

# MYA SERIES

精密行星减速机



MYA090 - 10 - S2 - P2 / 马达

减速机型式：

MYA042/MYA060/MYA090  
MYA115/MYA142/MYA180/MYA220

输出轴型式选择：S1：平滑直轴  
S2：附键直轴

马达型号：  
马达制造及型号

减速比：单级(L1)：3,4,5,6,7,8,10  
双级(L2)：12,15,20,25,30,35,40,50,60,70,80,100

背隙：P0：超精密背隙  
P1：精密背隙  
P2：标准背隙

选型范例：MYA090-10-S2-P2/MHMD-082G1U

### 性能 -MYA 减速机

规格		级数	减速比 <sup>1</sup>	MYA042	MYA060	MYA090	MYA115	MYA142	MYA180	MYA220
额定输出力矩T <sub>2N</sub>	Nm	1	3	20	55	130	208	342	588	1,140
			4	19	50	140	290	542	1,050	1,700
			5	22	60	160	330	650	1,200	2,000
			6	20	55	150	310	600	1,100	1,900
			7	19	50	140	300	550	1,100	1,800
			8	17	45	120	260	500	1,000	1,600
			10	14	40	100	230	450	520	1,220
			12	20	55	130	208	342	588	1,140
			15	20	55	130	208	342	588	1,140
		2	20	19	50	140	290	542	1,050	1,700
			25	22	60	160	330	650	1,200	2,000
			30	22	55	130	208	342	1,200	2,000
			35	22	60	160	330	650	1,200	2,000
			40	22	50	140	290	542	1,200	2,000
			50	22	60	160	330	650	1,200	2,000
			60	20	55	150	310	600	1,100	1,900
			70	19	50	140	300	550	1,100	1,800
			80	17	45	120	260	500	1,000	1,600
			100	14	40	100	230	450	520	1,220
最大输出力矩T <sub>2B</sub>	Nm	1,2	3~100	3倍额定输出力矩						
额定输入转速n <sub>1</sub>	rpm	1,2	3~100	5,000	5,000	4,000	4,000	3,000	3,000	2,000
最大输入转速n <sub>1B</sub>	rpm	1,2	3~100	10,000	10,000	8,000	8,000	6,000	6,000	4,000
超精密背隙 P0	arcmin	1	3~10	—	—	≤1	≤1	≤1	≤1	≤1
		2	12~100	—	—	—	≤3	≤3	≤3	≤3
精密背隙 P1	arcmin	1	3~10	≤3	≤3	≤3	≤3	≤3	≤3	≤3
		2	12~100	≤5	≤5	≤5	≤5	≤5	≤5	≤5
标准背隙 P2	arcmin	1	3~10	≤5	≤5	≤5	≤5	≤5	≤5	≤5
		2	12~100	≤7	≤7	≤7	≤7	≤7	≤7	≤7
扭转刚性	Nm/arcmin	1,2	3~100	3	7	14	25	50	145	225
容许径向力F <sub>205</sub> <sup>2</sup>	N	1,2	3~100	780	1,530	3,250	6,700	9,400	14,500	50,000
容许轴向力F <sub>2015</sub> <sup>2</sup>	N	1,2	3~100	350	630	1,300	3,000	4,000	6,200	35,000
容许轴向力F <sub>2025</sub> <sup>2</sup>	N	1,2	3~100	390	765	1,625	3,350	4,700	7,250	25,000
使用寿命	hr	1,2	3~100	20,000*						
效率 η	%	1	3~10	≥97%						
		2	12~100	≥94%						
重量	kg	1	3~10	0.5	1.3	3.7	7.8	14.5	29	48
		2	12~100	0.8	1.9	4.1	9	17.5	33	60
使用温度	°C	1,2	3~100	-10°C~+90°C						
润滑		1,2	3~100	合成润滑油脂						
防护等级		1,2	3~100	IP65						
安装方向		1,2	3~100	任意方向						
噪音值 (n <sub>1</sub> =3000rpm)	dB	1,2	3~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70

### 惯量 -MYA 减速机

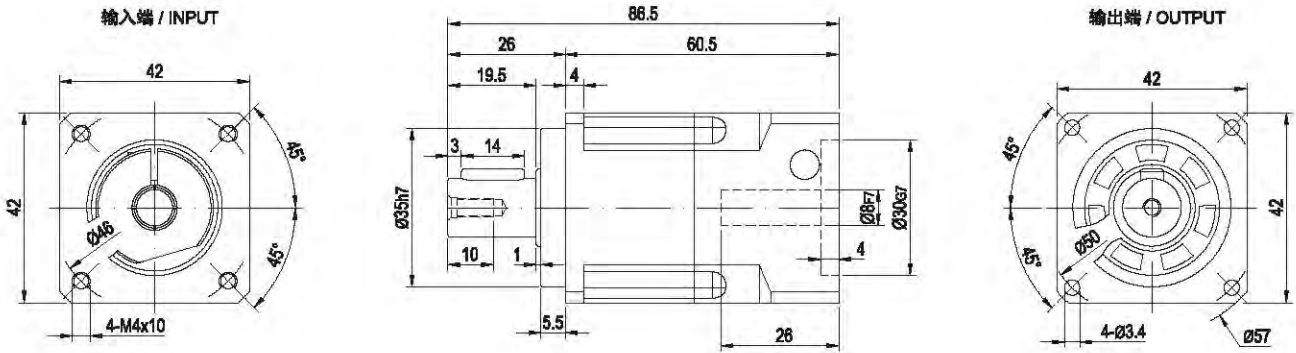
规格		级数	减速比 <sup>1</sup>	MYA042	MYA060	MYA090	MYA115	MYA142	MYA180	MYA220
转动惯量J <sub>1</sub>	kg-cm <sup>2</sup>	1	3	0.03	0.16	0.61	3.25	9.21	28.98	69.61
			4	0.03	0.14	0.48	2.74	7.54	23.67	54.37
			5	0.03	0.13	0.47	2.71	7.42	23.29	53.27
			6	0.03	0.13	0.45	2.65	7.25	22.75	51.72
			7	0.03	0.13	0.45	2.62	7.14	22.48	50.97
			8	0.03	0.13	0.44	2.58	7.07	22.59	50.84
			10	0.03	0.13	0.44	2.57	7.03	22.51	50.56
			12	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			15	0.03	0.03	0.13	0.47	2.71	7.42	23.29
		2	20	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			25	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			30	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			35	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			40	0.03	0.03	0.13	0.47	2.71	7.42	23.29
			50	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			60	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			70	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			80	0.03	0.03	0.13	0.44	2.57	7.03	22.51
			100	0.03	0.03	0.13	0.44	2.57	7.03	22.51

1. 减速比 (i=N<sub>in</sub>/N<sub>out</sub>)  
\* 连续运转降低使用寿命二分之一。

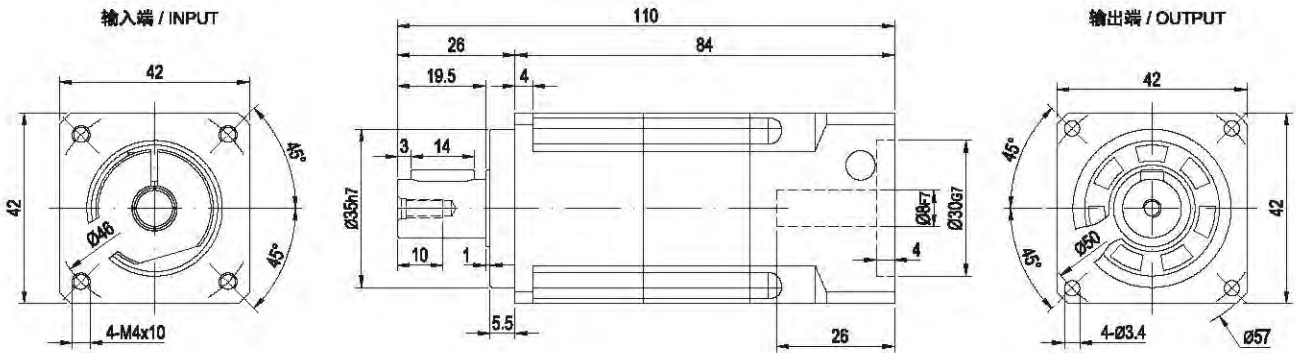
2. 输出转速 100rpm 时, 作用于输出轴中心位置。

外形尺寸图 / OUTLINE DIMENSION SHEET

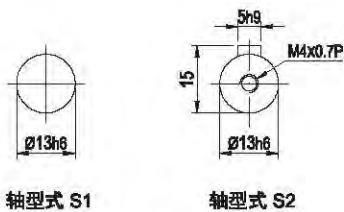
MYA-042-L1



MYA-042-L2



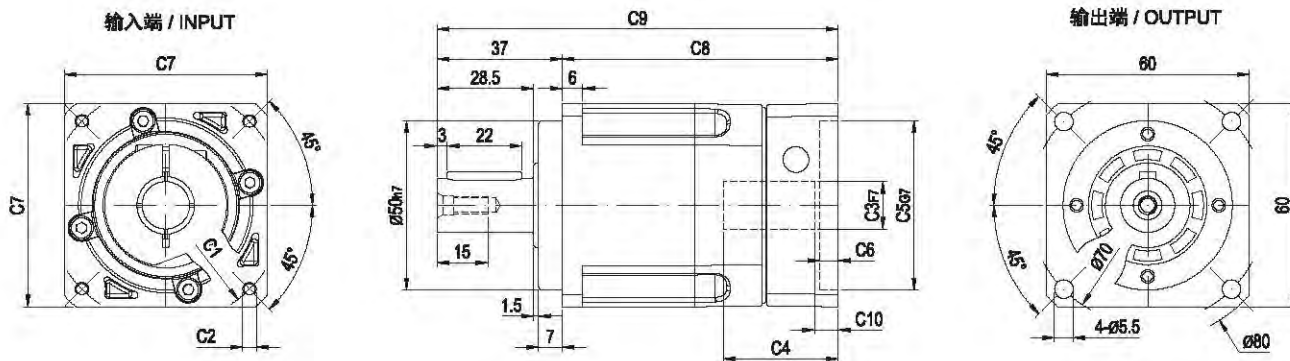
输出轴径 / Output Diameter



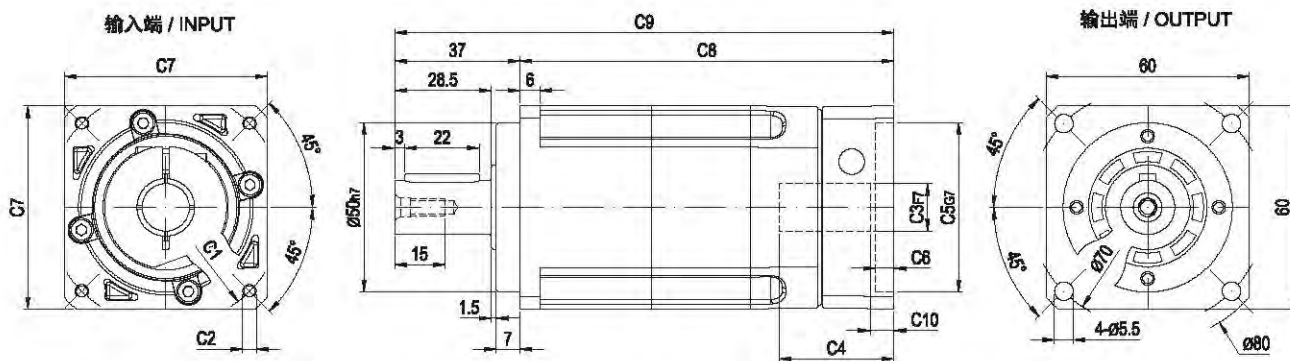
\* 输入马达连接板之尺寸, 可根据客户要求单独定做。  
 \* The input motor specific dimensions could be customised.

外形尺寸图 / OUTLINE DIMENSION SHEET

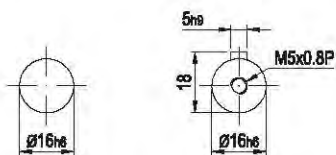
MYA-060-L1



MYA-060-L2



输出轴径 / Output Diameter



轴型式 S1

轴型式 S2

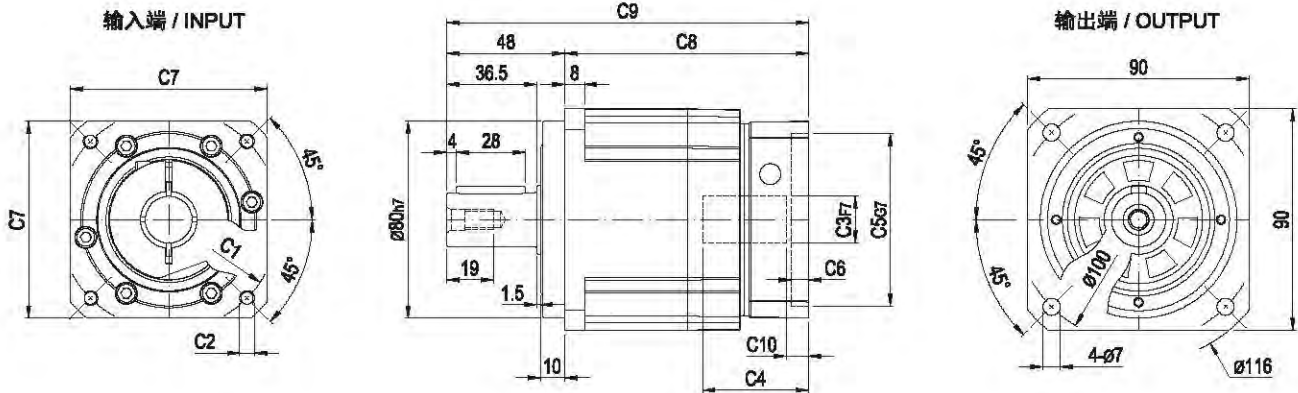
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
MYA-060-L1	Ø66.7	4-M4x12	Ø8	34	Ø38.1	5.5	60	81.5	118.5	7
	Ø70	4-M4x12, 4-M5x12	Ø11, Ø14	34	Ø50	5.5	60	81.5	118.5	7
	Ø90	4-M5x15, 4-M6x15	Ø19	42	Ø70	7	80	90.5	127.5	9
MYA-060-L2	Ø66.7	4-M4x12	Ø8	34	Ø38.1	5.5	60	110.5	147.5	7
	Ø70	4-M4x12, 4-M5x12	Ø11, Ø14	34	Ø50	5.5	60	110.5	147.5	7
	Ø90	4-M5x15, 4-M6x15	Ø19	42	Ø70	7	80	119.5	156.5	9

\* C1-C7是公制标准马达连接板之尺寸, 可根据客户要求单独定做。

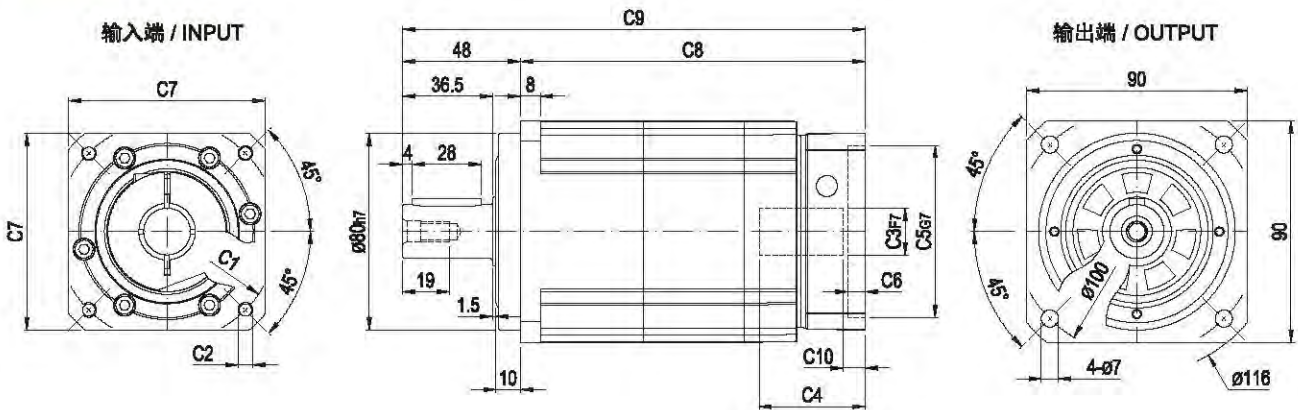
\* C1-C7are motor(metric standard) specific dimensions, which could be customised.

外形尺寸图 / OUTLINE DIMENSION SHEET

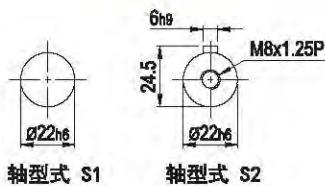
MYA-090-L1



MYA-090-L2



输出轴径 / Output Diameter

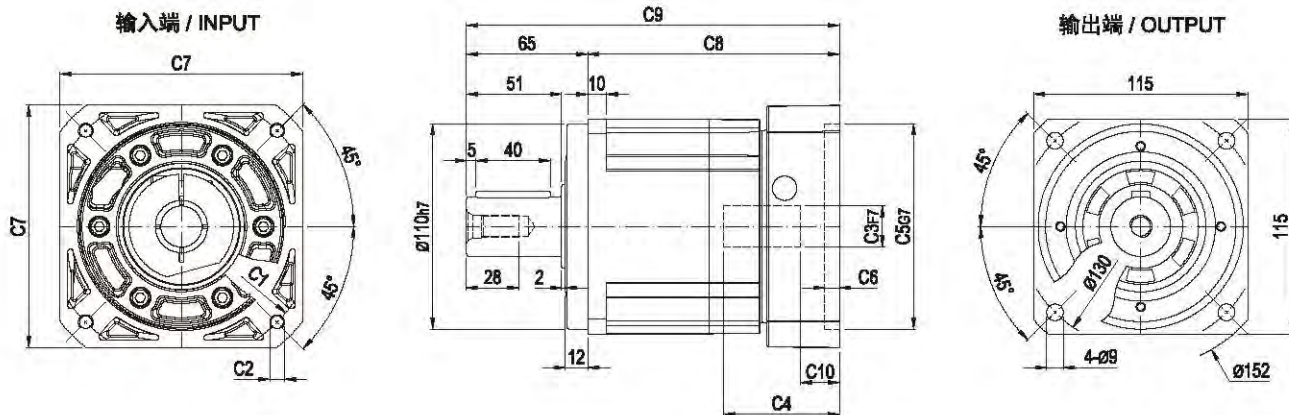


尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
MYA-090-L1	ø90	4-M5x15, 4-M6x15	ø19	43	ø70	7	80	99	147	9
	ø100	4-M6x15	ø16,ø19	43	ø80	7	86	99	147	9
	ø115	4-M8x20	ø19,ø22,ø24	56.5	ø95	10	100	115.5	163.5	17.5
	ø145	4-M8x20	ø19,ø22,ø24	60	ø110	8	130	119	167	21
MYA-090-L2	ø90	4-M5x15, 4-M6x15	ø19	43	ø70	7	80	140	188	9
	ø100	4-M6x15	ø16,ø19	43	ø80	7	86	140	188	9
	ø115	4-M8x20	ø19,ø22,ø24	56.5	ø95	10	100	156.5	204.5	17.5
	ø145	4-M8x20	ø19,ø22,ø24	60	ø110	8	130	160	208	21

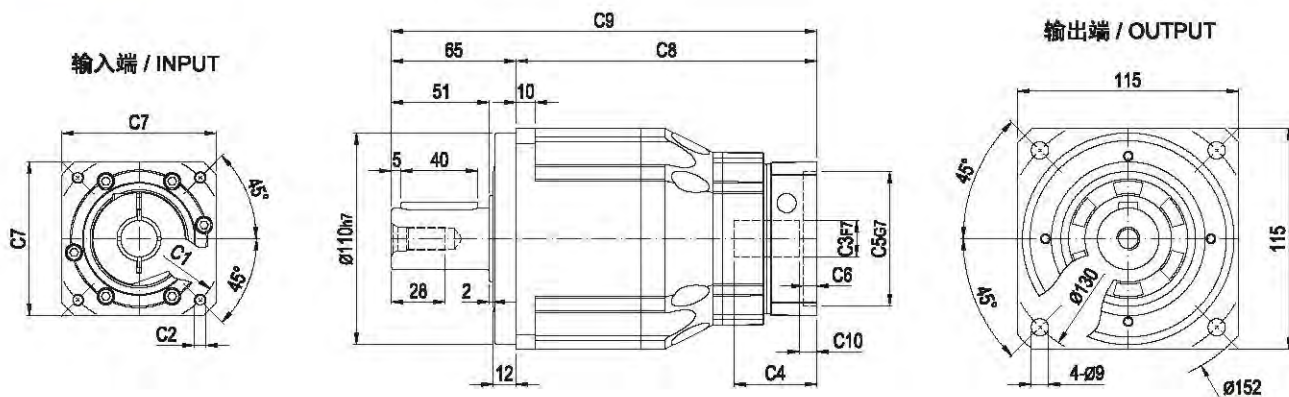
\* C1-C7是公制标准马达连接板之尺寸, 可根据客户要求单独定做。  
 \* C1-C7 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图 / OUTLINE DIMENSION SHEET

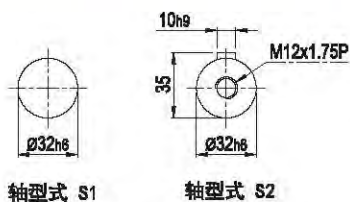
MYA-115-L1



MYA-115-L2



输出轴径 / Output Diameter



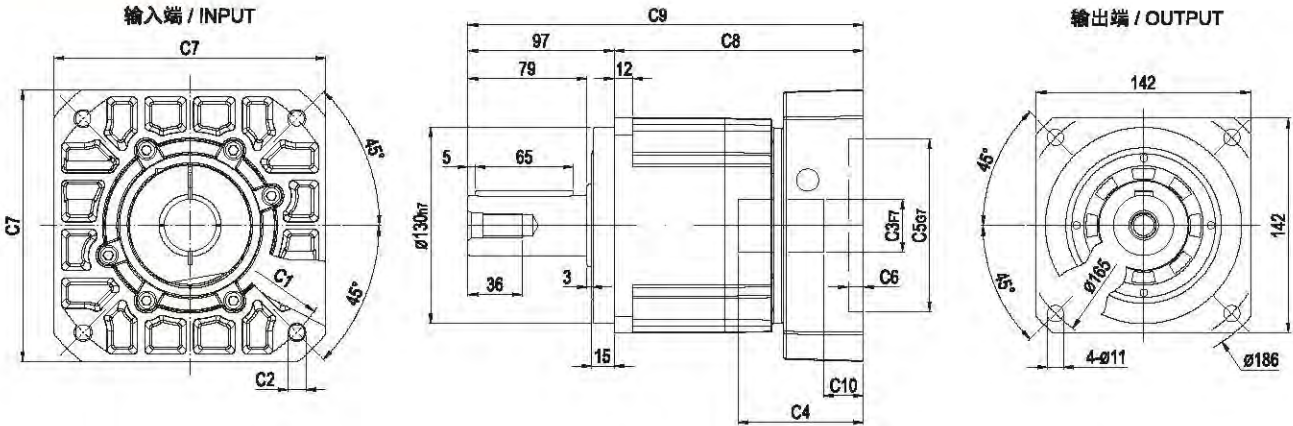
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
MYA-115-L1	$\phi 145$	4-M8x20	$\phi 19, \phi 22, \phi 24$	62	$\phi 110$	8	130	135	200	21
	$\phi 200$	4-M12x30	$\phi 35$	82	$\phi 114.3$	10	180	155	220	28
MYA-115-L2	$\phi 90$	4-M5x15, 4-M6x15	$\phi 19$	43	$\phi 70$	7	80	156	221	9
	$\phi 100$	4-M6x15	$\phi 16, \phi 19$	43	$\phi 80$	7	86	156	221	9
	$\phi 115$	4-M8x20	$\phi 19, \phi 22, \phi 24$	56.5	$\phi 95$	10	100	172.5	237.5	17.5
	$\phi 145$	4-M8x20	$\phi 19, \phi 22, \phi 24$	60	$\phi 110$	8	130	176	241	21

\* C1~C7是公制标准马达连接板之尺寸, 可根据客户要求单独定做。

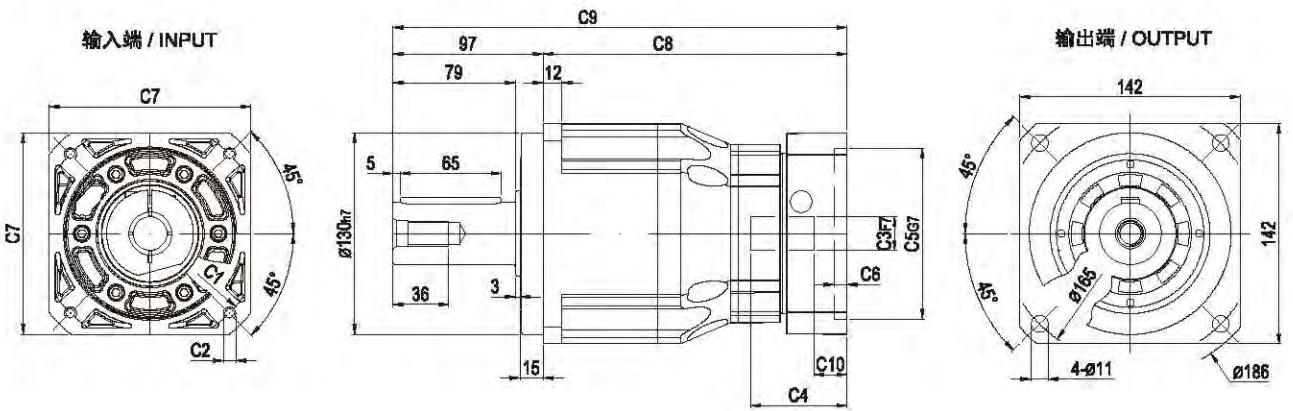
\* C1~C7 are motor (metric standard) specific dimensions, which could be customised.

外形尺寸图 / OUTLINE DIMENSION SHEET

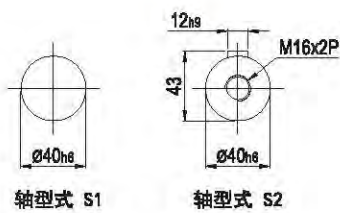
MYA-142-L1



MYA-142-L2



输出轴径 / Output Diameter

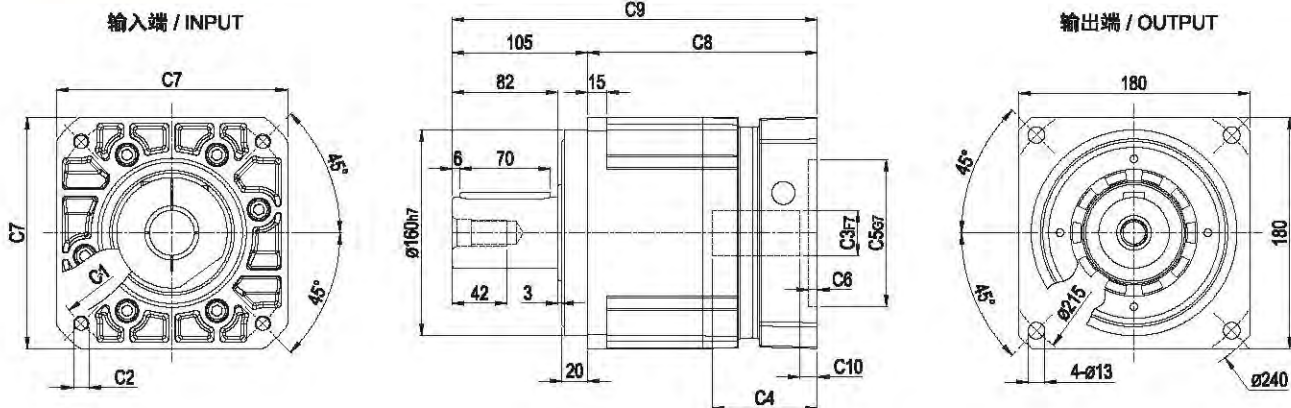


尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
MYA-142-L1	ø145	4-M8x20	ø22,ø24	72	ø110	10	130	154	251	20.5
	ø200	4-M12x30	ø35	83	ø114.3	10	180	165	262	26.5
MYA-142-L2	ø145	4-M8x20	ø19,ø22,ø24	62	ø110	8	130	195.5	292.5	21
	ø200	4-M12x30	ø35	82	ø114.3	10	180	215.5	312.5	28

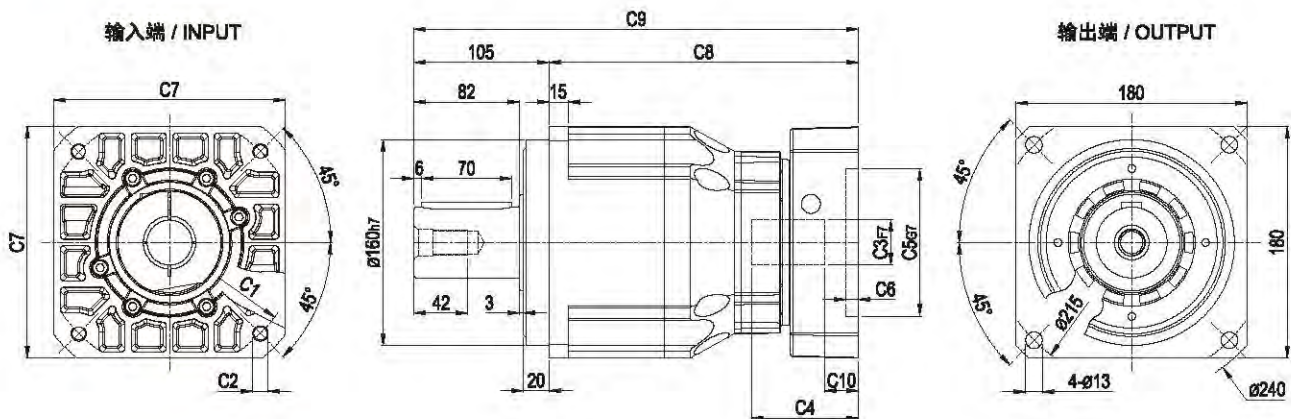
\* C1-C7是公制标准马达连接板之尺寸, 可根据客户要求单独定做。  
 \* C1-C7 are motor(metric standard) specific dimensions, which could be customised

外形尺寸图 / OUTLINE DIMENSION SHEET

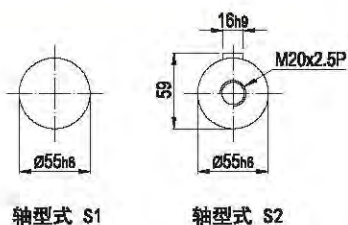
MYA-180-L1



MYA-180-L2



输出轴径 / Output Diameter



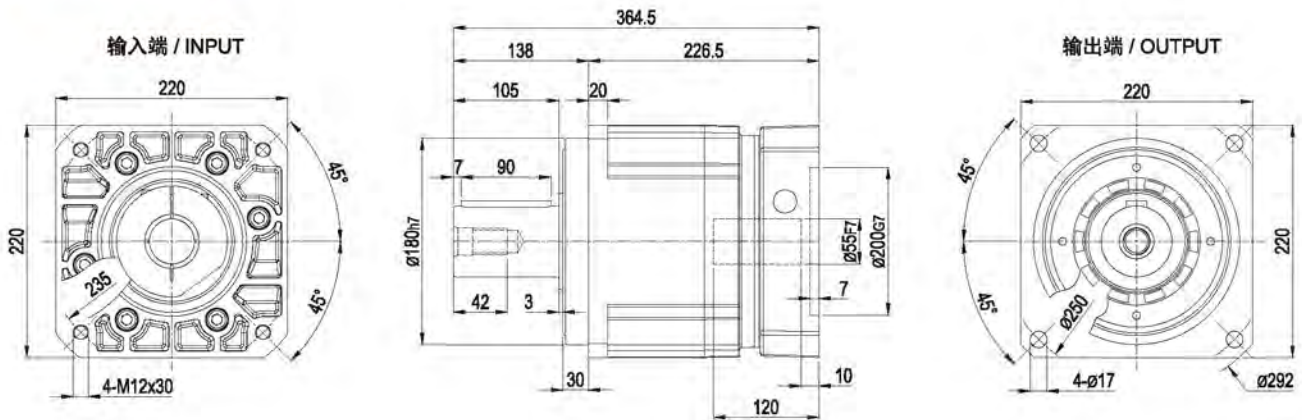
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
MYA-180-L1	$\phi 200$	4-M12x30	$\phi 35$	82	$\phi 114.3$	7	180	179	284	14
	$\phi 235$	4-M12x30	$\phi 42$	120	$\phi 200$	10	220	217	322	44
MYA-180-L2	$\phi 145$	4-M8x20	$\phi 22, \phi 24$	72	$\phi 110$	10	130	230	335	20.5
	$\phi 200$	4-M12x30	$\phi 35$	83	$\phi 114.3$	10	180	241	346	26.5

\* C1-C7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-C7 are motor (metric standard) specific dimensions, which could be customised

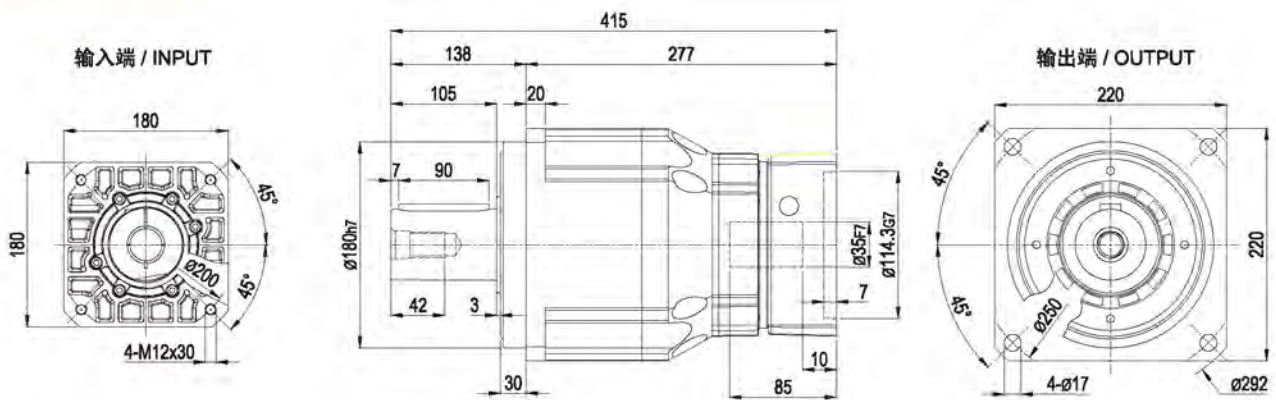


外形尺寸图 / OUTLINE DIMENSION SHEET

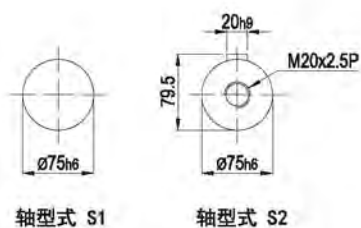
MYA-220-L1



MYA-220-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.