

菲兰德精密传动江苏有限公司
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精密行星齿轮减速机

PRECISION PLANETARY GEAR REDUCER



FEILANDE

德国科技 专注世界动力



菲兰德精密传动江苏有限公司



INTRODUCTION

关于我们



INTRODUCTION

菲兰德精密传动江苏有限公司是一家集产品研发,生产销售,市场运营为一体的精密齿轮减速机及动力传动装置专业制造商,公司坐落于美丽的太湖之滨—江苏无锡。

菲兰德源自于德国,菲兰德兼具德国先进科技,秉承德国细致考究的生产工艺,不断加强与国际国内同行的交流,吸取先进的设计理念,利用领先的设计软件开发研究新产品,实现产品结构更新换代的优化和升级,从研发到生产,严格执行国际,国内及行业标准,节能环保的理念贯穿每个环节。公司致力于**高效型准双曲面齿轮减速电机,直角中空/中实减速电机,高精度行星减速机的研发和生产**,拥有先进的产品工艺,精良的加工设备各齐全的检测仪器,能自主设计研发各种类型的减变速机和电机。

产品广泛应用于食品机械,包装机械,太阳能设备,橡塑机械,烟草机械,自动化流水线设备,仓储设备,玻璃机械,自动化控制控制设备等领域。

公司谨奉“敬业乐群,发展自己,服务社会”的企业宗旨。为员工创富造址,追求员工和企业一起成长,为客户创造利润,公司和客户携手共赢,为社会创造价值,坚持科技创新,绿色制造,走可持续发展之路。

Located in a beautiful lakeside city – Wuxi, Jiangsu Province, Filender Precise Transmission Jiangsu Co., Ltd. is a professional manufacturer of precise gear speed reducer and power transmission device, which combines product research and development, production and sales, and market operations.

Filender comes from Germany, and absorbs the advanced German technology as well as its meticulous and exquisite manufacturing technique. Meanwhile, the company continuously enhances the communication with domestic and foreign counterparts to bring in advanced design concepts. The company use leading design software to develop and research new products. All these optimize and upgrade our products. Strictly enforcing international and Chinese standards and industry standards, and saving energy are the concept throughout every step from development to production. The company is dedicated to **developing and producing high-efficient hypoid gear speed reducers, Grayson arc tooth right-angle speed reducers, and high-precision planetary reducers. It is equipped with advanced production techniques**, sophisticated processing equipment and all kinds of test equipment. These enable us to independently develop and design different kinds of gearboxes and electrical motors.

The products of Filender are widely used in many fields, including food machinery, packaging machinery, solar equipment, rubber machinery, cigarette machinery, automatic assembly line, warehousing equipment, glass machinery and automatic control device.

We would like to serve “devotion, teamwork, self-development and contributing to the society” as the enterprise’s objective. Filender brings benefits to the staff in order to seek to grow together with its all staff, creates profits for customers to realize a win-win relationship with our clients and creates value for society by scientific and technological innovation, green manufacturing and taking the road of sustainable development.

FEILANDE

动力传动专业制造商

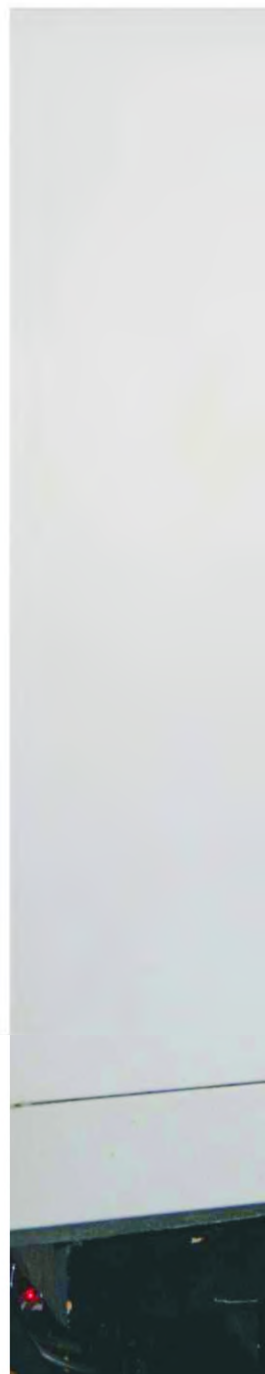
Professional manufacturer of power transmission

传动不止 创新无限

THERE IS MORE THAN
ENDLESS INNOVATION DRIVE

自动化设备代替人工，科技促进生产升级。

Automation equipment to replace artificial,
science and technology for upgrading the production.





FEILANDE

动力传动专业制造商

Professional manufacturer of power transmission



我们相信点滴的进步
连接着我们的未来

WE BELIEVE THAT A LITTLE PROGRESS
CONNECTED TO OUR FUTURE

高端的检测设备保证了产品的精度和质量。

High-end testing equipment to ensure the precision and quality .



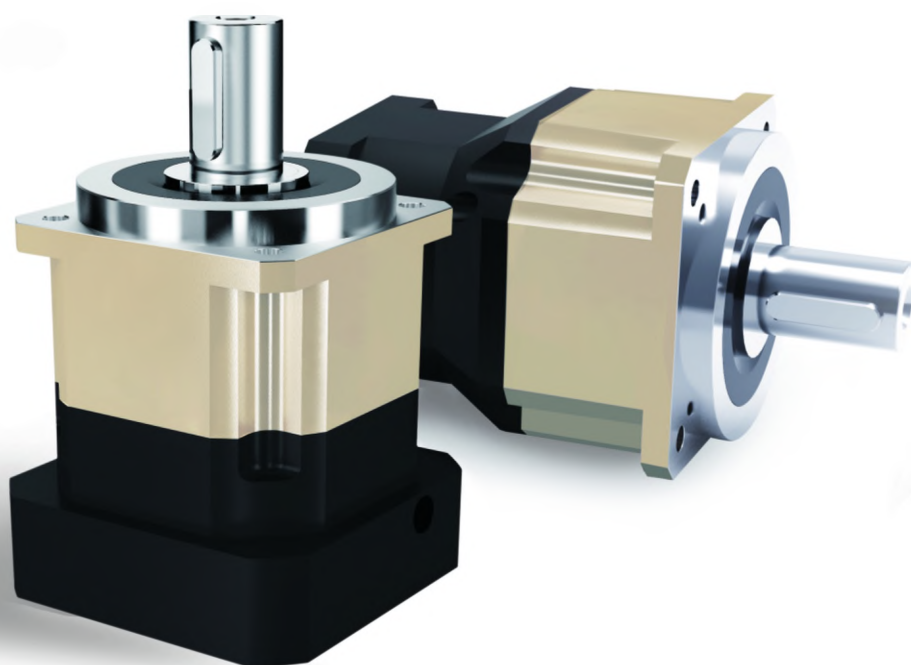
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菲兰德
FEILANDE

FAB
SERIES



动力传动专业制造商

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

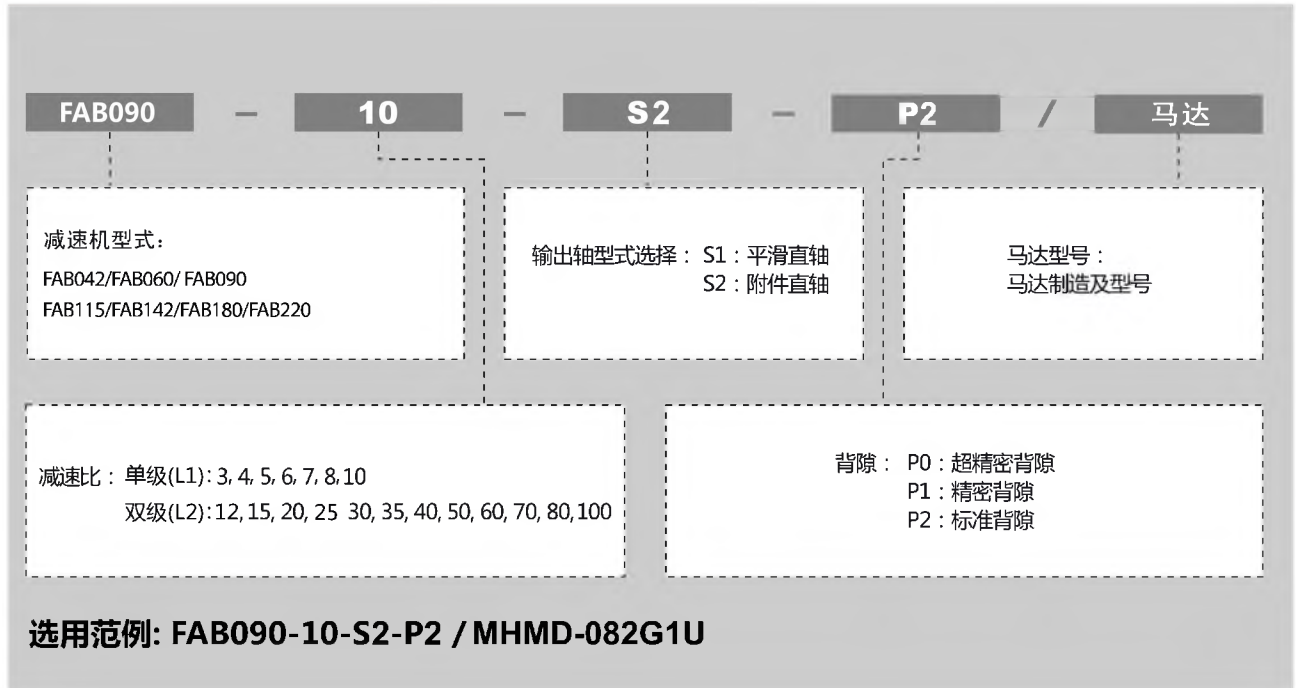
设计理念: 遵循规律, 总是超越

DESIGN PHILOSOPHY: To follow the law, but always beyond.

经营理念: 为客户需求而设计, 为客户满意而执着

BUSINESS PHILOSOPHY: Design for customer demand, dedication for customer satisfaction

型号说明 / MODEL ILLUMINATE



减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

规格	级数	减速比 ¹	FAB042	FAB060	FAB090	FAB115	FAB142	FAB180	FAB220	
额定输出力矩 T_{2N}	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	35	140	300	550	1,100	1,800
			8	17	35	120	260	500	1,000	1,600
			10	14	23	48	140	370	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	60	160	330	650	1,200	2,000	
		35	22	60	160	330	650	1,200	2,000	
		40	22	60	160	330	650	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	35	140	300	550	1,100	1,800	
		80	17	35	120	260	500	1,000	1,600	
100	14	23	48	140	370	520	1,220			
最大输出力矩 T_{2B}	Nm	1,2	3~100			3倍额定输出力矩				
额定输入转速 n_1	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_{1B}	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	≤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_{2rB}	N	1,2	3~100	780	1,530	3,250	6,700	9,400	14,500	50,000
容许轴向力 F_{2a1B}	N	1,2	3~100	350	630	1,300	3,000	4,000	6,200	35,000
容许轴向力 F_{2a2B}	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 ($n_1=3000\text{rpm}$)	dB	1,2	3~100	≤56	≤58	≤60	≤63	≤65	≤67	≤70

减速机转动惯量

规格	级数	减速比 ¹	FAB042	FAB060	FAB090	FAB115	FAB142	FAB180	FAB220	
转动惯量 J_1	kg · cm ²	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			

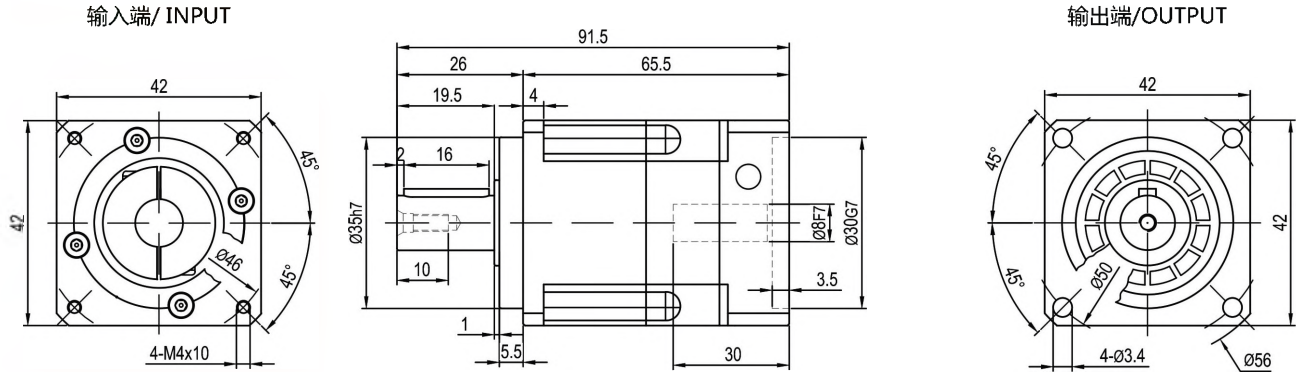
1. 减速比($i=N_{in}/N_{out}$)

* 连续运转降低使用寿命二分之一。

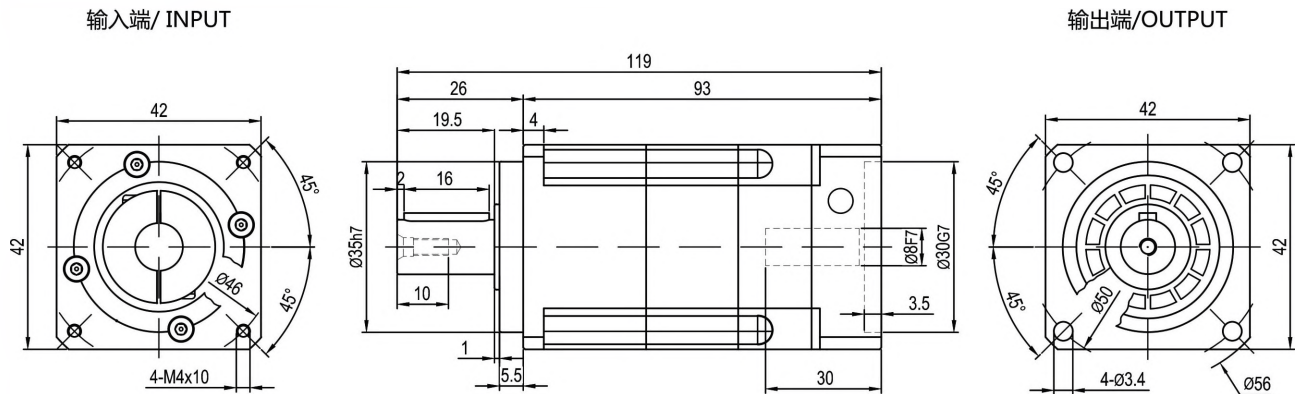
2. 输出转速 100 rpm 时，作用于输出轴中心位置。

外形尺寸图表 / OUTLINE DIMENSION SHEET

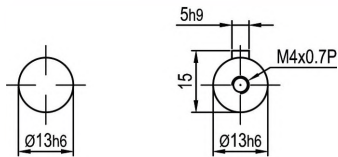
FAB-042-L1



FAB-042-L2



输出轴径/Output Diameter



轴型式 S1

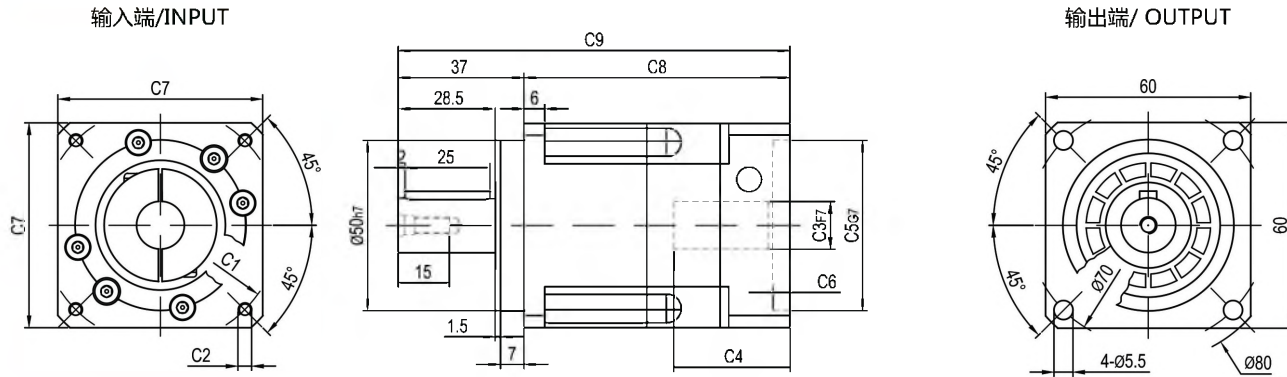
轴型式 S2

*输入马达连接板之尺寸,可根据客户要求单独定做。

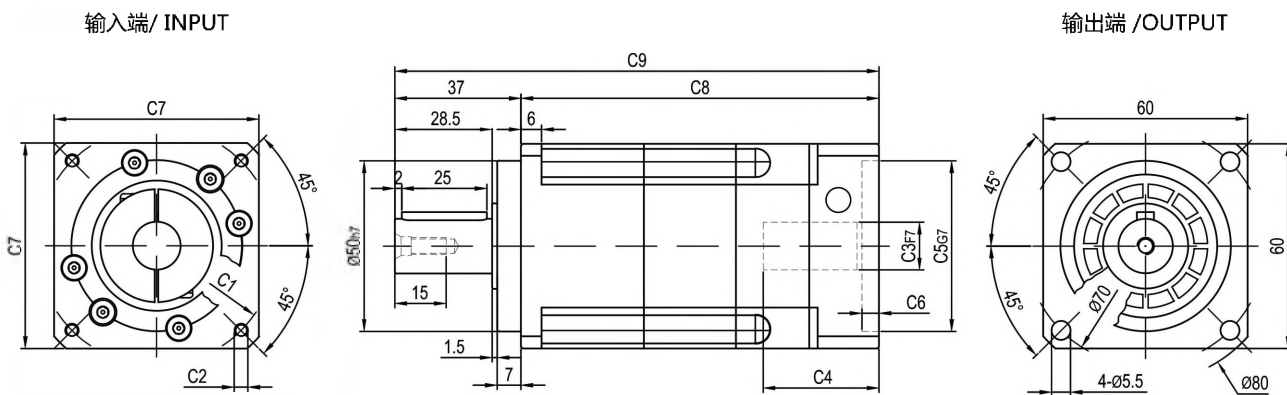
*The input motor specific dimensions could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

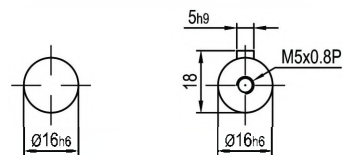
FAB-060-L1



FAB-060-L2



输出轴径/Output Diameter



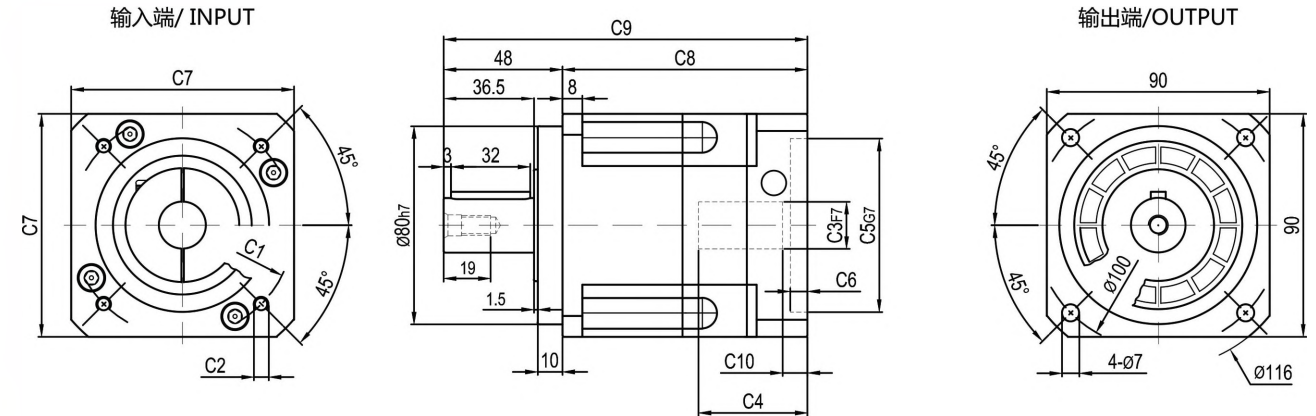
轴型式 S1 轴型式 S2

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9
FAB-060-L1	Ø70	4-M4x10, 4-M5x12	Ø11, Ø14	34	Ø50	5	60	78	115
	Ø90	4-M5x12, 4-M6x12	Ø19	44	Ø70	5	80	88	125
FAB-060-L2	Ø70	4-M4x10, 4-M5x12	Ø11, Ø14	34	Ø50	5	60	105	142

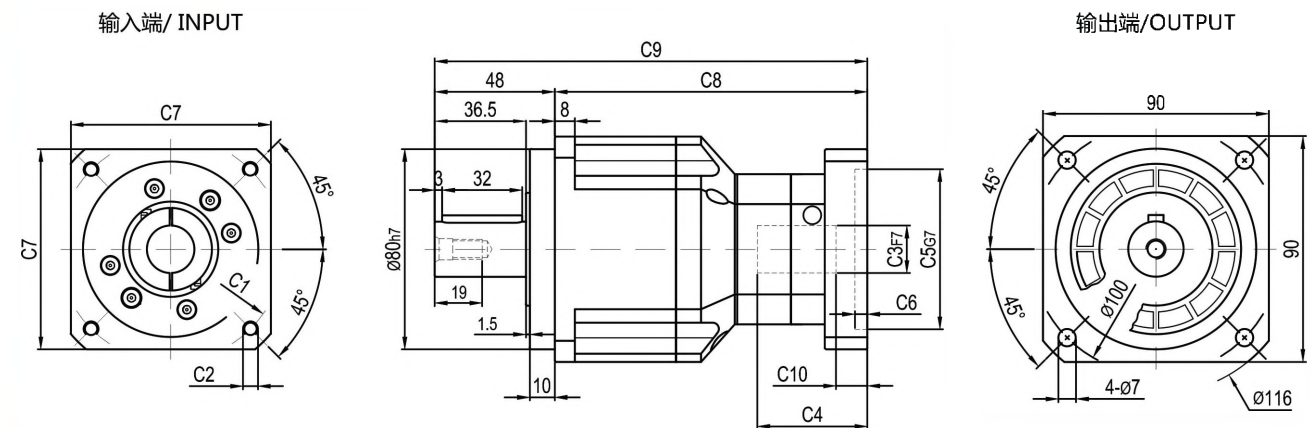
* C1~C7是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C7are motor(metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

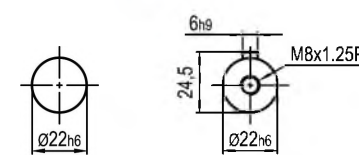
FAB-090-L1



FAB-090-L2



输出轴径/Output Diameter



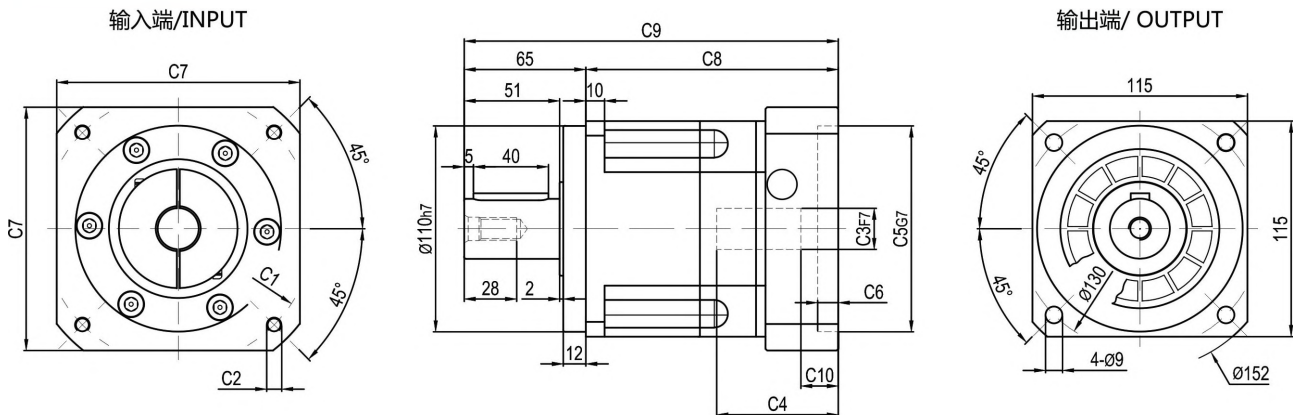
轴型式 S1 轴型式 S2

尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
	Ø90	4-M5x12, 4-M6x12	Ø19	44	Ø70	7	90	99	147	8
	Ø100	4-M6x12	Ø16	44	Ø80	7	90	99	147	7
FAB-090-L1	Ø115	4-M8x20	Ø19, Ø22	50	Ø95	7	100	105	153	13
	Ø115	4-M8x25	Ø19, Ø22	60	Ø95	8	100	115	163	23
	Ø145	4-M8x25	Ø19, Ø22, Ø24	60	Ø110	8	130	115	163	23
	Ø70	4-M4x10, 4-M5x12	Ø11, Ø14	34	Ø50	5	60	115	163	5.5
FAB-090-L2	Ø90	4-M5x12, 4-M6x12	Ø19	44	Ø70	5	80	125	173	16.5
	Ø100	4-M6x12	Ø16	38.5	Ø80	5	86	119.5	167.5	10

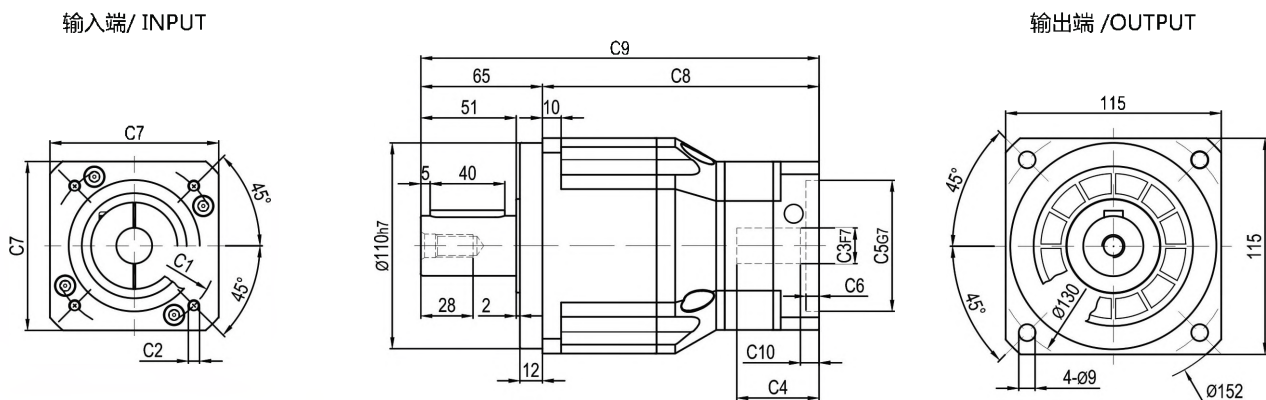
* C1~C7是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C7are motor(metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

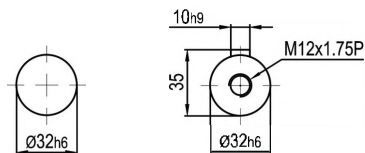
FAB-115-L1



FAB-115-L2



输出轴径/Output Diameter



轴型式 S1

轴型式 S2

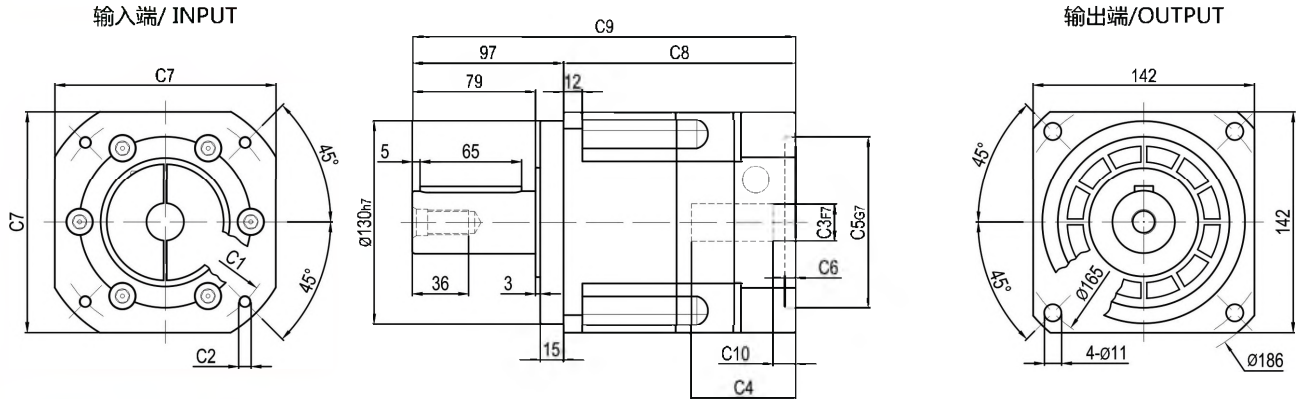
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
FAB-115-L1	Ø145	4-M8x25	Ø19,Ø22,Ø24	65	Ø110	11	130	135	200	20
	Ø200	4-M12x28	Ø35	80.5	Ø114.3	6	180	150.5	215.5	36.5
	Ø90	4-M5x12, 4-M6x12	Ø19	44	Ø70	7	90	148	213	8
FAB-115-L2	Ø100	4-M6x12	Ø16	44	Ø80	7	90	148	213	7
	Ø115	4-M8x20	Ø19,Ø22	50	Ø95	7	100	154	219	13
	Ø115	4-M8x25	Ø19,Ø22	60	Ø95	8	100	164	229	23
	Ø145	4-M8x25	Ø19,Ø22,Ø24	60	Ø110	8	130	164	229	23

* 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。

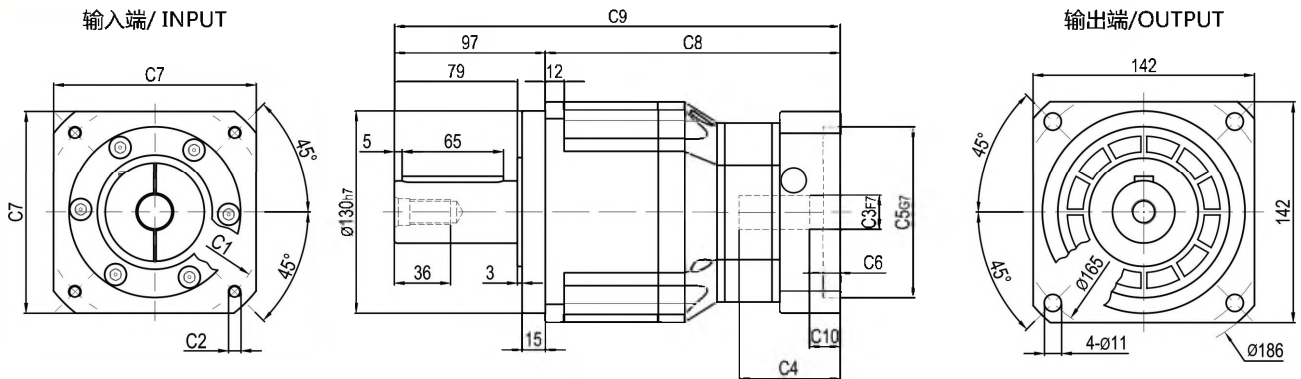
* C1~C7are motor(metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

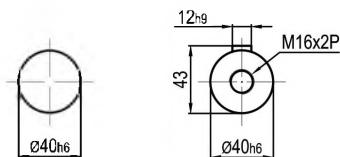
FAB-142-L1



FAB-142-L2



输出轴径/Output Diameter



轴型式 S1

轴型式 S2

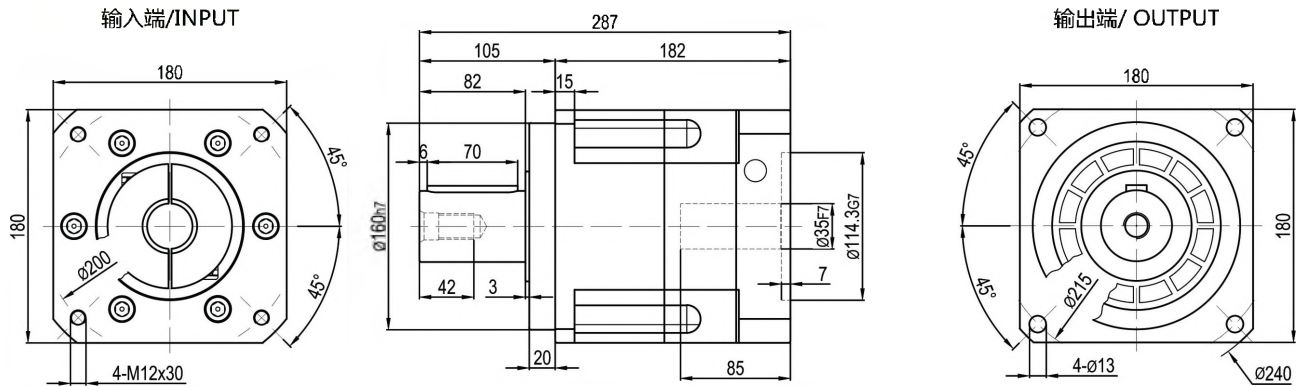
尺寸	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
FAB-142-L1	Ø145	4-M8x25	Ø22,Ø24	67.5	Ø110	7	142	149.5	246.5	14.5
	Ø200	4-M12x23	Ø35	83	Ø114.3	8	180	165	262	30
FAB-142-L2	Ø145	4-M8x25	Ø19,Ø22,Ø24	65	Ø110	11	130	190	287	20
	Ø200	4-M12x28	Ø35	80.5	Ø114.3	6	180	205.5	302.5	36.5

* 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。

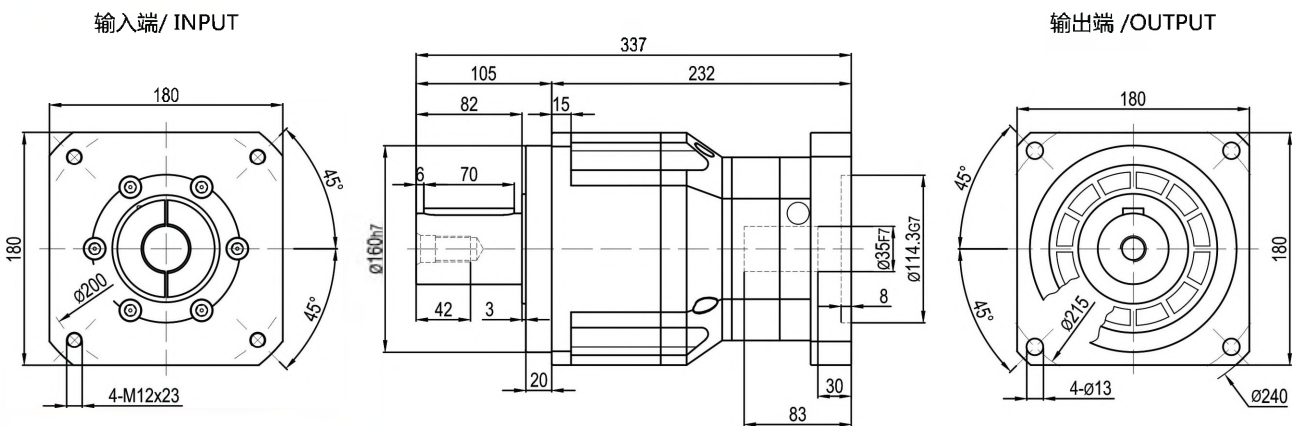
* C1~C7are motor(metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

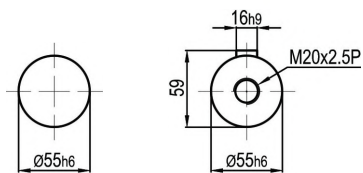
FAB-180-L1



FAB-180-L2



输出轴径/Output Diameter



轴型式 S1

轴型式 S2

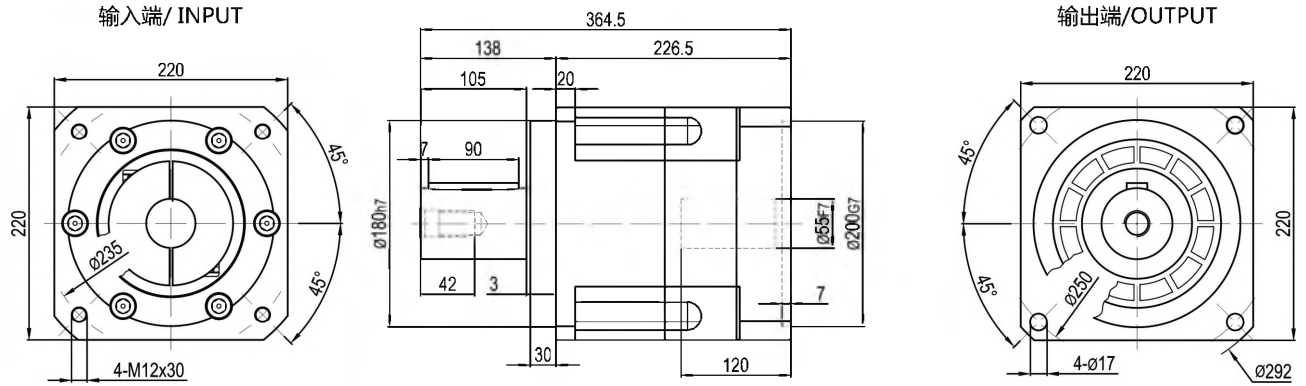
*输入马达连接板之尺寸,可根据客户要求单独定做。

*The input motor specific dimensions could be customised.

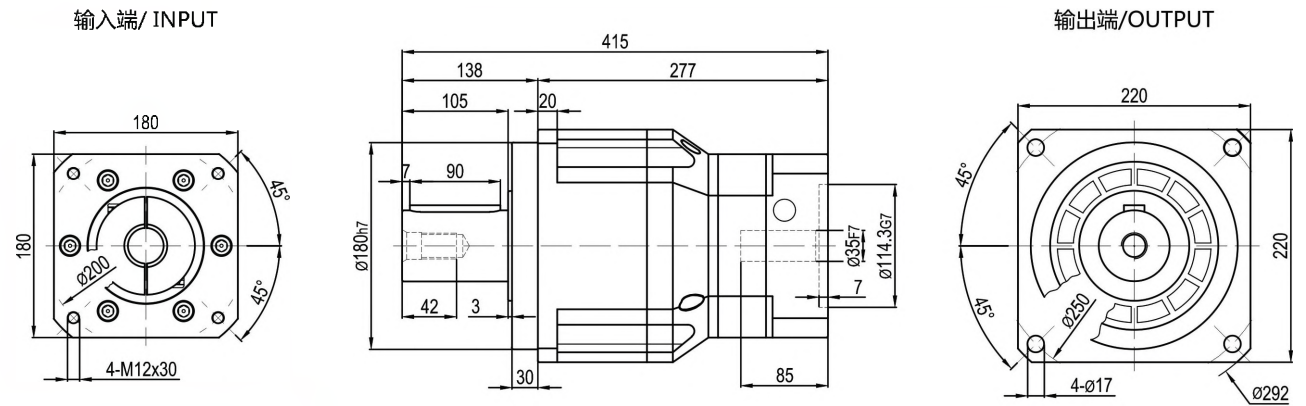


外形尺寸图表 / OUTLINE DIMENSION SHEET

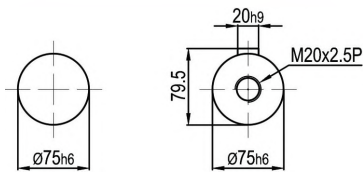
FAB-220-L1



FAB-220-L2



输出轴径/Output Diameter



轴型式 S1

轴型式 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.