φ 24	65	φ 110	11	142	20	199
	φ 165	4-M10x30	≤ φ 28	65	φ 130	10	142	20	199
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	21.5	239.5

* C1~C9 是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C9 are motor (metric standard) specific dimensions, which could be customised.

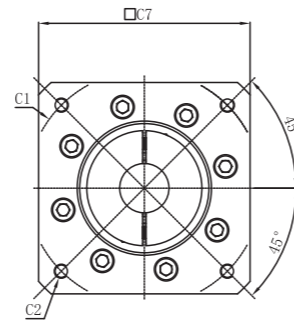
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGF 200-L1

输出端/OUTPUT



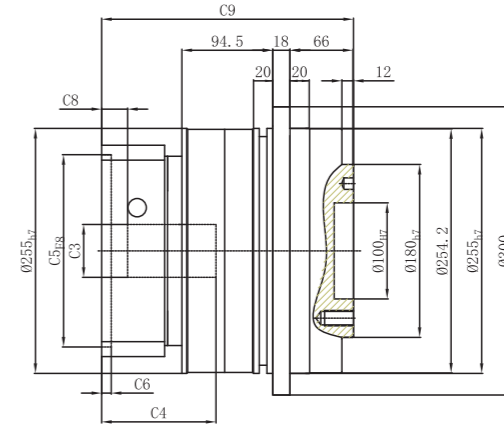
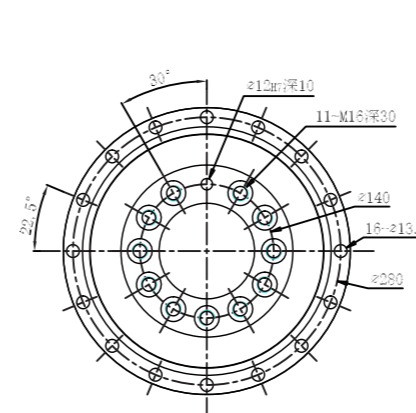
输入端/ INPUT



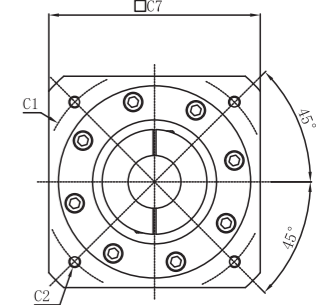
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGF255-L1

输出端/OUTPUT

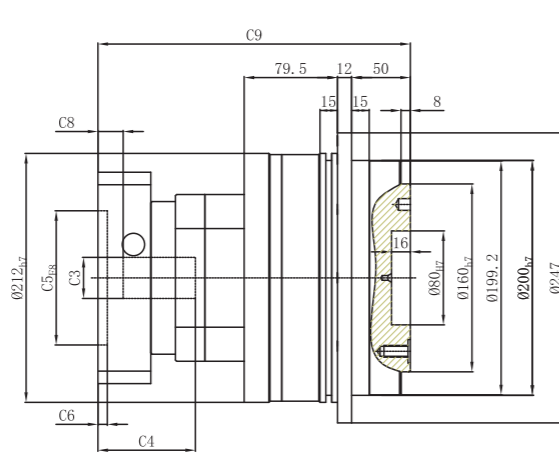
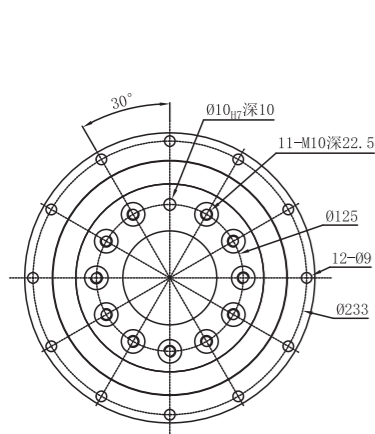


输入端/ INPUT

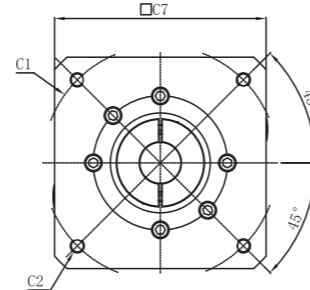


PGF 200-L2

输出端/OUTPUT

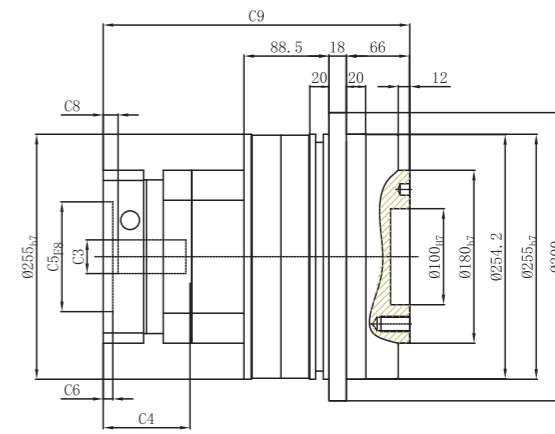
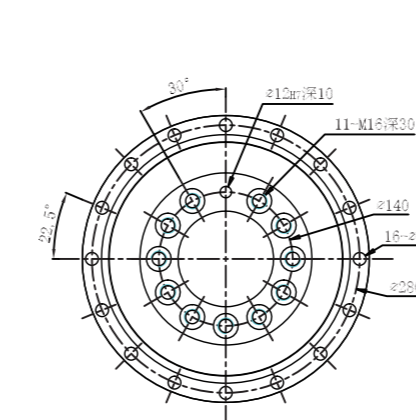


输入端/ INPUT

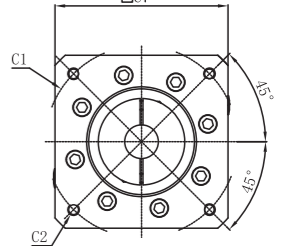


PGF255-L2

输出端/OUTPUT



输入端/ INPUT



尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGF 200-L1	φ 165	4-M10x25	≤ φ 32	86	φ 30	10	180	16.5	204
	φ 200	4-M12x35	≤ φ 42	86	φ 114.3	10	180	16.5	204
	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	48.5	236
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	86	φ 180	10	190	16.5	204
PGF 200-L2	φ 235	4-M10x30, 4-M14x35	≤ φ 55	118	φ 200	10	220	48.5	236
	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	19.5	264
	φ 165	4-M10x30	≤ φ 28	81	φ 130	10	142	19.5	264
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	21.5	266
	φ 200	4-M12x35, 4-M14x35	≤ φ 42	115	φ 114.3	8	180	53.5	298
φ 215	4-M14x35	≤ φ 42	83	φ 180	8	190	21.5	266	

* C1~C9 是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C9 are motor (metric standard) specific dimensions, which could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
PGF 255-L1	φ 200	4-M12x35	≤ φ 42	119	φ 114.3	10	220	27	262
	φ 215	4-M14x35	≤ φ 42	119	φ 180	10	220	27	262
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	119	φ 200	10	220	27	262
PGF 255-L2	φ 165	4-M10x25, 4-M12x35	≤ φ 32	118	φ 130	10	180	16.5	319
	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	16.5	319
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	118	φ 180	10	190	16.5	319
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	150	φ 200	10	220	48.5	351

* C1~C9 是公制标准马达连接板之尺寸,可根据客户要求单独定做。
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PGFR Series

High Precision Right Angle Disc Output

(盘式输出转角) 系列



型号说明 / ORDER CODE

PGFR064 - **10** - **P2** / **Motor**

Reducer Size
减速机型式：
PGFR 047、PGFR 064
PGFR 090、PGFR 110
PGFR 140、PGFR 200
PGFR 255

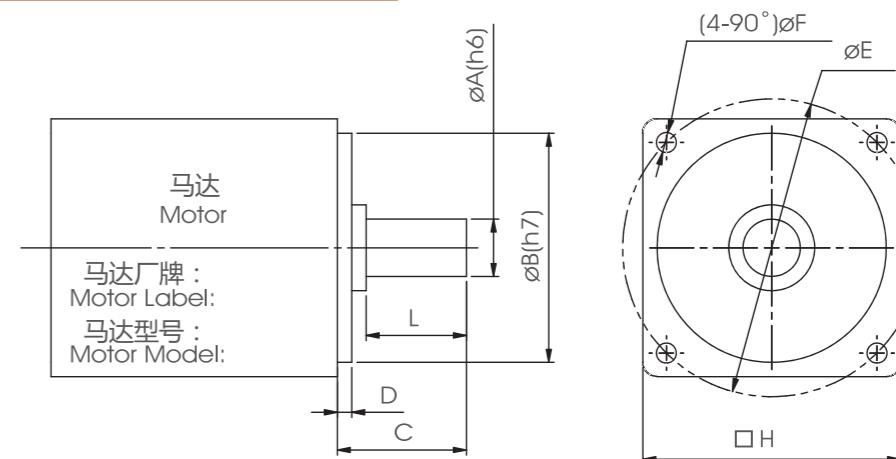
马达型号：
Motor Model

Ratio 减速比：
L1 单段：4、5、7、10
L2 双段：16、20、25、35、40、50、70、100

背隙：
超精密背隙：P0
精密背隙：P1
标准背隙：P2

Backlash：
Ultraprecise Backlash: P0
Precise Backlash: P1
Standard Backlash: P2

FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
øA(h6)	øB(h7)	C	D	øE	øF	□H	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

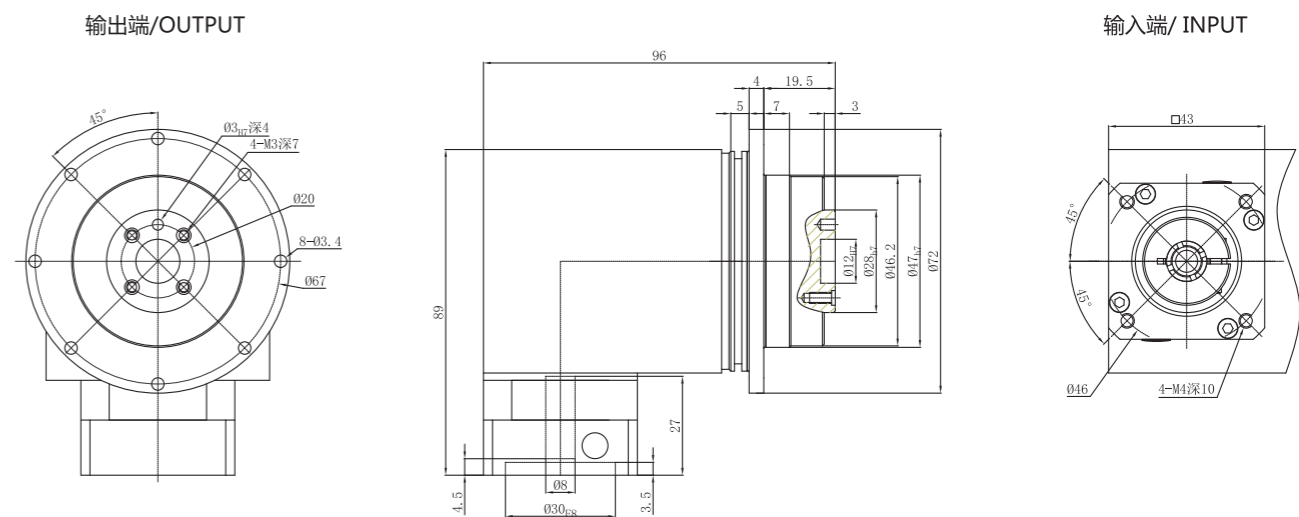
规格Specifications	单位unit	节数Stage	减速比Ratio	PGFR047	PGFR064	PGFR090	PGFR110	PGFR140	PGFR200	PGFR255			
额定输出转矩T2N Nominal Output Torque	N.m	1	4	21	50	142	285	582	1145	1650			
			5	25	66	176	335	600	1220	1700			
			7	21	54	145	310	540	1120	1500			
			8	21	50	142	285	582	1145	1650			
			10	25	66	176	335	600	1220	1700			
			14	21	54	145	310	540	1120	1500			
		2	20	16	45	122	250	500	620	1250			
			16	21	50	142	285	582	1145	1650			
			20	21	50	142	285	582	1145	1650			
			25	25	66	176	335	600	1220	1700			
			35	25	66	176	335	600	1220	1700			
			40	21	50	142	285	582	1145	1650			
急停力矩T2NOT Emergency Stop Torque	N.m	1、2	4~100	3倍额定输出转矩 (3.0 times of Nominal Output Torque)									
			额定输入转速n1 Nominal Input Speed	rpm	1、2	4~100	5000	5000	5000	4000	3000	3000	2000
			最大输入转速n1max Max.Input Speed	rpm	1、2	4~100	10000	10000	10000	8000	6000	6000	4000
			超精密背隙P0 Ultra-precise Backlash	arcmin	1	4~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5
精密背隙P1 Precise Backlash	arcmin	1	4~10	≤8	≤8	≤8	≤8	≤8	≤8	≤8			
		2	16~100	≤7	≤7	≤7	≤7	≤7	≤7	≤7			
标准背隙P2 Standard Backlash	arcmin	1	4~10	≤10	≤10	≤10	≤10	≤10	≤10	≤10			
		2	16~100	≤9	≤9	≤9	≤9	≤9	≤9	≤9			
扭转刚性 Torsional Rigidity	N.m /arcmin	1、2	4~100	6	11	30	84	150	435	1006			
最大弯曲力矩M2kB Max.Radial Load	N	1、2	4~100	40	120	241	417	1320	3200	5900			
容许轴向力F2aB Max.Axial Load	N	1、2	4~100	960	1800	2000	4550	6110	5300	10600			
使用温度 Operating Temp	°C	1、2	4~100	-10° C ~ +90° C									
使用寿命 Service Life	hr	1、2	4~100	20000 (10000/连续运转)									
效率η Efficiency	%	1	4~10	≥95%									
		2	16~100	≥92%									
重量 Weight	kg	1	4~10	1.0	1.6	3.5	7.8	15.0	45.5	68.7			
		2	16~100	1.3	2.2	4.8	9.5	19.1	40.8	72.6			
安装方向 mounting Position		1、2	3~100	任意方向 Any direction									
噪音值 Noise Level	dBA/1m	1、2	3~100	63	63	68	70	70	72	75			
防护等级 Protection Class		1、2	3~100	Ip65									
润滑 Lubrication		1、2	3~100	全合成润滑脂油 Synthetic Lubricant									

减速机转动惯量

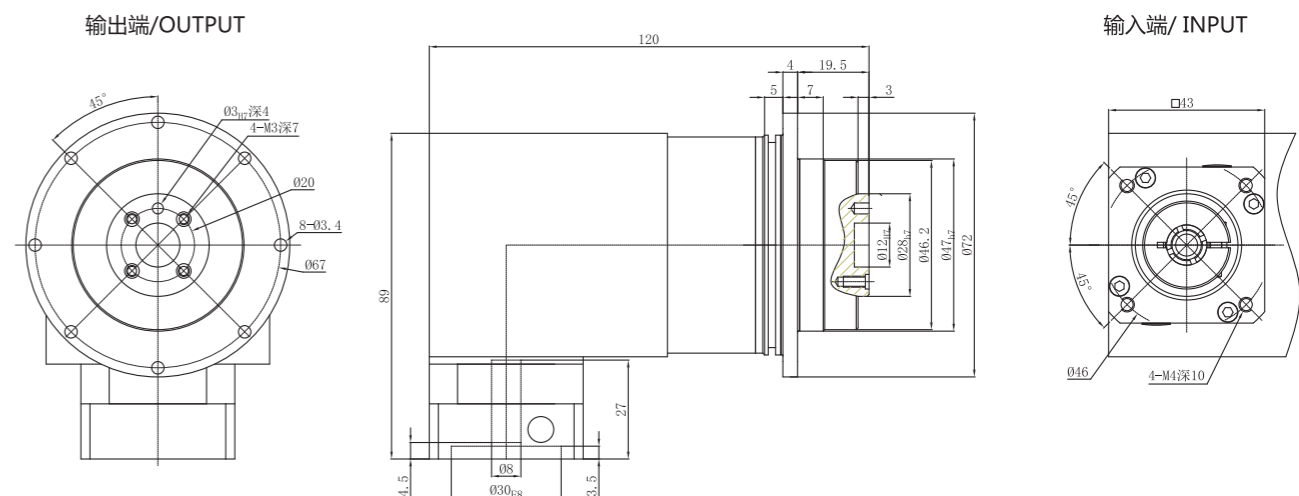
规格Specifications	单位unit	节数Stage	减速比Ratio	PGFR047	PGFR064	PGFR090	PGFR110	PGFR140	PGFR200	PGFR255
转动惯量J1 Inertia	kg.cm2	1	4	0.18	0.67	1.66	7.17	24.92	58.30	
			5	0.17	0.65	1.50	6.52	23.42	53.30	
			7	0.14	0.60	1.45	6.17	22.64	51.02	
			8/10/14/20	0.14	0.58	1.41	6.10	22.64	50.96	
		2	16/20/25	0.18	0.18	0.65	2.80	7.56	23.22	
			35/40	0.14	0.14	0.60	2.59	7.56	23.22	
			50/70/80/100	0.14	0.14	0.58	2.54	7.06	22.51	

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGFR 047-L1

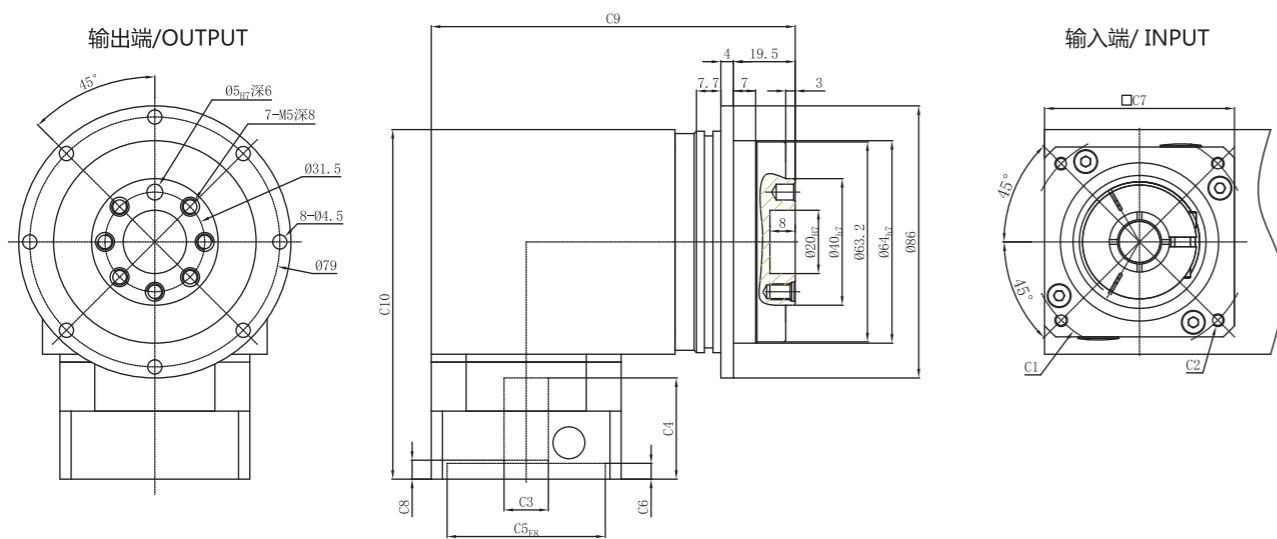


PGFR 047-L2

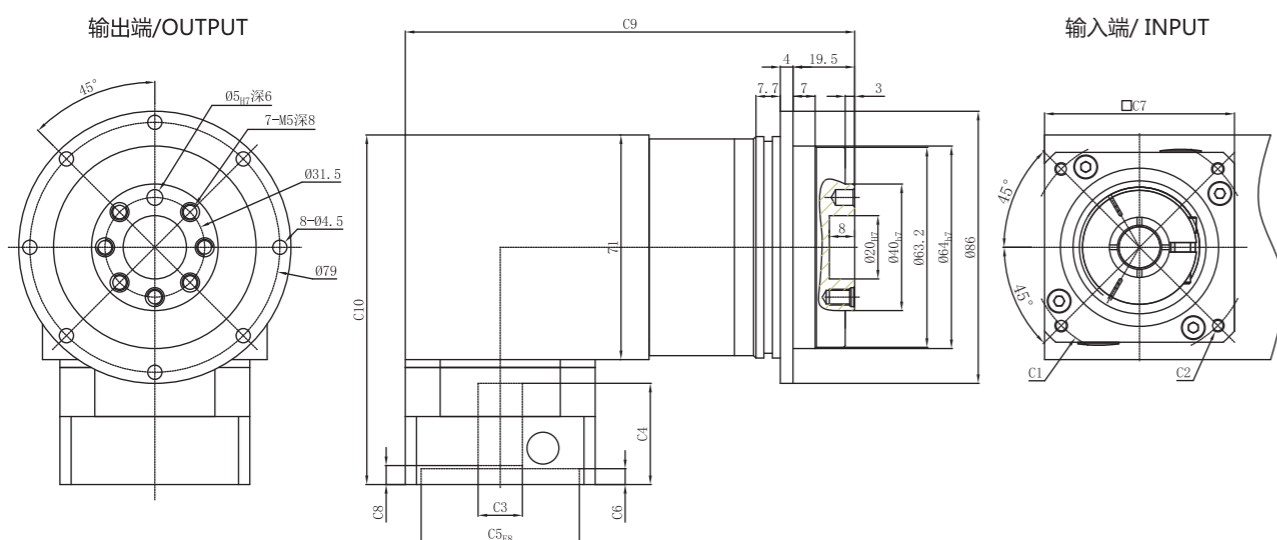


外形尺寸图表 / OUTLINE DIMENSION SHEET

PGFR064-L1



PGFR064-L2

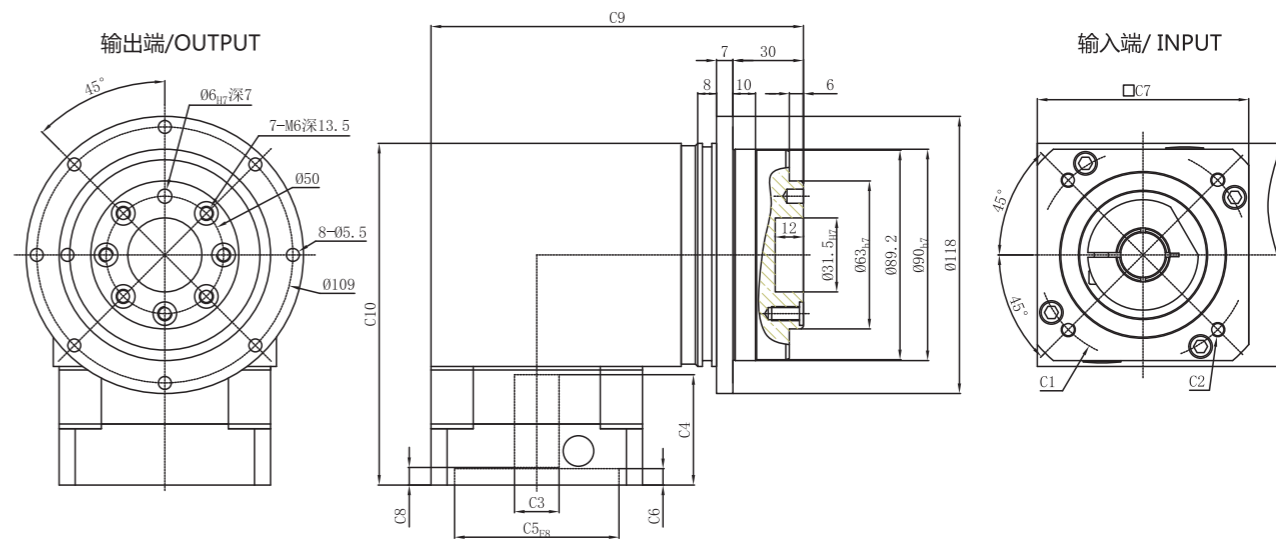


尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGFR064-L1	φ46	4-M4x12,4-M5x12	≤ φ8	37.5	φ30	10.5	60	11.5	115	116
	φ66.7	4-M4x12	≤ φ8	32	φ38.1	5	60	6	115	110.5
	φ70	4-M4x10,4-M5x12	≤ φ14	32	φ50	5	60	6	115	110.5
	φ75	4-M4x12,4-M5x12	≤ φ14	32	φ60	5	66	6	118	110.5
PGFR064-L2	φ46	4-M4x12,4-M5x12	≤ φ8	37.5	φ30	10.5	60	11.5	142	116
	φ66.7	4-M4x12	≤ φ8	32	φ38.1	5	60	6	142	110.5
	φ70	4-M4x10,4-M5x12	≤ φ14	32	φ50	5	60	6	142	110.5
	φ75	4-M4x12,4-M5x12	≤ φ14	32	φ60	5	66	6	145	110.5

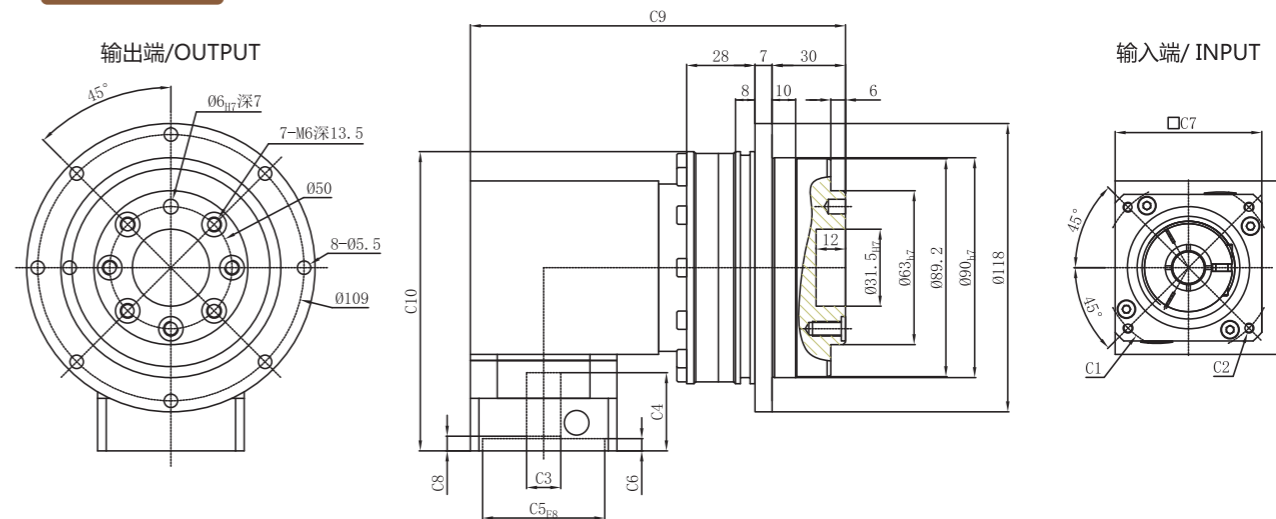
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGFR090-L1



PGFR090-L2

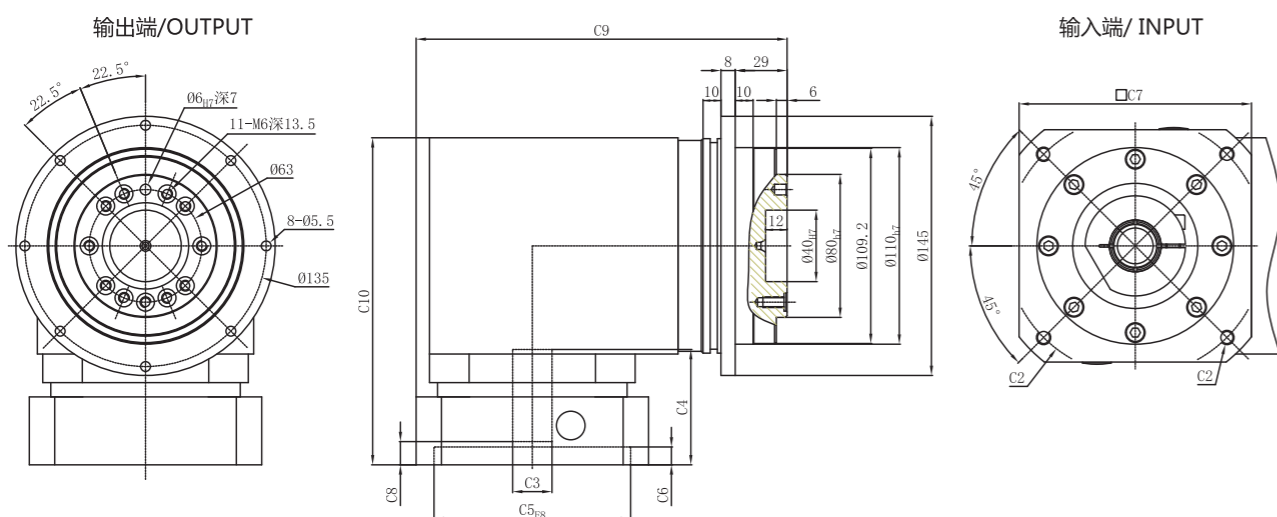


尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGFR090-L1	φ70	4-M4x10,4-M5x12	≤ φ14	47	φ50	4	90	6.5	158.5	145.5
	φ75	4-M4x12,4-M5x12	≤ φ14	47	φ60	5.5	90	6.5	158.5	145.5
	φ90	4-M5x15,4-M6x15	≤ φ19	47	φ70	7	90	7.5	158.5	145.5
	φ98.4	4-M5x15,4-M6x15	≤ φ14	47.5	φ73	7	90	7.5	158.5	145.5
	φ100	4-M6x15	≤ φ19	47.5	φ80	7	90	12.5	158.5	145.5
	φ115	4-M8x20	≤ φ24	59	φ95	10	100	12.5	163.5	157.5
	φ130	4-M8x20	≤ φ24	59	φ95	10	115	12.5	171	157.5
PGFR090-L2	φ145	4-M8x20	≤ φ24	59	φ110	10	130	12.5	178.5	157.5
	φ145	4-M8x20	≤ φ24	68	φ110	10	130	21.5	178.5	166.5
	φ70	4-M4x10,4-M5x12	≤ φ14	32	φ50	5	60	6	153.5	122.5
	φ75	4-M4x12,4-M5x12	≤ φ14	32	φ60	5	66	6	156.5	122.5
	φ90	4-M5x15,4-M6x15	≤ φ19	47	φ70	7	90	7.5	192	145.5
	φ98.4	4-M5x15,4-M6x15	≤ φ14	47.5	φ73	7	90	7.5	192	145.5
	φ100	4-M6x15	≤ φ19	47.5	φ80	7	90	12.5	192	145.5
	φ115	4-M8x20	≤ φ24	59	φ95	10	100	12.5	197	157.5
	φ130	4-M8x20	≤ φ24	59	φ95	10	115	12.5	204.5	157.5
	φ145	4-M8x20	≤ φ24	59	φ110	10	130	12.5	212	157.5
	φ145	4-M8x20	≤ φ24	68	φ110	10	130	21.5	212	166.5

* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

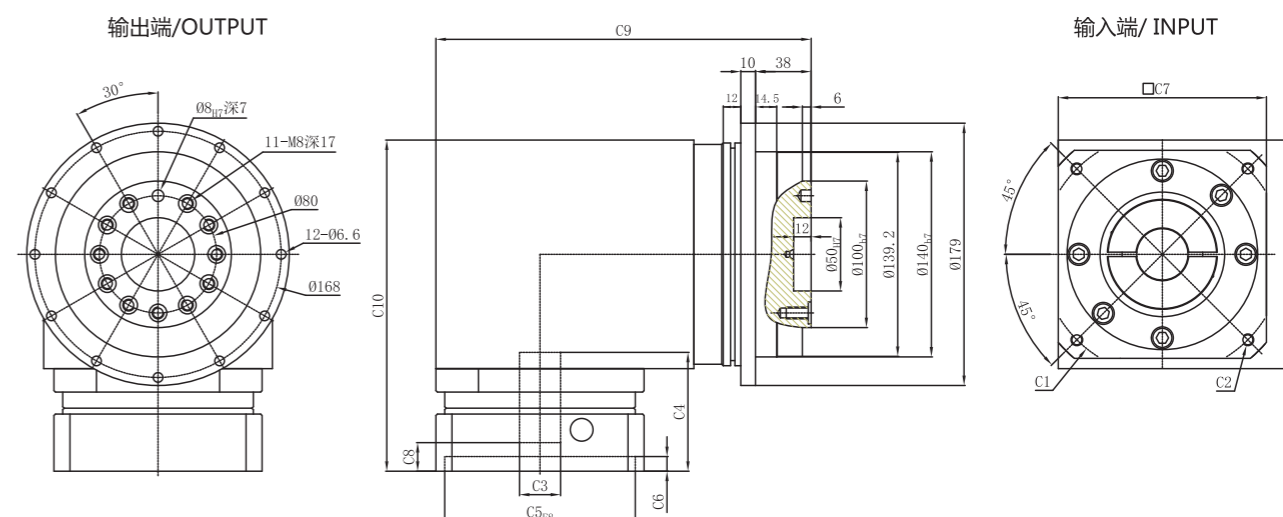
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGFR 110-L1

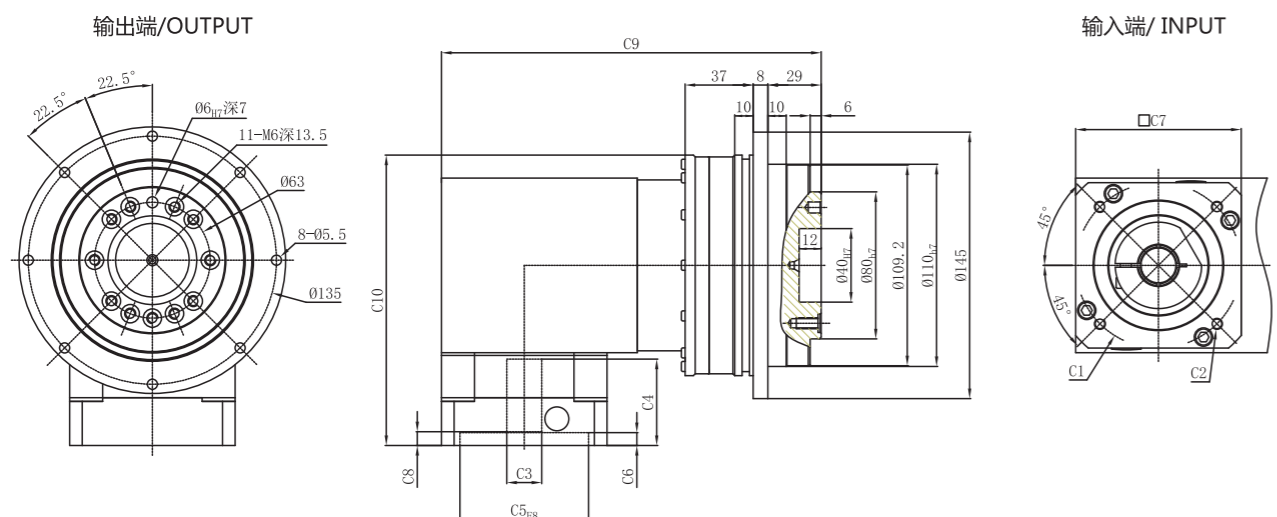


外形尺寸图表 / OUTLINE DIMENSION SHEET

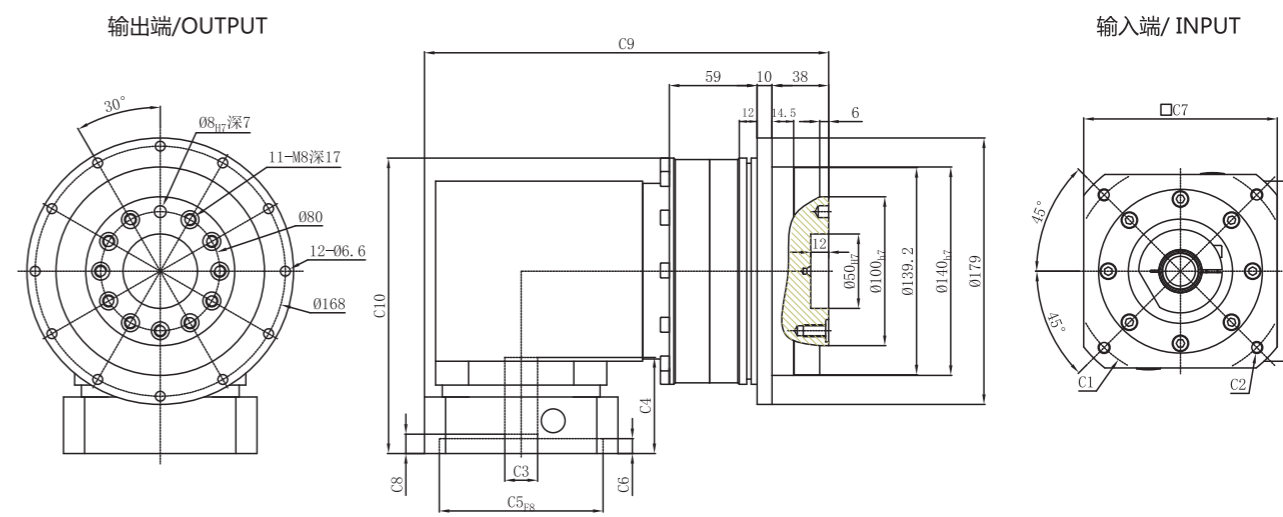
PGFR 140-L1



PGFR 110-L2



PGFR 140-L2



尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGFR110-L1	φ 90	4-M5x15,4-M6x15	≤ φ 19	62	φ 70	7	115	12	200	183
	φ 100	4-M6x15	≤ φ 19	62	φ 80	7	115	12	200	183
	φ 115	4-M8x20	≤ φ 24	62	φ 95	10	115	13	200	183
	φ 145	4-M8x20	≤ φ 24	62	φ 110	10	130	13	207.5	183
	φ 145	4-M8x20	≤ φ 24	71	φ 110	10	130	13	207.5	192
PGFR110-L2	φ 90	4-M5x15,4-M6x15	≤ φ 19	47	φ 70	7	90	7.5	206.5	158
	φ 100	4-M6x15	≤ φ 19	47	φ 80	7	90	7.5	206.5	158
	φ 115	4-M8x20	≤ φ 24	59	φ 95	10	115	12.5	219	170
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	12.5	226.5	170
	φ 145	4-M8x20	≤ φ 24	68	φ 110	10	130	21.5	226.5	179

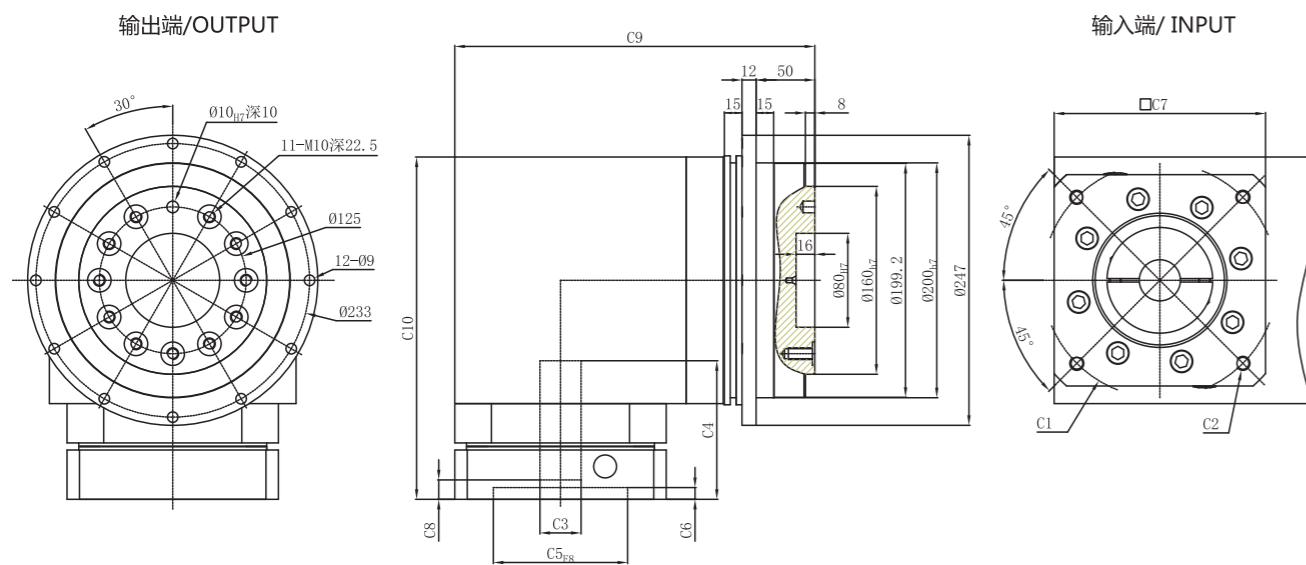
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGFR140-L1	φ 145	4-M8x20	≤ φ 28	81	φ 110	10	142	19.5	256	226
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	19.5	256	226
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	21.5	275	228
PGFR140-L2	φ 200	4-M12x35	≤ φ 42	115	φ 114.3	8	180	53.5	275	260
	φ 145	4-M8x25	≤ φ 24	62	φ 110	10	142	13	271.5	198.5
	φ 165	4-M10x30	≤ φ 28	62	φ 130	10	142	13	271.5	198.5

* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10 are motor (metric standard) specific dimensions, which could be customised.

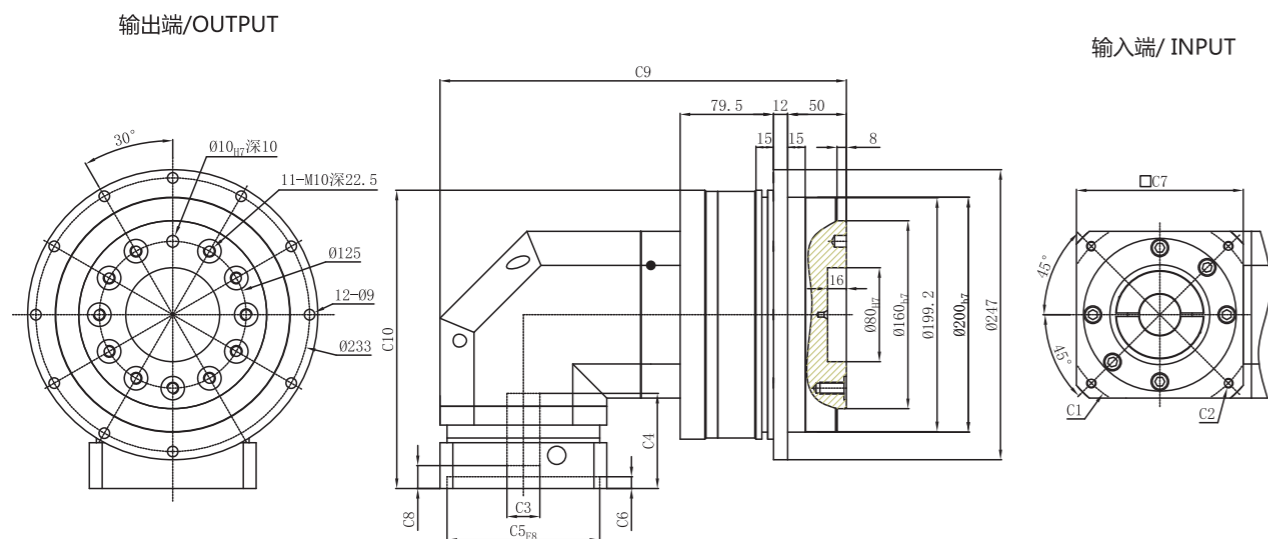
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGFR 200-L1



PGFR 200-L2

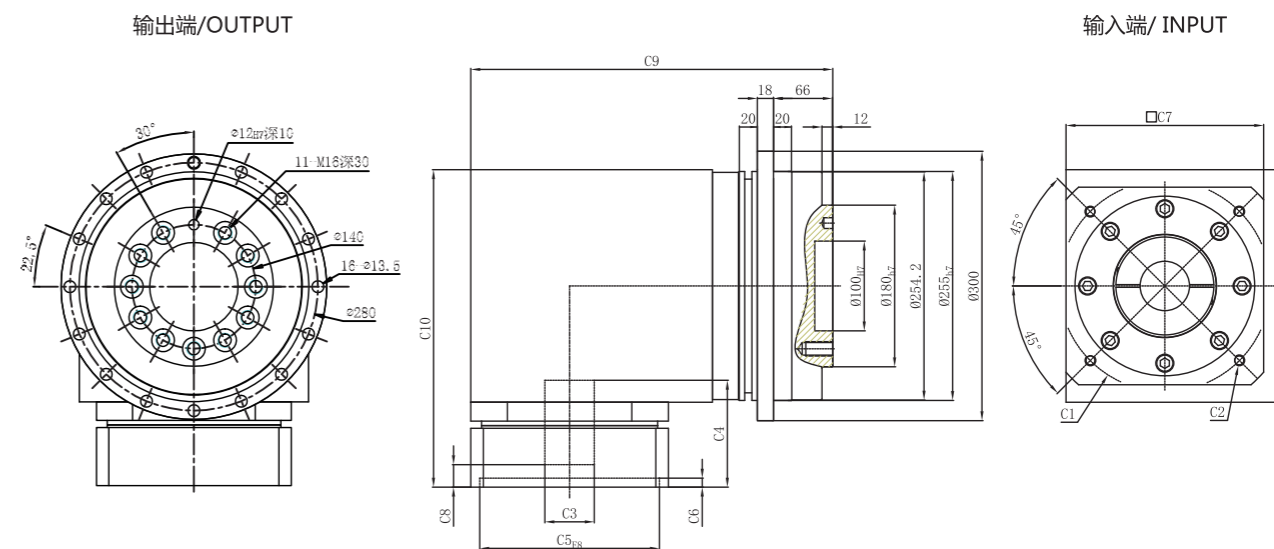


尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGFR 200-L1	φ 165	4-M10x25, 4-M12x35	≤ φ 32	118	φ 130	10	180	16.5	306.5	291.5
	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	16.5	306.5	291.5
	φ 215	4-M14x35	≤ φ 42	118	φ 180	10	190	16.5	311.5	291.5
	φ 235	4-M10x30, 4-M14x35	≤ φ 55	150	φ 200	10	220	48.5	326.5	323.5
PGFR 200-L2	φ 130	4-M8x20	≤ φ 24	81	φ 110	10	142	19.5	346	254
	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	19.5	346	254
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	19.5	346	254
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	21.5	365	256
	φ 200	4-M10x25, 4-M12x35	≤ φ 42	115	φ 114.3	8	180	53.5	365	288
φ 215	4-M14x35	≤ φ 42	83	φ 180	8	190	21.5	370	256	

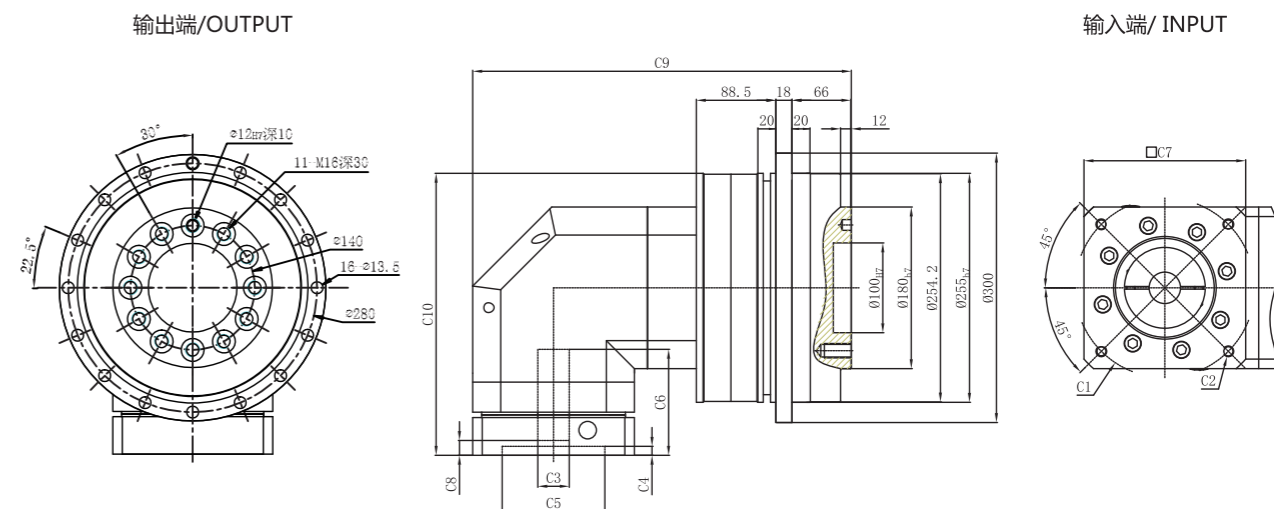
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGFR 255-L1



PGFR 255-L2



尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGFR255-L1	φ 200	4-M12x35	≤ φ 42	119	φ 114.3	10	220	27	403	353.5
	φ 215	4-M14x35	≤ φ 42	119	φ 180	10	220	27	403	353.5
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	119	φ 200	10	220	27	403	353.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	118	φ 130	10	180	16.5	421.5	314
PGFR255-L2	φ 200	4-M12x35	≤ φ 42	118	φ 114.3	10	180	16.5	421.5	314
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	118	φ 180	10	190	16.5	426.5	314
	φ 235	4-M12x35, 4-M14x35	≤ φ 55	150	φ 200	10	220	48.5	441.5	346

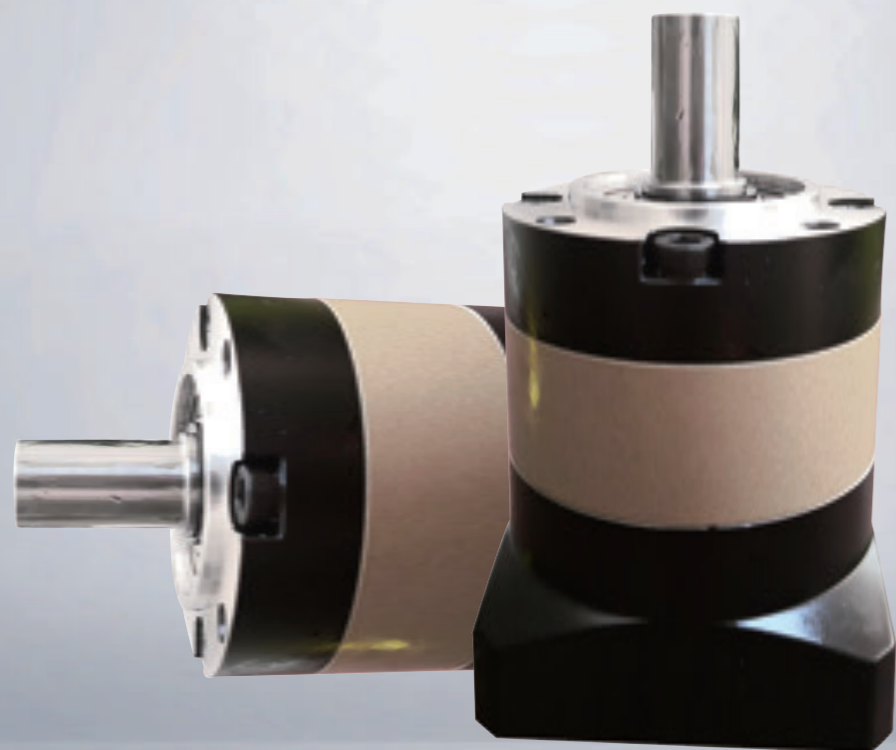
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10 are motor (metric standard) specific dimensions, which could be customised.



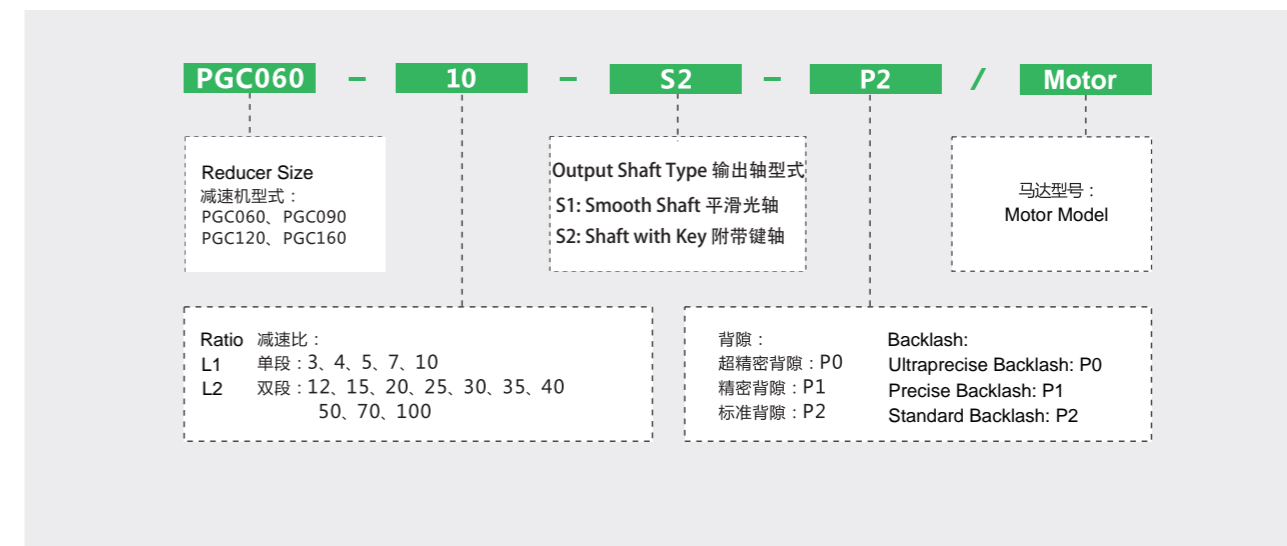
PGC Series

Economical Version-Spur Gear

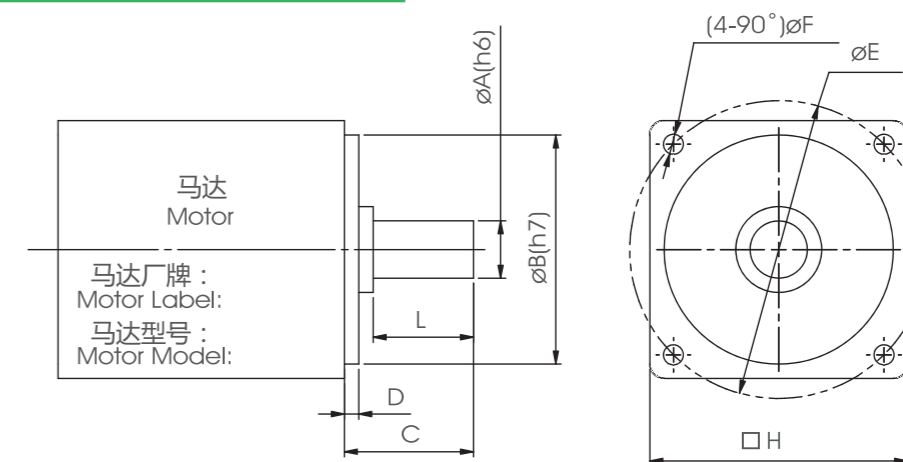
直齿经济型



型号说明 / ORDER CODE



FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
$\phi A(h6)$	$\phi B(h7)$	C	D	ϕE	ϕF	$\square H$	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规格Specifications	单位unit	节数Stage	减速比Ratio	PGC060	PGC090	PGC120	PGC160
额定输出力矩T2N Nominal Output Torque	N.m	1	3	32.6	95.2	283	482
			4	30.1	74.6	249	490
			5	32.3	95.2	283	473
			7	30.9	85.6	219	400
		2	10	25.0	75.0	210	320
			12	32.6	95.2	283	482
			15	32.6	95.2	283	482
			20	30.1	74.6	249	490
			25	32.3	95.2	283	473
			30	32.3	95.2	283	473
		2	35	32.3	95.2	283	473
			40	32.3	95.2	283	473
			50	32.3	95.2	283	473
			70	30.9	85.0	219	400
100	25.0	75.0	210	320			
急停力矩T2NOT Emergency Stop Torque	N.m	1、2	3~100	3倍额定输出力矩 (3.0 times of Nominal Output Torque)			
额定输入转速n1 Nominal Input Speed	rpm	1、2	3~100	3000	3000	2500	2000
最大输入转速n1max Max.Input Speed	rpm	1、2	3~100	6000	6000	5000	4000
超精密背隙P0 Ultraprecise Backlash	arcmin	1	3~10	-	-	≤3	≤3
		2	12~100	-	-	≤5	≤5
精密背隙P1 Precise Backlash	arcmin	1	3~10	-	≤6	≤5	≤5
		2	12~100	-	≤9	≤7	≤7
标准背隙P2 Standard Backlash	arcmin	1	3~10	≤12	≤9	≤7	≤7
		2	12~100	≤15	≤12	≤9	≤9
扭转刚性 Torsional Rigidity	N.m /arcmin	1、2	3~100	2.6	7.5	15.5	30
容许径向力F2rB Max.Radial Load	N	1、2	3~100	889	1630	3380	6450
容许轴向力F2aB Max.Axial Load	N	1、2	3~100	850	1420	2930	5510
使用温度 Operating Temp	°C	1、2	3~100	-10° C ~ +90° C			
使用寿命 Service Life	hr	1、2	3~100	20,000 (10,000/连续运转continui operationg)			
效率η Efficiency	%	1	3~10	≥96%			
		2	12~100	≥92%			
重量 Weight	kg	1	3~10	1.3	3.0	7.3	15.6
		2	12~100	2.0	5.0	11.5	20.7
安装方向 mounting Position	-	1、2	3~100	任意方向 Any direction			
噪音值 Noise Level	dBA/1m	1、2	3~100	60	65	65	70
防护等级 Protection Class	-	1、2	3~100	Ip65			
润滑 Lubrication	-	1、2	3~100	全合成润滑脂油 Synthetic Lubricant			

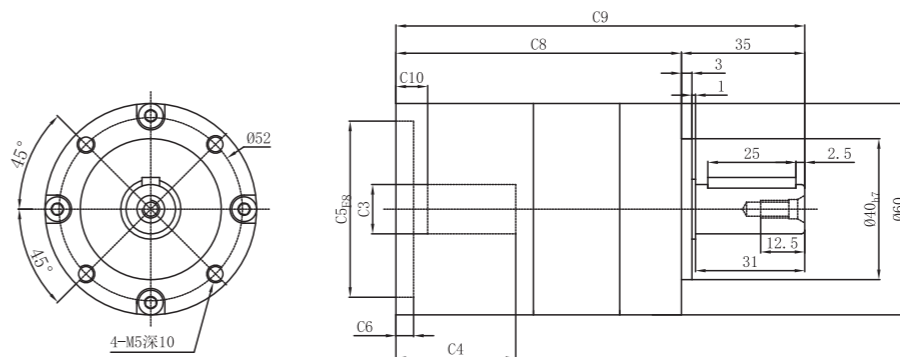
减速机转动惯量

规格Specifications	单位unit	节数Stage	减速比Ratio	PGC060	PGC090	PGC120	PGC160
转动惯量J1 Inertia	kg.cm ²	1	3	0.25	0.81	2.2	7.89
			4	0.18	0.65	1.8	5.83
			5	0.16	0.62	1.61	5.83
			7	0.14	0.60	1.55	5.22
		2	10	0.14	0.60	1.53	5.20
			12	0.16	0.62	1.61	5.83
			15	0.16	0.62	1.61	5.83
			20	0.16	0.62	1.61	5.83
			25	0.16	0.62	1.61	5.83
			30	0.14	0.60	1.55	5.22
		2	35	0.14	0.60	1.55	5.22
			40	0.14	0.60	1.55	5.22
			50	0.14	0.60	1.55	5.22
			70	0.14	0.60	1.53	5.20
100	0.14	0.60	1.53	5.20			

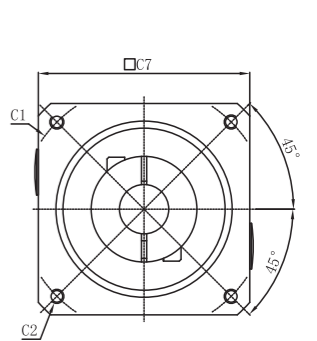
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGC060-L1

输出端/OUTPUT

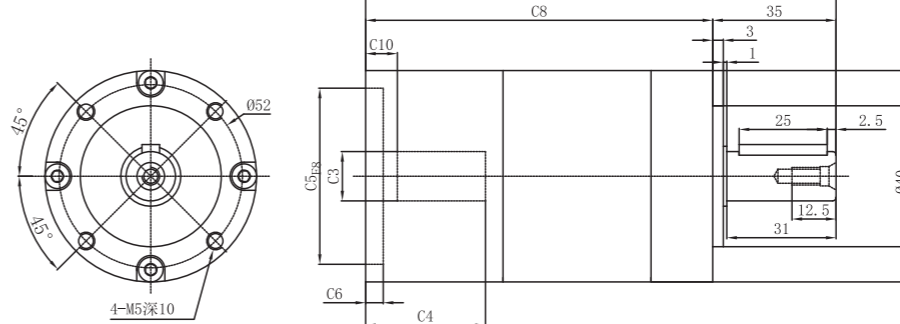


输入端/INPUT

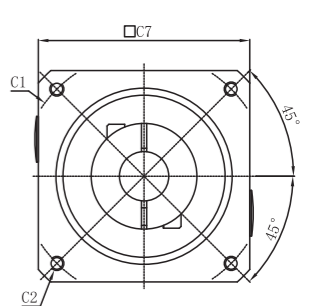


PGC060-L2

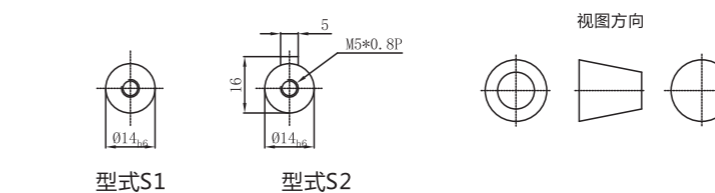
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



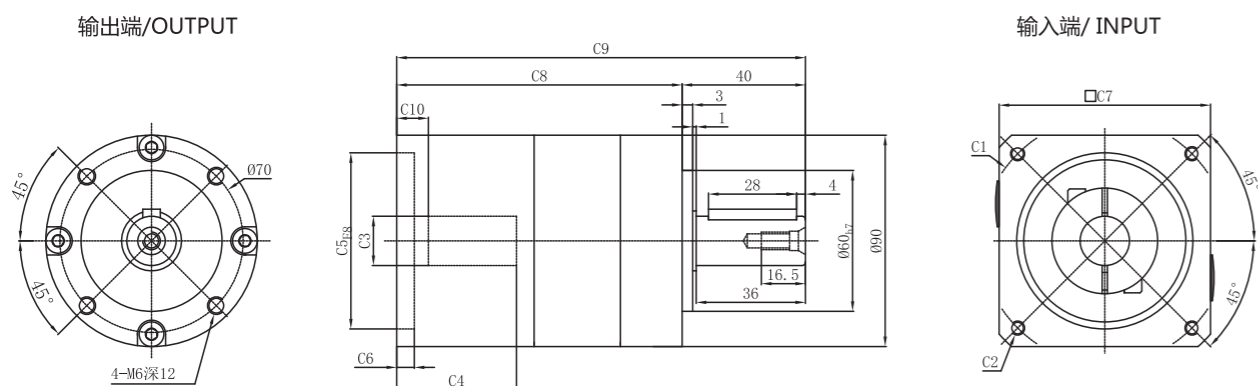
*输入马达连接板之尺寸,可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGC060-L1	φ46	4-M4x10	≤φ8	34	φ30	5	60	81	116	9
	φ66.7	4-M4x10	≤φ8	34	φ38.1	5	60	81	116	8
	φ70	4-M4x10,4-M5x12	≤φ14	34	φ50	5	60	81	116	9
PGC060-L2	φ46	4-M4x10	≤φ8	34	φ30	5	60	137.5	172.5	9
	φ66.7	4-M4x10	≤φ8	34	φ38.1	5	60	137.5	172.5	8
	φ70	4-M4x10,4-M5x12	≤φ14	34	φ50	5	60	137.5	172.5	9

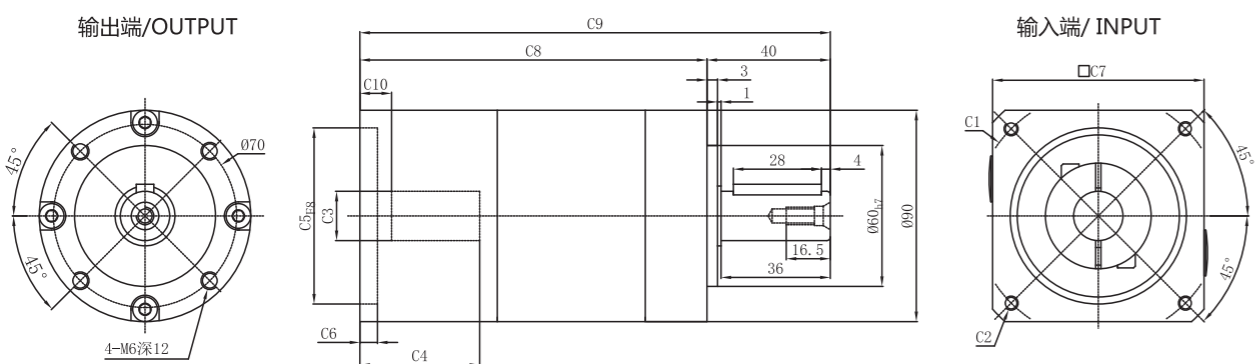
*C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
*C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

PGC090-L1



PGC090-L2



输出轴径/Output Diameter



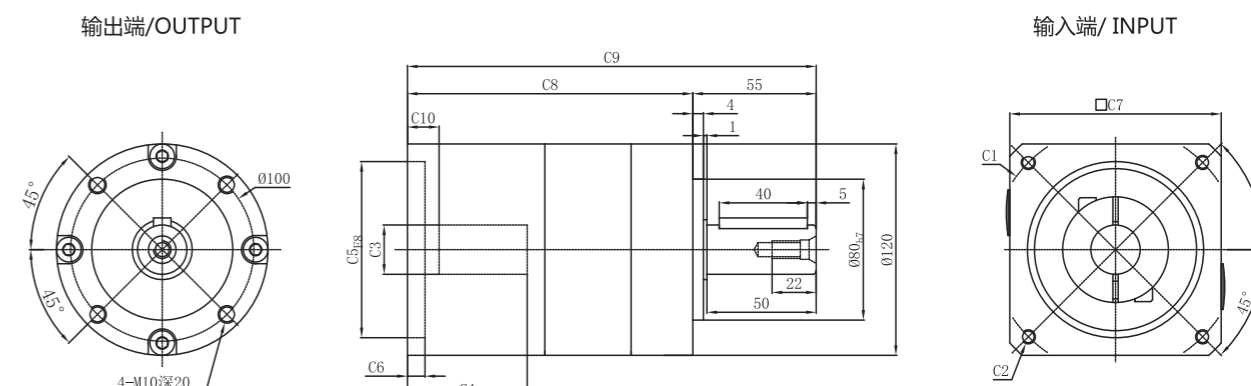
*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGC090-L1	φ 70	4-M4x12,4-M5x12	≤ φ 14	46	φ 50	4	90	100	140	6
	φ 75	4-M4x12,4-M5x12	≤ φ 14	46	φ 60	5.5	90	100	140	6
	φ 90	4-M5x15,4-M6x15	≤ φ 19	46	φ 70	7	90	100	140	7
	φ 100	4-M6x15	≤ φ 19	46	φ 80	7	90	100	140	7
	φ 115	4-M8x20	≤ φ 24	61.5	φ 95	10	100	100	140	12.5
PGC090-L2	φ 70	4-M4x12,4-M5x12	≤ φ 14	46	φ 50	4	90	119	159	6
	φ 75	4-M4x12,4-M5x12	≤ φ 14	46	φ 60	5.5	90	119	159	6
	φ 90	4-M5x15,4-M6x15	≤ φ 19	46	φ 70	7	90	119	159	7
	φ 100	4-M6x15	≤ φ 19	46	φ 80	7	90	119	159	7
	φ 115	4-M8x20	≤ φ 24	61.5	φ 95	10	100	119	159	12.5
φ 145	4-M8x20	≤ φ 24	61.5	φ 110	10	130	119	159	12.5	

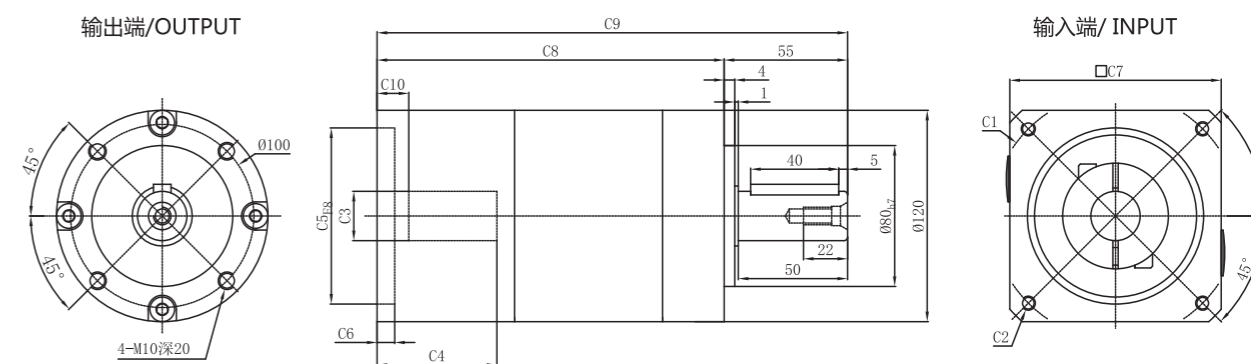
* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

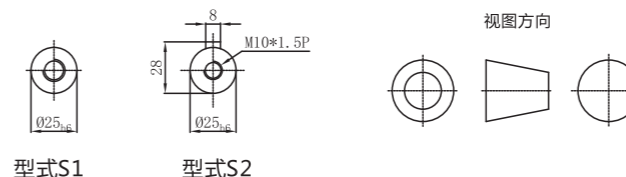
PGC120-L1



PGC120-L2



输出轴径/Output Diameter



*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

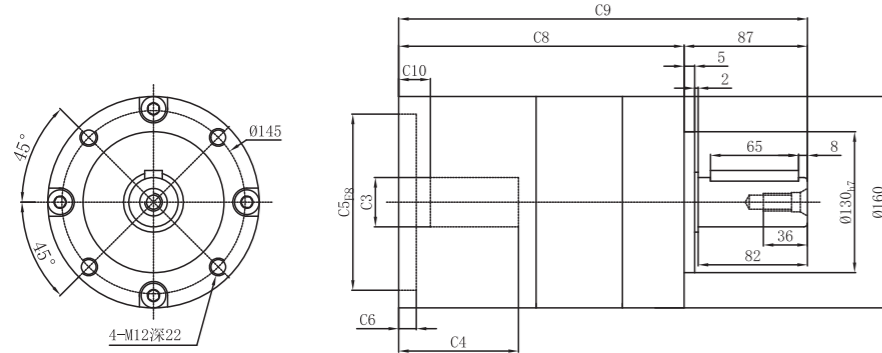
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGC120-L1	φ 90	4-M5x15,4-M6x15	≤ φ 19	48.5	φ 70	7	115	153	208	7
	φ 100	4-M6x15	≤ φ 19	48.5	φ 80	7	115	153	208	7
	φ 115	4-M8x20	≤ φ 24	58	φ 95	10	115	153	208	11.5
PGC120-L2	φ 90	4-M5x15,4-M6x15	≤ φ 19	48.5	φ 70	7	115	180	235	7
	φ 100	4-M6x15	≤ φ 19	48.5	φ 80	7	115	180	235	7
	φ 115	4-M8x20	≤ φ 24	58	φ 95	10	115	180	235	11.5
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	180	235	12.5

* C1~C10是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

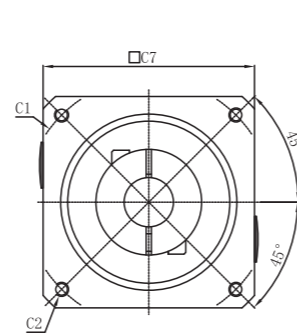
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGC160-L1

输出端/OUTPUT

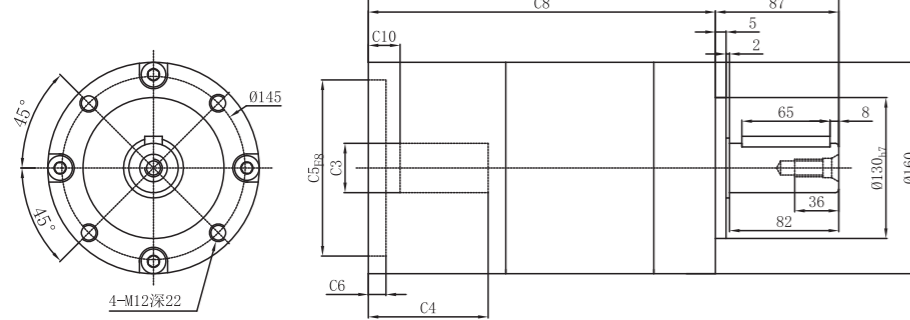


输入端/INPUT

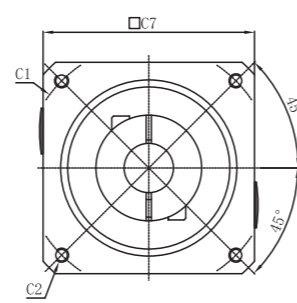


PGC160-L2

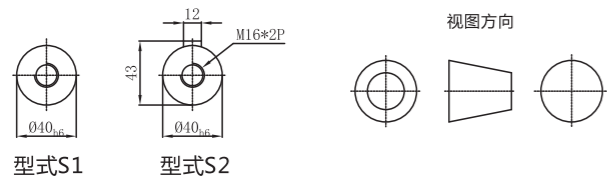
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGC160-L1	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	173	260	19.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	173	260	19.5
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	173	260	21.5
	φ 200	4-M12x35	≤ φ 42	115	φ 114.3	8	180	205	292	53.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	83	φ 180	8	190	173	260	21.5
PGC160-L2	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	243	330	19.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	243	330	19.5
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	243	330	21.5
	φ 200	4-M12x35	≤ φ 42	115	φ 114.3	8	180	275	362	53.5
φ 215	4-M12x35, 4-M14x35	≤ φ 42	83	φ 180	8	190	243	330	21.5	

* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.



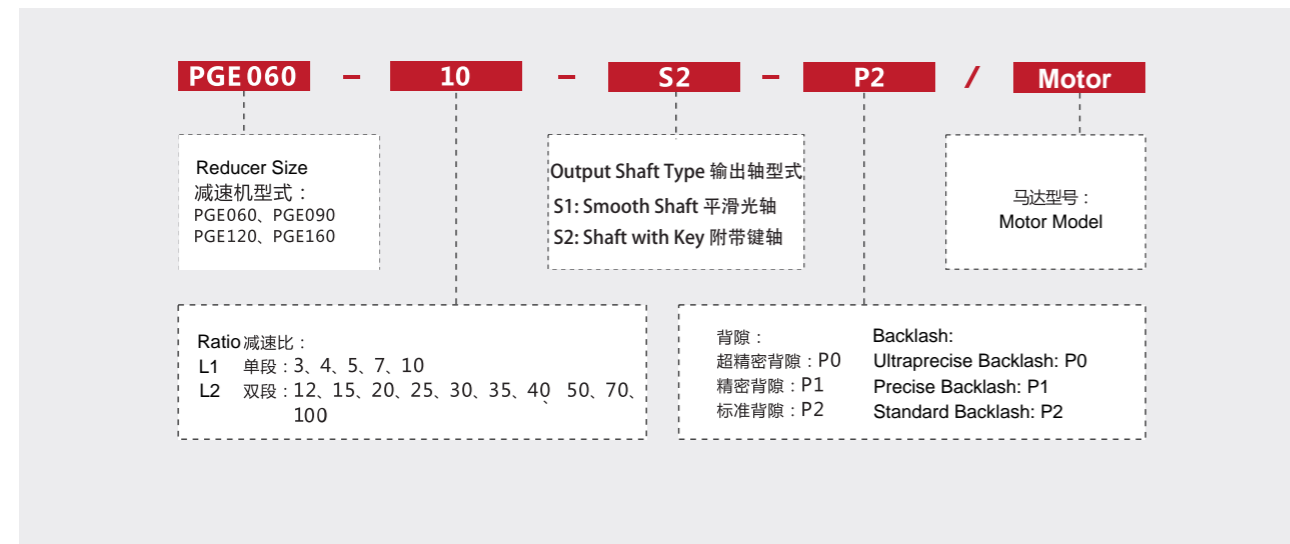
PGE Series

Economical Version-Flange Spur Gear

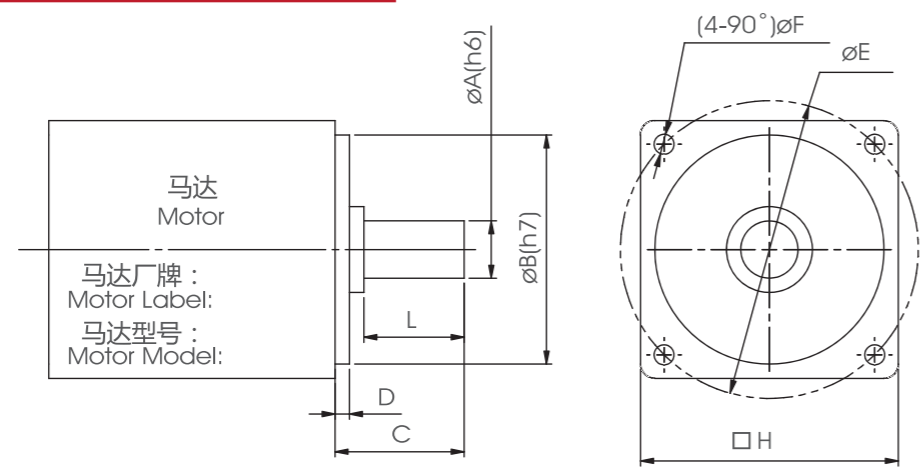
法兰直齿经济型



型号说明 / ORDER CODE



FILL IN DATA OF MOTOR 客户填写资料



规格 SPECIFICATIONS

Motor Shaft Dia.	Flange Dia.	Motor Shaft Length	Flange Height	P.C.D of Bore	Bore Dia.	Motor Flange Square	Actual Length of Motor Shaft	Backlash
马达轴外径	马达凸缘外径	马达轴长度	马达凸缘高度	螺丝孔中心距	螺丝孔直径	马达面尺寸	马达轴有效长	要求背隙
øA(h6)	øB(h7)	C	D	øE	øF	□H	L	P0/P1/P2

减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGE060	PGE090	PGE120	PGE160
额定输出力矩 T2N Nominal Output Torque	N.m	1	3	32.6	95.2	283	482
			4	30.1	74.6	249	490
			5	32.3	95.2	283	473
			7	30.9	85.6	219	400
		2	10	25.0	75.0	210	320
			12	32.6	95.2	283	482
			15	32.6	95.2	283	482
			20	30.1	74.6	249	490
			25	32.3	95.2	283	473
			30	32.3	95.2	283	473
			35	32.3	95.2	283	473
			40	32.3	95.2	283	473
			50	32.3	95.2	283	473
			70	30.9	85.0	219	400
100	25.0	75.0	210	320			
急停力矩 T2NOT Emergency Stop Torque	N.m	1, 2	3 ~ 100	3倍额定输出力矩 (3.0 times of Nominal Output Torque)			
额定输入转速 n1 Nominal Input Speed	rpm	1, 2	3 ~ 100	3000	3000	2500	2000
最大输入转速 n1max Max.Input Speed	rpm	1, 2	3 ~ 100	6000	6000	5000	4000
超精密背隙 P0 Ultraprecise Backlash	arcmin	1	3 ~ 10	-	-	≤3	≤3
精密背隙 P1 Precise Backlash	arcmin	2	12 ~ 100	-	-	≤5	≤5
		1	3 ~ 10	-	≤6	≤5	≤5
标准背隙 P2 Standard Backlash	arcmin	2	12 ~ 100	-	≤9	≤7	≤7
		1	3 ~ 10	≤12	≤9	≤7	≤7
扭转刚性 Torsional Rigidity	N.m / arcmin	1, 2	3 ~ 100	2.6	7.5	15.5	30
容许径向力 F2rB Max.Radial Load	N	1, 2	3 ~ 100	889	1630	3380	6450
容许轴向力 F2aB Max.Axial Load	N	1, 2	3 ~ 100	850	1420	2930	5510
使用温度 Operating Temp	°C	1, 2	3 ~ 100	-10° C ~ +90° C			
使用寿命 Service Life	hr	1, 2	3 ~ 100	20,000 (10,000/连续运转continuiu operationg)			
效率 η Efficiency	%	1	3 ~ 10	≥96%			
		2	12 ~ 100	≥92%			
重量 Weight	kg	1	3 ~ 10	1.3	3.0	7.3	15.6
		2	12 ~ 100	2.0	5.0	11.5	20.7
安装方向 mounting Position	-	1, 2	3 ~ 100	任意方向 Any direction			
噪音值 Noise Level	dBA/1m	1, 2	3 ~ 100	60	65	65	70
防护等级 Protection Class	-	1, 2	3 ~ 100	Ip65			
润滑 Lubrication	-	1, 2	3 ~ 100	全合成润滑油 Synthetic Lubricant			

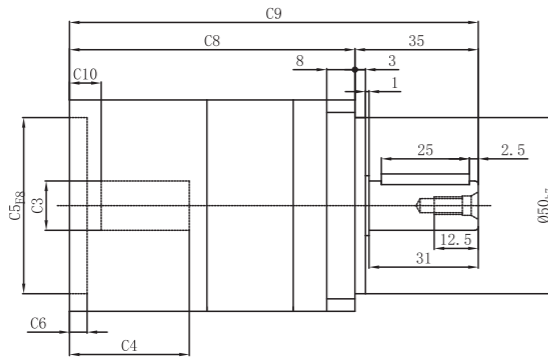
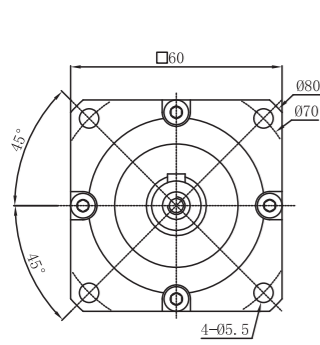
减速机转动惯量

规格 Specifications	单位 unit	节数 Stage	减速比 Ratio	PGE060	PGE090	PGE120	PGE160
转动惯量 J1 Inertia	kg.cm ²	1	3	0.25	0.81	2.2	7.89
			4	0.18	0.65	1.8	5.83
			5	0.16	0.62	1.61	5.83
			7	0.14	0.60	1.55	5.22
		2	10	0.14	0.60	1.53	5.20
			12	0.16	0.62	1.61	5.83
			15	0.16	0.62	1.61	5.83
			20	0.16	0.62	1.61	5.83
			25	0.16	0.62	1.61	5.83
			30	0.14	0.60	1.55	5.22
			35	0.14	0.60	1.55	5.22
			40	0.14	0.60	1.55	5.22
			50	0.14	0.60	1.55	5.22
			70	0.14	0.60	1.53	5.20
100	0.14	0.60	1.53	5.20			

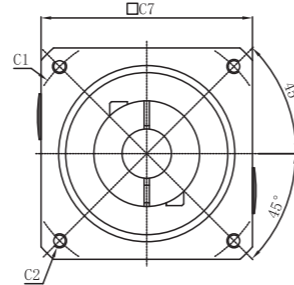
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGE060-L1

输出端/OUTPUT



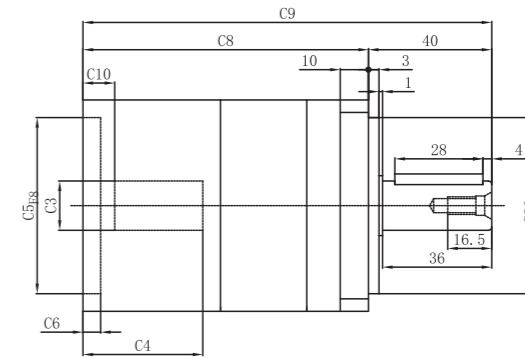
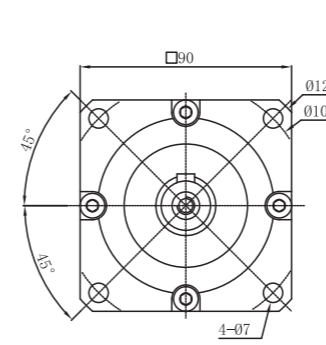
输入端/INPUT



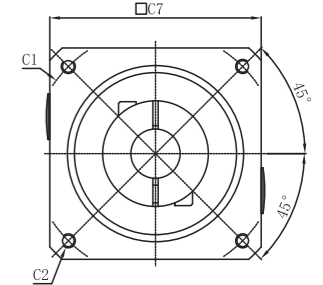
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGE090-L1

输出端/OUTPUT

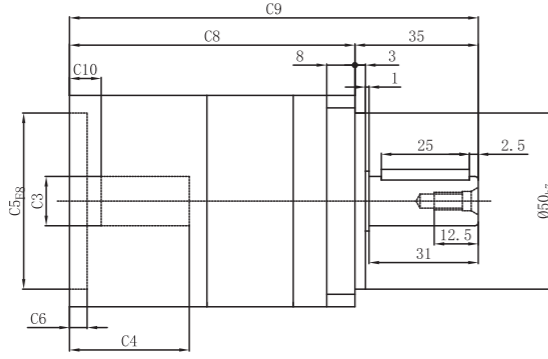
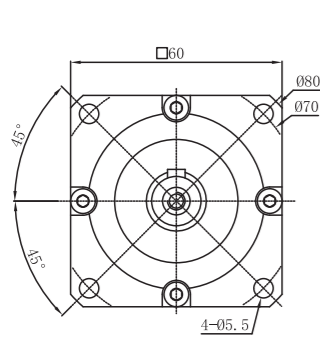


输入端/INPUT

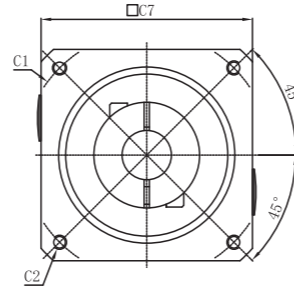


PGE060-L2

输出端/OUTPUT

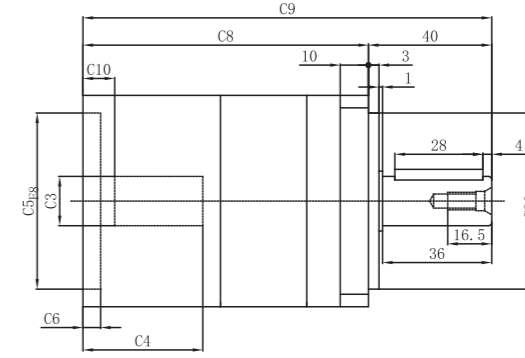
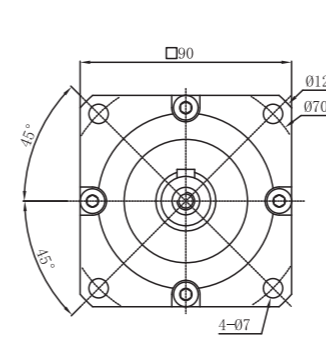


输入端/INPUT

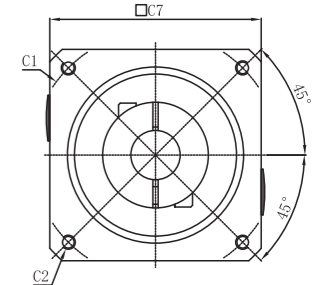


PGE090-L2

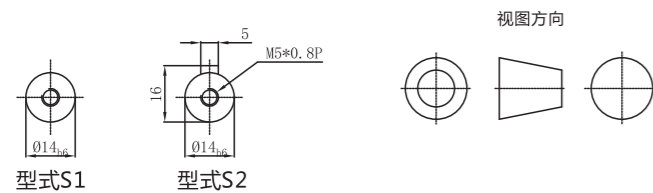
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter

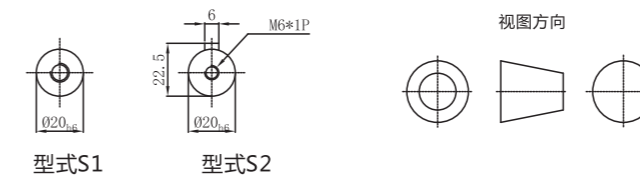


*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGE 060-L1	φ 46	4-M4x10	≤ φ 8	34	φ 30	5	60	81	116	9
	φ 66.7	4-M4x10	≤ φ 8	34	φ 38.1	5	60	81	116	8
	φ 70	4-M4x10,4-M5x12	≤ φ 14	34	φ 50	5	60	81	116	9
PGE 060-L2	φ 46	4-M4x10	≤ φ 8	34	φ 30	5	60	137.5	172.5	9
	φ 66.7	4-M4x10	≤ φ 8	34	φ 38.1	5	60	137.5	172.5	8
	φ 70	4-M4x10,4-M5x12	≤ φ 14	34	φ 50	5	60	137.5	172.5	9

* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

输出轴径/Output Diameter



*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

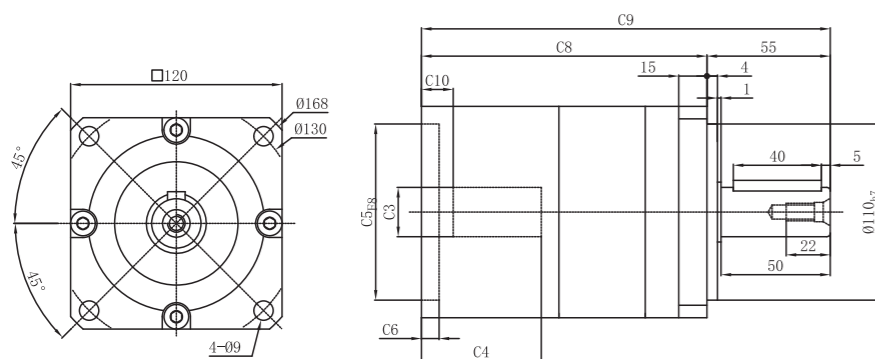
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGE090-L1	φ 70	4-M4x12,4-M5x12	≤ φ 14	46	φ 50	4	90	100	140	6
	φ 75	4-M4x12,4-M5x12	≤ φ 14	46	φ 60	5.5	90	100	1	6
	φ 90	4-M5x15,4-M6x15	≤ φ 19	46	φ 70	7	90	100	140	7
	φ 100	4-M6x15	≤ φ 19	46	φ 80	7	90	100	1	7
	φ 115	4-M8x20	≤ φ 24	61.5	φ 95	10	100	100	140	12.5
PGE090-L2	φ 70	4-M4x12,4-M5x12	≤ φ 14	46	φ 50	4	90	119	159	6
	φ 75	4-M4x12,4-M5x12	≤ φ 14	46	φ 60	5.5	90	119	1	6
	φ 90	4-M5x15,4-M6x15	≤ φ 19	46	φ 70	7	90	119	159	7
	φ 100	4-M6x15	≤ φ 19	46	φ 80	7	90	119	1	7
	φ 115	4-M8x20	≤ φ 24	61.5	φ 95	10	100	119	159	12.5
φ 145	4-M8x20	≤ φ 24	61.5	φ 110	10	130	119	1	12.5	

* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

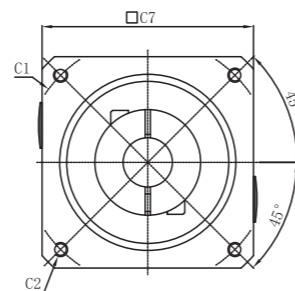
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGE120-L1

输出端/OUTPUT

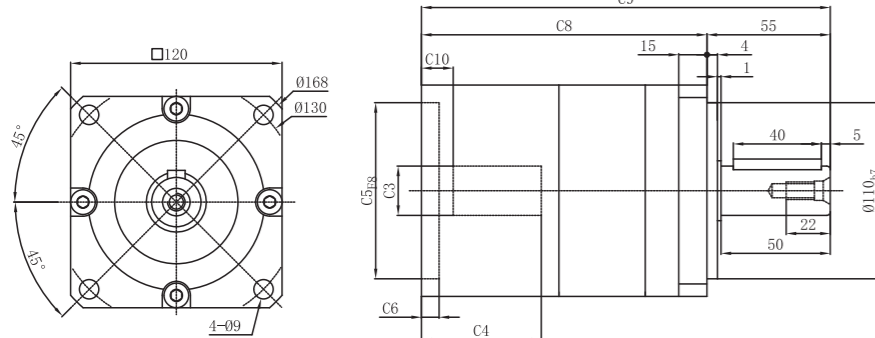


输入端/INPUT

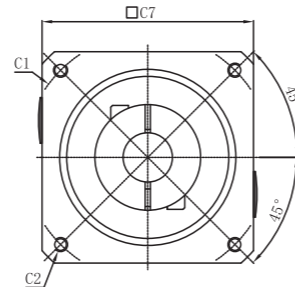


PGE120-L2

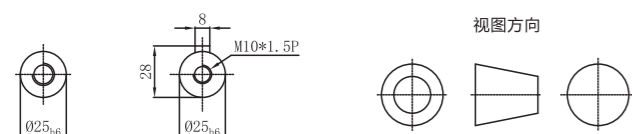
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



型式S1

型式S2

*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

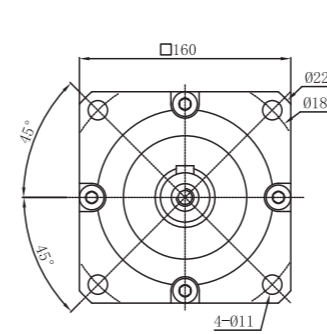
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGE120-L1	φ 90	4-M5x15, 4-M6x15	≤ φ 19	48.5	φ 70	7	115	153	208	7
	φ 100	4-M6x15	≤ φ 19	48.5	φ 80	7	115	153	2	7
	φ 115	4-M8x20	≤ φ 24	58	φ 95	10	115	153	208	11.5
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	153	2	12.5
	φ 145	4-M8x20	≤ φ 24	68	φ 110	10	130	162	217	21.5
PGE120-L2	φ 90	4-M5x15, 4-M6x15	≤ φ 19	48.5	φ 70	7	115	180	2	7
	φ 100	4-M6x15	≤ φ 19	48.5	φ 80	7	115	180	235	7
	φ 115	4-M8x20	≤ φ 24	58	φ 95	10	115	180	235	11.5
	φ 145	4-M8x20	≤ φ 24	59	φ 110	10	130	180	235	12.5
	φ 145	4-M8x20	≤ φ 24	68	φ 110	10	130	189	244	21.5

* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

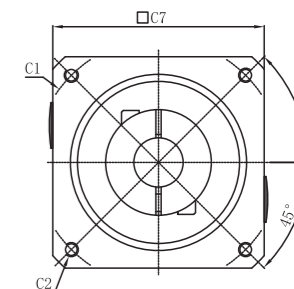
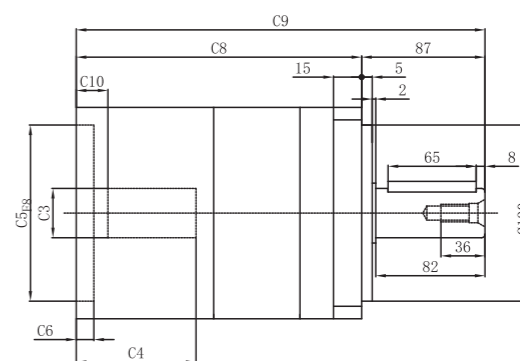
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGE160-L1

输出端/OUTPUT

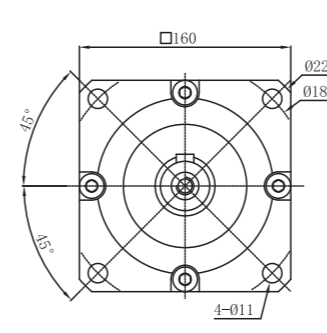


输入端/INPUT

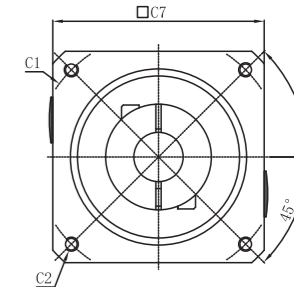
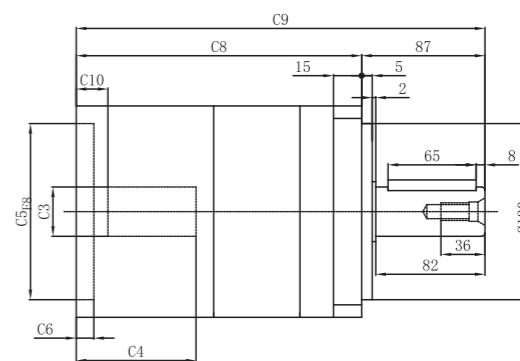


PGE160-L2

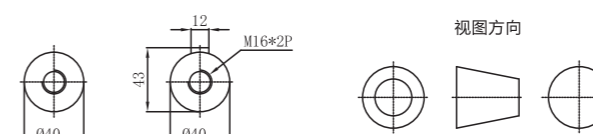
输出端/OUTPUT



输入端/INPUT



输出轴径/Output Diameter



型式S1

型式S2

*输入马达连接板之尺寸, 可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

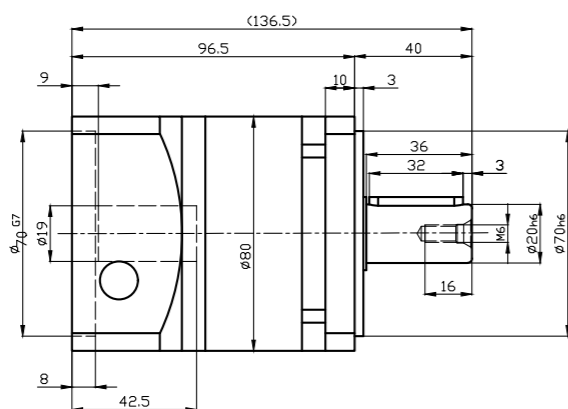
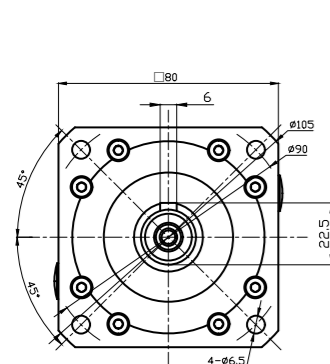
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
PGE160-L1	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	173	260	19.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	173	260	19.5
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	173	260	21.5
	φ 200	4-M12x35	≤ φ 42	115	φ 114.3	8	180	205	292	53.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	83	φ 180	8	190	173	260	21.5
PGE160-L2	φ 145	4-M8x20	≤ φ 24	81	φ 110	10	142	243	330	19.5
	φ 165	4-M10x25, 4-M12x35	≤ φ 32	81	φ 130	10	142	243	330	19.5
	φ 200	4-M12x35	≤ φ 42	83	φ 114.3	8	180	243	330	21.5
	φ 200	4-M12x35	≤ φ 42	115	φ 114.3	8	180	275	362	53.5
	φ 215	4-M12x35, 4-M14x35	≤ φ 42	83	φ 180	8	190	243	330	21.5

* C1~C10是公制标准马达连接板之尺寸, 可根据客户要求单独定做。
* C1~C10are motor (metric standard) specific dimensions, which could be customised.

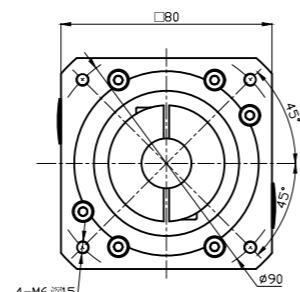
外形尺寸图表 / OUTLINE DIMENSION SHEET

PGE 080-L1

输出端/OUTPUT

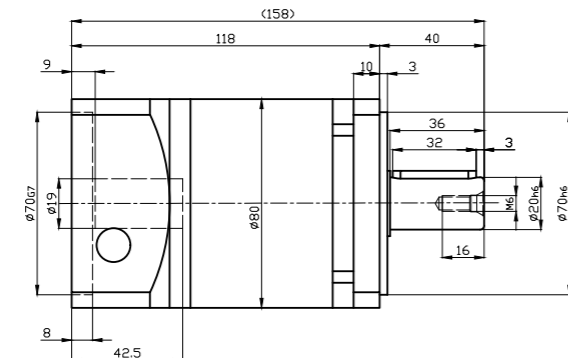
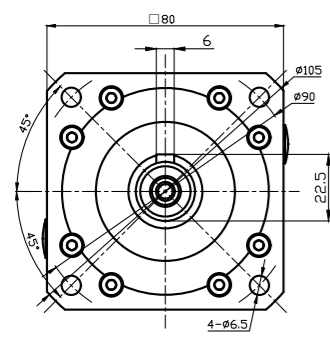


输入端/ INPUT

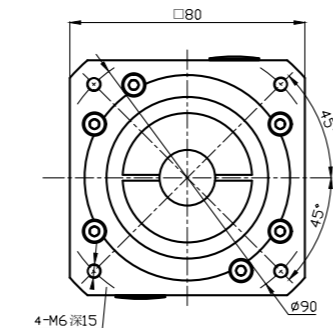


PGE 080-L2

输出端/OUTPUT



输入端/ INPUT



行星减速机马达安装说明书 / PLANETARY GEARBOX WITH MOTOR MOUNTING INSTRUCTIONS

For General Type

1

先确认马达减速机规格是否正确，并将马达与减速机安装面擦拭干净。

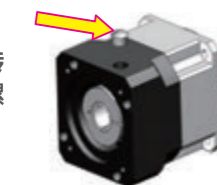
Check the motor and gearbox size. Clean the mounting surface.



2

将连接板上扣式塞头取下，转动马达锁紧环，直到锁紧环螺丝对准塞头孔。

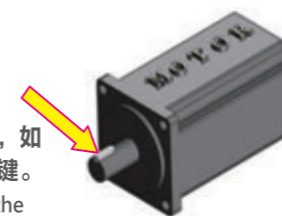
Take off the plug from the bracket. Revolve the set collar until the bolt is aligned with the hole.



3

取下马达上原先的键，如有必要，请安装平衡键。

Remove the key from the motor shaft. Mounting the balance key if necessary.



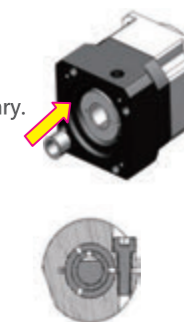
4

确认马达轴心尺寸，轴心太小选用适当衬套。

Make sure the motor shaft size. Choose the right bushing if necessary.

当马达为平轴状，对准衬套夹缝在平轴中心线，使锁紧环螺丝与平轴面呈垂直。

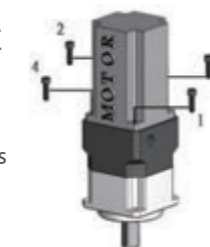
As installing on flatted shaft, be sure to align the collet gap over the flat and the set collar bolt perpendicular to the flat.



5

以锁紧扭力表建议扭力值5%，依照1至4顺序，将螺丝轻轻锁上。

Tighten the mounting bolts in 1~4 order with torque wrench to 5% specified torque.



6

将马达与减速机直立摆设，参照锁紧扭力表建议之扭力值，以扭力扳手将马达锁紧环螺丝锁紧。

Install gearbox and motor vertically. Tighten the set collar bolt with torque wrench to specified torque.



7

以锁紧扭力表建议之扭力值，依照1至4顺序，用扭力扳手将螺丝锁紧。

Tighten the mounting bolts in 1~4 order with torque wrench to specified torque.



8

将扣式塞头装回。

Put the plug back.

