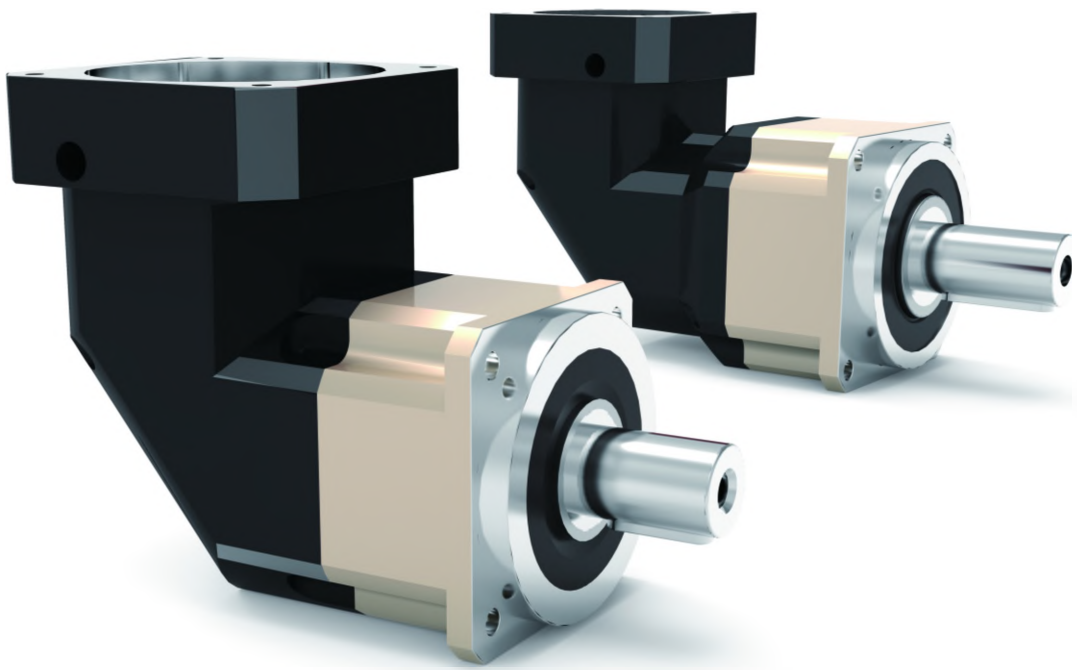




菲兰德
FEILANDE

FABR
SERIES



动力传动专业制造商

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

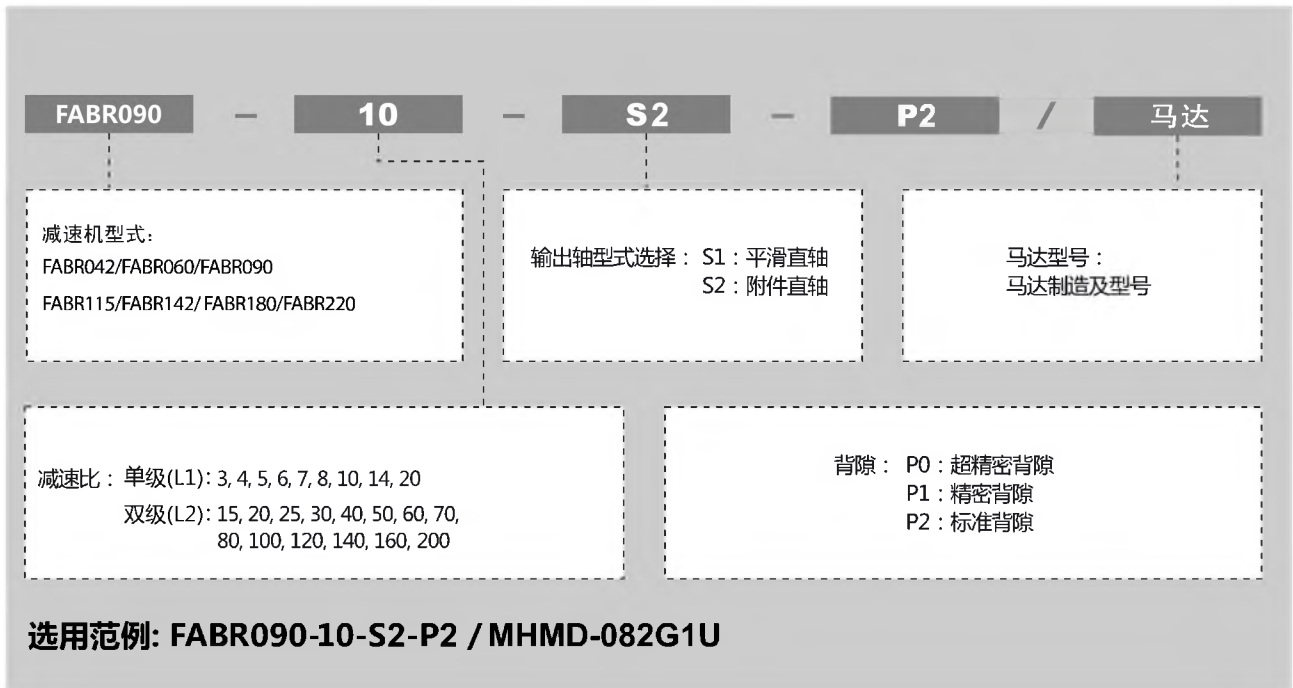
设计理念: 遵循规律, 总是超越

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 | FABR042 | FABR060 | FABR090 | FABR115 | FABR142 | FABR180 | FABR220 |
|--------------------------------------|-----------|-----|------------------|-------------|---------|---------|---------|---------|---------|---------|
| 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 |
| | | | 14 | - | 35 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | | 20 | - | 23 | 48 | 140 | 370 | 520 | 1,220 |
| | | | 15 | 20 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | 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 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 | |
| | | 70 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 | |
| | | 80 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 | |
| | | 100 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 | |
| 120 | - | - | 150 | 310 | 600 | 1,100 | 1,900 | | | |
| 140 | - | - | 140 | 300 | 550 | 1,100 | 1,800 | | | |
| 160 | - | - | 120 | 260 | 500 | 1,000 | 1,600 | | | |
| 200 | - | - | 48 | 140 | 370 | 520 | 1,220 | | | |
| 最大输出力矩 T _{2B} | Nm | 1,2 | 3~200 | 3倍额定输出力矩 | | | | | | |
| 额定输入转速 n ₁ | rpm | 1,2 | 3~200 | 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 | 3~200 | 10,000 | 10,000 | 8,000 | 8,000 | 6,000 | 6,000 | 4,000 |
| 超精密背隙 P0 | arcmin | 1 | 3~20 | - | - | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| | | 2 | 15~200 | - | - | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 |
| 精密背隙 P1 | arcmin | 1 | 3~20 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 |
| | | 2 | 15~200 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 |
| 标准背隙 P2 | arcmin | 1 | 3~20 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 |
| | | 2 | 15~200 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~200 | 3 | 7 | 14 | 25 | 50 | 145 | 225 |
| 容许径向力 F _{2rB} ² | N | 1,2 | 3~200 | 780 | 1,530 | 3,250 | 6,700 | 9,400 | 14,500 | 50,000 |
| 容许轴向力 F _{2a1B} ² | N | 1,2 | 3~200 | 350 | 630 | 1,300 | 3,000 | 4,000 | 6,200 | 35,000 |
| 容许轴向力 F _{2a2B} ² | N | 1,2 | 3~200 | 390 | 765 | 1,625 | 3,350 | 4,700 | 7,250 | 25,000 |
| 使用寿命 | hr | 1,2 | 3~200 | 20,000* | | | | | | |
| 效率 η | % | 1 | 3~20 | ≥95% | | | | | | |
| | | 2 | 15~200 | ≥92% | | | | | | |
| 重量 | kg | 1 | 3~20 | 0.9 | 2.1 | 6.4 | 13 | 24.5 | 51 | 83 |
| | | 2 | 15~200 | 1.2 | 1.5 | 7.8 | 14.2 | 27.5 | 54 | 95 |
| 使用温度 | °C | 1,2 | 3~200 | -10°C~+90°C | | | | | | |
| 润滑 | | 1,2 | 3~200 | 合成润滑油脂 | | | | | | |
| 防护等级 | | 1,2 | 3~200 | IP65 | | | | | | |
| 安装方向 | | 1,2 | 3~200 | 任意方向 | | | | | | |
| 噪音值 (n ₁ =3000rpm) | dB | 1,2 | 3~200 | ≤61 | ≤63 | ≤65 | ≤68 | ≤70 | ≤72 | ≤74 |

减速机转动惯量

| 规格 | | 级数 | 减速比 ¹ | FABR042 | FABR060 | FABR090 | FABR115 | FABR142 | FABR180 | FABR220 |
|---------------------|----------------------|----|------------------|---------|---------|---------|---------|---------|---------|---------|
| 转动惯量 J ₁ | kg · cm ² | 1 | 3~10 | 0.09 | 0.35 | 2.25 | 6.84 | 23.4 | 68.9 | 135.4 |
| | | | 14 | - | 0.07 | 1.87 | 6.25 | 21.8 | 65.6 | 119.8 |
| | | 2 | 20 | - | 0.07 | 1.87 | 6.25 | 21.8 | 65.6 | 119.8 |
| | | | 15~100 | 0.09 | 0.09 | 0.35 | 2.25 | 6.84 | 23.4 | 68.9 |
| | | | 120~200 | - | - | 0.31 | 1.87 | 6.25 | 21.8 | 65.6 |

1. 减速比(i=N₁/N_{out})

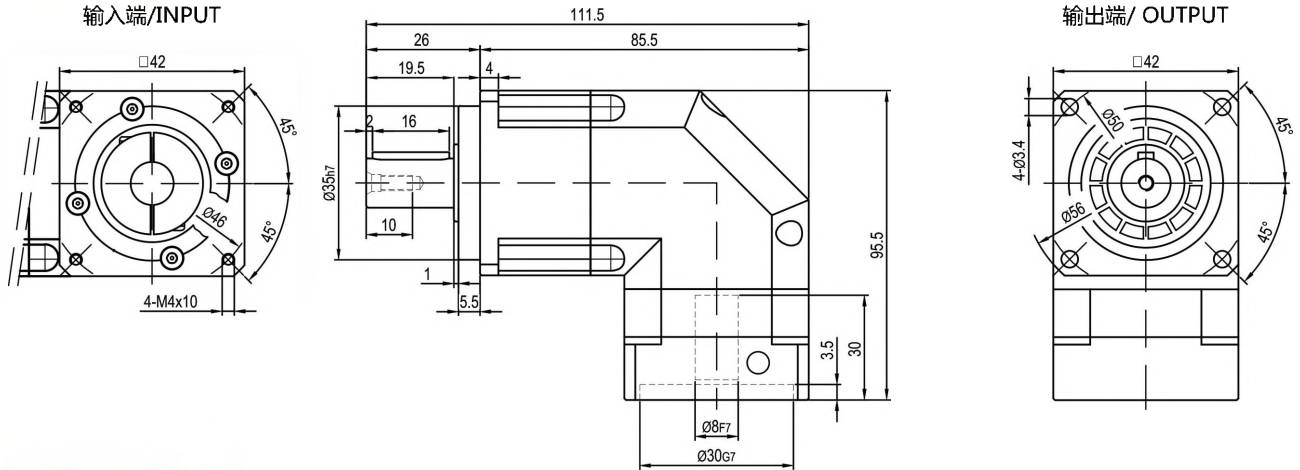
* 连续运转降低使用寿命二分之一。

2. 输出转速 100 rpm 时，作用于输出轴中心位置。

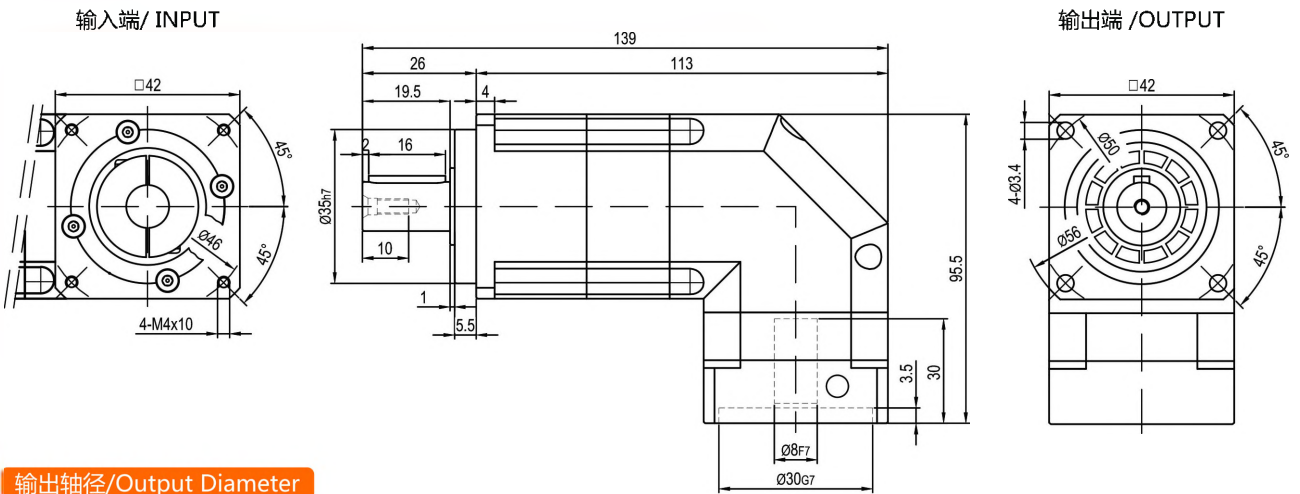


外形尺寸图表 / OUTLINE DIMENSION SHEET

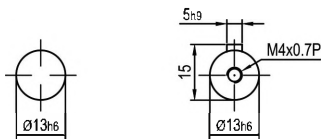
FABR-042-L1



FABR-042-L2



输出轴径/Output Diameter



轴型式 S1

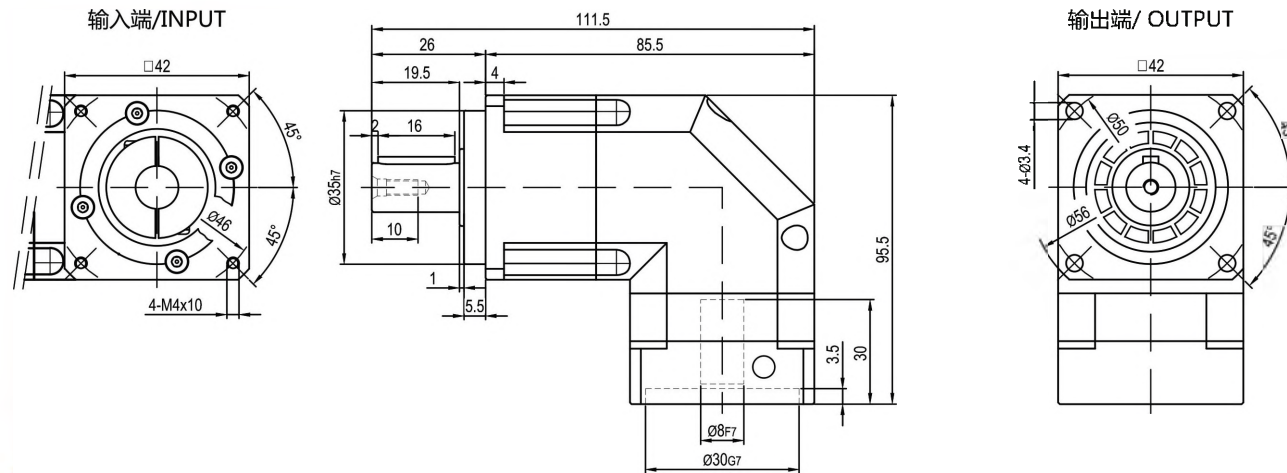
轴型式 S2

*输入马达连接板之尺寸,可根据客户要求单独定做。

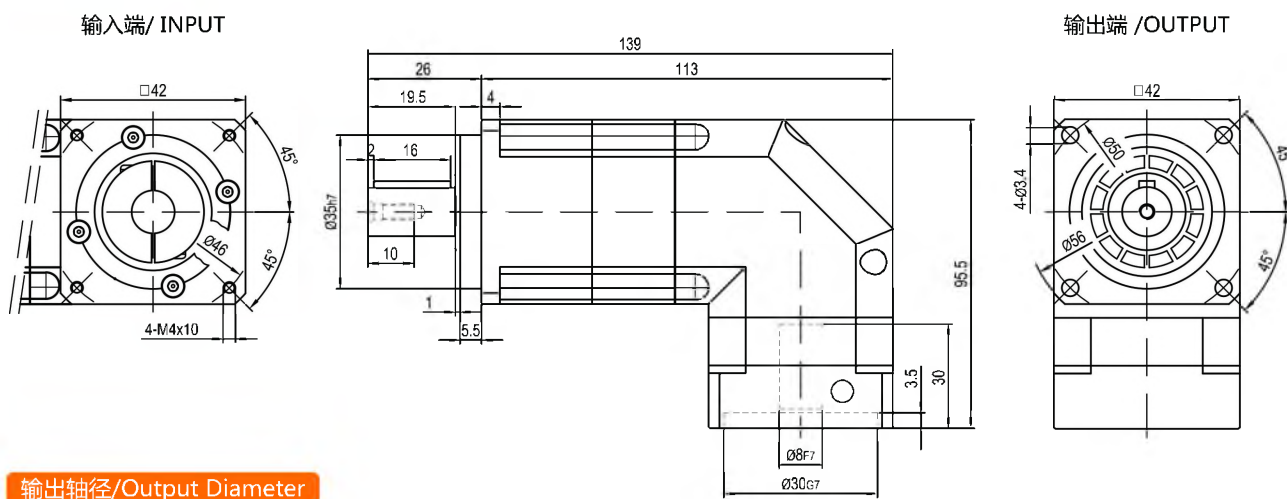
*The input motor specific dimensions could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

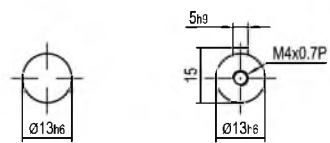
FABR-042-L1



FABR-042-L2



输出轴径/Output Diameter



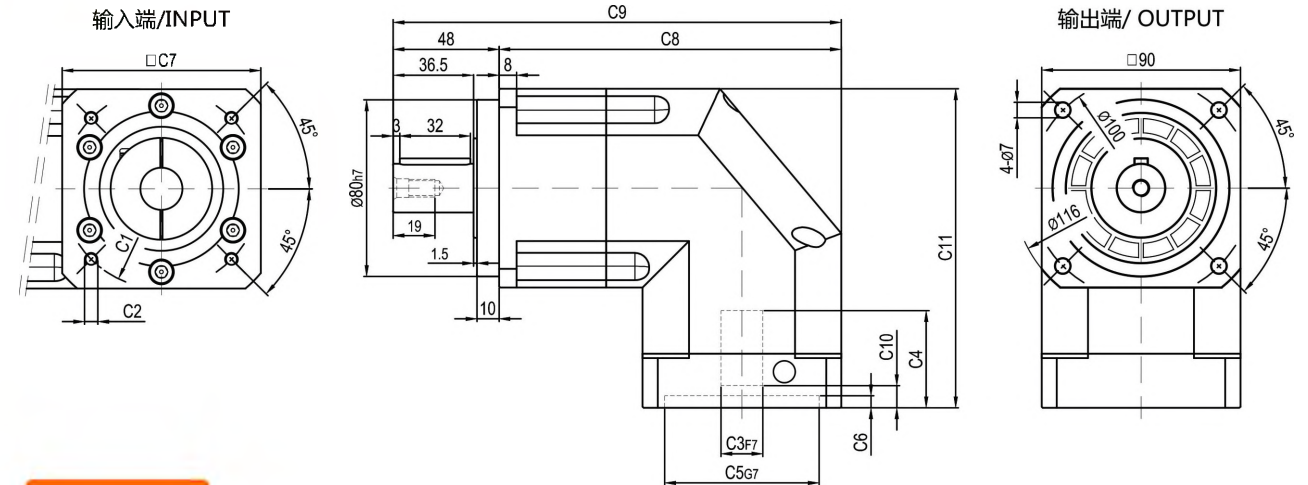
轴型式 S1

轴型式 S2

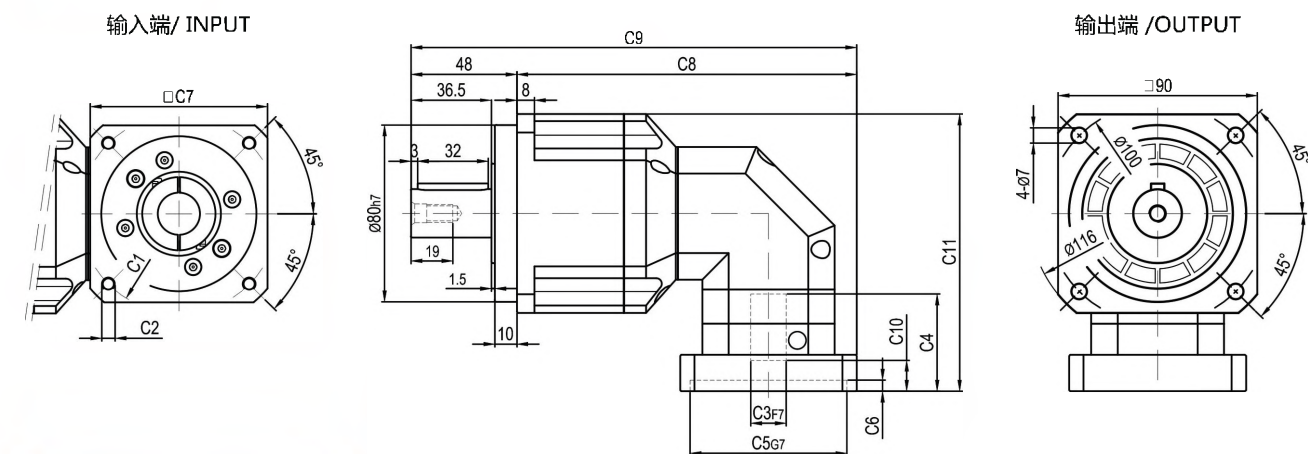
*输入马达连接板之尺寸,可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

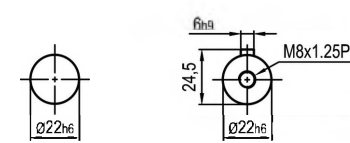
FABR-090-L1



FABR-090-L2



输出轴径/Output Diameter



轴型式 S1

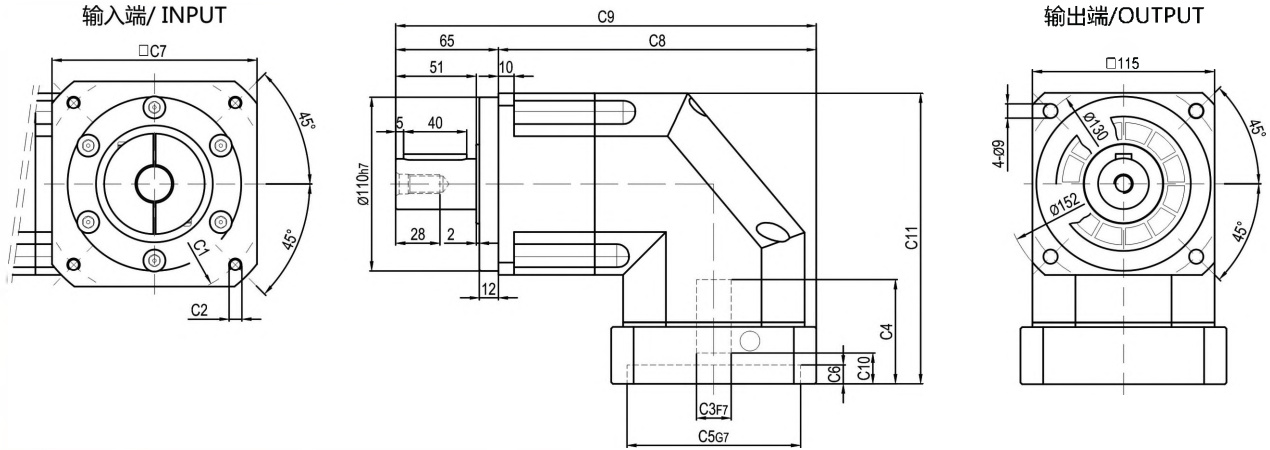
轴型式 S2

| 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 |
|------------------|------------------|---------------|------|------|----|-----|-----|-----|------|-------|-----|
| Ø90 | 4-M5x12, 4-M6x12 | Ø19 | 44 | Ø70 | 6 | 90 | 155 | 203 | 9 | 142 | |
| Ø100 | 4-M6x12 | Ø16 | 44 | Ø80 | 5 | 90 | 155 | 203 | 8 | 142 | |
| FABR-090-L1 Ø115 | 4-M8x20 | Ø19, Ø22 | 50 | Ø95 | 8 | 100 | 160 | 208 | 14 | 148 | |
| Ø115 | 4-M8x25 | Ø19, Ø22 | 57 | Ø95 | 8 | 100 | 160 | 208 | 21 | 155 | |
| Ø145 | 4-M8x25 | Ø19, Ø22, Ø24 | 60 | Ø110 | 11 | 130 | 175 | 223 | 24 | 158 | |
| FABR-090-L2 Ø70 | 4-M4x10, 4-M5x12 | Ø11, Ø14 | 34 | Ø50 | 5 | 60 | 144 | 192 | 5.5 | 115.5 | |
| Ø90 | 4-M5x12, 4-M6x12 | Ø19 | 44 | Ø70 | 5 | 80 | 154 | 202 | 16.5 | 125.5 | |
| Ø100 | 4-M6x12 | Ø16 | 38.5 | Ø80 | 5 | 86 | 157 | 205 | 10 | 120 | |

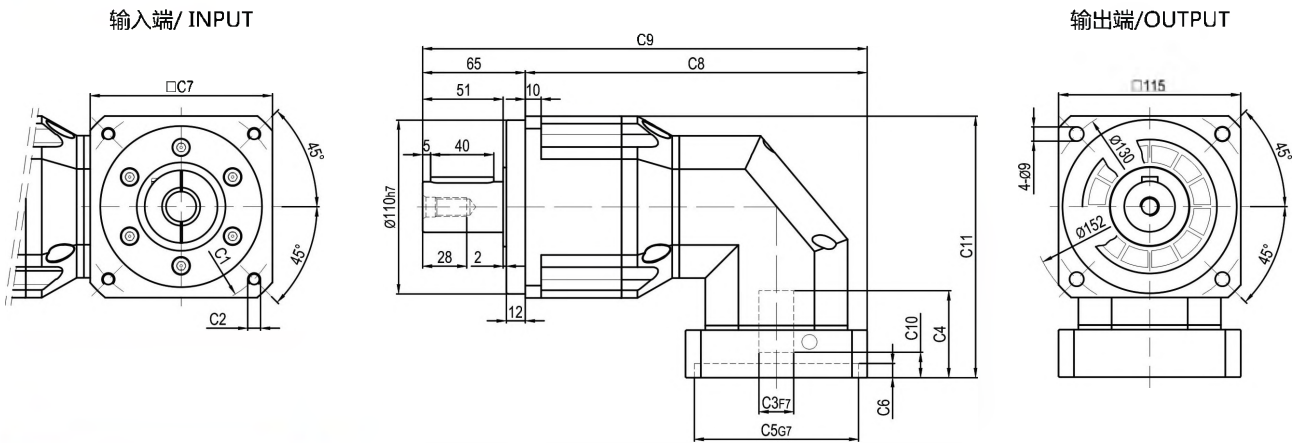
* C1~C7是公制标准马达连接板之尺寸,可根据客户要求单独定做。
* C1~C7are motor(metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

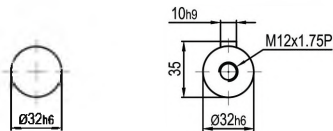
FABR-115-L1



FABR-115-L2



输出轴径/Output Diameter



轴型式 S1

轴型式 S2

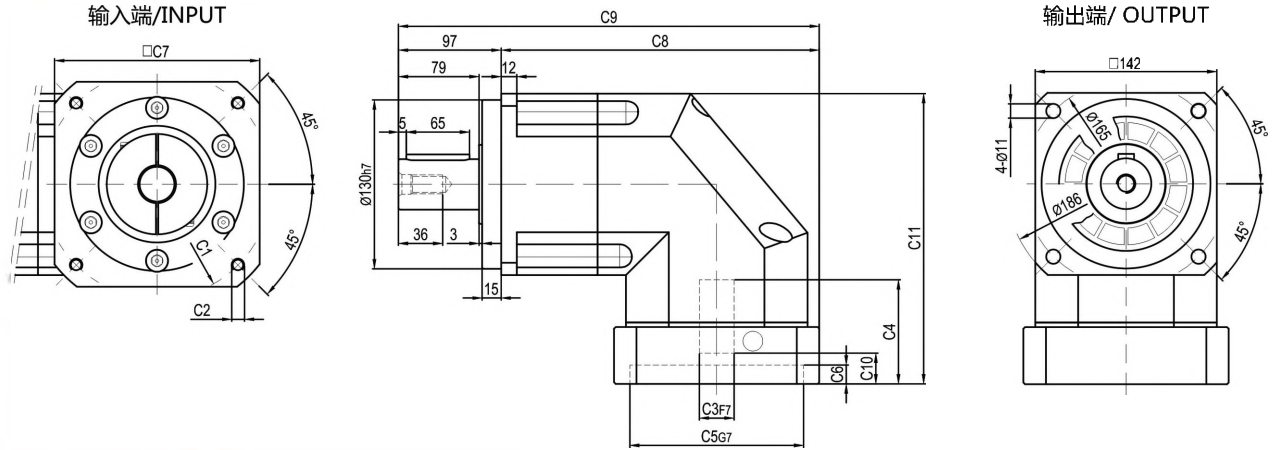
| 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 |
|-------------|------|------------------|-------------|----|--------|----|-----|-------|-------|------|-------|
| FABR-115-L1 | Ø145 | 4-M8x25 | Ø19,Ø22,Ø24 | 66 | Ø110 | 14 | 130 | 201.5 | 266.5 | 19.5 | 184 |
| | Ø200 | 4-M12x28 | Ø35 | 81 | Ø114.3 | 21 | 180 | 226.5 | 291.5 | 35.5 | 199 |
| FABR-115-L2 | Ø90 | 4-M5x12, 4-M6x12 | Ø19 | 44 | Ø70 | 6 | 90 | 204 | 269 | 9 | 154.5 |
| | Ø100 | 4-M6x12 | Ø16 | 44 | Ø80 | 5 | 90 | 204 | 269 | 8 | 154.5 |
| | Ø115 | 4-M8x20 | Ø19,Ø22 | 50 | Ø95 | 8 | 100 | 209 | 274 | 14 | 160.5 |
| FABR-115-L2 | Ø115 | 4-M8x25 | Ø19,Ø22 | 57 | Ø95 | 8 | 100 | 209 | 274 | 21 | 167.5 |
| | Ø145 | 4-M8x25 | Ø19,Ø22,Ø24 | 60 | Ø110 | 11 | 130 | 224 | 289 | 24 | 170.5 |

* 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。

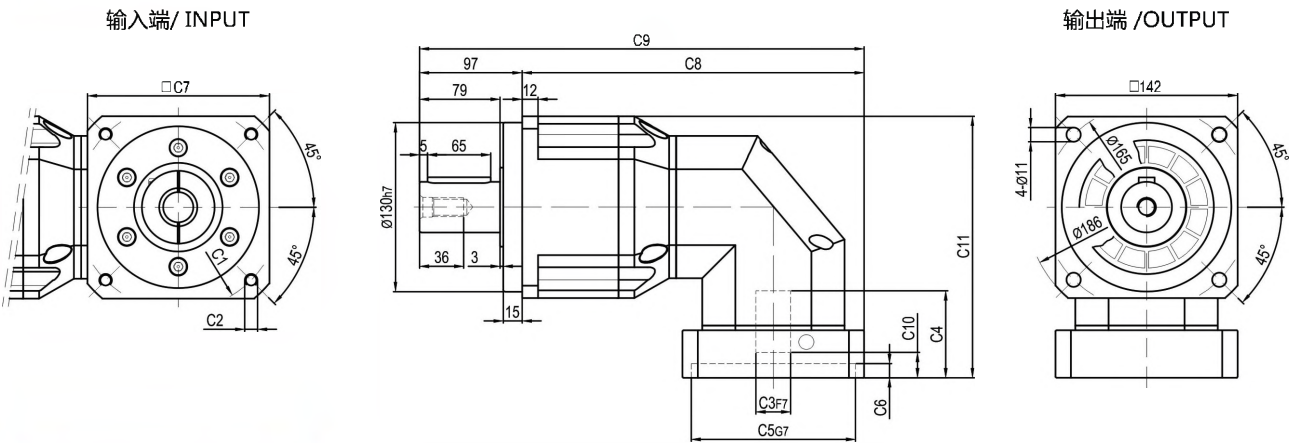
* C1~C7are motor(metric standard) specific dimensions, which could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

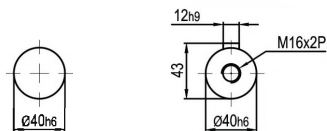
FABR-142-L1



FABR-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 | C11 |
|-------------|------|----------|-------------|----|--------|----|-----|-------|-------|------|-------|
| FABR-142-L1 | Ø145 | 4-M8x25 | Ø22,Ø24 | 83 | Ø110 | 11 | 142 | 236 | 333 | 19.5 | 228 |
| | Ø200 | 4-M12x30 | Ø35 | 85 | Ø114.3 | 15 | 180 | 255 | 352 | 21.5 | 230 |
| FABR-142-L2 | Ø145 | 4-M8x25 | Ø19,Ø22,Ø24 | 66 | Ø110 | 14 | 130 | 256.5 | 353.5 | 19.5 | 197.5 |
| | Ø200 | 4-M12x28 | Ø35 | 81 | Ø114.3 | 21 | 180 | 281.5 | 378.5 | 35.5 | 212.5 |

* 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.