



菲兰德
FEILANDE

FVE
SERIES



动力传动专业制造商

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

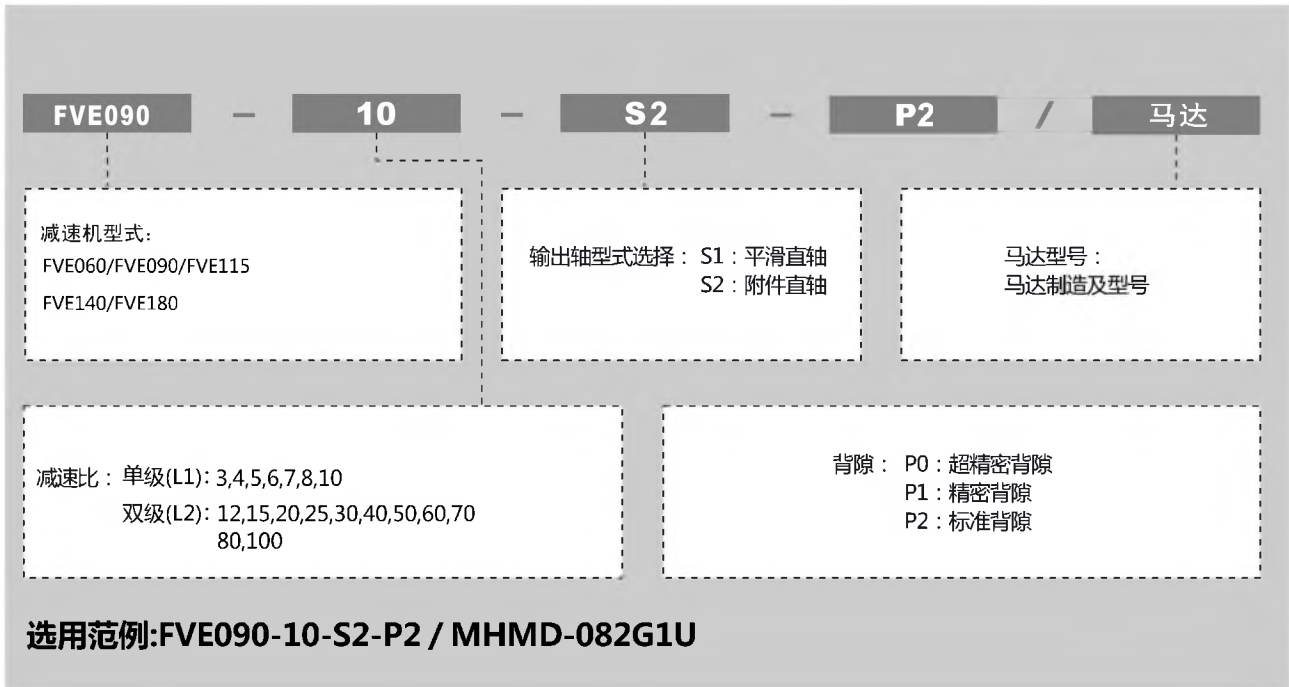
设计理念: 遵循规律, 总是超越

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 | FVE060 | FVE090 | FVE115 | FVE140 | FVE180 | |
|------------------------------|-----------|------------------|----------|--------|--------|-------------|--------|-------|
| 额定输出力矩 T_{2N} | Nm | 1 | 3 | 55 | 130 | 208 | 342 | 588 |
| | | | 4 | 50 | 140 | 290 | 542 | 1050 |
| | | | 5 | 60 | 160 | 330 | 650 | 1200 |
| | | | 6 | 55 | 150 | 310 | 600 | 1100 |
| | | | 7 | 35 | 140 | 300 | 550 | 1100 |
| | | | 8 | 35 | 120 | 260 | 500 | 1000 |
| | | 2 | 10 | 23 | 48 | 140 | 370 | 520 |
| | | | 12 | 55 | 130 | 208 | 342 | 588 |
| | | | 15 | 55 | 130 | 208 | 342 | 588 |
| | | | 20 | 50 | 140 | 290 | 542 | 1050 |
| | | | 25 | 60 | 160 | 330 | 650 | 1200 |
| | | | 30 | 60 | 160 | 330 | 650 | 1200 |
| | | | 35 | 60 | 160 | 330 | 650 | 1200 |
| | | | 40 | 60 | 160 | 330 | 650 | 1200 |
| | | | 50 | 60 | 160 | 330 | 650 | 1200 |
| | | | 60 | 55 | 150 | 310 | 600 | 1100 |
| | | | 70 | 35 | 140 | 300 | 550 | 1100 |
| | | | 80 | 35 | 120 | 260 | 500 | 1000 |
| 100 | 23 | 48 | 140 | 370 | 520 | | | |
| 最大输出力矩 T_{2B} | Nm | 1,2 | 3倍额定输出力矩 | | | | | |
| 额定输入转速 n_1 | rpm | 1,2 | 5000 | 4000 | 4000 | 3000 | 3000 | |
| 最大输入转速 n_{1B} | rpm | 1,2 | 12~100 | 10000 | 8000 | 8000 | 6000 | |
| 超精密背隙 P0 | arcmin | 1 | 3~10 | - | ≤1 | ≤1 | ≤1 | ≤1 |
| | | 2 | 12~100 | - | - | ≤3 | ≤3 | ≤3 |
| 精密背隙 P1 | arcmin | 1 | 3~10 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 |
| | | 2 | 12~100 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 |
| 标准背隙 P2 | arcmin | 1 | 3~10 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 |
| | | 2 | 12~100 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~100 | 7 | 14 | 25 | 50 | 145 |
| 容许径向力 F_{2r}^2 | N | 1,2 | 3~100 | 1530 | 3250 | 6700 | 9400 | 14500 |
| 容许轴向力 F_{2a}^2 | N | 1,2 | 3~100 | 630 | 1300 | 3000 | 4000 | 6200 |
| 容许轴向力 F_{2aB}^2 | N | 1,2 | 3~100 | 765 | 1625 | 3350 | 4700 | 7250 |
| 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 | 1.3 | 3.7 | 7.8 | 14.5 | 29 |
| | | 2 | 12~100 | 1.9 | 4.1 | 9 | 17.5 | 33 |
| 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 | ≤58 | ≤60 | ≤63 | ≤65 | ≤67 |

减速机转动惯量

| 规格 | 级数 | 减速比 ¹ | FVE060 | FVE090 | FVE115 | FVE140 | FVE180 | |
|------------|--------------------|------------------|--------|--------|--------|--------|--------|-------|
| 转动惯量 J_1 | kg·cm ² | 1 | 3 | 0.16 | 0.61 | 3.25 | 9.21 | 28.98 |
| | | | 4 | 0.14 | 0.48 | 2.74 | 7.54 | 23.67 |
| | | | 5 | 0.13 | 0.47 | 2.71 | 7.42 | 23.29 |
| | | | 6 | 0.13 | 0.45 | 2.65 | 7.25 | 22.75 |
| | | | 7 | 0.13 | 0.45 | 2.62 | 7.14 | 22.48 |
| | | | 8 | 0.13 | 0.44 | 2.58 | 7.07 | 22.59 |
| | | 2 | 10 | 0.13 | 0.44 | 2.57 | 7.03 | 22.51 |
| | | | 12 | 0.03 | 0.13 | 0.47 | 2.71 | 7.42 |
| | | | 15 | 0.03 | 0.13 | 0.47 | 2.71 | 7.42 |
| | | | 20 | 0.03 | 0.13 | 0.47 | 2.71 | 7.42 |
| | | | 25 | 0.03 | 0.13 | 0.47 | 2.71 | 7.42 |
| | | | 30 | 0.03 | 0.13 | 0.47 | 2.71 | 7.42 |
| | | | 35 | 0.03 | 0.13 | 0.47 | 2.71 | 7.42 |
| | | | 40 | 0.03 | 0.13 | 0.47 | 2.71 | 7.42 |
| | | | 50 | 0.03 | 0.13 | 0.44 | 2.57 | 7.03 |
| | | | 60 | 0.03 | 0.13 | 0.44 | 2.57 | 7.03 |
| | | | 70 | 0.03 | 0.13 | 0.44 | 2.57 | 7.03 |
| | | | 80 | 0.03 | 0.13 | 0.44 | 2.57 | 7.03 |
| 100 | 0.03 | 0.13 | 0.44 | 2.57 | 7.03 | | | |

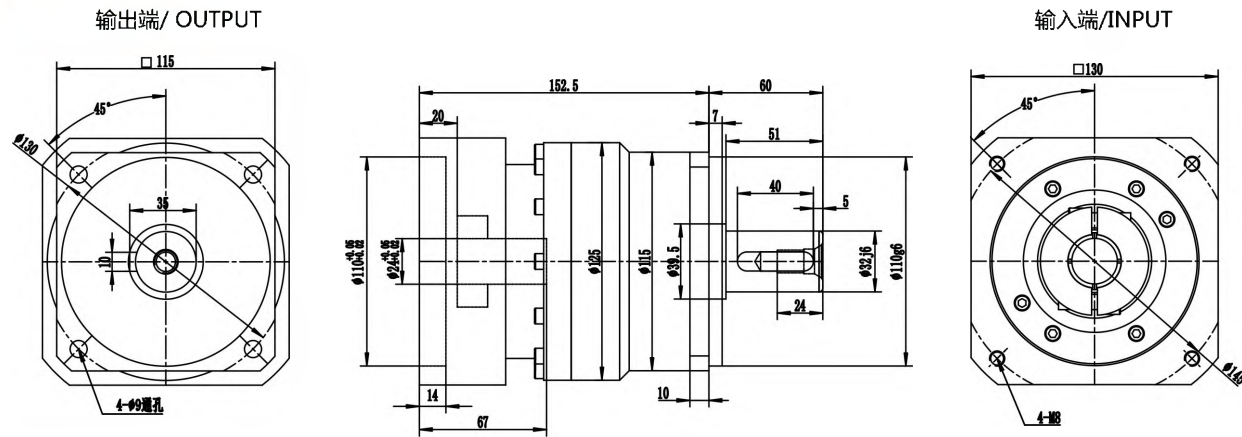
1. 减速比($i=N_{in}/N_{out}$)

* 连续运转降低使用寿命二分之一。

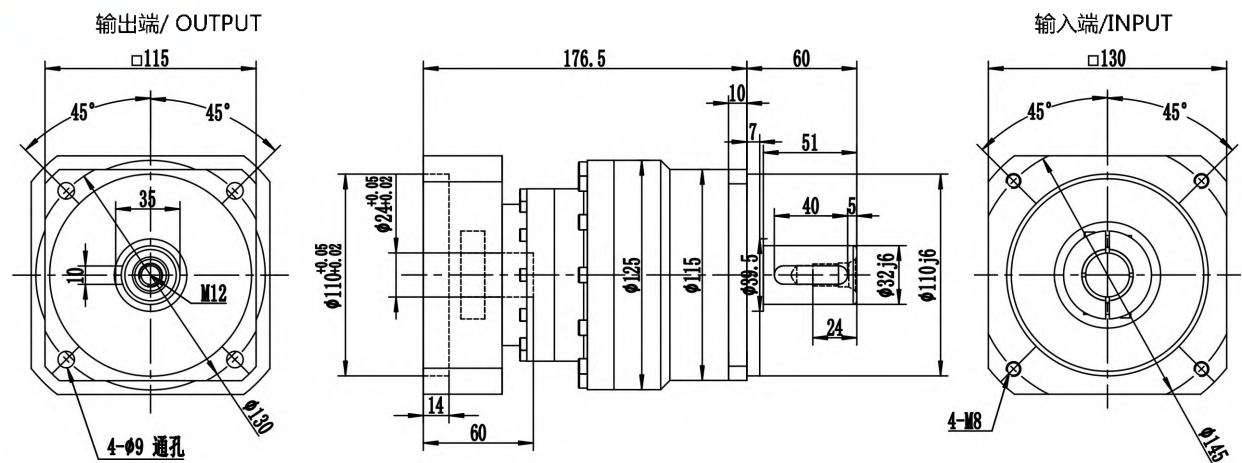
2. 输出转速 100 rpm 时, 作用于输出轴中心位置。

外形尺寸图表 / OUTLINE DIMENSION SHEET

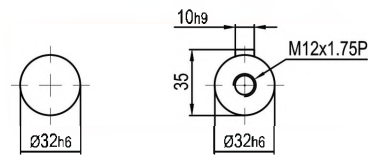
FVE-115-L1



FVE-115-L2



输出轴径/Output Diameter

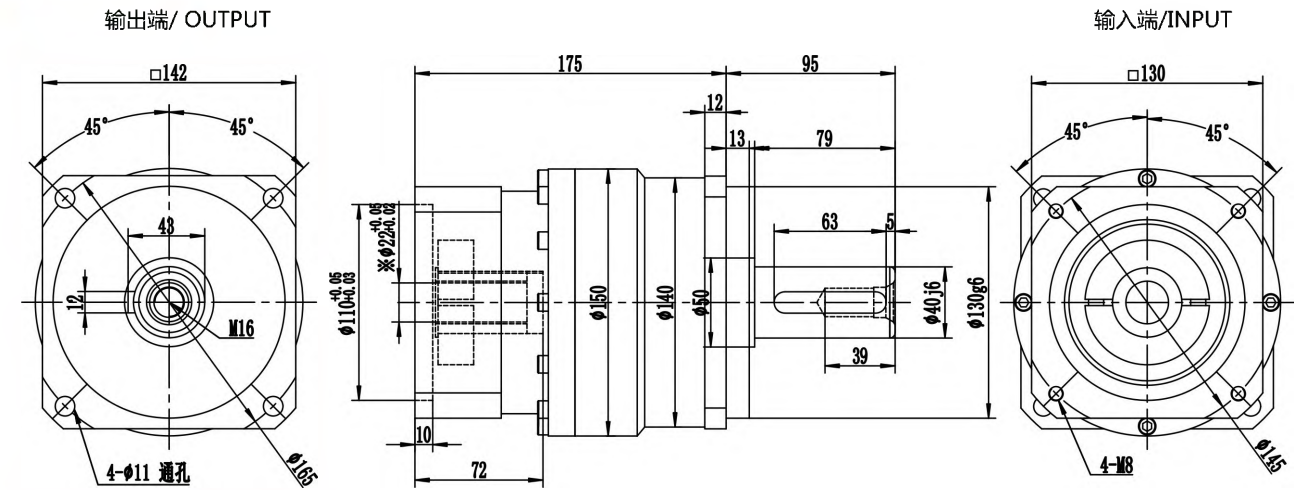


轴型式 S1 轴型式 S2

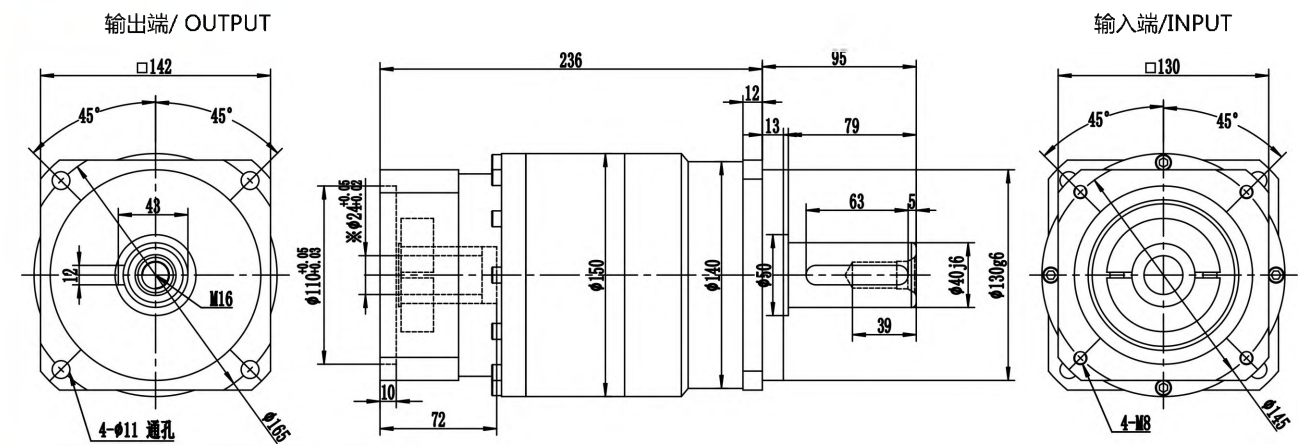
*输入马达连接板之尺寸,可根据客户要求单独定做。
*The input motor specific dimensions could be customised.

外形尺寸图表 / OUTLINE DIMENSION SHEET

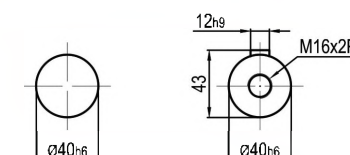
FVE-140-L1



FVE-140-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.