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新立盈®

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*由于产品不断更新，请以实物为准

新立盈®

致力为客户创造更大价值

# 减速机产品手册

新传动 ● 立匠心 ● 共创盈

# 目录检索

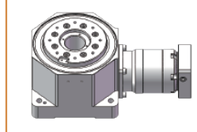


新立盈® 产品简介

## MTN中空平台 P001

| | | |
|---|---|---|
| 7种尺寸可选 | | 60mm-700mm |
| 额定输出力矩 | | 5Nm-688Nm |
| 减速比 | 单级 | 5/10/18 |
| | 双级 | 15/20/30/50/100/200 |
| 背隙 | 单级 | 5arcmin |
| | 双级 | 10arcmin |

## ZTT中空平台 P011



| | | |
|---|---|---|
| 6种尺寸可选 | | 110mm-260mm |
| 额定输出力矩 | | 80Nm-675Nm |
| 减速比 | 单级 | 4/6/8/9/10/15/20/30 |
| | 双级 | 36/60/75/90/150/300 |
| 背隙 | 单级 | 4arcmin |
| | 双级 | 8arcmin |

## BX摆线减速机 P027

| | | |
|---|---|---|
| 10种尺寸可选 | | 120mm-370mm |
| 容许力矩 | | 196Nm-8820Nm |
| 减速比 | 轴输出 | 53.5/59/103/81/121/141/153/161/...192.4 |
| 背隙 | | |

## 行星减速机 P057

| | | |
|---|---|---|
| 7种尺寸可选 | | 42mm-220mm |
| 额定输出力矩 | | 14Nm-2000Nm |
| 减速比 | 单级 | 3/4/5/6/7/8/10 |
| | 双级 | 12/15/20/25/30/35... |
| 背隙 | 单级 | 1-3-5arcmin |
| | 双级 | 3-7-10arcmin |

## XZT换向器 P101

| | | |
|---|---|---|
| 9种尺寸可选 | | 60mm-280mm |
| 静载荷 | | 30Nm-6029Nm |
| 减速比 | 单级 | 1/2/3 |
| | 双级 | 3/4/5/6/7/8/10/15/20 |
| 背隙 | 单级 | 8-10arcmin |
| | 双级 | 8-10arcmin |

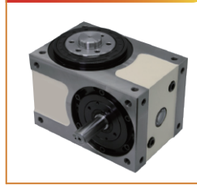
## 同步升降机 P111

| | | |
|---|---|---|
| 8种尺寸可选 | | 090mm-550mm |
| 下压负载 | | 0.2T-40T |
| 减速比 | 单级 | 2 |
| | 双级 | 6/8/10/12/14/16/20 |
| 背隙 | 单级 | 8arcmin |
| | 双级 | 10arcmin |

## 伺服电缸 P125

| | | |
|---|---|---|
| 10种尺寸可选 | | 40mm-220mm |
| 推力 | | 50kg-50000kg |
| 减速比 | 单级 | 1 |
| | 双级 | 3/4/5/6/7/8/10/20... |
| 背隙 | 标准 | 0.02mm |

## 凸轮分割器 P139



| | |
|---|---|
| 9种尺寸可选 | 45mm-350mm |
| 出力轴向负荷 | 140kgf-4150kgf |
| 更多详情请查阅选型手册 | |

## SKM准双曲面 P155

| | | |
|---|---|---|
| 5种尺寸可选 | | 50mm-110mm |
| 额定输出力矩 | | 130Nm-750Nm |
| 减速比 | 单级 | 7.5/10/12.5/15/20/...75 |
| | 双级 | 75/100/200...250/300 |
| 背隙 | 标准 | 25arcmin |
| | 最低 | 15arcmin |

## 工业行星 P165

| | |
|---|---|
| 10种尺寸可选 | 00-11框 |
| 额定输出力矩 | 48330Nm |
| 更多详情请查阅工业行星手册 | |

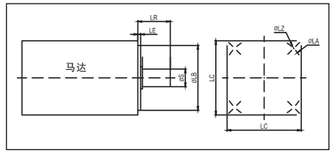
*注意 所有吊装工况请提前咨询我司技术并出具选型报告

## 型号命名

MTN – 60 – K – 05 – LB-S-LA-LZ

- MTN：旋轉平臺系列
  - MTN: 常规
  - DZMTN：吊装
- 60：规格
  - 60
  - 85
  - 130
  - 200
  - 280
  - 350
  - 450
  - 550
  - 700
- K：
  - K: 行星减速機
  - T: 直角减速機
- 05：减速比
  - 05
  - 10
  - 15
  - 18
- LB-S-LA-LZ：選配
  - N: 伺服電機
  - B: 步進電機

选型注意事项
所有系列15–18比都不可以外加减速机




## 技术参数

| 产品型号 | 单位 | MTN60 | MTN85 | | MTN130 | MTN200 | MTN280 | MTN350 | MTN450 | MTN550 | MTN700 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 平台本体减速比 | | 5/10 | 5/10 | 15/18 | 10/18 | 10/18 | 10/18 | 10 | 10 | 10 | 10 |
| 容许转矩 | N.M | 19/14 | 59/33 | 7.5 | 66/35 | 175/84 | 503/996 | 997 | 1831 | 2925 | 6403 |
| 平台伺服马达 | KW | 0.1 | 0.4 | 0.1 | 0.4 | 0.75 | 0.75-2 | 1-2 | 1-5 | 2-5 | 3-7.5 |
| 轴承结构 | | 交叉滚子轴承 | 交叉滚子轴承 | | 交叉滚子轴承 | 交叉滚子轴承 | 交叉滚子轴承 | 交叉滚子轴承 | 交叉滚子轴承 | 交叉滚子轴承 | 交叉滚子轴承 |
| 吊装负载 | kg | - | 5 | | 30 | 60 | 90 | - | - | - | - |
| 转动惯量 | $kg.m^2$ | $4500X10^{-7}$ | $21090X10^{-7}$ | | $110725X10^{-7}$ | $876410X10^{-7}$ | $200430X10^{-7}$ | $32010X10^{-7}$ | $380230X10^{-7}$ | $470200X10^{-7}$ | $680100X10^{-7}$ |
| 容许盘面输出转速 | r/min | 200 | 200 | | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| 容许轴向负载 | N | 300 | 800 | | 2500 | 4500 | 7000 | 10000 | 15000 | 22500 | 60000 |
| 重复定位精度 | arcsec | ±5 | ±5 | | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 |
| 定位精度 | arcmin | ±0.5 | ±0.5 | | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 |
| 平面跳动 | mm | ±0.005 | ±0.005 | | ±0.005 | ±0.005 | ±0.005 | ±0.005 | ±0.005 | ±0.005 | ±0.005 |
| 旋转平台同心度 | mm | ±0.01 | ±0.01 | | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 | ±0.01 |
| 旋转平台平行度 | mm | ±0.015 | ±0.015 | | ±0.015 | ±0.015 | ±0.015 | ±0.015 | ±0.015 | ±0.015 | ±0.015 |
| 寿命(连续减半) | h | 25000 | 25000 | | 25000 | 25000 | 25000 | 25000 | 25000 | 25000 | 25000 |
| 防护等级 | | IP40 | IP40 | | IP40 | IP40 | IP40 | IP40 | IP40 | IP40 | IP40 |

*注意 所有吊装工况请提前咨询我司技术并出具选型报告
输出转速不能超过200转





## 中空旋转平台参数用语注释

| | |
|---|---|
| 马达种类 | 旋转平台可适配的马达种类。 |
| 旋转平台轴承 | 旋转平台所使用的轴承种类。 |
| 容许转矩[注1] | 减速机构部的机械强度临界值,包括加速转矩、负载惯量,皆须在此容许转矩范围内使用。 |
| 容许转速 | 减速机构部的机械强度可容许的旋转平台之盘面转速。 |
| 转动惯量 | 马达部转子惯性惯量+减速机构部惯性惯量于旋转平台上所换算之值的总和。 |
| 容许轴向负载 | 对旋转平台轴方向施加轴向负载的容许值。 |
| 容许惯性力矩负荷 | 在偏离旋转平台中心的位置施加负载，使得旋转平台倾斜的力会发生作用时中心的偏心量×负载而计算出的惯性力矩负荷的容许值。 |
| 定位精度 | 旋转平台于360°内对任意点进行定位时的理论旋转角度与实际旋转角度[注2]的误差值。 |
| 重复定位精度 | 表示从同一方向反复对相同位置进行定位时所产生的误差值。 |
| 旋转平台平行度 | 旋转平台盘面运转时相对于底座安装面的平行度。 |
| 旋转平台同心度 | 无负载时旋转平台内径与外径的同心度误差值。 |
| 容许输入转速 | 减速机结构部的机械强度可容许的输入转速。 |
| 背隙 | 是指固定电动机轴后,旋转平台的齿轮间隙。 |
| 破坏转矩 | 当减速机承受此扭矩时结构会被破坏。 |
| 精度寿命 | 成速机正常使用下能保持精度的设计寿命 |
| 防护等级[注3] | 对于以IEC529、EN60034-5(=IEC60034-5)为基准的机器的防护构造,可按防尘、防水性的等级分类。 |

### 注1：转矩的单位互换

| 转矩单位 | 1 N.m | 1 N.cm | 1 kgf.m | 1 kgf.cm | 1 lbf.ft | 1 lbf.in |
|---|---|---|---|---|---|---|
| 1 N.m | 1 | $10^2$ | 0.10197 | 10.197 | 0.7376 | 8.8509 |
| 1 N.cm | $10^{-2}$ | 1 | $1.0197\times10^{-3}$ | 0.10197 | $7.376\times10^{-3}$ | $8.8509\times10^{-2}$ |
| 1 kgf.m | 9.8066 | 980.665 | 1 | $10^2$ | 7.233 | 86.79 |
| 1 kgf.cm | $9.8066\times10^{-2}$ | 9.8066 | $10^{-2}$ | 1 | $7.233\times10^{-2}$ | 0.8680 |
| 1 lbf.ft | 1.356 | $1.356\times10^2$ | 0.1383 | 13.83 | 1 | 12 |
| 1 lbf.in | 0.113 | 11.3 | $1.152\times10^{-2}$ | 1.152 | $8.333\times10^{-2}$ | 1 |

### 注2：角度单位的表示方法

| 角度单位 | 值 | 符号 | 简写 |
|---|---|---|---|
| 度 | 1/360圆 | ° | Deg |
| 弧分 | 1/60 度 | ′ (质数) | arcmin,amin,MOA |
| 角秒 | 1/60 弧分 | ″ (双质数) | arcsec |
| 千分之一角秒 | 1/1000 角秒 | | mas |

### 注3：IP 防护等级

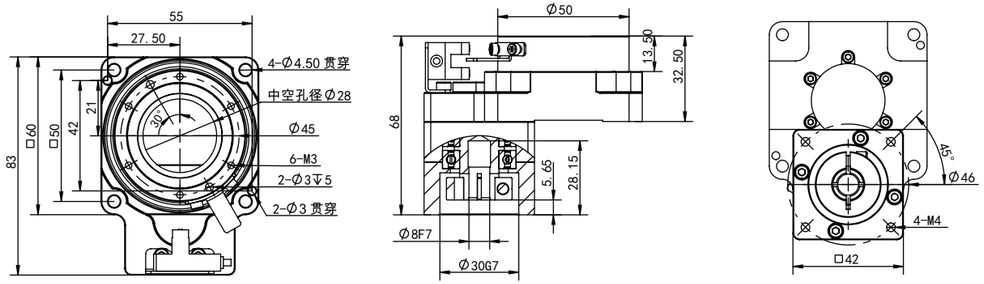
| IP 表示 | 防尘等级(第 1 位数) |
|---|---|
| IP 0 X | 无特别的保护功能 |
| IP 1 X | 直径超过50mm的物体不能进入 |
| IP 2 X | 长度超过80mm，直径超过12mm的物体不能进入 |
| IP 3 X | 直径或厚度超过2.5mm，直径超过2.5mm的物体不能进入 |
| IP 4 X | 厚度超过1.0mm，直径超过1.0mm的物体不能进入 |
| IP 5 X | 防止进入的灰尘影响设备工作 |
| IP 6 X | 完全防止灰尘进入 |

| IP 表示 | 防水等级(第 2 位数) |
|---|---|
| IP X 0 | 无特别的保护功能 |
| IP X 1 | 垂直落下的滴水不会对电器造成损坏 |
| IP X 2 | 倾斜15度时,仍可防止水滴浸入 |
| IP X 3 | 在与垂直方向成60°范围内、受雾状水喷射无损害 |
| IP X 4 | 受任意方向的泼水无损害 |
| IP X 5 | 任意方向直接受到水的喷射无损害 |
| IP X 6 | 任意方向直接受到强大水流的冲击水不会进入内部 |
| IP X 7 | 在特定条件下浸水后代仍可正常使用 |
| IP X 8 | 可在水下使用 |

## MTN60-5-N

本体式

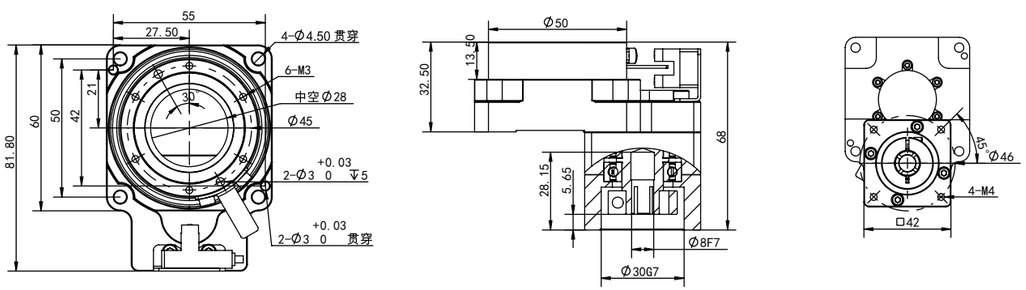
重量：0.54KG




## MTN60-10-N

本体式

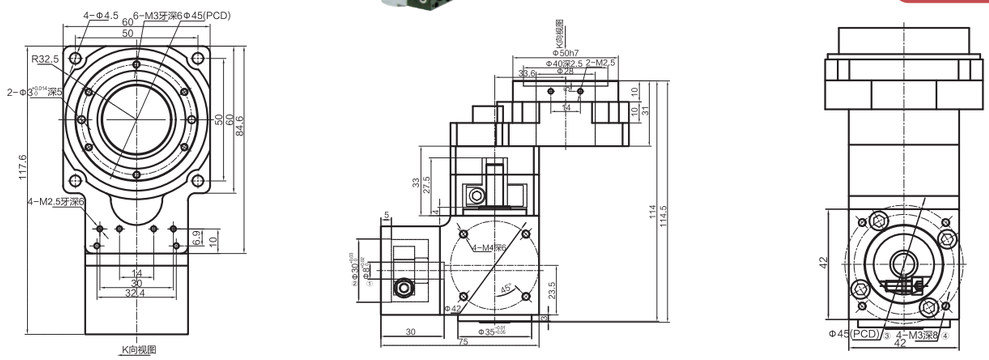
重量：0.54KG




## MTN60T-10/15/25-N

用 5 比平台接

重量：1KG



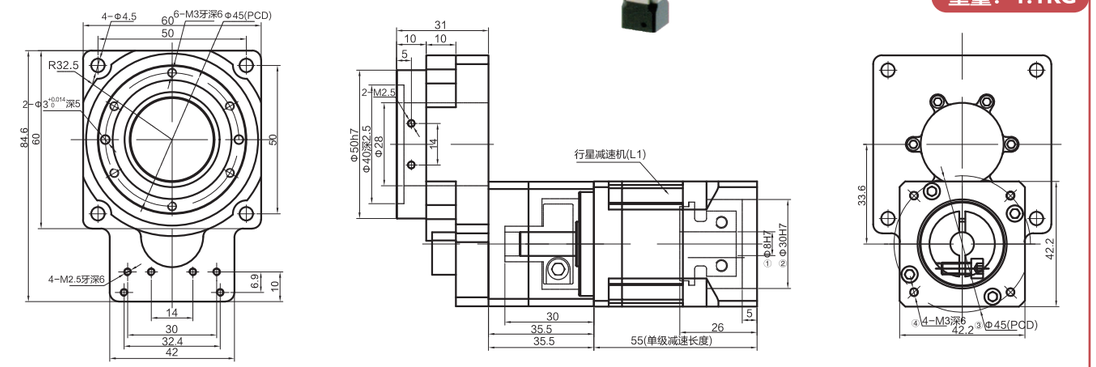




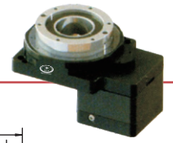

## MTN60K-15/20/25-N

用 5 比平台接

重量：1.1KG

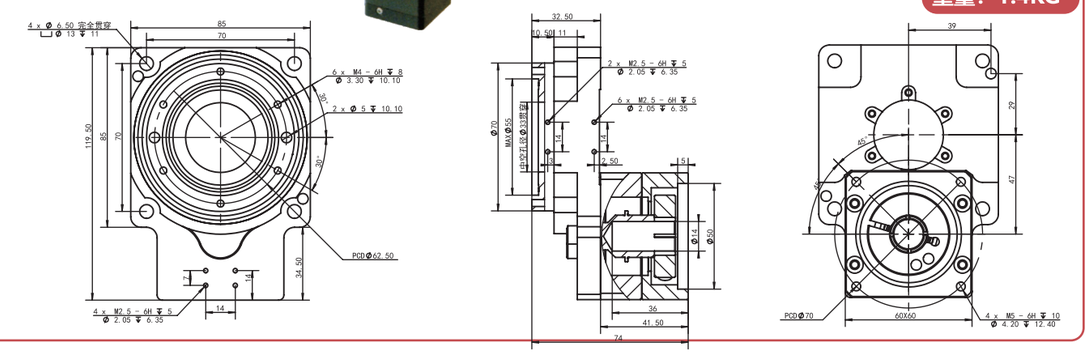



## MTN85-5-N

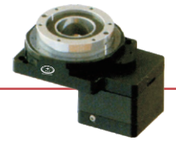


本体式

重量：1.4KG

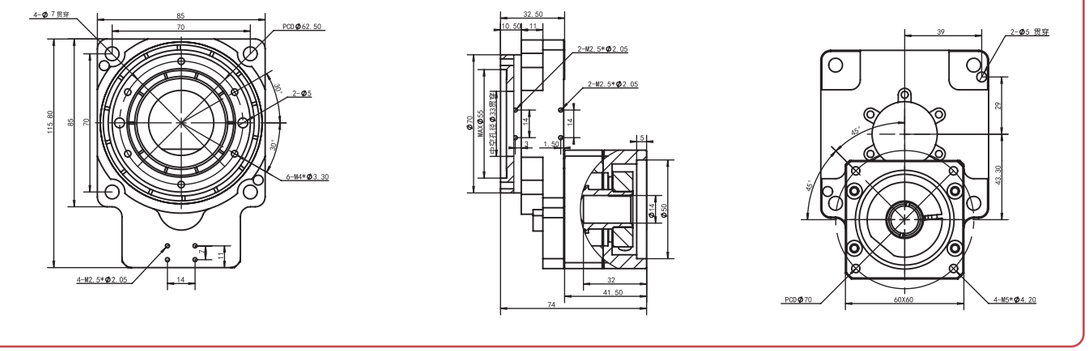



## MTN85-10-N



本体式

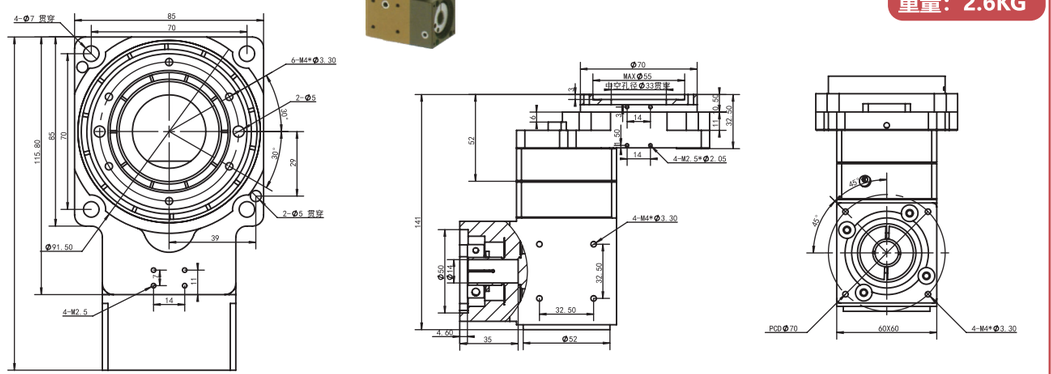
重量：1.4KG



## MTN85T-20/30/50-N

用 10 比平台接

重量：2.6KG

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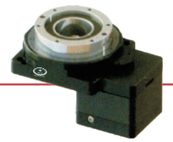
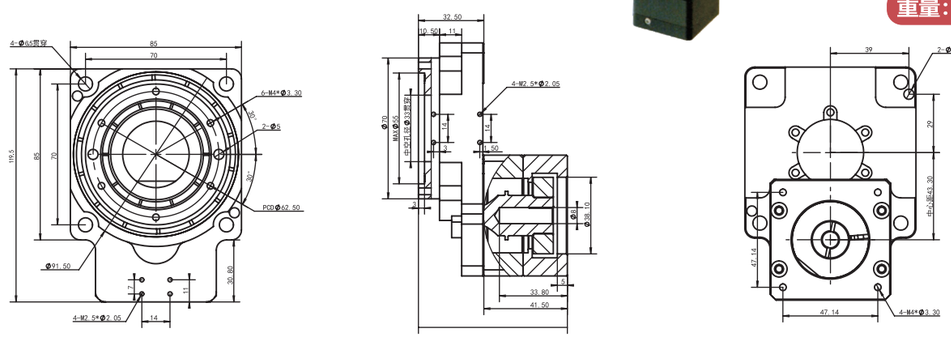


本体式

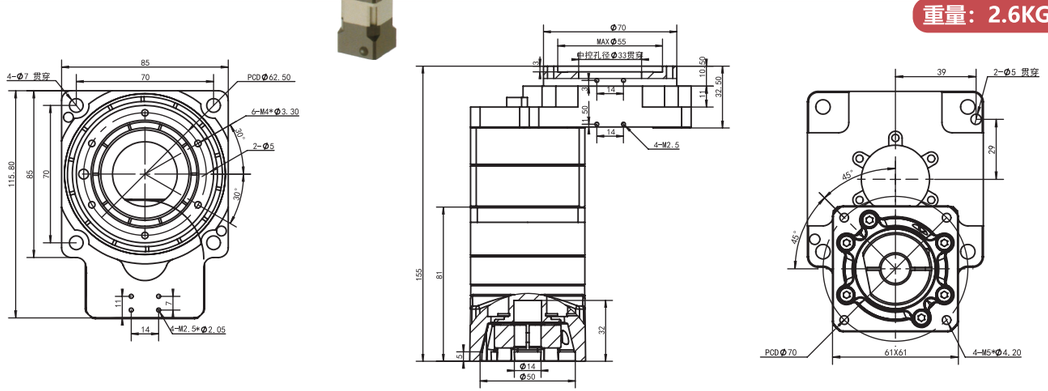
重量：1.4KG




## MTN85K-30/40/50-N

用 10 比平台接

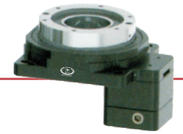
重量：2.6KG





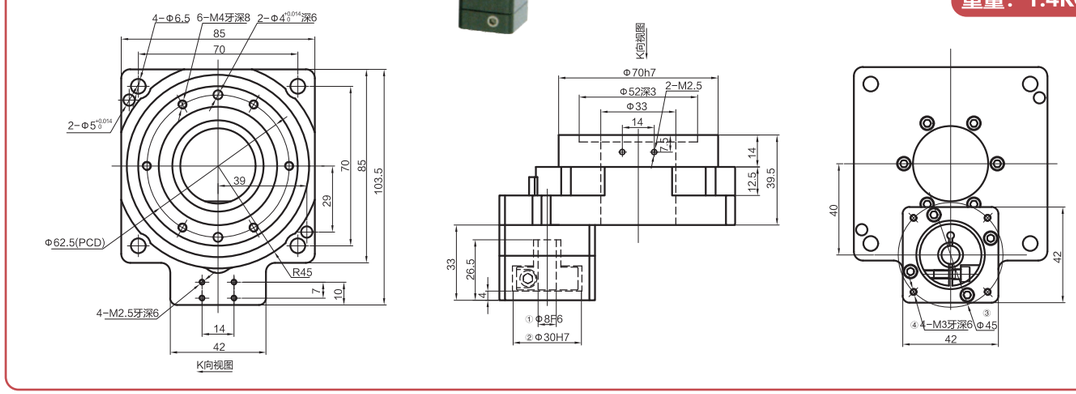



## MTN85-15/18-N



本体式，只能配 50-100W 电机

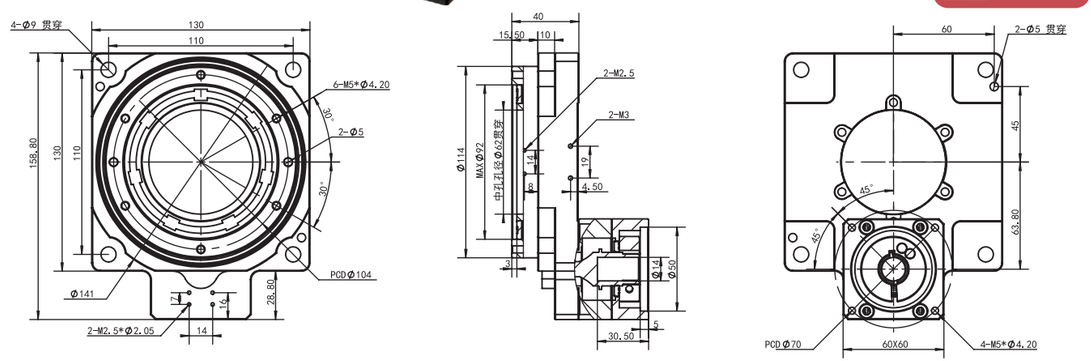
重量：1.4KG




## MTN130-10/18-N

本体式

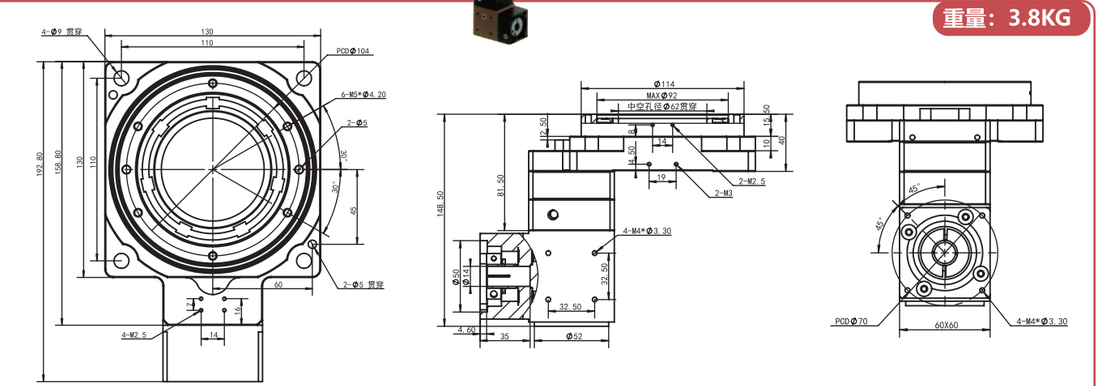
重量：2.5KG




## MTN130T-20/30/50-N

用 10 比平台接

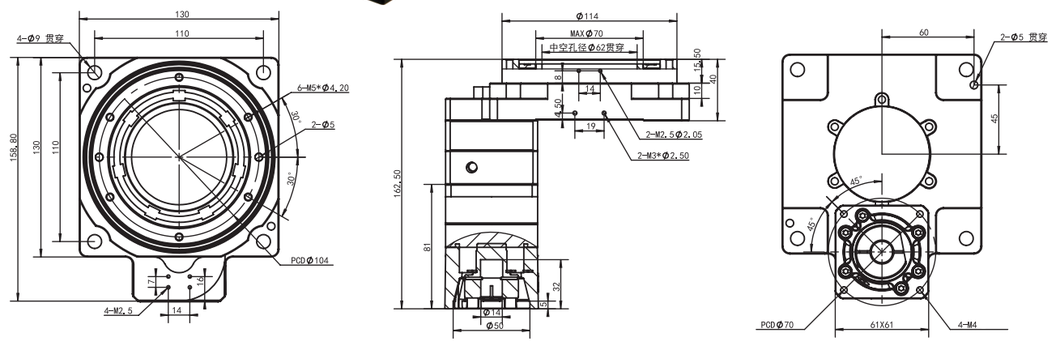
重量：3.8KG



## MTN130K-30/40/50-N

用 10 比平台接

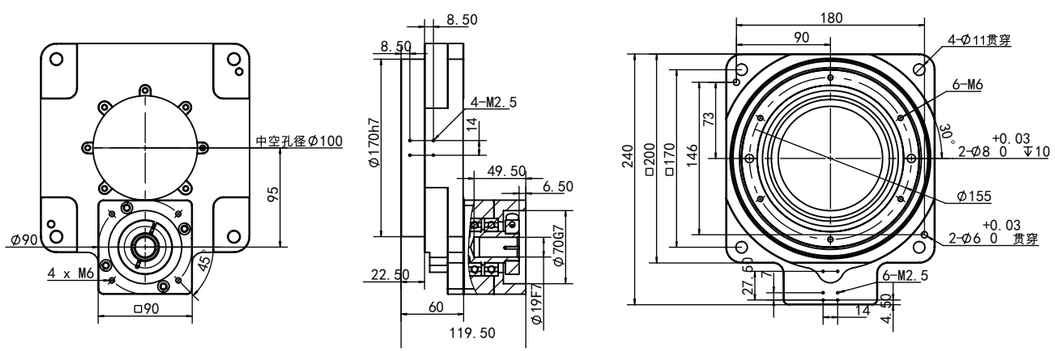
重量：3.8KG




## MTN200-10/18-N

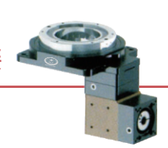
本体式

重量：8KG

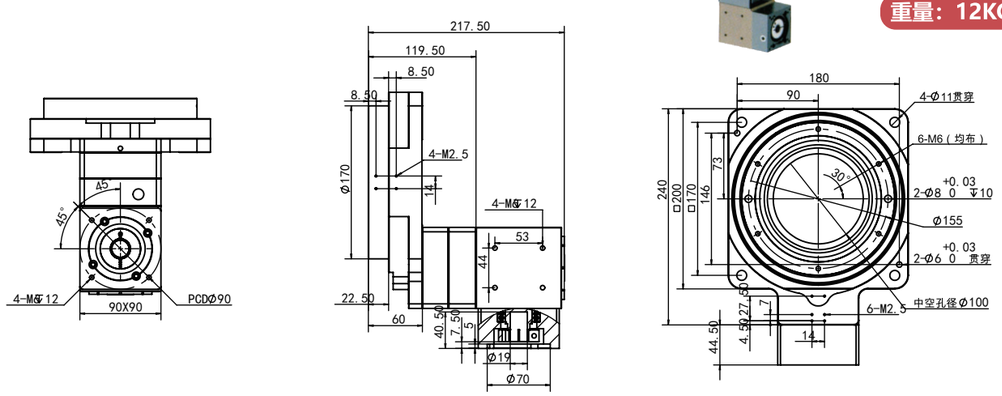



## MTN200T-20/30/50-N

用 10 比平台接



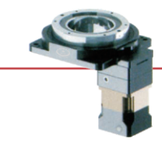
重量：12KG





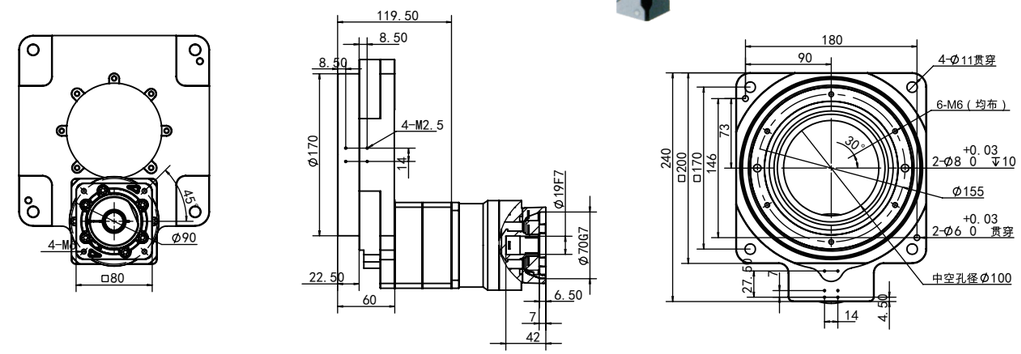



## MTN200K-30/40/50-N

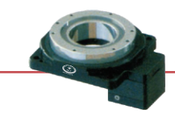


用 10 比平台接

重量：11KG

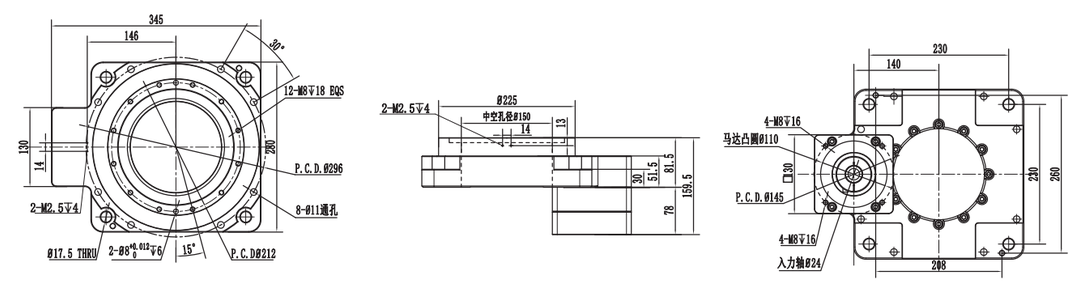



## MTN280-10/18-N



本体式

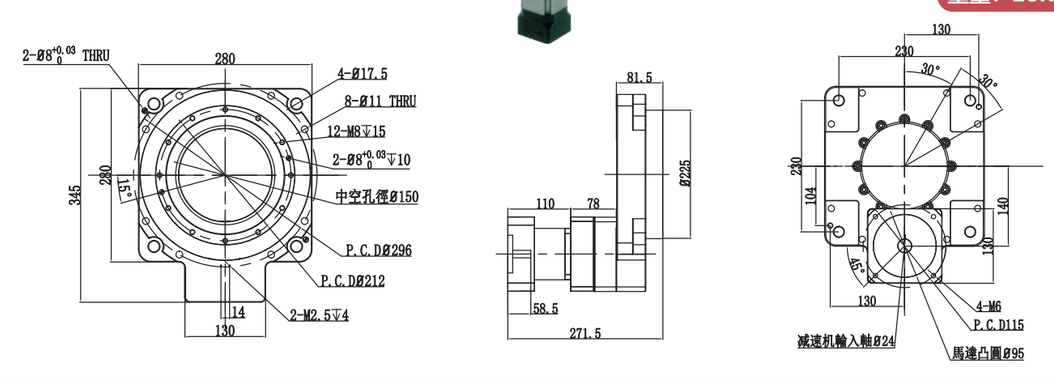
重量：20KG




## MTN280K-30/40/50-N

用 10 比平台接

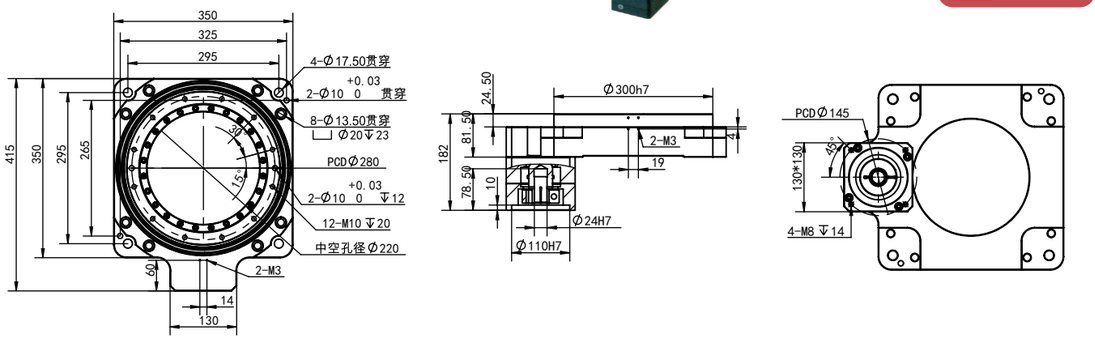
重量：28KG



## MTN350-10-N

本体式

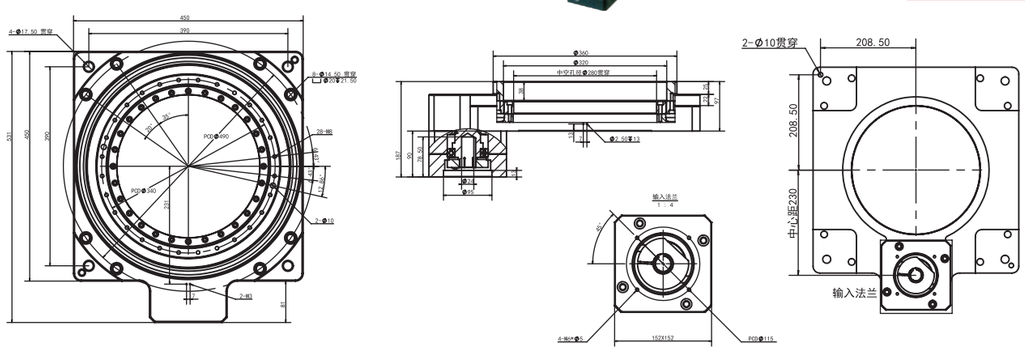
重量: 25 KG




## MTN450-10-N

本体式

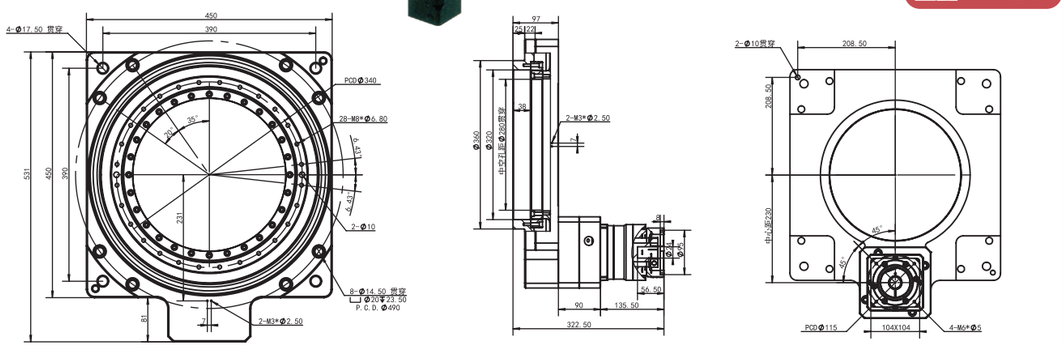
重量: 75KG




## MTN450-20/30/50-N

用 10 比平台接

重量: 83KG



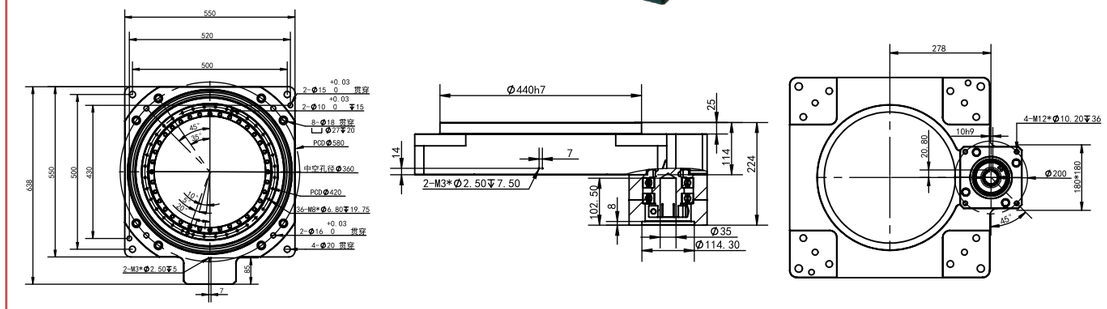





## MTN550-10-N

本体式

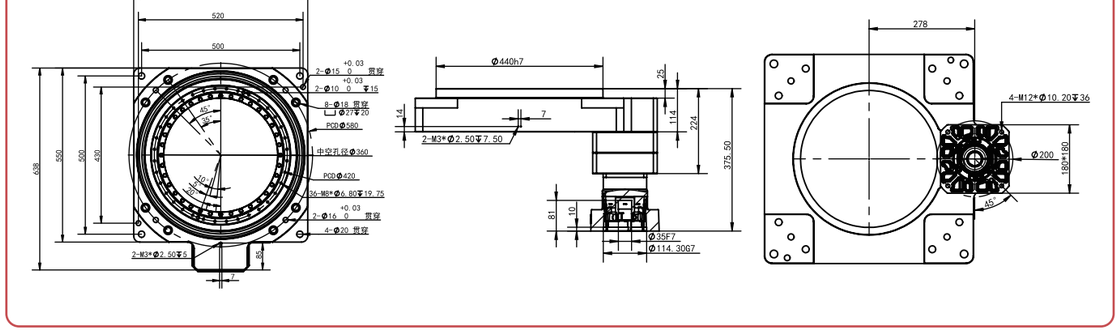
重量: 75KG




## MTN550-20/30/50-N

用 10 比平台接

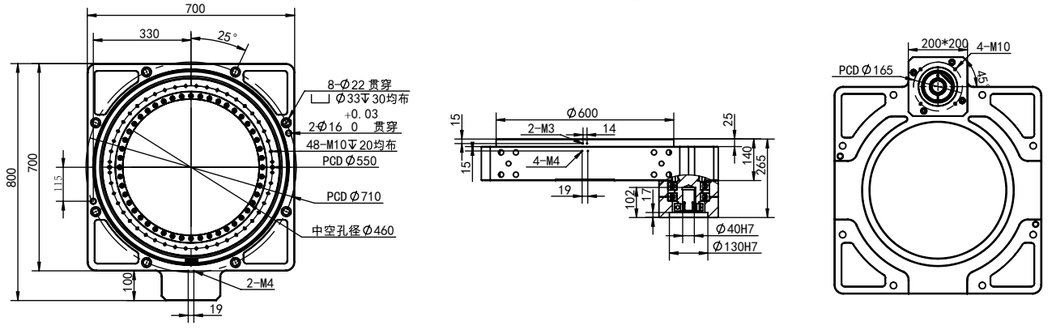
重量: 83KG




## MTN700-10-N

本体式

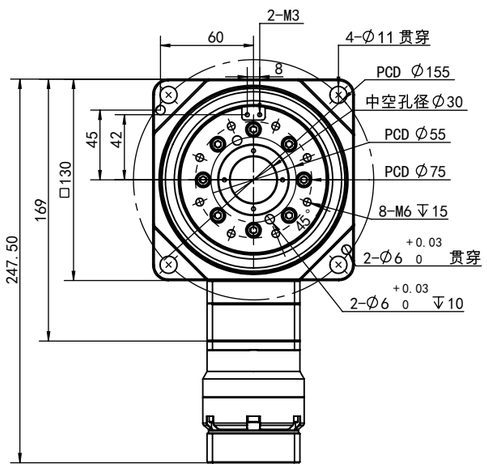
重量: 165 KG

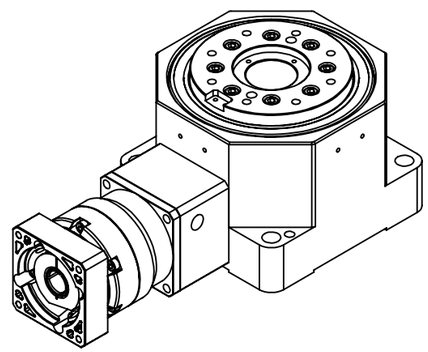


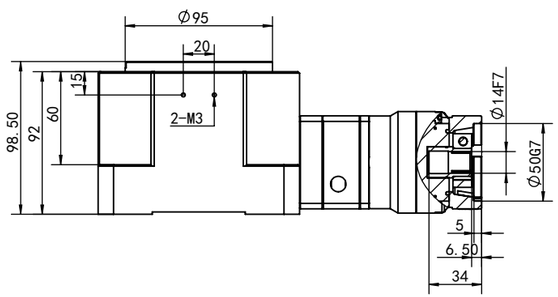
## 型号说明

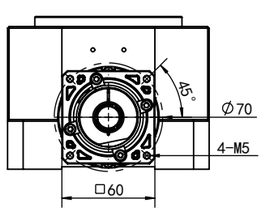
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 130 | - | 30 | - | N/B |

N伺服
适配200-750W AC伺服马达
B 步进
适配各品牌57型步进马达






| 产品型号 | 单位 | ZTT130 |
|---|---|---|
| 整体减速比 | | 9/12/15/18/21/24 |
| 适配马达 | W | 400 |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 80 |
| 最大输出扭矩 | Nm | 160 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | 6 |

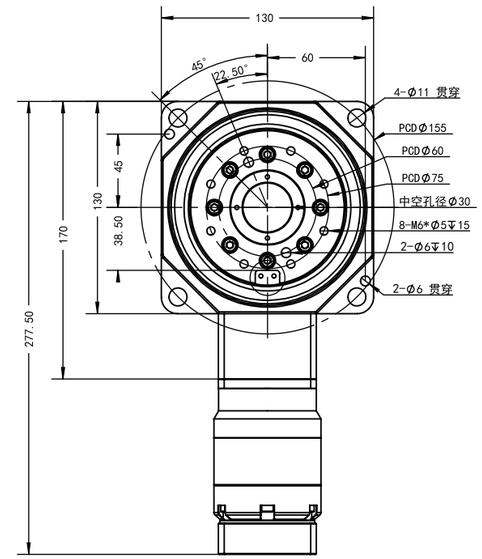


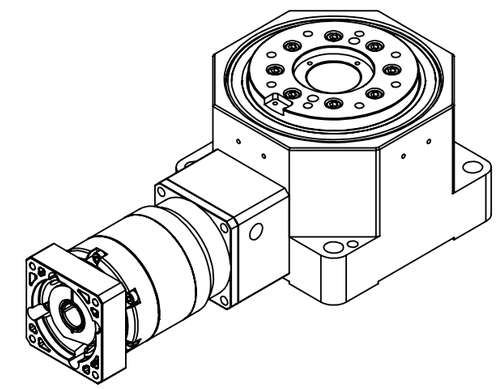


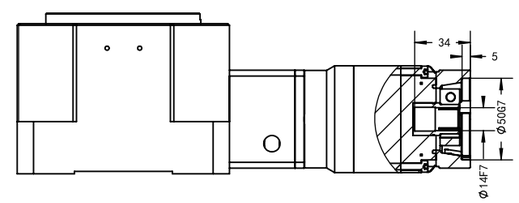
## 型号说明

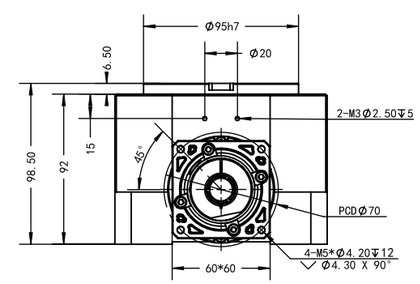
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 130 | - | 60 | - | N/B |

N伺服
适配200-750W 伺服马达
B 步进
适配各品牌57型步进马达





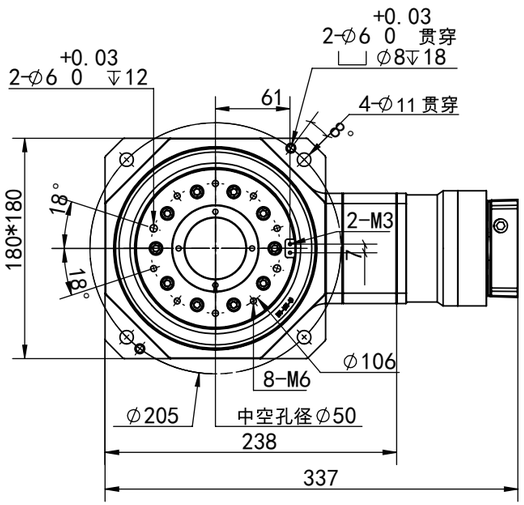



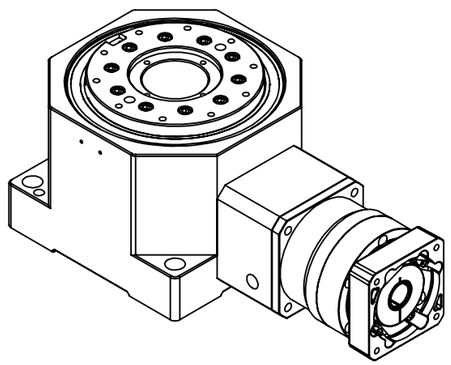

| 产品型号 | 单位 | ZTT130 |
|---|---|---|
| 整体减速比 | | 36/45/60/75/90/120 |
| 适配马达 | W | 400 |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 80 |
| 最大输出扭矩 | Nm | 160 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | 12 |

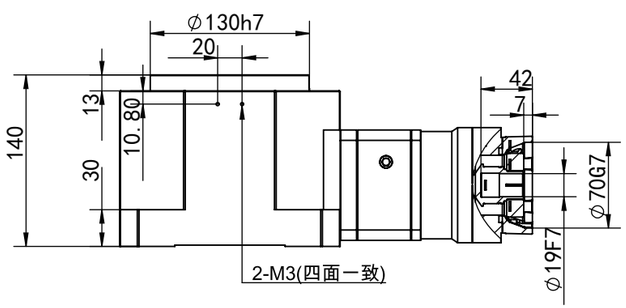
## 型号说明

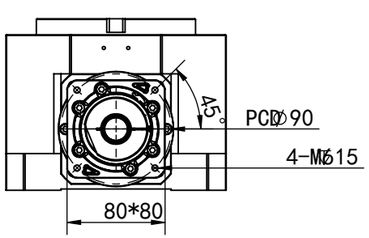
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 180 | - | 30 | - | N/B |

N伺服
适配750W-1.5KW 伺服马达
B 步进
适配各品牌86型步进马达






| 产品型号 | 单位 | ZTT180 |
|---|---|---|
| 整体减速比 | | 9/12/15/18/21/24 |
| 适配马达 | W | 750 |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 200 |
| 最大输出扭矩 | Nm | 400 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | 12 |

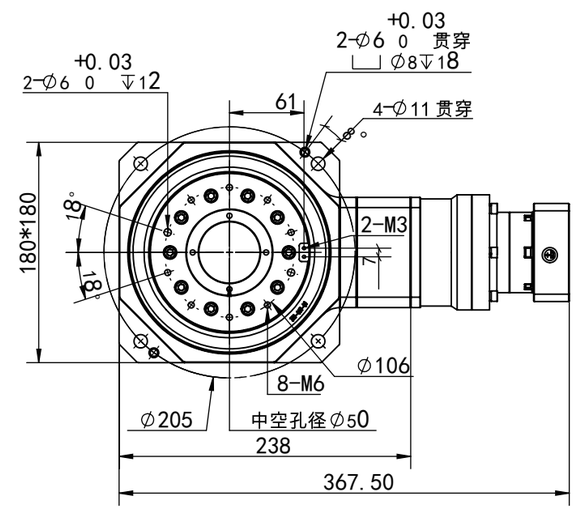


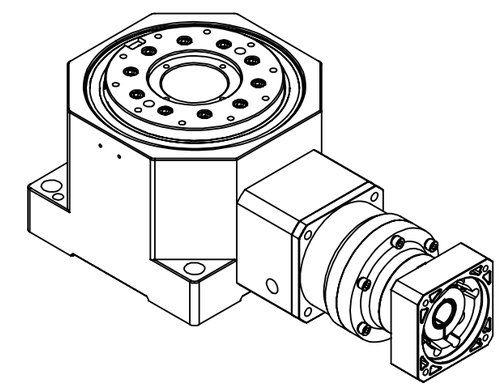


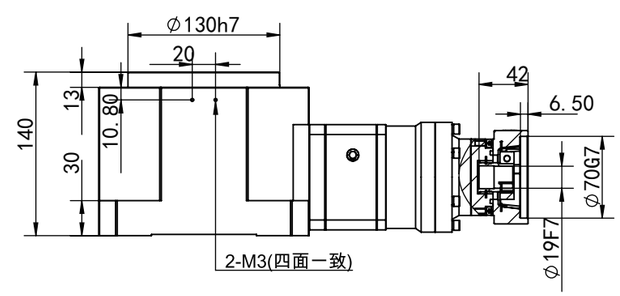
## 型号说明

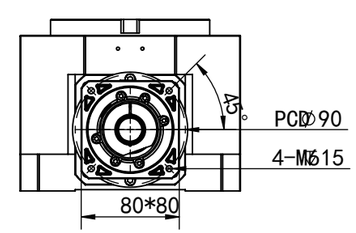
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 180 | - | 60 | - | N/B |

N伺服
适配750W-1.5KW 伺服马达
B 步进
适配各品牌86型步进马达





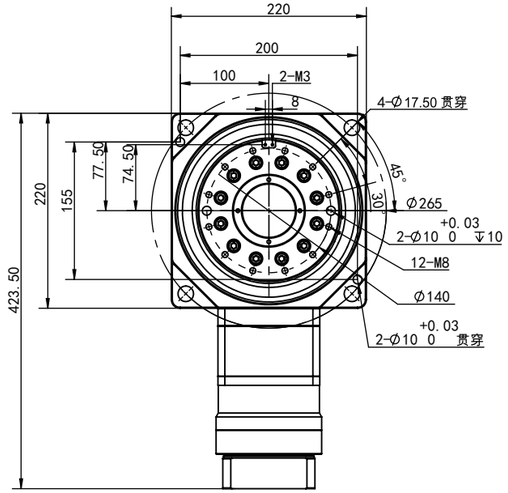



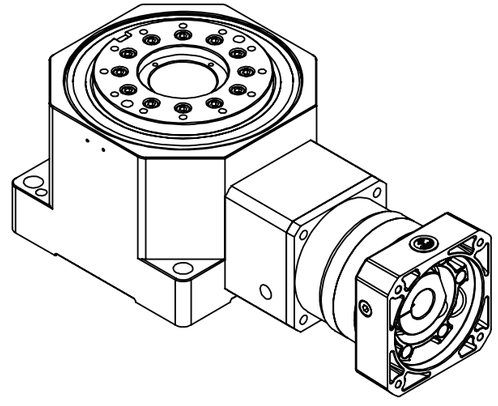

| 产品型号 | 单位 | ZTT180 |
|---|---|---|
| 整体减速比 | | 36/45/60/75/90/120 |
| 适配马达 | W | 750 |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 200 |
| 最大输出扭矩 | Nm | 4000 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | 12 |

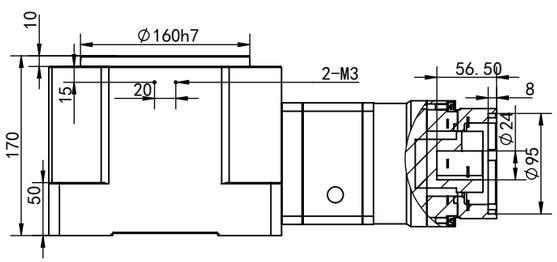
## 型号说明

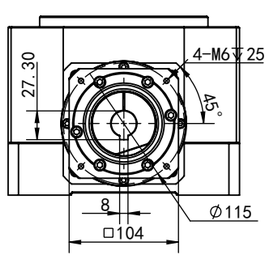
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 220 | - | 30 | - | N/B |

N伺服
适配750W-4.4KW 伺服马达
B 步进
适配各品牌150型步进马达






| 产品型号 | 单位 | ZTT220 |
|---|---|---|
| 整体减速比 | | 36/45/60/75/90/120 |
| 适配马达 | W | 5KW |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 450 |
| 最大输出扭矩 | Nm | 900 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | 35.3 |

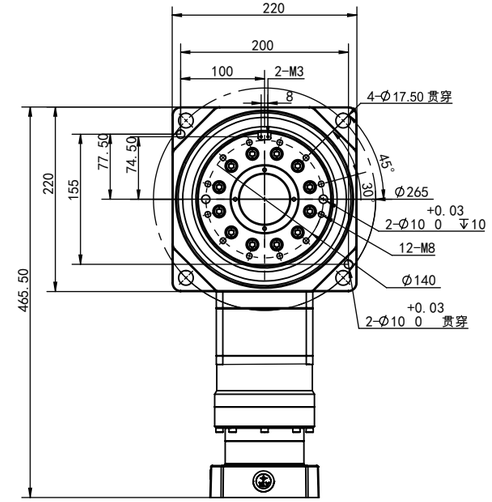


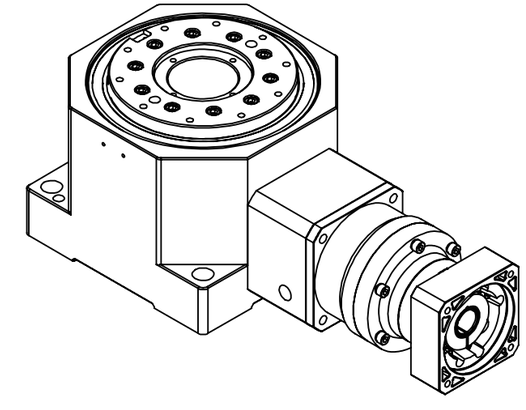


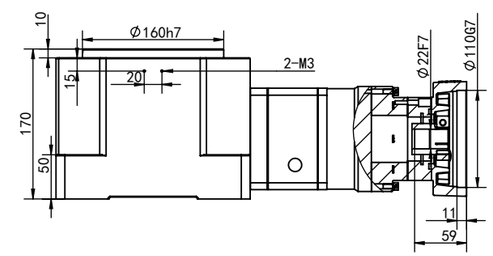
## 型号说明

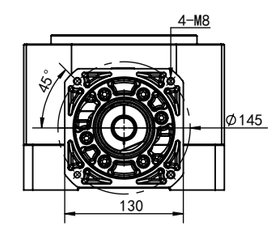
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 220 | - | 60 | - | N/B |

N伺服
适配750W-2.5KW伺服马达
B 步进
适配各品牌150型步进马达





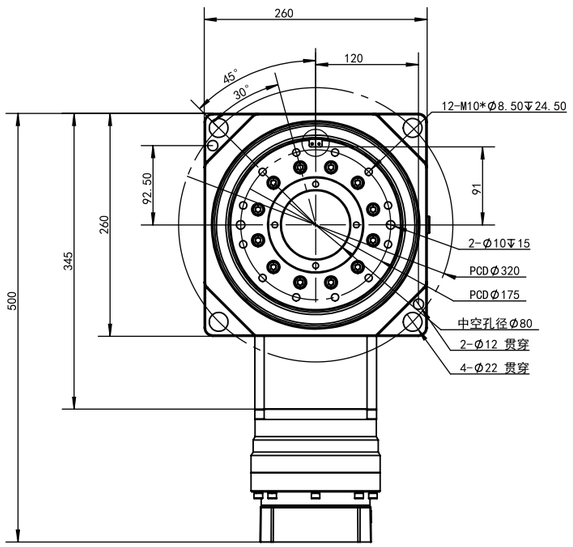



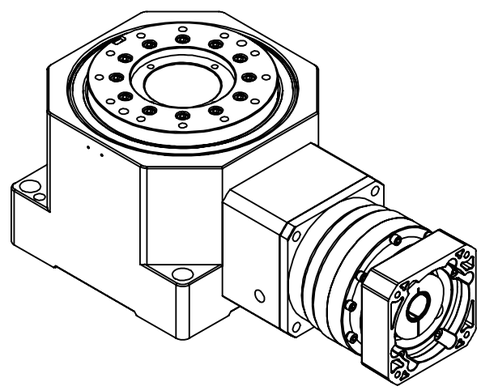

| 产品型号 | 单位 | ZTT220 |
|---|---|---|
| 整体减速比 | | 9/12/15/18/21/24 |
| 适配马达 | W | 5KW |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 450 |
| 最大输出扭矩 | Nm | 900 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | 35.3 |

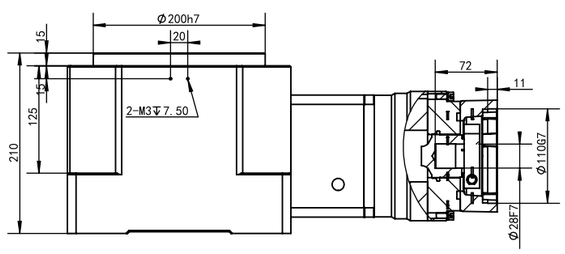
## 型号说明

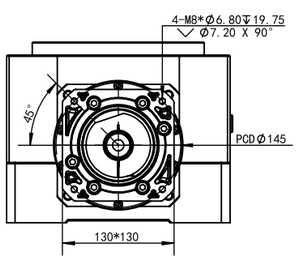
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 260 | - | 30 | - | N/B |

N伺服
适配1KW-7.5KW 伺服马达
B 步进
适配各品牌150型步进马达






| 产品型号 | 单位 | ZTT260 |
|---|---|---|
| 整体减速比 | | 9/12/15/18/21/24 |
| 适配马达 | W | 5KW |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 675 |
| 最大输出扭矩 | Nm | 1350 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | / |

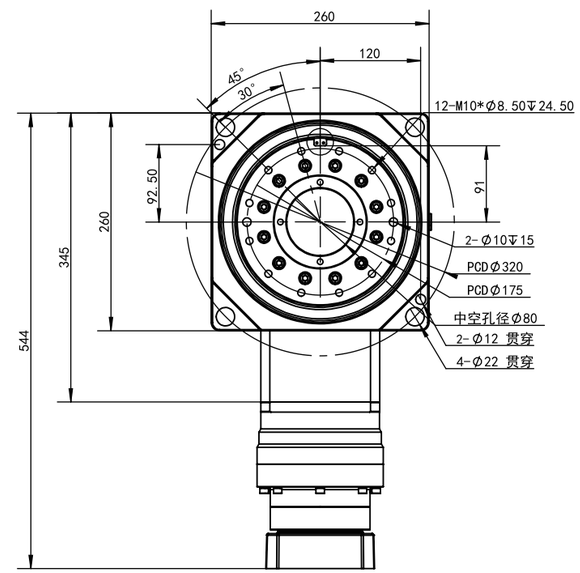


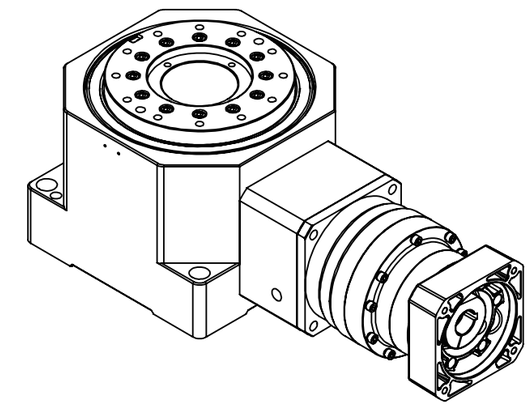


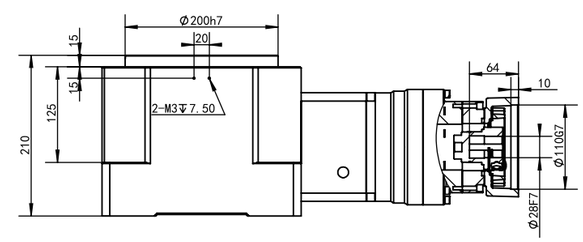
## 型号说明

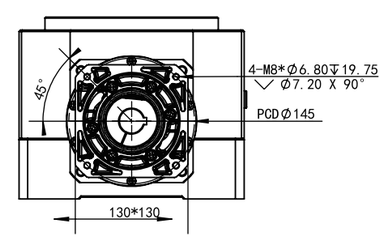
| 系列代码 | 基座号 | | 减速比 | | 马达规格 |
|---|---|---|---|---|---|
| ZTT | 260 | - | 60 | - | N/B |

N伺服
适配750W-4.4KW 伺服马达
B 步进
适配各品牌150型步进马达



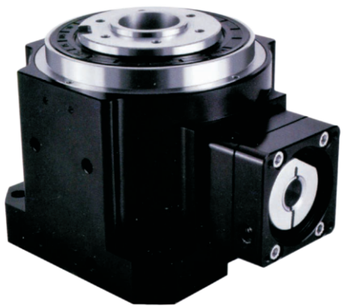






| 产品型号 | 单位 | ZTT260 |
|---|---|---|
| 整体减速比 | | 36/45/60/75/90/120 |
| 适配马达 | W | 5KW |
| 轴承结构 | | 交叉滚子轴承 |
| 额定输出扭矩 | Nm | 675 |
| 最大输出扭矩 | Nm | 1350 |
| 额定输出转速 | rpm | 200 |
| 最大输出转速 | rpm | 300 |
| 背隙 S1 | arcmin | ≤4 |
| 背隙 S2 | arcmin | ≤8 |
| 防护等级 | | IP65 |
| 精度寿命 | h | 20000 |
| 重量 | kg | / |

## 型號識別

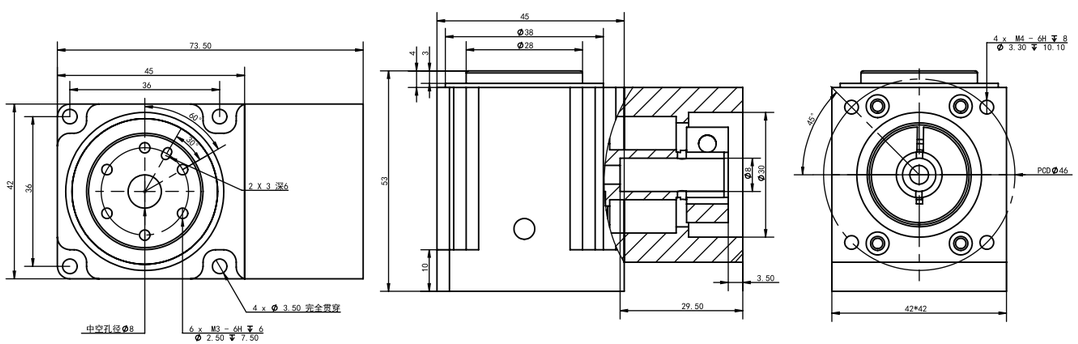


MTT – 42 – 05 – LB-S-LA-LZ

- MTT → 旋轉平臺系列
- 42 → 規格：42、60
- 05 → 減速比：3、5
- LB-S-LA-LZ → 選配
  - N: 伺服電機
  - B: 步進電機
  - S: 開環步進電機

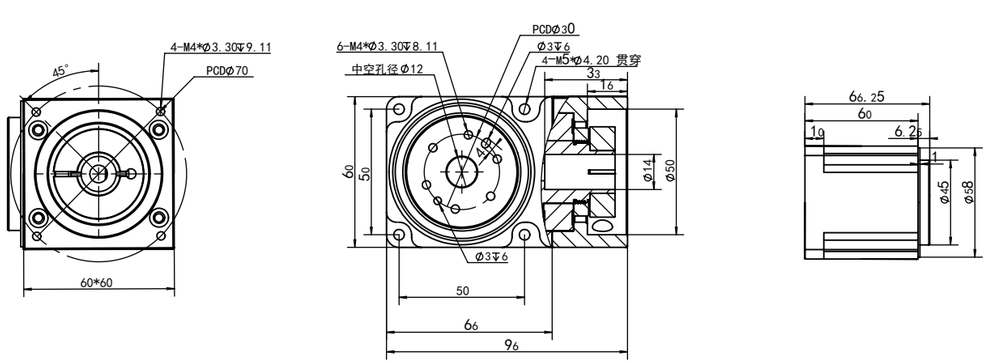
### MTT42-3/5-N

重量：1.2KG




### MTT60-5-N

重量：1.5KG




*注意 所有吊装工况请提前咨询我司技术并出具选型报告
输出转速不能超过200转





# 凸轮转台

## 型號識別

XLY – 68HP – 20 – N/B

- XLY → 公司
- 68HP → 规格类型：68、82、115、215、315、415
- 20 → 减速比
- N/B → 选配电机
  - N：伺服电机
  - B：步进电机

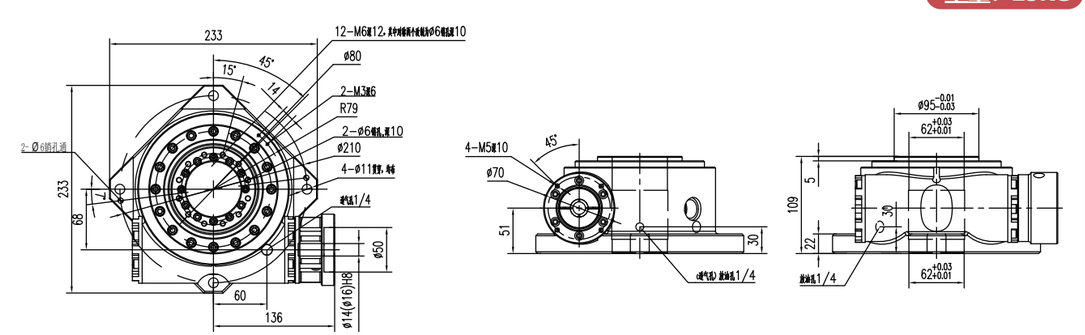
## 参数表

| 型号 | XLY68HP | XLY82HP | XLY90HP | XLY115HP | XLY165HP | XLY215HP | XLY315HP |
|---|---|---|---|---|---|---|---|
| 设计承重(kg) | ≤80 | ≤200 | ≤280 | ≤500 | ≤800 | ≤1600 | ≤2500 |
| 旋转工装盘最大外径(mm) | ≤500 | ≤800 | ≤900 | ≤1200 | ≤1500 | ≤2000 | ≤2500 |
| 转台本体减速比i | 20 | 24 | 20 | 20 | 30 | 40 | 60 |
| 倾覆力矩(N.m) | 400 | 585 | 625 | 1028 | 1800 | 3500 | 14000 |
| 允许输入扭矩(N.m) | ≤30 | ≤70 | ≤72 | ≤90 | ≤200 | ≤500 | ≤500 |
| 额定输出扭矩(N.m) | ≤260 | ≤400 | ≤480 | ≤1400 | ≤2000 | ≤19200 | ≤30000 |
| 允许惯性力矩(N.m) | 75 | 200 | 220 | 260 | - | - | - |
| 允许输入转速(r/min) | 2000 | 2000 | 2000 | 2000 | 1200 | 1200 | 2000 |
| 重复定位精度(arc-sec) | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 |
| 定位精度(arc-sec) | ±10 | ±10 | ±10 | ±10 | ±10 | ±10 | ±10 |
| 旋转平台平行度(mm) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| 旋转平台同心度(mm) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| 精度寿命(间歇运动) | 20000h | 20000h | 20000h | 20000h | 20000h | 20000h | 20000h |
| 结构类型 | 凸轮滚子+交叉滚子轴承 | | | | | | |
| 适配电机(kw) | 0.4/0.75 | 0.75 | 0.75 | 1.5 | 1.5 | 2 | 2 |
| 防护等级 | IP40 | IP40 | IP40 | IP40 | IP40 | IP40 | IP40 |
| 重量(kg) | 16 | 20 | 24 | 45 | 70 | 120 | 200 |

*注意 所有吊装工况请提前咨询我司技术并出具选型报告

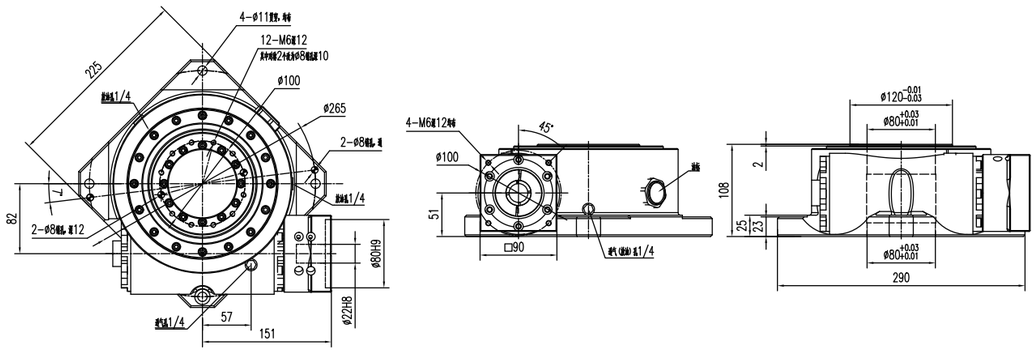
### 68HP-20

重量：25KG



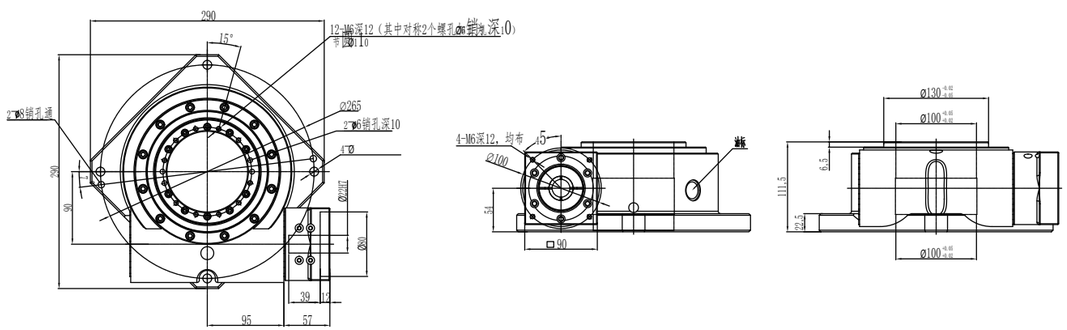
## 82HP-24

重量：30KG



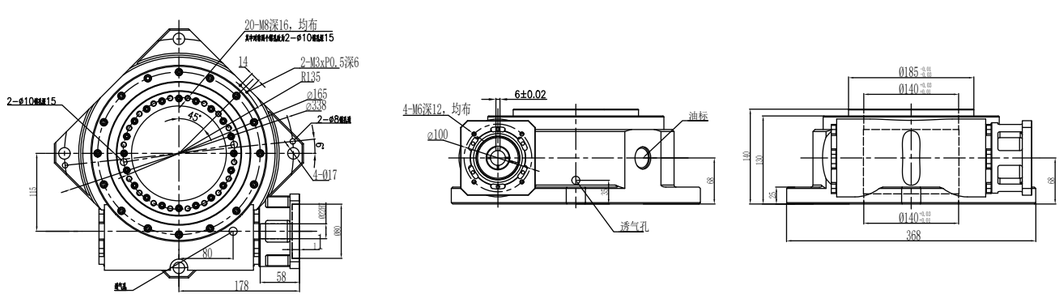

## 90HP-20

重量：48KG



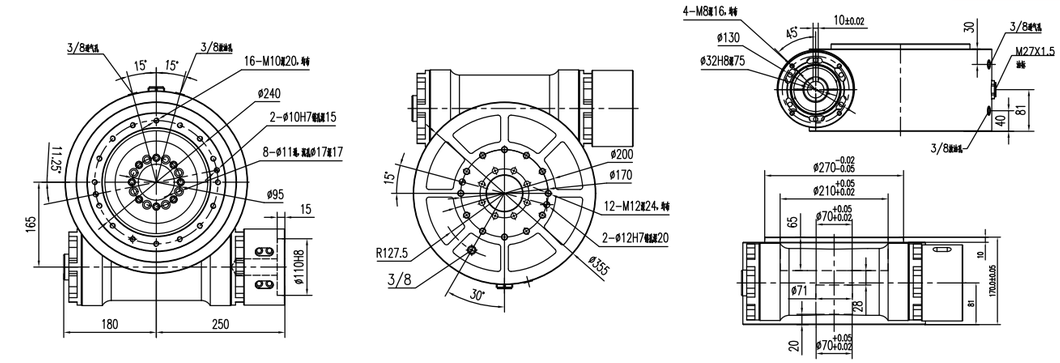

## 115HP-40

重量：130KG



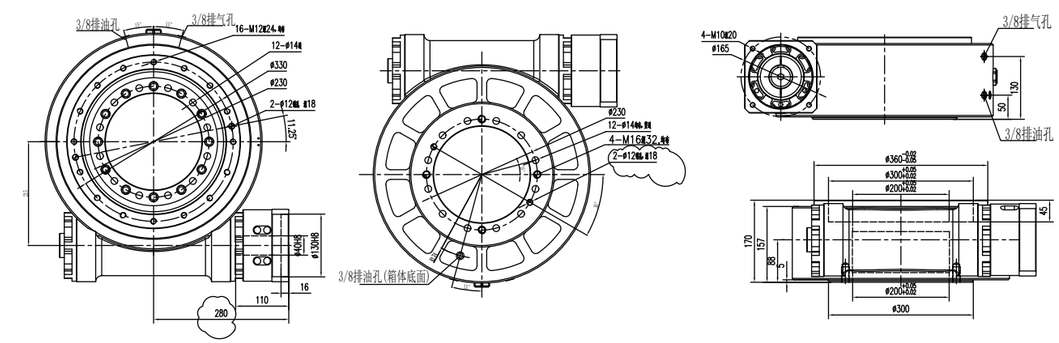

## 165HP-60

重量：220KG



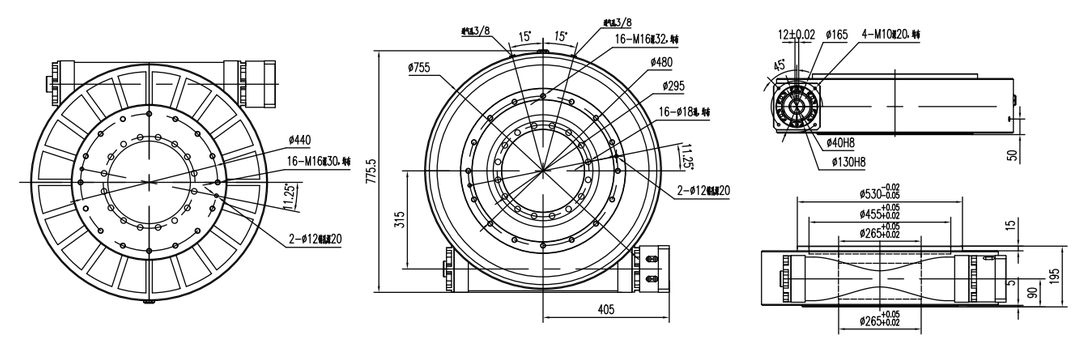

## 215HP-60

重量：220KG



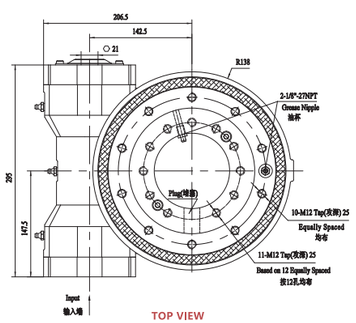

## 315HP-60

重量：330KG

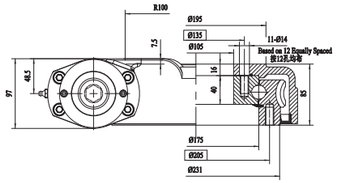


## XLA47-7

FRONT VIEW
正视图

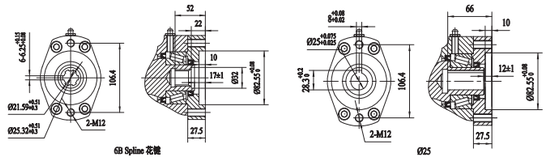



TOP VIEW
俯视图



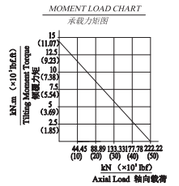

注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

INPUT



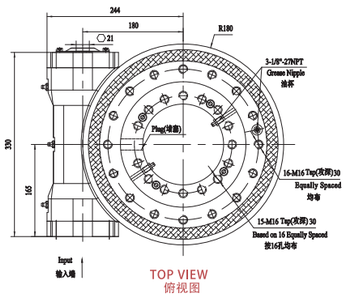

性能参数表
Slewing Drive Performonce Paramerers

| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 3.5 kN.m | 14.7 kN.m | 20.6 kN.m | 227 kN | 92.7 kN | 47:1 | ≤0.15° | 35Kg |
| 2583 lbf.ft | 10.8*10³ lbf.ft | 15.2*10³ lbf.ft | 51*10³ lbf | 20.8*10³ lbf | | | |

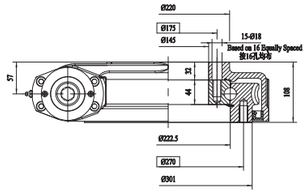



## XLA62-9

FRONT VIEW
正视图

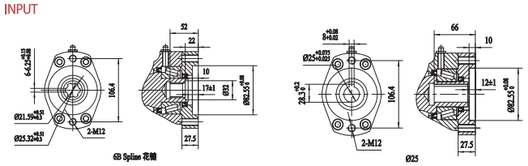



TOP VIEW
俯视图



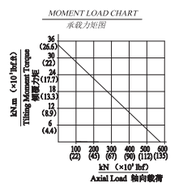

注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

INPUT




性能参数表
Slewing Drive Performonce Paramerers

| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 8 kN.m | 35.6 kN.m | 39.8 kN.m | 580 kN | 220 kN | 62:1 | ≤0.15° | 52Kg |
| 5904 lbf.ft | 26.3*10³ lbf.ft | 29.37*10³ lbf.ft | 130.3*10³ lbf | 49.4*10³ lbf | | | |



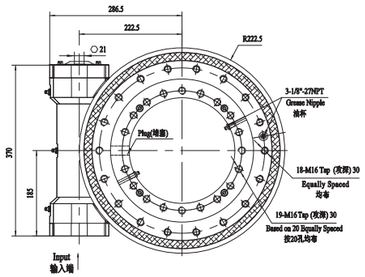

注意 输出转速每分钟不能超过2转



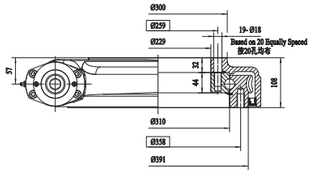


## XLA79-12

FRONT VIEW
正视图

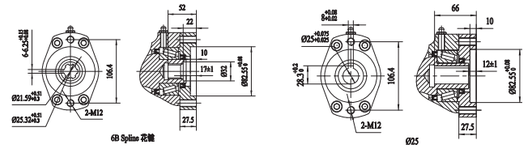



TOP VIEW
俯视图



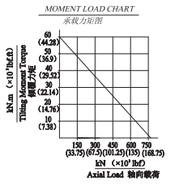

注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

INPUT



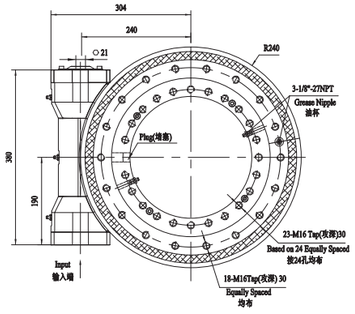

性能参数表
Slewing Drive Performonce Paramerers

| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 9.5 kN.m | 57 kN.m | 44.3 kN.m | 760 kN | 280 kN | 79:1 | ≤0.15° | 67Kg |
| 7011 lbf.ft | 41.2*10³ lbf.ft | 32.7*10³ lbf.ft | 171.1*10³ lbf | 62.9*10³ lbf | | | |

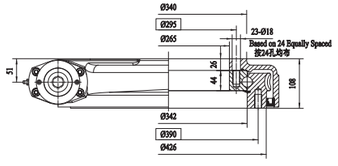



## XLA86-14

FRONT VIEW
正视图

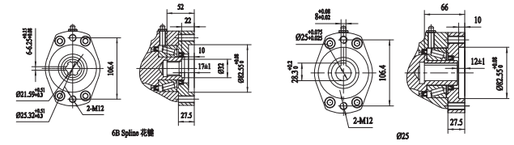



TOP VIEW
俯视图



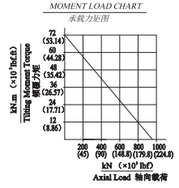

注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

INPUT



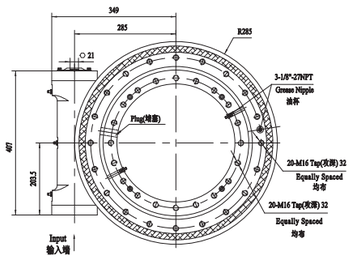

性能参数表
Slewing Drive Performonce Paramerers

| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 10.8 kN.m | 71.2 kN.m | 49.5 kN.m | 960 kN | 360 kN | 86:1 | ≤0.13° | 75Kg |
| 7970 lbf.ft | 52.5*10³ lbf.ft | 36.5*10³ lbf.ft | 215.8*10³ lbf | 80.9*10³ lbf | | | |

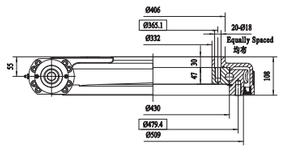


## XLA104-17

FRONT VIEW
正视图

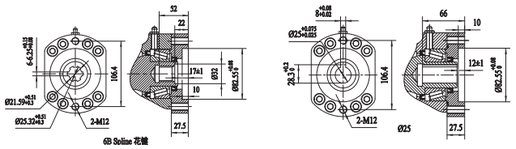



TOP VIEW
俯视图




注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

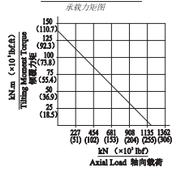
INPUT




性能参数表
Slewing Drive Performonce Paramerers

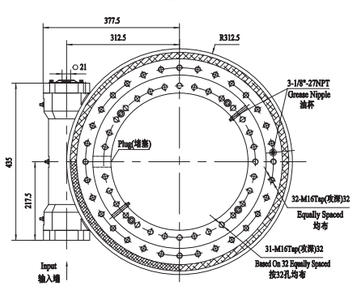
| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 12.96 kN.m | 142.4 kN.m | 74 kN.m | 1166 kN | 435 kN | 104:1 | ≤0.1° | 97Kg |
| 9564 lbf.ft | 105*10³ lbf.ft | 54.6*10³ lbf.ft | 262*10³ lbf | 97.8*10³ lbf | | | |

MOMENT LOAD CHART
承载力矩图

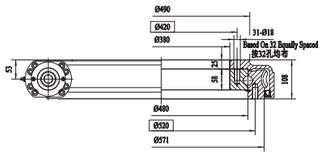



## XLA94-19

FRONT VIEW
正视图

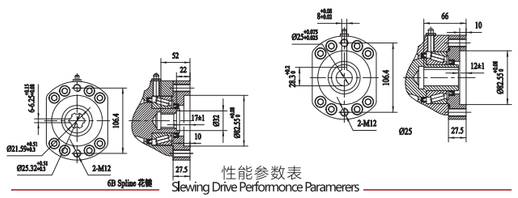



TOP VIEW
俯视图




注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

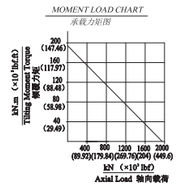
INPUT




性能参数表
Slewing Drive Performonce Paramerers

| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 18.5 kN.m | 196 kN.m | 82 kN.m | 1810 kN | 675 kN | 94:1 | ≤0.1° | 120Kg |
| 13640 lbf.ft | 144.5*10³ lbf.ft | 60.5*10³ lbf.ft | 406*10³ lbf | 151.7*10³ lbf | | | |

MOMENT LOAD CHART
承载力矩图

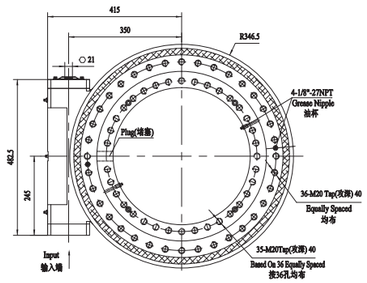




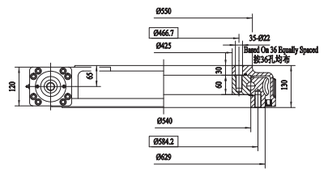



## XLA90-21

FRONT VIEW
正视图

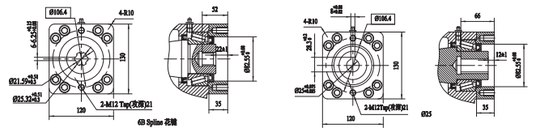



TOP VIEW
俯视图




注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

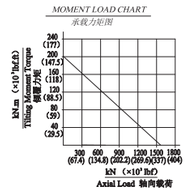
INPUT




性能参数表
Slewing Drive Performonce Paramerers

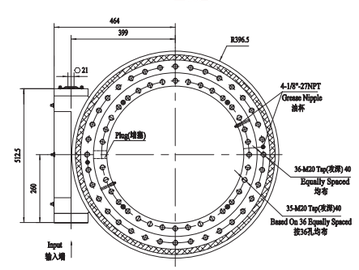
| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 28.7 kN.m | 203 kN.m | 107 kN.m | 1600 kN | 650 kN | 90:1 | ≤0.1° | 170Kg |
| 21180 lbf.ft | 150*10³ lbf.ft | 78.9*10³ lbf.ft | 359.7*10³ lbf | 146*10³ lbf | | | |

MOMENT LOAD CHART
承载力矩图

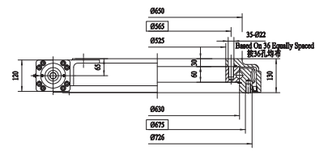



## XLA104-25

FRONT VIEW
正视图

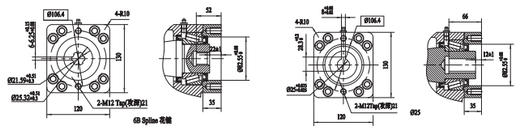



TOP VIEW
俯视图




注意：可根据客户要求进行定制化设计
Notice: Customized According To Requests

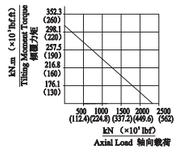
INPUT




性能参数表
Slewing Drive Performonce Paramerers

| Output Torque | Tilting Moment Torque | Holding Torque | Axial Load | Radial Load | Ratio | Backlash | Weight |
|---|---|---|---|---|---|---|---|
| 输出转矩 | 倾覆力矩 | 保持力矩 | 轴向承载力 | 径向承载力 | 速比 | 精度 | 重量 |
| 34.2 kN.m | 310 kN.m | 160 kN.m | 2400 kN | 950 kN | 104:1 | ≤0.1° | 200Kg |
| 25240 lbf.ft | 229*10³ lbf.ft | 118*10³ lbf.ft | 539.5*10³ lbf | 213.6*10³ lbf | | | |

MOMENT LOAD CHART
承载力矩图



## 型号定义 / MODEL ILLUMINATE

| 220 | BX | 81 | RVE | A | B | (  ) |
|---|---|---|---|---|---|---|

- ⑦ 电机轴径 Motor shaft diameter
- ⑥ 安装型式 Reducer mounting type
- ⑤ 输入齿轮轴型式 Type of input gear shaft
- ④ 机型代号 Reducer type code
- ③ 减速比 Reduction ratio
- ② 摆线针轮减速器 Cycloidal pin wheel reducer
- ① 代号（外形尺寸） Code (Outline dimension)

● ① **代号，具体见表1** Code, specific see table 1

**减速器代号** Reducer Code

| E 系列 E Series | | | C 系列 C Series | | |
|---|---|---|---|---|---|
| 代号 Code | 外形尺寸(mm) Outline dimension (mm) | 通用型号 General model | 代号 Code | 外形尺寸(mm) Outline dimension (mm) | 原代号 The original code |
| 120 | Φ122 | 6E | 10C | Φ145 | 150 |
| 150 | Φ145 | 20E | 27C | Φ181 | 180 |
| 190 | Φ190 | 40E | 50C | Φ222 | 220 |
| 220 | Φ222 | 80E | 100C | Φ250 | 250 |
| 250 | Φ244 | 110E | 200C | Φ345 | 350 |
| 280 | Φ280 | 160E | 320C | Φ440 | 440 |
| 320 | Φ325 | 320E | 500C | Φ520 | 520 |
| 370 | Φ370 | 450E | / | / | / |

● ② **BX：摆线针轮减速器** BX: Cycloidal pin wheel reducer

● ③ **81：减速比，具体见表2** 81: Gear ratio, specific see table 2

**减速比** Reduction Ratio

| E 系列 E Series | | C 系列 C Series | |
|---|---|---|---|
| 代号 Code | 减速比 (输出法兰输出) Reduction ratio (output flange output) | 代号 Code | 单体减速比 Monomer reduction ratio |
| 120 | 31, 43, 53.5, 59, 79, 103 | 10CBX | 27.00 |
| 150 | 41, 57, 81, 105, 121, 141, 161 | 27CBX | 36.57 |
| 190 | 41, 57, 81, 105, 121, 153 | 50CBX | 32.54 |
| 220 | 57, 81, 101, 121, 153 | 100CBX | 36.75 |
| 250 | 81, 111, 161, 175.28 | 200CBX | 34.86 |
| 280 | 81, 101, 129, 145, 171 | 320CBX | 35.61 |
| 320 | 81, 101, 118.5, 129, 141, 171, 185 | 500CBX | 37.34 |
| 370 | 81, 101, 118.5, 129, 154.8, 171, 192.4 | / | / |

注1: E系列如由外壳 (针齿壳) 输出，减速比相应减1。Note 1: E series, such as by the shell (pin shell) output, the corresponding reduction ratio by 1.

注2: C系列减速比是指电机安装在外壳的减速比，如安装在输出法兰侧，减速比相应减1。Note 2: C series gear ratio refers to the motor installed in the casing of the reduction ratio, if installed on the output flange side, the corresponding reduction ratio by 1.

● ④ **减速器机型代号** Reducer type code

RVE: 主轴承内置E型 Main bearing built-in E type

RVC: 中空型 Hollow type

REA: 带输入法兰E型 With input flange E type

RCA: 带输入法兰中空型 With input flange hollow type

● ⑥ **减速器安装型式** Reducer mounting type

B: 输出轴螺栓紧固连接 Output shaft bolt fastening connection

P: 输出轴螺栓及定位销并用型式
Output shaft bolts and locating pins with the type

● ⑤ **输入齿轮轴型式及电机轴径**
Enter the gear shaft type and motor shaft diameter

A: 标准型式A, E系列输入齿轮A轴 (P21) 。
Standard Type A, E Series Input Gear A-axis (P21).
C系列代表标准中心齿轮。C Series represents the standard sun gear.

B: 标准型式B, E系列输入齿轮B轴 (P21) 。
Standard Type B, E Series Input Gear B-axis (P21).

Z: 特配型式。 Special matching type.

W: 无。 Nothing.

TB: C系列 同步带轮输入型式 C series synchronous pulley input type.

● ⑦ **电机轴径** Motor shaft diameter





## 技术要求
## TECHNICAL REQUIREMENT

### 外观质量、标志：减速机外观应整洁、美观，标志清晰、正确
Appearance Quality, Marks: Reducer Appearance Should Be Neat, Beautiful, Clear, Correct

- 减速机表面不应有碰伤、划痕、毛刺、凹坑和锈蚀等明显缺陷。Reducer's appearance should not be bumps, scratches, burrs, pits and coeeosion etc.
- 紧固件连接应牢靠，锁紧，密封应可靠。Fastener connection should be firm, lock, seal should be reliable.
- 标志的字迹应清晰、正确，经规定的环境条件试验后，标记和字迹仍应清晰可见。Mark should be clear and correct after the testing, the mark should be clearly.
- 减速器应有可靠的防锈措施。Reducer should have reliable anti rust measures.

### 基本尺寸 Basic Dimensions

- 减速器的外形尺寸、安装尺寸应符合P11~P18和P19~P23的图纸或客户要求并得到客户确认的图纸要求。
  Deceleration device installation size, size should be consistent with the P11~P18 and P19~P23 of the drawing or customer requirements and customer confirmation drawings.
- 输入齿轮轴、安装法兰等可依客户要求生产，生产前相关图纸应得到客户的确认。
  Input shaft and installation flange can be produced as customer's requirements. before the producting, it should get customer's comfirmation drawing.

### 空转试验 Idle Test

- 空转运行试验：减速器在输入转速≤3000r/min下空载运行10min，减速器运转应平稳正常，无异常或冲击性噪声。
  Noload operating test: After reducers work under noload for 10min with input speed ≤3000r/min, reducer can run steadily, no abnormal or impacting noise.
- 速比试验: 减速器速比应符合标定值。
  Ratio test: The speed ratio of the reducer should be in accordance with the calibration value.

### 噪声 Noise

- 减速器在输入转速≤3000r/min下空载运行，其噪声应小于$75^{+3}$dB(A)。
  The reducer running in no-load input speed is less than or equal to 3000r/min, the noise should be less than $75^{+3}$dB(A).

### 转矩 Torque

- 减速器在额定输出转矩条件下连续运转2小时以上，减速器能正常运转，无异音。
  Reducers work continuously for over 2 hours at rated torque, no abnormal noise.
- 减速器在工作环境温度,额定负载下连续工作，减速器壳温升应小于45K，减速器外壳温度小于60℃。
  After reducers work continuously, reducer's temperature should less than 45K, Reducer housing temperature is less than ＜60℃.
- 减速器传动效率应符合表3、表4的要求。
  Gear reducer transmission efficiency should meet the requirements of table 3, table 4.
- E系列减速器输出转矩符合表3的规定。
  E series reducer output torque in accordance with the provisions of table 3.
- C系列减速器输出转矩符合表4的规定。
  C series reducer output torque in accordance with the provisions of table 4.

● **表3–E系列输出转矩及效率** Table 3-E series output torque and efficiency

| 输出转速项目 Output Speed Project / 型号 Model | 5 r/min | | 15 r/min | | | 25 r/min | | 30 r/min | | 容许最高输出转速 Maximum Allowable Loss Out Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| | 输出转矩 Output Torque | 输入功率 Input Power | 输出转矩 Output Torque | 输入功率 Input Power | 效率 Efficiency | 输出转矩 Output Torque | 输入功率 Input Power | 输出转矩 Output Torque | 输入功率 Input Power | |
| | N.m | Kw | N.m | Kw | % | N.m | Kw | N.m | Kw | r/min |
| 120BX | 115 | 0.075 | 58.8 | 0.115 | 80 | 62 | 0.2 | 64 | 0.25 | 100 |
| 150BX | 245 | 0.16 | 196 | 0.385 | 80 | 153 | 0.5 | 153 | 0.6 | 75 |
| 35BX | 329 | 0.23 | 254 | 0.5 | 80 | 203 | 0.71 | 192 | 0.8 | 75 |
| 190BX | 612 | 0.4 | 392 | 0.77 | 80 | 367 | 1.2 | 382 | 1.5 | 70 |
| 65BX | 745 | 0.52 | 575 | 1.13 | 80 | 460 | 1.61 | 435 | 1.81 | 70 |
| 220BX | 1146 | 0.75 | 784 | 1.54 | 80 | 673 | 2.2 | 637 | 2.5 | 70 |
| 250BX | 1528 | 1.0 | 1078 | 2.12 | 80 | 978 | 3.2 | 892 | 3.5 | 50 |
| 280BX | 2292 | 1.5 | 1568 | 3.1 | 80 | 1437 | 4.7 | 1274 | 5.0 | 45 |
| 320BX | 4584 | 3.0 | 3136 | 6.2 | 80 | 2903 | 9.5 | 2802 | 11.0 | 35 |
| 370BX | 6112 | 4.0 | 4410 | 8.66 | 80 | / | / | / | / | 25 |

注1: 额定转矩是指输出转速为15 r/min时的输出转矩。输入功率考虑了减速器的效率。
Note 1: The rated torque is the output torque of the output speed of 15 r/min. The input power considers the efficiency of the reducer.

注2: 转矩计算公式 Note 2: Torque calculation formula:
T=9549XPXη/N （T: 转矩Nm, P: 功率Kw, N: 转速r/min, η: 效率%）。T=9549XPXη/N (T: Torque Nm, P: Power Kw, N: Speed r/min, η: Efficiency %).

● **表4–C系列输出转矩及效率** Table 4-C output series torque and efficiency

| 型号 Model / 输出转速项目 Output Speed Project | 5 r/min 输出转矩 Output Torque N.m | 5 r/min 输入功率 Input Power Kw | 15 r/min 输出转矩 Output Torque N.m | 15 r/min 输入功率 Input Power Kw | 15 r/min 效率 Efficiency % | 25 r/min 输出转矩 Output Torque N.m | 25 r/min 输入功率 Input Power Kw | 30 r/min 输出转矩 Output Torque N.m | 30 r/min 输入功率 Input Power Kw | 容许最高输出转速 Maximum Allowable Loss Out Speed r/min |
|---|---|---|---|---|---|---|---|---|---|---|
| 10CBX | 134 | 0.09 | 98 | 0.20 | 78 | 89 | 0.3 | 87 | 0.35 | 80 |
| 27CBX | 372 | 0.25 | 264 | 0.54 | 78 | 239 | 0.8 | 223 | 0.90 | 60 |
| 50CBX | 745 | 0.50 | 490 | 1.00 | 78 | 447 | 1.5 | 434 | 1.75 | 50 |
| 100CBX | 1490 | 1.00 | 980 | 2.00 | 78 | 894 | 3.0 | 819 | 3.30 | 40 |
| 120CBX | 1490 | 1.00 | 1176 | 2.36 | 78 | 941 | 3.16 | 856 | 3.45 | 40 |
| 200CBX | 2235 | 2.00 | 1960 | 4.00 | 78 | 1788 | 6.0 | 1638 | 6.60 | 30 |
| 320CBX | 4470 | 3.00 | 3136 | 6.30 | 78 | 2830 | 9.5 | / | / | 25 |
| 500CBX | 7003 | 4.70 | 4900 | 10.0 | 78 | / | / | / | / | 20 |

注1: 额定转矩是指输出转速为15rpm时的输出转矩。输入功率考虑了减速器的效率。
Note 1: The rated torque is the output torque of the output speed of 15rpm. The input power considers the efficiency of the reducer.

注2: 转矩计算公式 Note 2: Torque calculation formula:
T=9549XPXη/N （T: 转矩Nm, P: 功率Kw, N: 转速RPM, η: 效率% ）。T=9549XPXη/N (T: Torque Nm, P: Power Kw, N: Speed RPM, η: Efficiency %).

## 传动精度、扭转刚度、齿隙与回差 Transmission Precision, Torsional Stiffness, Backlash And Backlash

- 减速器扭转刚度、齿隙和回差应符合表5及表6的要求。
  The torsional stiffness, backlash and backlash of the gear reducer shall meet the requirements of table 5 and table 6.
- 减速器传动精度应符合表5及表6的要求。
  The transmission accuracy of gear reducer shall conform to the requirements of table 5 and table 6.

## 寿命 Life

- 减速器在额定转速和额定负载下运转，减速器工作寿命应为6000小时以上。
  When the reducer is working on rated speed and on-loading, reducer 's lift time is more than 6000 hours.

## 容许力矩（弯矩） Allowable Torque (Bending Torque)

- 瞬时容许力矩一般为减速器容许力矩的2倍。
  The instant allowable torque is generally twice the allowable torque of the reducer.
- 减速器容许力矩应符合表5、表6的要求。
  The allowable torque of the gear reducer shall meet to the requirements of table 5 and table 6.

## 过载 Overload

- 减速机在额定扭矩的125%进行过载试验运行5min，运行期间不得有异常噪声和损坏等现象。
  After reducer working under over-load for 5min with 125% rated torque, dudring the running, it have no noise and other damage.

## 减速器技术参数参见表5及表6 Reducer Technical Parameters See Table 5 And Table 6

● **表5–C系列技术参数** Table 5-C series of technical parameters

| 型号 Model / 项目 Project | 减速器单体减速比 Retarder Monomer Reduction Ratio | 容许力矩 Allowable Moment N.m | 扭转刚度 Torsional Rigidity N.m/(Arc.min) | 启动停止许用输出转矩 Stat And Stop Allowing Output Torque N.m | 瞬时容许最大转矩 Instantaneous Maximum Torque N.m | 传动精度 Transmission Accuracy Arc.min | 齿隙回差 Backlash Of Backlash Arc.min | 寿命 Life h | 减速器单体惯性力矩 Retarder Inertia Moment Kg.m² | 重量 Weight kg |
|---|---|---|---|---|---|---|---|---|---|---|
| 10CBX | 27.00 | 686 | 47 | 245 | 490 | 1.0 | 1.0 | 6000 | $1.380X10^{-5}$ | 4.60 |
| 27CBX | 36.57 | 980 | 147 | 662 | 1323 | 1.0 | 1.0 | 6000 | $0.550X10^{-4}$ | 8.50 |
| 50CBX | 32.54 | 1764 | 255 | 1225 | 2450 | 1.0 | 1.0 | 6000 | $1.820X10^{-4}$ | 14.6 |
| 100CBX | 36.75 | 2450 | 510 | 2450 | 4900 | 1.0 | 1.0 | 6000 | $0.475X10^{-3}$ | 19.5 |
| 120CBX | 36.75 | 2940 | 588 | 2990 | 5880 | 1.0 | 1.0 | 6000 | $0.475X10^{-3}$ | 19.5 |
| 200CBX | 34.86 | 8820 | 980 | 4900 | 9800 | 1.0 | 1.0 | 6000 | $1.390X10^{-3}$ | 55.6 |
| 320CBX | 35.61 | 20580 | 1960 | 7840 | 15680 | 1.0 | 1.0 | 6000 | $0.518X10^{-2}$ | 79.5 |
| 500CBX | 37.34 | 34300 | 3430 | 12250 | 24500 | 1.0 | 1.0 | 6000 | $0.996X10^{-2}$ | 154 |

**说明**Note: 惯性力矩值是减速器单体的值，不考虑中心齿轮、输入齿轮的惯性力矩。电机轴换算的惯性力矩值请参照以下公式计算。
Inertial moment value is the value of the reducer unit, without considering the inertial moment of the central gear and the input gear. For the inertia moment value converted by the motor shaft, refer to the following formula.

$$\frac{\text{惯性力矩(减速器单体)+中心齿轮的惯性力矩 Inertia moment (Reducer Unit) + Inertia moment of the central gear}}{\text{(中心齿轮大齿轮的齿数/输入齿轮的齿数)}^2 \text{ (Tooth Number of Central Gear/Tooth Number of Input Gear)}^2} + \text{输入齿轮的惯性力矩 Inertia moment of input gear}$$





● **表6–E系列技术参数** Table 6-E series of technical parameters

| 型号 Model / 项目 Project | 速比值 Ratio Value 轴输出 Axis Output | 容许力矩 Allowable Moment N.m | 扭转刚度 Torsional Rigidity N.m/(Arc.min) | 启动停止许用输出转矩 Stat And Stop Allowing Output Torque (N.m) | 瞬时容许最大转矩 Instantaneous Maximum Torque N.m | 传动精度 Transmission Accuracy Arc.min | 齿隙回差 Backlash Of Backlash Arc.min | 寿命 Life h | 惯性力矩 (I=GD²/4) Moment of inertia 输入轴换算值 Input axis conversion value (kg-m²) | 重量 Weight kg |
|---|---|---|---|---|---|---|---|---|---|---|
| 120BX | 53.50 | 196 | 20 | 117 | 294 | 1.5 | 1.5 | 6000 | $1.53X10^{-6}$ | 2.50 |
| | 59.00 | | | | | | | | $1.39X10^{-6}$ | |
| | 79.00 | | | | | | | | $1.09X10^{-6}$ | |
| | 103.0 | | | | | | | | $0.74X10^{-6}$ | |
| 150BX | 41/57/81.00 | 880 | 49 | 412 | 820 | 1.0 | 1.0 | 6000 | $6.07X10^{-6}$ | 4.70 |
| | 105.0 | | | | | | | | $4.32X10^{-6}$ | |
| | 121.0 | | | | | | | | $3.56X10^{-6}$ | |
| | 141.0 | | | | | | | | $2.88X10^{-6}$ | |
| | 161.0 | | | | | | | | $2.39X10^{-6}$ | |
| 35BX | 81.00 | 1103 | 73 | 530 | 1190 | 1.0 | 1.0 | 6000 | $6.07X10^{-6}$ | 4.6 |
| | 105.0 | | | | | | | | $4.32X10^{-6}$ | |
| | 121.0 | | | | | | | | $3.56X10^{-6}$ | |
| | 141.0 | | | | | | | | $2.88X10^{-6}$ | |
| | 161.0 | | | | | | | | $2.39X10^{-6}$ | |
| 190BX | 41/57/81.00 | 1600 | 108 | 1029 | 2000 | 1.0 | 1.0 | 6000 | $2.20X10^{-5}$ | 9.30 |
| | 105.0 | | | | | | | | $1.63X10^{-5}$ | |
| | 121.0 | | | | | | | | $1.37X10^{-5}$ | |
| | 153.0 | | | | | | | | $1.01X10^{-5}$ | |
| 65BX | 81.00 | 1916 | 162 | 1380 | 2690 | 1.0 | 1.0 | 6000 | $2.20X10^{-5}$ | 9.50 |
| | 105.0 | | | | | | | | $1.63X10^{-5}$ | |
| | 121.0 | | | | | | | | $1.37X10^{-5}$ | |
| | 153.0 | | | | | | | | $1.01X10^{-5}$ | |
| 220BX | 81.00 | 2000 | 196 | 1960 | 3600 | 1.0 | 1.0 | 6000 | $6.00X10^{-5}$ | 13.1 |
| | 101.0 | | | | | | | | $4.82X10^{-5}$ | |
| | 121.0 | | | | | | | | $3.96X10^{-5}$ | |
| | 153.0 | | | | | | | | $2.98X10^{-5}$ | |
| 250BX | 81.00 | 2900 | 294 | 2695 | 5380 | 1.0 | 1.0 | 6000 | $9.88X10^{-5}$ | 17.4 |
| | 111.0 | | | | | | | | $6.96X10^{-5}$ | |
| | 161.0 | | | | | | | | $4.36X10^{-5}$ | |
| | 175.28 | | | | | | | | $3.89X10^{-5}$ | |
| 280BX | 81.00 | 3900 | 392 | 3920 | 7800 | 1.0 | 1.0 | 6000 | $1.77X10^{-4}$ | 26.4 |
| | 101.0 | | | | | | | | $1.40X10^{-4}$ | |
| | 129.0 | | | | | | | | $1.06X10^{-4}$ | |
| | 145.0 | | | | | | | | $0.87X10^{-4}$ | |
| | 171.0 | | | | | | | | $0.74X10^{-4}$ | |
| 320BX | 81.00 | 7000 | 980 | 7840 | 15600 | 1.0 | 1.0 | 6000 | $4.83X10^{-4}$ | 44.3 |
| | 101.0 | | | | | | | | $3.79X10^{-4}$ | |
| | 118.5 | | | | | | | | $3.15X10^{-4}$ | |
| | 129.0 | | | | | | | | $2.84X10^{-4}$ | |
| | 141.0 | | | | | | | | $2.54X10^{-4}$ | |
| | 171.0 | | | | | | | | $1.97X10^{-4}$ | |
| | 185.0 | | | | | | | | $1.77X10^{-4}$ | |
| 370BX | 81.00 | 8820 | 1176 | 11025 | 22000 | 1.0 | 1.0 | 6000 | $8.75X10^{-4}$ | 66.4 |
| | 101.0 | | | | | | | | $6.91X10^{-4}$ | |
| | 118.5 | | | | | | | | $5.75X10^{-4}$ | |
| | 129.0 | | | | | | | | $5.20X10^{-4}$ | |
| | 154.8 | | | | | | | | $4.12X10^{-4}$ | |
| | 171.0 | | | | | | | | $3.61X10^{-4}$ | |
| | 192.4 | | | | | | | | $3.07X10^{-4}$ | |

# 润滑 LUBRICATION

## 减速器出厂时未填充润滑油脂，在安装时填充建议的润滑油脂，充填量约为减速器内部空腔体积的70~90%

The lubrication grease is not filled before gearbox leave factory. Please fill in the suggested lubrication grease during assembly, the amount is roughly 70～90% of the gearbox inside cavity volume

## 润滑油脂一般更换时间为2000小时。润滑油脂被污染或在恶劣的环境下使用时，需检查润滑油脂老化、被污染的情况，并规定更换时间

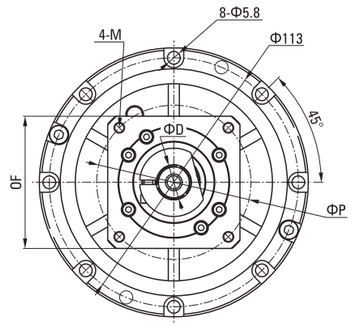
Lubricating grease is generally replaced in 2000 hours. When the grease is contaminated or is used in harsh environment, it is necessary to check the condition of aging and pollution, and to change the time

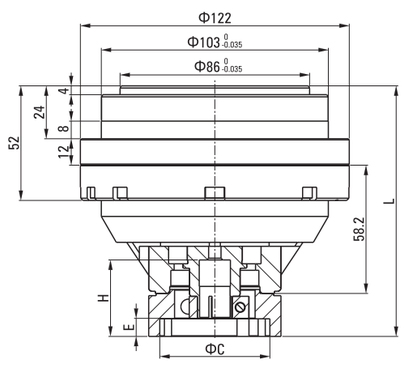
## 减速器使用润滑油脂：Molywhite RE–00 或VIGO–grease REO 其它相同品级精密减速器专用润滑脂

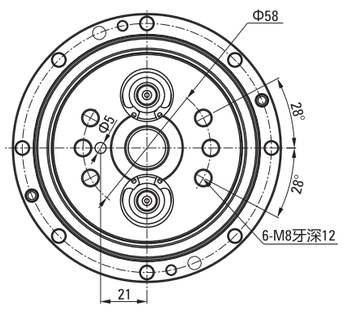
Reducer using lubricating oil: Molywhite RE-00 or VIGO–grease REO other similar grade precision reducer special grease

## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### ■120BX-REA2 外形图 120BX-REA2 Outline Drawing




| 马达种类 Type Motor | M41 | M42 |
|---|---|---|
| C | 50 | 50 |
| D | 11/14 | 11/14 |
| E | 8 | 8 |
| F | 60 | 60 |
| H | 34 | 34 |
| L | 113.7 | 113.7 |
| M | M4 | M5 |
| P | 70 | 70 |

● **说明** Note:

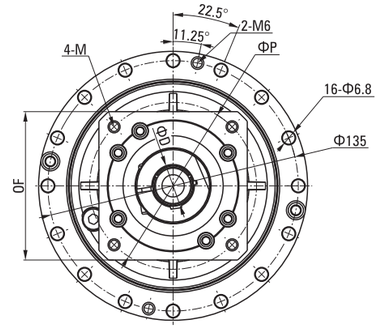
1. 本图适用电机轴: <=14；电机轴用锁紧器锁紧。This figure applies to the motor shaft: <=14; motor shaft lock use locker.
2. 减速机速比: (31,43,53.5,59,79,103):1 (轴输出)。Speed reduction ratio: (31,43,53.5,59,79,103): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 58N.m (输出转速: 15R/Min)。Rated output torque: 58N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

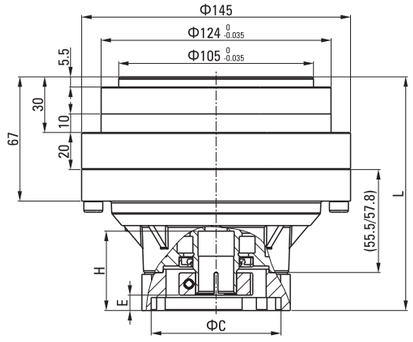


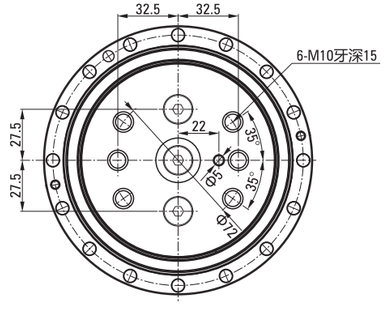


## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### ■150BX-REA2 外形图 150BX-REA2 Outline Drawing




| 马达种类 Type Motor | M59A | M59B |
|---|---|---|
| C | 50 | 50 |
| D | 14 | 14 |
| E | 5 | 5 |
| F | 80 | 80 |
| H | 35 | 35 |
| K | - | - |
| L | 123 | 123 |
| L (41,57K) | 113 | 113 |
| M | M4 | M5 |
| P | 70 | 70 |

| 马达种类 Type Motor | M51 | M52 |
|---|---|---|
| C | 70 | 70 |
| D | 19 | 19 |
| E | 8 | 8 |
| F | 80 | 80 |
| H | 45 | 45 |
| K | 6 | 6 |
| L | 128.3 | 128.3 |
| L (41,57K) | - | - |
| M | M5 | M6 |
| P | 90 | 90 |

| 马达种类 Type Motor | M53 | M51 |
|---|---|---|
| C | 80 | 70 |
| D | 19 | 19 |
| E | 8 | 8 |
| F | 90 | 80 |
| H | 45 | 42 |
| K | 6 | 无键型 |
| L | 128.3 | 126 |
| L (41,57K) | - | 116 |
| M | M6 | M5 |
| P | 100 | 90 |

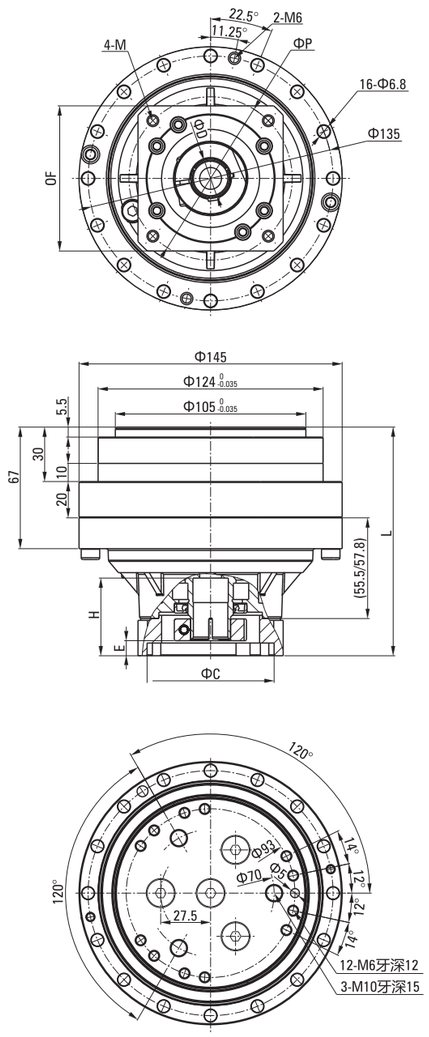
| 马达种类 Type Motor | M52 | M53 |
|---|---|---|
| C | 70 | 80 |
| D | 19 | 19 |
| E | 8 | 8 |
| F | 80 | 90 |
| H | 42 | 42 |
| K | 无键型 | 无键型 |
| L | 126 | 126 |
| L (41,57K) | 116 | 116 |
| M | M6 | M6 |
| P | 90 | 100 |

● **说明** Note:

1. 本图适用电机轴: <=19x40L；电机轴用锁紧器锁紧。This figure applies to the motor shaft: <=19x40L; motor shaft lock use locker.
2. 减速机速比: (41,57,81,105,121,141,161):1 (轴输出)。Speed reduction ratio: (41,57,81,105,121,141,161): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 196N.m (输出转速: 15R/Min)。Rated output torque: 196N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### 35BX-REA2 外形图 35BX-REA2 Outline Drawing




| 马达种类 Type Motor | M59A | M59B |
|---|---|---|
| C | 50 | 50 |
| D | 14 | 14 |
| E | 5 | 5 |
| F | 80 | 80 |
| H | 35 | 35 |
| K | - | - |
| L | 123 | 123 |
| L (41,57K) | 113 | 113 |
| M | M4 | M5 |
| P | 70 | 70 |

| 马达种类 Type Motor | M51 | M52 |
|---|---|---|
| C | 70 | 70 |
| D | 19 | 19 |
| E | 8 | 8 |
| F | 80 | 80 |
| H | 45 | 45 |
| K | 6 | 6 |
| L | 128.3 | 128.3 |
| L (41,57K) | - | - |
| M | M5 | M6 |
| P | 90 | 90 |

| 马达种类 Type Motor | M53 | M51 |
|---|---|---|
| C | 80 | 70 |
| D | 19 | 19 |
| E | 8 | 8 |
| F | 90 | 80 |
| H | 45 | 42 |
| K | 6 | 无键型 |
| L | 128.3 | 126 |
| L (41,57K) | - | 116 |
| M | M6 | M5 |
| P | 100 | 90 |

| 马达种类 Type Motor | M52 | M53 |
|---|---|---|
| C | 70 | 80 |
| D | 19 | 19 |
| E | 8 | 8 |
| F | 80 | 90 |
| H | 42 | 42 |
| K | 无键型 | 无键型 |
| L | 126 | 126 |
| L (41,57K) | 116 | 116 |
| M | M6 | M6 |
| P | 90 | 100 |

**说明** Note:

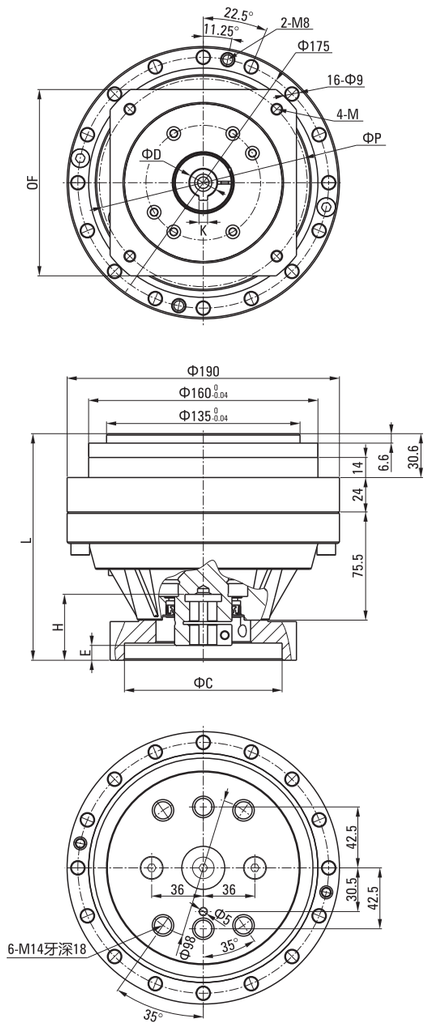
1. 本图适用电机轴: <=19x40L。This figure applies to the motor shaft: <=19x40L.
2. 减速机速比: (41,57,81,105,121,141,161):1 (轴输出)。Speed reduction ratio: (41,57,81,105,121,141,161): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 254N.m (输出转速: 15R/Min)。Rated output torque: 254N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.





## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### 190BX-REA2 外形图 190BX-REA2 Outline Drawing




| 马达种类 Type Motor | M59A | M59B |
|---|---|---|
| C | 50 | 50 |
| D | 14 | 14 |
| E | 8 | 8 |
| F | 80 | 80 |
| H | 35 | 35 |
| K | - | - |
| L | 147.6 | 147.6 |
| L (41,57K) | 147.6 | 147.6 |
| M | M4 | M5 |
| P | 70 | 70 |

| 马达种类 Type Motor | M72 | M73 |
|---|---|---|
| C | 110 | 95 |
| D | 19/22 | 19 |
| E | 20 | 7 |
| F | 130 | 100 |
| H | 58 | 48 |
| K | 6/8 | 6 |
| L | 170.1 | 162.1 |
| L (41,57K) | 165.1 | 155.1 |
| M | M8 | M6 |
| P | 145 | 115 |

| 马达种类 Type Motor | M74 | M75 |
|---|---|---|
| C | 95 | 95 |
| D | 19/22 | 19/22 |
| E | 7 | 10 |
| F | 100 | 110 |
| H | 48 | 52 |
| K | 6/8 | 6/8 |
| L | 162.1 | 165.1 |
| L (41,57K) | 155.1 | 158.1 |
| M | M8 | M8 |
| P | 115 | 130 |

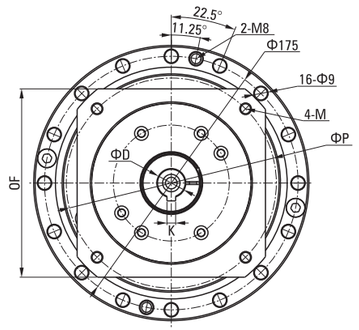
| 马达种类 Type Motor | M77 | M78 |
|---|---|---|
| C | 80 | 70 |
| D | 19 | 19 |
| E | 10 | 8 |
| F | 90 | 80 |
| H | 40 | 40 |
| K | 6 | 6 |
| L | 158.1 | 156.1 |
| L (41,57K) | 150.1(M51/52/53) | |
| M | M6 | M6 |
| P | 100 | 90 |

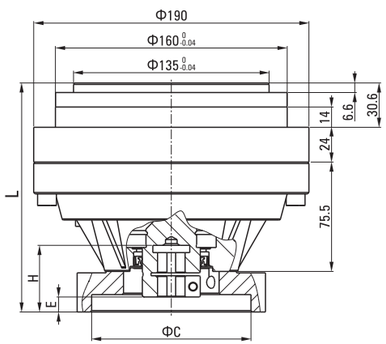
**说明** Note:

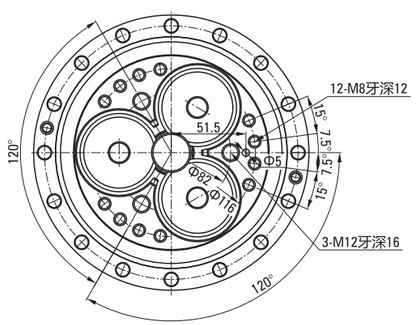
1. 本图适用电机轴: <=24；电机轴用锁紧带键一体轴。This figure applies to the motor shaft: <=24; motor shaft lock use locker.
2. 减速机速比: (41,57,81,105,121,153):1 (轴输出)。Speed reduction ratio: (41,57,81,105,121,153): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 392N.m (输出转速: 15R/Min)。Rated output torque: 392N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### 65BX-REA 外形图 65BX-REA Outline Drawing




| 马达种类 Type Motor | M59A | M59B |
|---|---|---|
| C | 50 | 50 |
| D | 14 | 14 |
| E | 8 | 8 |
| F | 80 | 80 |
| H | 35 | 35 |
| K | - | - |
| L | 147.6 | 147.6 |
| L (41,57K) | 147.6 | 147.6 |
| M | M4 | M5 |
| P | 70 | 70 |

| 马达种类 Type Motor | M72 | M73 |
|---|---|---|
| C | 110 | 95 |
| D | 19/22 | 19 |
| E | 20 | 7 |
| F | 130 | 100 |
| H | 58 | 48 |
| K | 6/8 | 6 |
| L | 170.1 | 162.1 |
| L (41,57K) | 165.1 | 155.1 |
| M | M8 | M6 |
| P | 145 | 115 |

| 马达种类 Type Motor | M74 | M75 |
|---|---|---|
| C | 95 | 95 |
| D | 19/22 | 19/22 |
| E | 7 | 10 |
| F | 100 | 110 |
| H | 48 | 52 |
| K | 6/8 | 6/8 |
| L | 162.1 | 165.1 |
| L (41,57K) | 155.1 | 158.1 |
| M | M8 | M8 |
| P | 115 | 130 |

| 马达种类 Type Motor | M77 | M78 |
|---|---|---|
| C | 80 | 70 |
| D | 19 | 19 |
| E | 10 | 8 |
| F | 90 | 80 |
| H | 40 | 40 |
| K | 6 | 6 |
| L | 158.1 | 156.1 |
| L (41,57K) | 150.1(M51/52/53) | |
| M | M6 | M6 |
| P | 100 | 90 |

● **说明** Note:

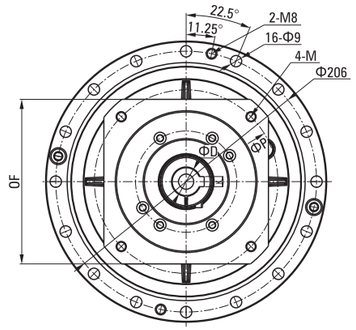
1. 本图适用电机轴: <=24；电机轴用锁紧带键一体轴。This figure applies to the motor shaft: <=24; motor shaft lock use locker.
2. 减速机速比: (41,57,81,105,121,153):1 (轴输出)。Speed reduction ratio: (41,57,81,105,121,153): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 575N.m (输出转速: 15R/Min)。Rated output torque: 575N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

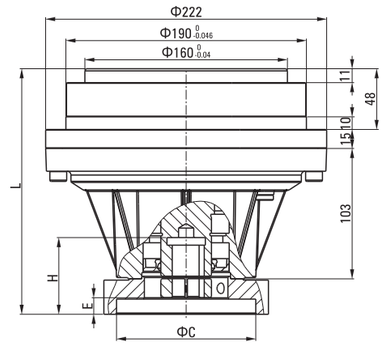


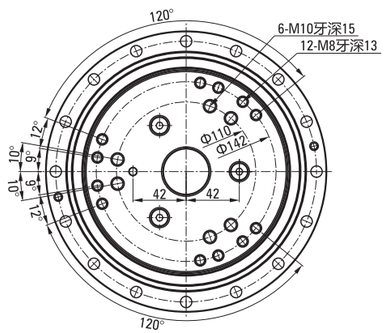


## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### 220BX-REA2 外形图 220BX-REA2 Outline Drawing




| 马达种类 Type Motor | M71 | M73 |
|---|---|---|
| C | 110 | 95 |
| D | 19/22/24 | 19 |
| E | 13 | 10 |
| F | 130 | 100 |
| H | 60 | 57 |
| K | 6/8 | 6 |
| L | 194 | 191 |
| M | M8 | M6 |
| P | 145 | 115 |

| 马达种类 Type Motor | M74 | M75 |
|---|---|---|
| C | 95 | 95 |
| D | 19/22 | 19/22/24 |
| E | 10 | 13 |
| F | 100 | 110 |
| H | 57 | 60 |
| K | 6/8 | 6/8 |
| L | 191 | 194 |
| M | M8 | M8 |
| P | 115 | 130 |

| 马达种类 Type Motor | M76 | M77 |
|---|---|---|
| C | 130 | 80 |
| D | 19/22 | 19 |
| E | 13 | 10 |
| F | 142 | 90 |
| H | 60 | 60 |
| K | 6/8 | 6 |
| L | 194 | 194 |
| M | M10 | M6 |
| P | 165 | 100 |

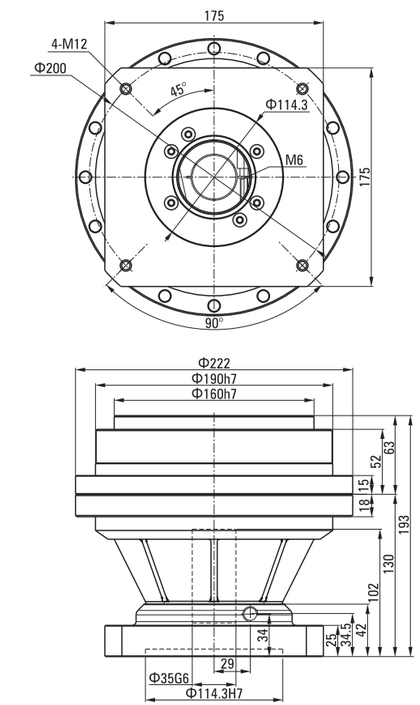
| 马达种类 Type Motor | M78 | M81 |
|---|---|---|
| C | 70 | 114.3 |
| D | 19 | 28/35 |
| E | 11 | 27.5 |
| F | 80 | 175 |
| H | 58 | 82 |
| K | 6 | 8/10 |
| L | 192 | 208 |
| M | M6 | M8 |
| P | 90 | 200 |

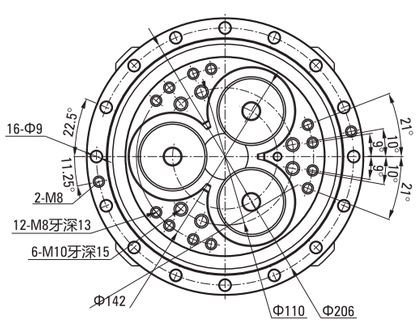
● **说明** Note:

1. 本图适用电机轴: <=24x70L；电机轴用锁紧器锁紧。This figure applies to the motor shaft: <=24x70L; motor shaft lock use locker.
2. 减速机速比: (57,81,101,121,153):1 (轴输出)。Speed reduction ratio: (57,81,101,121,153): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 784N.m (输出转速: 15R/Min)。Rated output torque: 784N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### 220BX-REA-35 外形图 220BX-REA-35 Outline Drawing




● **说明** Note:

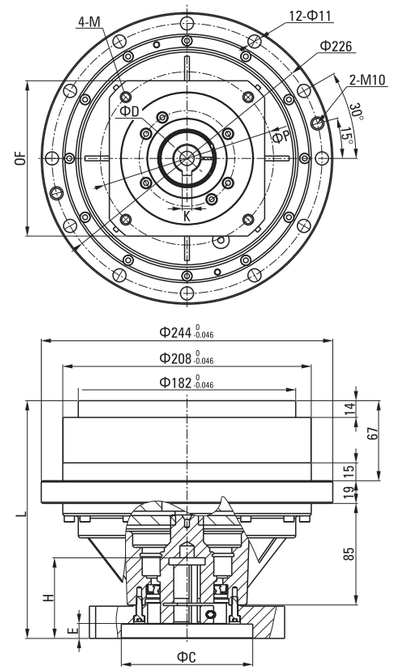
1. 本图适用电机轴: <=35x80L；电机轴用锁紧带键一体轴。This figure applies to the motor shaft: <=35x80L; motor shaft lock use locker.
2. 减速机速比: (57,81,101,121,153):1 (轴输出)。Speed reduction ratio: (57,81,101,121,153): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 784N.m (输出转速: 15R/Min); 容许力矩1700Nm, 容许推力7400N。Rated output torque: 784N.m (output speed: 15R/Min); Allowable moment 1700Nm, allowable thrust 7400N.
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

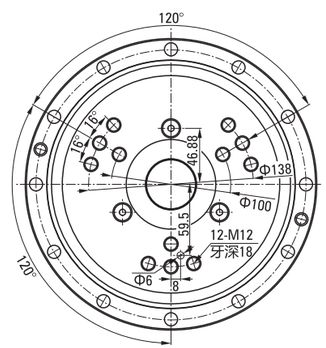




## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### 250BX-REA2 外形图 250BX-REA2 Outline Drawing




| 马达种类 Type Motor | M71 | M73 |
|---|---|---|
| C | 110 | 95 |
| D | 22/24 | 22 |
| E | 12.5 | 9.5 |
| F | 130 | 100 |
| H | 66 | 57 |
| K | 6/8 | 6 |
| L | 199 | 196 |
| M | M8 | M6 |
| P | 145 | 115 |

| 马达种类 Type Motor | M74 | M75 |
|---|---|---|
| C | 95 | 95 |
| D | 22 | 22/24 |
| E | 9.5 | 12.5 |
| F | 100 | 110 |
| H | 57 | 60 |
| K | 6/8 | 6/8 |
| L | 196 | 199 |
| M | M8 | M8 |
| P | 115 | 130 |

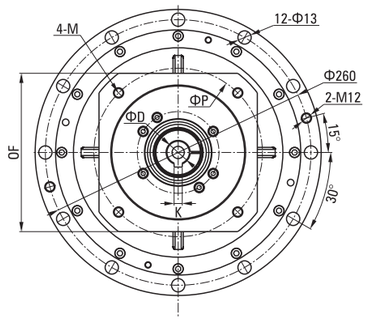
| 马达种类 Type Motor | M76 | M91 |
|---|---|---|
| C | 130 | 114.3 |
| D | 22 | 28/35 |
| E | 12.5 | 27 |
| F | 142 | 175 |
| H | 60 | 82 |
| K | 6/8 | 8/10 |
| L | 199 | 213 |
| M | M10 | M12 |
| P | 165 | 200 |

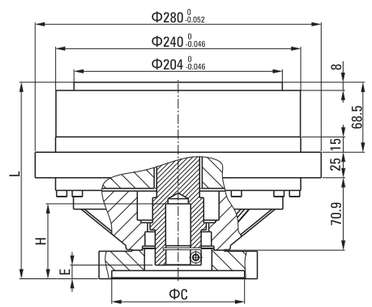
● **说明** Note:

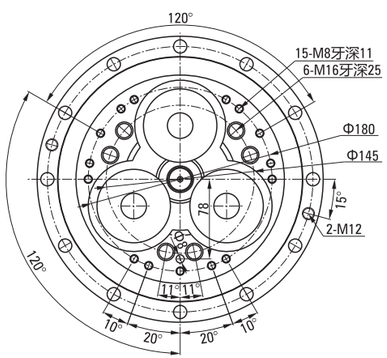
1. 本图适用电机轴: <=35x80L；电机轴用锁紧带键一体轴。This figure applies to the motor shaft: <=35x80L; motor shaft lock use locker.
2. 减速机速比: (81,111,161,175.28):1 (轴输出)。Speed reduction ratio: (81,111,161,175.28): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 1078N.m (输出转速: 15R/Min)。Rated output torque: 1078N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### ■280BX-REA 外形图 280BX-REA Outline Drawing




| 马达种类 Type Motor | M71 | M73 |
|---|---|---|
| C | 110 | 95 |
| D | 22/24 | 22 |
| E | 13.4 | 10.4 |
| F | 130 | 100 |
| H | 70 | 65 |
| K | 6/8 | 6 |
| L | 192.4 | 189.4 |
| M | M8 | M6 |
| P | 145 | 115 |

| 马达种类 Type Motor | M74 | M75 |
|---|---|---|
| C | 95 | 95 |
| D | 22 | 22/24 |
| E | 10.4 | 13.4 |
| F | 100 | 110 |
| H | 57 | 60 |
| K | 6/8 | 6/8 |
| L | 189.4 | 192.4 |
| M | M8 | M8 |
| P | 115 | 130 |

| 马达种类 Type Motor | M76 | M91 |
|---|---|---|
| C | 130 | 114.3 |
| D | 22 | 28/35 |
| E | 13.4 | 27 |
| F | 142 | 175 |
| H | 60 | 82 |
| K | 6/8 | 8/10 |
| L | 192.4 | 206.4 |
| M | M10 | M12 |
| P | 165 | 200 |

● **说明** Note:

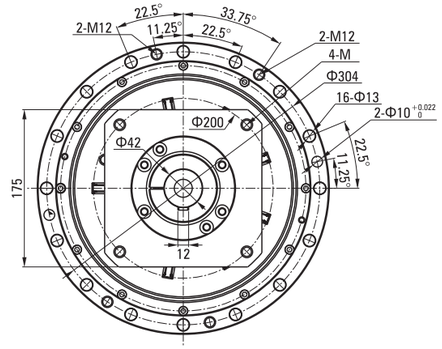
1. 本图适用电机轴:<=35x70L；电机轴用锁紧带键一体轴。This figure applies to the motor shaft: <=35x70L; Motor shaft is locked by locker.
2. 减速机速比: (81,101,129,145,171): 1 (轴输出)。Speed reduction ratio: (81,101,129,145,171): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0或RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 1568N.m (输出转速: 15R/Min)。Rated output torque: 1568N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。The motor mounting flange is supplied according to the motor type.

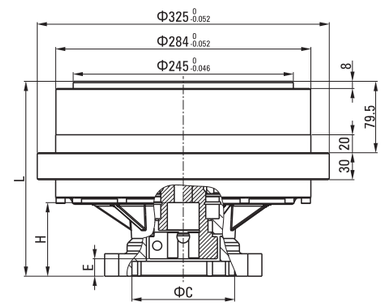


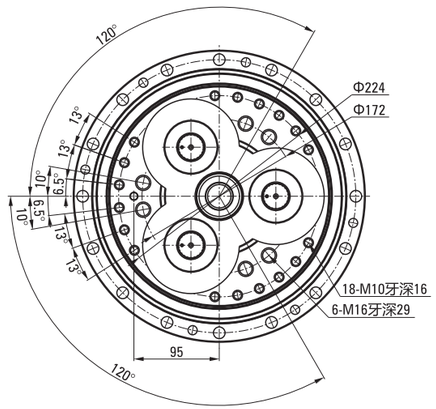


## REA系列外形尺寸图
## REA SERIES OUTLINE DIMENSION DRAWING

### ■320BX-REA 外形图 320BX-REA Outline Drawing




| 马达种类 Type Motor | M91 | M92 |
|---|---|---|
| C | 114.3 | 180 |
| D | 35 | 35 |
| E | 19 | 19 |
| F | 175 | 200 |
| H | 81 | 81 |
| K | 10 | 10 |
| L | 216.9 | 216.9 |
| M | M12 | M12 |
| P | 200 | 215 |

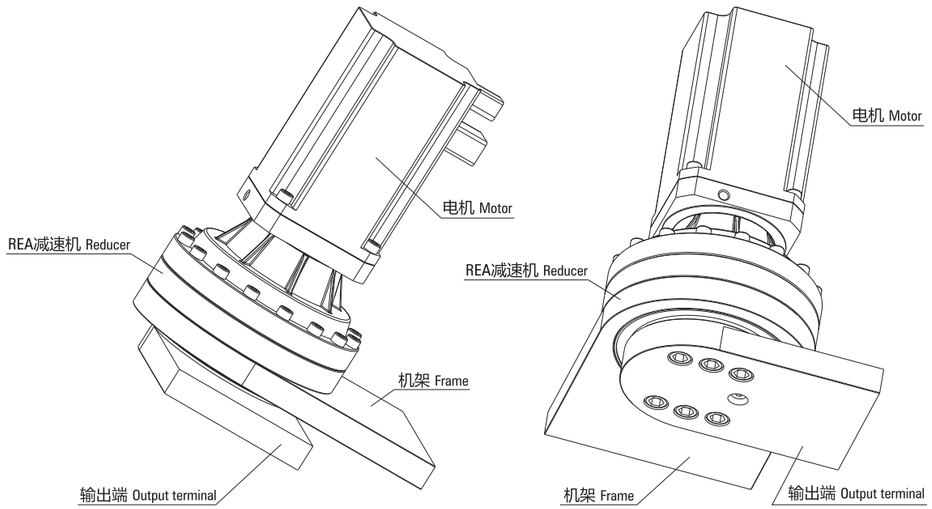
| 马达种类 Type Motor | M91 |
|---|---|
| C | 114.3 |
| D | 42 |
| E | 48.5 |
| F | 175 |
| H | 116 |
| K | 12 |
| L | 248.4 |
| M | M12 |
| P | 200 |

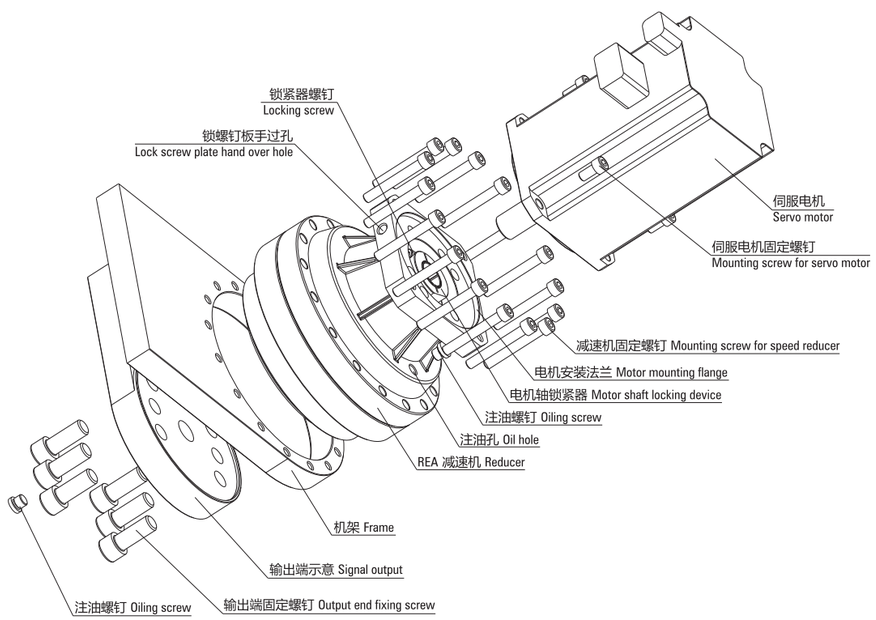
● **说明** Note:

1. 本图适用电机轴: <=42x114L；电机轴用锁紧带键一体轴。This figure applies to the motor shaft: <=42x114L; motor shaft lock use locker.
2. 减速机速比: (81,101,118.5,129,141,171,185):1 (轴输出)。Speed reduction ratio: (81,101,118.5,129,141,171,185): 1 (shaft output).
3. 润滑油脂: VIGO GREASE RE0 或 RE-00 (MOLYWHITE)。Lubricants: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 3136N.m (输出转速: 15R/Min)。Rated output torque: 3136N.m (output speed: 15R/Min).
5. 电机安装法兰依电机型号提供。Motor mounting flange according to motor model.

## REA系列减速机安装图
## RVA SERIES INSTALLATION DRAWING

### REA系列减速机安装示例 REA Series Reducer Installation Example



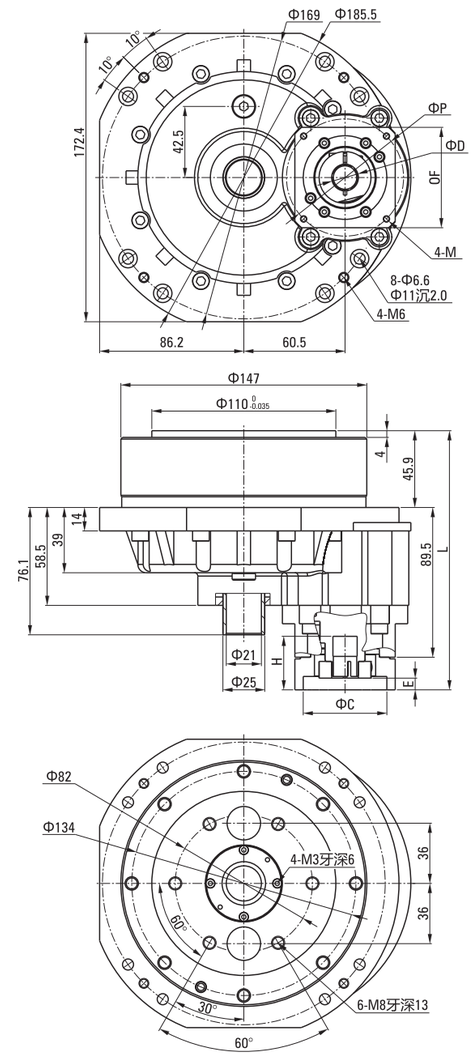








## RCA系列外形尺寸图
## RCA SERIES OUTLINE DIMENSION DRAWING

### 10CBX–RCA 外形图 10CBX-RCA Outline Drawing




| 马达种类 Type Motor | M41 | M42 |
|---|---|---|
| C | 50 | 50 |
| D | 14 | 14 |
| E | 7 | 7 |
| F | 60 | 60 |
| H | 32 | 32 |
| L | 154.9 | 154.9 |
| M | M4 | M5 |
| P | 70 | 70 |

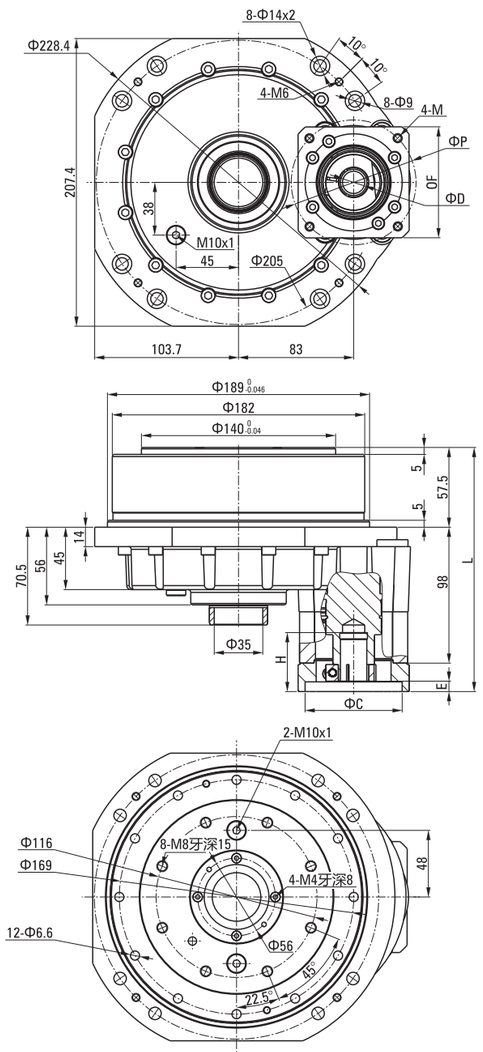
| 马达种类 Type Motor | M51 | M52 |
|---|---|---|
| C | 70 | 70 |
| D | 19 | 19 |
| E | 7 | 7 |
| F | 80 | 80 |
| H | 42 | 42 |
| L | 154.9 | 154.9 |
| M | M5 | M6 |
| P | 90 | 90 |

● **说明** Note:

1. 本图为中空10CBX型减速器。This picture shows the hollow 10CBX reducer.
2. 减速机速比: (81,108,453,189,243):1。Reducer speed ratio: (81,108,453,189,243):1.
3. 润滑油脂: VIGO GREASE RE0或RE-00 (MOLYWHITE)。Grease: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 98N.m (输出转速: 15R/Min)。 Rated output torque: 98N.m (output speed: 15R / Min).

## RCA系列外形尺寸图
## RCA SERIES OUTLINE DIMENSION DRAWING

### ■27CBX-RCA 外形图 27CBX-RCA Outline Drawing




| 马达种类 Type Motor | M51 | M52 |
|---|---|---|
| C | 70 | 70 |
| D | 19 | 19 |
| E | 7.5 | 7.5 |
| F | 80 | 80 |
| H | 42 | 42 |
| K | 6 | 6 |
| L | 176 | 176 |
| M | M5 | M6 |
| P | 90 | 90 |

| 马达种类 Type Motor | M53 | M54 |
|---|---|---|
| C | 80 | 110 |
| D | 19 | 19 |
| E | 7.5 | 23 |
| F | 90 | 130 |
| H | 42 | 58 |
| K | 6 | 6 |
| L | 176 | 191.5 |
| M | M6 | M8 |
| P | 100 | 145 |

| 马达种类 Type Motor | M54 | M56 |
|---|---|---|
| C | 110 | 95 |
| D | 22 | 19 |
| E | 23 | 20 |
| F | 130 | 100 |
| H | 58 | 55 |
| K | 8 | 6 |
| L | 191.5 | 188.5 |
| M | M8 | M6 |
| P | 145 | 115 |

| 马达种类 Type Motor | M57 |
|---|---|
| C | 95 |
| D | 22 |
| E | 20 |
| F | 100 |
| H | 55 |
| K | 8 |
| L | 188.5 |
| M | M8 |
| P | 115 |

● **说明** Note:

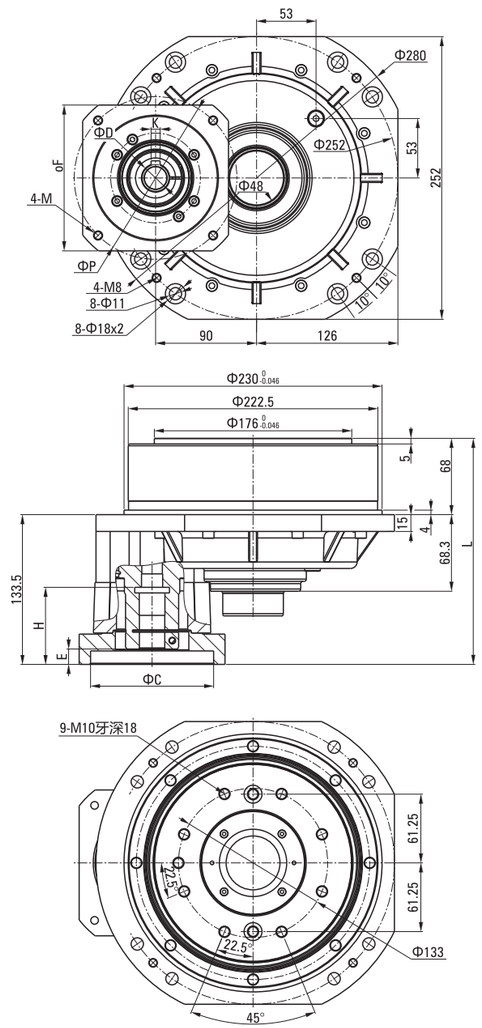
1. 本图为中空27CBX型减速器。This picture shows the hollow 27CBX reducer.
2. 减速机速比: (79,103,120,157,177,231.5):1。Reducer speed ratio: (79,103,120,157,177,231.5):1.
3. 润滑油脂: VIGO GREASE RE0或RE-00 (MOLYWHITE)。Grease: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 264N.m (输出转速: 15R/Min)。 Rated output torque: 264N.m (output speed: 15R / Min).





## RCA系列外形尺寸图
## RCA SERIES OUTLINE DIMENSION DRAWING

### ■50CBX-RCA 外形图 50CBX-RCA Outline Drawing




| 马达种类 Type Motor | M51 | M52 |
|---|---|---|
| C | 70 | 70 |
| D | 19 | 19 |
| E | 6 | 6 |
| F | 80 | 80 |
| H | 58 | 58 |
| K | 6 | 6 |
| L | 194 | 194 |
| M | M5 | M6 |
| P | 90 | 90 |

| 马达种类 Type Motor | M53 | M71 |
|---|---|---|
| C | 80 | 110 |
| D | 19 | 19/22/24 |
| E | 6 | 13.5 |
| F | 90 | 130 |
| H | 58 | 65 |
| K | 6 | 6/8 |
| L | 194 | 201.5 |
| M | M6 | M8 |
| P | 100 | 145 |

| 马达种类 Type Motor | M73 | M74 |
|---|---|---|
| C | 95 | 95 |
| D | 19/22/24 | 19/22/24 |
| E | 10.5 | 10.5 |
| F | 100 | 100 |
| H | 62 | 62 |
| K | 6/8 | 6/8 |
| L | 198.5 | 198.5 |
| M | M6 | M8 |
| P | 115 | 115 |

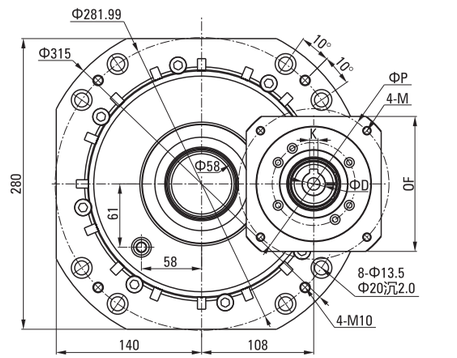
| 马达种类 Type Motor | M75 |
|---|---|
| C | 95 |
| D | 19/22/24 |
| E | 13.5 |
| F | 110 |
| H | 65 |
| K | 6/8 |
| L | 201.5 |
| M | M8 |
| P | 130 |

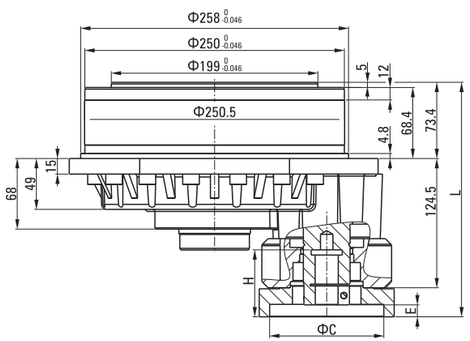
● **说明** Note:

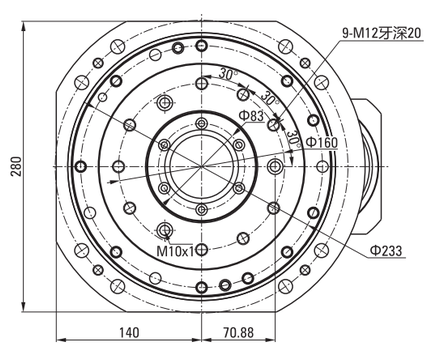
1. 本图为中空50CBX型减速器。This picture shows the hollow 50CBX reducer.
2. 减速机速比: (80,107,151,177,234):1。Reducer speed ratio: (80,107,151,177,234):1.
3. 润滑油脂: VIGO GREASE RE0或RE-00 (MOLYWHITE)。Grease: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 490N.m (输出转速: 15R/Min)。 Rated output torque: 490N.m (output speed: 15R / Min).

## RCA系列外形尺寸图
## RCA SERIES OUTLINE DIMENSION DRAWING

### ■100CBX-RCA 外形图 100CBX-RCA Outline Drawing




| 马达种类 Type Motor | M71 | M73 |
|---|---|---|
| C | 110 | 95 |
| D | 22/24 | 22/24 |
| E | 11.5 | 8.5 |
| F | 130 | 100 |
| H | 62 | 58 |
| K | 6/8 | 6 |
| L | 226 | 223 |
| M | M8 | M6 |
| P | 145 | 115 |

| 马达种类 Type Motor | M74 | M75 |
|---|---|---|
| C | 95 | 95 |
| D | 22/24 | 22/24 |
| E | 8.5 | 11.5 |
| F | 100 | 110 |
| H | 58 | 60 |
| K | 6/8 | 6/8 |
| L | 223 | 226 |
| M | M8 | M8 |
| P | 115 | 130 |

| 马达种类 Type Motor | M76 | M91 |
|---|---|---|
| C | 130 | 114.3 |
| D | 22/24 | 28/35 |
| E | 11.5 | 25.5 |
| F | 142 | 175 |
| H | 60 | 82 |
| K | 6/8 | 8/10 |
| L | 226 | 240 |
| M | M10 | M12 |
| P | 165 | 200 |

● **说明** Note:

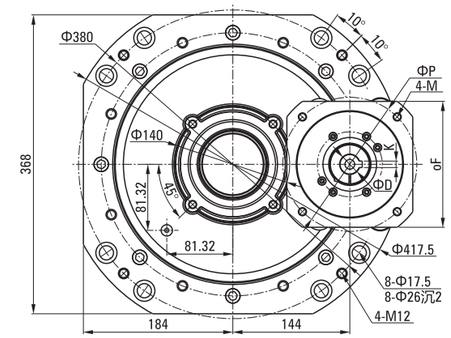
1. 本图为中空100CBX型减速器。This picture shows the hollow 100CBX reducer.
2. 减速机速比: (76.3,100.2,124.7,152,214.3,264.6):1。Reducer speed ratio: (76.3,100.2,124.7,152,214.3,264.6):1.
3. 润滑油脂: VIGO GREASE RE0或RE-00 (MOLYWHITE)。Grease: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 980N.m (输出转速: 15R/Min)。 Rated output torque: 980N.m (output speed: 15R / Min).

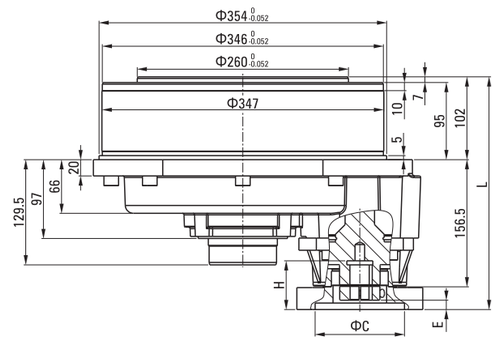


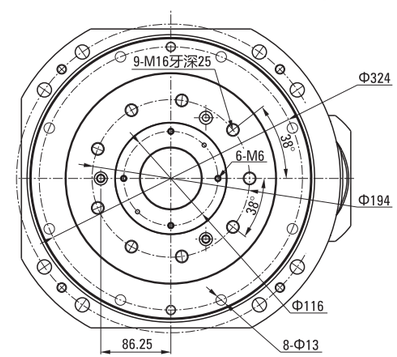


## RCA系列外形尺寸图
## RCA SERIES OUTLINE DIMENSION DRAWING

### ■200CBX-RCA 外形图 200CBX-RCA Outline Drawing




| 马达种类 Type Motor | M71 | M71 |
|---|---|---|
| C | 110 | 110 |
| D | 22/24 | 28 |
| E | 11.5 | 11.5 |
| F | 130 | 130 |
| H | 60 | 60 |
| K | 6/8 | 8 |
| L | 286.5 | 286.5 |
| M | M8 | M8 |
| P | 145 | 145 |

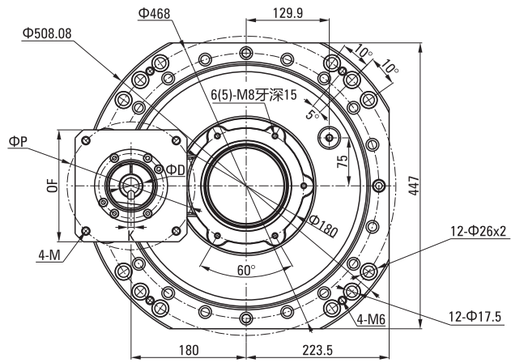
| 马达种类 Type Motor | M91 | M91 |
|---|---|---|
| C | 114.3 | 114.3 |
| D | 28 | 35 |
| E | 25.5 | 25.5 |
| F | 175 | 175 |
| H | 74 | 84 |
| K | 8 | 10 |
| L | 300.5 | 300.5 |
| M | M12 | M12 |
| P | 200 | 200 |

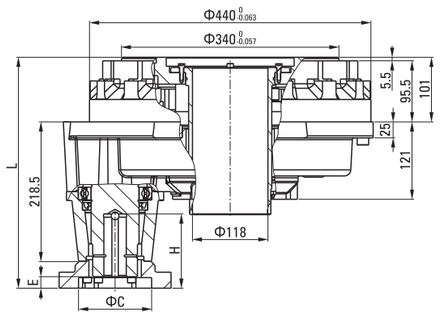
● **说明** Note:

1. 本图为中空200CBX型减速器。This picture shows the hollow 200CBX reducer.
2. 减速机速比: (106,122,156,206,245,281):1。Reducer speed ratio: (106,122,156,206,245,281):1.
3. 润滑油脂: VIGO GREASE RE0或RE-00 (MOLYWHITE)。Grease: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 1960N.m (输出转速: 15R/Min)。 Rated output torque: 1960N.m (output speed: 15R / Min).

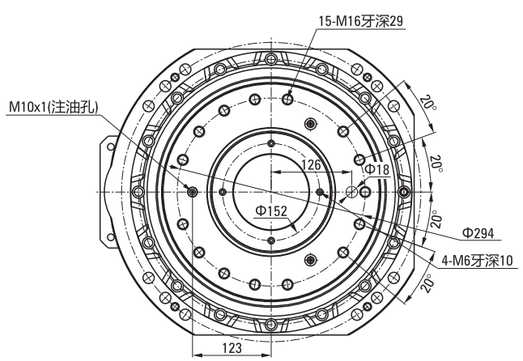
## RCA系列外形尺寸图
## RCA SERIES OUTLINE DIMENSION DRAWING

### 320CBX-RCA 外形图 320CBX-RCA Outline Drawing




| 马达种类 Type Motor | M91 | M91 |
|---|---|---|
| C | 114.3 | 114.3 |
| D | 42 | 35 |
| E | 18 | 18 |
| F | 175 | 175 |
| H | 116 | 90 |
| K | 12 | 10 |
| L | 361.5 | 361.5 |
| M | M12 | M12 |
| P | 200 | 200 |




● **说明** Note:

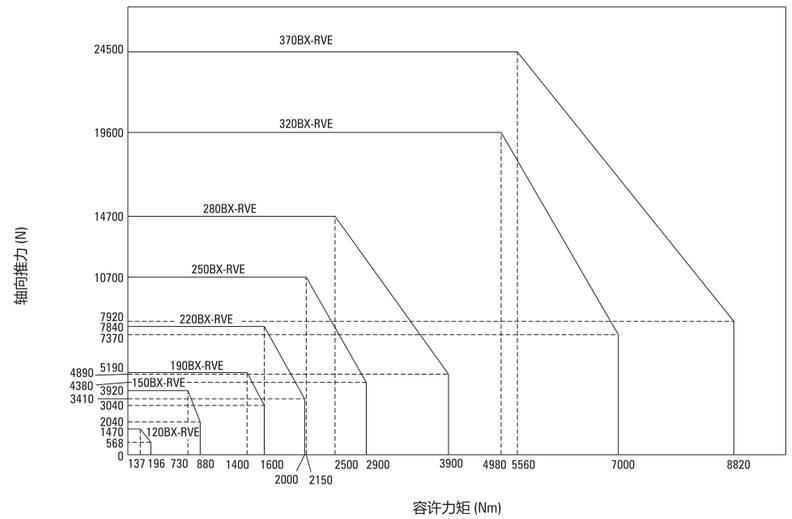
1. 本图为中空320CBX型减速器。This picture shows the hollow 320CBX reducer, the input end with timing pulley.
2. 减速机速比: (253 etc...):1。Reducer speed ratio: (253 etc...):1.
3. 润滑油脂: VIGO GREASE RE0或RE-00 (MOLYWHITE)。Grease: VIGO GREASE RE0 or RE-00 (MOLYWHITE).
4. 额定输出扭矩: 3160N.m (输出转速: 15R/Min)。 Rated output torque: 3160N.m (output speed: 15R / Min).

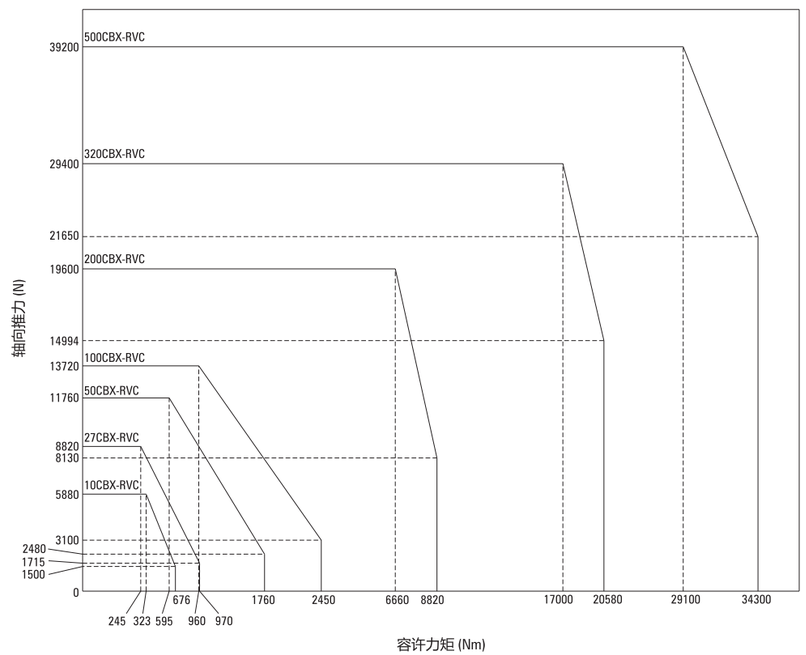




## 选定产品–线图
## SELECTED PRODUCT - LINE GRAPH

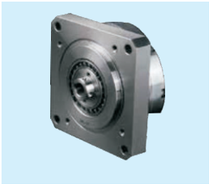
### 容许力矩线图 Permissible Torque Line Diagram

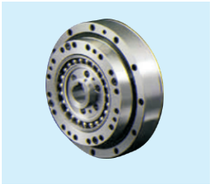


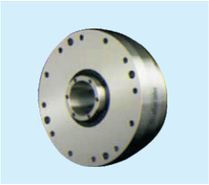

LSS-I


LSD-I

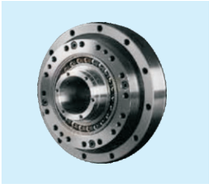

LFS-I

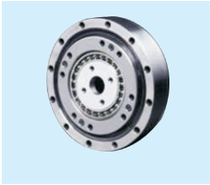

LHT-I

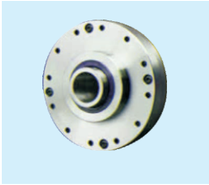

LHT-II


LHT-III

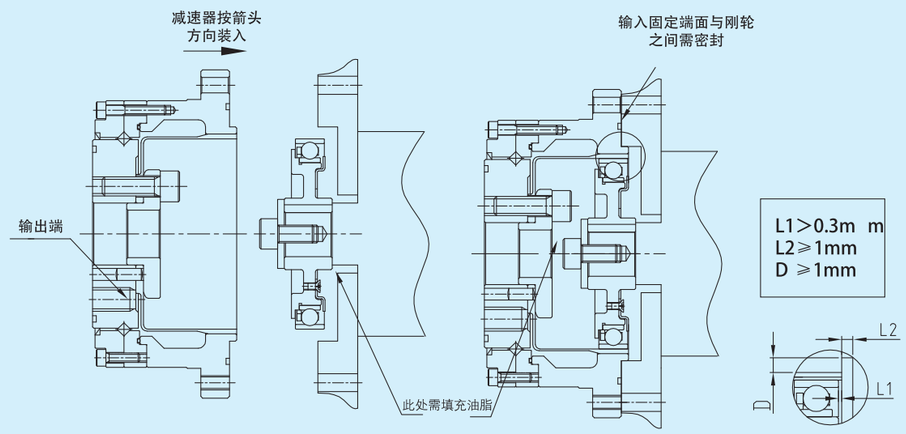

LHT-IV


LHT-V

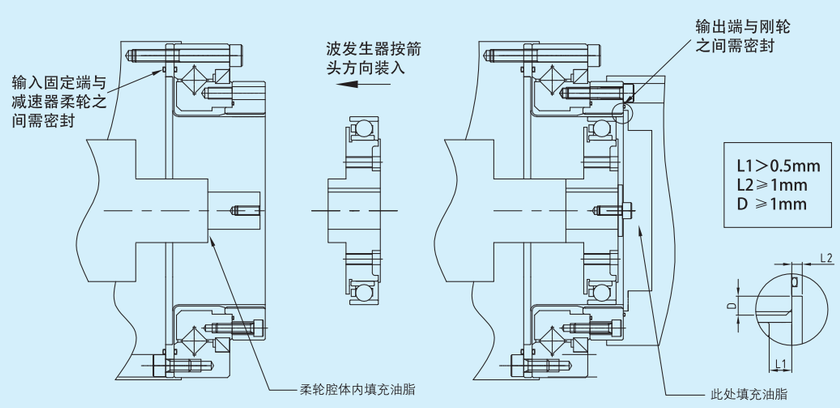

LHD-I


LHD-III

## LSS系列安装方式




## LHT-I/II系列安装方式一








# LSS – 14 – 100 – U/C – I

| 机型名称 | 型号 | 减速比 注1 | | | | | | 结构代号 | 类型 |
|---|---|---|---|---|---|---|---|---|---|
| LSS<br>LSN<br>LSG<br>LSD<br>LFS | 11 | 50 | 80 | 100 | - | - | - | U：整机<br>C：部件 | I:简易标准型<br>II:简易十字滑块 |
| | 14 | 50 | 80 | 100 | - | - | - | | |
| | 17 | 50 | 80 | 100 | - | - | - | | |
| | 20 | 50 | 80 | 100 | 120 | 160 | - | | |
| | 25 | 50 | 80 | 100 | 120 | - | - | | |
| | 32 | 50 | 80 | 100 | 120 | - | - | | |

注1：减速比表示的是输入：波发生器，固定：刚轮，输出：柔轮时的情况。

## LSS系列

### LSS系列

易于操作的组合化产品。每个型号都有用于支撑外部负载，具有高刚性的交叉滚子轴承。

### LSN系列

轻量型产品，在不改变性能的前提下，相比标准品，重量减少了30%。

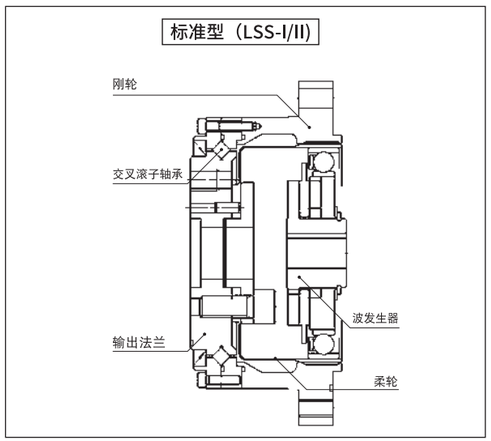
### LSG系列

高转矩用，转矩容量比标准产品提升30%，使用寿命提高43%，追求高负载容量，高可靠性。

### 应用领域

工业机器人　服务机器人　金属机床　医疗器械
测定、分析、试验设备　能源相关　造纸设备

## LSS系列组合型结构




*注意 所有吊装工况请提前咨询我司技术并出具选型报告

## LSS(LSG )系列谐波减速器弯矩负载表

| 型号 | 设计值 | 启动停止允许值 | 瞬间允许值 |
|---|---|---|---|
| LSS(LSG)-14 | M b di 20Nm | M b peak 40Nm | M b max 80Nm |
| | F t di 180N | F t peak 320N | F t max 560N |
| | F a di 180N | F a peak 320N | F a max 560N |
| LSS(LSG)-17 | M b di 30Nm | M b peak 60Nm | M b max 120Nm |
| | F t di 230N | F t peak 400N | F t max 700N |
| | F a di 230N | F a peak 400N | F a max 700N |
| LSS(LSG)-20 | M b di 42Nm | M b peak 80Nm | M b max 168Nm |
| | F t di 270N | F t peak 480N | F t max 830N |
| | F a di 270N | F a peak 480N | F a max 830N |
| LSS(LSG)-25 | M b di 80Nm | M b peak 160Nm | M b max 313m |
| | F t di 440N | F t peak 770N | F t max 1320N |
| | F a di 440N | F a peak 770N | F a max 1320N |
| LSS(LSG)-32 | M b di 220Nm | M b peak 440Nm | M b max 890Nm |
| | F t di 900N | F t peak 1600N | F t max 2700N |
| | F a di 900N | F a peak 1600N | F a max 2700N |

## LHT(LHG)系列谐波减速器弯矩负载表

| 型号 | 设计值 | 启动停止允许值 | 瞬间允许值 |
|---|---|---|---|
| LHT(LHG)-14 | M b di 41Nm | M b peak 80Nm | M b max 160Nm |
| | F t di 270N | F t peak 490N | F t max 830N |
| | F a di 270N | F a peak 490N | F a max 830N |
| LHT(LHG)-17 | M b di 72Nm | M b peak 140Nm | M b max 290Nm |
| | F t di 400N | F t peak 700N | F t max 1200N |
| | F a di 400N | F a peak 700N | F a max 1200N |
| LHT(LHG)-20 | M b di 140Nm | M b peak 280Nm | M b max 560m |
| | F t di 650N | F t peak 1150N | F t max 1980N |
| | F a di 650N | F a peak 1150N | F a max 1980N |
| LHT(LHG)-25 | M b di 243Nm | M b peak 480Nm | M b max 974m |
| | F t di 900N | F t peak 1600N | F t max 2800N |
| | F a di 900N | F a peak 1600N | F a max 2800N |
| LHT(LHG)-32 | M b di 460Nm | M b peak 900Nm | M b max 1860Nm |
| | F t di 1350N | F t peak 2300N | F t max 4000N |
| | F a di 1350N | F a peak 2300N | F a max 4000N |
| LHT(LHG)-40 | M b di 600Nm | M b peak 1200Nm | M b max 3000Nm |
| | F t di 2000N | F t peak 3500N | F t max 6000N |
| | F a di 2000N | F a peak 3500N | F a max 6000N |

备注:输出端负载 M b——弯矩,F t——径向力,F a——轴向力





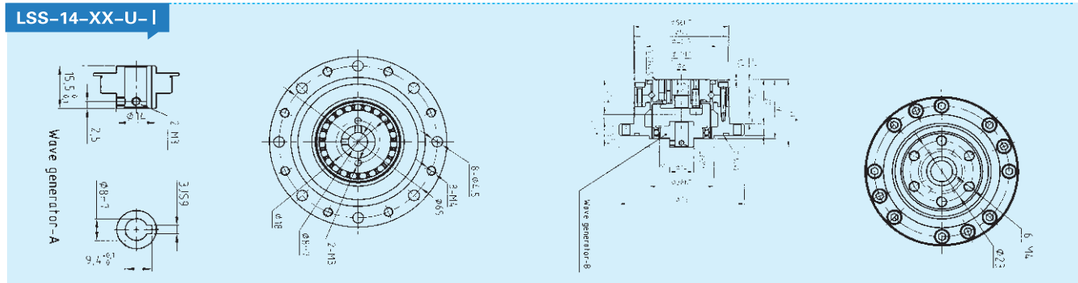
## LSS/LSN系列额定参数表

| 型号 | 速比 | 输入2000r/min时的额定转矩 | | 起动停止时的容许峰值转矩 | | 平均负载转矩的容许最大值 | | 瞬间容许最大转矩 | | 容许最高输入转速(脂润滑) | 容许平均输入转速(脂润滑) | 背隙 | 设计寿命 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nm | kgfm | Nm | kgfm | Nm | kgfm | Nm | kgfm | r/min | r/min | Arc Sec | Hour |
| 11 | 80 | 3. 8 | 0. 4 | 8. 5 | 0. 9 | 6. 8 | 0. 7 | 19. 1 | 1. 9 | 8000 | 3000 | ≤30 | 10000 |
| | 100 | 4. 1 | 0. 4 | 8. 9 | 0. 9 | 7. 2 | 0. 7 | 20 | 2 | | | | |
| 14 | 50 | 6. 2 | 0. 6 | 20. 7 | 2. 1 | 7. 9 | 0. 7 | 40. 3 | 4. 1 | 7000 | 3000 | ≤30 | 15000 |
| | 80 | 9 | 0. 9 | 27 | 2. 7 | 12. 7 | 1. 3 | 54. 1 | 5. 5 | | | | |
| | 100 | 9 | 0. 9 | 32 | 3. 3 | 12. 7 | 1. 3 | 62. 1 | 6. 3 | | | | |
| 17 | 50 | 18. 4 | 1. 9 | 39 | 4 | 29. 9 | 3 | 80. 5 | 8. 2 | 6500 | 3000 | ≤30 | 15000 |
| | 80 | 25. 3 | 2. 6 | 49. 5 | 5 | 31 | 3. 2 | 100. 1 | 10. 2 | | | | |
| | 100 | 27. 6 | 2. 8 | 62 | 6. 3 | 45 | 4. 6 | 124. 2 | 12. 7 | | | | |
| 20 | 50 | 28. 8 | 2. 9 | 64. 4 | 6. 6 | 39 | 4 | 112. 7 | 11. 5 | 5600 | 3000 | ≤30 | 15000 |
| | 80 | 39. 1 | 4 | 85 | 8. 8 | 54 | 5. 5 | 146. 1 | 14. 9 | | | | |
| | 100 | 46 | 4. 7 | 94. 3 | 9. 6 | 56 | 5. 8 | 169. 1 | 17. 2 | | | | |
| | 120 | 46 | 4. 7 | 100 | 10. 2 | 56 | 5. 8 | 169. 1 | 17. 2 | | | | |
| | 160 | 46 | 4. 7 | 112 | 10. 9 | 56 | 5. 8 | 169. 1 | 17. 2 | | | | |
| 25 | 50 | 44. 9 | 4. 6 | 113 | 11. 5 | 63 | 6. 5 | 213. 9 | 21. 8 | 4800 | 3000 | ≤30 | 15000 |
| | 80 | 72. 5 | 7. 4 | 158 | 16. 1 | 100 | 10. 2 | 293. 3 | 29. 9 | | | | |
| | 100 | 77. 1 | 7. 9 | 181 | 18. 4 | 124 | 12. 7 | 326. 6 | 33. 3 | | | | |
| | 120 | 77. 1 | 7. 9 | 192 | 19. 6 | 124 | 12. 7 | 349. 6 | 35. 6 | | | | |
| 32 | 50 | 87. 4 | 8. 9 | 248 | 25. 3 | 124 | 12. 7 | 439 | 44. 8 | 4000 | 3000 | ≤30 | 15000 |
| | 80 | 135. 7 | 13. 8 | 350 | 35. 6 | 192 | 19. 6 | 653 | 66. 6 | | | | |
| | 100 | 157. 6 | 16. 1 | 383 | 39. 1 | 248 | 25. 3 | 744 | 75. 9 | | | | |
| | 120 | 157. 6 | 16. 1 | 406 | 41. 4 | 248 | 25. 3 | 789 | 80. 5 | | | | |

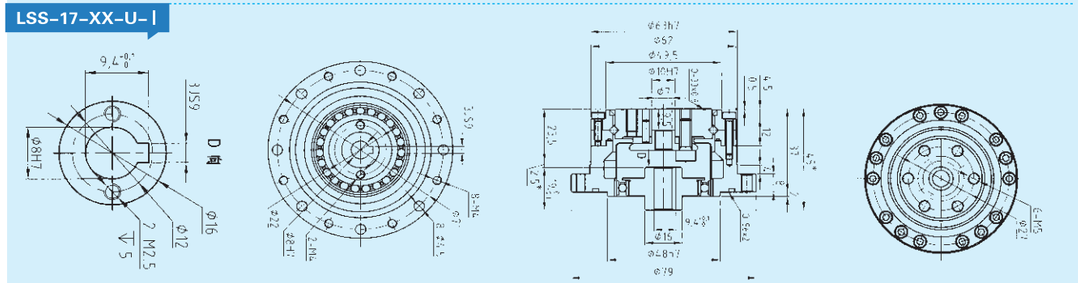
## LSG系列额定参数表

| 型号 | 速比 | 输入2000r/min时的额定转矩 | | 起动停止时的容许峰值转矩 | | 平均负载转矩的容许最大值 | | 瞬间容许最大转矩 | | 容许最高输入转速(脂润滑) | 容许平均输入转速(脂润滑) | 背隙 | 设计寿命 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nm | kgfm | Nm | kgfm | Nm | kgfm | Nm | kgfm | r/min | r/min | Arc Sec | Hour |
| 11 | 80 | 3. 8 | 0. 4 | 8. 5 | 0. 9 | 6. 8 | 0. 7 | 19. 1 | 1. 9 | 8000 | 3000 | ≤20 | 10000 |
| | 100 | 4. 1 | 0. 4 | 8. 9 | 0. 9 | 7. 2 | 0. 7 | 20 | 2 | | | | |
| 14 | 50 | 7 | 0. 7 | 23 | 2. 3 | 9 | 0. 9 | 46 | 4. 7 | 10000 | 6500 | ≤20 | 15000 |
| | 80 | 10 | 1 | 30 | 3. 1 | 14 | 1. 4 | 61 | 6. 2 | | | | |
| | 100 | 10 | 1. 0 | 36 | 3. 7 | 14 | 1. 4 | 70 | 7. 2 | | | | |
| 17 | 50 | 21 | 2. 1 | 44 | 4. 5 | 34 | 3. 4 | 91 | 9 | 7500 | 5600 | ≤20 | 20000 |
| | 80 | 29 | 2. 9 | 56 | 5. 7 | 35 | 3. 6 | 113 | 12 | | | | |
| | 100 | 31 | 3. 2 | 70 | 7. 2 | 51 | 5. 2 | 143 | 15 | | | | |
| 20 | 50 | 33 | 3. 3 | 73 | 7. 4 | 44 | 4. 5 | 127 | 13 | 7000 | 4800 | ≤20 | 20000 |
| | 80 | 44 | 4. 5 | 96 | 9. 8 | 61 | 6. 2 | 165 | 17 | | | | |
| | 100 | 52 | 5. 3 | 107 | 10. 9 | 64 | 6. 5 | 191 | 20 | | | | |
| | 120 | 52 | 5. 3 | 113 | 11. 5 | 64 | 6. 5 | 191 | 20 | | | | |
| | 160 | 52 | 5. 3 | 120 | 12. 2 | 64 | 6. 5 | 191 | 20 | | | | |
| 25 | 50 | 51 | 5. 2 | 127 | 13 | 72 | 7. 3 | 242 | 25 | 5600 | 4000 | ≤20 | 20000 |
| | 80 | 82 | 8. 4 | 178 | 18 | 113 | 12 | 332 | 34 | | | | |
| | 100 | 87 | 8. 9 | 204 | 21 | 140 | 14 | 369 | 38 | | | | |
| | 120 | 87 | 8. 9 | 217 | 22 | 140 | 14 | 395 | 40 | | | | |
| 32 | 50 | 99 | 10 | 281 | 29 | 140 | 14 | 497 | 51 | 5600 | 3000 | ≤20 | 20000 |
| | 80 | 153 | 16 | 395 | 40 | 217 | 22 | 738 | 75 | | | | |
| | 100 | 178 | 18 | 433 | 44 | 281 | 29 | 841 | 86 | | | | |
| | 120 | 178 | 18 | 459 | 47 | 281 | 29 | 892 | 91 | | | | |

## LSS-14-XX-U-I

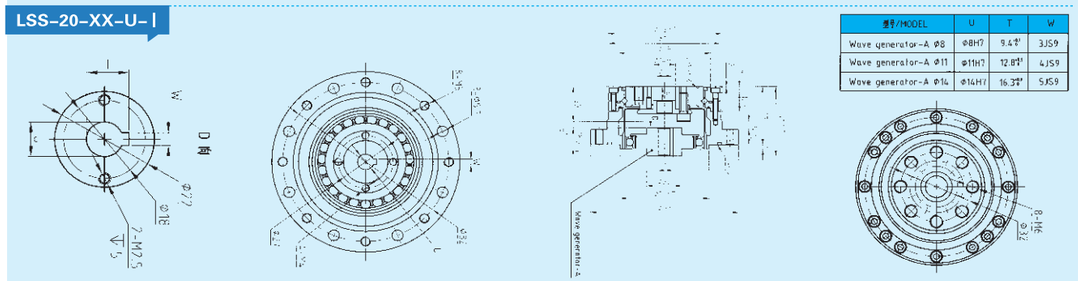



## LSS-17-XX-U-I

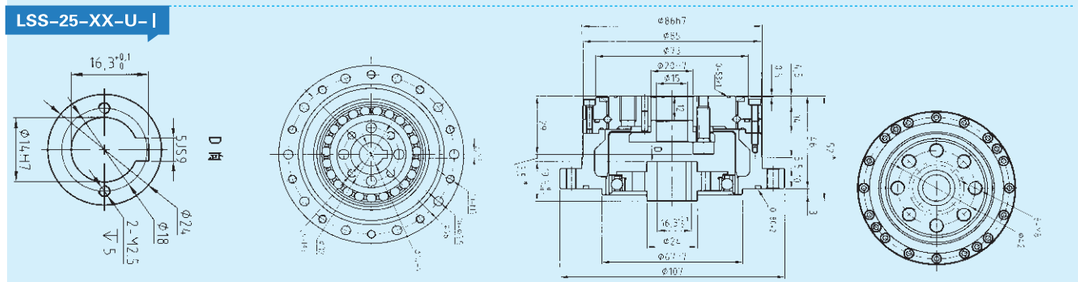


## LSS-20-XX-U-I

| 型号/MODEL | U | T | W |
|---|---|---|---|
| Wave generator-A Φ8 | Φ8H7 | 9.4$^{+0.1}_{0}$ | 3JS9 |
| Wave generator-A Φ11 | Φ11H7 | 12.8$^{+0.1}_{0}$ | 4JS9 |
| Wave generator-A Φ14 | Φ14H7 | 16.3$^{+0.1}_{0}$ | 5JS9 |

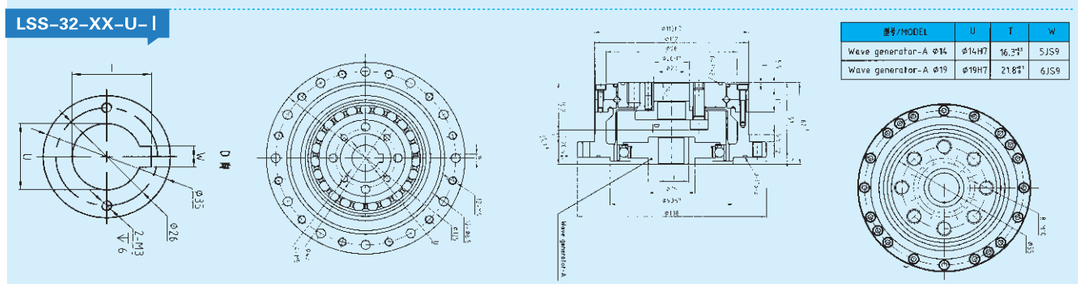


## LSS-25-XX-U-I



## LSS-32-XX-U-I

| 型号/MODEL | U | T | W |
|---|---|---|---|
| Wave generator-A Φ14 | Φ14H7 | 16.3$^{+0.1}_{0}$ | 5JS9 |
| Wave generator-A Φ19 | Φ19H7 | 21.8$^{+0.1}_{0}$ | 6JS9 |



*以上图纸尺寸仅供参考,实际根据客户提供的数据,会出具相关的技术参数及尺寸。





中空型（LHT-III）

输入轴型（LHT-IV）

简易型（LHT-I/LHT-II）

简易组合型（LHT-V）

### LHT系列

大口径中空孔扁平形状，易于操作的组合化产品。

### LHN系列

轻量型产品，相比标准品，重量减少了20%。

### LHG系列

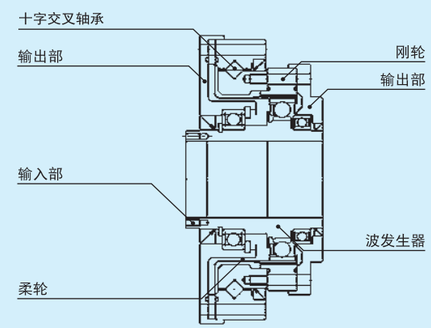
高转矩用，转矩容量比标准产品提升30%，使用寿命提高43%，追求高负载容量，高可靠性。

### 应用领域

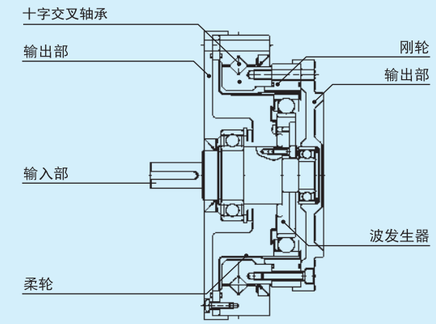
工业机器人　服务机器人　医疗器械设备　自动化及特种设备　印刷电路制造设备

## LHT系列组合型结构

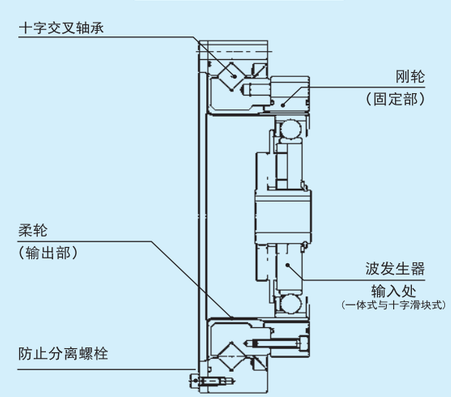
中空型（LHT/LHN/LHG-III）



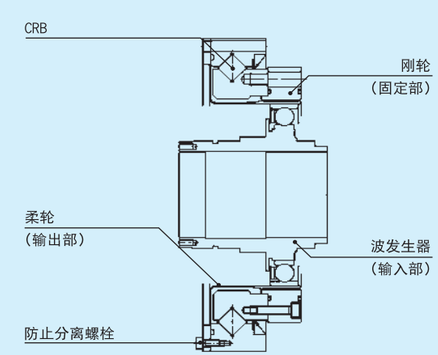

输入轴型（LHT/LHN/LHG-IV）




简易型（LHT/LHG-I/II）




简易组合型（LHT/LHG-V）



| 型号 | 速比 | 输入2000r/min时的额定转矩 | | 起动停止时的容许峰值转矩 | | 平均负载转矩的容许最大值 | | 瞬间容许最大转矩 | | 容许最高输入转速(脂润滑) | 容许平均输入转速(脂润滑) | 背隙 | 设计寿命 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nm | kgfm | Nm | kgfm | Nm | kgfm | Nm | kgfm | r/min | r/min | Arc Sec | Hour |
| 14 | 50 | 6. 2 | 0. 6 | 20. 7 | 2. 1 | 7. 9 | 0. 7 | 40. 3 | 4. 1 | 7000 | 3000 | ≤30 | 10000 |
| | 80 | 9 | 0. 9 | 27 | 2. 7 | 12. 7 | 1. 3 | 54. 1 | 5. 5 | | | | |
| | 100 | 9 | 0. 9 | 32 | 3. 3 | 12. 7 | 1. 3 | 62. 1 | 6. 3 | | | | |
| 17 | 50 | 18. 4 | 1. 9 | 39 | 4 | 29. 9 | 3 | 80. 5 | 8. 2 | 6500 | 3000 | ≤30 | 15000 |
| | 80 | 25. 3 | 2. 6 | 49. 5 | 5 | 31 | 3. 2 | 100. 1 | 10. 2 | | | | |
| | 100 | 27. 6 | 2. 8 | 62 | 6. 3 | 45 | 4. 6 | 124. 2 | 12. 7 | | | | |
| 20 | 50 | 28. 8 | 2. 9 | 64. 4 | 6. 6 | 39 | 4 | 112. 7 | 11. 5 | 5600 | 3000 | ≤30 | 15000 |
| | 80 | 39. 1 | 4 | 85 | 8. 8 | 54 | 5. 5 | 146. 1 | 14. 9 | | | | |
| | 100 | 46 | 4. 7 | 94. 3 | 9. 6 | 56 | 5. 8 | 169. 1 | 17. 2 | | | | |
| | 120 | 46 | 4. 7 | 100 | 10. 2 | 56 | 5. 8 | 169. 1 | 17. 2 | | | | |
| | 160 | 46 | 4. 7 | 100 | 10. 2 | 56 | 5. 8 | 169. 1 | 17. 2 | | | | |
| 25 | 50 | 44. 9 | 4. 6 | 113 | 11. 5 | 63 | 6. 5 | 213. 9 | 21. 8 | 4800 | 3000 | ≤30 | 15000 |
| | 80 | 72. 5 | 7. 4 | 158 | 16. 1 | 100 | 10. 2 | 293. 3 | 29. 9 | | | | |
| | 100 | 77. 1 | 7. 9 | 181 | 18. 4 | 124 | 12. 7 | 326. 6 | 33. 3 | | | | |
| | 120 | 77. 1 | 7. 9 | 192 | 19. 6 | 124 | 12. 7 | 349. 6 | 35. 6 | | | | |
| 32 | 50 | 87. 4 | 8. 9 | 248 | 25. 3 | 124 | 12. 7 | 439 | 44. 8 | 4000 | 3000 | ≤30 | 15000 |
| | 80 | 135. 7 | 13. 8 | 350 | 35. 6 | 192 | 19. 6 | 653 | 66. 6 | | | | |
| | 100 | 157. 6 | 16. 1 | 383 | 39. 1 | 248 | 25. 3 | 744 | 75. 9 | | | | |
| 40 | 100 | 308 | 37. 2 | 660 | 67 | 432 | 44 | 1232 | 126. 7 | 4000 | 3000 | ≤30 | 15000 |

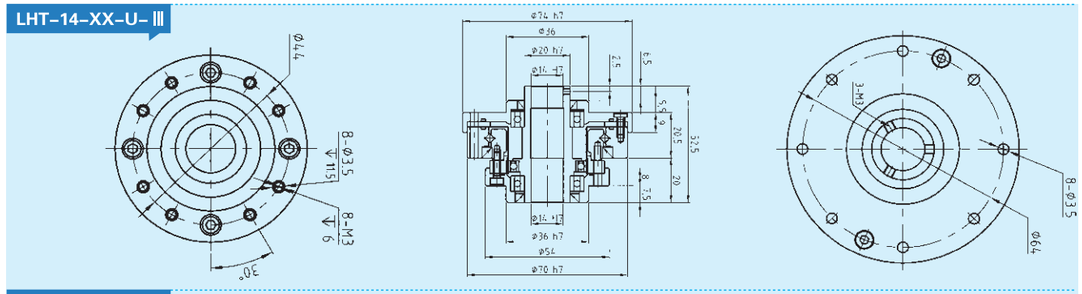
## LHG系列额定参数表

| 型号 | 速比 | 输入2000r/min时的额定转矩 | | 起动停止时的容许峰值转矩 | | 平均负载转矩的容许最大值 | | 瞬间容许最大转矩 | | 容许最高输入转速(脂润滑) | 容许平均输入转速(脂润滑) | 背隙 | 设计寿命 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nm | kgfm | Nm | kgfm | Nm | kgfm | Nm | kgfm | r/min | r/min | Arc Sec | Hour |
| 14 | 50 | 7 | 0. 7 | 23 | 2. 3 | 9 | 0. 9 | 46 | 4. 7 | 14000 | 8500 | ≤20 | 15000 |
| | 80 | 10 | 1 | 30 | 3. 1 | 14 | 1. 4 | 61 | 6. 2 | | | | |
| | 100 | 10 | 1. 0 | 36 | 3. 7 | 14 | 1. 4 | 70 | 7. 2 | | | | |
| 17 | 50 | 21 | 2. 1 | 44 | 4. 5 | 34 | 3. 4 | 91 | 9 | 10000 | 7300 | ≤20 | 20000 |
| | 80 | 29 | 2. 9 | 56 | 5. 7 | 35 | 3. 6 | 113 | 12 | | | | |
| | 100 | 31 | 3. 2 | 70 | 7. 2 | 51 | 5. 2 | 143 | 15 | | | | |
| 20 | 50 | 33 | 3. 3 | 73 | 7. 4 | 44 | 4. 5 | 127 | 13 | 10000 | 6500 | ≤20 | 20000 |
| | 80 | 44 | 4. 5 | 96 | 9. 8 | 61 | 6. 2 | 165 | 17 | | | | |
| | 100 | 52 | 5. 3 | 107 | 10. 9 | 64 | 6. 5 | 191 | 20 | | | | |
| | 120 | 52 | 5. 3 | 113 | 11. 5 | 64 | 6. 5 | 191 | 20 | | | | |
| | 160 | 52 | 5. 3 | 120 | 12. 2 | 64 | 6. 5 | 191 | 20 | | | | |
| 25 | 50 | 51 | 5. 2 | 127 | 13 | 72 | 7. 3 | 242 | 25 | 7500 | 5600 | ≤20 | 20000 |
| | 80 | 82 | 8. 4 | 178 | 18 | 113 | 12 | 332 | 34 | | | | |
| | 100 | 87 | 8. 9 | 204 | 21 | 140 | 14 | 369 | 38 | | | | |
| | 120 | 87 | 8. 9 | 217 | 22 | 140 | 14 | 395 | 40 | | | | |
| 32 | 50 | 99 | 10 | 281 | 29 | 140 | 14 | 497 | 51 | 7000 | 4800 | ≤20 | 20000 |
| | 80 | 153 | 16 | 395 | 40 | 217 | 22 | 738 | 75 | | | | |
| | 100 | 178 | 18 | 433 | 44 | 281 | 29 | 841 | 86 | | | | |
| 40 | 100 | 345 | 35 | 738 | 75 | 484 | 49 | 1400 | 143 | 5600 | 4000 | ≤20 | 20000 |

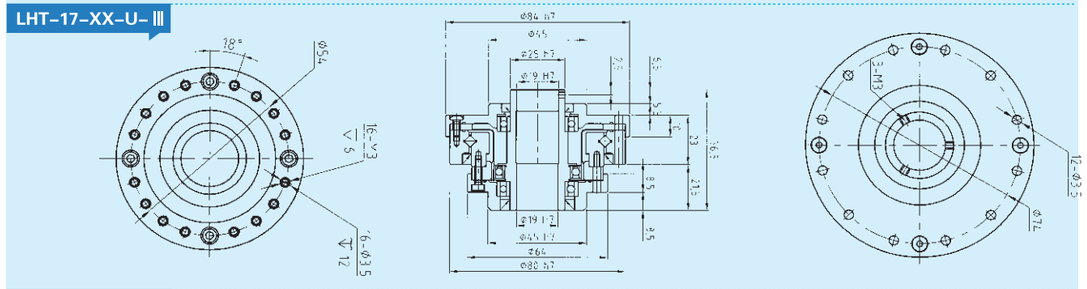




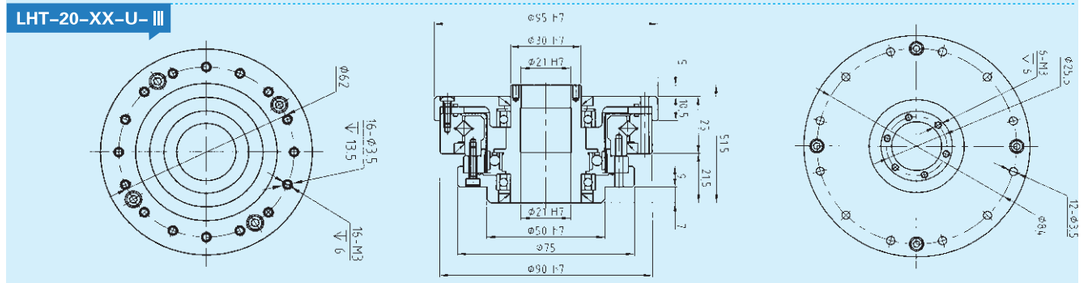
LHT-14-XX-U-Ⅲ



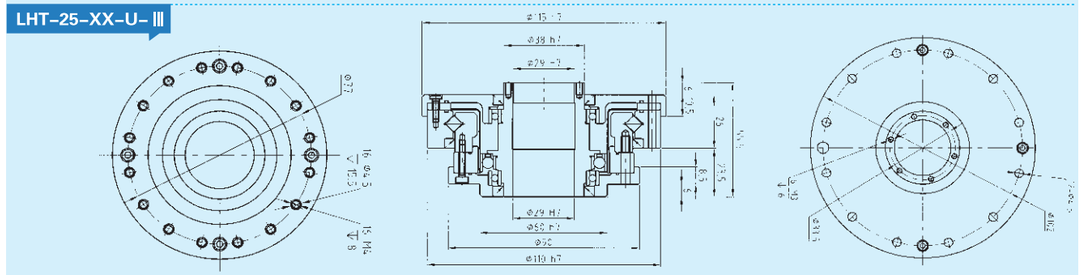
LHT-17-XX-U-Ⅲ



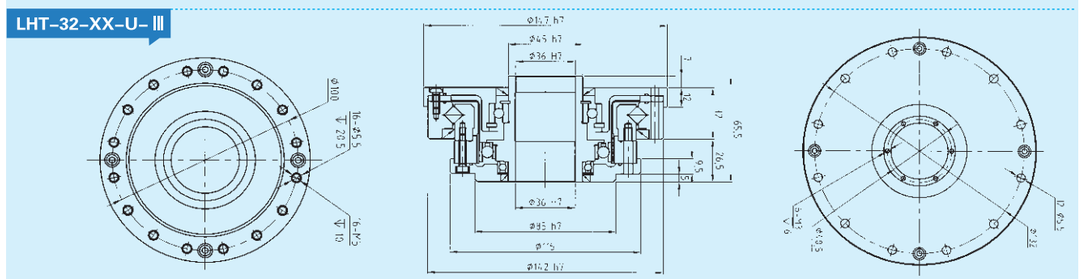
LHT-20-XX-U-Ⅲ



LHT-25-XX-U-Ⅲ



LHT-32-XX-U-Ⅲ



*以上图纸尺寸仅供参考,实际根据客户提供的数据,会出具相关的技术参数及尺寸。

## 型号定义 / MODEL ILLUMINATE

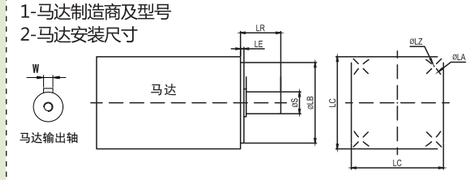
**AB060 – 10 – P □ / S(KW)-LB-LA-LZ**

减速机型式：
AB060/AB090/AB115/AB142/AB180
AB220

AE070/AE090/AE120/AE155/AE205
AE235

背隙：P2：标准背隙

马达型号：
1-马达制造商及型号
2-马达安装尺寸




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

例1：AB060-10-P2-14-50-70-M5
例2：AB060-10-P2-14K5-50-70-M5 *注：K：开键，不开键则省略

## 减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

| 规格 | | 级数 | 减速比 | AB042 | AB060 AE070 | AB090 AE090 | AB115 AE120 | AB142 AE155 | AB180 AE205 | AB220 AE235 | AB280 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 额定输入力矩T2B | Nm | 1 | 3 | 20 | 55 | 130 | 208 | 342 | 588 | 1140 | - |
| | | | 4 | 19 | 50 | 140 | 290 | 542 | 1050 | 1700 | 4035 |
| | | | 5 | 22 | 60 | 160 | 330 | 650 | 1200 | 2000 | 3505 |
| | | | 6 | 20 | 55 | 150 | 310 | 600 | 1100 | 1900 | - |
| | | | 7 | 19 | 50 | 140 | 300 | 550 | 1100 | 1800 | 2630 |
| | | | 8 | 17 | 45 | 120 | 260 | 500 | 1000 | 1600 | - |
| | | | 10 | 14 | 40 | 100 | 230 | 450 | 520 | 1220 | 1810 |
| | | 2 | 12 | 20 | 55 | 130 | 208 | 342 | 588 | 1140 | - |
| | | | 15 | 20 | 55 | 130 | 208 | 342 | 588 | 1140 | - |
| | | | 20 | 19 | 50 | 140 | 290 | 542 | 1050 | 1700 | 4035 |
| | | | 25 | 22 | 60 | 160 | 330 | 650 | 1200 | 2000 | 3505 |
| | | | 30 | 22 | 50 | 130 | 208 | 342 | 588 | 1140 | - |
| | | | 35 | 22 | 60 | 160 | 330 | 650 | 1200 | 2000 | 3505 |
| | | | 40 | 22 | 50 | 140 | 290 | 542 | 1050 | 1700 | 4035 |
| | | | 50 | 22 | 60 | 160 | 330 | 650 | 1200 | 2000 | 3505 |
| | | | 60 | 20 | 55 | 150 | 310 | 600 | 1100 | 1900 | - |
| | | | 70 | 19 | 50 | 140 | 300 | 550 | 1100 | 1800 | 2630 |
| | | | 80 | 17 | 45 | 120 | 260 | 600 | 1000 | 1600 | - |
| | | | 100 | 14 | 40 | 100 | 230 | 450 | 520 | 1220 | 1810 |
| 最大输入力矩T2B | Nm | 1,2 | 3~100 | 2倍额定输出力矩 | | | | | | | |
| 额定输入转速n1 | rpm | 1,2 | 3~100 | 5000 | 5000 | 4000 | 4000 | 3000 | 3000 | 2000 | 2000 |
| 最大输入转速n1B | rpm | 1,2 | 3~100 | 10000 | 10000 | 8000 | 8000 | 6000 | 6000 | 4000 | 3000 |
| 背隙P1 | arcmin | 1 | 3~10 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 |
| | | 2 | 12~100 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | |
| 背隙P2 | arcmin | 1 | 3~10 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 |
| | | 2 | 12~100 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤8 |
| 扭转刚性 | Nm/arcmi | 1,2 | 3~100 | 3 | 7 | 14 | 25 | 50 | 145 | 225 | |
| 容许径向力F2rB2 | N | 1,2 | 3~100 | 780 | 1530 | 3250 | 6700 | 9400 | 14500 | 50000 | 50000 |
| 容许轴向力F2a1B2 | N | 1,2 | 3~100 | 350 | 630 | 1300 | 3000 | 4000 | 6200 | 35000 | 35000 |
| 容许轴向力F2a2B2 | N | 1,2 | 3~100 | 390 | 765 | 1625 | 3350 | 4700 | 7250 | 25000 | 25000 |
| 使用寿命 | hr | 1,2 | 3~100 | 20000*（连续运转减半） | | | | | | | |
| 效率 η | % | 1 | 3~10 | ≥95% | | | | | | | |
| | | 2 | 12~100 | ≥90% | | | | | | | |
| 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 | ℃ | 1,2 | 3~100 | -10℃~+90℃ | | | | | | | |
| 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n1=3000rpm** | **dB** | **1,2** | **3~100** | **≤56** | **≤58** | **≤60** | **≤63** | **≤65** | **≤67** | **≤70** | **≤70** |

*注意 所有吊装工况请提前咨询我司技术并出具选型报告

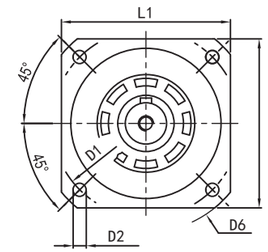


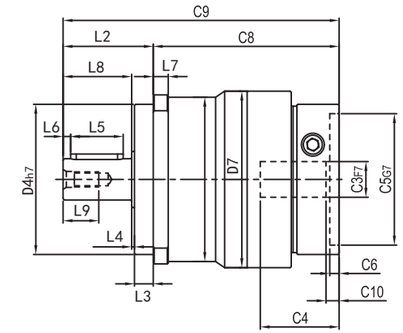


## 外形尺寸图表 / OUTLINE DIMENSION SHEET

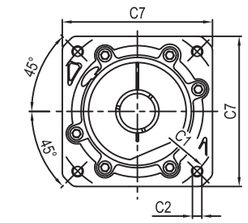
### AB-L1（单级）

输出端/OUTPUT



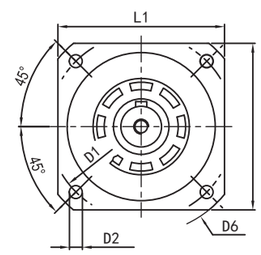



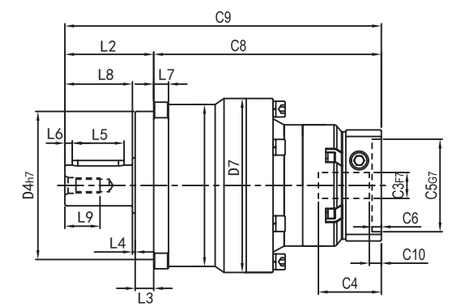

输入端/ INPUT



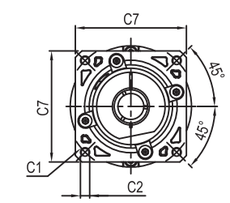

### AB-L2（双级）

输出端/OUTPUT

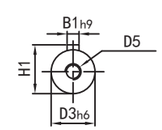



输入端/ INPUT




输出轴径\Output Diameter




轴型式

| 输出尺寸 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | D7 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AB060 | L1 | 70 | 5.5 | 16 | 50 | M5 | 80 | 66 | 60 | 37 | 7 | 1.5 | 22 | 3 | 6 | 28.5 | 15 | 5 | 18 |
| | L2 | | | | | | | | | | | | | | | | | 5 | 18 |
| AB090 | L1 | 100 | 7 | 22 | 80 | M8 | 116 | 94 | 90 | 48 | 10 | 1.5 | 28 | 4 | 8 | 36.5 | 19 | 6 | 24.5 |
| | L2 | | | | | | | | | | | | | | | | | 6 | 24.5 |
| AB115 | L1 | 130 | 9 | 32 | 110 | M12 | 152 | 119 | 115 | 65 | 12 | 2 | 40 | 5 | 10 | 51 | 28 | 10 | 35 |
| | L2 | | | | | | | | | | | | | | | | | 10 | 35 |
| AB142 | L1 | 165 | 11 | 40 | 130 | M16 | 186 | 151 | 142 | 97 | 15 | 3 | 65 | 5 | 12 | 79 | 36 | 12 | 43 |
| | L2 | | | | | | | | | | | | | | | | | 12 | 43 |
| AB180 | L1 | 215 | 13 | 55 | 160 | M20 | 240 | 184 | 180 | 105 | 20 | 3 | 70 | 6 | 15 | 82 | 42 | 16 | 59 |
| | L2 | | | | | | | | | | | | | | | | | 16 | 59 |
| AB220 | L1 | 250 | 17 | 75 | 180 | M20 | 292 | 256 | 220 | 138 | 30 | 3 | 90 | 7 | 20 | 105 | 42 | 20 | 79.5 |
| | L2 | | | | | | | | | | | | | | | | | 20 | 79.5 |
| AB280 | L1 | 315 | 18 | 80 | 250 | M20 | 365 | 290 | 280 | 145 | 30 | 5 | 90 | 10 | 30 | 110 | 42 | 22 | 85 |
| | L2 | | | | | | | | | | | | | | | | | 22 | 85 |

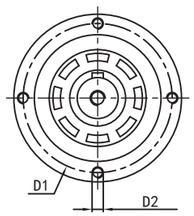
| 输入尺寸 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AB060 | L1 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 78.5≤85 | 115.5≤122 | 5.5≤12 |
| | L2 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 107.5≤114 | 144.5≤151 | 5.5≤12 |
| AB090 | L1 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 99≤117 | 147≤165 | 6≤19 |
| | L2 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 123≤129.5 | 171≤177.5 | 5.5≤12 |
| AB115 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 134≤151.5 | 199≤216.5 | 19.5≤28 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 150.5≤168.5 | 215.5≤233.5 | 6≤19 |
| AB142 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 155≤165 | 252≤262 | 19.5≤25 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 199≤216.5 | 296≤313.5 | 19.5≤28 |
| AB180 | L1 | 200 | M12 | 35 | 85 | 114.3 | 7 | 180 | 179≤214 | 284≤319 | 7.5≤44 |
| | L2 | 200 | M12 | 35 | 82 | 114.3 | 8 | 180 | 225.5≤235 | 330.5≤340 | 19.5≤30 |
| AB220 | L1 | 200 | M12 | 42 | 116 | 114.3 | 15 | 200 | 220≤230 | 358≤368 | 12.5≤22.5 |
| | L2 | 200 | M12 | 42 | 116 | 114.3 | 7 | 200 | 264≤299 | 402≤437 | 7.5≤44 |
| AB280 | L1 | 215 | M12 | 42 | 117 | 180 | 10 | 200 | 337≤401 | 482≤546 | 14.5≤49.5 |
| | L2 | 215 | M12 | 42 | 117 | 180 | 10 | 200 | 337≤401 | 482≤546 | 14.5≤49.5 |

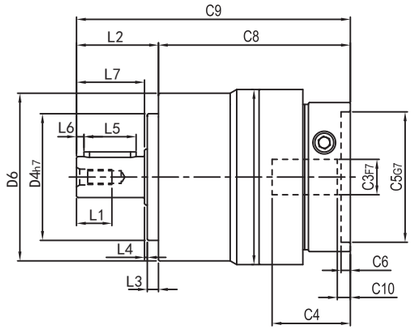
* 输入马达连接板尺寸，可根据客户要求单独定做
*The inout motor specific dimensions

## 外形尺寸图表 / OUTLINE DIMENSION SHEET

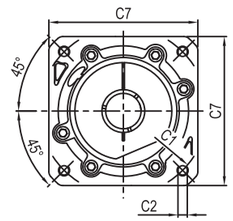
### AE-L1（单级）

输出端 / OUTPUT



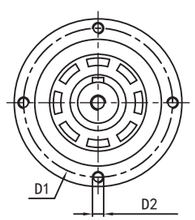



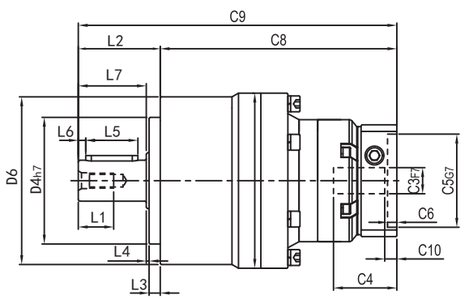

输入端 / INPUT



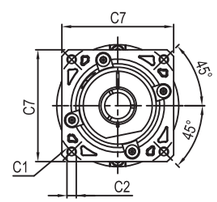

### AE-L2（双级）

输出端 / OUTPUT

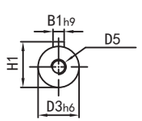



输入端 / INPUT




输出轴径\Output Diameter




轴型式

| 输出尺寸 | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | B1 | H1 |
| AE070 | L1 | 62 | M5 | 16 | 52 | M5 | 70 | 15 | 35 | 5 | 1.5 | 22 | 3 | 28.5 | 5 | 18 |
| | L2 | | | | | | | | | | | | | | 5 | 18 |
| AE090 | L1 | 80 | M6 | 22 | 68 | M8 | 90 | 19 | 44 | 6 | 1.5 | 28 | 4 | 36.5 | 6 | 24.5 |
| | L2 | | | | | | | | | | | | | | 6 | 24.5 |
| AE120 | L1 | 108 | M8 | 32 | 90 | M12 | 120 | 28 | 62 | 9 | 2 | 40 | 5 | 51 | 10 | 35 |
| | L2 | | | | | | | | | | | | | | 10 | 35 |
| AE155 | L1 | 140 | M10 | 40 | 120 | M16 | 155 | 36 | 94 | 12 | 3 | 65 | 5 | 79 | 12 | 43 |
| | L2 | | | | | | | | | | | | | | 12 | 43 |
| AE205 | L1 | 184 | M12 | 55 | 160 | M20 | 205 | 42 | 100 | 15 | 3 | 70 | 6 | 82 | 16 | 59 |
| | L2 | | | | | | | | | | | | | | 16 | 59 |
| AE235 | L1 | 210 | M16 | 75 | 180 | M20 | 235 | 42 | 126 | 18 | 3 | 90 | 7 | 105 | 20 | 79.5 |
| | L2 | | | | | | | | | | | | | | 20 | 79.5 |

| 输入尺寸 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
| AE070 | L1 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 80.5≤87 | 115.5≤122 | 5.5≤12 |
| | L2 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 109.5≤116 | 144.5≤151 | 5.5≤12 |
| AE090 | L1 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 103≤121 | 147≤165 | 6≤19 |
| | L2 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 127≤133.5 | 171≤177.5 | 5.5≤12 |
| AE120 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 137≤154.5 | 199≤216.5 | 19.5≤28 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 153.5≤171.5 | 215.5≤233.5 | 6≤19 |
| AE155 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 158≤168 | 252≤262 | 19.5≤25 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 202≤219.5 | 296≤313.5 | 19.5≤28 |
| AE205 | L1 | 200 | M12 | 35 | 85 | 114 | 7 | 180 | 184≤219 | 284≤319 | 7.5≤44 |
| | L2 | 200 | M12 | 35 | 82 | 114 | 8 | 180 | 230.5≤240 | 330.5≤340 | 19.5≤30 |
| AE235 | L1 | 200 | M12 | 42 | 116 | 114 | 15 | 200 | 232≤242 | 358≤368 | 12.5≤22.5 |
| | L2 | 200 | M12 | 42 | 116 | 114 | 7 | 180 | 276≤311 | 402≤437 | 7.5≤44 |

* 输入马达连接板尺寸，
可根据客户要求单独定做
*The inout motor
specific dimensions





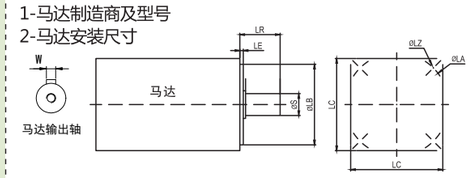
## 型号定义 / MODEL ILLUMINATE

ABR060 – 10 – P□ / S(KW)-LB-LA-LZ

减速机型式：
ABR060/ABR090/ABR115/ABR142/ABR180
ABR220
AER070/AER090/AER120/AER155

背隙 P2

马达型号：
1-马达制造商及型号
2-马达安装尺寸



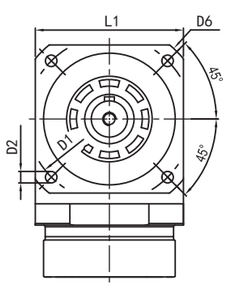

减速比：单级(L1)： 3,4,5,6,7,8,10
双级(L2)： 12,15,20,25,30,35,40,50,60,70,80,100

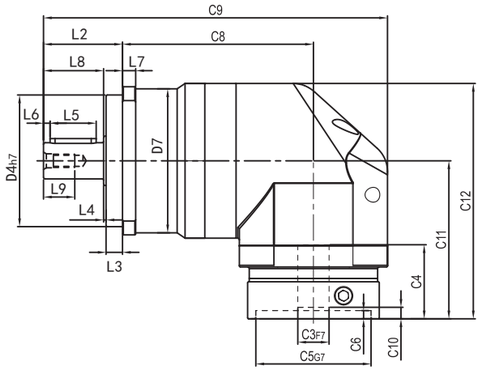
| 规 格 | | 级 数 | 减速比[1] | ABR060 AER070 | ABR090 AER090 | ABR115 AER120 | ABR142 AER155 | ABR180 | ABR220 |
|---|---|---|---|---|---|---|---|---|---|
| 额定输出力矩$T_{2N}$ | Nm | 1 | 3 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 4 | 50 | 140 | 290 | 542 | 1,050 | 1,700 |
| | | | 5 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 6 | 55 | 150 | 310 | 600 | 1,100 | 1,900 |
| | | | 7 | 50 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | | 8 | 50 | 140 | 290 | 542 | 1,000 | 1,600 |
| | | | 10 | 60 | 160 | 330 | 650 | 520 | 1,220 |
| | | | 14 | 50 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | 定货时备注L1级 | 20 | 40 | 100 | 230 | 450 | | |
| | | 2 | 12 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 15 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 20 | 50 | 140 | 290 | 542 | 1,050 | 1,700 |
| | | | 25 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 30 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 35 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 40 | 50 | 140 | 290 | 542 | 1,050 | 1,700 |
| | | | 50 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 60 | 55 | 150 | 310 | 600 | 1,200 | 2,000 |
| | | | 70 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 80 | 50 | 140 | 290 | 542 | 1,200 | 2,000 |
| | | | 100 | 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 | – | 100 | 230 | 450 | 520 | 1,220 |
| 最大输出力矩$T_{2B}$ | Nm | 1,2 | 3~200 | 2倍额定输出力矩 | | | | | |
| 额定输入转速$n_1$ | rpm | 1,2 | 3~200 | 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 | 8,000 | 8,000 | 6,000 | 6,000 | 4,000 |
| 背隙 **P1** | arcmin | 1 | 3~20 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 |
| | | 2 | 12~200 | ≤10 | ≤10 | ≤10 | ≤10 | ≤10 | ≤10 |
| 背隙 **P2** | arcmin | 1 | 3~20 | ≤10 | ≤10 | ≤10 | ≤10 | ≤10 | ≤10 |
| | | 2 | 12~200 | ≤12 | ≤12 | ≤12 | ≤12 | ≤12 | ≤12 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~200 | 7 | 14 | 25 | 50 | 145 | 225 |
| 容许径向力$F_{2rB}$[2] | N | 1,2 | 3~200 | 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 | 630 | 1,300 | 3,000 | 4,000 | 6,200 | 35,000 |
| 容许轴向力$F_{2a2B}$[2] | N | 1,2 | 3~200 | 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 | 12~200 | ≤92% | | | | | |
| 重量 | kg | 1 | 3~20 | 2.1 | 6.4 | 13 | 24.5 | 51 | 83 |
| | | 2 | 12~200 | 2.5 | 7.8 | 14.2 | 27.5 | 54 | 95 |
| 使用温度 | ℃ | 1,2 | 3~200 | -10℃~+90℃ | | | | | |
| 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 | ≤63 | ≤65 | ≤68 | ≤70 | ≤72 | ≤74 |

## 外形尺寸图表 / OUTLINE DIMENSION SHEET

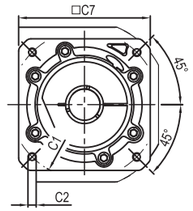
### ABR-L1（单级）

输出端 / OUTPUT



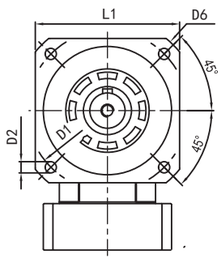



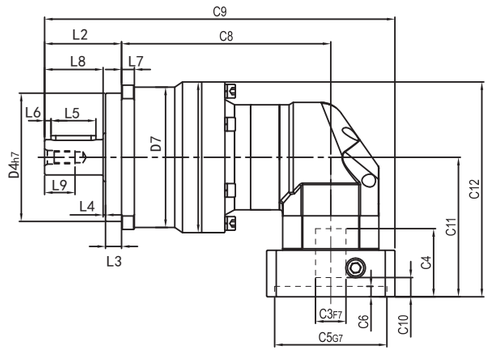

输入端 / INPUT



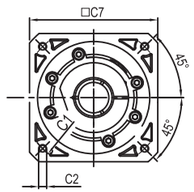

### ABR-L2（双级）

输出端 / OUTPUT

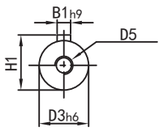



输入端 / INPUT




输出轴径\Output Diameter




轴型式

| 输出尺寸 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
| ABR060 | L1 | 70 | 5.5 | 16 | 50 | M5 | 80 | 60 | 37 | 7 | 1.5 | 22 | 3 | 6 | 28.5 | 15 | 5 | 18 |
| | L2 | | | | | | | | | | | | | | | | | |
| ABR090 | L1 | 100 | 7 | 22 | 80 | M8 | 116 | 90 | 48 | 10 | 1.5 | 28 | 4 | 8 | 36.5 | 19 | 6 | 24.5 |
| | L2 | | | | | | | | | | | | | | | | | |
| ABR115 | L1 | 130 | 9 | 32 | 110 | M12 | 152 | 115 | 65 | 12 | 2 | 40 | 5 | 10 | 51 | 28 | 10 | 35 |
| | L2 | | | | | | | | | | | | | | | | | |
| ABR142 | L1 | 165 | 11 | 40 | 130 | M16 | 186 | 142 | 97 | 15 | 3 | 65 | 5 | 12 | 79 | 36 | 12 | 43 |
| | L2 | | | | | | | | | | | | | | | | | |
| ABR180 | L1 | 215 | 13 | 55 | 160 | M20 | 240 | 180 | 105 | 20 | 3 | 70 | 6 | 15 | 82 | 42 | 16 | 59 |
| | L2 | | | | | | | | | | | | | | | | | |
| ABR220 | L1 | 250 | 17 | 75 | 180 | M20 | 292 | 220 | 138 | 30 | 3 | 90 | 7 | 20 | 105 | 42 | 20 | 79.5 |
| | L2 | | | | | | | | | | | | | | | | | |

| 输入尺寸 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 |
| ABR060 | L1 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 86 | 153≤163 | 6≤19 | 77.5≤87 | 111.7≤121.2 |
| | L2 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 115 | 182≤192 | 5.5≤12 | 77.5≤87 | 111.7≤121.2 |
| ABR090 | L1 | 90 | M6 | 19 | 45 | 70 | 6.5 | 80 | 116 | 209≤229 | 6≤19 | 96≤120 | 143≤167 |
| | L2 | 90 | M6 | 19 | 43 | 70 | 6.5 | 80 | 130.5 | 208.5≤221.5 | 5.5≤12 | 77.5≤87 | 124.5≤134 |
| ABR115 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 137.5 | 267.5≤292.5 | 19.5≤28 | 135.5≤152.5 | 195≤212 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 167.5 | 277.5≤297.5 | 6≤19 | 96≤120 | 155.5≤179.5 |
| ABR142 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 170 | 338≤357 | 19.5≤25 | 150≤160 | 227.2≤237.2 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 202.5 | 364.5≤389.5 | 19.5≤28 | 135.5≤152.5 | 210.7≤227.7 |
| ABR180 | L1 | 200 | M12 | 35 | 82 | 114 | 8 | 180 | 179≤214 | 284≤319 | 7.5≤44 | - | - |
| | L2 | 200 | M12 | 35 | 82 | 114 | 8 | 180 | 225.5≤235 | 330.5≤340 | 19.5≤30 | - | - |
| ABR220 | L1 | 235 | M12 | 55 | 119 | 200 | 10 | 220 | 220≤230 | 358≤368 | 12.5≤22.5 | - | - |
| | L2 | 235 | M12 | 55 | 119 | 200 | 10 | 220 | 264≤299 | 402≤437 | 7.5≤44 | - | - |

* 输入马达连接板尺寸，
可根据客户要求单独定做
*The inout motor
specific dimensions

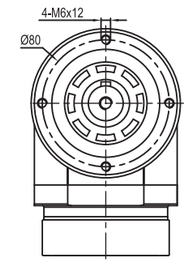


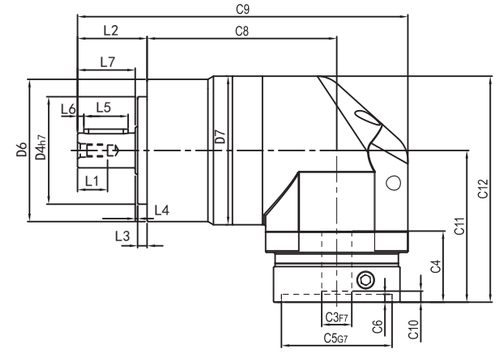


## 外形尺寸图表 / OUTLINE DIMENSION SHEET

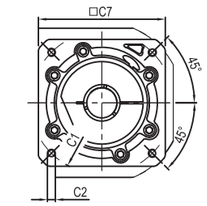
### AER-L1（单级）

输出端 / OUTPUT



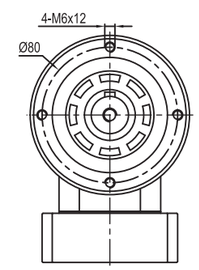



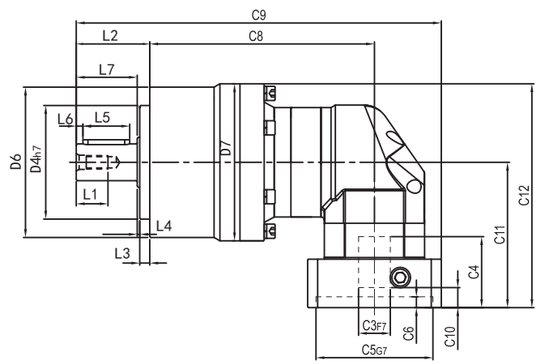

输入端 / INPUT



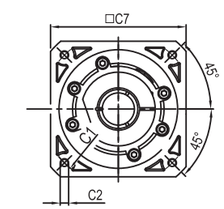

### AER-L2（双级）

输出端 / OUTPUT

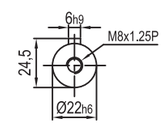



输入端 / INPUT




输出轴径\Output Diameter




轴型式

| 输出尺寸 | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | B1 | H1 |
| AER070 | L1 | 62 | M5 | 16 | 52 | M5 | 70 | 15 | 35 | 5 | 1.5 | 22 | 3 | 29 | 5 | 18 |
| | L2 | | | | | | | | | | | | | | | |
| AER090 | L1 | 80 | M6 | 22 | 68 | M8 | 90 | 19 | 44 | 6 | 1.5 | 28 | 4 | 37 | 6 | 25 |
| | L2 | | | | | | | | | | | | | | | |
| AER120 | L1 | 108 | M8 | 32 | 90 | M12 | 120 | 28 | 62 | 9 | 2 | 40 | 5 | 51 | 10 | 35 |
| | L2 | | | | | | | | | | | | | | | |
| AER155 | L1 | 140 | M10 | 40 | 120 | M16 | 155 | 36 | 94 | 12 | 3 | 65 | 5 | 79 | 12 | 43 |
| | L2 | | | | | | | | | | | | | | | |

| 输入尺寸 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 |
| AER070 | L1 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 88 | 153≤163 | 5.5≤12 | 77.5≤87 | 112.5≤122 |
| | L2 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 117 | 182≤192 | 5.5≤12 | 77.5≤87 | 112.5≤122 |
| AER090 | L1 | 90 | M6 | 19 | 45 | 70 | 6.5 | 80 | 120 | 209≤229 | 6≤19 | 96≤120 | 143≤167 |
| | L2 | 90 | M6 | 19 | 42.5 | 70 | 6.5 | 80 | 135 | 208.5≤221.5 | 5.5≤12 | 77.5≤87 | 124.5≤134 |
| AER120 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 141 | 267.5≤292.5 | 19.5≤28 | 135.5≤152.5 | 195.5≤212.5 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 171 | 277.5≤297.5 | 6≤19 | 96≤120 | 156≤180 |
| AER155 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 173 | 338≤357 | 19.5≤25 | 150≤160 | 227.5≤237.5 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 206 | 364.5≤389.5 | 19.5≤28 | 135.5≤152.5 | 213≤230 |

## 型号定义 / MODEL ILLUMINATE

**AFP060 – 10 – P□ / S(KW)-LB-LA-LZ**

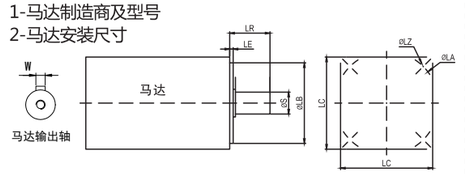
减速机型式：

AFP060/AFP090/AFP115/AFP160

AEP060/AEP090/AEP115/AEP160

背隙 P2

马达型号：
1-马达制造商及型号
2-马达安装尺寸




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

例1：AFP060-10-P2-14-50-70-M5
例2：AFP060-10-P2-14K5-50-70-M5 *注：K：开键，不开键则省略

## 减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

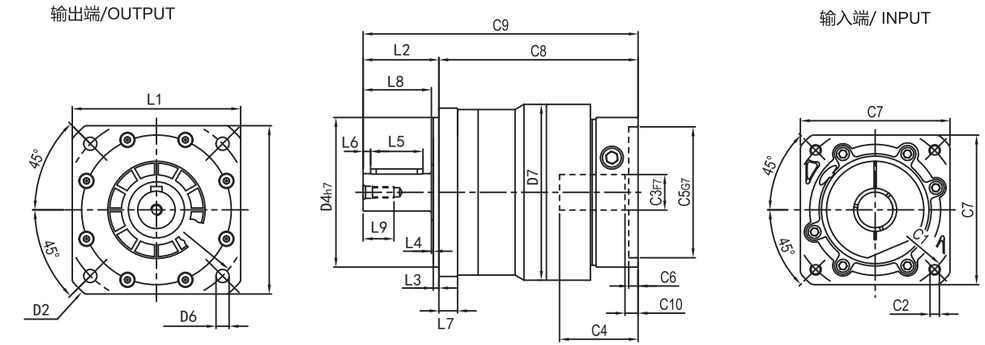
| 规 格 | | 级 数 | 减速比[1] | AEP060 AFP060 | AEP090 AFP090 | AEP115 AFP115 | AEP160 AFP160 |
|---|---|---|---|---|---|---|---|
| 额定输出力矩$T_{2N}$ | Nm | 1 | 3 | 55 | 130 | 208 | 342 |
| | | | 4 | 50 | 140 | 290 | 542 |
| | | | 5 | 60 | 160 | 330 | 650 |
| | | | 6 | 55 | 150 | 310 | 600 |
| | | | 7 | 50 | 140 | 300 | 550 |
| | | | 8 | 45 | 120 | 260 | 500 |
| | | | 10 | 40 | 100 | 230 | 450 |
| | | 2 | 12 | 55 | 130 | 208 | 342 |
| | | | 15 | 55 | 130 | 208 | 342 |
| | | | 20 | 50 | 140 | 290 | 542 |
| | | | 25 | 60 | 160 | 330 | 650 |
| | | | 30 | 55 | 130 | 208 | 342 |
| | | | 35 | 60 | 160 | 330 | 650 |
| | | | 40 | 50 | 140 | 290 | 542 |
| | | | 50 | 60 | 160 | 330 | 650 |
| | | | 60 | 55 | 150 | 310 | 600 |
| | | | 70 | 50 | 140 | 300 | 550 |
| | | | 80 | 45 | 120 | 260 | 500 |
| | | | 100 | 40 | 100 | 230 | 450 |
| 最大输出力矩$T_{2B}$ | Nm | 1,2 | 3~100 | 2倍额定输出力矩 | | | |
| 额定输入转速$n_1$ | rpm | 1,2 | 3~100 | 5,000 | 4,000 | 4,000 | 3,000 |
| 最大输入转速$n_{1B}$ | rpm | 1,2 | 3~100 | 10,000 | 8,000 | 8,000 | 6,000 |
| 背隙 **P2** | arcmin | 1 | 3~10 | ≤6 | ≤6 | ≤6 | ≤6 |
| | | 2 | 12~100 | ≤8 | ≤8 | ≤8 | ≤8 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~100 | 7 | 14 | 25 | 50 |
| 容许径向力$F_{2rB}$[2] | N | 1,2 | 3~100 | 1,530 | 3,250 | 6,700 | 9,400 |
| 容许轴向力$F_{2a1B}$[2] | N | 1,2 | 3~100 | 630 | 1,300 | 3,000 | 4,000 |
| 容许轴向力$F_{2a2B}$[2] | N | 1,2 | 3~100 | 765 | 1,625 | 3,350 | 4,700 |
| 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 |
| | | 2 | 12~100 | 1.9 | 4.1 | 9 | 17.5 |
| 使用温度 | ℃ | 1,2 | 3~100 | -10℃~+90℃ | | | |
| 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（$n_1$=3000rpm） | dB | 1,2 | 3~100 | ≤58 | ≤60 | ≤63 | ≤65 |



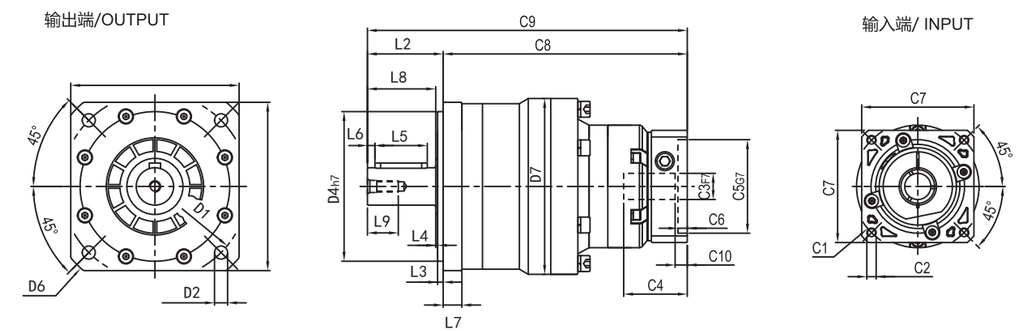


## 外形尺寸图表 / OUTLINE DIMENSION SHEET

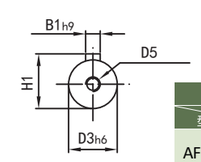
### AFP-L1（单级）




### AFP-L2（双级）




### 输出轴径\Output Diameter




轴型式

**输出尺寸**

| 型号 \ 尺寸 | | D1 | D2 | D3 | D4 | D5 | D6 | D8 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AFP060 | L1 | 70 | 5.5 | 16 | 50 | M5 | 82 | 66 | 62 | 33 | 3 | 1.5 | 22 | 3 | 8 | 28.5 | 15 | 5 | 18 |
| | L2 | | | | | | | | | | | | | | | | | 5 | 18 |
| AFP090 | L1 | 100 | 7 | 22 | 80 | M8 | 118 | 94 | 90 | 41 | 3 | 1 | 28 | 4 | 10 | 36.5 | 17 | 6 | 24.5 |
| | L2 | | | | | | | | | | | | | | | | | 6 | 24.5 |
| AFP115 | L1 | 130 | 9 | 32 | 110 | M12 | 160 | 119 | 120 | 55 | 4 | 1 | 40 | 5 | 15 | 50 | 23 | 10 | 35 |
| | L2 | | | | | | | | | | | | | | | | | 10 | 35 |
| AFP160 | L1 | 185 | 11 | 40 | 130 | M16 | 220 | 151 | 175 | 87 | 5 | 3 | 65 | 5 | 16 | 79 | 36 | 12 | 43 |
| | L2 | | | | | | | | | | | | | | | | | 12 | 43 |

**输入尺寸**

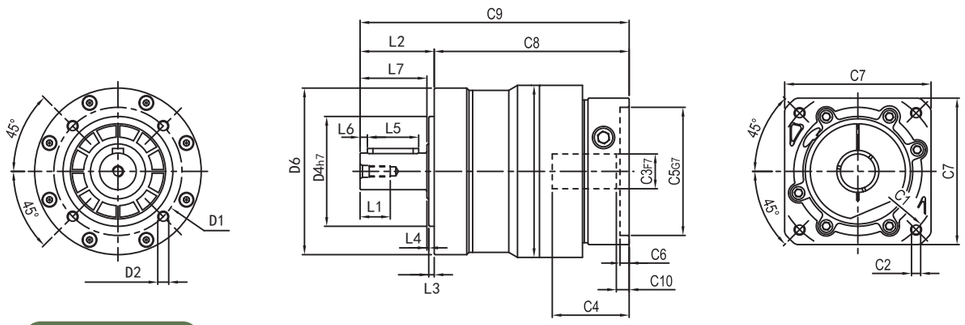
| 型号 \ 尺寸 | | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AFP060 | L1 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 82.5≤89 | 115.5≤122 | 5.5≤12 |
| | L2 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 111.5≤118 | 144.5≤151 | 5.5≤12 |
| AFP090 | L1 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 106.5≤124.5 | 147≤165 | 6≤19 |
| | L2 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 130.5≤137 | 171≤177.5 | 5.5≤12 |
| AFP115 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 143≤160.5 | 198≤215.5 | 19.5≤28 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 10 | 130 | 159.5≤177.5 | 230≤232.5 | 6≤19 |
| AFP160 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 165≤175 | 252≤262 | 19.5≤25 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 209≤226.5 | 296≤313.5 | 19.5≤28 |

* 输入马达连接板尺寸，可根据客户要求单独定做
*The inout motor specific dimensions

## 外形尺寸图表 / OUTLINE DIMENSION SHEET

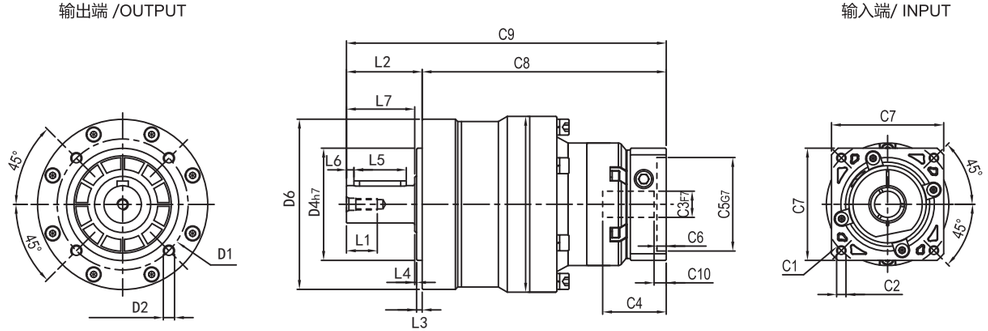
### AEP-L1（单级）

输出端/ OUTPUT　　输入端/INPUT

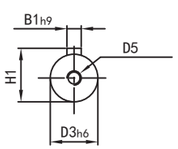



### AEP-L2（双级）

输出端 /OUTPUT　　输入端/ INPUT




### 输出轴径\Output Diameter




轴型式

**输出尺寸**

| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | B1 | H1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AEPP060 | L1 | 52 | M5 | 16 | 40 | M5 | 65 | 15 | 33 | 3 | 1.5 | 22 | 3 | 28.5 | 5 | 18 |
| | L2 | | | | | | | | | | | | | | 5 | 18 |
| AEP090 | L1 | 70 | M6 | 22 | 60 | M8 | 91 | 16.5 | 40.5 | 3 | 1 | 28 | 4 | 36.5 | 6 | 24.5 |
| | L2 | | | | | | | | | | | | | | 6 | 24.5 |
| AEP120 | L1 | 100 | M10 | 32 | 80 | M12 | 120 | 23 | 55 | 4 | 1 | 40 | 5 | 50 | 10 | 35 |
| | L2 | | | | | | | | | | | | | | 10 | 35 |
| AEP160 | L1 | 145 | M12 | 40 | 130 | M16 | 160 | 36 | 87 | 5 | 3 | 65 | 5 | 79 | 12 | 43 |
| | L2 | | | | | | | | | | | | | | 12 | 43 |

**输入尺寸**

| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AEPP060 | L1 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 82.5≤89 | 115.5≤122 | 5.5≤12 |
| | L2 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 111.5≤118 | 144.5≤151 | 5.5≤12 |
| AEP090 | L1 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 106.5≤124.5 | 147≤165 | 6≤19 |
| | L2 | 90 | M6 | 19 | 42 | 70 | 6.5 | 86 | 130.5≤137 | 171≤177.5 | 5.5≤12 |
| AEP120 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 143≤160.5 | 198≤215.5 | 19.5≤28 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 159.5≤177.5 | 214.5≤232.5 | 6≤19 |
| AEP160 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 165≤175 | 252≤262 | 19.5≤25 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 209≤226.5 | 296≤313.5 | 19.5≤28 |

* 输入马达连接板尺寸，
可根据客户要求单独定做
*The inout motor
specific dimensions





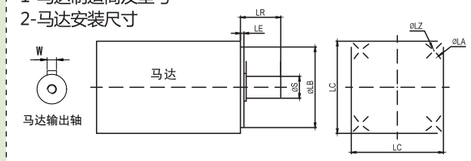
## 型号定义 / MODEL ILLUMINATE

**AFPR060 – 10 – P□ / S(KW)-LB-LA-LZ**

减速机型式：
AFPR060/AFPR090/AFPR115/AFPR160
AEPR060/AEPR090/AEPR115/AEPR160

背隙 P2

马达型号：
1-马达制造商及型号
2-马达安装尺寸

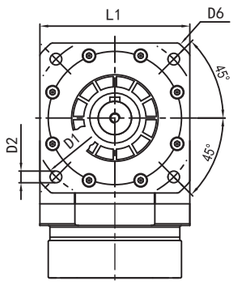


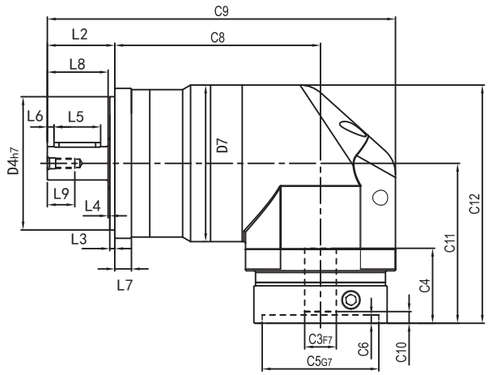

减速比：单级(L1)： 3,4,5,6,7,8,10
双级(L2)： 12,15,20,25,30,35,40,50,60,70,80,100

| 规 格 | | 级 数 | 减速比[1] | AEPR060 AFPR060 | AEPR090 AFPR090 | AEPR115 AFPR115 | AEPR160 AFPR160 |
|---|---|---|---|---|---|---|---|
| 额定输出力矩$T_{2N}$ | Nm | 1 | 3 | 55 | 130 | 208 | 342 |
| | | | 4 | 50 | 140 | 290 | 542 |
| | | | 5 | 60 | 160 | 330 | 650 |
| | | | 6 | 55 | 150 | 310 | 600 |
| | | | 7 | 50 | 140 | 300 | 550 |
| | | | 8 | 50 | 140 | 290 | 542 |
| | | | 10 | 60 | 160 | 330 | 650 |
| | | | 14 | 50 | 140 | 300 | 550 |
| | | 定货时备注L1级 | 20 | 40 | 100 | 230 | 450 |
| | | 2 | 12 | 55 | 130 | 208 | 342 |
| | | | 15 | 55 | 130 | 208 | 342 |
| | | | 20 | 50 | 140 | 290 | 542 |
| | | | 25 | 60 | 160 | 330 | 650 |
| | | | 30 | 55 | 130 | 208 | 342 |
| | | | 35 | 60 | 160 | 330 | 650 |
| | | | 40 | 50 | 140 | 290 | 542 |
| | | | 50 | 60 | 160 | 330 | 650 |
| | | | 60 | 55 | 150 | 310 | 600 |
| | | | 70 | 60 | 160 | 330 | 650 |
| | | | 80 | 50 | 140 | 290 | 542 |
| | | | 100 | 60 | 160 | 330 | 650 |
| | | | 120 | – | 150 | 310 | 600 |
| | | | 140 | – | 140 | 300 | 550 |
| | | | 160 | – | 120 | 260 | 500 |
| | | | 200 | – | 100 | 230 | 450 |
| 最大输出力矩$T_{2B}$ | Nm | 1,2 | 3~200 | 2倍额定输出力矩 | | | |
| 额定输入转速$n_1$ | rpm | 1,2 | 3~200 | 5,000 | 4,000 | 4,000 | 3,000 |
| 最大输入转速$n_{1B}$ | rpm | 1,2 | 3~200 | 10,000 | 8,000 | 8,000 | 6,000 |
| 背隙 **P2** | arcmin | 1 | 3~20 | ≤13 | ≤13 | ≤13 | ≤13 |
| | | 2 | 12~200 | ≤15 | ≤15 | ≤15 | ≤15 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~200 | 7 | 14 | 25 | 50 |
| 容许径向力$F_{2rB}$[2] | N | 1,2 | 3~200 | 1,530 | 3,250 | 6,700 | 9,400 |
| 容许轴向力$F_{2a1B}$[2] | N | 1,2 | 3~200 | 630 | 1,300 | 3,000 | 4,000 |
| 容许轴向力$F_{2a2B}$[2] | N | 1,2 | 3~200 | 765 | 1,625 | 3,350 | 4,700 |
| 使用寿命 | hr | 1,2 | 3~200 | 20,000* | | | |
| 效率 η | % | 1 | 3~20 | ≤95% | | | |
| | | 2 | 12~200 | ≤92% | | | |
| 重量 | kg | 1 | 3~20 | 2.1 | 6.4 | 13 | 24.5 |
| | | 2 | 12~200 | 2.5 | 7.8 | 14.2 | 27.5 |
| 使用温度 | ℃ | 1,2 | 3~200 | -10℃~+90℃ | | | |
| 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 | ≤63 | ≤65 | ≤68 | ≤70 |

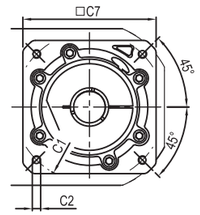
## AFPR-L1（单级）

输出端 / OUTPUT



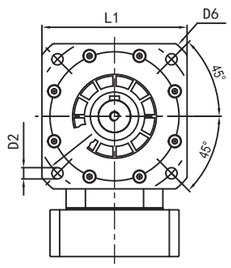



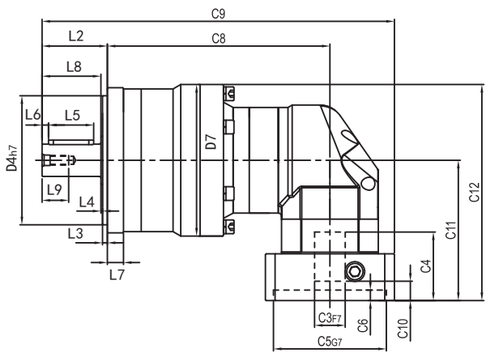

输入端 / INPUT



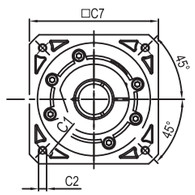

## AFPR-L2（双级）

输出端 / OUTPUT

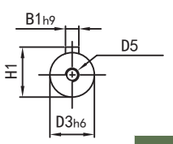



输入端 / INPUT




### 输出轴径\Output Diameter




轴型式

| 输出尺寸 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
| AFPR060 | L1<br>L2 | 70 | 5.5 | 16 | 50 | M5 | 80 | 60 | 33 | 3 | 1.5 | 22 | 3 | 8 | 28.5 | 15 | 5 | 18 |
| AFPR090 | L1<br>L2 | 100 | 7 | 22 | 80 | M8 | 116 | 90 | 40.5 | 3 | 1 | 28 | 4 | 10 | 36.5 | 19 | 6 | 24.5 |
| AFPR115 | L1<br>L2 | 130 | 9 | 32 | 110 | M12 | 152 | 115 | 56 | 4 | 1 | 40 | 5 | 15 | 51 | 28 | 10 | 35 |
| AFPR160 | L1<br>L2 | 165 | 11 | 40 | 130 | M16 | 186 | 142 | 87 | 5 | 3 | 65 | 5 | 16 | 79 | 36 | 12 | 43 |

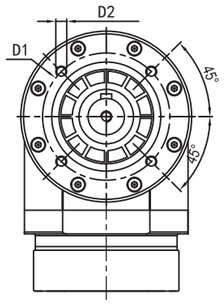
| 输入尺寸 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 |
| AFPR060 | L1 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 86 | 153≤163 | 6≤19 | 77.5≤87 | 111.7≤121.2 |
| | L2 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 115 | 182≤192 | 5.5≤12 | 77.5≤87 | 111.7≤121.2 |
| AFPR090 | L1 | 90 | M6 | 19 | 45 | 70 | 6.5 | 80 | 116 | 209≤229 | 6≤19 | 96≤120 | 143≤167 |
| | L2 | 90 | M6 | 19 | 42.5 | 70 | 6.5 | 80 | 131 | 208.5≤221.5 | 5.5≤12 | 77.5≤87 | 124.5≤134 |
| AFPR115 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 138 | 267.5≤292.5 | 19.5≤28 | 135.5≤152.5 | 195≤212 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 168 | 277.5≤297.5 | 6≤19 | 96≤120 | 155.5≤179.5 |
| AFPR160 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 170 | 338≤357 | 19.5≤25 | 150≤160 | 227.2≤237.2 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 203 | 364.5≤389.5 | 19.5≤28 | 135.5≤152.5 | 210.7≤227.7 |

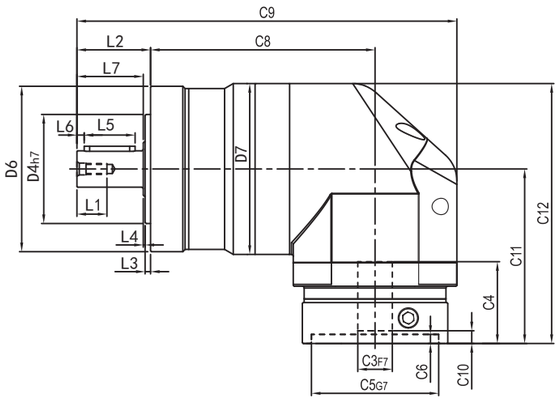




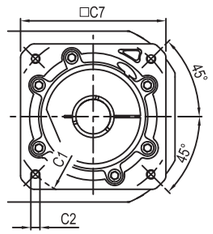
## AEPR-L1（单级）

输出端/ OUTPUT



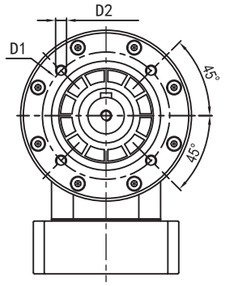



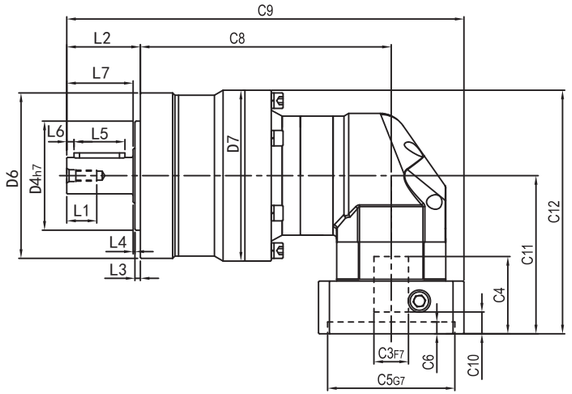

输入端/INPUT



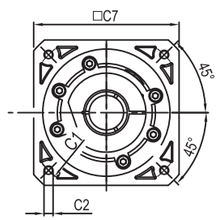

## AEPR-L2（双级）

输出端 /OUTPUT

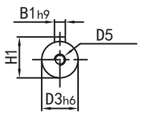



输入端/ INPUT




### 输出轴径\Output Diameter




轴型式

| 输出尺寸 | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | B1 | H1 |
| AEPR060 | L1<br>L2 | 52 | M5 | 16 | 40 | M5 | 65 | 15 | 33 | 3 | 1.5 | 22 | 3 | 28.5 | 5 | 18 |
| AEPR090 | L1<br>L2 | 70 | M6 | 22 | 80 | M8 | 91 | 16.5 | 40.5 | 3 | 1 | 28 | 4 | 36.5 | 6 | 24.5 |
| AEPR115 | L1<br>L2 | 100 | M10 | 32 | 110 | M12 | 120 | 23 | 55 | 4 | 1 | 40 | 5 | 50 | 6 | 24.5 |
| AEPR160 | L1<br>L2 | 145 | M12 | 40 | 130 | M16 | 160 | 36 | 87 | 5 | 3 | 65 | 5 | 79 | 10 | 35 |

| 输入尺寸 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 |
| AEPR060 | L1 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 86 | 153≤163 | 5.5≤12 | 77.5≤87 | 111.7≤121.2 |
| | L2 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 115 | 182≤192 | 5.5≤12 | 77.5≤87 | 111.7≤121.2 |
| AEPR090 | L1 | 90 | M6 | 19 | 45 | 70 | 6.5 | 80 | 116 | 209≤229 | 6≤19 | 96≤120 | 143≤167 |
| | L2 | 90 | M6 | 19 | 42.5 | 70 | 6.5 | 80 | 131 | 208.5≤221.5 | 5.5≤12 | 77.5≤87 | 124.5≤134 |
| AEPR115 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 138 | 267.5≤292.5 | 19.5≤28 | 135.5≤152.5 | 195.5≤212.5 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 168 | 277.5≤297.5 | 6≤19 | 96≤120 | 156≤180 |
| AEPR160 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 170 | 338≤357 | 19.5≤25 | 150≤160 | 230≤240 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 203 | 364.5≤389.5 | 19.5≤28 | 135.5≤152.5 | 215.5≤232.5 |

## 型号定义 / MODEL ILLUMINATE

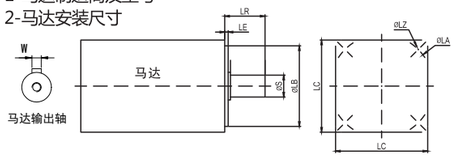
**GAB060 – 10 – P□ / S(KW)-LB-LA-LZ**

减速机型式：

GAB042/GAB060/GAB090/GAB115/
GAB142/GAB180/GAB220

背隙：P0超精密背隙 P1精密背隙 P2标准背隙

马达型号：
1-马达制造商及型号
2-马达安装尺寸




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

**例1：GAB060-10-P2-14-50-70-M5**
**例2：GAB060-10-P2-14K5-50-70-M5** *注：K：开键，不开键则省略

## 减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

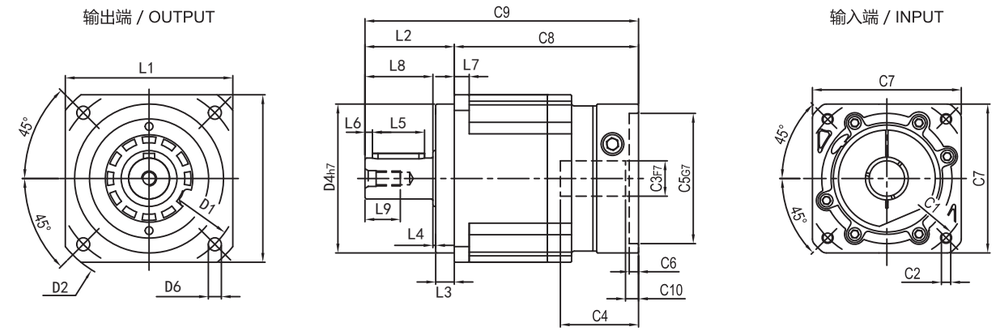
| 规 格 | | 级 数 | 减速比[1] | GAB042 | GAB060 | GAB090 | GAB115 | GAB142 | GAB180 | GAB220 |
|---|---|---|---|---|---|---|---|---|---|---|
| 额定输出力矩$T_{2N}$ | Nm | 1 | 3 | 20 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 4 | 19 | 50 | 140 | 290 | 542 | 1,050 | 1,700 |
| | | | 5 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 6 | 20 | 55 | 150 | 310 | 600 | 1,100 | 1,900 |
| | | | 7 | 19 | 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 |
| | | 2 | 12 | 20 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 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 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 35 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 40 | 22 | 50 | 140 | 290 | 542 | 1,050 | 1,700 |
| | | | 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$T_{2B}$ | Nm | 1,2 | 3~100 | 2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 | 3~100 | — | — | — | ≤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$F_{2rB}$[2] | N | 1,2 | 3~100 | 780 | 1,530 | 3,250 | 6,700 | 9,400 | 14,500 | 50,000 |
| 容许轴向力$F_{2a1B}$[2] | N | 1,2 | 3~100 | 350 | 630 | 1,300 | 3,000 | 4,000 | 6,200 | 35,000 |
| 容许轴向力$F_{2a2B}$[2] | 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 | ℃ | 1,2 | 3~100 | -10℃~+90℃ | | | | | | |
| 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（$n_1$=3000rpm） | dB | 1,2 | 3~100 | ≤56 | ≤58 | ≤60 | ≤63 | ≤65 | ≤67 | ≤70 |



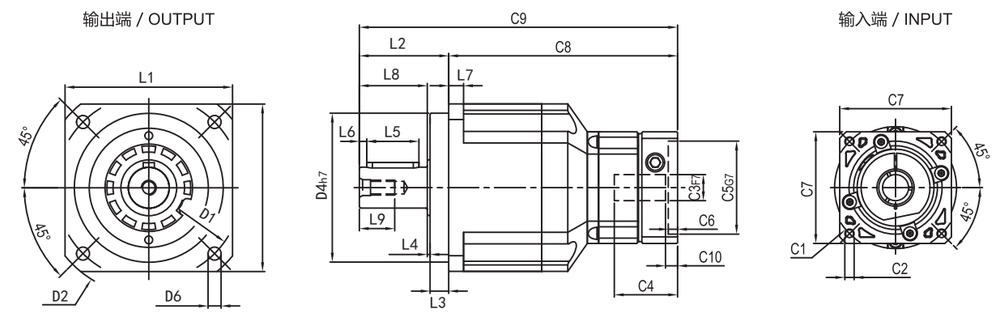


## 外形尺寸图表 / OUTLINE DIMENSION SHEET

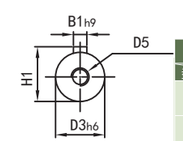
### GAB-L1（单级）




### GAB-L2（双级）




输出轴径\Output Diameter




轴型式

| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GAB042 | L1 | 50 | 3.4 | 13 | 35 | M4 | 56 | 42 | 26 | 5.5 | 1 | 14 | 2.5 | 4 | 19.5 | 10 | 5 | 15 |
| | L2 | | | | | | | | | | | | | | | | 5 | 15 |
| GAB060 | L1 | 70 | 5.5 | 16 | 50 | M5 | 80 | 60 | 37 | 7 | 1.5 | 22 | 3 | 6 | 28.5 | 15 | 5 | 18 |
| | L2 | | | | | | | | | | | | | | | | 5 | 18 |
| GAB090 | L1 | 100 | 7 | 22 | 80 | M8 | 116 | 90 | 48 | 10 | 1.5 | 28 | 4 | 8 | 36.5 | 19 | 6 | 24.5 |
| | L2 | | | | | | | | | | | | | | | | 6 | 24.5 |
| GAB115 | L1 | 130 | 9 | 32 | 110 | M12 | 152 | 115 | 65 | 12 | 2 | 40 | 5 | 10 | 51 | 28 | 10 | 35 |
| | L2 | | | | | | | | | | | | | | | | 10 | 35 |
| GAB142 | L1 | 165 | 11 | 40 | 130 | M16 | 186 | 142 | 97 | 15 | 3 | 65 | 5 | 12 | 79 | 36 | 12 | 43 |
| | L2 | | | | | | | | | | | | | | | | 12 | 43 |
| GAB180 | L1 | 215 | 13 | 55 | 160 | M20 | 240 | 180 | 105 | 20 | 3 | 70 | 6 | 15 | 82 | 42 | 16 | 59 |
| | L2 | | | | | | | | | | | | | | | | 16 | 59 |
| GAB220 | L1 | 250 | 17 | 75 | 180 | M20 | 292 | 220 | 138 | 30 | 3 | 90 | 7 | 20 | 105 | 42 | 20 | 79.5 |
| | L2 | | | | | | | | | | | | | | | | 20 | 79.5 |

输出尺寸

| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GAB042 | L1 | 46 | M4 | 8 | 26 | 30 | 4 | 42 | 60.5 | 86.5 | 5.5 |
| | L2 | 46 | M4 | 8 | 26 | 30 | 4 | 42 | 84 | 110 | 5.5 |
| GAB060 | L1 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 78.5≤85 | 115.5≤122 | 5.5≤12 |
| | L2 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 107.5≤114 | 144.5≤151 | 5.5≤12 |
| GAB090 | L1 | 90 | M6 | 19 | 42 | 70 | 6.5 | 80 | 99≤117 | 147≤165 | 6≤19 |
| | L2 | 90 | M6 | 19 | 42 | 70 | 6.5 | 80 | 123≤129.5 | 171≤177.5 | 5.5≤12 |
| GAB115 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 134≤151.5 | 199≤216.5 | 19.5≤28 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 150.5≤168.5 | 215.5≤233.5 | 6≤19 |
| GAB142 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 155≤165 | 252≤262 | 19.5≤25 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 199≤216.5 | 296≤313.5 | 19.5≤28 |
| GAB180 | L1 | 200 | M12 | 35 | 85 | 114 | 7 | 180 | 182 | 287 | 7.5≤44 |
| | L2 | 200 | M12 | 35 | 83 | 114 | 8 | 180 | 232 | 337 | 19.5≤30 |
| GAB220 | L1 | 235 | M12 | 55 | 120 | 200 | 7 | 220 | 226.5 | 364.5 | 12.5≤22.5 |
| | L2 | 200 | M12 | 35 | 85 | 114 | 7 | 180 | 277 | 415 | 7.5≤44 |

输入尺寸

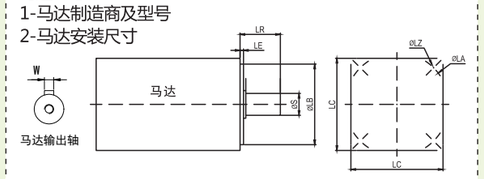
* 输入马达连接板尺寸，
可根据客户要求单独定做
*The inout motor
specific dimensions

**GABR060 – 10 – P□ / S(KW)-LB-LA-LZ**

减速机型式：
GABR042/GABR060/GABR090/GABR115/
GABR142/GABR180/GABR220

背隙：P0超精密背隙
P1精密背隙 P2标准背隙

马达型号：
1-马达制造商及型号
2-马达安装尺寸




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

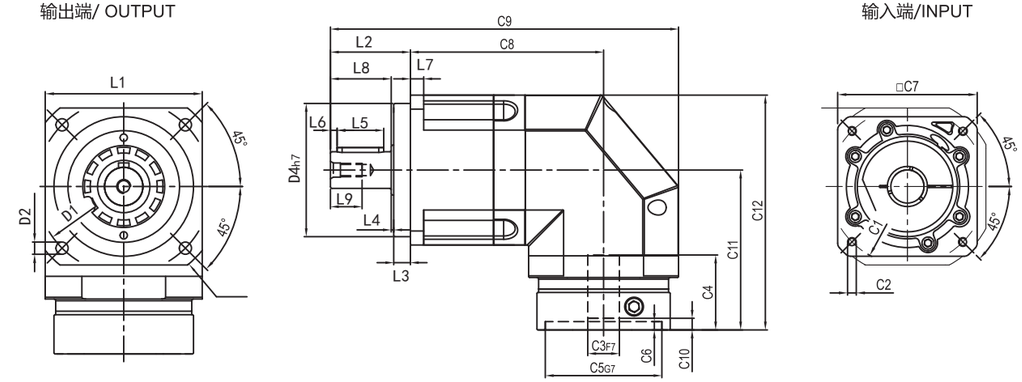
| 规 格 | | 级 数 | 减速比[1] | GABR042 | GABR060 | GABR090 | GABR115 | GABR142 | GABR180 | GABR220 |
|---|---|---|---|---|---|---|---|---|---|---|
| 额定输出力矩$T_{2N}$ | Nm | 1 | 3 | 20 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 4 | 19 | 50 | 140 | 290 | 542 | 1,050 | 1,700 |
| | | | 5 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 6 | 20 | 55 | 150 | 310 | 600 | 1,100 | 1,900 |
| | | | 7 | 19 | 50 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | | 8 | 17 | 50 | 140 | 290 | 542 | 1,000 | 1,600 |
| | | | 10 | 14 | 60 | 160 | 330 | 650 | 520 | 1,220 |
| | | | 14 | – | 50 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | 定货时备注L1级 | 20 | – | 40 | 100 | 230 | 450 | 520 | 1,220 |
| | | 2 | 12 | – | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 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 | 55 | 130 | 208 | 342 | 588 | 1,140 |
| | | | 35 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 40 | 22 | 50 | 140 | 290 | 542 | 1,050 | 1,700 |
| | | | 50 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 60 | 22 | 55 | 150 | 310 | 600 | 1,200 | 2,000 |
| | | | 70 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 80 | 22 | 50 | 140 | 290 | 542 | 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 | – | – | 100 | 230 | 450 | 520 | 1,220 |
| 最大输出力矩$T_{2B}$ | Nm | 1,2 | 3~200 | 2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 | 12~200 | – | – | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 |
| 精密背隙 P1 | arcmin | 1 | 3~20 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 |
| | | 2 | 12~200 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 |
| 标准背隙 P2 | arcmin | 1 | 3~20 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 | ≤4 |
| | | 2 | 12~200 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 | ≤7 |
| 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 | 12~200 | ≤92% | | | | | | |
| 重量 | kg | 1 | 3~20 | 0.9 | 2.1 | 6.4 | 13 | 24.5 | 51 | 83 |
| | | 2 | 12~200 | 1.2 | 2.5 | 7.8 | 14.2 | 27.5 | 54 | 95 |
| 使用温度 | ℃ | 1,2 | 3~200 | -10℃~+90℃ | | | | | | |
| 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 |





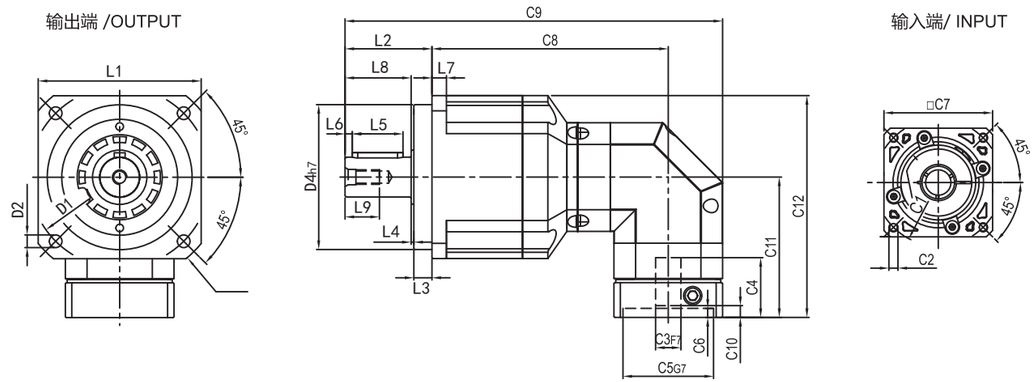
## GABR-L1（单级）

输出端/ OUTPUT　　输入端/INPUT

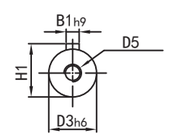



## GABR-L2（双级）

输出端 /OUTPUT　　输入端/ INPUT




输出轴径\Output Diameter




轴型式

| 输出尺寸 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
| GABR042 | L1<br>L2 | 50 | 3.4 | 13 | 35 | M4 | 56 | 42 | 26 | 5.5 | 1 | 14 | 2.5 | 4 | 19.5 | 10 | 5 | 15 |
| GABR060 | L1<br>L2 | 70 | 5.5 | 16 | 50 | M5 | 80 | 60 | 37 | 7 | 1.5 | 22 | 3 | 6 | 28.5 | 15 | 5 | 18 |
| GABR090 | L1<br>L2 | 100 | 7 | 22 | 80 | M8 | 116 | 90 | 48 | 10 | 1.5 | 28 | 4 | 8 | 36.5 | 19 | 6 | 24.5 |
| GABR115 | L1<br>L2 | 130 | 9 | 32 | 110 | M12 | 152 | 115 | 65 | 12 | 2 | 40 | 5 | 10 | 51 | 28 | 10 | 35 |
| GABR142 | L1<br>L2 | 165 | 11 | 40 | 130 | M16 | 186 | 142 | 97 | 15 | 3 | 65 | 5 | 12 | 79 | 36 | 12 | 43 |
| GABR180 | L1<br>L2 | 215 | 13 | 55 | 160 | M20 | 240 | 180 | 105 | 20 | 3 | 70 | 6 | 15 | 82 | 42 | 16 | 59 |
| GABR220 | L1<br>L2 | 250 | 17 | 75 | 180 | M20 | 292 | 220 | 138 | 30 | 3 | 90 | 7 | 20 | 105 | 42 | 20 | 79.5 |

| 输入尺寸 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 |
| GABR042 | L1 | 46 | M4 | 8 | 26 | 30 | 4 | 42 | / | 109 | / | - | - |
| | L2 | 46 | M4 | 8 | 26 | 30 | 4 | 42 | / | 132.5 | / | - | - |
| GABR060 | L1 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 86 | 153≤192 | 6≤19 | 77.5≤87 | 107.5≤117 |
| | L2 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 115 | 144.5≤151 | 5.5≤12 | 77.5≤87 | 107.5≤117 |
| GABR090 | L1 | 90 | M6 | 19 | 45 | 70 | 6.5 | 80 | 116 | 209≤229 | 6≤19 | 96≤120 | 141≤165 |
| | L2 | 90 | M6 | 19 | 42.5 | 70 | 6.5 | 80 | 130.5 | 208.5≤221.5 | 5.5≤12 | 77.5≤87 | 122.5≤132 |
| GABR115 | L1 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 137.5 | 267.5≤292.5 | 19.5≤28 | 135.5≤152.5 | 193≤210 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 167.5 | 277.5≤297.5 | 6≤19 | 96≤120 | 153.5≤177.5 |
| GABR142 | L1 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 170 | 338≤357 | 19.5≤25 | 150≤160 | 221≤231 |
| | L2 | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 202.5 | 364.5≤389.5 | 19.5≤28 | 135.5≤152.5 | 206.5≤223.5 |
| GABR180 | L1 | 200 | M12 | 35 | 85 | 114 | 7 | 180 | 179≤214 | 284≤319 | 7.5≤44 | - | - |
| | L2 | 200 | M12 | 35 | 85 | 114 | 15 | 180 | 225.5≤235 | 330.5≤340 | 19.5≤30 | - | - |
| GABR220 | L1 | 235 | M12 | 55 | 120 | 200 | 7 | 220 | 220≤230 | 358≤368 | 12.5≤22.5 | - | - |
| | L2 | 200 | M12 | 35 | 85 | 114 | 7 | 180 | 264≤299 | 402≤437 | 7.5≤44 | - | - |

* 输入马达连接板尺寸，
可根据客户要求单独定做
*The inout motor
specific dimensions

## 型号定义 / MODEL ILLUMINATE

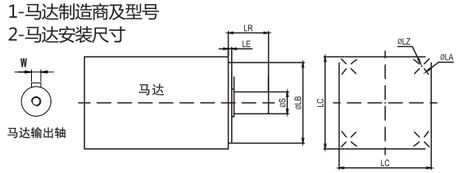
*注意 吊装工况需提前咨询我司技术并出具选型报告

**AD064 – 10 – P□ / S(KW)-LB-LA-LZ**

减速机型式：
AD047/AD064/AD090/AD110/
AD140/AD200/AD255
ADR047/ADR064/ADR090/ADR110/
ADR140/ADR200/ADR255

背隙：P0超精密背隙 P1精密背隙 P2标准背隙

马达型号：
1-马达制造商及型号
2-马达安装尺寸




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

例1：AD064-10-P2-14-50-70-M5
例2：AD064-10-P2-14K5-50-70-M5 *注：K：开键，不开键则省略

## 减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

| 规 格 | | 级 数 | 减速比[1] | AD047 | AD064 | AD090 | AD110 | AD140 | AD200 | AD255 |
|---|---|---|---|---|---|---|---|---|---|---|
| 额定输出力矩$T_{2N}$ | Nm | 1 | 4 | 19 | 48 | 130 | 270 | 560 | 1,100 | 1,700 |
| | | | 5 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 6 | - | 55 | 150 | 310 | 600 | - | - |
| | | | 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 |
| | | 2 | 20 | 19 | 48 | 130 | 270 | 560 | 1,100 | 1,700 |
| | | | 25 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 35 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 40 | 22 | 48 | 130 | 270 | 560 | 1,200 | 2,000 |
| | | | 50 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 60 | - | 55 | 150 | 310 | 600 | - | - |
| | | | 70 | 19 | 50 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | | 80 | - | 45 | 120 | 260 | 500 | - | - |
| | | | 100 | 14 | 40 | 100 | 230 | 450 | 520 | 1,220 |
| 最大输出力矩$T_{2B}$ | Nm | 1,2 | 4~100 | 2倍额定输出力矩 | | | | | | |
| 额定输入转速$n_1$ | rpm | 1,2 | 4~100 | 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 | 4~100 | 10,000 | 10,000 | 8,000 | 8,000 | 6,000 | 6,000 | 4,000 |
| 超精密背隙 P0 | arcmin | 1 | 4~10 | - | - | ≤1 | ≤1 | ≤1 | ≤1 | ≤1 |
| | | 2 | 20~100 | - | - | - | ≤3 | ≤3 | ≤3 | ≤3 |
| 精密背隙 P1 | arcmin | 1 | 4~10 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 | ≤3 |
| | | 2 | 20~100 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 |
| 标准背隙 P2 | arcmin | 1 | 4~10 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 | ≤5 |
| | | 2 | 20~100 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 |
| 扭转刚性 | Nm/arcmin | 1,2 | 20~100 | 7 | 13 | 31 | 82 | 151 | 440 | 1,006 |
| 最大弯曲力矩$M_{2KB}$[2] | Nm | 1,2 | 4~100 | 42.5 | 125 | 235 | 430 | 1,300 | 3,064 | 5,900 |
| 容许径向力$F_{2B}$[2] | N | 1,2 | 4~100 | 1,080 | 2,110 | 2,310 | 4,800 | 6,200 | 5,450 | 10,600 |
| 使用寿命 | hr | 1,2 | 4~100 | 20,000＊ | | | | | | |
| 效率 η | % | 1 | 4~10 | ≥97% | | | | | | |
| | | 2 | 20~100 | ≥94% | | | | | | |
| 重量 | kg | 1 | 4~10 | 0.7 | 1.2 | 3.0 | 5.6 | 11.9 | 31.6 | 56.1 |
| | | 2 | 20~100 | 1.0 | 1.6 | 3.7 | 7.3 | 15.9 | 36.9 | 70.4 |
| 使用温度 | ℃ | 1,2 | 4~100 | -10℃~+90℃ | | | | | | |
| 润滑 | | 1,2 | 4~100 | 合成润滑油脂 | | | | | | |
| 防护等级 | | 1,2 | 4~100 | IP65 | | | | | | |
| 安装方向 | | 1,2 | 4~100 | 任意方向 | | | | | | |
| 噪音值（$n_1$=3000rpm） | dB | 1,2 | 4~100 | ≤56 | ≤58 | ≤60 | ≤63 | ≤65 | ≤67 | ≤70 |

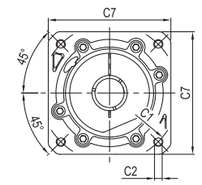


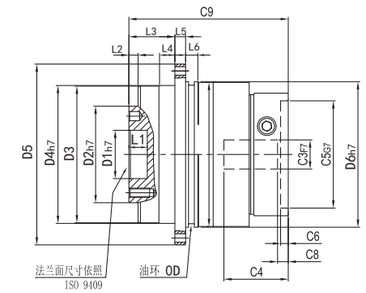


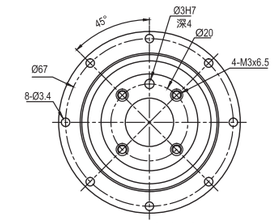
## 外形尺寸图表 / OUTLINE DIMENSION SHEET

### AD-L1（单级）

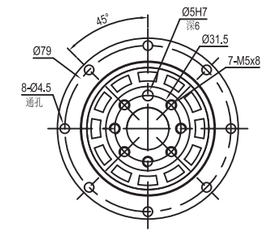
输入端/INPUT



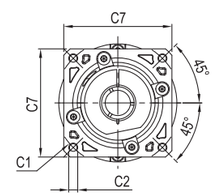

AD047输出端

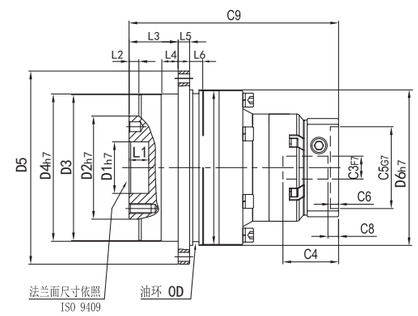


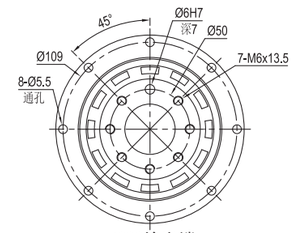

AD064输出端

### AD-L2（双级）

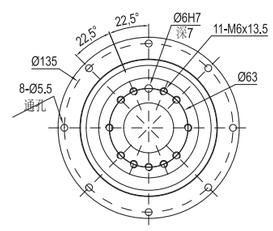
输入端/ INPUT



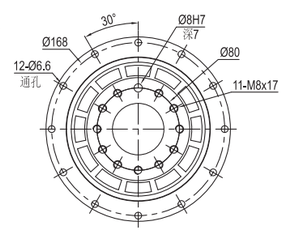



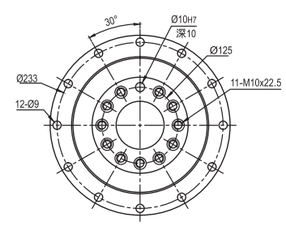

AD090输出端



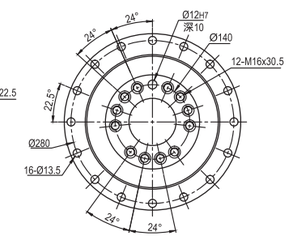

AD110输出端




AD140输出端




AD200输出端




AD255输出端

| 型号 | 尺寸 | 输出尺寸 D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | 输入尺寸 C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | 0D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AD047 | L1 | 12 | 28 | 46 | 47 | 72 | 60 | 4 | 3 | 20 | 7 | 4 | 5 | 46 | M4 | 8 | 30 | 30 | 3.5 | 48 | 5.5 | 70 | 56*2 |
| | L2 | | | | | | | | | | | | | 46 | M4 | 8 | 30 | 30 | 3.5 | 48 | 5.5 | 97.5 | 56*2 |
| AD064 | L1 | 20 | 40 | 63 | 64 | 86 | 70 | 8 | 3 | 20 | 7 | 4 | 7.7 | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 5.5≤12 | 81.5≤88 | 66*2 |
| | L2 | | | | | | | | | | | | | 70 | M5 | 14 | 34 | 50 | 5 | 60 | 5.5≤12 | 110.5≤117 | 66*2 |
| AD090 | L1 | 32 | 63 | 89 | 90 | 118 | 95 | 12 | 6 | 30 | 10 | 7 | 8 | 90 | M6 | 19 | 42 | 70 | 6.5 | 80 | 6≤19 | 104≤122 | 90*3 |
| | L2 | | | | | | | | | | | | | 90 | M6 | 19 | 42 | 70 | 6.5 | 80 | 5.5≤11 | 128≤134.5 | 90*3 |
| AD110 | L1 | 40 | 80 | 109 | 110 | 145 | 120 | 12 | 6 | 29 | 10 | 8 | 10 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 19.5≤28 | 135≤152.5 | 110*3 |
| | L2 | | | | | | | | | | | | | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 6≤19 | 151.5≤169.5 | 110*3 |
| AD140 | L1 | 50 | 100 | 139 | 140 | 179 | 152 | 12 | 6 | 38 | 15 | 10 | 12 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 19.5≤25 | 162≤172 | 145*3 |
| | L2 | | | | | | | | | | | | | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 19.5≤28 | 206≤233.5 | 145*3 |
| AD200 | L1 | 80 | 160 | 199 | 200 | 247 | 212 | 16 | 8 | 50 | 15 | 12 | 15 | 200 | M12 | 35 | 86 | 114.3 | 6 | 180 | 8.5 | 199.5 | 200*5 |
| | L2 | | | | | | | | | | | | | 200 | M12 | 35 | 83 | 114.3 | 8 | 180 | 19≤28 | 249.5≤257.5 | 200*5 |
| AD255 | L1 | 100 | 180 | 254 | 255 | 300 | 255 | 20 | 12 | 66 | 20 | 18 | 20 | 235 | M12 | 42 | 116 | 200 | 6 | 220 | 10 | 256.5 | 238*5 |
| | L2 | | | | | | | | | | | | | 200 | M12 | 35 | 85 | 114.3 | 7 | 180 | 10≤19 | 311.5 | 238*5 |

AD

ADR

## 减速机性能资料/ GEAR BOX PERFORMANCE INFORMATION

| 规 格 | | 级 数 | 减速比[1] | ADR047 | ADR064 | ADR090 | ADR110 | ADR140 | ADR200 | ADR255 |
|---|---|---|---|---|---|---|---|---|---|---|
| 额定输出力矩$T_{2N}$ | Nm | 1 | 4 | 19 | 48 | 130 | 270 | 560 | 1,100 | 1,700 |
| | | | 5 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 6 | - | 55 | 150 | 310 | 600 | - | - |
| | | | 7 | 19 | 50 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | | 8 | 17 | 48 | 130 | 270 | 560 | 1,000 | 1,600 |
| | | | 10 | 14 | 60 | 160 | 330 | 650 | 520 | 1,220 |
| | | | 14 | - | 50 | 140 | 300 | 550 | 1,100 | 1,800 |
| | | 定货时备注L1级 | 20 | - | 40 | 100 | 230 | 450 | 520 | 1,220 |
| | | 2 | 20 | 19 | 48 | 130 | 270 | 560 | 1,100 | 1,700 |
| | | | 25 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 35 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 40 | 22 | 48 | 130 | 270 | 560 | 1,200 | 2,000 |
| | | | 50 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 60 | - | 55 | 150 | 310 | 600 | - | - |
| | | | 70 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 80 | - | 48 | 130 | 270 | 560 | - | - |
| | | | 100 | 22 | 60 | 160 | 330 | 650 | 1,200 | 2,000 |
| | | | 120 | - | - | 150 | 310 | 600 | - | - |
| | | | 140 | - | - | 140 | 300 | 550 | 1,100 | 1,800 |
| | | | 160 | - | - | 120 | 260 | 500 | - | - |
| | | | 200 | - | - | 100 | 230 | 450 | 520 | 1,220 |
| 最大输出力矩$T_{2B}$ | Nm | 1,2 | 4~200 | 2倍额定输出力矩 | | | | | | |
| 额定输入转速$n_1$ | rpm | 1,2 | 4~200 | 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 | 4~200 | 10,000 | 10,000 | 8,000 | 8,000 | 6,000 | 6,000 | 4,000 |
| 超精密背隙 P0 | arcmin | 1 | 4~20 | - | - | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| | | 2 | 20~200 | - | - | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 |
| 精密背隙 P1 | arcmin | 1 | 4~20 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 | ≤4 |
| | | 2 | 20~200 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 | ≤7 |
| 标准背隙 P2 | arcmin | 1 | 4~20 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 | ≤6 |
| | | 2 | 20~200 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 | ≤9 |
| 扭转刚性 | | 1,2 | 4~200 | 7 | 13 | 31 | 82 | 151 | 440 | 1,006 |
| 最大弯曲力矩$M_{2KB}$[2] | Nm | 1,2 | 4~200 | 42.5 | 125 | 235 | 430 | 1,300 | 3,064 | 5,900 |
| 容许径向力$F_{2B}$[2] | N | 1,2 | 4~200 | 1,080 | 2,110 | 2,310 | 4,800 | 6,200 | 5,450 | 10,600 |
| 使用寿命 | hr | 1,2 | 4~200 | 20,000＊ | | | | | | |
| 效率 η | % | 1 | 4~20 | ≥95% | | | | | | |
| | | 2 | 20~200 | ≥92% | | | | | | |
| 重量 | kg | 1 | 4~20 | 1.1 | 1.9 | 4.5 | 9.8 | 20.1 | 45.4 | 85.4 |
| | | 2 | 20~200 | 1.4 | 2.1 | 5.9 | 10.5 | 21.9 | 50.9 | 85.9 |
| 使用温度 | ℃ | 1,2 | 4~200 | -10℃~+90℃ | | | | | | |
| 润滑 | | 1,2 | 4~200 | 合成润滑油脂 | | | | | | |
| 防护等级 | | 1,2 | 4~200 | IP65 | | | | | | |
| 安装方向 | | 1,2 | 4~200 | 任意方向 | | | | | | |
| 噪音值（$n_1$=3000rpm） | dB | 1,2 | 4~200 | ≤61 | ≤63 | ≤65 | ≤68 | ≤70 | ≤72 | ≤74 |

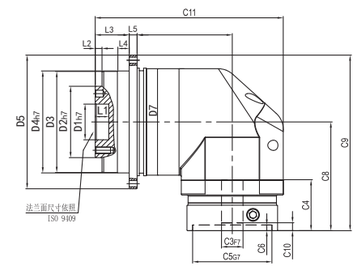
*注意 吊装工况需提前咨询我司技术并出具选型报告



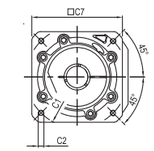


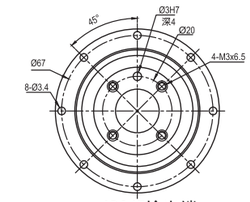
## 外形尺寸图表 / OUTLINE DIMENSION SHEET

### ADR-L1（单级）

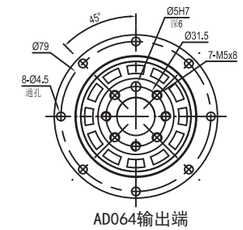



输入端/INPUT



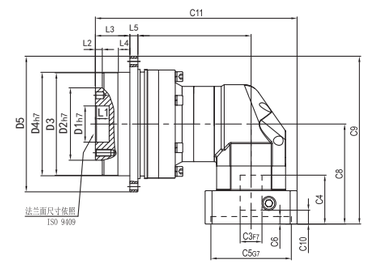




AD047输出端

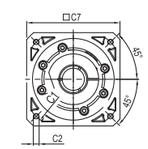


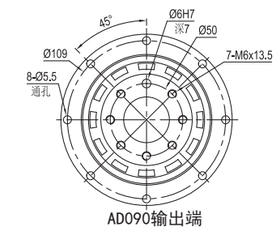

AD064输出端

### ADR-L2（双级）

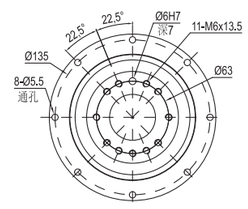



输入端/ INPUT

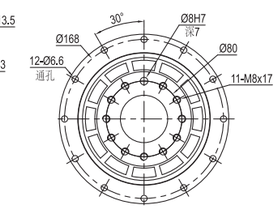


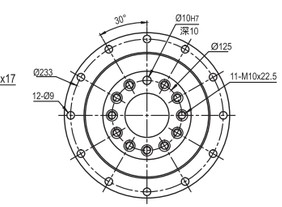

AD090输出端



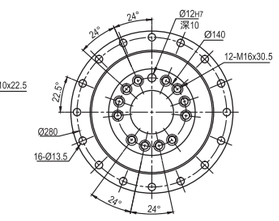

AD110输出端




AD140输出端




AD200输出端




AD255输出端

| 型号 | 尺寸 | 输出尺寸 D1 | D2 | D3 | D4 | D5 | L1 | L2 | L3 | L4 | L5 | 输入尺寸 C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | 0D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ADR047 | L1 | 12 | 28 | 46 | 47 | 72 | 4 | 3 | 20 | 7 | 4 | 46 | M4 | 8 | 30 | 30 | 3.5 | 48 | 74 | 104.25 | 107.5 | 5.5 | 56*2 |
| | L2 | | | | | | | | | | | 46 | M4 | 8 | 30 | 30 | 3.5 | 48 | 104.25 | 104.25 | 122 | 5.5 | 56*2 |
| ADR064 | L1 | 20 | 40 | 63 | 64 | 86 | 8 | 3 | 20 | 7 | 4 | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 77.5≤87 | 120.5≤130 | 119≤129 | 5.5≤12 | 66*2 |
| | L2 | | | | | | | | | | | 70 | M5 | 14 | 33 | 50 | 5 | 60 | 77.5≤87 | 120.5≤130 | 148≤158 | 5.5≤12 | 66*2 |
| ADR090 | L1 | 32 | 63 | 89 | 90 | 118 | 12 | 6 | 30 | 10 | 7 | 90 | M6 | 19 | 45 | 70 | 6.5 | 80 | 96≤120 | 155≤179 | 166≤186 | 6≤19 | 90*3 |
| | L2 | | | | | | | | | | | 90 | M6 | 19 | 42.5 | 70 | 6.5 | 80 | 77.5≤87 | 136.5≤146 | 165.5≤175.5 | 5.5≤11 | 90*3 |
| ADR110 | L1 | 40 | 80 | 109 | 110 | 145 | 12 | 6 | 29 | 10 | 8 | 145 | M8 | 22 | 64 | 110 | 10 | 130 | 135.5≤152.5 | 208≤225 | 203.5≤228.5 | 19.5≤28 | 110*3 |
| | L2 | | | | | | | | | | | 145 | M8 | 22 | 59 | 110 | 11 | 130 | 96≤120 | 168.5≤192.5 | 213.5≤233.5 | 6≤19.5 | 110*3 |
| ADR140 | L1 | 50 | 100 | 139 | 140 | 179 | 12 | 6 | 38 | 15 | 10 | 145 | M8 | 24 | 72 | 110 | 11 | 130 | 150≤160 | 239.5≤249.5 | 248≤267 | 19.5≤25 | 145*3 |
| | L2 | | | | | | | | | | | 145 | M8 | 24 | 64 | 110 | 10 | 130 | 135.5≤152.5 | 225≤242 | 274.5≤299.5 | 19.5≤28 | 145*3 |
| ADR200 | L1 | 80 | 160 | 199 | 200 | 247 | 16 | 8 | 50 | 15 | 12 | 200 | M12 | 35 | 85 | 114 | 6 | 180 | 213.5 | 316 | 334.5 | / | 200*5 |
| | L2 | | | | | | | | | | | 200 | M12 | 35 | 85 | 114 | 6 | 180 | 164.5≤189.5 | 269.5≤294.5 | 333.5 | / | 200*5 |
| ADR255 | L1 | 100 | 180 | 254 | 255 | 300 | 20 | 12 | 66 | 20 | 18 | 235 | M12 | 42 | 116 | 200 | 6 | 220 | 268.5 | 398.5 | 392 | / | 238*5 |
| | L2 | | | | | | | | | | | 200 | M12 | 35 | 85 | 114 | 6 | 180 | 231.5 | 340 | 403 | / | 238*5 |

## 型号定义 / MODEL ILLUMINATE

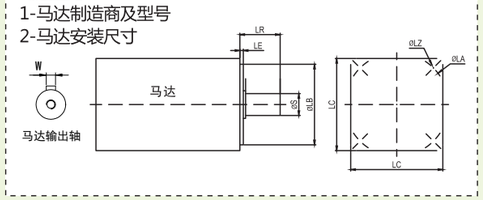
**FSP060 – 10 – S(KW)-LB-LA-LZ**

减速机型式：

FSP60/FSP90/FSP120/FSP160/
FSPZ60/FSPZ90/FSPZ120/FSPZ160

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
120, 140, 160, 200

马达型号：
1-马达制造商及型号
2-马达安装尺寸




**例1：FSP060-10-14-50-70-M5**
**例2：FSP060-10-14K5-50-70-M5** *注：K：开键，不开键则省略

## 减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

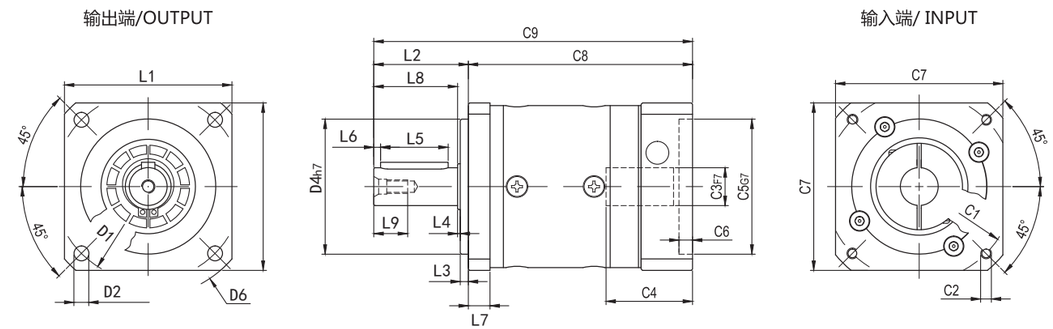
| 规格 | | 级数 | 减速比[1] | ESP40 FSP40 | ESP60 FSP60 | ESP90 FSP90 | ESP120 FSP120 | ESP160 FSP160 |
|---|---|---|---|---|---|---|---|---|
| 额定输出力矩 $T_{2N}$ | Nm | 1 | 3 | 16 | 27 | 96 | 161 | 364 |
| | | | 4 | 16 | 40 | 122 | 210 | 423 |
| | | | 5 | 15 | 40 | 122 | 210 | 423 |
| | | | 7 | 12 | 34 | 90 | 170 | 358 |
| | | | 8 | 10 | 34 | 95 | 150 | 350 |
| | | | 10 | 10 | 16 | 90 | 86 | 210 |
| | | 2 | 12 | 15 | 27 | 56 | 161 | 364 |
| | | | 15 | 16 | 27 | 96 | 161 | 423 |
| | | | 20 | 16 | 27 | 96 | 210 | 423 |
| | | | 25 | 15 | 40 | 122 | 210 | 423 |
| | | | 30 | 15 | 27 | 96 | 161 | 364 |
| | | | 35 | 12 | 40 | 122 | 210 | 423 |
| | | | 40 | 16 | 40 | 122 | 210 | 423 |
| | | | 50 | 15 | 40 | 122 | 210 | 423 |
| | | | 70 | 12 | 34 | 95 | 170 | 358 |
| | | | 100 | 10 | 16 | 56 | 86 | 210 |
| 最大输出力矩 $T_{2B}$ | Nm | 1,2 | 3~100 | 2倍额定输出力矩 | | | | |
| 额定输入转速 $n_1$ | rpm | 1,2 | 3~100 | 4500 | 4,000 | 3,600 | 3,000 | 2,500 |
| 最大输入转速 $n_{1B}$ | rpm | 1,2 | 3~100 | 8000 | 6,000 | 6,000 | 4,800 | 3,600 |
| 背隙* | arcmin | 1 | 3~10 | ≤ 8 | ≤ 8 | ≤ 8 | ≤ 8 | ≤ 8 |
| | | 2 | 12~100 | ≤10 | ≤ 12 | ≤ 12 | ≤ 12 | ≤ 12 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~100 | 0.8 | 1.8 | 4.8 | 11 | 35 |
| 容许径向力 $F_{2rB}$[2] | N | 1,2 | 3~100 | / | / | / | / | / |
| 容许轴向力 $F_{2aB}$[2] | N | 1,2 | 3~100 | 150 | 220 | 430 | 1000 | 1500 |
| 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 | 0.43 | 1.1 | 3.2 | 7 | 15 |
| | | 2 | 12~100 | 0.65 | 1.3 | 4.0 | 9 | 17 |
| 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 | IP64 | | | | |
| 安装方向 | | 1,2 | 3~100 | 任意方向 | | | | |
| 噪音值（ 3 000 ） | dB | 1,2 | 3~100 | ≤ 55 | ≤58 | ≤ 60 | ≤65 | ≤70 |



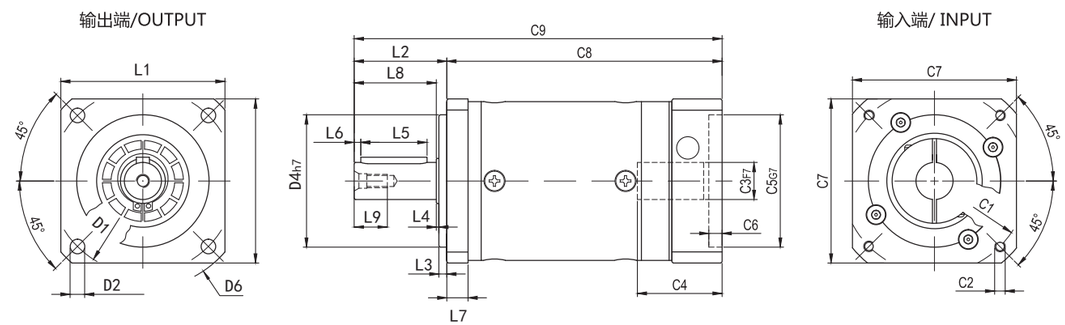


## 外形尺寸图表 / OUTLINE DIMENSION SHEET

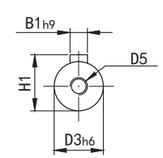
### FSP-L1（单级）

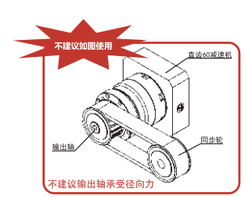



### FSP-L2（双级）




### 输出轴径\Output Diameter



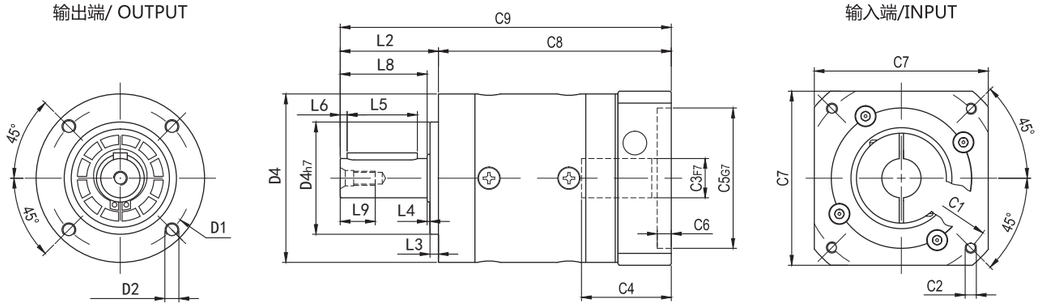

| 输出尺寸 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
| ESP040 | L1 | 34 | M4 | 10 | 26 | M3 | 60 | 45 | 26 | 2 | 1 | 16 | 3 | 6 | 23 | 9 | 3 | 11 |
| | L2 | | | | | | | | | | | | | | | | | |
| ESP060 | L1 | 52 | M5 | 14 | 50 | M5 | 82 | 62 | 32 | 3 | 1 | 25 | 2.5 | 8 | 28 | 15 | 5 | 16 |
| | L2 | | | | | | | | | | | | | | | | | |
| ESP090 | L1 | 70 | M6 | 20 | 80 | M6 | 120 | 92 | 40 | 3 | 1 | 28 | 4 | 10 | 36 | 17 | 6 | 23 |
| | L2 | | | | | | | | | | | | | | | | | |
| ESP120 | L1 | 100 | M10 | 25 | 110 | M10 | 168 | 124 | 50 | 4 | 1 | 40 | 5 | 15 | 40 | 23 | 8 | 28 |
| | L2 | | | | | | | | | | | | | | | | | |

| 输入尺寸 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
| ESP040 | L1 | 46 | M4 | 8 | 27 | 30 | 3.5 | 42 | 62 | 88 | - |
| | L2 | 46 | M4 | 8 | 27 | 30 | 3.5 | 42 | 77 | 103 | - |
| ESP060 | L1 | 70 | M5 | 14 | 32 | 50 | 5 | 62 | 80≤81 | 112≤113 | - |
| | L2 | 70 | M5 | 14 | 32 | 50 | 5 | 62 | 101≤102 | 133≤134 | - |
| ESP090 | L1 | 90 | M6 | 19 | 42 | 70 | 6 | 80 | 113.5≤136 | 153.5≤176 | 5≤25 |
| | L2 | 90 | M6 | 19 | 42 | 70 | 6 | 80 | 142≤160.5 | 182≤200.5 | 5≤25 |
| ESP120 | L1 | 145 | M8 | 22 | 59 | 110 | 8 | 130 | 150≤161 | 205≤216 | 9≤20 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 8 | 130 | 185≤196 | 240≤251 | 9≤20 |

## 外形尺寸图表 / OUTLINE DIMENSION SHEET

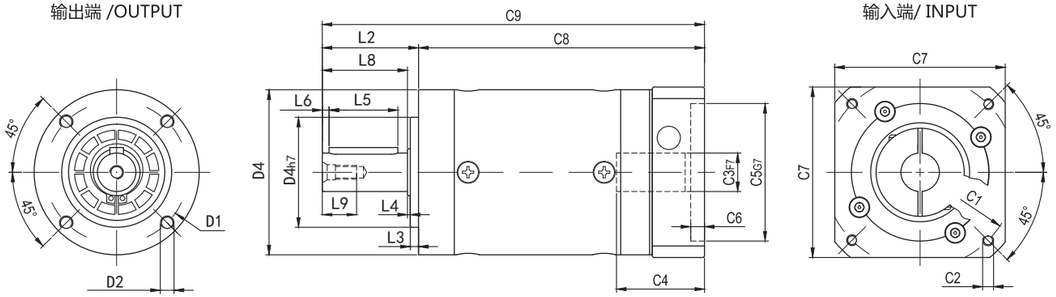
### ESP-L1（单级）

输出端/ OUTPUT　　输入端/INPUT

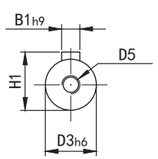


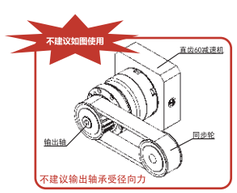

### ESP-L2（双级）

输出端 /OUTPUT　　输入端/ INPUT




### 输出轴径\Output Diameter




| 输出尺寸 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | B1 | H1 |
| FSP040 | L1 | 50 | 3.5 | 10 | 26 | M3 | 60 | 45 | 26 | 2 | 1 | 16 | 3 | 6 | 23 | 9 | 3 | 11 |
| | L2 | | | | | | | | | | | | | | | | | |
| FSP060 | L1 | 70 | 5.5 | 14 | 50 | M5 | 82 | 62 | 32 | 3 | 1 | 25 | 2.5 | 8 | 28 | 15 | 5 | 16 |
| | L2 | | | | | | | | | | | | | | | | | |
| FSP090 | L1 | 100 | 7 | 20 | 80 | M6 | 120 | 92 | 40 | 3 | 1 | 28 | 4 | 10 | 36 | 17 | 6 | 23 |
| | L2 | | | | | | | | | | | | | | | | | |
| FSP120 | L1 | 130 | 9 | 25 | 110 | M10 | 168 | 124 | 50 | 4 | 1 | 40 | 5 | 15 | 40 | 23 | 8 | 28 |
| | L2 | | | | | | | | | | | | | | | | | |

| 输入尺寸 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
| FSP040 | L1 | 46 | M4 | 8 | 27 | 30 | 3.5 | 42 | 62 | 88 | - |
| | L2 | 46 | M4 | 8 | 27 | 30 | 3.5 | 42 | 77 | 103 | - |
| FSP060 | L1 | 70 | M5 | 14 | 32 | 50 | 5 | 62 | 80≤81 | 112≤113 | - |
| | L2 | 70 | M5 | 14 | 32 | 50 | 5 | 62 | 101≤102 | 133≤134 | - |
| FSP090 | L1 | 90 | M6 | 19 | 42 | 70 | 6 | 80 | 113.5≤136 | 153.5≤176 | 5≤25 |
| | L2 | 90 | M6 | 19 | 42 | 70 | 6 | 80 | 142≤160.5 | 182≤200.5 | 5≤25 |
| FSP120 | L1 | 145 | M8 | 22 | 59 | 110 | 8 | 130 | 150≤161 | 205≤216 | 9≤20 |
| | L2 | 145 | M8 | 22 | 59 | 110 | 8 | 130 | 185≤196 | 240≤251 | 9≤20 |

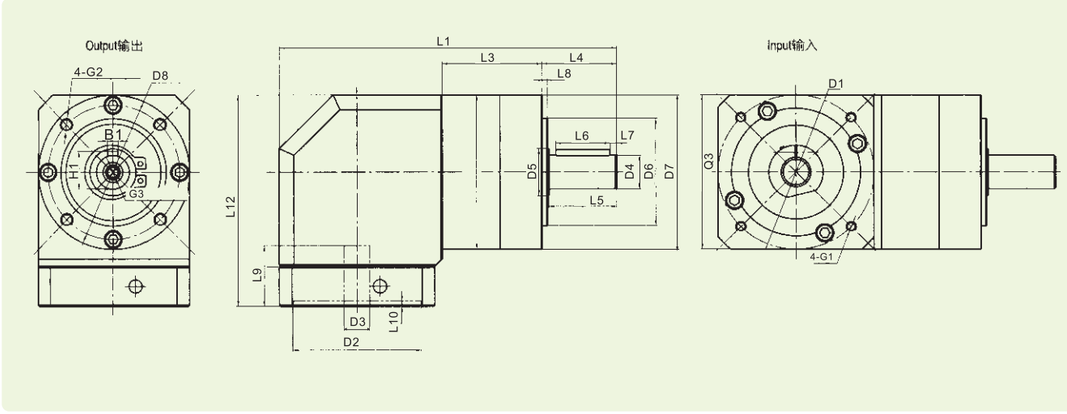




## 减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

| 规格 | | 级数 | 减速比[1] | ESPZ60 FSPZ60 | ESPZ90 FSPZ90 | ESPZ120 FSPZ120 | ESPZ160 FSPZ160 |
|---|---|---|---|---|---|---|---|
| 额定输出力矩 $T_{2N}$ | Nm | 1 | 3 | 27 | 96 | 161 | 364 |
| | | | 4 | 40 | 122 | 210 | 423 |
| | | | 5 | 40 | 122 | 210 | 423 |
| | | | 7 | 34 | 90 | 170 | 358 |
| | | | 8 | 34 | 95 | 150 | 350 |
| | | | 10 | 16 | 90 | 86 | 210 |
| | | 2 | 12 | 27 | 56 | 161 | 364 |
| | | | 15 | 27 | 96 | 161 | 423 |
| | | | 20 | 27 | 96 | 210 | 423 |
| | | | 25 | 40 | 122 | 210 | 423 |
| | | | 30 | 27 | 96 | 161 | 364 |
| | | | 35 | 40 | 122 | 210 | 423 |
| | | | 40 | 40 | 122 | 210 | 423 |
| | | | 50 | 40 | 122 | 210 | 423 |
| | | | 70 | 34 | 95 | 170 | 358 |
| | | | 100 | 16 | 56 | 86 | 210 |
| 最大输出力矩 $T_{2B}$ | Nm | 1,2 | 3~100 | 2倍额定输出力矩 | | | |
| 额定输入转速 $n_1$ | rpm | 1,2 | 3~100 | 4,000 | 3,600 | 3,000 | 2,500 |
| 最大输入转速 $n_{1B}$ | rpm | 1,2 | 3~100 | 6,000 | 6,000 | 4,800 | 3,600 |
| 背隙 * | arcmin | 1 | 3~10 | ≤ 10 | ≤ 12 | ≤ 15 | ≤ 15 |
| | | 2 | 12~100 | ≤ 15 | ≤ 20 | ≤ 30 | ≤ 30 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~100 | 2.2 | 7.2 | 14.5 | 65.5 |
| 容许径向力 $F_{2rB}$[2] | N | 1,2 | 3~100 | 240 | 450 | 1240 | 2250 |
| 容许轴向力 $F_{2aB}$[2] | N | 1,2 | 3~100 | 220 | 430 | 1000 | 1500 |
| 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 | 1.7 | 4.4 | 12.0 | 26.5 |
| | | 2 | 12~100 | 1.9 | 5.0 | 14.0 | 29.6 |
| 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 | IP64 | | | |
| 安装方向 | | 1,2 | 3~100 | 任意方向 | | | |
| 噪音值（ 3 000 ） | dB | 1,2 | 3~100 | ≤58 | ≤ 60 | ≤ 65 | ≤75 |

## 外形尺寸图表 / OUTLINE DIMENSION SHEET




此系列减速机倒装时请提前告知

■单位Unit:mm

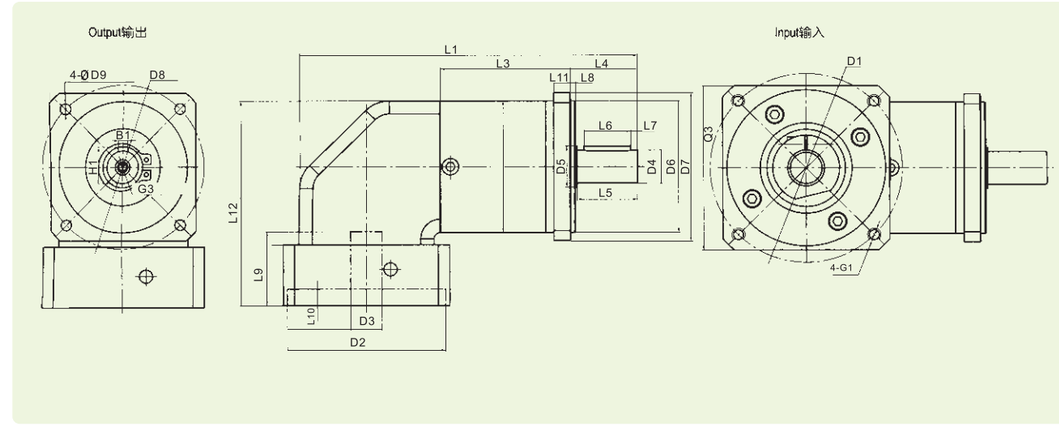
| 产品型号Product type | ESPZ60 | | | ESPZ90 | | | ESPZ120 | | | ESPZ160 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 级数 Number of stage | L1 | L2 | / | L1 | L2 | / | L1 | L2 | / | L1 | L2 | / |
| L1箱体总长 L1 overall length | 148.5 | 166 | / | 192 | 212 | / | 255 | 284.5 | / | 368 | 471.5 | / |
| L3箱体长度L3 body length | 42 | 59.5 | / | 57.5 | 77.5 | / | 75.5 | 105 | / | 129 | 178.5 | / |
| L12总高 L12 overall height | 100.5 | | | 130 | | | 169 | | | 229 | | |
| **输出端 Output** | | | | | | | | | | | | |
| L4出轴长度L4 output shaft length | 35 | | | 40.5 | | | 55.5 | | | 87 | | |
| L5出轴长至轴肩 L5 output length to the shaft shoulder | 30 | | | 36 | | | 50 | | | 80 | | |
| L6键长度 L6 key length | 20 | | | 25 | | | 40 | | | 70 | | |
| L7键至轴末端长 L7 key length to the shaft end | 3 | | | 3 | | | 5 | | | 5 | | |
| L8定位凸台长度 L8 spigot length | 3 | | | 3 | | | 4 | | | 5 | | |
| D4出轴直径D4 output shaft diameter | ϕ14h7 | | | ϕ20h7 | | | ϕ25h7 | | | ϕ40h7 | | |
| D5轴肩直径D5 shaft shoulder diameter | ϕ17 | | | ϕ25 | | | ϕ35 | | | ϕ55 | | |
| D6定位凸台直径D6 spigot diameter | ϕ40 | | | ϕ60 | | | ϕ80 | | | ϕ130 | | |
| D7齿轮箱端面D7 gear box section | ϕ60 | | | ϕ80 | | | ϕ115 | | | ϕ175 | | |
| D8安装孔分布圆D8 Mounting hole distribution circle | ϕ52 | | | ϕ70 | | | ϕ100 | | | ϕ145 | | |
| B1键宽B1 key width | 5 | | | 6 | | | 8 | | | 12 | | |
| H1键高H1 key height | 16 | | | 22.5 | | | 28 | | | 43 | | |
| G2安装螺纹孔G2 × 深度mounting screw hole × depth | M5X8 | | | M6X10 | | | M10X16 | | | M12X20 | | |
| G3中心螺纹孔G3 center screw hole | M5X12 | | | M6X16 | | | M10X22 | | | M12X25 | | |
| **输入端 Input** | | | | | | | | | | | | |
| L9电机轴长度L9 motor shaft length | ≤30 | | | ≤40 | | | ≤58 | | | ≤81 | | |
| L10定位凸台深度L10 spingot depth | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| D1安装孔分布圆D1 mounting hole distribution circle | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| D2定位凸台直径D2 spigot diameter | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| D3输入轴轴径D3 input shaft diametr | ≤14 | | | ≤19 | | | ≤24 | | | ≤42 | | |
| G1安装螺纹孔G1 mounting screw hole | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| Q3输入法兰Q3 input flange | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |

※输入端尺寸可根据电机尺寸制作。
※Input size made according to motor size.





## 外形尺寸图表 / OUTLINE DIMENSION SHEET




此系列减速机倒装时请提前告知

■单位Unit:mm

| 产品型号Product type | FSPZ60 | | | FSPZ90 | | | FSPZ120 | | | FSPZ160 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 级数 Number of stage | L1 | L2 | / | L1 | L2 | / | L1 | L2 | / | L1 | L2 | / |
| L1箱体总长 L1 overall length | 148.5 | 166 | / | 192 | 212 | / | 255 | 284.5 | / | 368 | 471.5 | / |
| L3箱体长度L3 body length | 42 | 59.5 | / | 57.5 | 77.5 | / | 75.5 | 105 | / | 129 | 178.5 | / |
| L12总高 L12 overall height | 100.5 | | | 130 | | | 169 | | | 229 | | |
| **输出端 Output** | | | | | | | | | | | | |
| L4出轴长度L4 output shaft length | 35 | | | 40.5 | | | 55.5 | | | 87 | | |
| L5出轴长至轴肩 L5 output length to the shaft shoulder | 30 | | | 36 | | | 50 | | | 80 | | |
| L6键长度 L6 key length | 20 | | | 25 | | | 40 | | | 70 | | |
| L7键至轴末端长 L7 key length to the shaft end | 3 | | | 3 | | | 5 | | | 5 | | |
| L8定位凸台长度 L8 spigot length | 3 | | | 3 | | | 4 | | | 5 | | |
| D11法兰厚度 L11 flange thickness | 8 | | | 10 | | | 15 | | | | | |
| D4出轴直径D4 output shaft diameter | ϕ14h7 | | | ϕ20h7 | | | ϕ25h7 | | | ϕ40h7 | | |
| D5轴肩直径D5 shaft shoulder diameter | ϕ17 | | | ϕ25 | | | ϕ35 | | | ϕ55 | | |
| D6定位凸台直径D6 spigot diameter | ϕ50 | | | ϕ80 | | | ϕ110 | | | ϕ130 | | |
| D7齿轮箱端面D7 gear box section | □60 | | | □90 | | | □120 | | | ϕ175 | | |
| D8安装孔分布圆D8 Mounting hole distribution circle | ϕ70 | | | ϕ100 | | | ϕ130 | | | ϕ185 | | |
| D9法兰安装孔D9 flange mounting hole | ϕ5. 5 | | | ϕ6. 5 | | | ϕ8.5 | | | ϕ11 | | |
| B1键宽B1 key width | 5 | | | 6 | | | 8 | | | 12 | | |
| H1键高H1 key height | 16 | | | 22.5 | | | 28 | | | 43 | | |
| G3中心螺纹孔G3 center screw hole | M5X12 | | | M6X16 | | | M10X22 | | | M12X25 | | |
| **输入端 Input** | | | | | | | | | | | | |
| L9电机轴长度L9 motor shaft length | ≤30 | | | ≤40 | | | ≤58 | | | ≤81 | | |
| L10定位凸台深度L10 spingot depth | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| D1安装孔分布圆D1 mounting hole distribution circle | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| D2定位凸台直径D2 spigot diameter | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| D3输入轴轴径D3 input shaft diametr | ≤14 | | | ≤19 | | | ≤24 | | | ≤42 | | |
| G1安装螺纹孔G1 mounting screw hole | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |
| Q3输入法兰Q3 input flange | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | | 根据电机尺寸 | | |

※输入端尺寸可根据电机尺寸制作。
※Input size made according to motor size.

## 型号定义 / MODEL ILLUMINATE

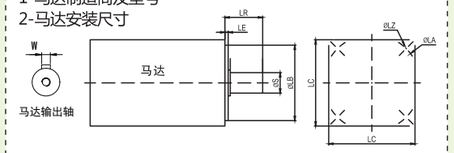
**PTK060** **K** – **10** / **S(KW)-LB-LA-LZ**

减速机基座
PTK060/PTK085/PTK115/PTK140/PTK160

输出形式
K：锁紧环　C：胀紧套　无：孔输出

减速比：单级(L1)： 3,4,5,6,7,8,10
双级(L2)： 12,15,20,25,30,35,40.50

马达型号：
1-马达制造商及型号
2-马达安装尺寸




**例1：PTK060K-10-19-70-90-M6**
**例2：PTK060K-10-19K6-70-90-M6** *注：K：开键，不开键则省略

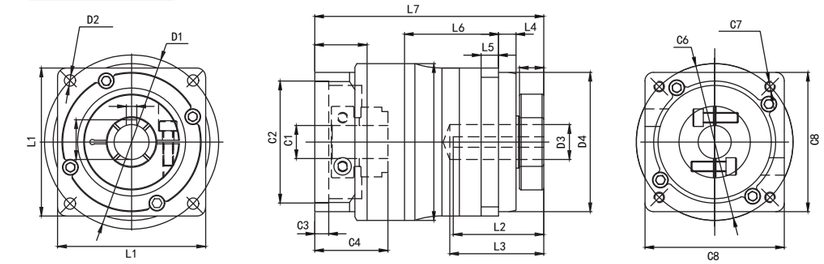
| 型号 | 单位 | PTK060 | PTK085 | PTK115 | PTK140 | PTK160 | 减速比 | 级数 |
|---|---|---|---|---|---|---|---|---|
| 额定输出扭矩 | Nm | 16.5 | 63 | 155 | 310 | 310 | 3 | 1 |
| | | 26 | 90 | 230 | 460 | 460 | 4 | |
| | | 28 | 100 | 245 | 500 | 500 | 5 | |
| | | 20 | 68 | 165 | 340 | 340 | 7 | |
| | | 12.5 | 43 | 95 | 195 | 195 | 10 | |
| | | 19.5 | 75 | 185 | 370 | 370 | 9 | 2 |
| | | 31.5 | 110 | 275 | 550 | 550 | 12 | |
| | | 31.5 | 110 | 275 | 550 | 550 | 16 | |
| | | 31.5 | 110 | 275 | 550 | 550 | 20 | |
| | | 33.5 | 120 | 290 | 600 | 600 | 25 | |
| | | 31.5 | 110 | 275 | 550 | 550 | 28 | |
| | | 33.5 | 120 | 290 | 600 | 600 | 35 | |
| | | 31.5 | 110 | 275 | 550 | 550 | 40 | |
| | | 33.5 | 120 | 290 | 600 | 600 | 50 | |
| | | 24 | 81 | 195 | 400 | 400 | 70 | |
| | | 37.5 | 130 | 335 | 665 | 665 | 80 | 3 |
| | | 37.5 | 130 | 335 | 665 | 665 | 100 | |
| | | 40 | 145 | 355 | 720 | 720 | 125 | |
| | | 37.5 | 130 | 335 | 665 | 665 | 140 | |
| | | 40 | 145 | 355 | 720 | 720 | 175 | |
| | | 37.5 | 130 | 335 | 665 | 665 | 200 | |
| 最大输出扭矩 | Nm | 2倍额定输出扭矩 | | | | | | |
| 最大容许径向力 | N | 800 | 2100 | 4400 | 15000 | 15000 | | 1 |
| | | 1000 | 2600 | 5200 | 19000 | 19000 | | 2 |
| | | 1600 | 3000 | 5800 | 31000 | 31000 | | 3 |
| 最大容许轴向力 | N | 400 | 1000 | 1700 | 16000 | 16000 | | 1 |
| | | 520 | 1300 | 2400 | 20000 | 20000 | | 2 |
| | | 850 | 1800 | 3000 | 25000 | 25000 | | 3 |
| 扭转刚性 | Nm/arcmin | 3.2 | 8.2 | 18.5 | 30 | 30 | / | / |
| 回程间隙 | arcmin | ≤8 | | | | | | 1 |
| | | ≤10 | | | | | | 2 |
| | | ≤12 | | | | | | 3 |
| 额定输入转速 | rpm | 3000 | 3000 | 3000 | 2500 | 2500 | | / |
| 最大输入转速 | rpm | 7000 | 6000 | 5000 | 4200 | 4200 | | |
| 噪音 | dB | ≤58 | ≤60 | ≤62 | ≤65 | ≤65 | | |

* 回程间隙是在受力2%的额定输出扭矩T2N下测得；
* 噪音值是在额定输入转速3000rpm且无负载下测得（160系列是在2500rpm且无负载下测得）

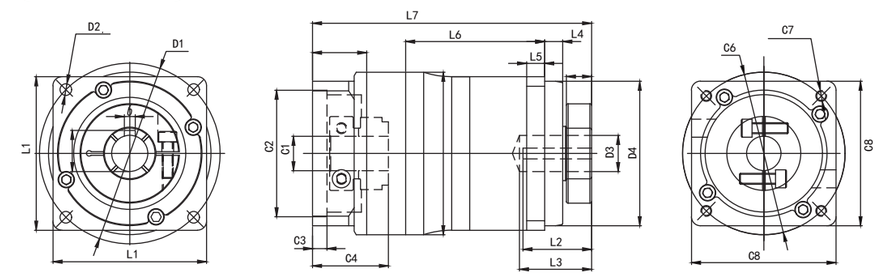




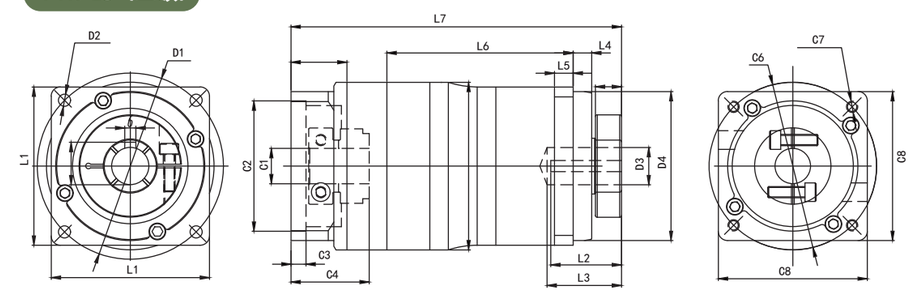
### PTK-L1（单级）



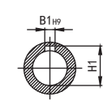

### PTK-L2（双级）




### PTK-L3（三级）




输出轴径\Output Diameter




**输出尺寸**

| 型号＼尺寸 | D1 | D2 | D3 | D4 | L1 | L2 | L3 | L4 | L5 | B1 | H1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PTK060 | 70 | M5 | 14/16 | 50 | 60 | 27 | 28 | 3 | 9 | 5 | 16.3/18.3 |
| PTK085 | 100 | M6 | 20/22 | 80 | 85 | 38 | 40 | 10 | 10 | 6 | 22.8/24.8 |
| PTK115 | 130 | M8 | 28 | 110 | 120 | 45 | / | 12 | 14 | 8 | 31.3 |
| PTK140 | 165 | M10 | 40 | 130 | 140 | 60 | / | 17 | / | 12 | 43.3 |
| PTK160 | 185 | M10 | 40 | 130 | 158 | 60 | / | 7 | / | 12 | 43.3 |

**输入尺寸**

| 型号＼尺寸 | C1 | C2 | C3 | C4 | C6 | C7 | C8 | C9 | C10 |
|---|---|---|---|---|---|---|---|---|---|
| PTK060 | 8≤19 | 30≤70 | 5≤6 | 31.5≤36.5 | 45≤90 | M3≤M6 | 60≤80 | 61≤66 | 91≤96 |
| PTK085 | 14≤24 | 50≤110 | 5≤8 | 39≤57 | 70≤145 | M4≤M8 | 60≤120 | 80≤98 | 125≤143 |
| PTK115 | 19≤28 | 70≤110 | 8 | 47≤72 | 90≤155 | M5≤M8 | 120≤130 | 92≤117 | 152≤177 |
| PTK140 | 22≤42 | 110≤180 | 6≤10 | 60≤120.5 | 145≤215 | M10≤M12 | 145≤198 | 105≤190 | 177.5≤262.5 |
| PTK160 | 22≤42 | 110≤180 | 6≤10 | 60≤120.5 | 145≤215 | M10≤M12 | 145≤198 | 105≤190 | 177.5≤262.5 |

## 减速机性能资料 / GEAR BOX PERFORMANCE INFORMATION

| 规格 | | 级数 | 减速比 | GXK090 | GXK115 | GXK142 | GXK180 |
|---|---|---|---|---|---|---|---|
| 额定输入力矩$T_{2B}$ | Nm | 1 | 3 | 130 | 208 | 342 | 558 |
| | | | 4 | 140 | 290 | 542 | 1000 |
| | | | 5 | 160 | 330 | 600 | 1000 |
| | | | 6 | 150 | 310 | 600 | - |
| | | | 7 | 140 | 300 | 550 | 1000 |
| | | | 8 | 120 | 260 | 500 | 1000 |
| | | | 10 | 100 | 230 | 450 | 520 |
| | | 2 | 12 | 130 | 208 | 342 | - |
| | | | 15 | 130 | 208 | 342 | 588 |
| | | | 20 | 140 | 290 | 542 | 1000 |
| | | | 25 | 160 | 330 | 600 | 1000 |
| | | | 30 | 130 | 208 | 342 | 588 |
| | | | 35 | 160 | 330 | 600 | 1000 |
| | | | 40 | 140 | 290 | 542 | 1000 |
| | | | 50 | 160 | 330 | 600 | 1000 |
| | | | 60 | 140 | 310 | 600 | - |
| | | | 70 | 140 | 300 | 550 | 1000 |
| | | | 80 | 120 | 260 | 500 | 1000 |
| | | | 100 | 100 | 230 | 450 | 520 |
| 最大输入力矩$T_{2B}$ | Nm | 1,2 | 3~100 | 2倍额定输出力矩 | | | |
| 额定输入转速$n_1$ | rpm | 1,2 | 3~100 | 4000 | 4000 | 3000 | 3000 |
| 最大输入转速$n_{1B}$ | rpm | 1,2 | 3~100 | 8000 | 8000 | 6000 | 6000 |
| 背隙P1 | arcmin | 1 | 3~10 | ≤7 | ≤7 | ≤7 | ≤7 |
| | | 2 | 12~100 | ≤10 | ≤10 | ≤10 | ≤10 |
| 背隙P2 | arcmin | 1 | 3~10 | ≤10 | ≤10 | ≤10 | ≤10 |
| | | 2 | 12~100 | ≤12 | ≤12 | ≤12 | ≤12 |
| 扭转刚性 | Nm/arcmin | 1,2 | 3~100 | 14 | 25 | 50 | 145 |
| 容许径向力$F_{2rB}$[2] | N | 1,2 | 3~100 | 3250 | 6700 | 9400 | 14500 |
| 容许轴向力$F_{2a1B}$[2] | N | 1,2 | 3~100 | 1300 | 3000 | 4000 | 6200 |
| 容许轴向力$F_{2a2B}$[2] | N | 1,2 | 3~100 | 1625 | 3350 | 4700 | 7250 |
| 使用寿命 | hr | 1,2 | 3~100 | 20000*（连续运转减半） | | | |
| 效率 η | % | 1 | 3~10 | ≥93% | | | |
| | | 2 | 12~100 | ≥90% | | | |
| 重量 | kg | 1 | 3~10 | 7.2 | 14.8 | 27 | 50 |
| | | 2 | 12~100 | 7.6 | 16 | 30 | 54 |
| 使用温度 | ℃ | 1,2 | 3~100 | -10℃~+90℃ | | | |
| 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 | dB | 1,2 | 3~100 | ≤60 | ≤63 | ≤65 | ≤67 |

*注意 吊装工况需提前咨询我司技术并出具选型报告





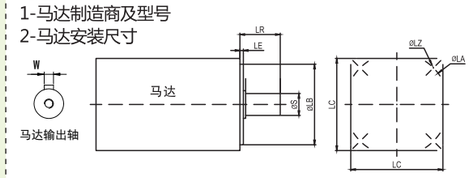
## 型号定义 / MODEL ILLUMINATE

**GXK090 – 10 / S(KW)-LB-LA-LZ**

减速机基座：
090/115/142/180
输出形式：
K：锁紧环 C：胀紧套 D：轴输出

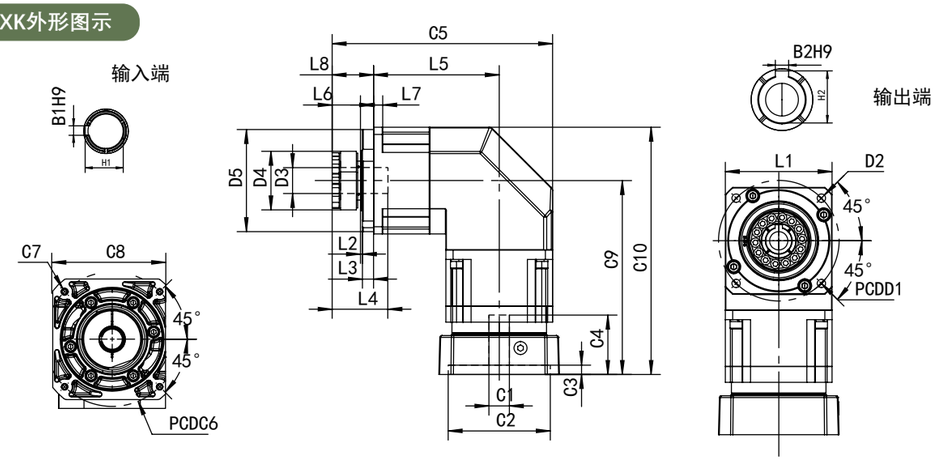
减速比：单级(L1)： 3,4,5,6,7,8,10
双级(L2)： 12,15,20,25,30,35,40.50

马达型号：
1-马达制造商及型号
2-马达安装尺寸




例1：GXK090-10-19-70-90-M6
例2：GXK090-10-19K6-70-90-M6 *注：K：开键，不开键则省略

### GXK外形图示




| 型号 | 尺寸 | D1 | D2 | D3 | D4 | D5 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | B2 | H2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 输出尺寸 | | | | | | | | | | | | | | |
| GXK090 | L1 | 100 | 7 | 22 | 60 | 80 | 90 | 1.5 | 8 | 57 | 103 | 28.5 | 8 | 36.5 | 6 | 24.8 |
| | L2 | 100 | 7 | 22 | 60 | 80 | 90 | 1.5 | 8 | 57 | 103 | 28.5 | 8 | 36.5 | 6 | 24.8 |
| GXK115 | L1 | 130 | 9 | 32 | 80 | 110 | 115 | 2 | 12 | 72.5 | 128 | 34.5 | 10 | 46.5 | 10 | 35.3 |
| | L2 | 130 | 9 | 32 | 80 | 110 | 115 | 1 | 12 | 72.5 | 128 | 34.5 | 10 | 46.5 | 10 | 35.3 |
| GXK142 | L1 | 165 | 11 | 40 | 90 | 130 | 142 | 3 | 15 | 83.5 | 157 | 37.5 | 12 | 52.5 | 12 | 43.3 |
| | L2 | 165 | 11 | 40 | 90 | 130 | 142 | 3 | 15 | 83.5 | 157 | 37.5 | 12 | 52.5 | 12 | 43.3 |
| GXK180 | L1 | 215 | 13 | 55 | 115 | 160 | 180 | 3 | 20 | 101 | 195 | 41.5 | 15 | 61.5 | 16 | 59.3 |
| | L2 | 215 | 13 | 55 | 115 | 160 | 180 | 3 | 20 | 101 | 195 | 41.5 | 15 | 61.5 | 16 | 59.3 |

| 型号 | 尺寸 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | B1 | H1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 输入尺寸 | | | | | | | | | | | |
| GXK090 | L1 | 19 | 70 | 6.5 | 42 | 184.5 | 90 | M5 | 90 | 151 | 196 | 6 | 21.8 |
| | L2 | 19 | 70 | 6.5 | 42 | 184.5 | 90 | M5 | 90 | 181.5 | 226.5 | 6 | 21.8 |
| GXK115 | L1 | 22 | 110 | 10 | 64 | 232 | 145 | M8 | 130 | 209 | 266.5 | 6 | 24.8 |
| | L2 | 22 | 110 | 11 | 59 | 232 | 145 | M8 | 130 | 243.5 | 301 | 6 | 24.8 |
| GXK142 | L1 | 22 | 110 | 11 | 72 | 280.5 | 145 | M8 | 142 | 238 | 309 | 6 | 24.8 |
| | L2 | 22 | 110 | 10 | 64 | 280.5 | 145 | M8 | 142 | 282 | 353 | 6 | 24.8 |
| GXK180 | L1 | 42 | 114.3 | 8 | 117.5 | 346.5 | 200 | M12 | 180 | 316.5 | 406.5 | 12 | 45.3 |
| | L2 | 42 | 114.3 | 8 | 117.5 | 346.5 | 200 | M12 | 180 | 380.5 | 470.5 | 12 | 45.3 |

# XAR、XARS、XARK、XARKS Series

## 精密直角減速機
## Precision right angle reducer

### 體積小 、省空間

使用螺旋式傘齒輪，馬達的安裝可實現90度轉向，節省安裝空間。

### 高精度、低噪音、高剛性

精密型背隙小于1弧分，定位精確;傳動齒輪經精密研制，達到精密傳動，低噪音、高剛性質量要求。

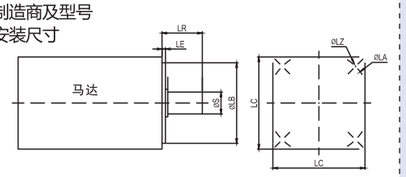
### 型号定义 / MODEL ILLUMINATE

**XAR060 – 1 – P□ / LB-S-LA-LZ**

减速机型式：
XAR/XARS:042/060/090
XARK/XARKS:042/060/090
XARH:042/060/090

背隙：标准背隙 P1

马达型号：
1-马达制造商及型号
2-马达安装尺寸

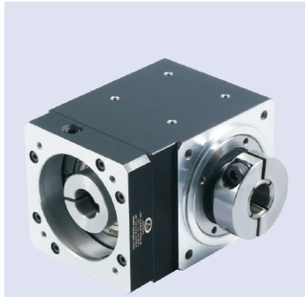



减速比：单级(L1)：1，2，3，5
双级(L2)：6，8，9，10，12，14，15，16，20，21，24，30，

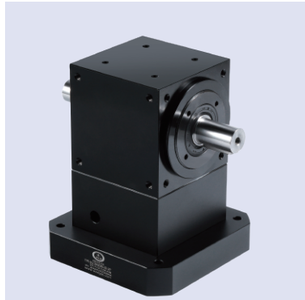
**选用范例：XAR060-5-14-50-70-M5**






XARK


XAR

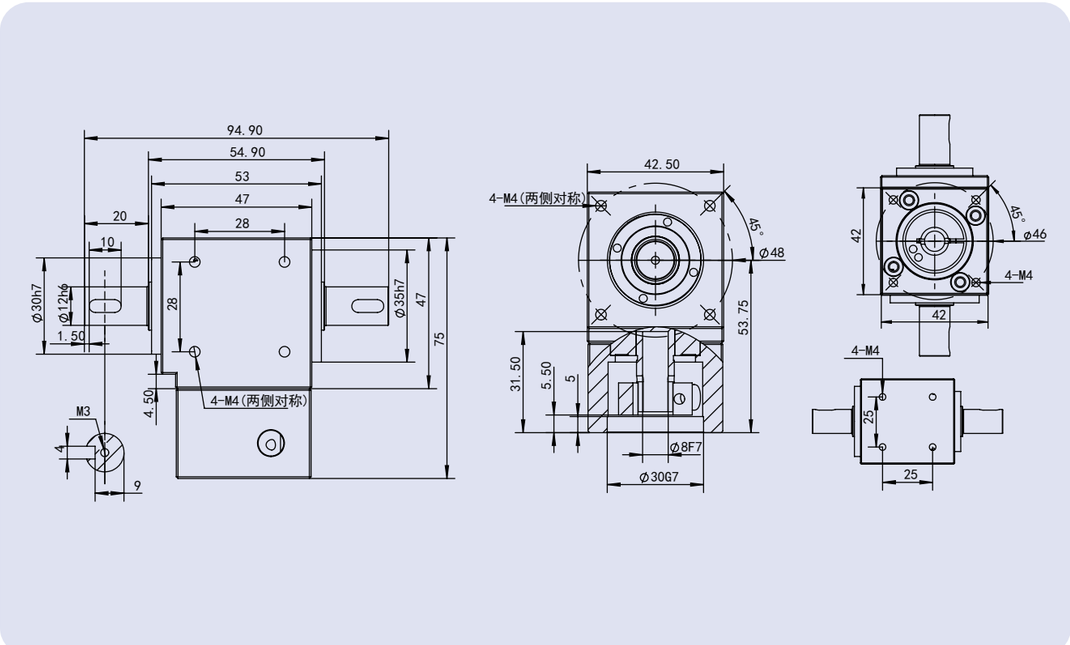

XARS

### 性能参数表

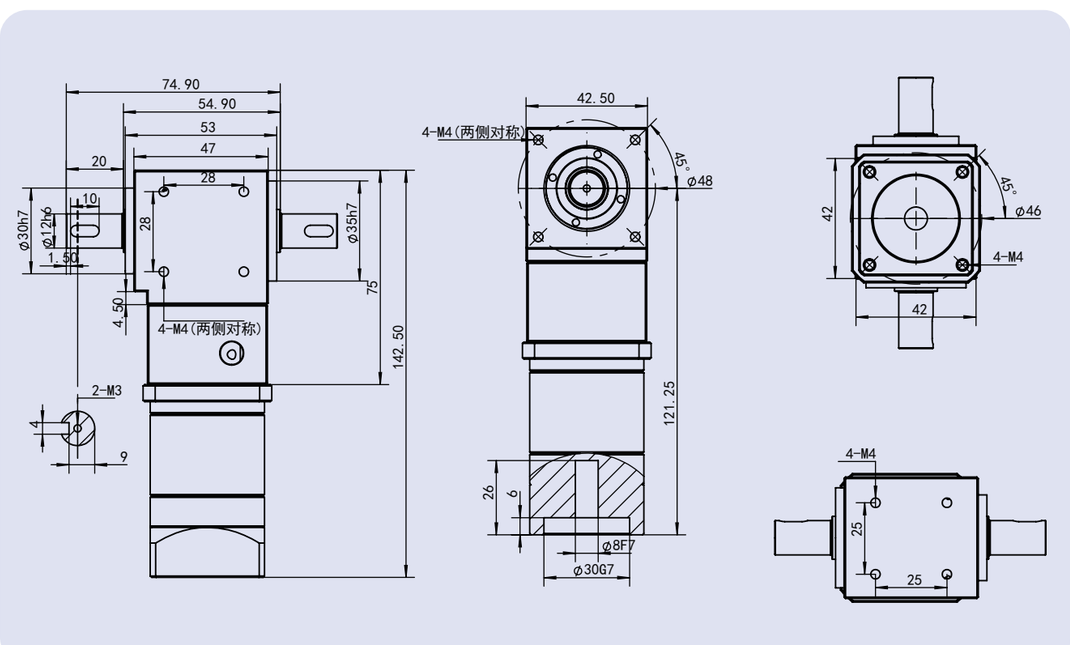
| 型号 | 系列 | XAR/XARS/XARK/XARKS | | | 减速比 | 级数 |
|---|---|---|---|---|---|---|
| | 框号 | 42 | 60 | 90 | | |
| 静载荷 | Nm | 15 | 30 | 64 | 1 | 1级 |
| | | 21 | 36 | 108 | 2 | |
| | | 18 | 38 | 89 | 3 | |
| | | 17 | 35 | 65 | 5 | |
| 动载荷 | Nm | 5.1 | 10 | 21 | 1 | 1级 |
| | | 7 | 12 | 35 | 2 | |
| | | 6 | 13 | 28 | 3 | |
| | | 6 | 11 | 21 | 5 | |
| 额定输入转速 | rpm | 1500 | | | / | / |
| 最大输入转速 | rpm | 3000 | | | | |
| 最大容许径向力 | N | 350 | 560 | 1050 | | |
| 最大容许轴向力 | N | 160 | 230 | 550 | | |
| 转动惯量 | $Kg.cm^2$ | 0.03 | 0.08 | 0.09 | | |
| 回程间隙 | arcmin | P0＜1 P1＜3 | | | | |
| | | P0＜2 P1＜5 | | | | |
| 噪音 | dB | ≤58 | ≤58 | ≤60 | | |
| 满载效率 | % | 1级：97% 2级：95% | | | | |
| 寿命 | h | ＞20000 | | | | |
| 工作温度 | / | （-25℃～+90℃） | | | | |
| 润滑方式 | | 合成油脂润滑 | | | | |
| 转动方向 | | 输入、输出同向 | | | | |
| 防护等级 | | IP65 | | | | |
| 安装方式 | | 任意方向 | | | | |
| 重量 | kg | 0.49 | 1.25 | 3.93 | | 1级 |
| | | 0.89 | 2.27 | 6.68 | | 2级 |

* 5比不建议外接行星
* XARK/S060，XARH060减速比1的孔径请咨询技术
* 以上参数仅供参考，根据客户提供的参数，可出具相关的技术参数及尺寸

## XARS42-L1



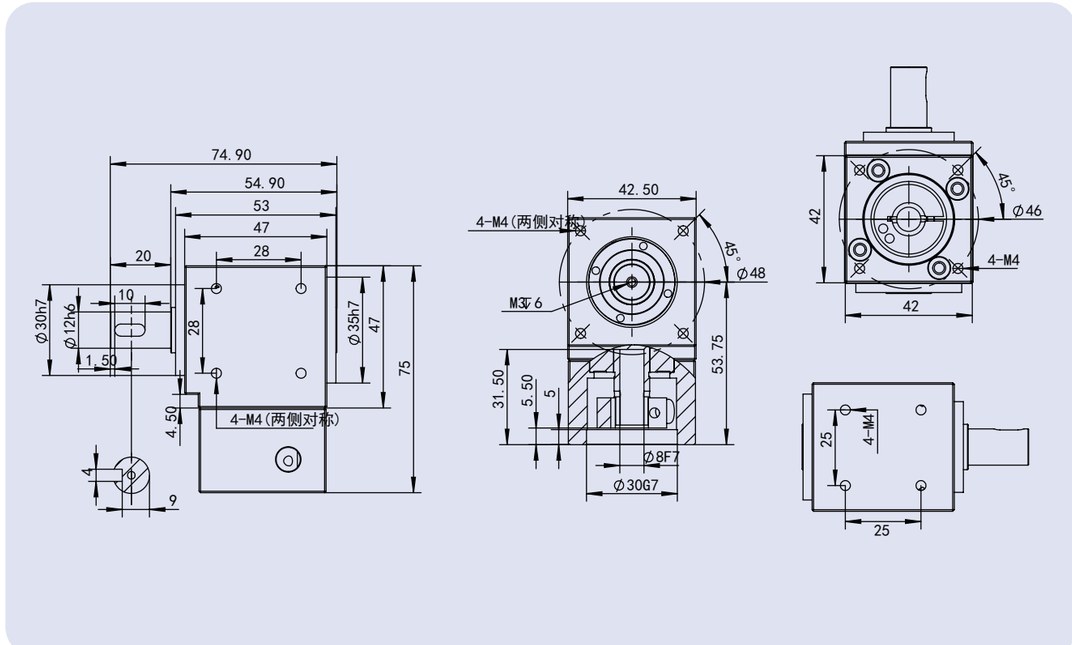

## XARS42-L2



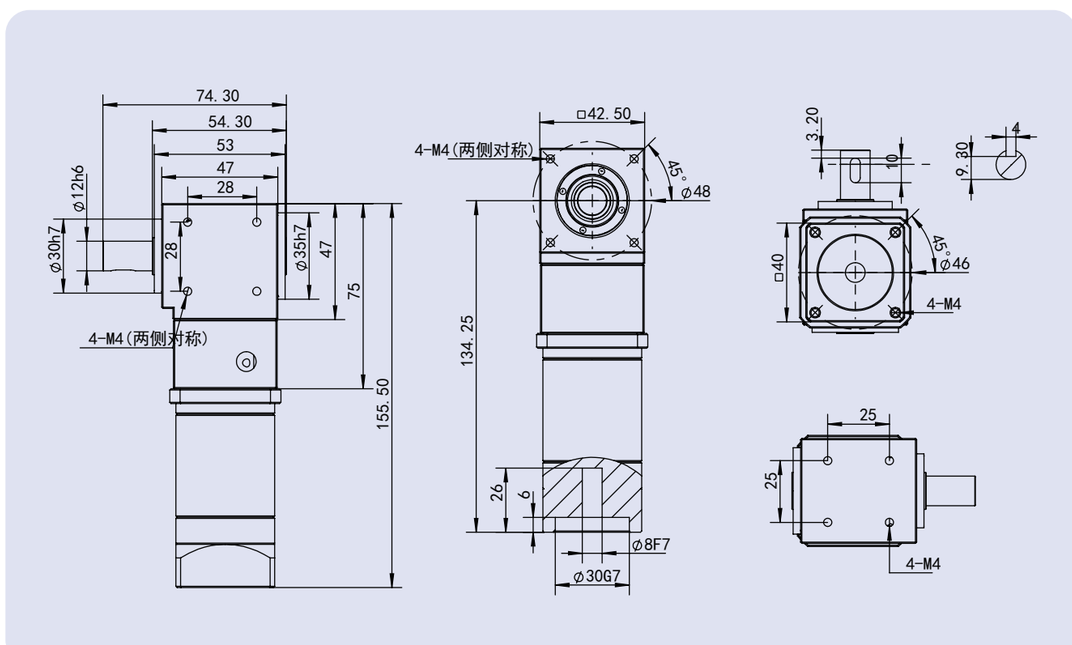




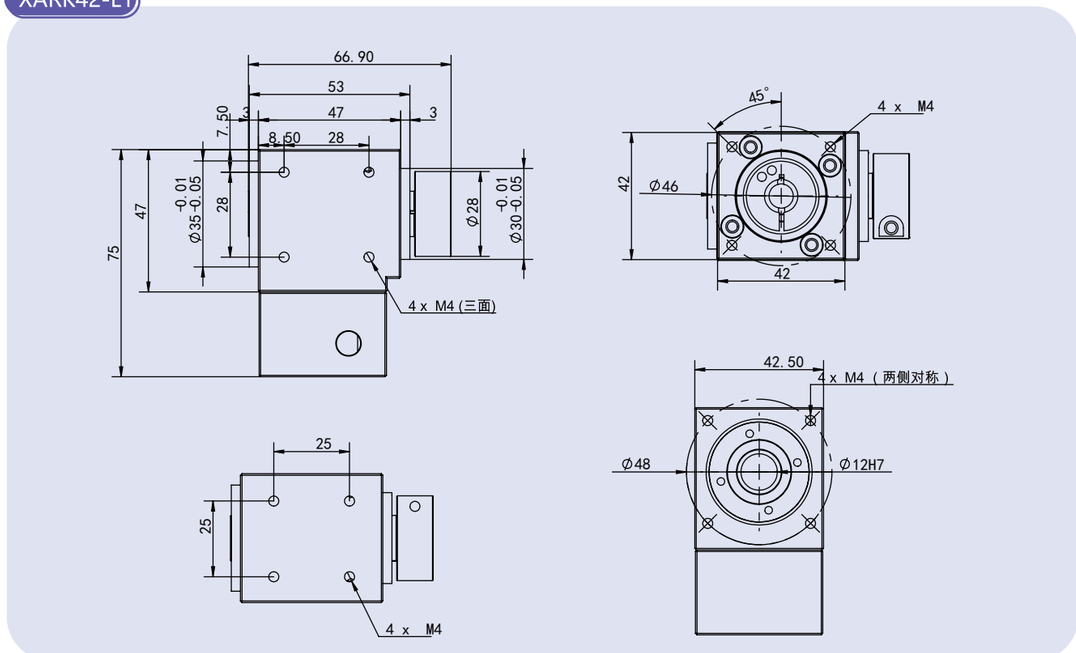

## XAR42-L1



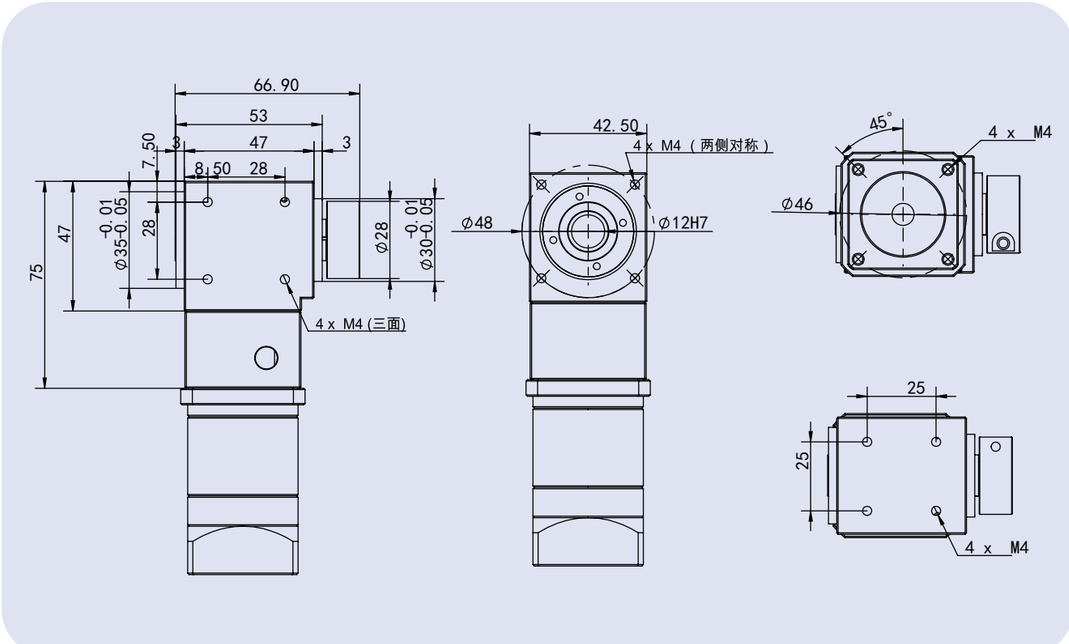

## XAR42-L2



## XARK42-L1



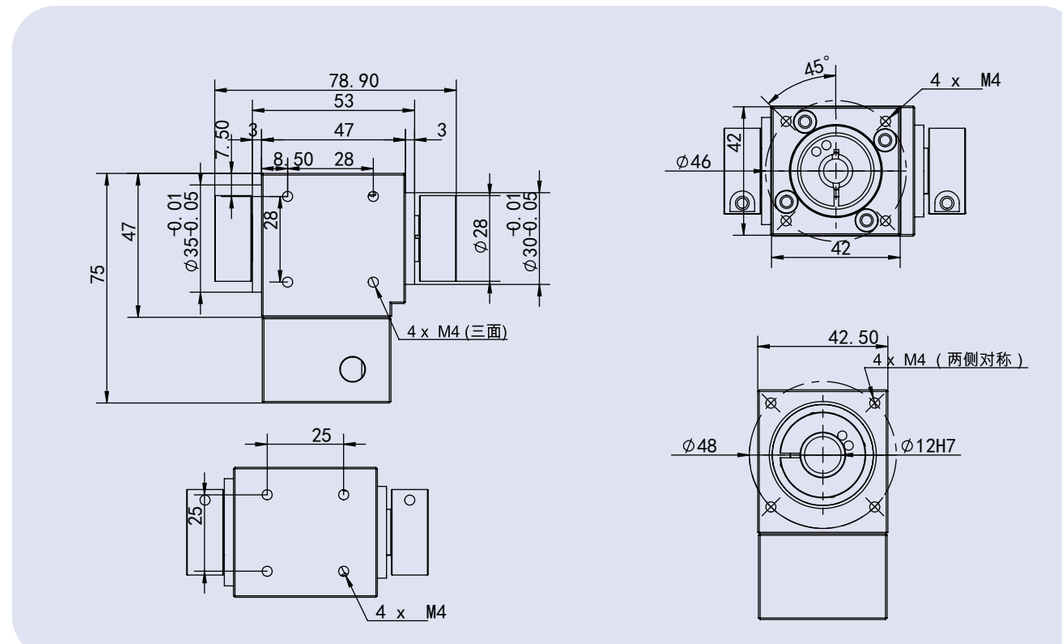

## XARK42-L2



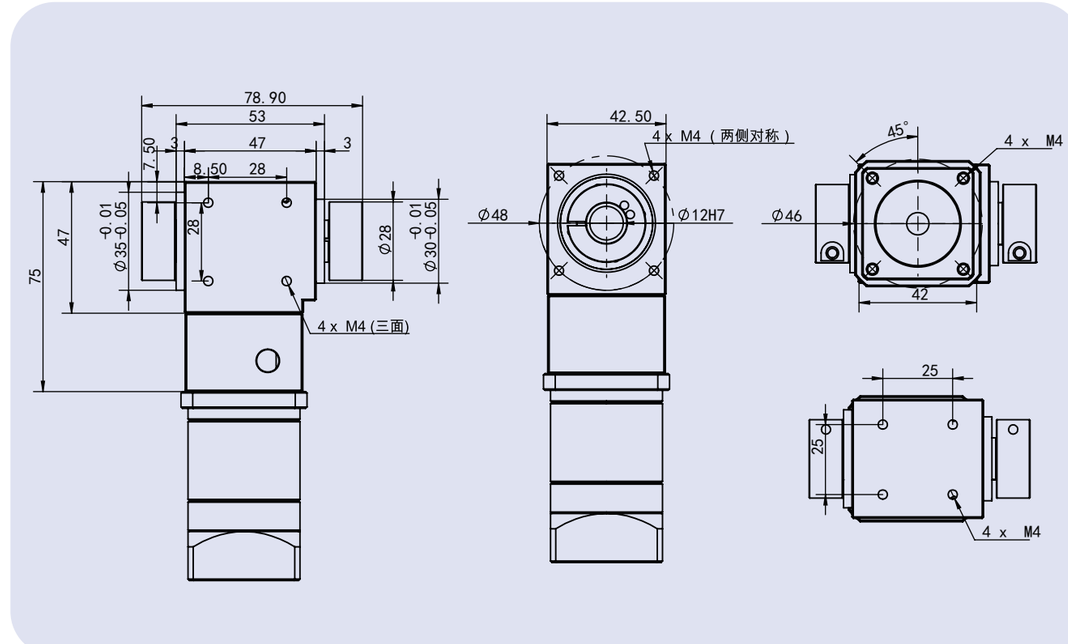




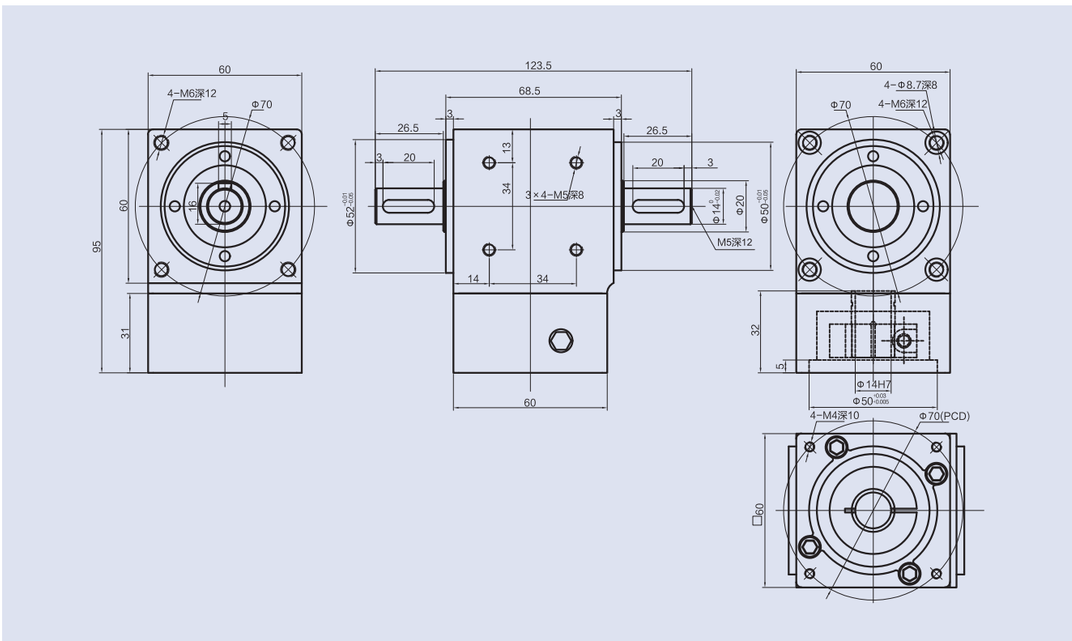

## XARKS42-L1



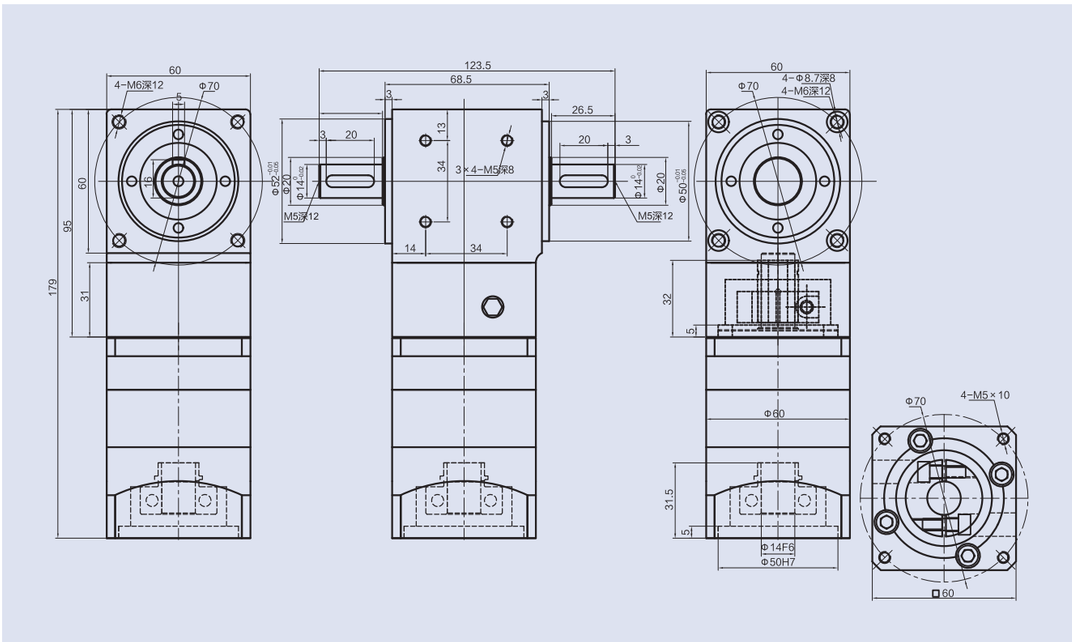

## XARKS42-L2



## XARS60-L1



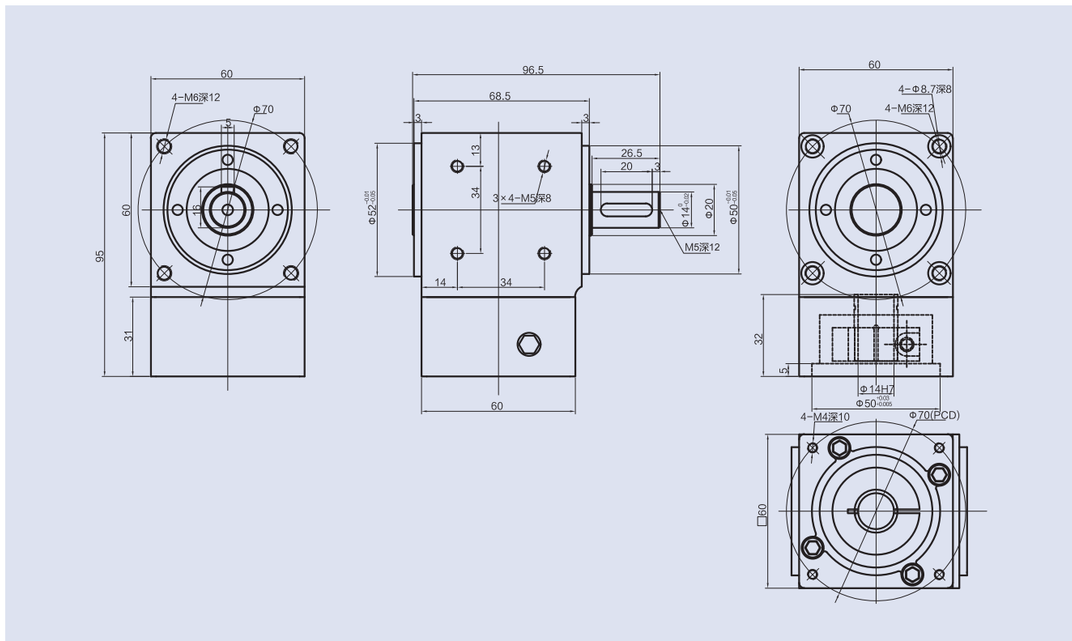

## XARS60-L2



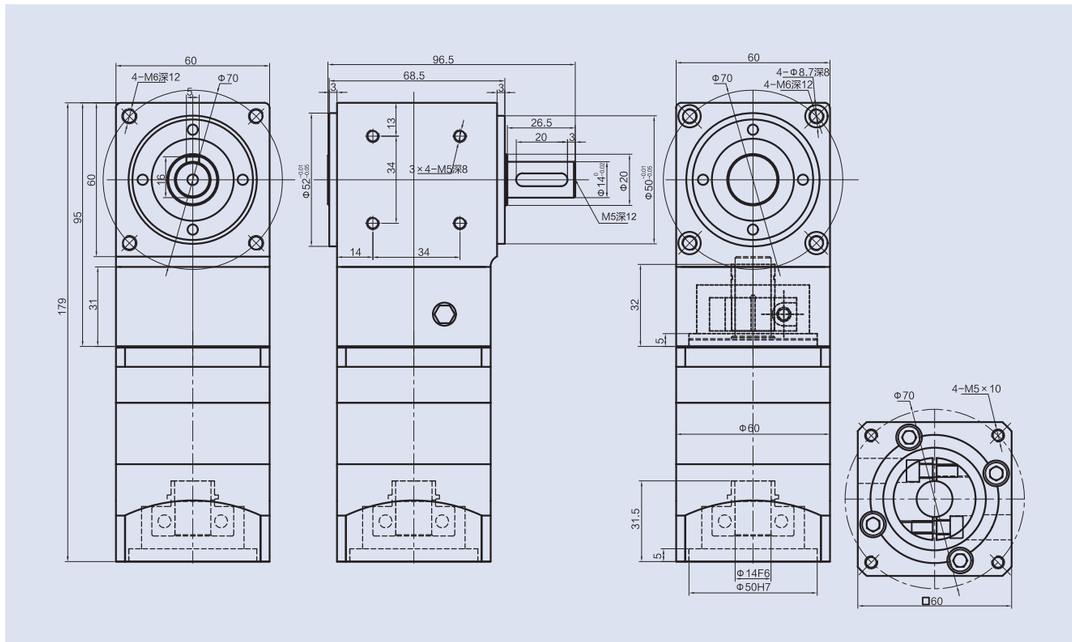




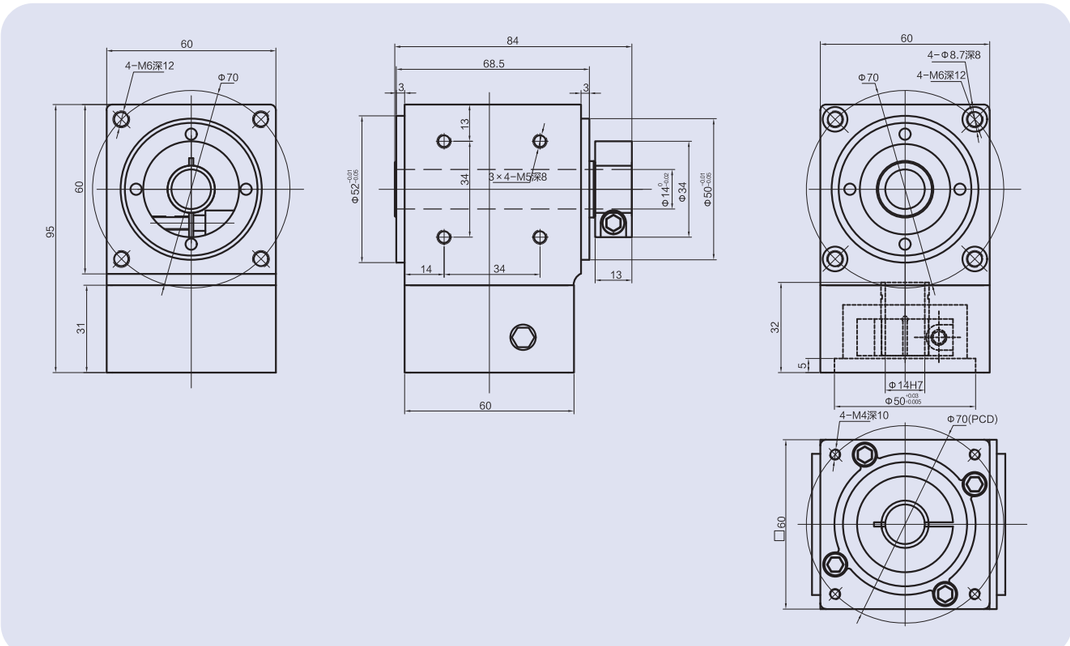

## XAR60-L1



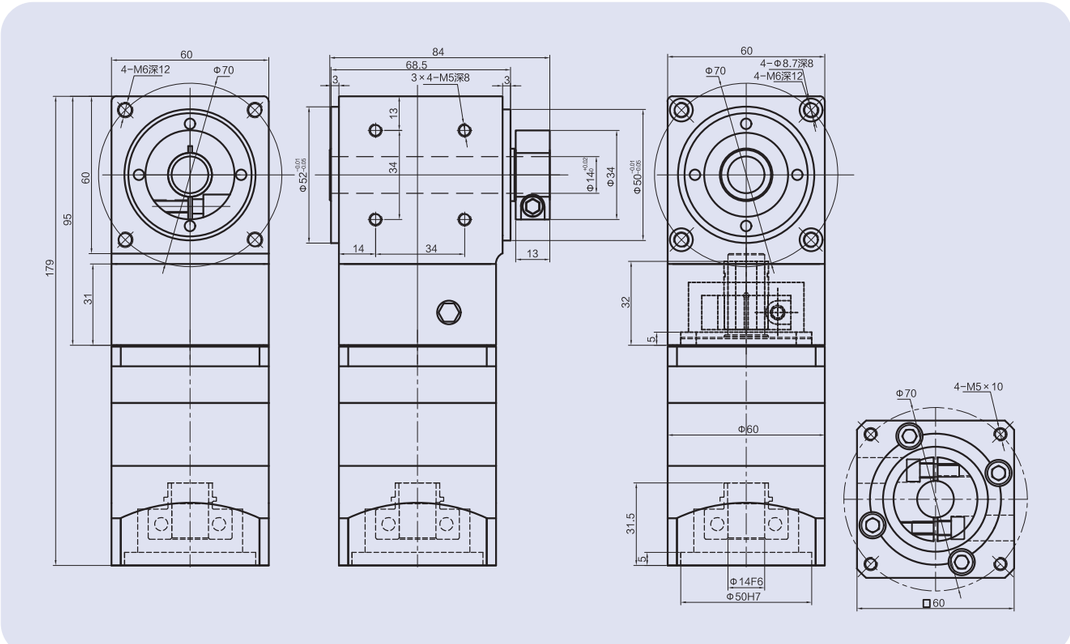

## XAR60-L2



## XARK60-L1



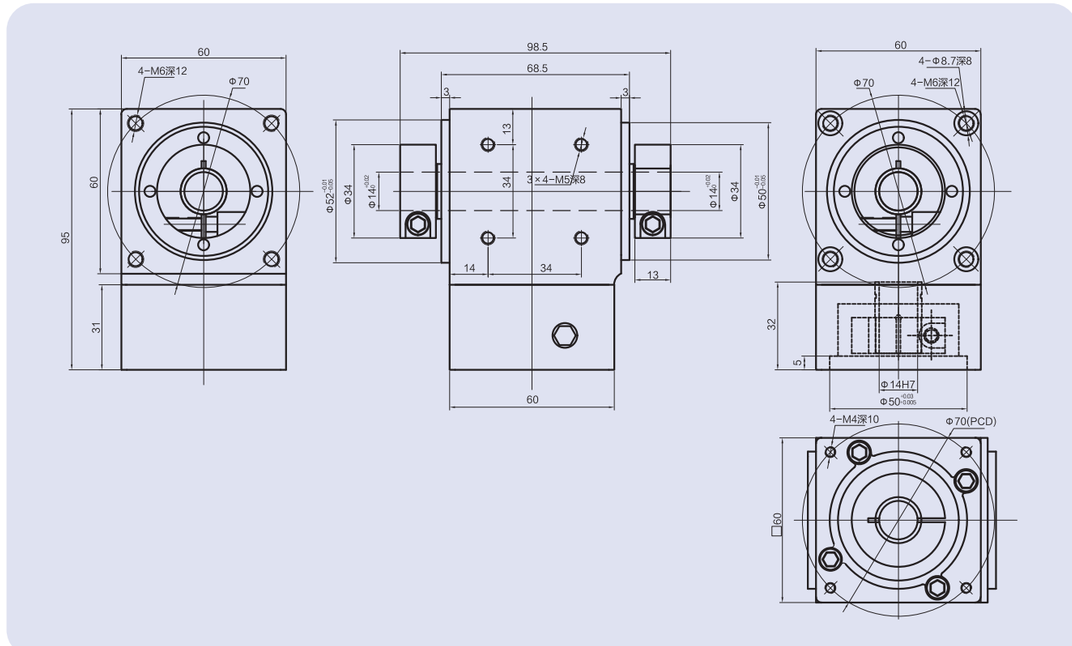

## XARK60-L2



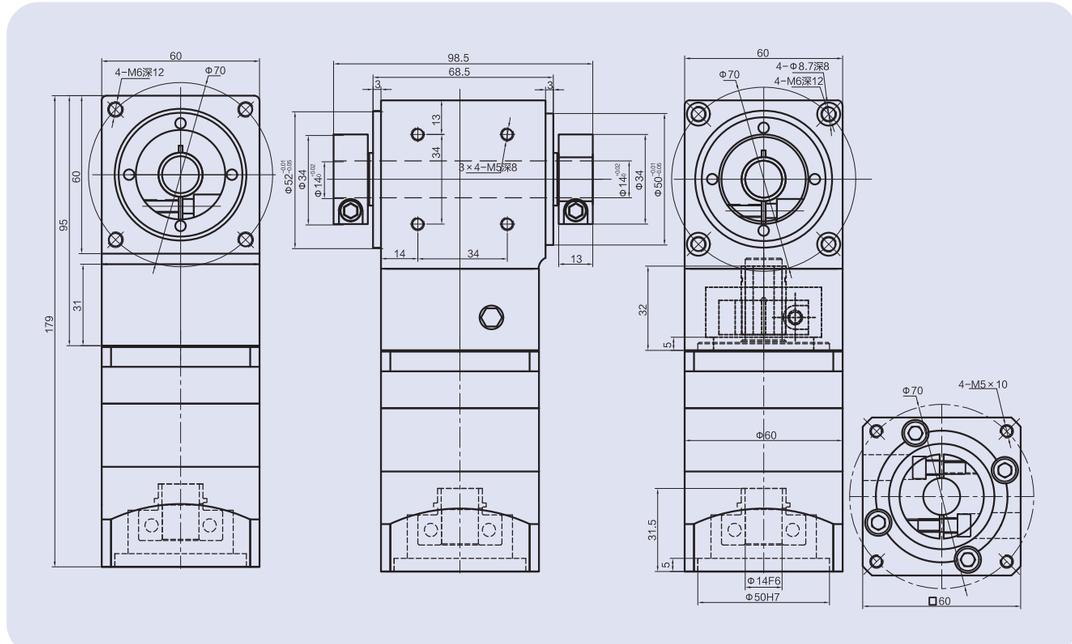




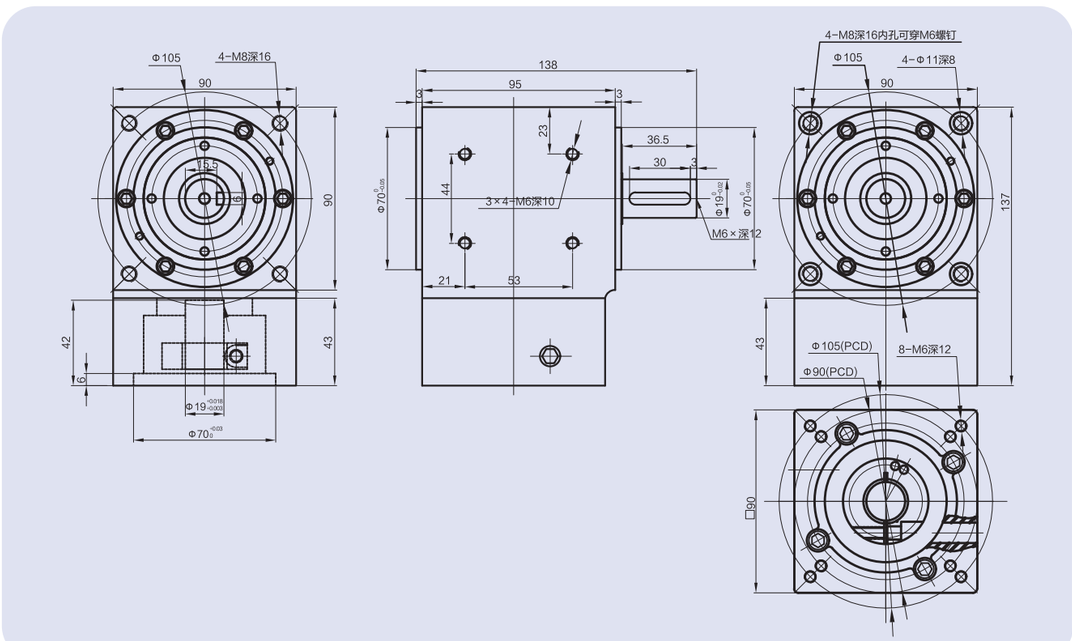

## XARKS60-L1



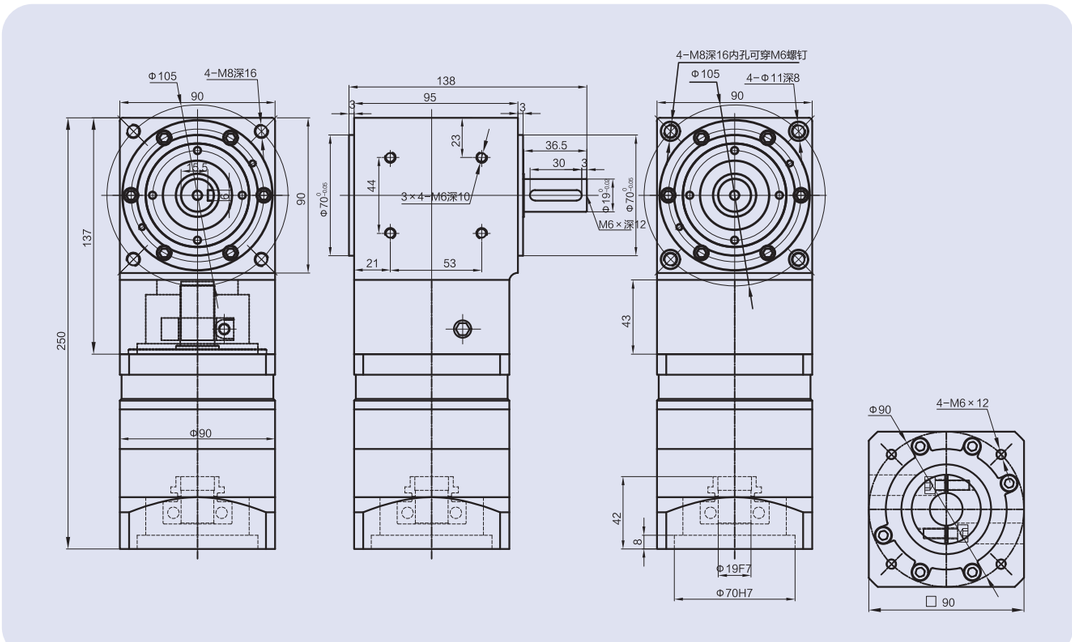

## XARKS60-L2



## XAR90-L1



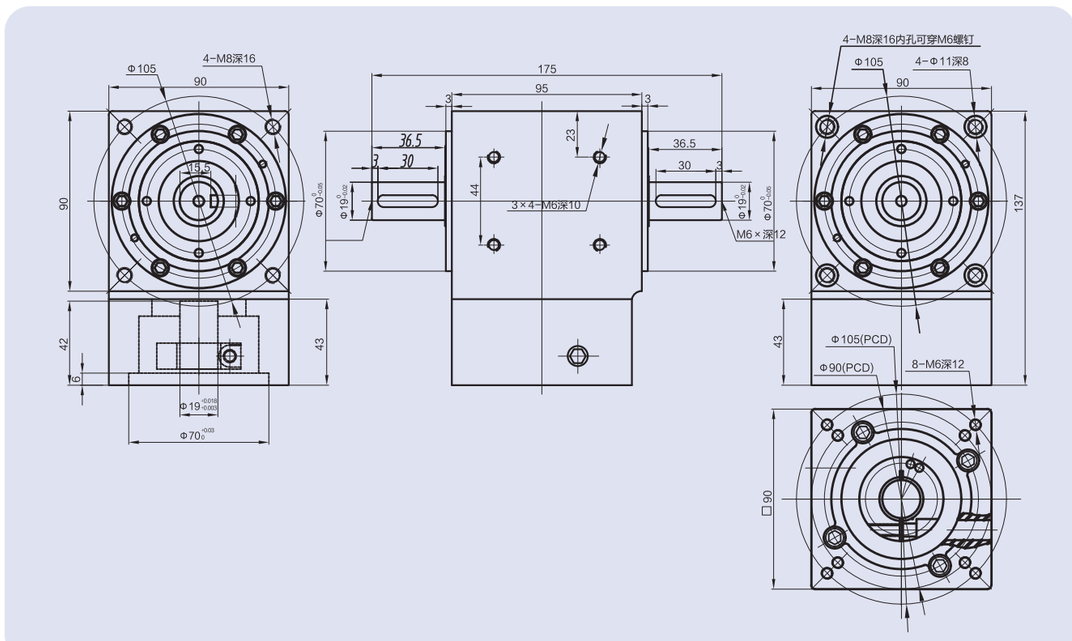

## XAR90-L2



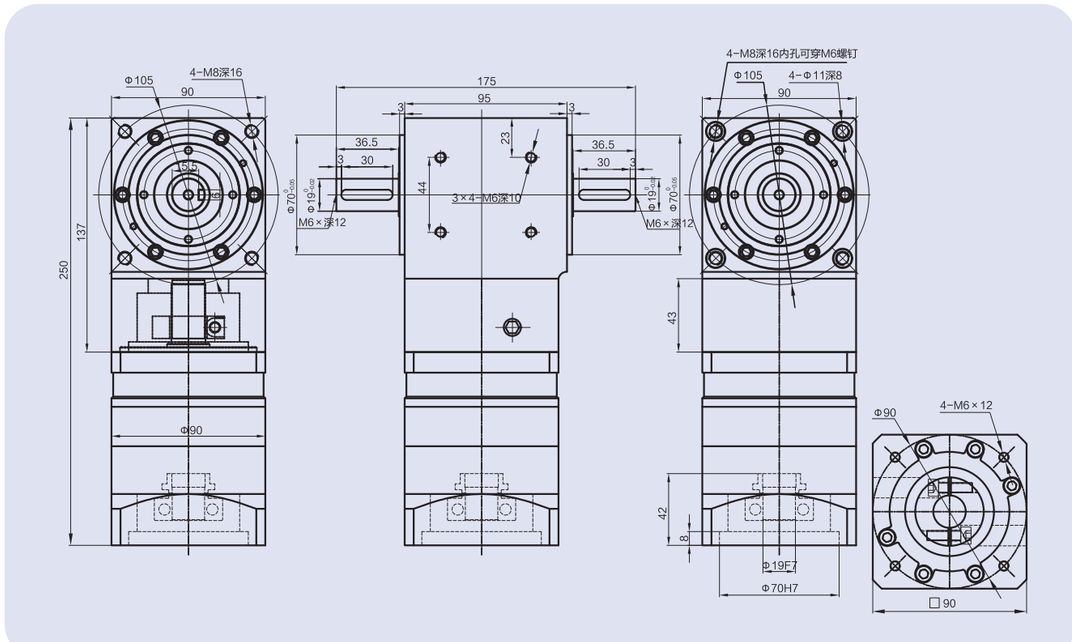




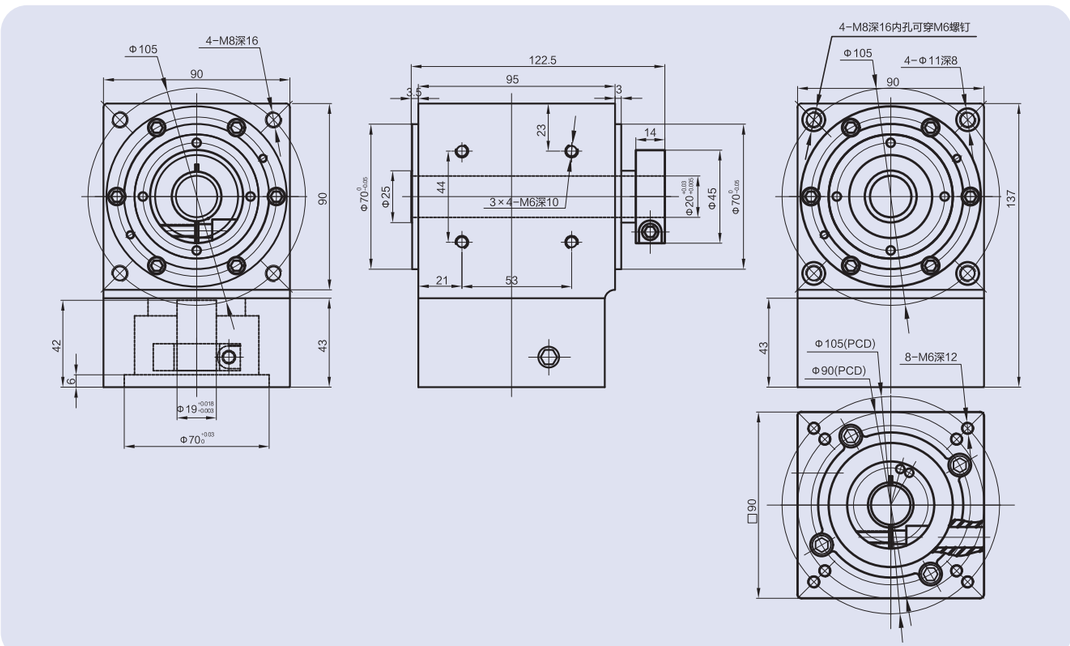

## XARS90-L1



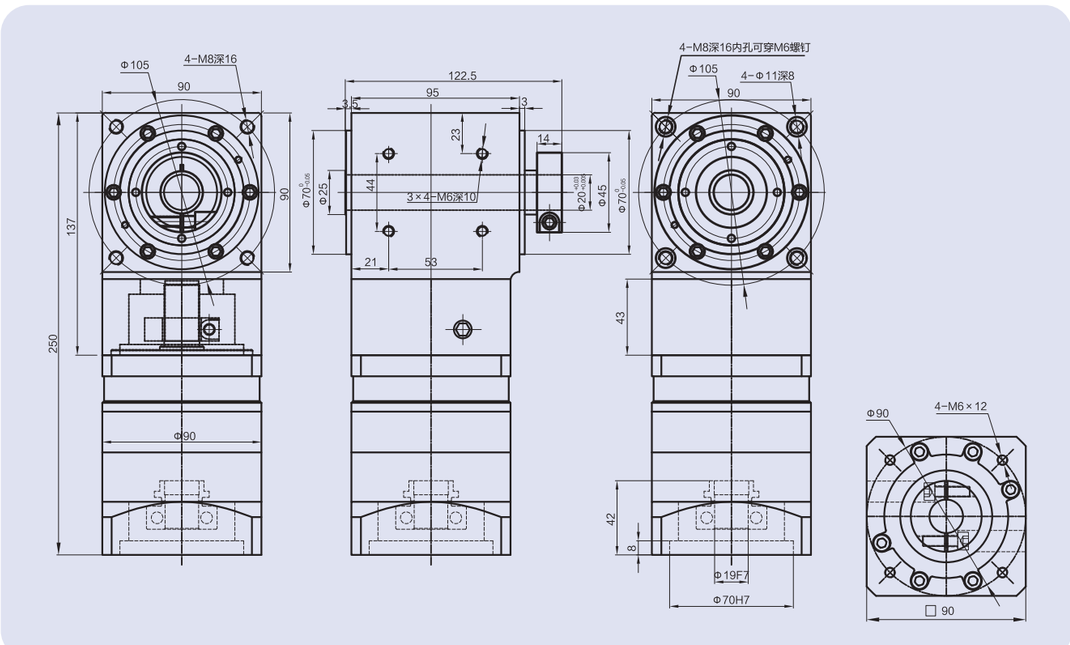

## XARS90-L2



## XARK90-L1



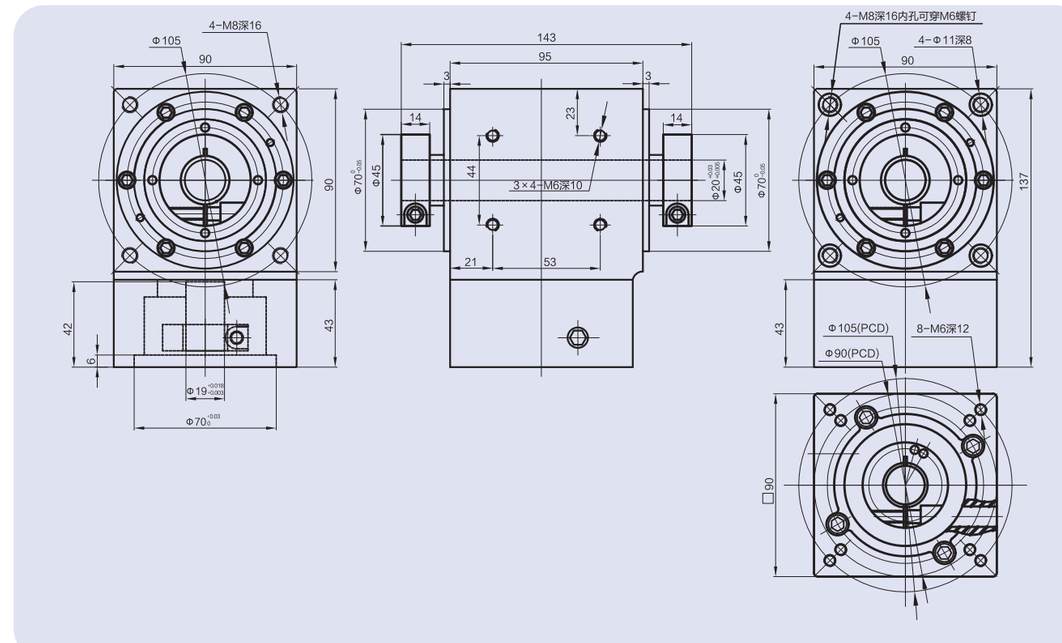

## XARK90-L2



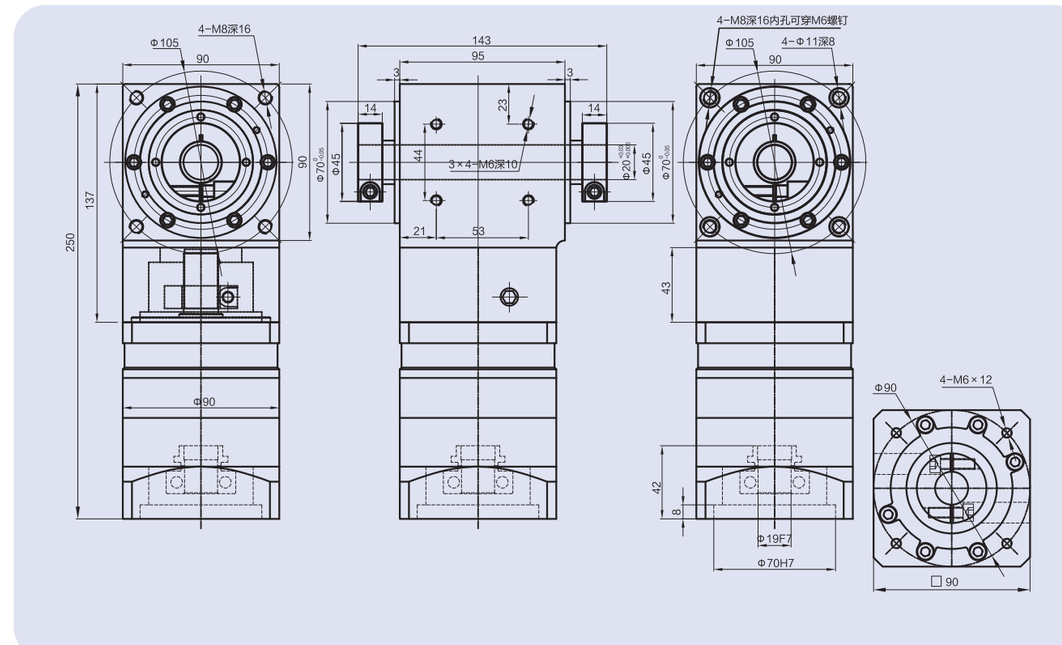





## XARKS90-L1




## XARKS90-L2



## 型号定义 / MODEL ILLUMINATE

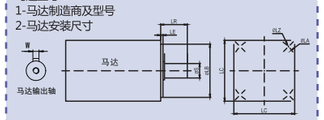
**XZT090 – L – 1**

- 型号：XZT065/XZT075/XZT090/XZT110/XZT140/XZT170/XZT210/XZT240/XZT280
- 输出类型：L/L1/R1/C/CL/CR/H/4M/LM/RM
- 减速比：1/2/3

**选用范例：XZT090-L-1**

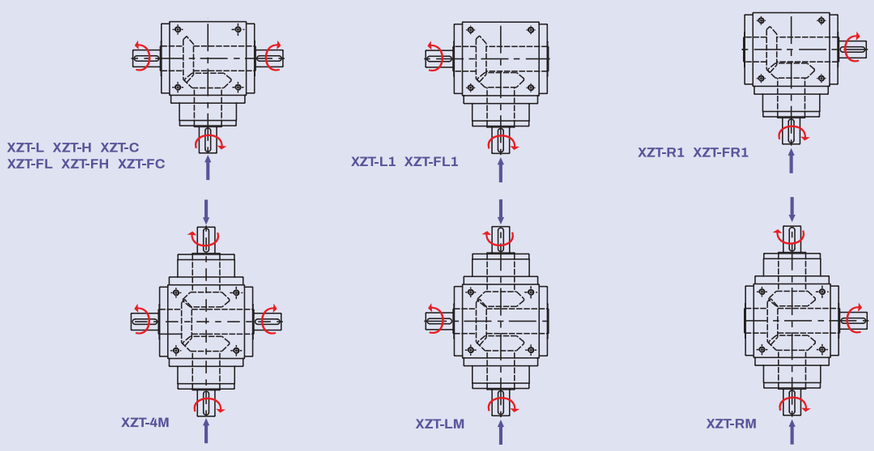
**XZTF090 – FL – 1 – S(KW)-LB-LA-LZ**

- 型号：XZTF065/XZTF075/XZTF090/XZTF110/XZTF140/XZTF170/XZTF210/XZTF240/XZTF280
- 输出类型：FL/FL1/FR1/FC/FCL/FCR/FH/F4M/FLM/FRM
- 减速比：
  1级：1, 2, 3
  2级：3, 4, 5, 6, 7, 8, 9, 10
  3级：12, 15, 20, 30, 40, 50, 60, 80, 100. . .
- 马达型号：
  1-马达制造商及型号
  2-马达安装尺寸




**例1：XZTF090-FL-100-19-70-90-M6**
**例2：XZTF090-FL-100-19K6-70-90-M6**

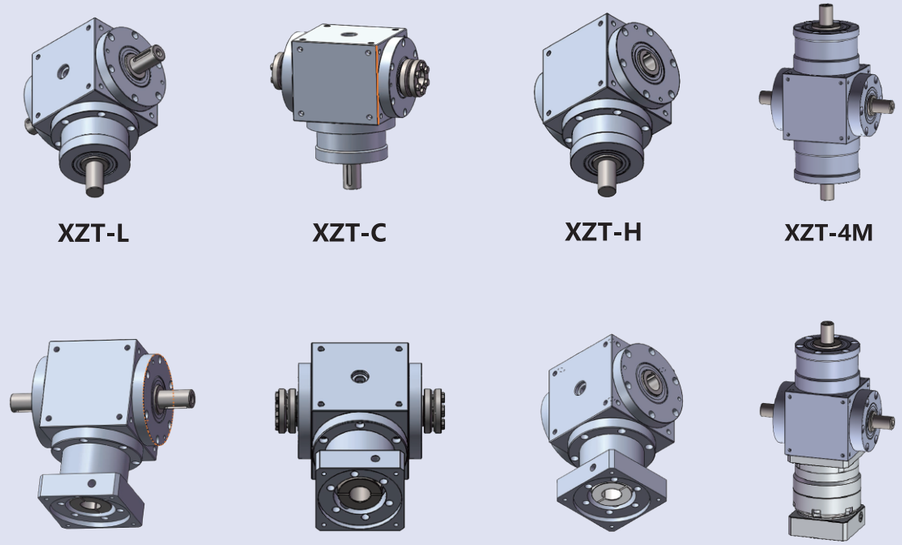
### XZT 系列的旋转方向








### XZT 输出/输入类型

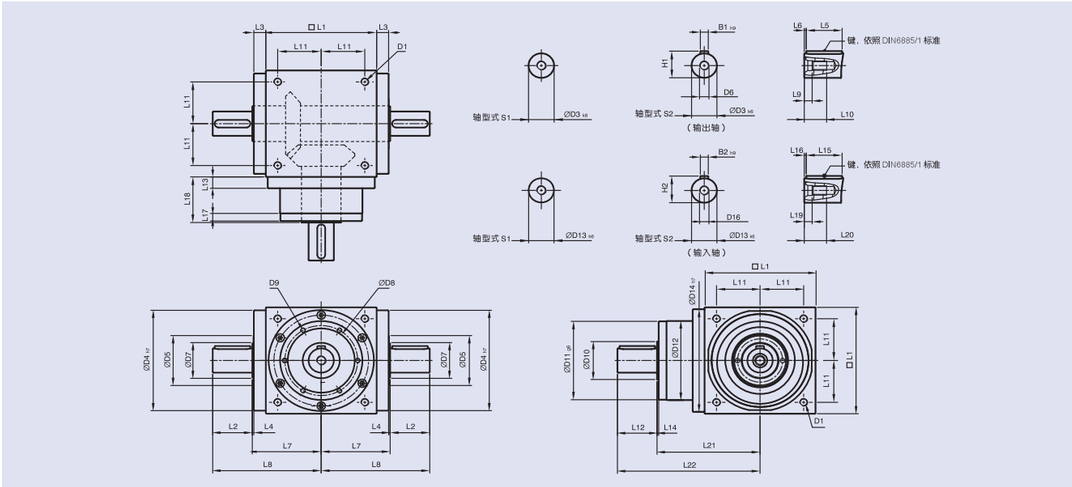



## 性能参数表

| 型号 | 单位 | | L/L1/R1/H/C/LM/RM/4M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | XZT065 | XZT075 | XZT090 | XZT110 | XZT140 | XZT170 | XZT210 | XZT240 | XZT280 | 减速比 |
| 静载荷 | Nm | 55 | 55 | 147 | 289 | 439 | 618 | 1049 | 3297 | 6029 | 1 |
| | | / | / | 108 | 258 | 355 | 785 | 1515 | 3684 | / | 2 |
| | | / | / | 89 | 235 | 475 | 851 | 1410 | / | / | 3 |
| 动载荷 | Nm | 17 | 17 | 52 | 105 | 158 | 229 | 394 | 1266 | 2306 | 1 |
| | | / | / | 35 | 94 | 129 | 298 | 576 | 1417 | / | 2 |
| | | / | / | 28 | 85 | 173 | 301 | 513 | / | / | 3 |
| 额定输入转速 | rpm | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 1500 | 1～5 |
| 最大容许径向力输出轴1 | N | 950 | 950 | 1450 | 2100 | 2700 | 3800 | 7800 | 9600 | 10500 | 1～5 |
| 最大容许径向力输出轴2 | N | 1100 | 1100 | 1700 | 2700 | 4800 | 6600 | 11500 | 16000 | 18000 | 1～5 |
| 最大容许轴向力输出轴1 | N | 425 | 425 | 725 | 1050 | 1350 | 1900 | 3900 | 4800 | 5250 | 1～5 |
| 最大容许径向力输出轴2 | N | 550 | 550 | 850 | 1350 | 2400 | 3300 | 5750 | 8500 | 9000 | 1～5 |
| 回程间隙 | arcmin | ≤8 | | | | | ≤10 | | | | 1～5 |
| 噪音 | dB | ≤70 | ≤70 | ≤74 | ≤76 | ≤77 | ≤78 | ≤80 | ≤82 | ≤83 | 1～5 |
| 满载效率 | % | ≤94% | | | | | | | | | 1～5 |
| 寿命 | h | ≥20000 | | | | | | | | | 1～5 |
| 工作温度 | | (-10℃ ～ 90℃) | | | | | | | | | 1～5 |
| 润滑方式 | | 合成油脂润滑 | | | | | | | | | 1～5 |

* 工况超过日常温度，请联系技术咨询

# XZT-L （单节，减速比 i=1~2）



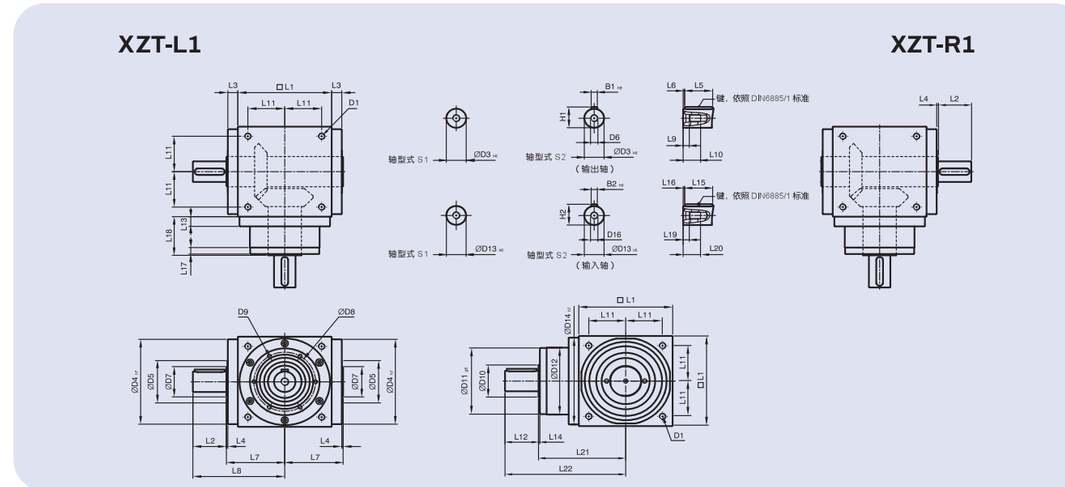

（单位：mm）

| 尺寸 | XZT065 L | XZT075 L | XZT090 L | XZT110 L | XZT140 L | XZT170 L | XZT210 L | XZT240 L | XZT280 L |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D3 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D5 | 31 | 35 | 43 | 53 | 68 | 83 | 104 | 124 | 144 |
| D6 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| D7 | 21 | 22 | 28 | 33 | 47 | 55 | 75 | 85 | 110 |
| D8 | 53 | 62 | 76 | 95 | 92 | 114 | 142 | 160 | 176 |
| D9 | 4xM4xL7 | 4xM5xL8 | 4xM5xL8 | 6xM6xL10 | 6xM6xL10 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM10xL15 |
| D10 | 15.4 | 20.4 | 25.8 | 35.8 | 49.8 | 59.3 | 79.3 | 92.3 | 102.3 |
| D11 g6 | 62.9 | 72.9 | 87 | 107 | 103 | 127 | 158 | 178 | 198 |
| D12 | 62 | 72 | 86 | 106 | 104 | 128 | 160 | 180 | 200 |
| D13 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D14 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D16 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L2 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L5 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L6 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L8 | 67 | 84 | 97 | 112 | 137 | 162 | 202 | 232 | 277 |
| L9 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L10 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L12 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L14 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L15 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L16 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L17 | 6 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 |
| L18 | 43 | 52.5 | 55 | 60 | 60 | 70 | 90 | 105 | 120 |
| L19 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L20 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L21 | 75.5 | 90 | 100 | 115 | 130 | 155 | 195 | 225 | 260 |
| L22 | 95 | 120 | 135 | 155 | 180 | 215 | 270 | 310 | 370 |
| B1 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| B2 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| H1 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |
| H2 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |





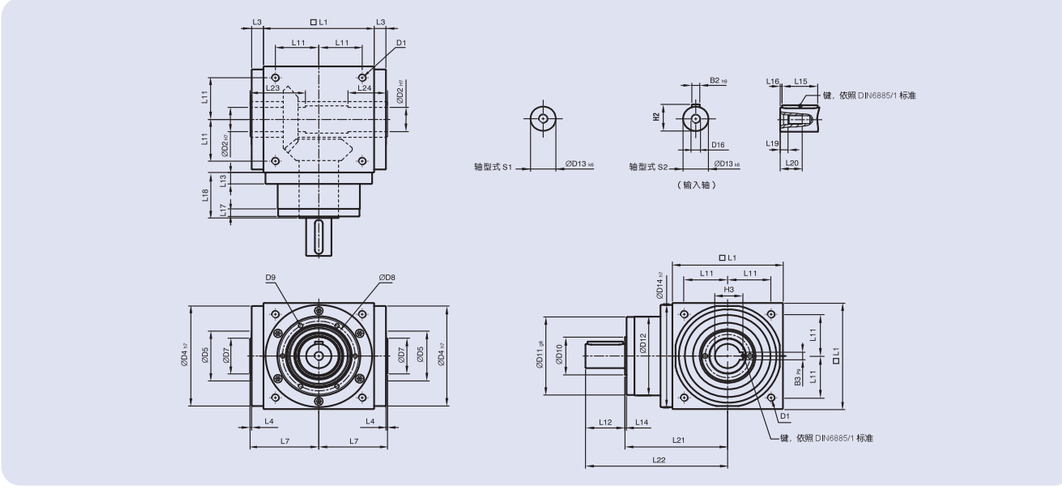
# XZT-L1/R1 轴输入型 （单节，减速比 i=1~2）




（单位：mm）

| 尺寸 | XZT065 L1/R1 | XZT075 L1/R1 | XZT090 L1/R1 | XZT110 L1/R1 | XZT140 L1/R1 | XZT170 L1/R1 | XZT210 L1/R1 | XZT240 L1/R1 | XZT280 L1/R1 |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D3 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D5 | 31 | 35 | 43 | 53 | 68 | 83 | 104 | 124 | 144 |
| D6 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| D7 | 21 | 22 | 28 | 33 | 47 | 55 | 75 | 85 | 110 |
| D8 | 53 | 62 | 76 | 95 | 92 | 114 | 142 | 160 | 176 |
| D9 | 4xM4xL7 | 4xM5xL8 | 4xM5xL8 | 6xM6xL10 | 6xM6xL10 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM10xL15 |
| D10 | 15.4 | 20.4 | 25.8 | 35.8 | 49.8 | 59.3 | 79.3 | 92.3 | 102.3 |
| D11 g6 | 62.9 | 72.9 | 87 | 107 | 103 | 127 | 158 | 178 | 198 |
| D12 | 62 | 72 | 86 | 106 | 104 | 128 | 160 | 180 | 200 |
| D13 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D14 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D16 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L2 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L5 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L6 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L8 | 67 | 84 | 97 | 112 | 137 | 162 | 202 | 232 | 277 |
| L9 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L10 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L12 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L14 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L15 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L16 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L17 | 6 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 |
| L18 | 43 | 52.5 | 55 | 60 | 60 | 70 | 90 | 105 | 120 |
| L19 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L20 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L21 | 75.5 | 90 | 100 | 115 | 130 | 155 | 195 | 225 | 260 |
| L22 | 95 | 120 | 135 | 155 | 180 | 215 | 270 | 310 | 370 |
| B1 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| B2 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| H1 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |
| H2 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |

## XZT-H（单节，减速比 i=1~2）



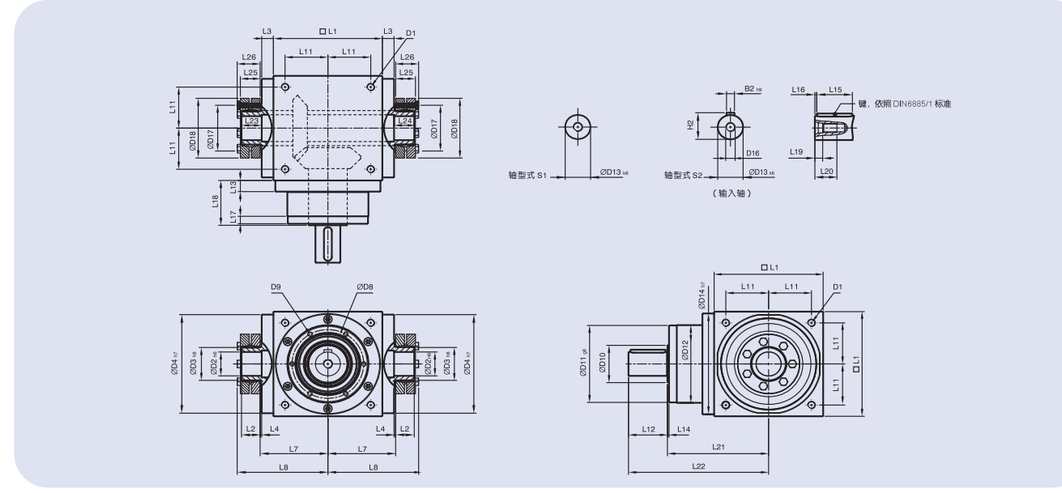

（单位：mm）

| 尺寸 | XZT065 H | XZT075 H | XZT090 H | XZT110 H | XZT140 H | XZT170 H | XZT210 H | XZT240 H | XZT280 H |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D2 H7 | 13 | 14 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D5 | 31 | 35 | 43 | 53 | 68 | 83 | 104 | 124 | 144 |
| D7 | 21 | 22 | 28 | 33 | 47 | 55 | 75 | 85 | 110 |
| D8 | 53 | 62 | 76 | 95 | 92 | 114 | 142 | 160 | 176 |
| D9 | 4xM4xL7 | 4xM5xL8 | 4xM5xL8 | 6xM6xL10 | 6xM6xL10 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM10xL15 |
| D10 | 15.4 | 20.4 | 25.8 | 35.8 | 49.8 | 59.3 | 79.3 | 92.3 | 102.3 |
| D11 g6 | 62.9 | 72.9 | 87 | 107 | 103 | 127 | 158 | 178 | 198 |
| D12 | 62 | 72 | 86 | 106 | 104 | 128 | 160 | 180 | 200 |
| D13 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D14 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D16 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L12 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L14 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L15 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L16 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L17 | 6 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 |
| L18 | 43 | 52.5 | 55 | 60 | 60 | 70 | 90 | 105 | 120 |
| L19 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L20 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L21 | 75.5 | 90 | 100 | 115 | 130 | 155 | 195 | 225 | 260 |
| L22 | 95 | 120 | 135 | 155 | 180 | 215 | 270 | 310 | 370 |
| L23 | 40 | 47 | 52 | 53 | 70 | 80 | 95 | 115 | 115 |
| L24 | 30 | 32 | 35 | 35 | 50 | 55 | 65 | 80 | 80 |
| B2 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| B3 P9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| H2 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |
| H3 | 15.3 | 16.3 | 20.8 | 24.8 | 35.3 | 43.3 | 53.8 | 59.3 | 64.4 |





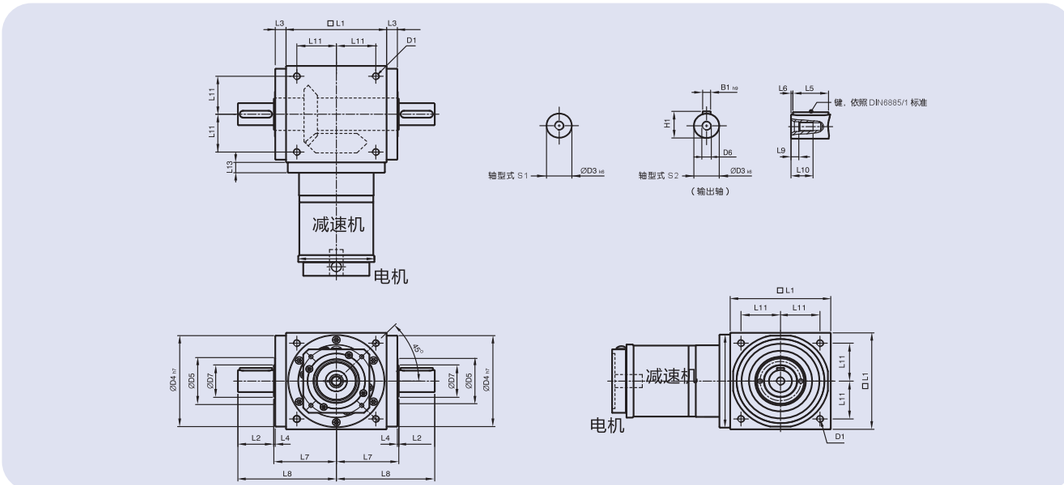
## XZT-C（单节，减速比 i=1~2）




（单位：mm）

| 尺寸 | XZT065 C | XZT075 C | XZT090 C | XZT110 C | XZT140 C | XZT170 C | XZT210 C | XZT240 C | XZT280 C |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D2 H6 | 13 | 14 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D3 h8 | 16 | 16 | 22 | 25 | 44 | 50 | 62 | 68 | 75 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D8 | 53 | 62 | 76 | 95 | 92 | 114 | 142 | 160 | 176 |
| D9 | 4xM4xL7 | 4xM5xL8 | 4xM5xL8 | 6xM6xL10 | 6xM6xL10 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM8xL12.5 | 6xM10xL15 |
| D10 | 15.4 | 20.4 | 25.8 | 35.8 | 49.8 | 59.3 | 79.3 | 92.3 | 102.3 |
| D11 g6 | 62.9 | 72.9 | 87 | 107 | 103 | 127 | 158 | 178 | 198 |
| D12 | 62 | 72 | 86 | 106 | 104 | 128 | 160 | 180 | 200 |
| D13 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D14 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D16 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| D17 | 26 | 26 | 36 | 38 | 61 | 70 | 86 | 86 | 100 |
| D18 | 41 | 41 | 50 | 50 | 80 | 90 | 110 | 115 | 138 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L2 | 14 | 14 | 18 | 18 | 24 | 26 | 29 | 29 | 30.5 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L8 | 66 | 72.5 | 85 | 95 | 116.5 | 133.5 | 161.5 | 181.5 | 205 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L12 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L14 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L15 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L16 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L17 | 6 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 |
| L18 | 43 | 52.5 | 55 | 60 | 60 | 70 | 90 | 105 | 120 |
| L19 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L20 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L21 | 75.5 | 90 | 100 | 115 | 130 | 155 | 195 | 225 | 260 |
| L22 | 95 | 120 | 135 | 155 | 180 | 215 | 270 | 310 | 370 |
| L23 | 15 | 15 | 20 | 20 | 26 | 28 | 31 | 31 | 32.5 |
| L24 | 15 | 15 | 20 | 20 | 26 | 28 | 31 | 31 | 32.5 |
| L25 | 15 | 15 | 19.5 | 19.5 | 25.5 | 27.5 | 30.5 | 30.5 | 32.5 |
| L26 | 18.5 | 18.5 | 23 | 23 | 29.5 | 31.5 | 34.5 | 34.5 | 38 |
| B2 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| H2 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |

# XZTF-FL（双节，减速比 i=7~50）




（单位：mm）

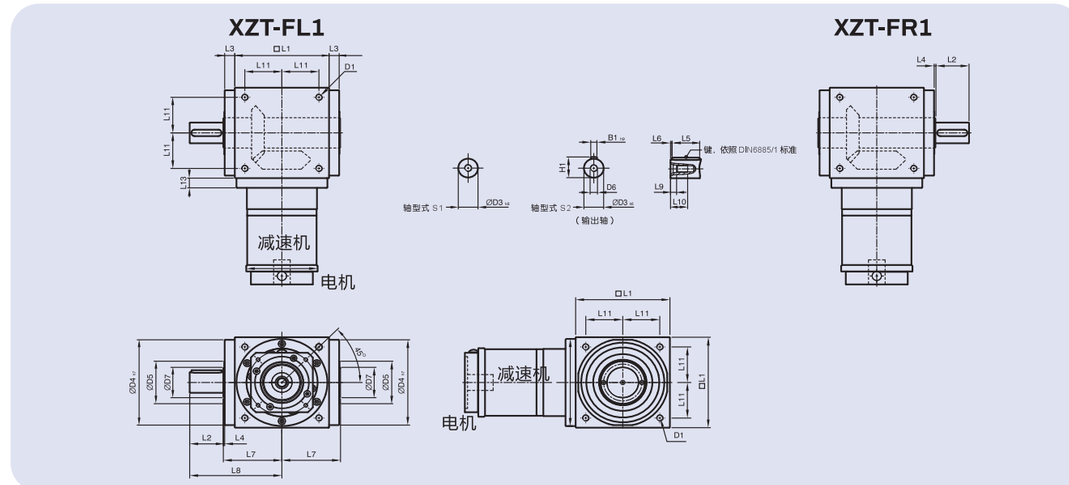
| 尺寸 | XZTF065 FL | XZTF075 FL | XZTF090 FL | XZTF110 FL | XZTF140 FL | XZTF170 FL | XZTF210 FL | XZTF240 FL | XZTF280 FL |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D3 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D5 | 31 | 35 | 43 | 53 | 68 | 83 | 104 | 124 | 144 |
| D6 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| D7 | 21 | 22 | 28 | 33 | 47 | 55 | 75 | 85 | 110 |
| D15 | 62.9 | 72.9 | 87 | 107 | 106 | 130 | 158 | 178 | 198 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L2 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L5 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L6 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L8 | 67 | 84 | 97 | 112 | 137 | 162 | 202 | 232 | 277 |
| L9 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L10 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| B1 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| H1 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |

请联系销售人员出图





# XZTF-FL1/FR1（双节，减速比 i=7~50）

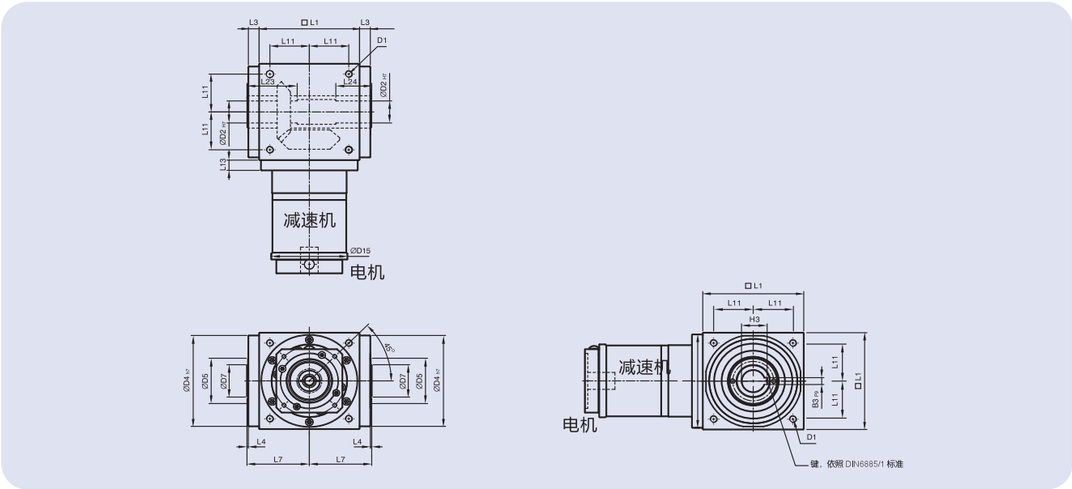



（单位：mm）

| 尺寸 | XZTF065 FL1 | XZTF075 FL1 | XZTF090 FL1 | XZTF110 FL1 | XZTF140 FL1 | XZTF170 FL1 | XZTF210 FL1 | XZTF240 FL1 | XZTF280 FL1 |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D3 k6 | 13 | 16 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D5 | 31 | 35 | 43 | 53 | 68 | 83 | 104 | 124 | 144 |
| D6 | M4 | M5 | M5 | M8 | M12 | M16 | M16 | M16 | M20 |
| D7 | 21 | 22 | 28 | 33 | 47 | 55 | 75 | 85 | 110 |
| D15 | 62.9 | 72.9 | 87 | 107 | 106 | 130 | 158 | 178 | 198 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L2 | 19.5 | 30 | 35 | 40 | 50 | 60 | 75 | 85 | 110 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L5 | 16 | 25 | 28 | 32 | 45 | 50 | 70 | 80 | 100 |
| L6 | 2 | 2.5 | 3.5 | 4 | 2.5 | 5 | 2.5 | 2.5 | 5 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L8 | 67 | 84 | 97 | 112 | 137 | 162 | 202 | 232 | 277 |
| L9 | 4.5 | 4.8 | 4.8 | 7.2 | 10 | 12 | 12 | 12 | 15 |
| L10 | 10 | 12.5 | 12.5 | 19 | 28 | 36 | 36 | 36 | 42 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L21 | 75 | 84.5 | 99 | 122 | 144.5 | 157.5 | 206.5 | 239 | 248 |
| L22 | 107.5 | 122 | 144 | 177 | 214.5 | 242.5 | 311.5 | 359 | 388 |
| B1 h9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| H1 | 15 | 18 | 20.5 | 24.5 | 35 | 43 | 53.5 | 59 | 64 |

请联系销售人员出图

# XZTF-FH （双节，减速比 i=7~50）




（单位：mm）

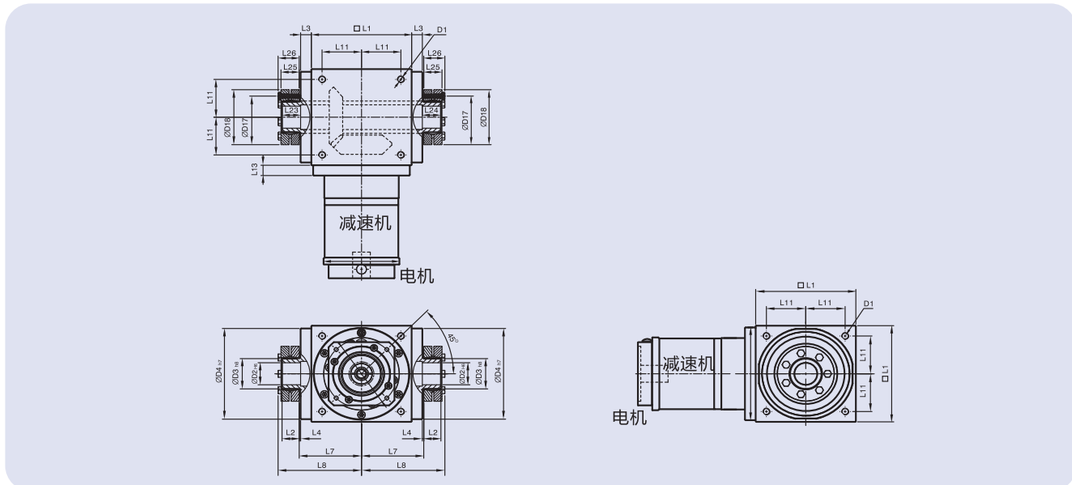
| 尺寸 | XZTF065 FH | XZTF075 FH | XZTF090 FH | XZTF110 FH | XZTF140 FH | XZTF170 FH | XZTF210 FH | XZTF240 FH | XZTF280 FH |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D2 H7 | 13 | 14 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D5 | 31 | 35 | 43 | 53 | 68 | 83 | 104 | 124 | 144 |
| D7 | 21 | 22 | 28 | 33 | 47 | 55 | 75 | 85 | 110 |
| D15 | 62.9 | 72.9 | 87 | 107 | 106 | 130 | 158 | 178 | 198 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L23 | 40 | 47 | 52 | 53 | 70 | 80 | 95 | 115 | 115 |
| L24 | 30 | 32 | 35 | 35 | 50 | 55 | 65 | 80 | 80 |
| B3 P9 | 5 | 5 | 6 | 6 | 10 | 12 | 14 | 16 | 18 |
| H3 | 15.3 | 16.3 | 20.8 | 24.8 | 35.3 | 43.3 | 53.8 | 59.3 | 64.4 |

请联系销售人员出图





# XZTF-FC （双节，减速比 i=7~50）




（单位：mm）

| 尺寸 | XZTF065 FC | XZTF075 FC | XZTF090 FC | XZTF110 FC | XZTF140 FC | XZTF170 FC | XZTF210 FC | XZTF240 FC | XZTF280 FC |
|---|---|---|---|---|---|---|---|---|---|
| D1 | M4 | M6 | M6 | M8 | M10 | M12 | M16 | M16 | M16 |
| D2 H6 | 13 | 14 | 18 | 22 | 32 | 40 | 50 | 55 | 60 |
| D3 h8 | 16 | 16 | 22 | 25 | 44 | 50 | 62 | 68 | 75 |
| D4 h7 | 63 | 73 | 88 | 108 | 135 | 165 | 205 | 235 | 275 |
| D15 | 62.9 | 72.9 | 87 | 107 | 106 | 130 | 158 | 178 | 198 |
| D17 | 26 | 26 | 36 | 38 | 61 | 70 | 86 | 86 | 100 |
| D18 | 41 | 41 | 50 | 50 | 80 | 90 | 110 | 115 | 138 |
| L1 | 65 | 75 | 90 | 110 | 140 | 170 | 210 | 240 | 280 |
| L2 | 14 | 14 | 18 | 18 | 24 | 26 | 29 | 29 | 30.5 |
| L3 | 13 | 14.5 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| L7 | 47.5 | 54 | 62 | 72 | 87 | 102 | 127 | 147 | 167 |
| L8 | 66 | 72.5 | 85 | 95 | 116.5 | 133.5 | 161.5 | 181.5 | 205 |
| L11 | 27 | 30 | 36 | 44 | 55 | 67 | 85 | 95 | 110 |
| L13 | 13 | 15 | 15 | 15 | 15 | 15 | 20 | 25 | 25 |
| L23 | 15 | 15 | 20 | 20 | 26 | 28 | 31 | 31 | 32.5 |
| L24 | 15 | 15 | 20 | 20 | 26 | 28 | 31 | 31 | 32.5 |
| L25 | 15 | 15 | 19.5 | 19.5 | 25.5 | 27.5 | 30.5 | 30.5 | 32.5 |
| L26 | 18.5 | 18.5 | 23 | 23 | 29.5 | 31.5 | 34.5 | 34.5 | 38 |

请联系销售人员出图

## 型号定义 / MODEL ILLUMINATE

**SGSJ090 – G4 – A – D16 – DC5 – XC100 – 500-500 – 10 – S-LB-LA-LZ**

**型 号**
SGSJ:丝杆升降机 LMSJ：螺母升降
SGSJ090/110/135/170/210/240/300/480/600
LMSJ090/110/135/170/210/240/300/480/600

**传动型式**
电机驱动置中

**丝杆直径**
D16(090)
D25(110)
D32(135)
D40(170)
D50(215)
D63(240)

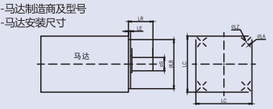
**导程**

**有效行程**

**丝杆间距**

**减速比**

**马达尺寸**
1-马达制造商及型号
2-马达安装尺寸




G1 G2 G2-A G4-A G4-AH

**SJT090 – 2 – SC – 1 – S(KW)-LB-LA-LZ**

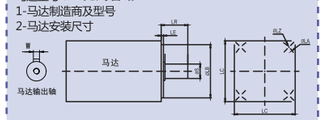
**型号**
SJT090/SJT110/SJT135/SJT170/SJT215/SJT240

**减速比**

**输出类型**
SC:输出上齿
XC:输出下齿

**输入类型**
1：单输入
1L：转角单输入
2：双输入
2L：转角双输入
3：三输入

**马达型号：（无则省略）**
1-马达制造商及型号
2-马达安装尺寸



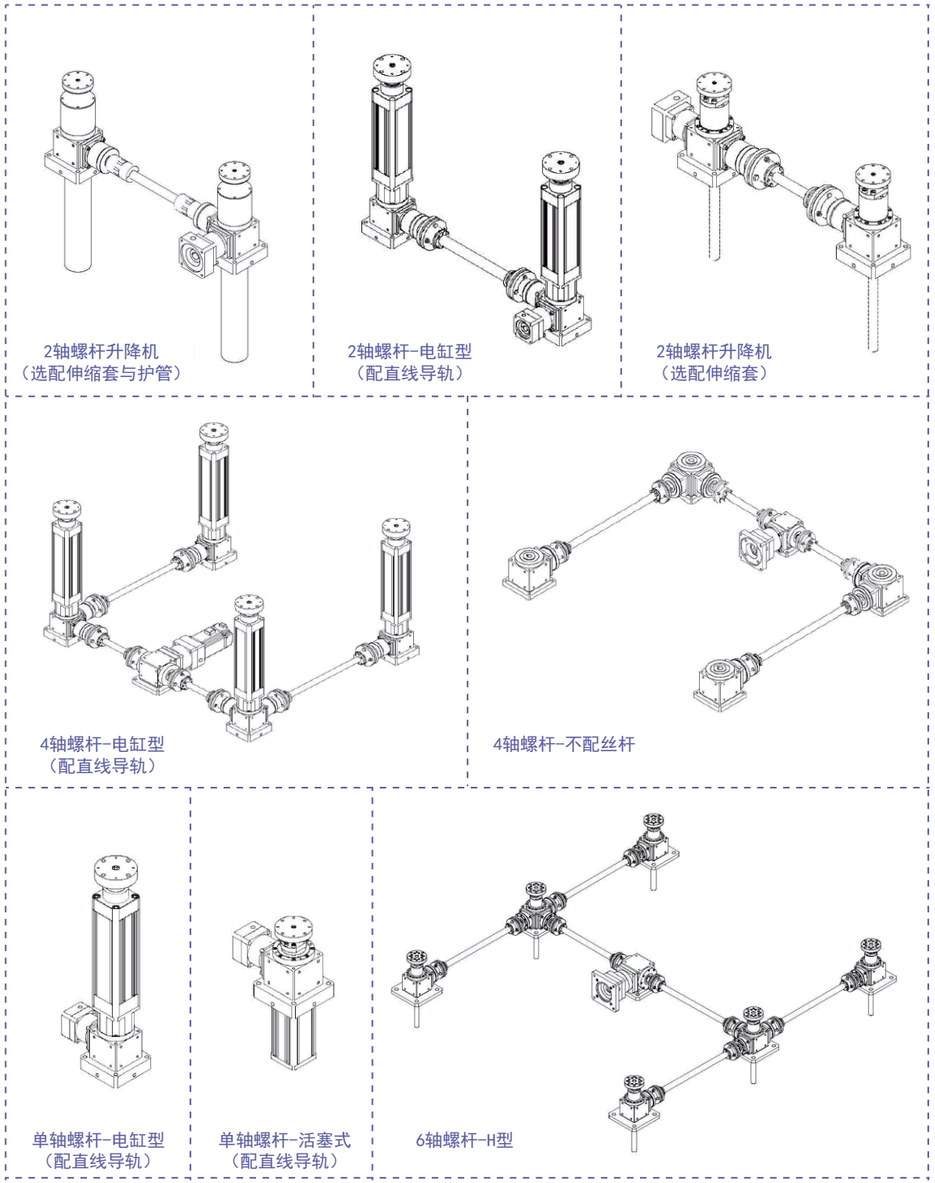

＊ 1. 单点升降用转换器不用区分上下齿，既可以选上齿也可以选下齿，没有特别说明，出货按下齿
＊ 2. 多点联动升降用转换器需要区分上下齿，一个上齿配一个下齿



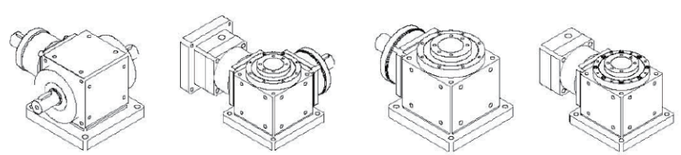


## 按需定制

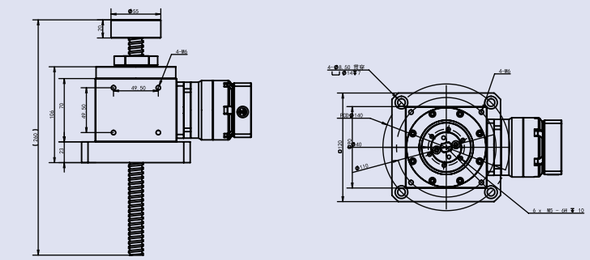
① 螺杆型，② 电缸型，③ 活塞型，④ 多轴型（单轴，2轴，4轴，6轴）



2轴螺杆升降机（选配伸缩套与护管）
2轴螺杆-电缸型（配直线导轨）
2轴螺杆升降机（选配伸缩套）
4轴螺杆-电缸型（配直线导轨）
4轴螺杆-不配丝杆
单轴螺杆-电缸型（配直线导轨）
单轴螺杆-活塞式（配直线导轨）
6轴螺杆-H型

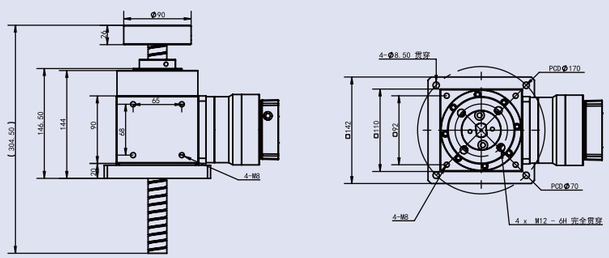


## SGSJ090-G1
### 下压0.2T



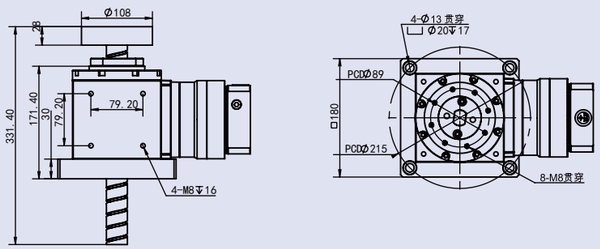
| SGSJ090技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 35 | 丝杆参数 | |
| 最大输出扭矩 | 70 | 丝杆直径 | 16 |
| 输入转速 | 3000 | 丝杆导程 | 5/10/16 |
| 负载重量 | ≤200KG | 安装方式 | 任意方向 |
| 定位精度 | ≤0.1mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

## SGSJ110-G1
### 下压0.5T



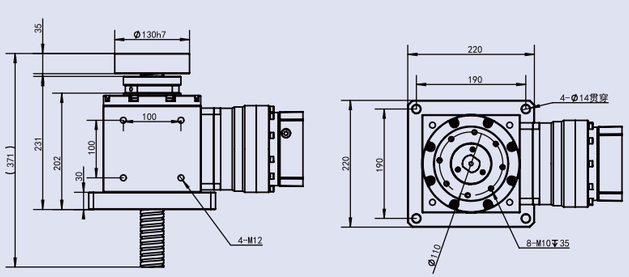
| SGSJ110技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 94 | 丝杆直径 | 25 |
| 最大输出扭矩 | 188 | 丝杆导程 | 5/10/25/50 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤500KG | 安装方式 | 任意方向 |
| 定位精度 | ≤0.1mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

## SGSJ135-G1
### 下压0.7T



| SGSJ135技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 129 | 丝杆直径 | 32 |
| 最大输出扭矩 | 258 | 丝杆导程 | 5/10/20/32/64 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤700KG | 安装方式 | 任意方向 |
| 定位精度 | ≤0.1mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

## SGSJ170-G1
### 下压1.4T



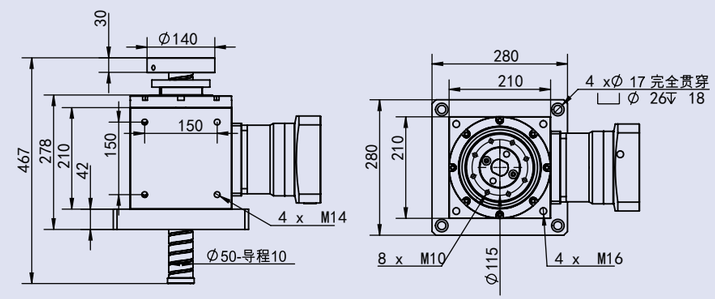
| SGSJ170技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 298 | 丝杆直径 | 40 |
| 最大输出扭矩 | 596 | 丝杆导程 | 5/10/20/40 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤1.4T | 安装方式 | 任意方向 |
| 定位精度 | ≤0.1mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

*以上图纸尺寸仅供参考,实际根据客户提供的数据,会出具相关的技术参数及尺寸。



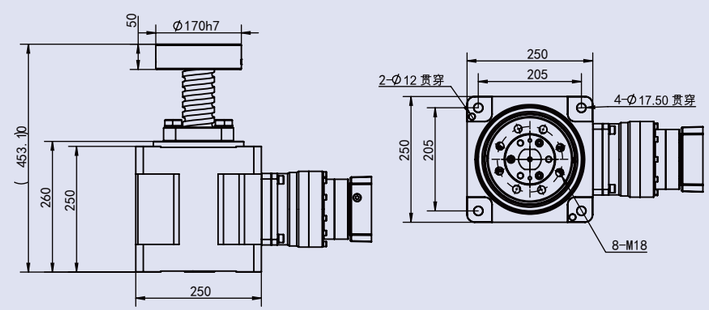


## SGSJ210-G1
### 下压5T



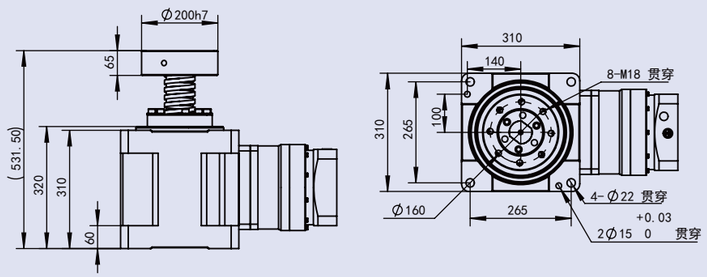
| SGSJ210技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 576 | 丝杆直径 | 50 |
| 最大输出扭矩 | 1152 | 丝杆导程 | 10/20/50 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤5T | 安装方式 | 任意方向 |
| 定位精度 | ≤0.2mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

## SGSJ240-G1
### 下压15-20T



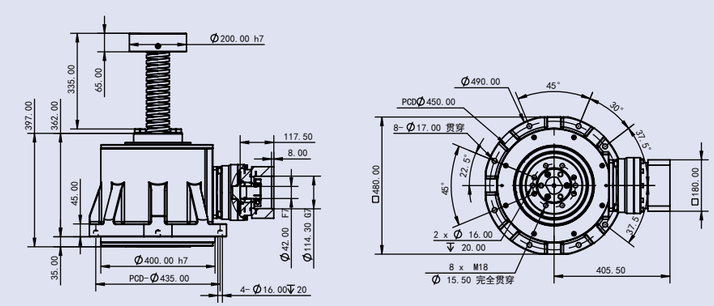
| SGSJ240技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 1417 | 丝杆直径 | 63 |
| 最大输出扭矩 | 2834 | 丝杆导程 | 20 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤20T | 安装方式 | 任意方向 |
| 定位精度 | ≤0.2mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

## SGSJ300-G1
### 下压20-25T



| SGSJ300技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 1600 | 丝杆直径 | 80 |
| 最大输出扭矩 | 3200 | 丝杆导程 | 20 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤25T | 安装方式 | 任意方向 |
| 定位精度 | ≤0.2mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

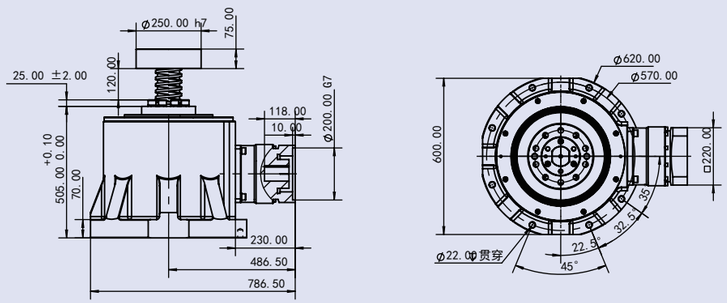
## SGSJ480-G1
### 下压45T



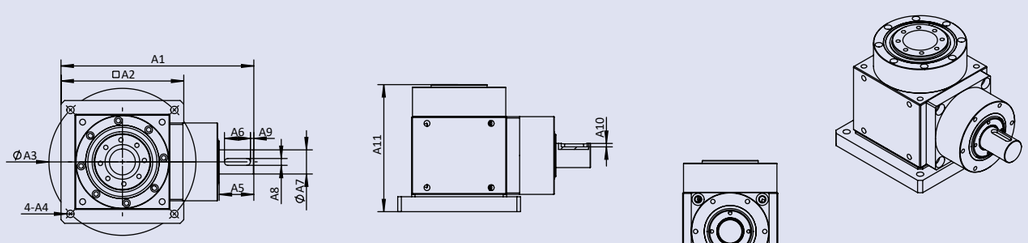
| SGSJ480技术参数 | | | |
|---|---|---|---|
| 额定顶升重量 | 350KN | 丝杆直径 | 80 |
| 最大顶升重量 | 550KN | 丝杆导程 | 20 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤45T | 安装方式 | 任意方向 |
| 定位精度 | ≤0.2mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

*以上图纸尺寸仅供参考,实际根据客户提供的数据,会出具相关的技术参数及尺寸。

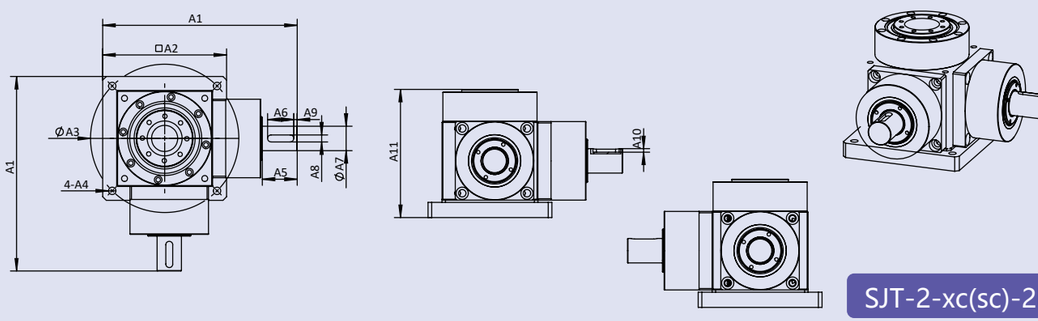
## SGSJ600-G1
### 下压60T




| SGSJ600技术参数 | | | |
|---|---|---|---|
| 额定输出扭矩 | 500KN | 丝杆直径 | 100 |
| 最大输出扭矩 | 600KN | 丝杆导程 | 25 |
| 输入转速 | 3000 | | |
| 负载重量 | ≤60T | 安装方式 | 任意方向 |
| 定位精度 | ≤0.2mm | 防护等级 | IP54 |
| 噪音值 | ≤83 | 使用寿命 | 20000h |
| 传动效率 | 85% | 润滑方式 | 合成润滑脂 |

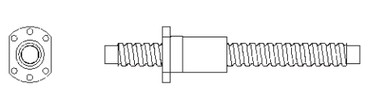



SJT-2-xc(sc)-1




SJT-2-xc(sc)-2L

* 滚珠螺杆：肩部加工（配中空轴）



1. 单点升降用转换器不用区分上下齿，既可以选上齿也可以选下齿，没有特别说明，出货按下齿
2. 多点联动升降用转换器需要区分上下齿，一个上齿配一个下齿

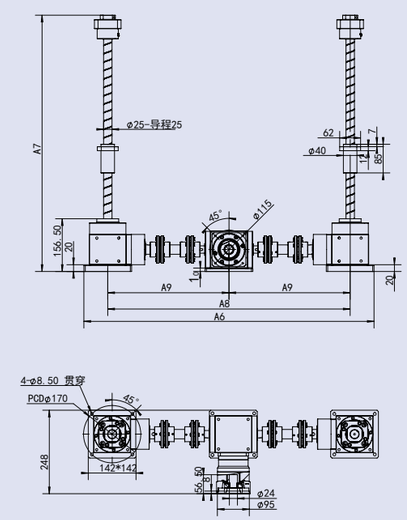
P.S：（多轴升降机使用-中空轴）
滚珠螺杆直径(16/20/25/32/40/50)
滚珠螺杆导程(5/10/20/25/30/32/40/50)
正确尺寸以2D/3D为准

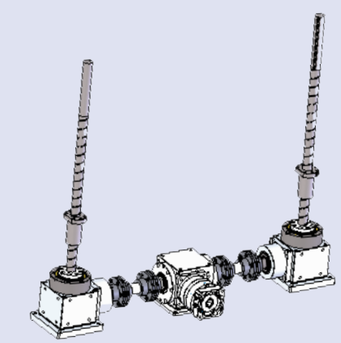
| 规格 | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SJT090 -2-XC(SC)-X | 184 | 120 | 140 | 8.5 | 27 | 20 | 20 | 6 | 4 | 3.5 | 108 |
| SJT110 -2-XC(SC)-X | 223 | 142 | 170 | 8.5 | 40 | 30 | 28 | 8 | 4 | 4 | 147 |
| SJT135 -2-XC(SC)-X | 262.5 | 180 | 215 | 13 | 40 | 30 | 28 | 8 | 4 | 4 | 171 |



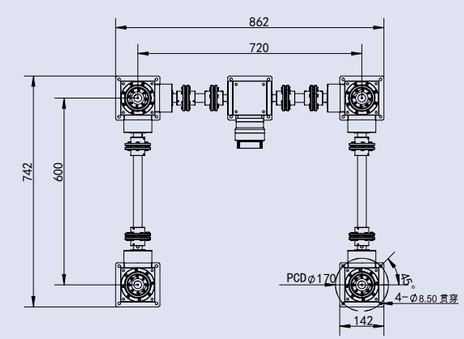


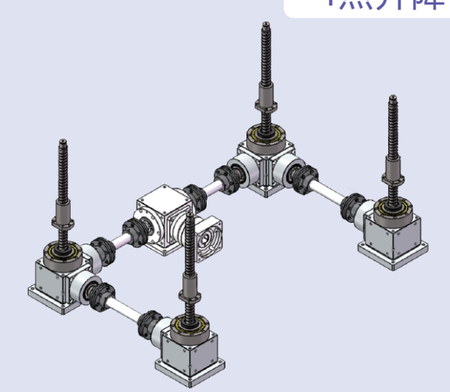
## LMSJ-G2-A
### 2点升降



## LMSJ-G4-A
### 4点升降

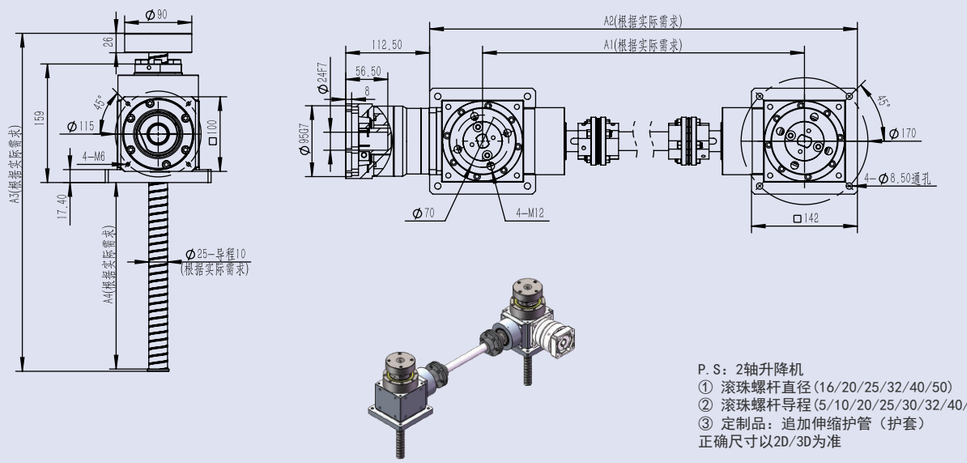


*以上图纸尺寸仅供参考,实际根据客户提供的数据,会出具相关的技术参数及尺寸。

## SGSJ-G2
### 2点升降

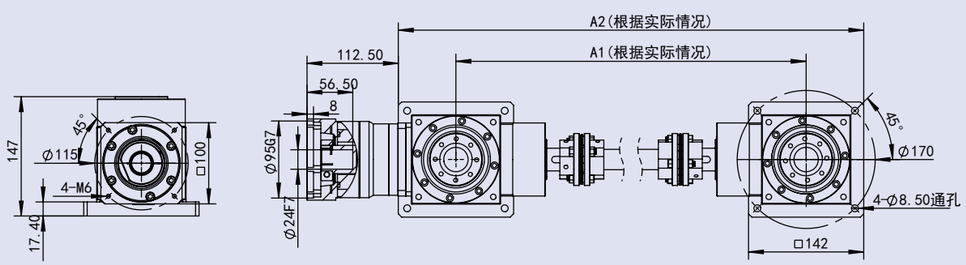
* 输入尺寸
（以选定电机而定）



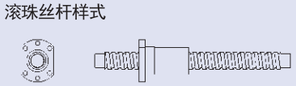

P.S：2轴升降机
① 滚珠螺杆直径(16/20/25/32/40/50)
② 滚珠螺杆导程(5/10/20/25/30/32/40/50)
③ 定制品：追加伸缩护管（护套）
正确尺寸以2D/3D为准

## SJT-G2
### 2点升降

* 输入尺寸
（以选定电机而定）




滚珠丝杆样式



P.S：2轴升降机
① 滚珠螺杆直径(16/20/25/32/40/50)
② 滚珠螺杆导程(5/10/20/25/30/32/40/50)
③ 定制品：追加伸缩护管（护套）
正确尺寸以2D/3D为准

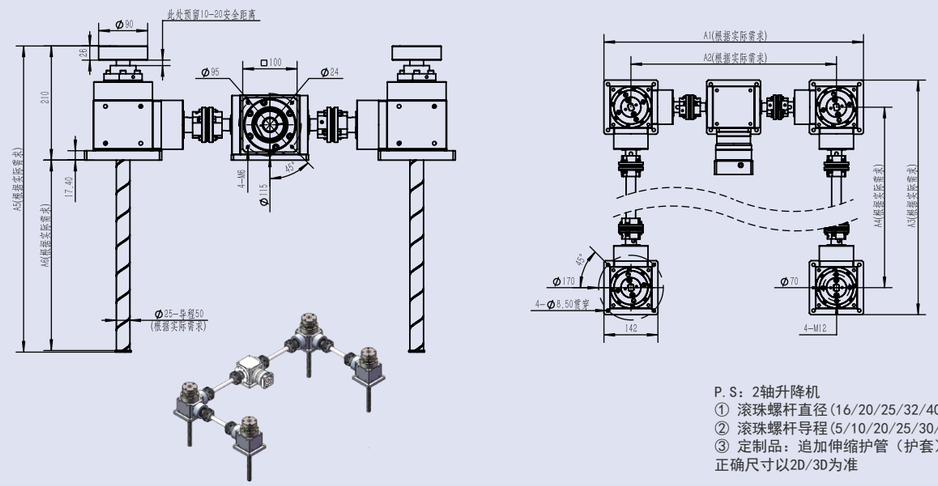
*以上图纸尺寸仅供参考,实际根据客户提供的数据,会出具相关的技术参数及尺寸。





## SGSJ-G4-A
### 4点升降

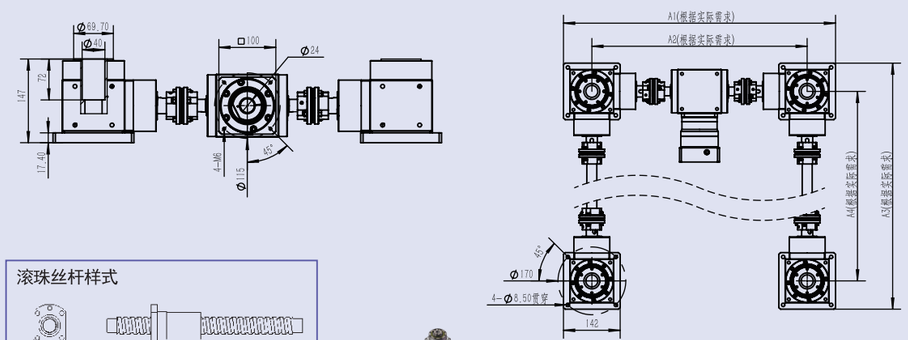
* 输入尺寸
（以选定电机而定）



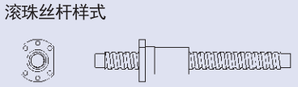

P.S：2轴升降机
① 滚珠螺杆直径(16/20/25/32/40/50)
② 滚珠螺杆导程(5/10/20/25/30/32/40/50)
③ 定制品：追加伸缩护管（护套）
正确尺寸以2D/3D为准

## SJT-G4-A
### 4点升降

* 输入尺寸
（以选定电机而定）




滚珠丝杆样式

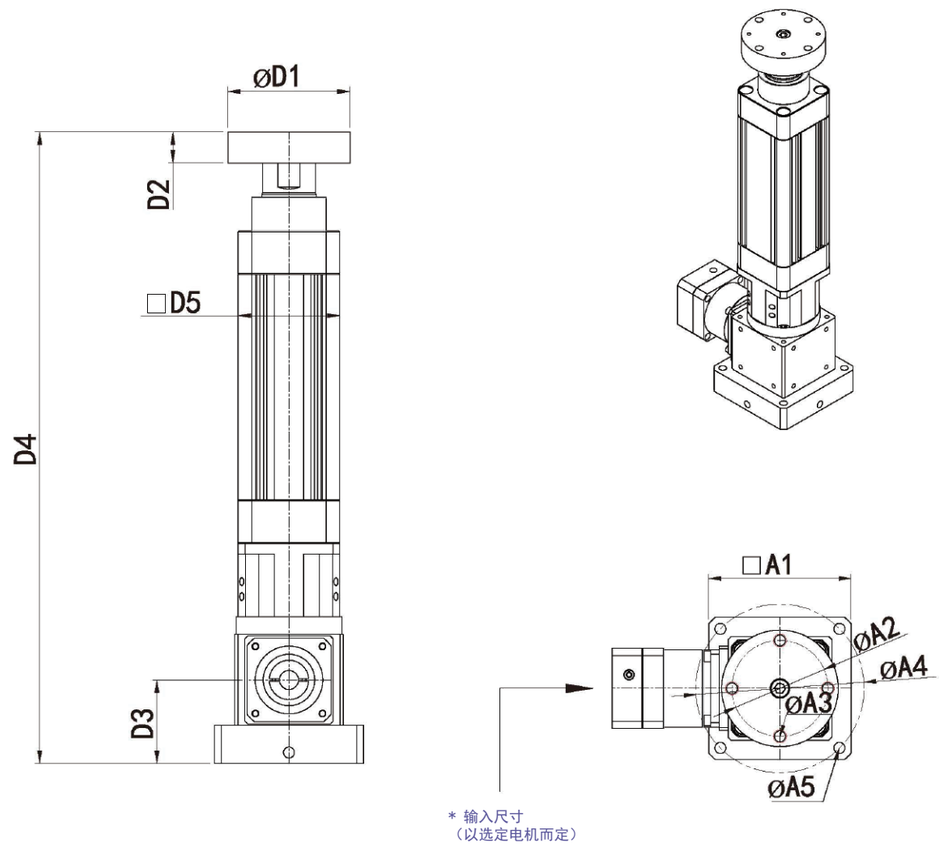


P.S：2轴升降机
① 滚珠螺杆直径(16/20/25/32/40/50)
② 滚珠螺杆导程(5/10/20/25/30/32/40/50)
③ 定制品：追加伸缩护管（护套）
正确尺寸以2D/3D为准

*以上图纸尺寸仅供参考,实际根据客户提供的数据,会出具相关的技术参数及尺寸。

## SGSJ-G1-DG
## 单轴螺杆升降机-电缸型式

外形尺寸图 Dimensions




P. S：电缸型（配直线导轨）
滚珠螺杆直径(16/20/25/32/40/50)
滚珠螺杆导程(5/10/20/25/30/32/40/50)
正确尺寸以2D/3D为准

unit: mm

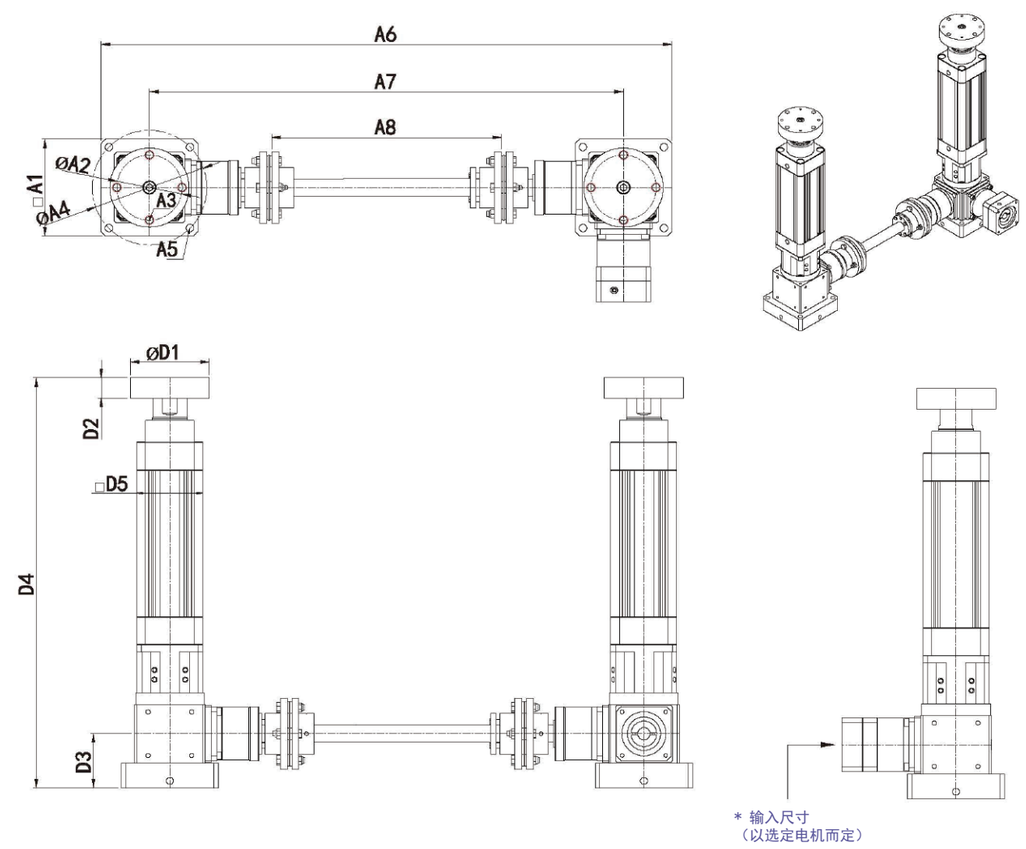
| 规格 | D1 | D2 | D3 | D4 | D5 | A1 | A2 | A3 | A4 | A5 |
|---|---|---|---|---|---|---|---|---|---|---|
| SGSJ090-G1-DG75 | 90 | 23 | 61.5 | 依实际行程 | 75 | 110 | 74 | 4-M10 | 130 | 4-ø8.5 |
| SGSJ110-G1-DG97 | 90 | 23 | 61.5/65 | | 97 | 142 | 74 | 4-M10 | 170 | 4-ø8.5 |





## SGSJ-G2-DG
## 2轴螺杆升降机-电缸型式

外形尺寸图 Dimensions



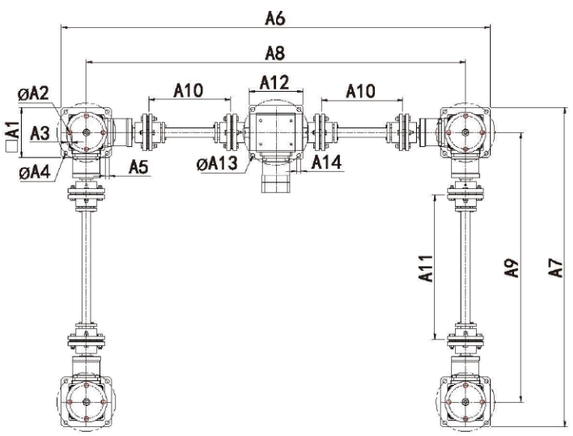

P. S：电缸型（配直线导轨）
滚珠螺杆直径(16/20/25/32/40/50)
滚珠螺杆导程(5/10/20/25/30/32/40/50)
正确尺寸以2D/3D为准

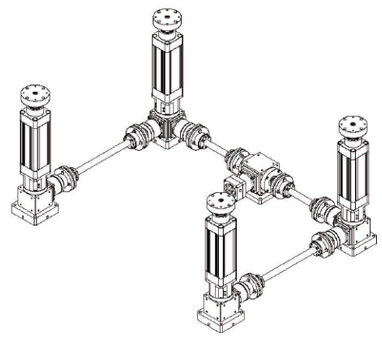
unit: mm

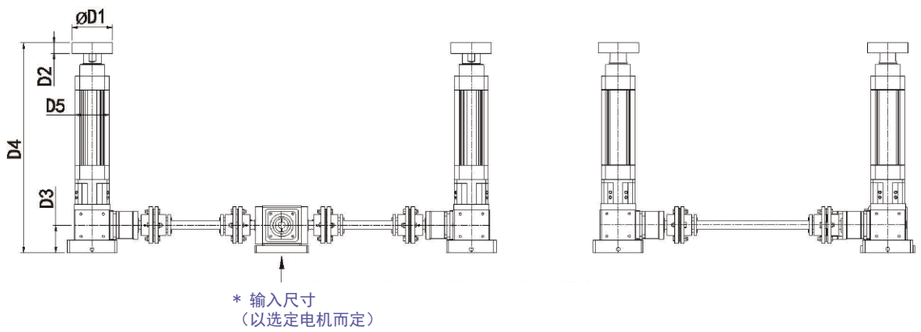
| 规格 | D1 | D2 | D3 | D4 | D5 | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SGSJ090-G2-DG75 | 90 | 23 | 61.5 | 依实际行程 | 75 | 110 | 74 | 4-M10 | 130 | 4-ø8.5 | 依螺杆跨距 | | |
| SGSJ110-G2-DG97 | 90 | 23 | 61.5/65 | | 97 | 142 | 74 | 4-M10 | 170 | 4-ø8.5 | | | |

## SGSJ-G4-DG
## 4轴螺杆升降机-电缸型式

外形尺寸图 Dimensions






P.S：电缸型（配直线导轨）
滚珠螺杆直径(16/20/25/32/40/50)
滚珠螺杆导程(5/10/20/25/30/32/40/50)
正确尺寸以2D/3D为准

unit：mm

| 规格 | D1 | D2 | D3 | D4 | D5 | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SGSJ090-G4-DG75 | 90 | 23 | 61.5 | 依实际 | 75 | 110 | 74 | 4-M10 | 130 | 4-ø8.5 | 依螺杆跨距 | | |
| SGSJ110-G4-DG97 | 90 | 23 | 61.5/65 | 行程 | 97 | 142 | 74 | 4-M10 | 170 | 4-ø8.5 | | | |

| 规格 | D9 | D10 | D11 | D12 | D13 | D14 |
|---|---|---|---|---|---|---|
| SGSJ090-G4-DG75 | 依螺杆跨距 | | | 120 | 145 | 4-ø8.5 |
| SGSJ110-G4-DG97 | | | | 142 | 170 | 4-ø8.5 |

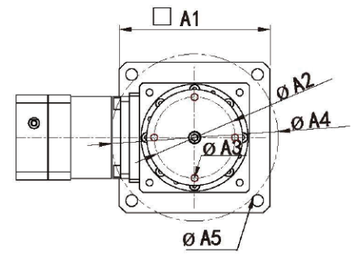


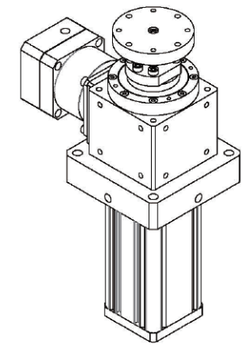


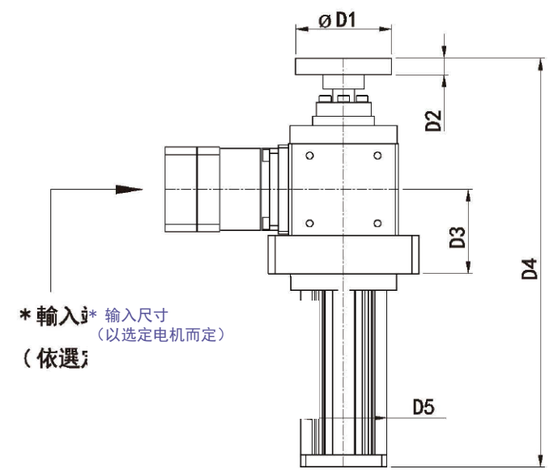
## SGSJ-G1-HS
## 单轴螺杆升降机-活塞型式

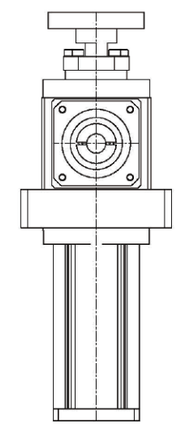
外形尺寸图 Dimensions

外开





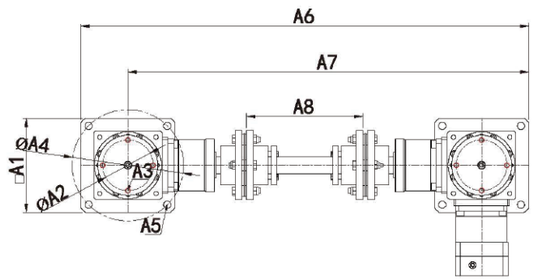
P.S：活塞型（配直线导轨）
滚珠螺杆直径(16/20/25/32/40/50)
滚珠螺杆导程(5/10/20/25/30/32/40/50)
正确尺寸以2D/3D为准

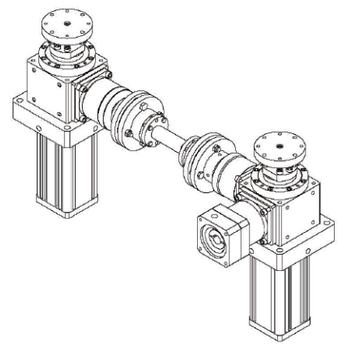
unit：mm

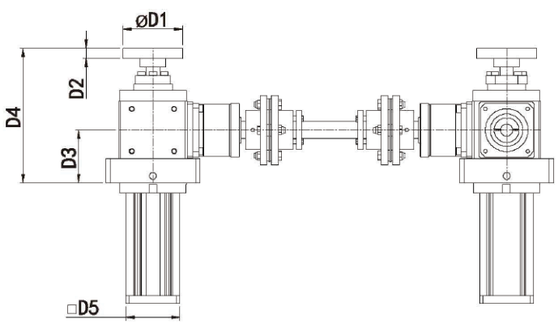
| 规格 | D1 | D2 | D3 | D4 | D5 | A1 | A2 | A3 | A4 | A5 |
|---|---|---|---|---|---|---|---|---|---|---|
| SGSJ090-G1-HS | 70 | 12 | 61.5 | 依实际 | 63 | 110 | 59 | 4-M6 | 130 | 4-ø8.5 |
| SGSJ110-G1-HS | 90 | 23 | 61.5/65 | 行程 | 75 | 142 | 74 | 4-M10 | 170 | 4-ø8.5 |

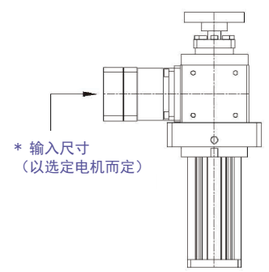
## SGSJ-G2-HS
## 单轴螺杆升降机-活塞型式

外形尺寸图 Dimensions






P.S：活塞型（配直线导轨）
滚珠螺杆直径(16/20/25/32/40/50)
滚珠螺杆导程(5/10/20/25/30/32/40/50)
正确尺寸以2D/3D为准

unit：mm

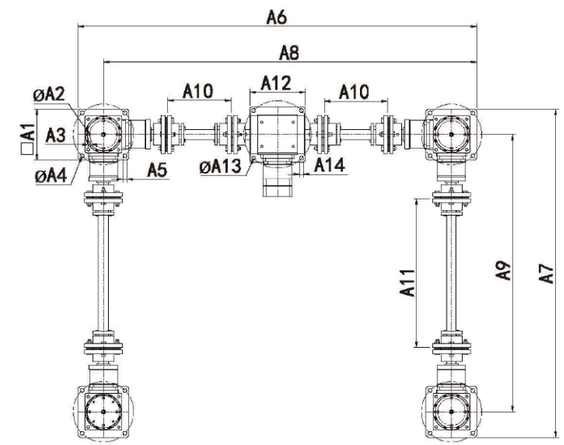
| 规格 | D1 | D2 | D3 | D4 | D5 | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SGSJ090-G2-HS | 70 | 12 | 61.5 | 依实际行程 | 63 | 110 | 59 | 4-M6 | 130 | 4-ø8.5 | 依螺杆跨距 | | |
| SGSJ110-G2-HS | 90 | 23 | 61.5/65 | | 75 | 142 | 74 | 4-M10 | 170 | 4-ø8.5 | | | |

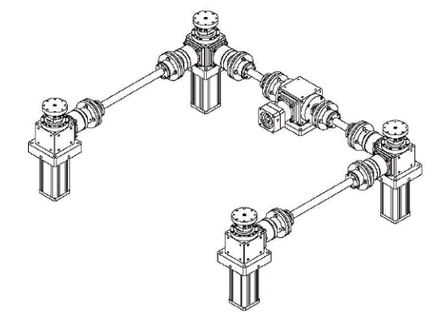


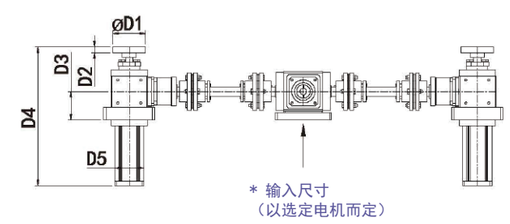


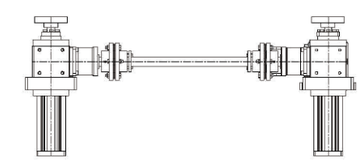
## SGSJ-G4-HS
## 2轴螺杆升降机-活塞型式

外形尺寸图 Dimensions





P.S：活塞型（配直线导轨）
滚珠螺杆直径(16/20/25/32/40/50)
滚珠螺杆导程(5/10/20/25/30/32/40/50)
正确尺寸以2D/3D为准

unit：mm

| 规格 | D1 | D2 | D3 | D4 | D5 | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SGSJ090-G4-HS | 70 | 12 | 61.5 | 依实际行程 | 63 | 110 | 59 | 4-M6 | 130 | 4-ø8.5 | 依螺杆跨距 | | |
| SGSJ110-G4-HS | 90 | 23 | 61.5/65 | | 75 | 142 | 74 | 4-M10 | 170 | 4-ø8.5 | | | |

| 规格 | D9 | D10 | D11 | D12 | D13 | D14 |
|---|---|---|---|---|---|---|
| SGSJ090-G4-HS | 依螺杆跨距 | | | 120 | 145 | 4-ø8.5 |
| SGSJ110-G4-HS | | | | 142 | 170 | 4-ø8.5 |

## 伺服电缸产品型号定义

DG 80 - R 01 DC10 - XC100 - 030 - K1500 20 - FMC - S3 - BC - FB

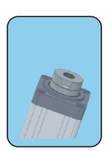
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

| ① 产品代码 | ② 产品系列 | ③ 产品结构 | ④ 安装方式 | ⑤ 丝杆导程 | ⑥ 有效行程 |
|---|---|---|---|---|---|
| 产品代码 | 产品系列 | 产品结构 | 安装方式 | 丝杆导程 | 有效行程 |

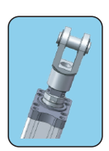
| ⑦ 速比 | ⑧ 电机功率 | ⑨ 电机转速 | ⑩ 连接类型 | ⑪ 感应器数量 | ⑫ 电机抱闸 | ⑬ 尺寸标准 |
|---|---|---|---|---|---|---|
| 速比 | 电机功率 | 电机转速 | 负载连接类型 | 感应器数量 | 电机抱闸 | 尺寸标准 |

## 轴端负载连接方式


外螺纹 FM

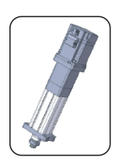

内螺纹 BA


鱼眼 P

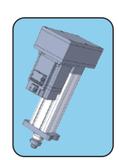

Y型接头 Y


I型接头 I

## 直连型安装方式


L01

## 折返型安装方式


R01

## 选型参考

（注：本缸型的推力、行程、速度，需结合实际使用情况，三者上限值不能同时结合使用。）

| 产品系列 | 推力 | 允许最大速度 | 行程mm | 缸径 | 外径 | 丝杆直径 | 丝杆导程(mm) | 推杆直径 | 直配电机 | 适配减速机 |
|---|---|---|---|---|---|---|---|---|---|---|
| DG40 | ≤50KG | ≤250mm/s | ≤300 | ϕ30 | 40*40 | ϕ12 | 04 05 | ϕ20 | 40框、42步进 | 不配 |
| DG50 | ≤150KG | ≤500mm/s | ≤360 | ϕ40 | 53*53 | ϕ12 | 05 10 | ϕ25 | 40框、60框、57步进 | 不配 |
| DG60 | ≤270KG | ≤500mm/s | ≤480 | ϕ50 | 61*61 | ϕ16 | 05 10 16 20 | ϕ35 | 60框、57步进 | 不配 |
| DG60Z | ≤500KG | ≤500mm/s | ≤480 | ϕ50 | 61*61 | ϕ16 | 05 10 16 20 | ϕ35 | 80框、86步进 | 60框 |
| DG75 | ≤680KG | ≤500mm/s | ≤600 | ϕ63 | 75*75 | ϕ20 | 05 10 20 | ϕ45 | 60框、80框、86步进 | 不配 |
| DG75Z | ≤800KG | ≤500mm/s | ≤600 | ϕ63 | 75*75 | ϕ20 | 05 10 20 | ϕ45 | 100框、130框 | 60框、90框 |
| DG80 | ≤2T | ≤1000mm/s | ≤750 | ϕ65 | 80*80 | ϕ25 | 05 10 25 | ϕ50 | 80框、100框、130框 | 60框、90框、115框 |
| DG94 | ≤2T | ≤1000mm/s | ≤960 | ϕ80 | 94*94 | ϕ32 | 05 10 25 32 | ϕ60 | 80框、100框、130框 | 不配 |
| DG4Z | ≤3T | ≤1000mm/s | ≤960 | ϕ80 | 94*94 | ϕ32 | 05 10 25 32 | ϕ60 | 180框 | 85框、90框、115框 |
| DG115 | ≤5T | ≤250mm/s | ≤1200 | ϕ100 | 112*112 | ϕ40 | 05 10 20 40 | ϕ75 | 130框、180框 | 115框、142框 |
| DG135 | ≤10T | ≤250mm/s | ≤1500 | ϕ120 | 134*134 | ϕ50 | 10 20 | ϕ90 | 130框、180框 | 115框、142框 |
| DG140 | ≤13T | ≤250mm/s | ≤1500 | ϕ110 | ϕ132 | ϕ50 | 10 20 | ϕ90 | 无 | 142框 |
| DG160 | ≤18T | ≤250mm/s | ≤1800 | ϕ140 | 158*158 | ϕ63 | 20 | ϕ100 | 无 | 142框、180框 |
| DG180 | ≤20T | ≤250mm/s | ≤1800 | ϕ160 | ϕ180 | ϕ63 | 20 | ϕ120 | 无 | 142框、180框 |
| DG245 | ≤40T | ≤250mm/s | ≤2400 | ϕ180 | ϕ210 | ϕ80 | 20 | ϕ140 | 无 | 180框、220框 |
| DG300 | ≤60T | ≤500mm/s | ≤3000 | ϕ220 | ϕ280 | ϕ100 | 25 | ϕ180 | 无 | 220框 |

## 减速机对应输入法兰

注：减速机输入法兰，字体黑色为1段、2段通用规格，字体蓝色为1段可用，字体红色为2段可用。

| 减速机框号/对应标准输入法兰 | |
|---|---|
| 60框 | 60框、80框 |
| 85框 | 60框、80框、130框 |

| 减速机框号/对应标准输入法兰 | |
|---|---|
| 90框 | 60框、80框、100框、130框 |
| 115框 | 80框、100框、130框、180框 |

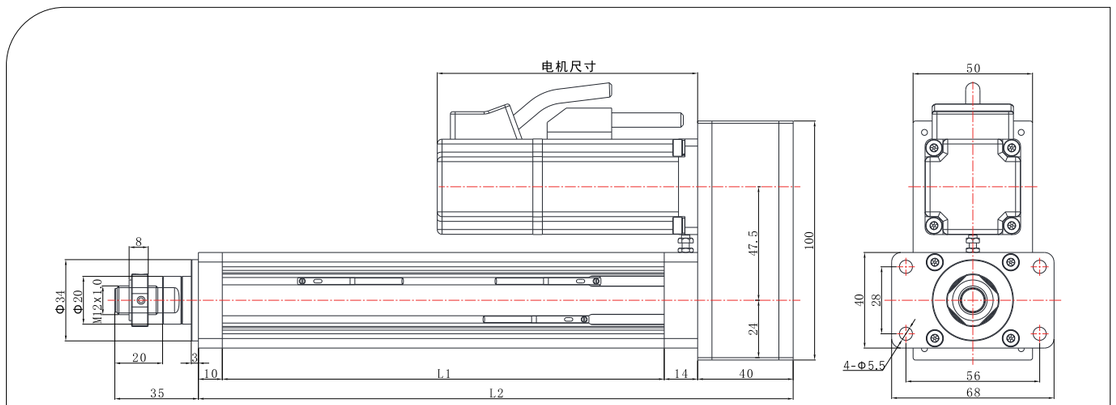
| 减速机框号/对应标准输入法兰 | |
|---|---|
| 142框 | 130框、180框 |
| 180框 | 180框、200框、220框 |
| 220框 | 180框、200框、220框 |





## DG40 折返系列·标准尺寸图

注：电机安装板匹配不同电机时，尺寸可能发生变化。

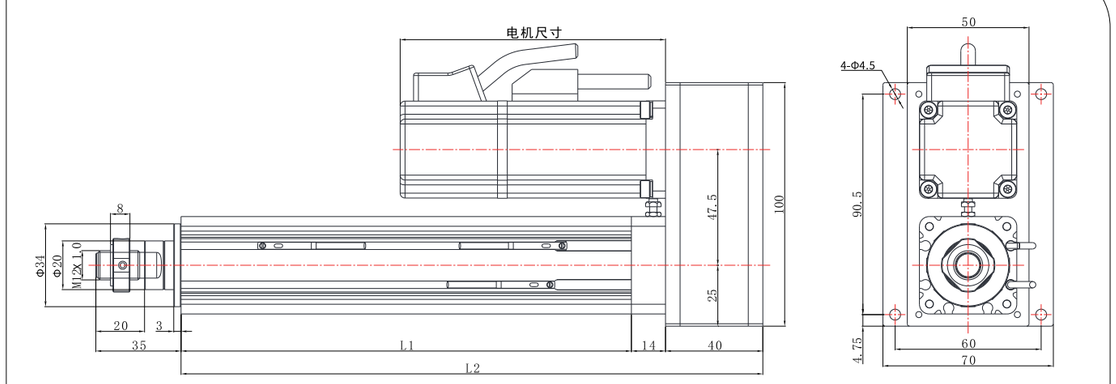



R01 前法兰

说明：L1=行程+85，L2=行程+149

## DG40 折返系列·标准尺寸图

注：电机安装板匹配不同电机时，尺寸可能发生变化。



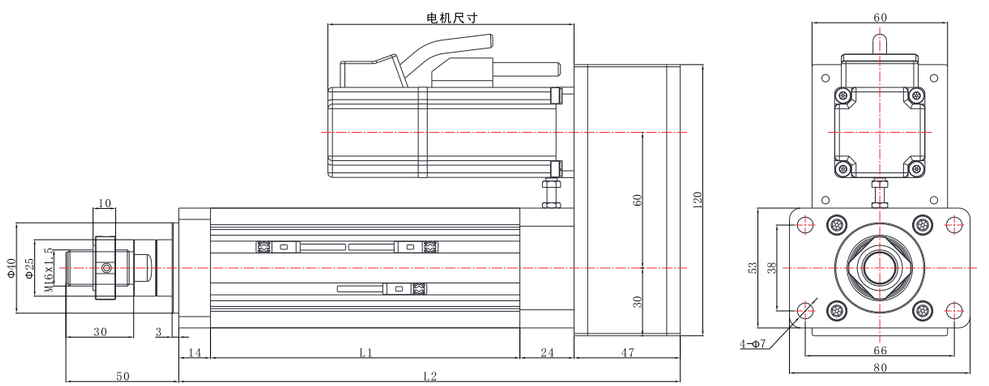

说明：L1=行程+85，L2=行程+139

R02 后法兰

| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 40x40 mm | ϕ30 mm | ≤0.5KN | ≤360mm | ≤250mm/s | ±0.3° | 磁感开关 |

## DG50 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

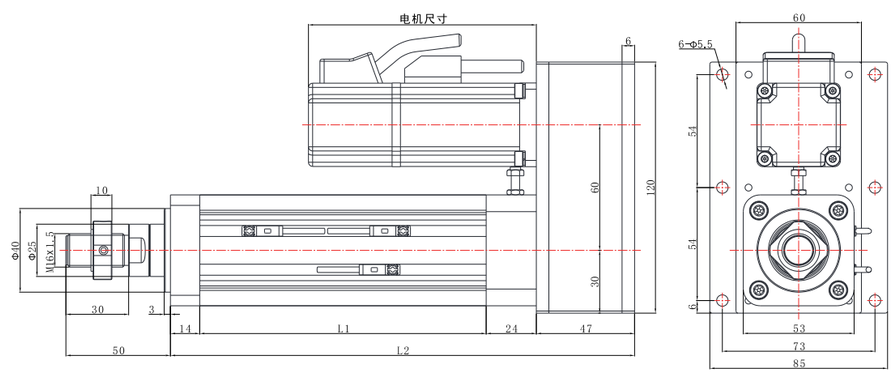



R01 前法兰

说明:L1=行程+87,L2=行程+172

## DG50 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。




说明:L1=行程+87,L2=行程+172

R02 后法兰

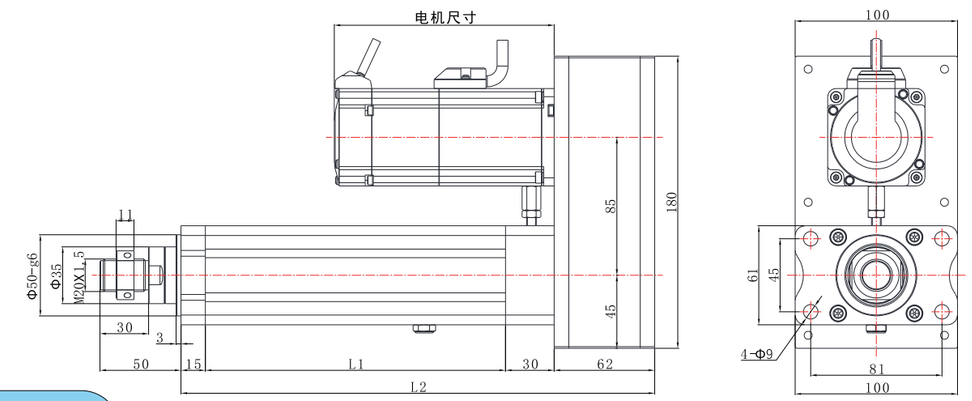
| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 53x53 mm | φ40 mm | ≤1.5KN | ≤360mm | ≤500mm/s | ±0.3° | 磁感开关 |





## DG60 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

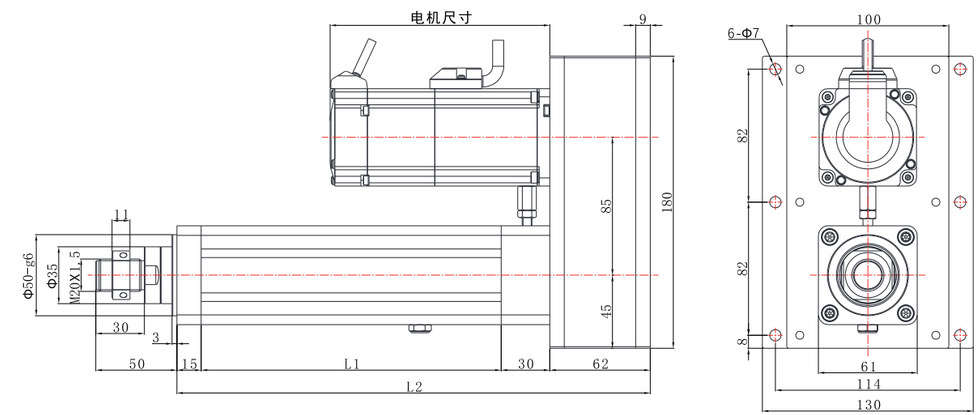



R01 前法兰

说明:L1=行程+85,L2=行程+192

## DG60 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。



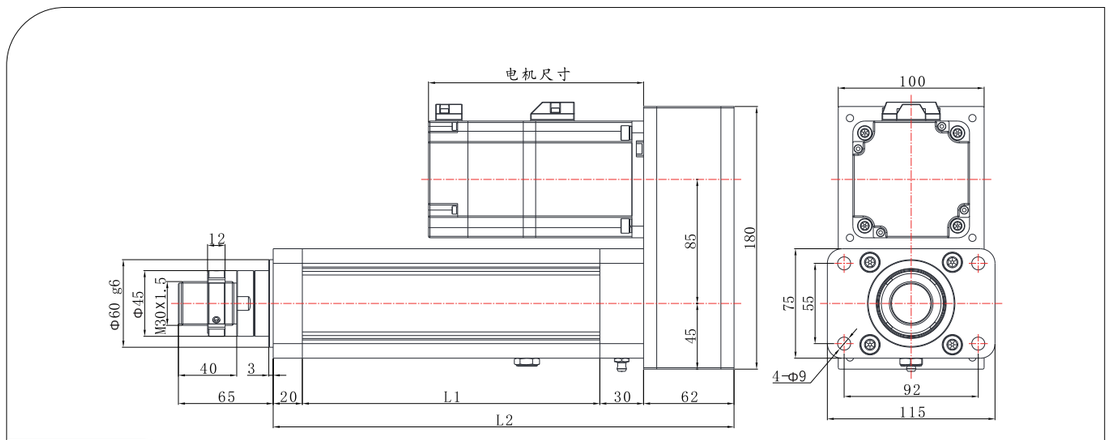

说明:L1=行程+85,L2=行程+192

R02 后法兰

| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 61x61mm | φ50 mm | ≤2.7KN | ≤800mm | ≤500mm/s | ±0.3° | 磁感开关 |

## DG75 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

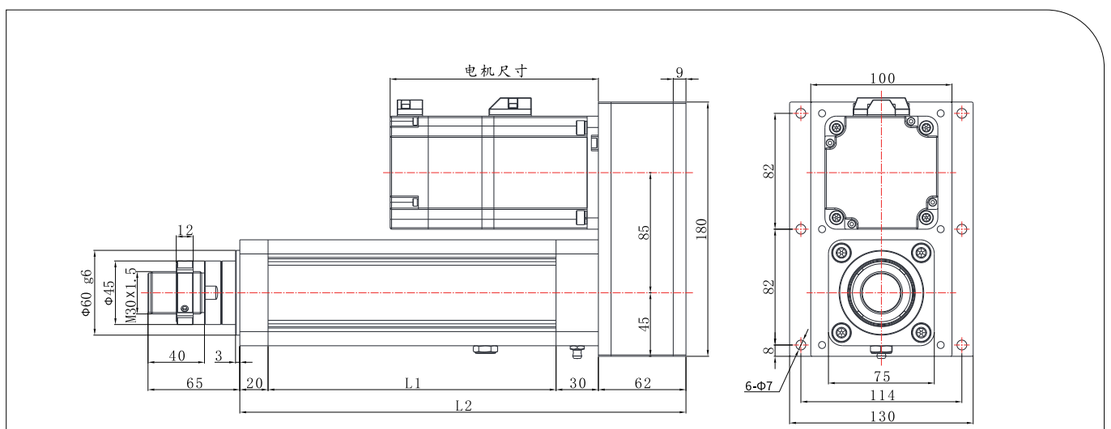



R01 前法兰

说明:L1=行程+104,L2=行程+216

## DG75 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。




说明:L1=行程+104,L2=行程+216

R02 后法兰

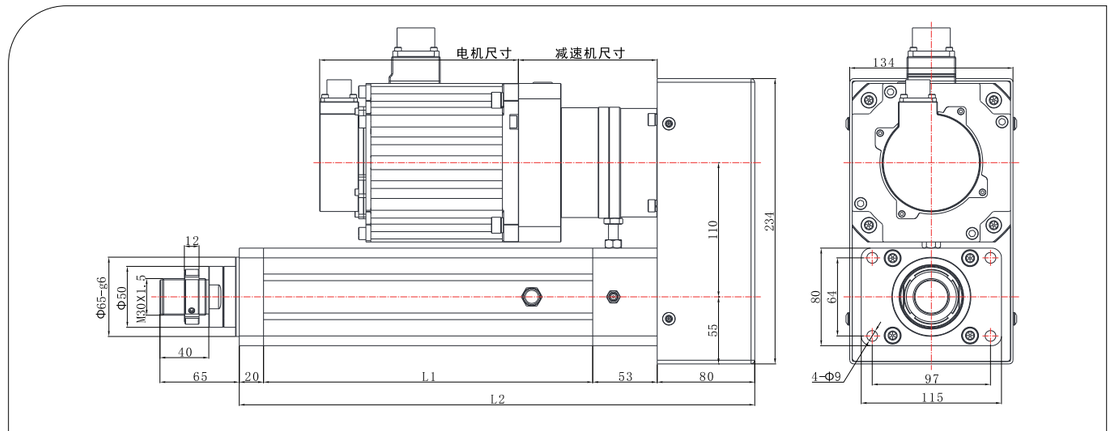
| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 75x75 mm | φ63 mm | ≤6.8KN | ≤600mm | ≤500mm/s | ±0.3° | 磁感开关 |





## DGD80折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

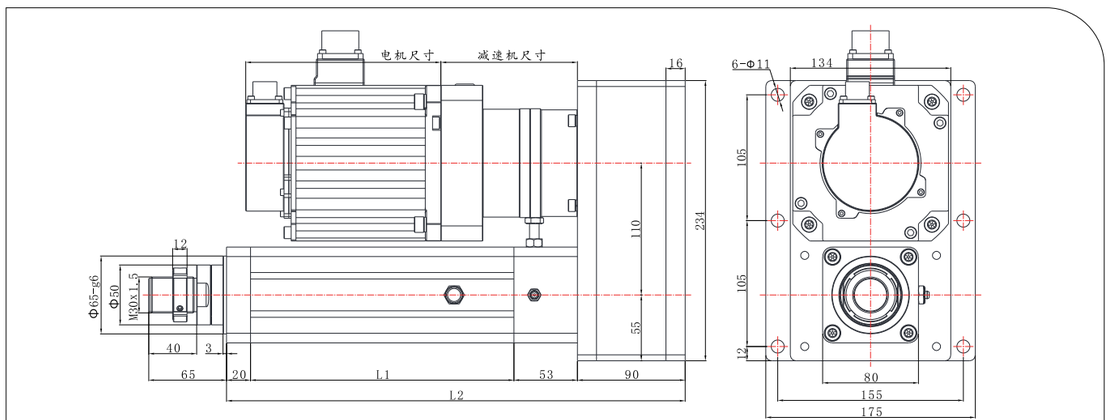



R01 前法兰

说明:当行程≤400mm时:L1=行程+120,L2=行程+273
当行程>400mm时:L1=行程+150,L2=行程+303

## DG80 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。



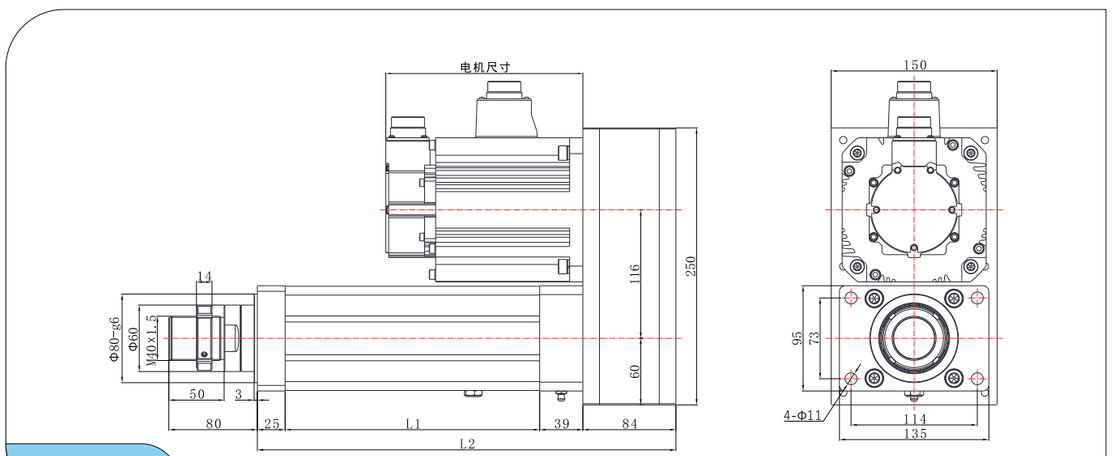

说明:当行程≤400mm时:L1=行程+120,L2=行程+283
当行程>400mm时:L1=行程+150,L2=行程+313

R02 后法兰

| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 80x80 mm | φ65 mm | ≤20KN | ≤750mm | ≤1000mm/s | ±0.3° | 磁感开关 |

## DG94 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

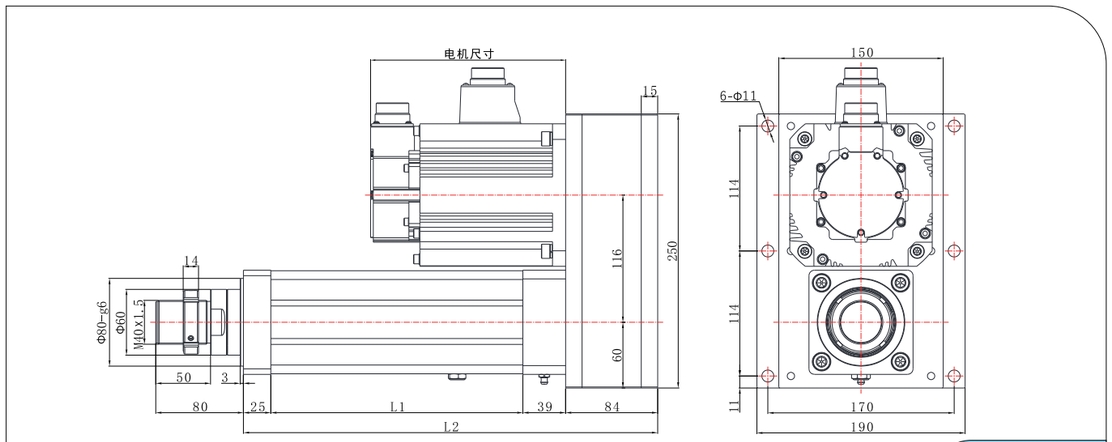



R01 前法兰

说明:L1=行程+130,L2=行程+278

## DG94 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。




说明:L1=行程+130,L2=行程+278

R02 后法兰

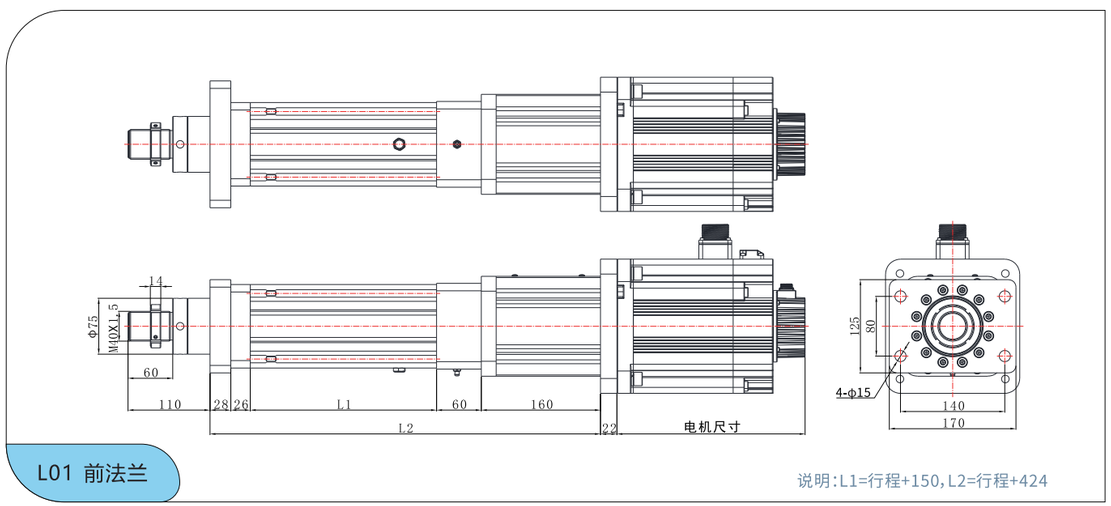
| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 94x94 mm | φ80mm | ≤30KN | ≤960mm | ≤1000mm/s | ±0.3° | 磁感开关 |





## DG115 直连系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

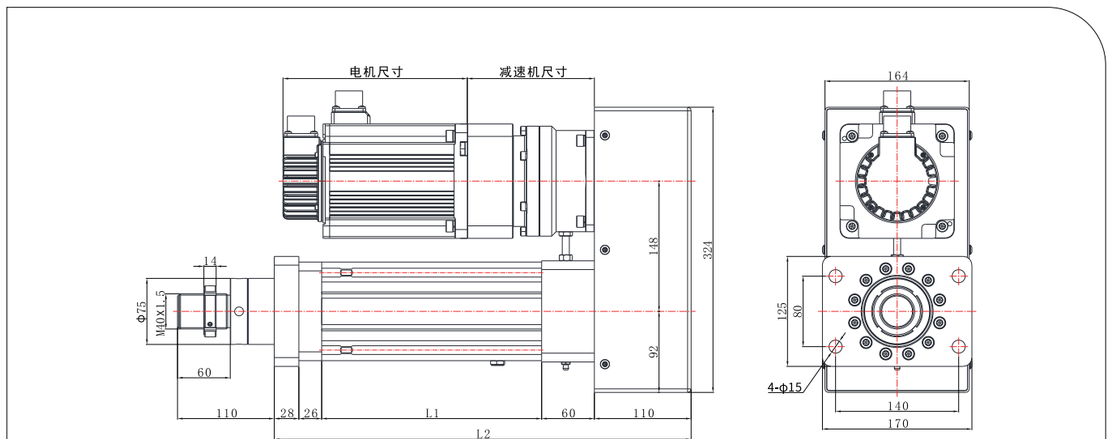



L01 前法兰

说明:L1=行程+150,L2=行程+424

## DG115 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。



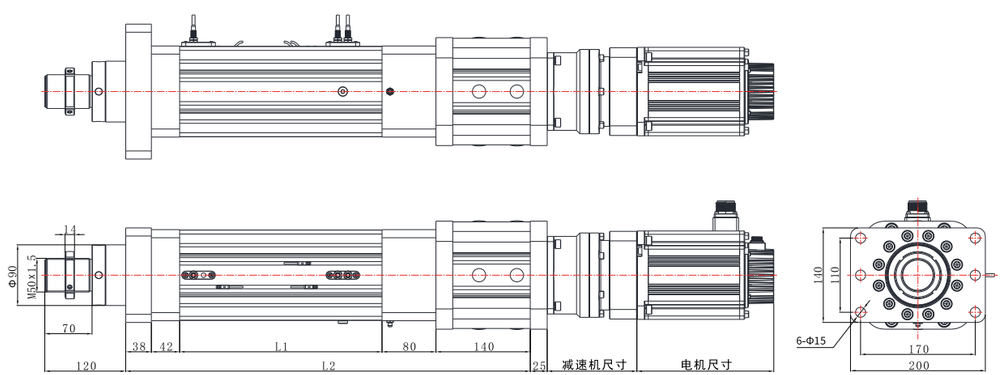

说明:L1=行程+150,L2=行程+374

R01 前法兰

| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 112x112 mm | φ100mm | ≤50KN | ≤2000mm | ≤250mm/s | ±0.3° | 磁感开关 |

## DG135 直连系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

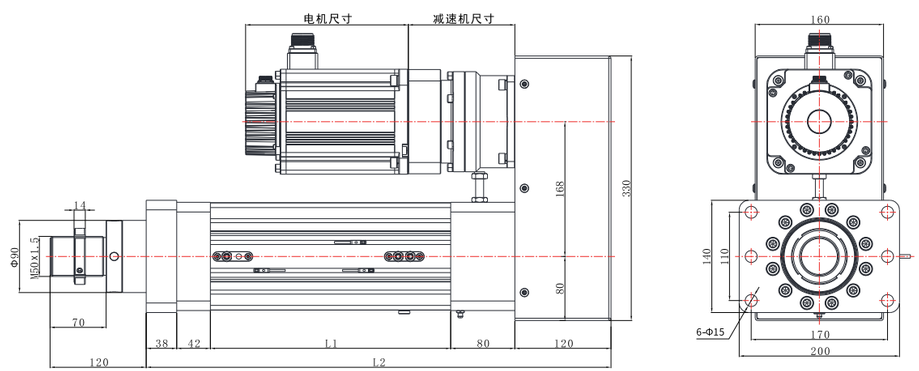



L01 前法兰

说明:L1=行程+200,L2=行程+500
接近开关和感应开关二选一

## DG135 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。




说明:L1=行程+200,L2=行程+480
接近开关和感应开关二选一

R01 前法兰

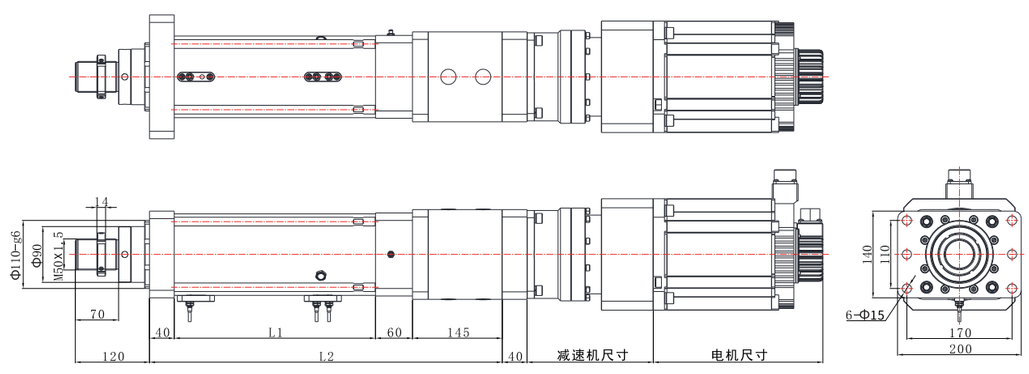
| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 | |
|---|---|---|---|---|---|---|---|
| 134x134 mm | φ120mm | ≤100KN | ≤2000mm | ≤250mm/s | ±0.3° | 磁感开关 | 接近开关 |





## DG140 直连系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

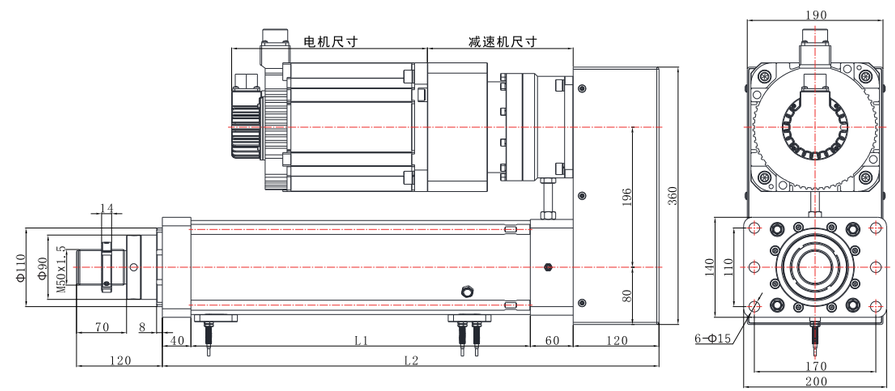



L01 前法兰

说明:L1=行程+275,L2=行程+520

## DG140 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。



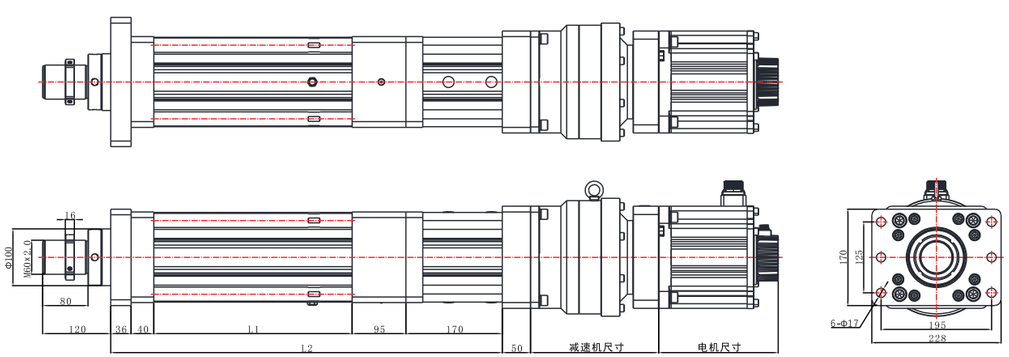

说明:L1=行程+275,L2=行程+495

R01 前法兰

| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| φ132 mm | φ110mm | ≤130KN | ≤2000mm | ≤250mm/s | ±0.3° | 接近开关 |

## DG160 直连系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

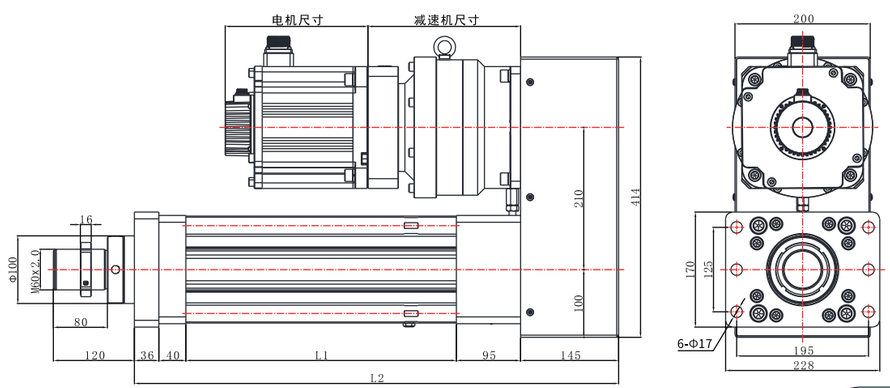



L01 前法兰

说明:L1=行程+300,L2=行程+641

## DG160 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。




说明:L1=行程+300,L2=行程+616

R01 前法兰

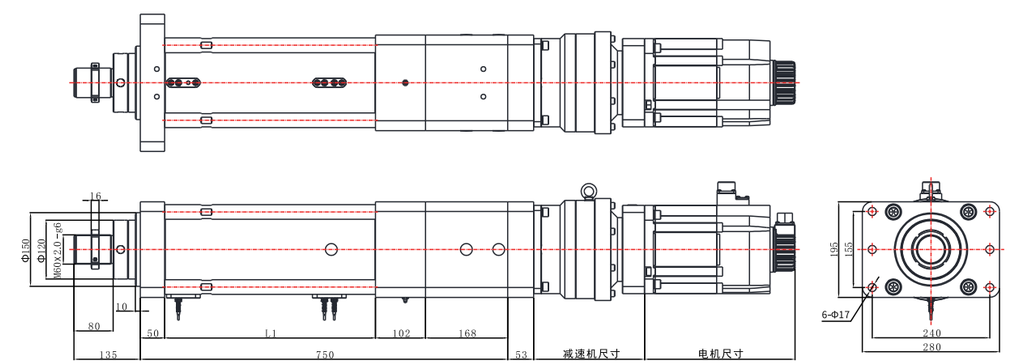
| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 158x158 mm | Φ140mm | ≤180KN | ≤2000mm | ≤250mm/s | ±0.3° | 接近开关 |





## DG180 直连系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。

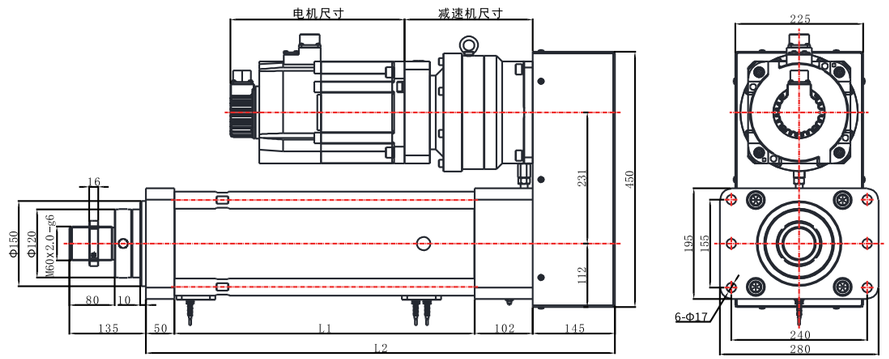



L01 前法兰

说明:L1=行程+330,L2=行程+650

## DG180 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。



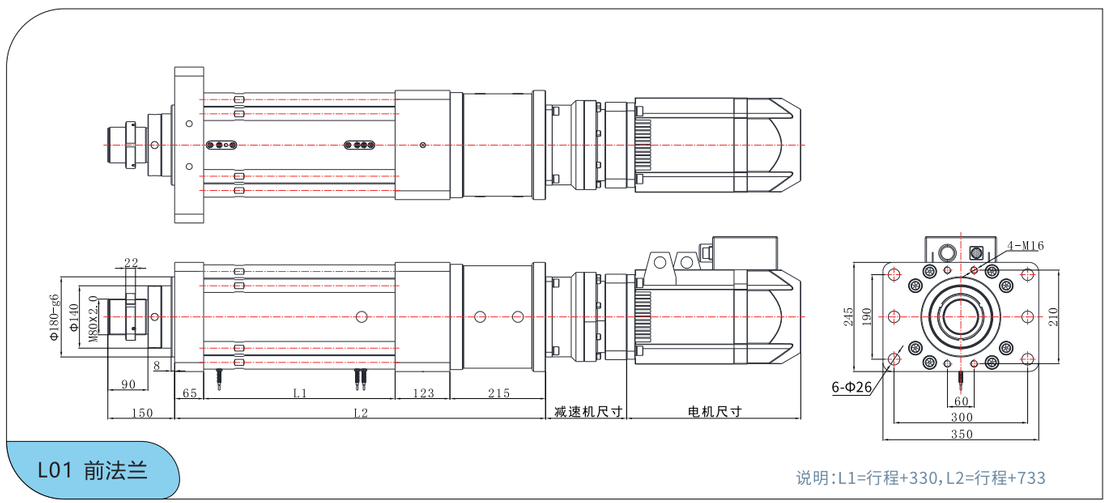

说明:L1=行程+330,L2=行程+627

R01 前法兰

| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| 180x180 mm | Φ160mm | ≤250KN | ≤2000mm | ≤250mm/s | ±0.3° | 接近开关 |

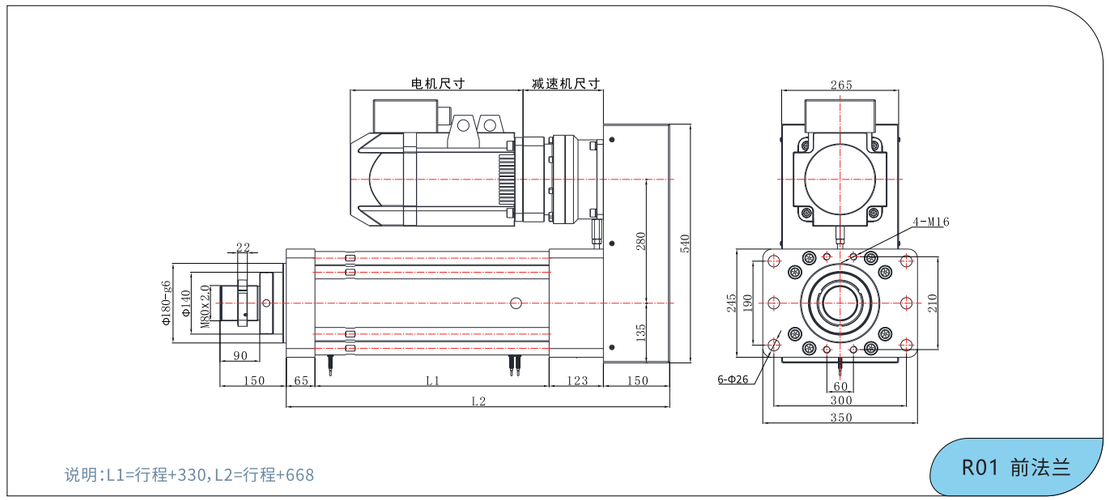
## DG245 直连系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。




## DG245 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。



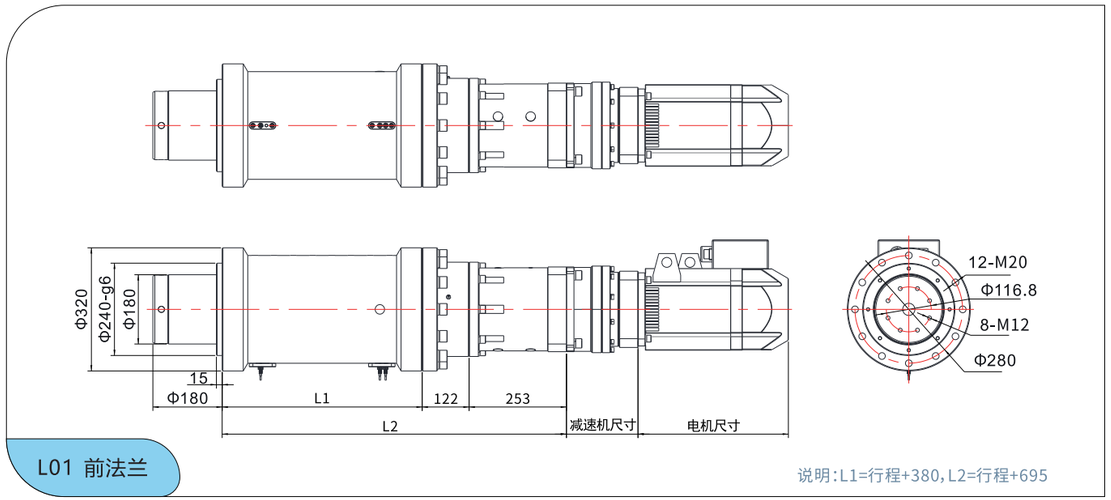

| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| Φ210 mm | Φ180mm | ≤400KN | ≤2000mm | ≤250mm/s | ±0.3° | 接近开关 |





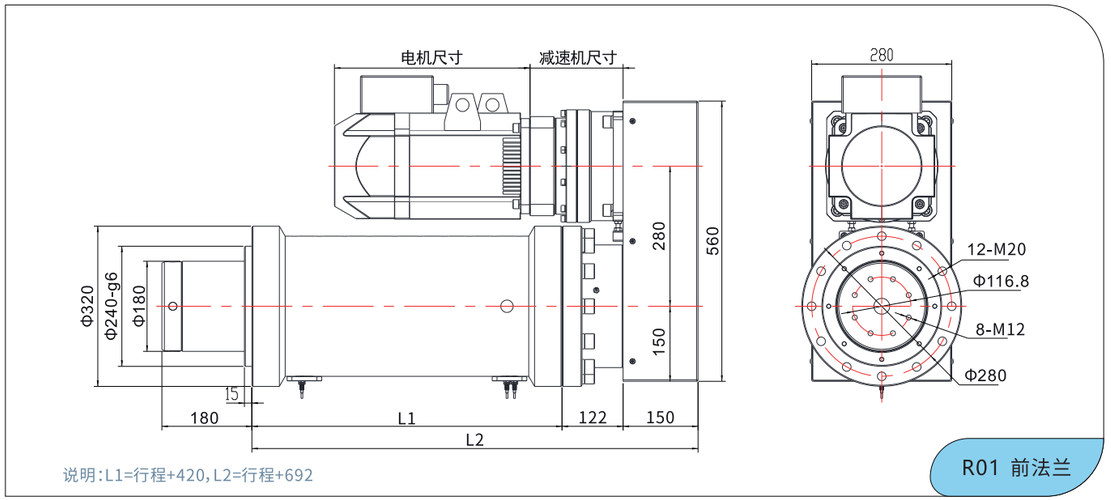
## DG300 直连系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。



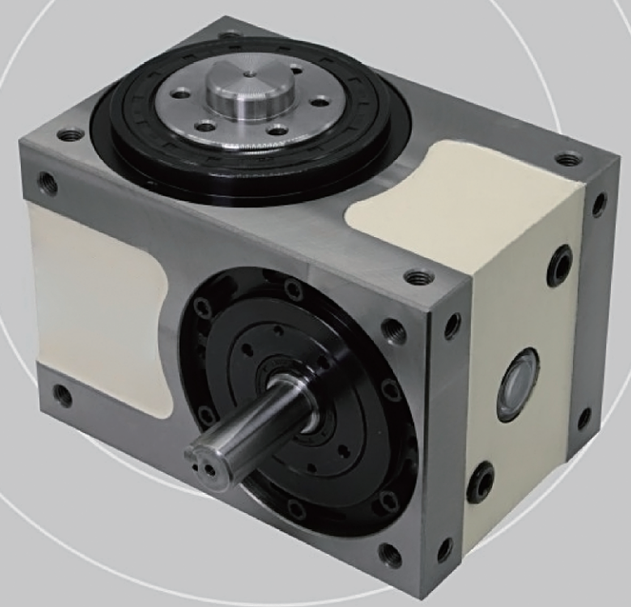

## DG300 折返系列·标准尺寸图

注:电机安装板匹配不同电机时,尺寸可能发生变化。




| 缸筒外径 | 缸筒内径 | 允许最大推力 | 行程范围 | 允许最大速度 | 活塞杆旋转角度 | 限位开关 |
|---|---|---|---|---|---|---|
| Φ280 mm | Φ230mm | ≤600KN | ≤2000mm | ≤500mm/s | ±0.3° | 接近开关 |

# DF法兰型
## 弧面凸轮分割器

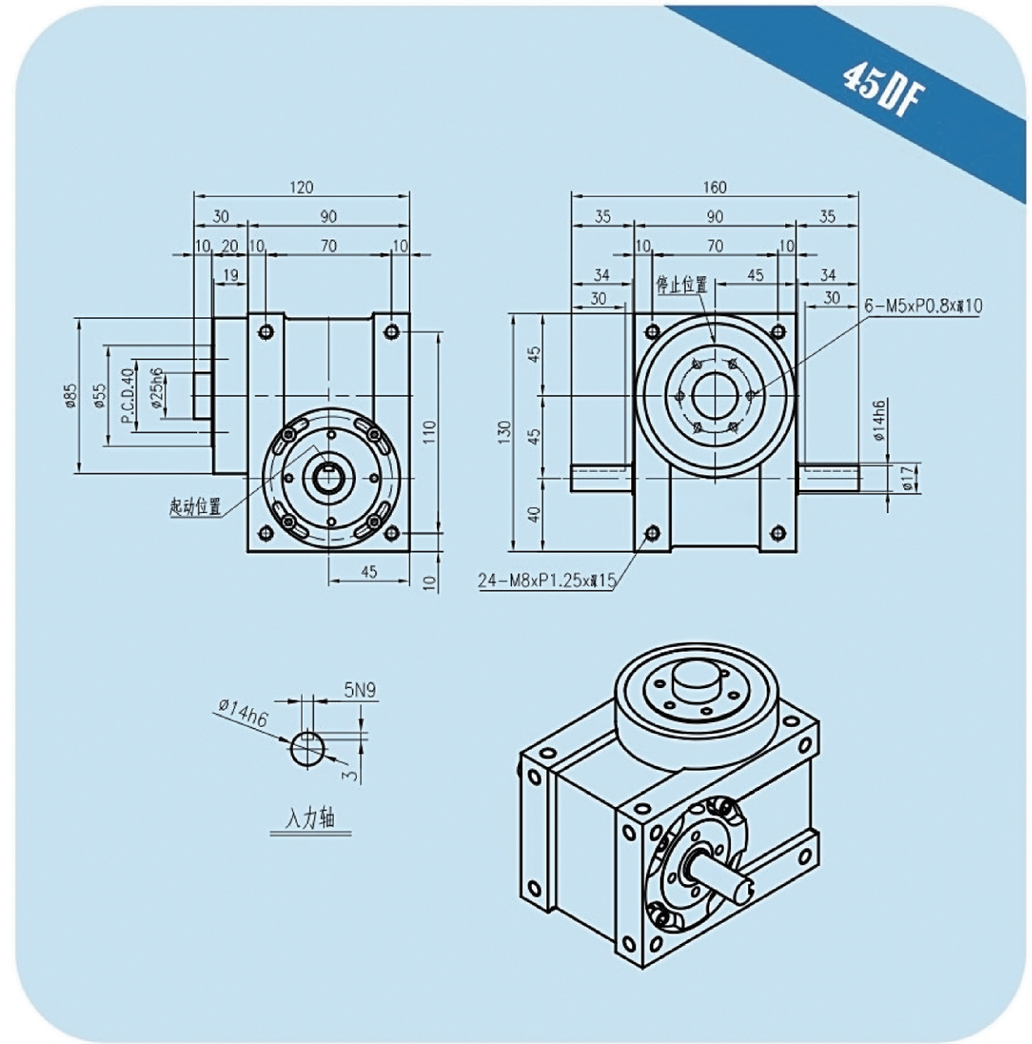


### 45DF、60DF、70DF、80DF、110DF、140DF、180DF、250DF、350DF

此机种具有重负荷特性，可承受较大的垂直径向或轴向压力，其输出轴为法兰盘式设计。有凸缘中心、盘面螺孔、定位、销孔、固定面宽大，可使链接件更具坚实平稳。最能适用于较大负荷的回转式圆盘驱动场合。被广泛使用在各类盘式加工机械及类似机构的产业机械，自动化间歇驱动部，驱动圆盘。其余图纸找生产厂家索图。



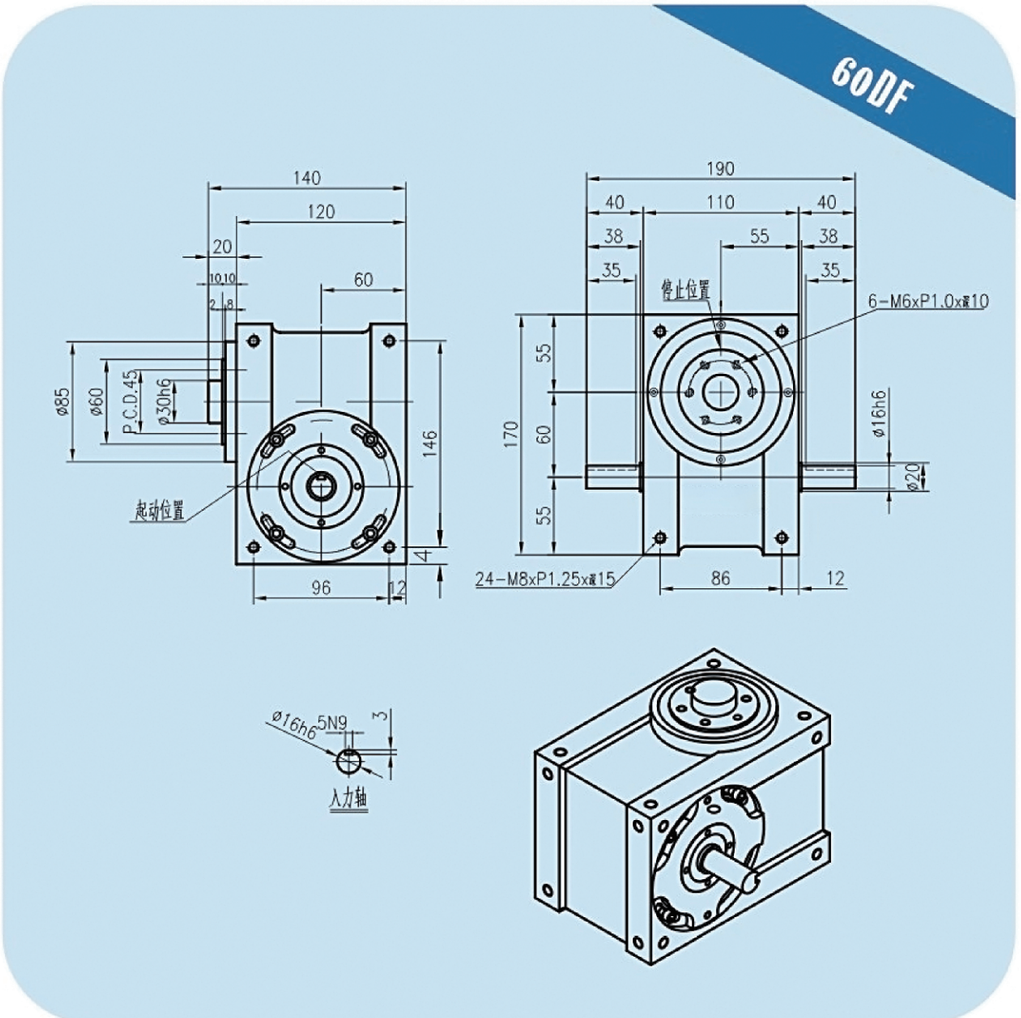





**技术参数**

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 130 |
| 出力轴容许轴向负荷 | C2 | kgf | 140 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 85 |
| 入力轴最大弯曲力矩 | C4 | kgf | 110 |
| 入力轴最大扭矩 | C5 | kgf-m | 4 |
| 入力轴的$GD^2$(注1) | C6 | kgf-$m^2$ | $3.2\times10^{-4}$ |
| 定位分割精度 | | sec. | ±60 |
| 重量 | | kg | 7 |

注：入力轴的$GD^2$是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



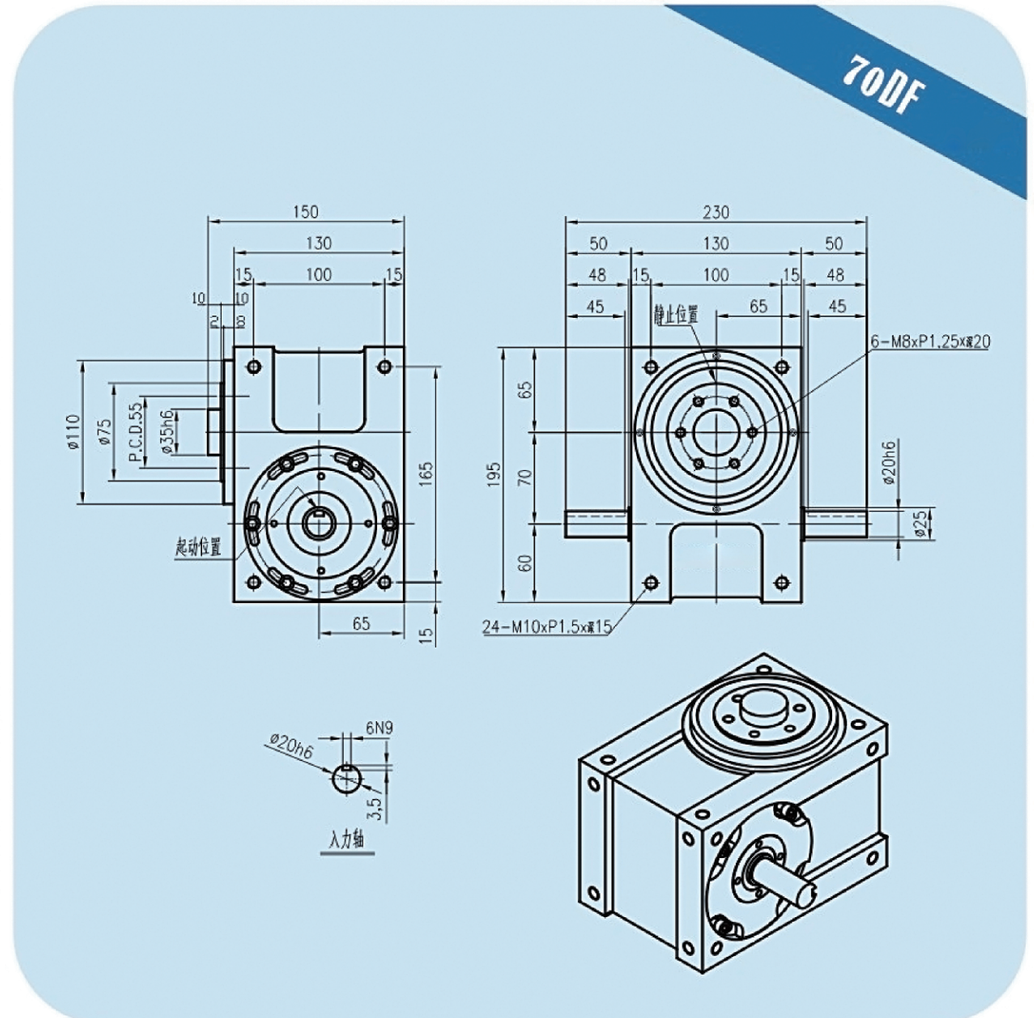

**技术参数**

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 140 |
| 出力轴容许轴向负荷 | C2 | kgf | 142 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 100 |
| 入力轴最大弯曲力矩 | C4 | kgf | 150 |
| 入力轴最大扭矩 | C5 | kgf-m | 6 |
| 入力轴的GD²(注1) | C6 | kgf-m² | $1.9\times10^{-3}$ |
| 定位分割精度 | | sec. | ±45 |
| 重量 | | kg | 13 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



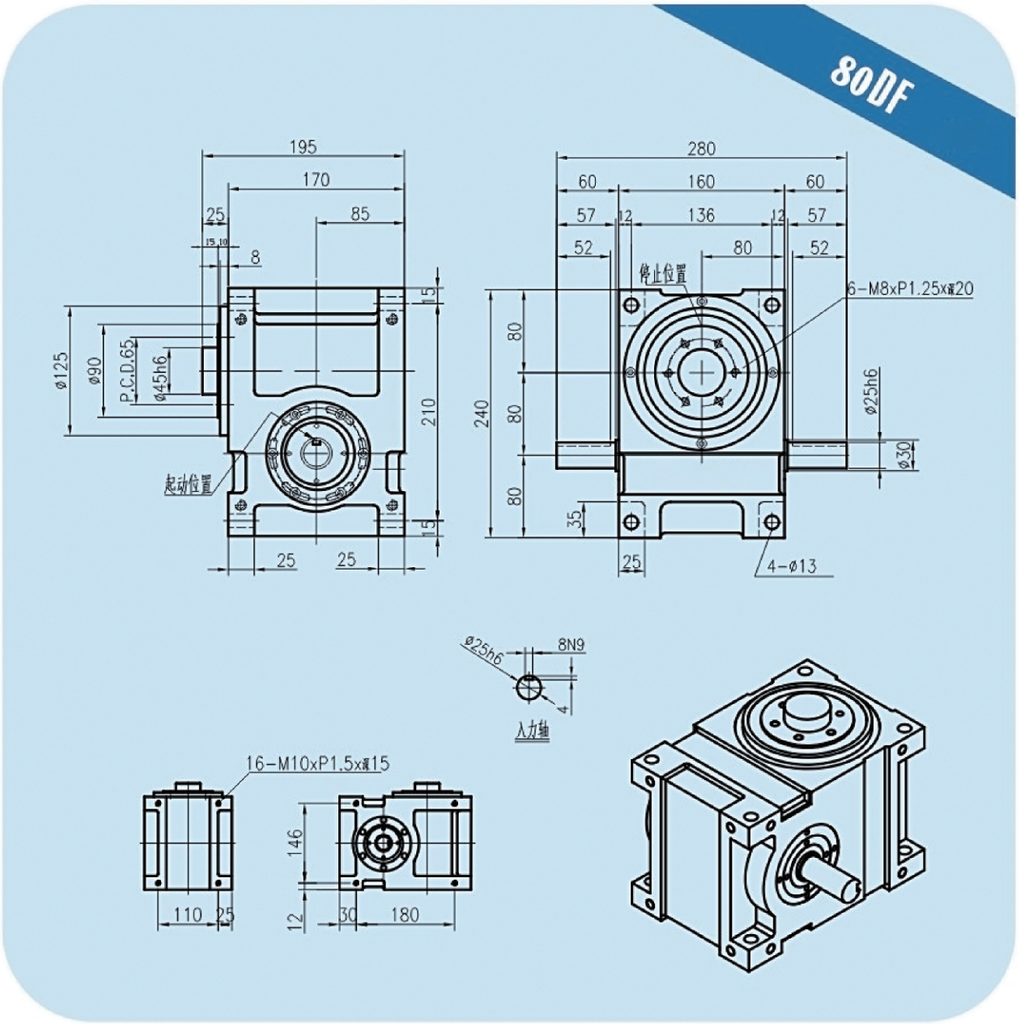





**技术参数**

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 220 |
| 出力轴容许轴向负荷 | C2 | kgf | 300 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 150 |
| 入力轴最大弯曲力矩 | C4 | kgf | 150 |
| 入力轴最大扭矩 | C5 | kgf-m | 6 |
| 入力轴的GD²(注1) | C6 | kgf-m² | $1.9\times10^{-3}$ |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 18 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



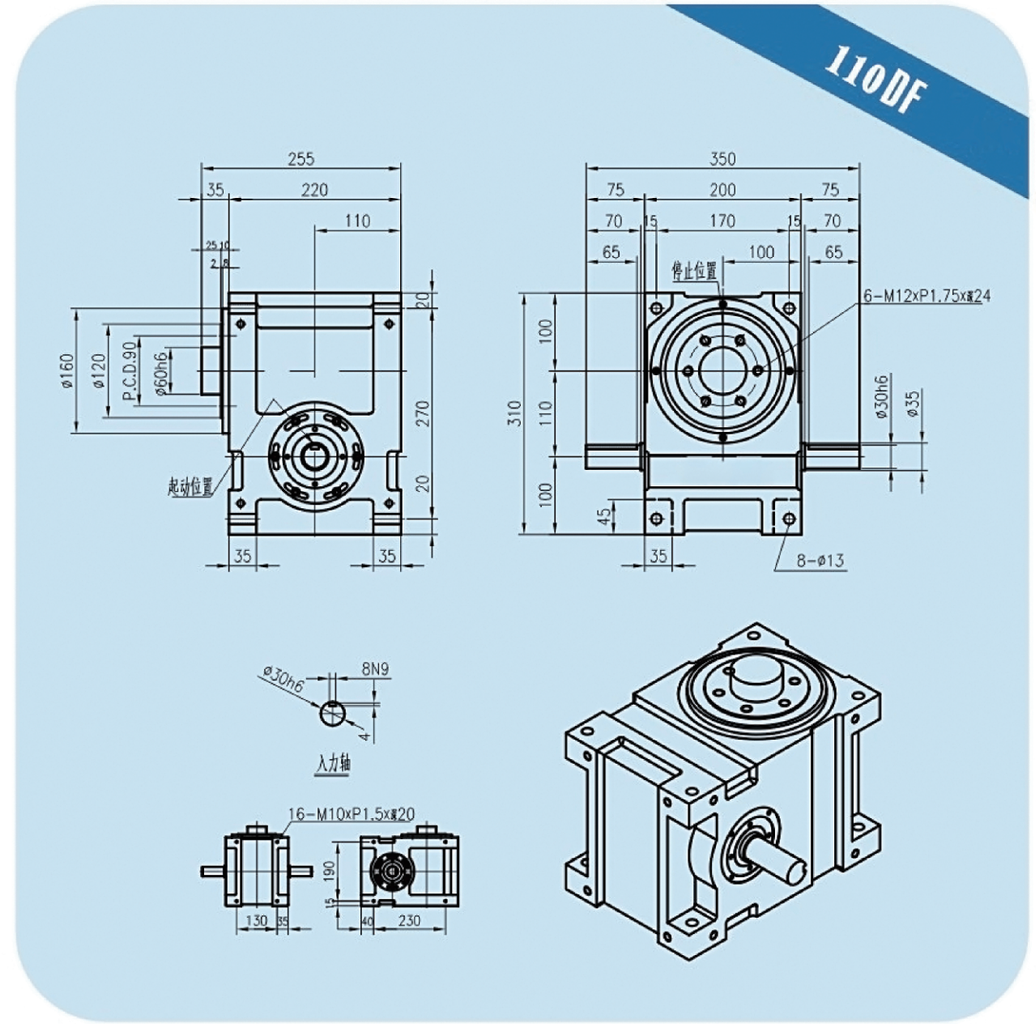

**技术参数**

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 330 |
| 出力轴容许轴向负荷 | C2 | kgf | 420 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 335 |
| 入力轴最大弯曲力矩 | C4 | kgf | 260 |
| 入力轴最大扭矩 | C5 | kgf-m | 25 |
| 入力轴的GD²(注1) | C6 | kgf-㎡ | $9\times10^{-3}$ |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 32 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



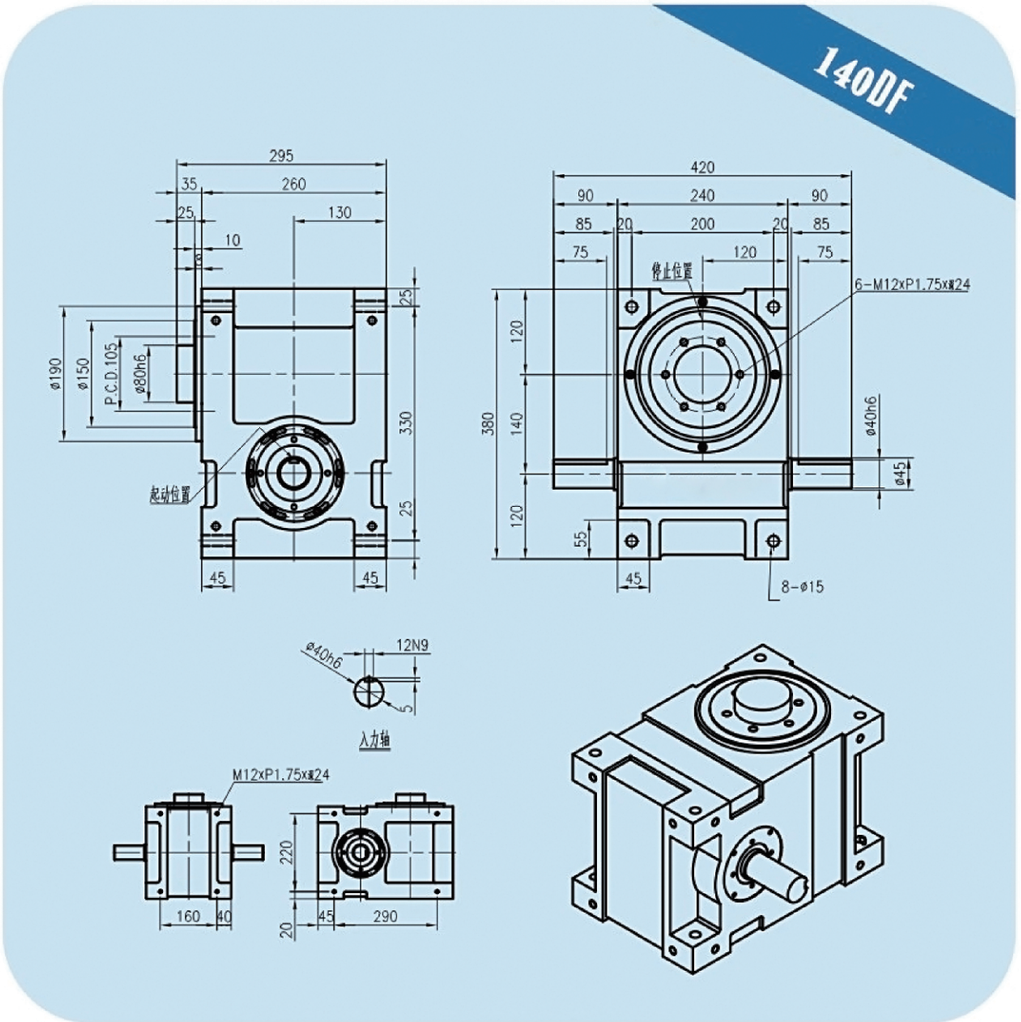





**技术参数**

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 560 |
| 出力轴容许轴向负荷 | C2 | kgf | 700 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 480 |
| 入力轴最大弯曲力矩 | C4 | kgf | 415 |
| 入力轴最大扭矩 | C5 | kgf-m | 40 |
| 入力轴的GD²(注1) | C6 | kgf-㎡ | $2.8\times10^{-2}$ |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 65 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



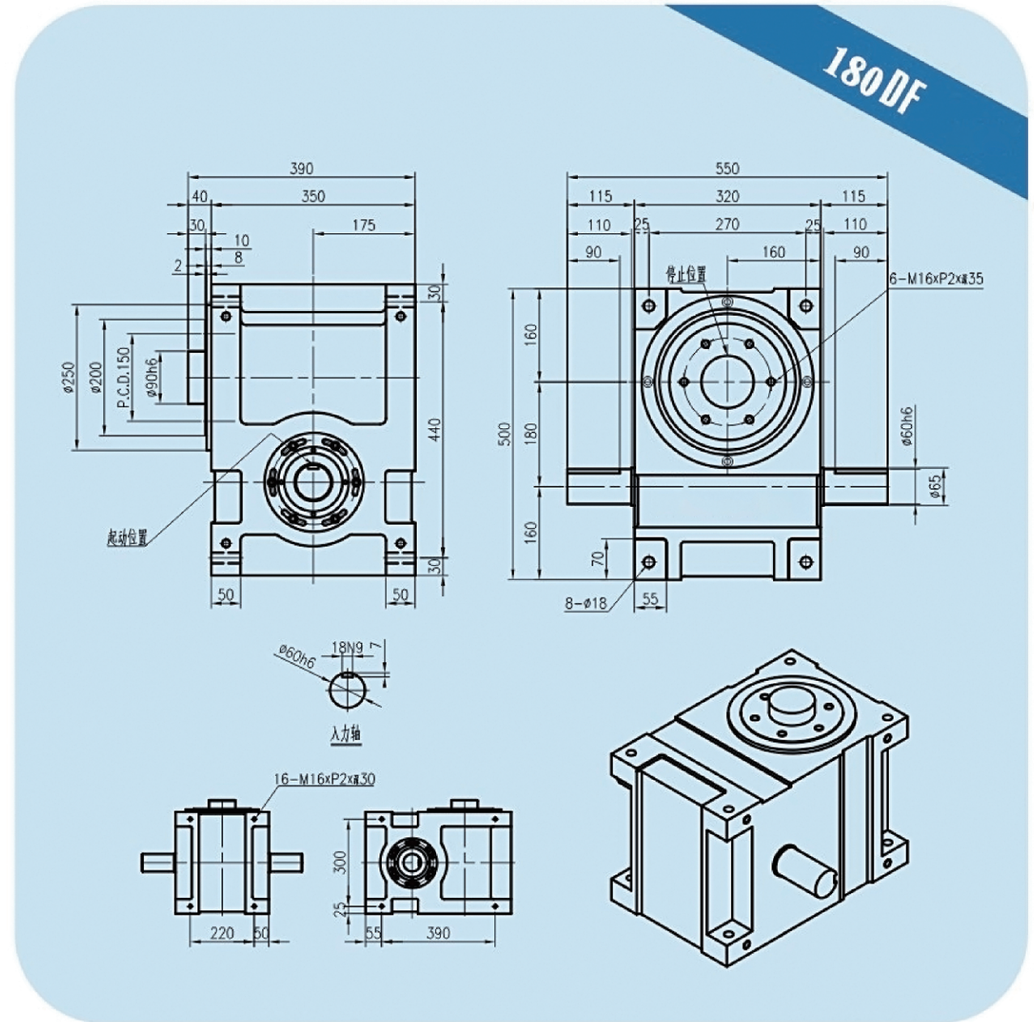

## 技术参数

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 760 |
| 出力轴容许轴向负荷 | C2 | kgf | 1000 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 550 |
| 入力轴最大弯曲力矩 | C4 | kgf | 710 |
| 入力轴最大扭矩 | C5 | kgf-m | 100 |
| 入力轴的GD²(注1) | C6 | kgf-㎡ | 0.11 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 90 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



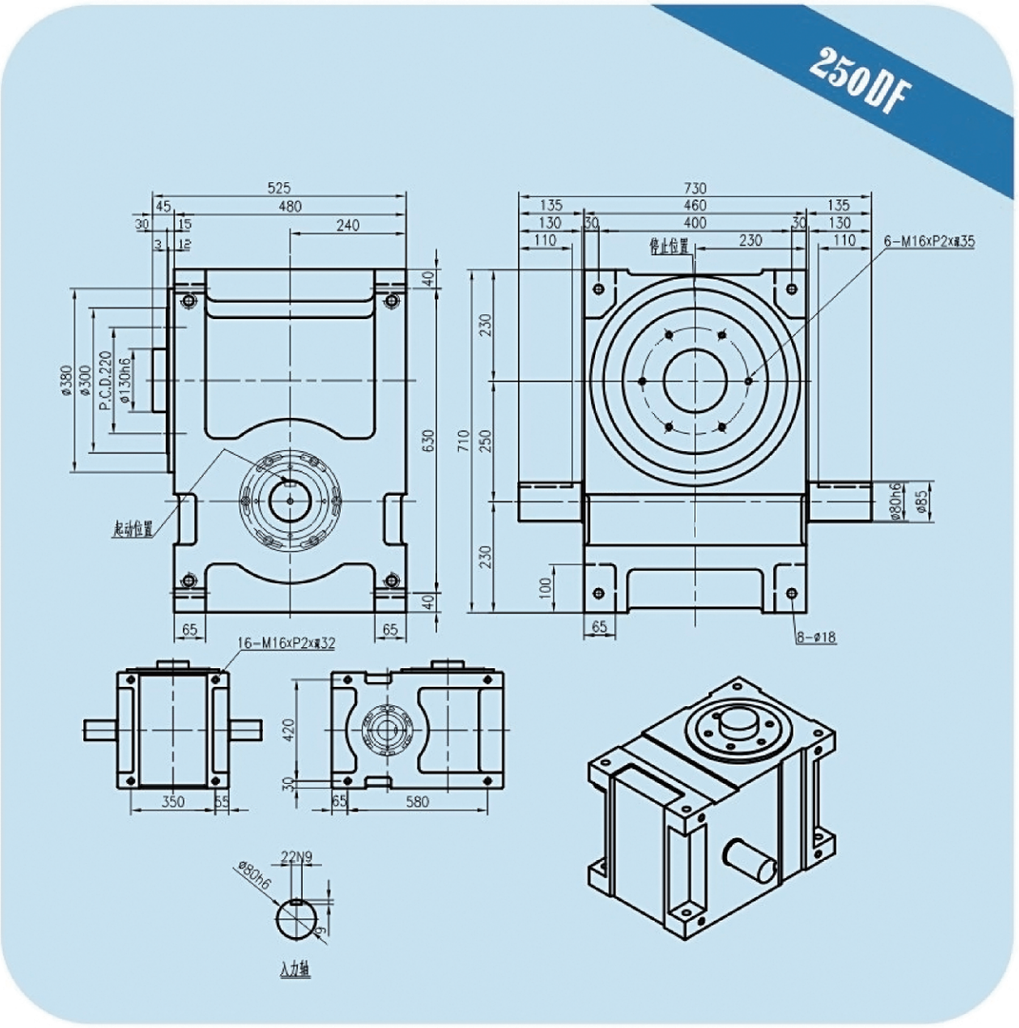





## 技术参数

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 1200 |
| 出力轴容许轴向负荷 | C2 | kgf | 1500 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 1100 |
| 入力轴最大弯曲力矩 | C4 | kgf | 1960 |
| 入力轴最大扭矩 | C5 | kgf-m | 340 |
| 入力轴的GD²(注1) | C6 | kgf-㎡ | 0.39 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 220 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值




**技术参数**

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 3200 |
| 出力轴容许轴向负荷 | C2 | kgf | 4150 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 1550 |
| 入力轴最大弯曲力矩 | C4 | kgf | 3800 |
| 入力轴最大扭矩 | C5 | kgf-m | 780 |
| 入力轴的GD²(注1) | C6 | kgf-m² | 1.98 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 680 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



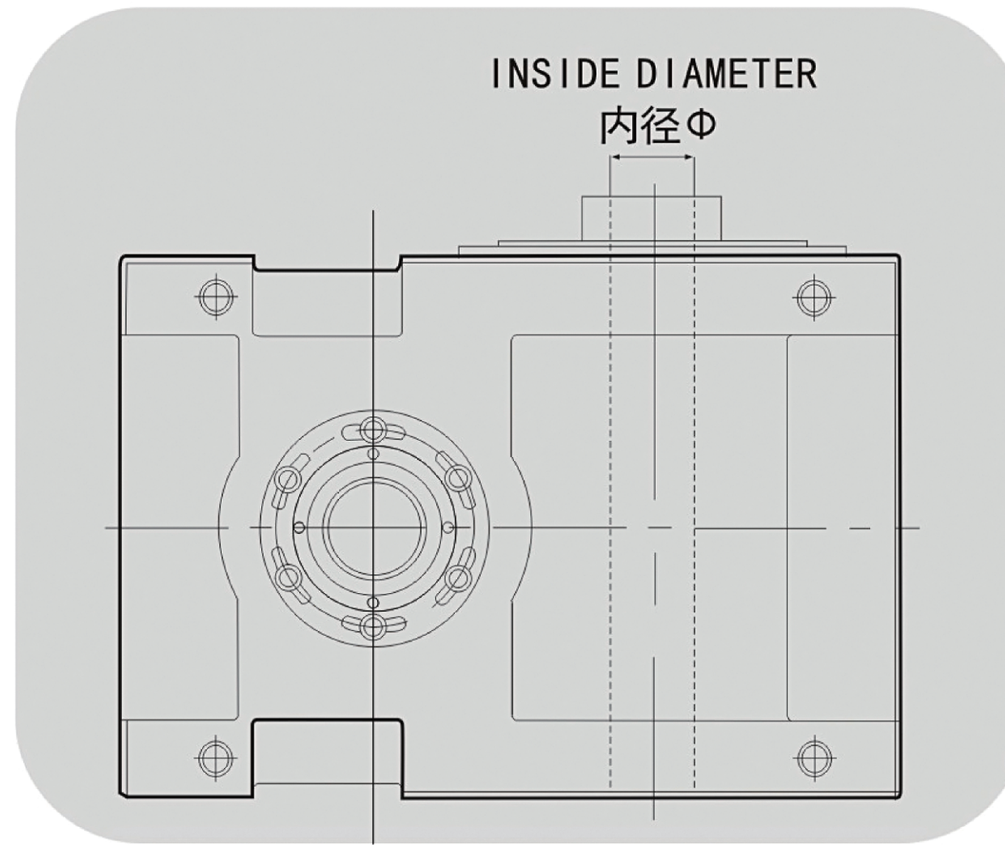


## DFH中空法兰型外形即同DF，只是输出中空，中空尺寸如下表：

### 中空法兰型内径对照表
INSIDE DIAMETER OF THE HOLLOW FLANGE TYPE

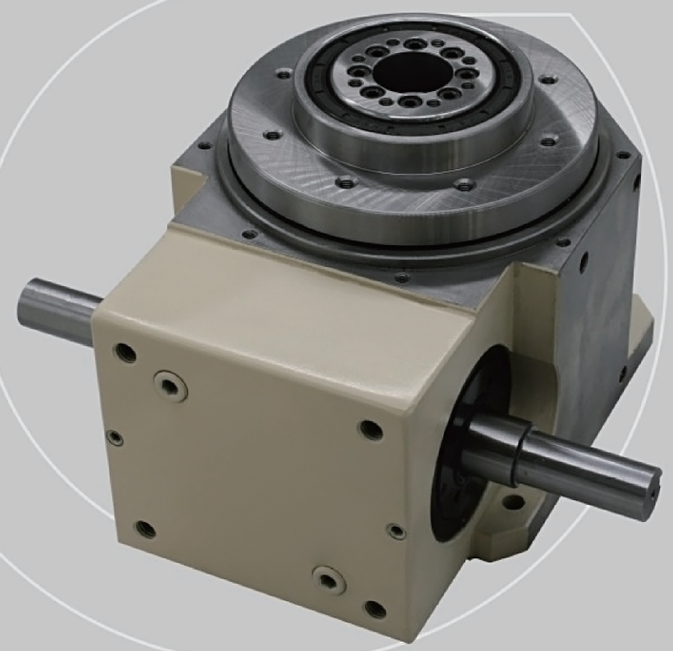
| 型式 TYPE | 45D | 60D | 70D | 80D | 110D | 140D | 180D | 250D |
|---|---|---|---|---|---|---|---|---|
| 内径 INSIDE DIAMETER | Φ10 | Φ16 | Φ20 | Φ25 | Φ35 | Φ42 | Φ60 | Φ80 |

DFH中空法兰型外形尺寸同DF,只是输出中空，中空尺寸如下表



# DT平台桌面型

## 弧面凸轮分割器

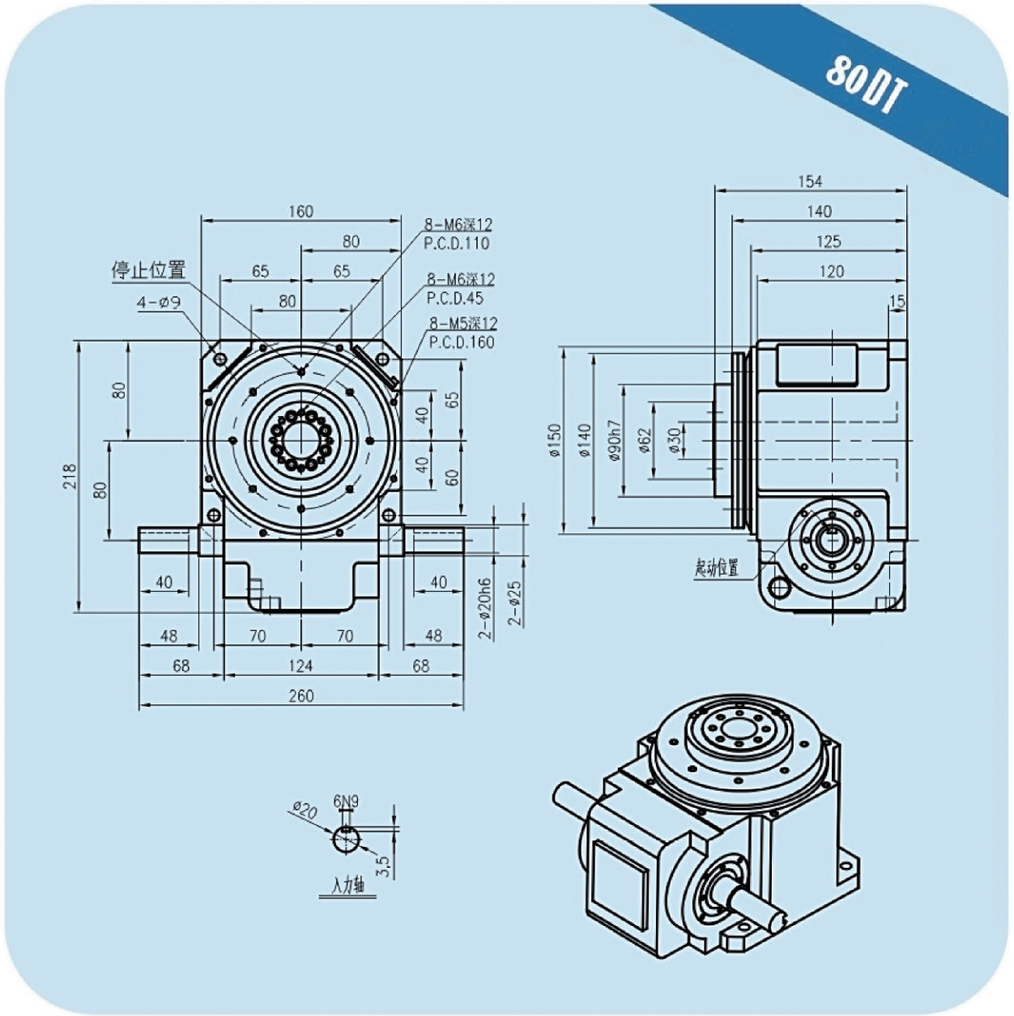


### 80DT、110DT、140DT、180DT、250DT、

此机种的尺寸设计特性与法兰型功能相似，于驱动运转上可承受超大轴向负载及垂直径向压力，在输出端有一凸起固定盘面及大孔径空心轴，可将动力源的电、油、气管路置于空心孔内，此系列机种广泛应用于重负载、直结自动化设备的各类机械及产业机械等，作同步自动化间歇驱动。



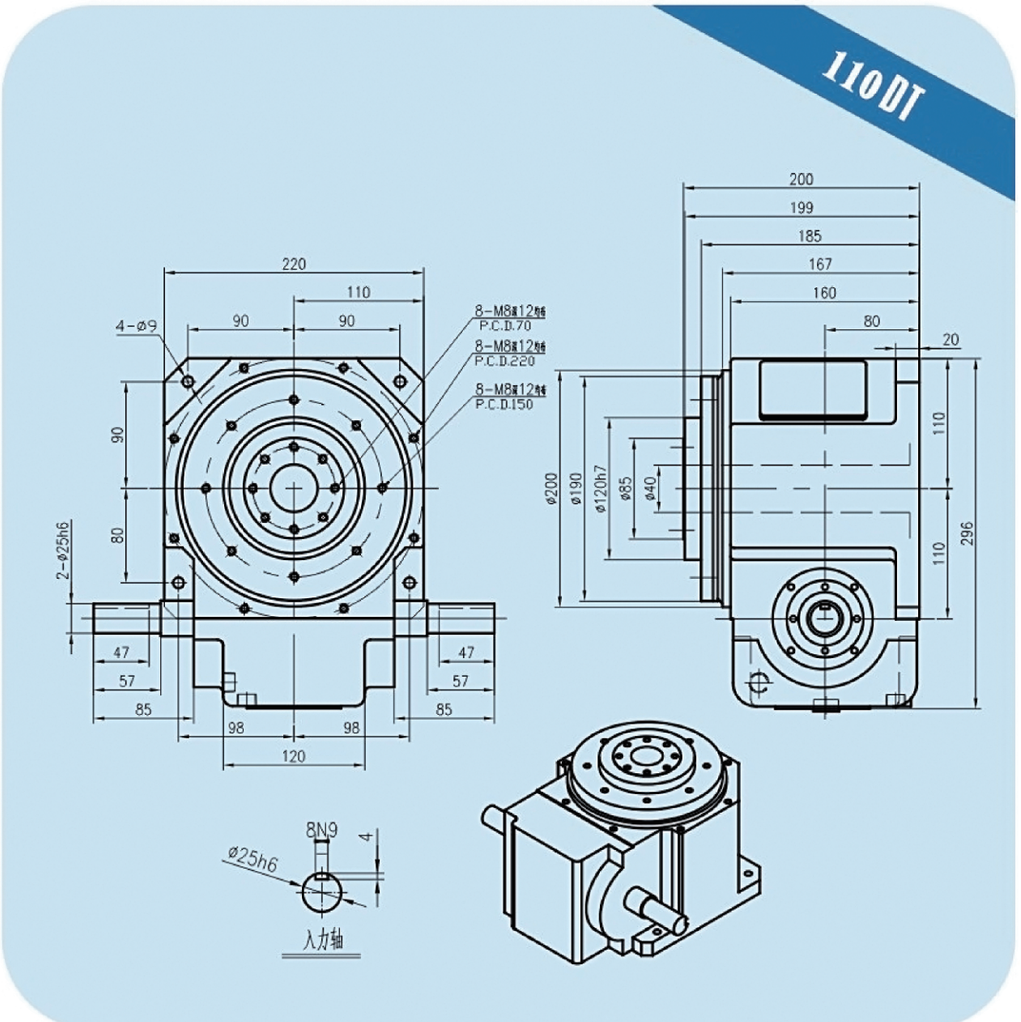





**技术参数**

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 520 |
| 出力轴容许轴向负荷 | C2 | kgf | 220 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 220 |
| 入力轴最大弯曲力矩 | C4 | kgf | 160 |
| 入力轴最大扭矩 | C5 | kgf-m | 9.5 |
| 入力轴的$GD^2$(注1) | C6 | kgf-㎡ | 0.03 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 20 |

注：入力轴的$GD^2$是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



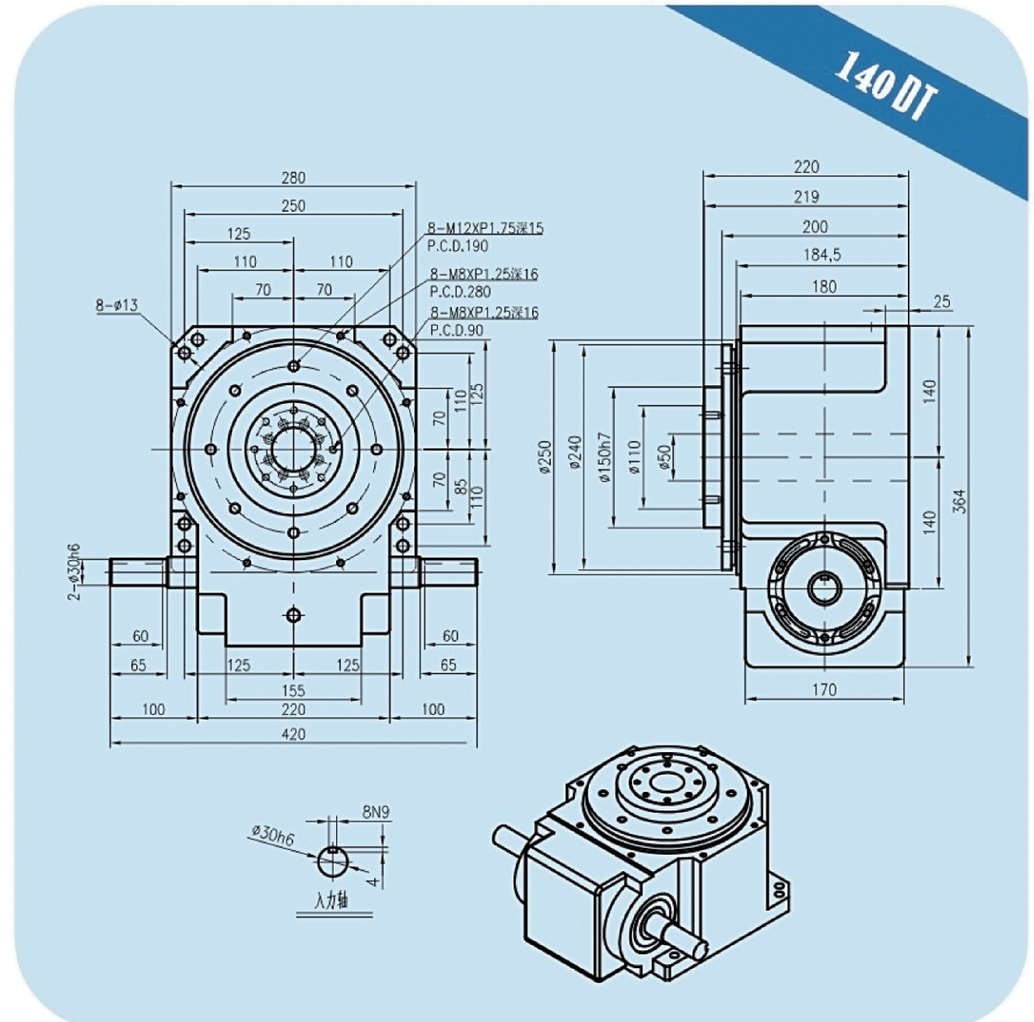

## 技术参数

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 860 |
| 出力轴容许轴向负荷 | C2 | kgf | 420 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 300 |
| 入力轴最大弯曲力矩 | C4 | kgf | 250 |
| 入力轴最大扭矩 | C5 | kgf-m | 25 |
| 入力轴的GD²(注1) | C6 | kgf-㎡ | 0.01 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 50 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



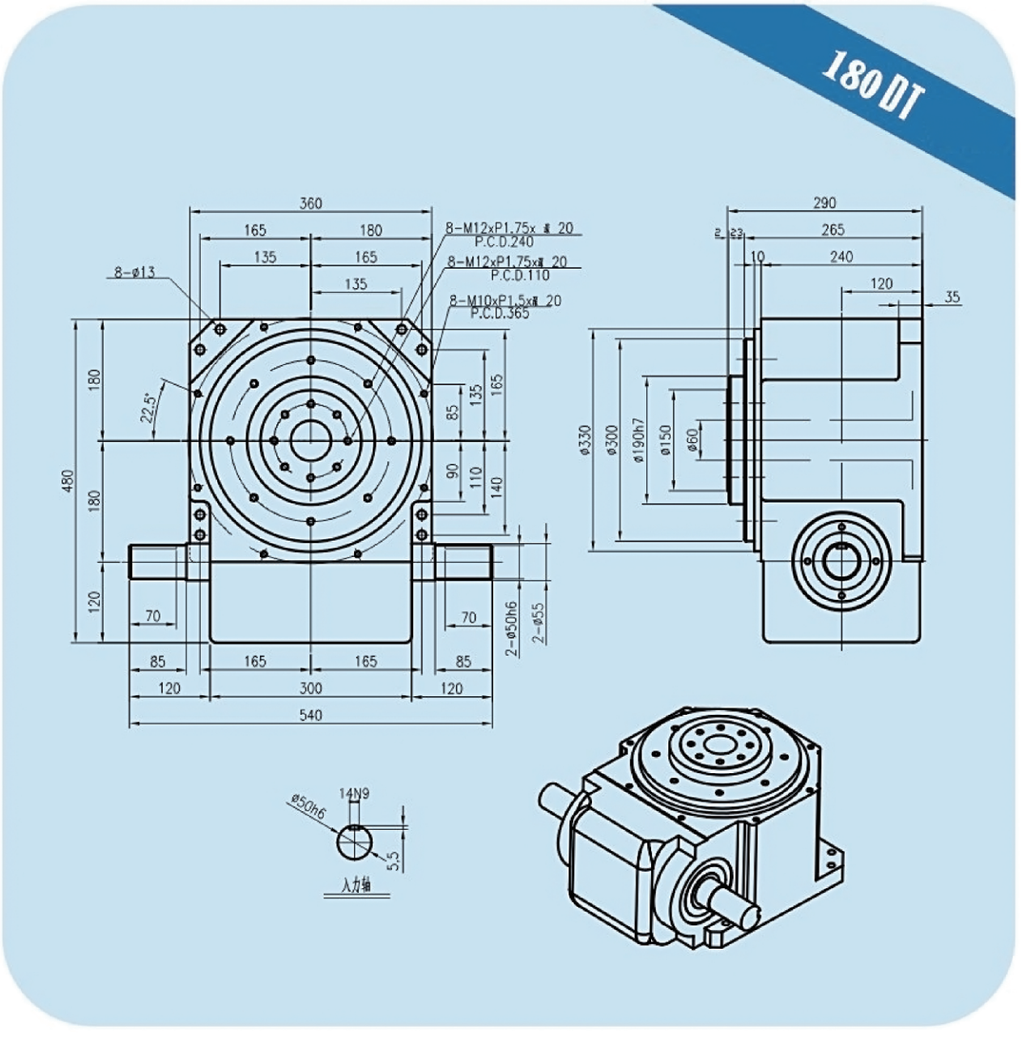





## 技术参数

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 1050 |
| 出力轴容许轴向负荷 | C2 | kgf | 720 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 500 |
| 入力轴最大弯曲力矩 | C4 | kgf | 350 |
| 入力轴最大扭矩 | C5 | kgf-m | 53 |
| 入力轴的GD²(注1) | C6 | kgf-㎡ | 0.07 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 85 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



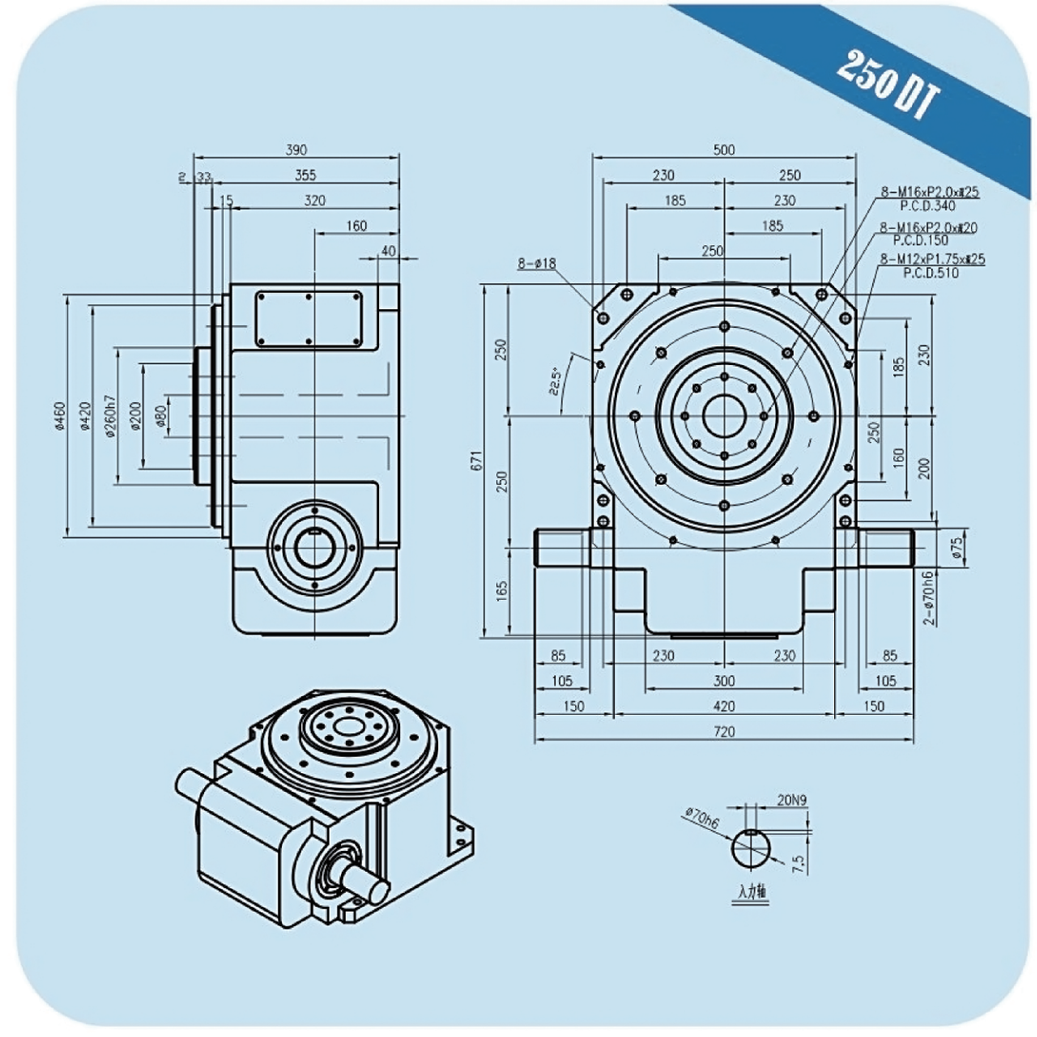

## 技术参数

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 1500 |
| 出力轴容许轴向负荷 | C2 | kgf | 1100 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 1200 |
| 入力轴最大弯曲力矩 | C4 | kgf | 960 |
| 入力轴最大扭矩 | C5 | kgf-m | 220 |
| 入力轴的GD²(注1) | C6 | kgf-m² | 0.23 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 190 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



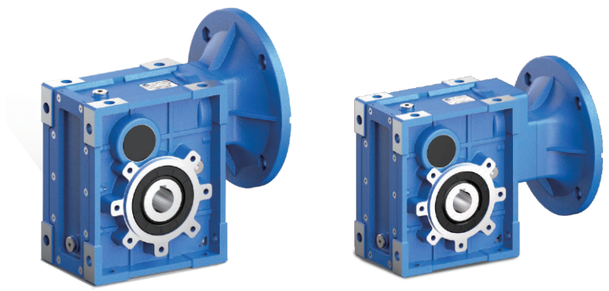





## 技术参数

| 项目 | 符号 | 单位 | 数值 |
|---|---|---|---|
| 出力轴容许径向负荷 | C1 | kgf | 2500 |
| 出力轴容许轴向负荷 | C2 | kgf | 1800 |
| 出力轴容许力矩 | TS | kgf-m | 参考力矩表 |
| 入力轴容许径向负荷 | C3 | kgf | 1900 |
| 入力轴最大弯曲力矩 | C4 | kgf | 2250 |
| 入力轴最大扭矩 | C5 | kgf-m | 670 |
| 入力轴的GD²(注1) | C6 | kgf-m² | 0.86 |
| 定位分割精度 | | sec. | ±30 |
| 重量 | | kg | 500 |

注：入力轴的GD²是在停留范围内的数值　注2：C1至C5数值是达到安全系数=2时的数值



## 型号说明 / MODEL ILLUMINATE

**减速电机** / Geared motor

| SKM | 38 | B | – | 20.10 | – | FA1 | – | SS1 | – | B3 | – | （电机规格） |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ① | ② | ③ | | ④ | | ⑤ | | ⑥ | | ⑧ | | ⑨ |

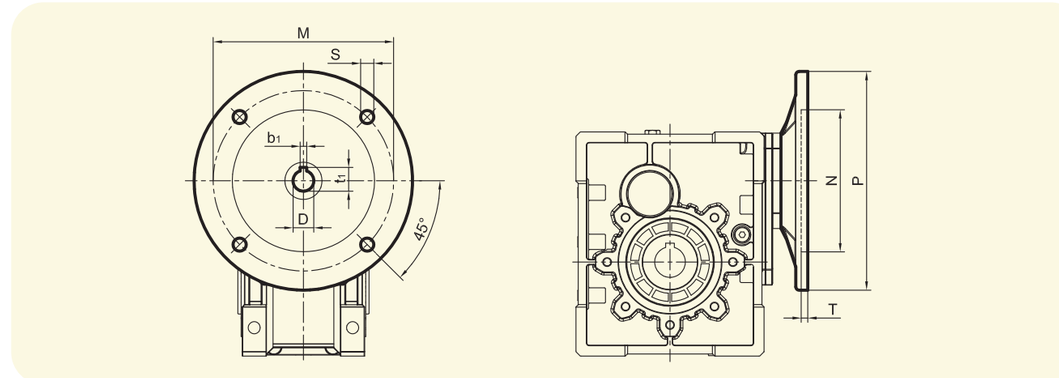
| NO | 说 明 | Comments |
|---|---|---|
| 1 | 减速机系列代号： SKM | Code for gear units series: SKM |
| 2 | 减速机规格代号：28、38、48、58、68 | Specification code of gear units: 28. 38. 48. 58.68 |
| 3 | 1) B：表示2级传动<br>2) C：表示3级传动 | 1) B: Means 2 stages<br>2) C: Means 3 stages |
| 4 | 减速机速比 i | Speed ratio of reducer i |
| 5 | 1.无代号表示不带输出法兰<br>2.FA,FB,FC,FD,FE(1/2):输出法兰代号和位置 | 1.No mark means without output flange<br>2.FA, FB, FC, FD, FE(1/2):output Flange and position |
| 6 | 1.无代号表示孔输出<br>2.SS(1/2):单向输出轴和位置<br>3.DS：双向输出轴 | 1.No mark means hole output<br>2.SS(1/2):Single output shaft and position<br>3.DS:Double output shaft |
| 8 | 安装方位代号 | Installation position code |
| 9 | 电机型号规格 | motor type |





## 输入尺寸图表 / INPUT SIZE DIAGRAM

SKM..IEC 输入法兰尺寸/Input Flange Dimension




| SKM | IEC接口 | | | | | | 键槽/keyway | | i(速比/ratio) | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PAM-IEC | N | M | P | S | T | b1 | t1 | 7.5 | 10 | 12.5 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 75 | 100 | 125 | 150 | 200 | 250 | 300 |
| | | | | | | | | | D | | | | | | | | | | | | | | | | |
| | | | | | | | | | B | | | | | | | | | | C | | | | | | |
| 28 | 63B5 | 95 | 115 | 140 | 9 | 4 | 4 | 12.8 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 71B5 | 110 | 130 | 160 | 9 | 5 | 5 | 16.3 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | – | – | – | – |
| | 71B14 | 70 | 85 | 105 | 7 | 5 | 5 | 16.3 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | – | – | – | – |
| | 80B5 | 130 | 165 | 200 | 11 | 5 | 6 | 21.8 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | – | – | – | – | – | – | – |
| | 80B14 | 80 | 100 | 120 | 7 | 5 | 6 | 21.8 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | – | – | – | – | – | – | – |
| | 90B5 | 130 | 165 | 200 | 11 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – | – | – | – |
| | 90B14 | 95 | 115 | 140 | 9 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – | – | – | – |
| 38 | 63B5 | 95 | 115 | 140 | 9 | 4 | 4 | 12.8 | – | – | – | – | – | – | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 71B5 | 110 | 130 | 160 | 9 | 5 | 5 | 16.3 | – | – | – | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | – | – | – | – |
| | 71B14 | 70 | 85 | 105 | 7 | 5 | 5 | 16.3 | – | – | – | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | – | – | – | – |
| | 80B5 | 130 | 165 | 200 | 11 | 5 | 6 | 21.8 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | – | – | – | – | – | – | – |
| | 80B14 | 80 | 100 | 120 | 7 | 5 | 6 | 21.8 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | – | – | – | – | – | – | – |
| | 90B5 | 130 | 165 | 200 | 11 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – | – |
| | 90B14 | 95 | 115 | 140 | 9 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – | – |
| 48 | 63B5 | 95 | 115 | 140 | 9 | 4 | 4 | 12.8 | – | – | – | – | – | – | – | – | – | – | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 71B5 | 110 | 130 | 160 | 9 | 5 | 5 | 16.3 | – | – | – | – | – | – | – | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| | 80B5 | 130 | 165 | 200 | 11 | 5 | 6 | 21.8 | – | – | – | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | – | – | – |
| | 80B14 | 80 | 100 | 120 | 7 | 5 | 6 | 21.8 | – | – | – | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | – | – | – |
| | 90B5 | 130 | 165 | 200 | 11 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – |
| | 90B14 | 95 | 115 | 140 | 9 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – |
| | 100/112B5 | 180 | 215 | 250 | 13 | 5 | 8 | 31.3 | 28 | 28 | 28 | 28 | 28 | 28 | 28/– | 28/– | – | – | – | – | – | – | – | – | – |
| | 100/112B14 | 110 | 130 | 160 | 9 | 5 | 8 | 31.3 | 28 | 28 | 28 | 28 | 28 | 28 | 28/– | 28/– | – | – | – | – | – | – | – | – | – |
| 58 | 63B5 | 95 | 115 | 140 | 9 | 4 | 4 | 12.8 | – | – | – | – | – | – | – | – | – | – | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 71B5 | 110 | 130 | 160 | 9 | 5 | 5 | 16.3 | – | – | – | – | – | – | – | – | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| | 80B5 | 130 | 165 | 200 | 11 | 5 | 6 | 21.8 | – | – | – | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| | 80B14 | 80 | 100 | 120 | 7 | 5 | 6 | 21.8 | – | – | – | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| | 90B5 | 130 | 165 | 200 | 11 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – |
| | 90B14 | 95 | 115 | 140 | 9 | 5 | 8 | 27.3 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | – | – | – | – | – | – | – |
| | 100/112B5 | 180 | 215 | 250 | 13 | 5 | 8 | 31.3 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28/– | 28/– | – | – | – | – | – | – | – |
| | 100/112B14 | 110 | 130 | 160 | 9 | 5 | 8 | 31.3 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28/– | 28/– | 35 | – | – | – | – | – | – |
| 68 | | | | | | | | | 24/28/35/38/42 | | | | | | | | | | – | – | – | – | – | – | – |

## 减速机选型表 / GEAR UNIT SELECTION TABLES

SKM 28..减速机组合表（$n_1$ =1400r/min）
SKM 28..Possible geometrical combinations ($n_1$ =1400r/min)

**130Nm**

| 减速机型号 Gear units | i 公称 Nominal | i 实际 Actual | $n_2$ [r/min] | $M_{2max}$ [Nm] | $F_{r2}$ [N] | MV63 | MV71 | MV80 | MV90 |
|---|---|---|---|---|---|---|---|---|---|
| 3级/Stage | | | | | | | | | |
| SKM28C | 300 | 303.19 | 4.6 | 130 | 4100 | | | | |
| SKM28C | 250 | 256.09 | 5.5 | 130 | 4100 | | | | |
| SKM28C | 200 | 205.11 | 6.8 | 130 | 4100 | | | | |
| SKM28C | 150 | 151.82 | 9.2 | 130 | 4000 | | | | |
| SKM28C | 125 | 127.76 | 11 | 100 | 3770 | | | | |
| SKM28C | 100 | 102.32 | 13.7 | 80 | 3560 | | | | |
| SKM28C | 75 | 75.74 | 18.5 | 130 | 3220 | | | | |
| 2级/Stage | | | | | | | | | |
| SKM28B | 60 | 59.55 | 23.5 | 130 | 2960 | | | | |
| SKM28B | 50 | 50.30 | 27.8 | 130 | 2790 | | | | |
| SKM28B | 40 | 40.29 | 34.7 | 130 | 2610 | | | | |
| SKM28B | 30 | 29.82 | 46.9 | 130 | 2350 | | | | |
| SKM28B | 25 | 25.10 | 55.8 | 130 | 2200 | | | | |
| SKM28B | 20 | 20.10 | 69.7 | 100 | 2080 | | | | |
| SKM28B | 15 | 14.88 | 94.1 | 80 | 1880 | | | | |
| SKM28B | 12.5 | 12.83 | 109.1 | 130 | 1770 | | | | |
| SKM28B | 10 | 10.28 | 136.2 | 100 | 1670 | | | | |
| SKM28B | 7.5 | 7.61 | 184 | 80 | 1510 | | | | |

SKM 38..减速机组合表（$n_1$ =1400r/min）
SKM 38..Possible geometrical combinations ($n_1$ =1400r/min)

**200Nm**

| 减速机型号 Gear units | i 公称 Nominal | i 实际 Actual | $n_2$ [r/min] | $M_{2max}$ [Nm] | $F_{r2}$ [N] | MV63 | MV71 | MV80 | MV90 |
|---|---|---|---|---|---|---|---|---|---|
| 3级/Stage | | | | | | | | | |
| SKM38C | 300 | 302.36 | 4.6 | 200 | 4800 | | | | |
| SKM38C | 250 | 255.39 | 5.5 | 200 | 4800 | | | | |
| SKM38C | 200 | 204.54 | 6.8 | 180 | 4800 | | | | |
| SKM38C | 150 | 149.26 | 9.4 | 200 | 4650 | | | | |
| SKM38C | 125 | 127.41 | 11 | 180 | 4330 | | | | |
| SKM38C | 100 | 102.04 | 13.7 | 150 | 4070 | | | | |
| SKM38C | 75 | 74.46 | 18.8 | 110 | 3650 | | | | |
| 2级/Stage | | | | | | | | | |
| SKM38B | 60 | 59.55 | 23.5 | 200 | 3430 | | | | |
| SKM38B | 50 | 50.30 | 27.8 | 200 | 3190 | | | | |
| SKM38B | 40 | 40.29 | 34.7 | 180 | 2970 | | | | |
| SKM38B | 30 | 29.40 | 47.6 | 200 | 2720 | | | | |
| SKM38B | 25 | 25.10 | 55.8 | 180 | 2530 | | | | |
| SKM38B | 20 | 20.10 | 69.7 | 150 | 2380 | | | | |
| SKM38B | 15 | 14.67 | 95.4 | 110 | 2130 | | | | |
| SKM38B | 12.5 | 12.83 | 109.1 | 180 | 2030 | | | | |
| SKM38B | 10 | 10.28 | 136.2 | 150 | 1910 | | | | |
| SKM38B | 7.5 | 7.50 | 186.7 | 110 | 1710 | | | | |





## 减速机选型表 / GEAR UNIT SELECTION TABLES

SKM 48..减速机组合表（$n_1$ =1400r/min）
SKM 48..Possible geometrical combinations ($n_1$ =1400r/min)

**350Nm**

| 减速机型号 Gear units | i 公称 Nominal | i 实际 Actual | $n_2$ [r/min] | $M_{2max}$ [Nm] | $F_{r2}$ [N] | MV63 | MV71 | MV80 | MV90 | MV100 | MV112 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3级/Stage | | | | | | | | | | | |
| SKM48C | 300 | 302.72 | 4.6 | 350 | 6500 | | | | | | |
| SKM48C | 250 | 255.69 | 5.5 | 350 | 6500 | | | | | | |
| SKM48C | 200 | 204.78 | 6.8 | 300 | 6500 | | | | | | |
| SKM48C | 150 | 149.44 | 9.4 | 350 | 6500 | | | | | | |
| SKM48C | 125 | 127.56 | 11 | 300 | 5980 | | | | | | |
| SKM48C | 100 | 102.16 | 13.7 | 240 | 5520 | | | | | | |
| SKM48C | 75 | 74.55 | 18.8 | 200 | 5040 | | | | | | |
| 2级/Stage | | | | | | | | | | | |
| SKM48B | 60 | 59.55 | 23.5 | 350 | 4660 | | | | | | |
| SKM48B | 50 | 50.30 | 27.8 | 350 | 4340 | | | | | | |
| SKM48B | 40 | 40.29 | 34.7 | 300 | 4080 | | | | | | |
| SKM48B | 30 | 29.40 | 47.6 | 350 | 3720 | | | | | | |
| SKM48B | 25 | 25.10 | 55.8 | 300 | 3500 | | | | | | |
| SKM48B | 20 | 20.10 | 69.7 | 240 | 3230 | | | | | | |
| SKM48B | 15 | 14.67 | 95.4 | 200 | 2950 | | | | | | |
| SKM48B | 12.5 | 12.83 | 109.1 | 300 | 2770 | | | | | | |
| SKM48B | 10 | 10.28 | 136.2 | 240 | 2550 | | | | | | |
| SKM48B | 7.5 | 7.50 | 186.7 | 200 | 2330 | | | | | | |

SKM 58..减速机组合表（$n_1$ =1400r/min）
SKM 58..Possible geometrical combinations ($n_1$ =1400r/min)

**500Nm**

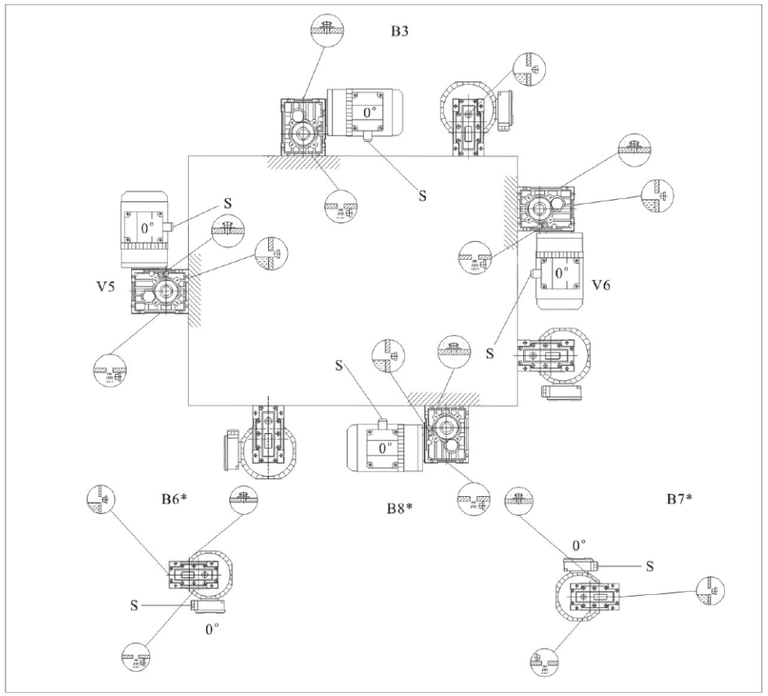
| 减速机型号 Gear units | i 公称 Nominal | i 实际 Actual | $n_2$ [r/min] | $M_{2max}$ [Nm] | $F_{r2}$ [N] | MV63 | MV71 | MV80 | MV90 | MV100 | MV112 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3级/Stage | | | | | | | | | | | |
| SKM58C | 300 | 303.73 | 4.6 | 500 | 8300 | | | | | | |
| SKM58C | 250 | 256.55 | 5.5 | 500 | 8300 | | | | | | |
| SKM58C | 200 | 205.47 | 6.8 | 480 | 8300 | | | | | | |
| SKM58C | 150 | 149.94 | 9.3 | 500 | 8050 | | | | | | |
| SKM58C | 125 | 127.98 | 11 | 480 | 7580 | | | | | | |
| SKM58C | 100 | 102.50 | 13.7 | 380 | 7000 | | | | | | |
| SKM58C | 75 | 74.80 | 18.7 | 300 | 6390 | | | | | | |
| 2级/Stage | | | | | | | | | | | |
| SKM58B | 60 | 59.55 | 23.5 | 500 | 5890 | | | | | | |
| SKM58B | 50 | 50.30 | 27.8 | 500 | 5500 | | | | | | |
| SKM58B | 40 | 40.29 | 34.7 | 480 | 5170 | | | | | | |
| SKM58B | 30 | 29.40 | 47.6 | 500 | 4710 | | | | | | |
| SKM58B | 25 | 25.10 | 55.8 | 480 | 4430 | | | | | | |
| SKM58B | 20 | 20.10 | 69.7 | 380 | 4090 | | | | | | |
| SKM58B | 15 | 14.67 | 95.4 | 300 | 3730 | | | | | | |
| SKM58B | 12.5 | 12.83 | 109.1 | 480 | 3510 | | | | | | |
| SKM58B | 10 | 10.28 | 136.2 | 380 | 3240 | | | | | | |
| SKM58B | 7.5 | 7.50 | 186.7 | 300 | 2950 | | | | | | |

## 减速机选型表 / GEAR UNIT SELECTION TABLES

SKM68..减速机组合表 ( $n_1$ =1400r/min )
SKM68..Possible geometrical combinations ($n_1$ =1400r/min)

**750Nm**

| 减速机型号 Gear units | i 公称 Nominal | i 实际 Actual | $n_2$ [r/min] | $M_{2max}$ [Nm] | $F_{r2}$ [N] | MV63 | MV71 | MV80 | MV90 | MV100 | MV112 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3级/Stage | | | | | | | | | | | |
| SKM68C | 300 | 296.10 | 4.7 | 750 | 10000 | | | | | | |
| SKM68C | 250 | 244.29 | 5.7 | 750 | 10000 | | | | | | |
| SKM68C | 200 | 206.29 | 6.8 | 750 | 9920 | | | | | | |
| SKM68C | 150 | 153.33 | 9.1 | 750 | 8980 | | | | | | |
| SKM68C | 125 | 129.48 | 10.8 | 750 | 8490 | | | | | | |
| SKM68C | 100 | 103.64 | 13.5 | 650 | 7880 | | | | | | |
| SKM68C | 75 | 75.55 | 18.5 | 520 | 7090 | | | | | | |
| 2级/Stage | | | | | | | | | | | |
| SKM68B | 60 | 59.22 | 24 | 750 | 6540 | | | | | | |
| SKM68B | 50 | 48.86 | 29 | 750 | 6130 | | | | | | |
| SKM68B | 40 | 41.26 | 34 | 750 | 5800 | | | | | | |
| SKM68B | 30 | 30.67 | 46 | 750 | 5250 | | | | | | |
| SKM68B | 25 | 25.90 | 54 | 750 | 4960 | | | | | | |
| SKM68B | 20 | 20.73 | 68 | 650 | 4610 | | | | | | |
| SKM68B | 15 | 15.11 | 93 | 520 | 4150 | | | | | | |
| SKM68B | 12.5 | 12.84 | 109 | 750 | 3930 | | | | | | |
| SKM68B | 10 | 10.27 | 136 | 650 | 3650 | | | | | | |
| SKM68B | 7.5 | 7.49 | 187 | 520 | 3280 | | | | | | |



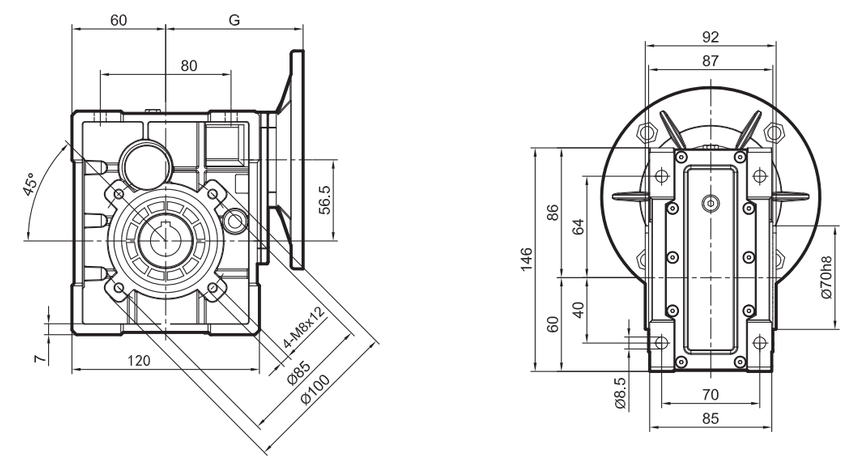

*：表示在此安装方式，不能仅凭油位塞加注润滑油，加注量按表内所示。
*：It means the lubricant can t be added according to the oil level line plug ,but also higher the fill quantity sa shown in the table



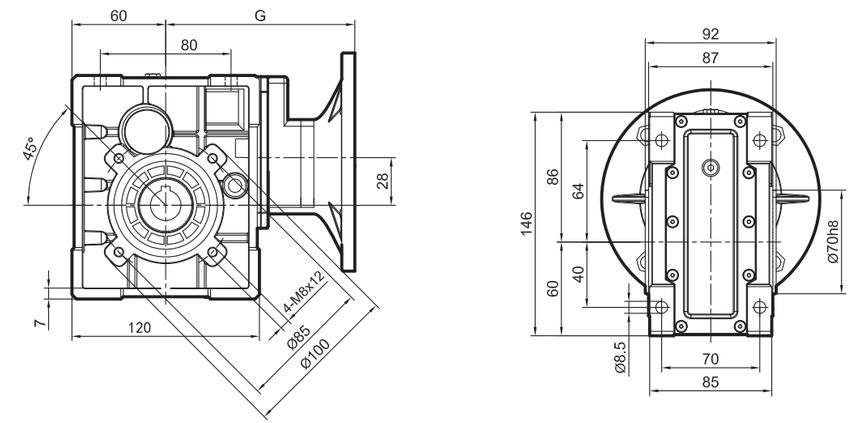


## 外形尺寸图表 / OUTLINE DIMENSION SHEET

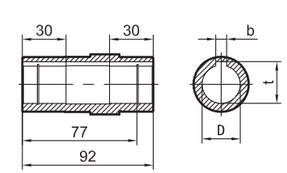
### SKM28-B-IEC




### SKM28-C-IEC




### 输出孔/Output hole




| IEC | SKM | G |
|---|---|---|
| 63B5 | 28B | 101.5 |
| | 28C | 119.5 |
| 71B5/B14 | 28B | 102.5 |
| | 28C | 120.5 |
| 80B5/B14 | 28B | 122.5 |
| 90B5/B14 | 28B | 122.5 |

| $D_{H8}$ | b | t |
|---|---|---|
| 20* | 6 | 22.8 |
| 25 | 8 | 28.3 |

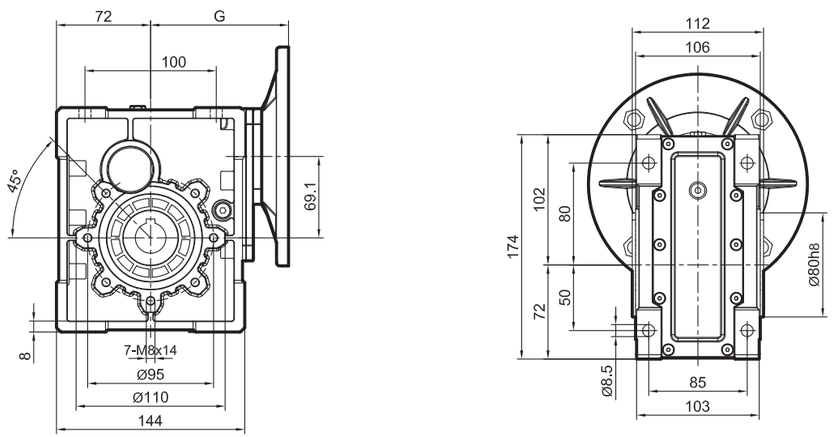
*非标孔，订单时请说明。
*Only on request

| SKM | Kg(重量 ) |
|---|---|
| 28B | 4. 2 |
| 28C | 5 |

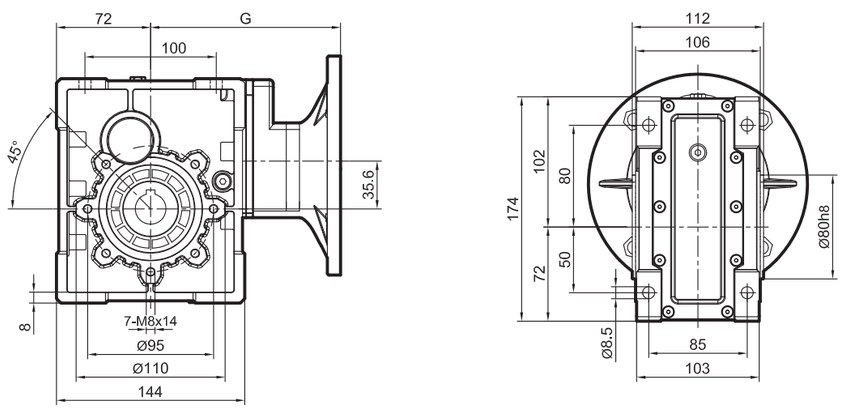
不包括马达
Weight without motor

## 外形尺寸图表 / OUTLINE DIMENSION SHEET

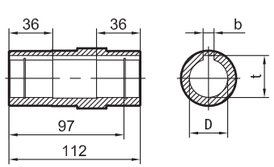
### SKM38-B-IEC




### SKM38-C-IEC




### 输出孔/Output hole




| IEC | SKM | G |
|---|---|---|
| 63B5 | 38B | 112.5 |
| | 38C | 137.5 |
| 71B5/B14 | 38B | 119.5 |
| | 38C | 144.5 |
| 80B5/B14 | 38B | 139.5 |
| | 38C | 164.5 |
| 90B5/B14 | 38B | 139.5 |

| DH8 | b | t |
|---|---|---|
| 25 | 8 | 28.3 |
| 28* | 8 | 31.3 |

*非标孔，订单时请说明。
*Only on request

| SKM | Kg(重量) |
|---|---|
| 38B | 6.0 |
| 38C | 6.8 |

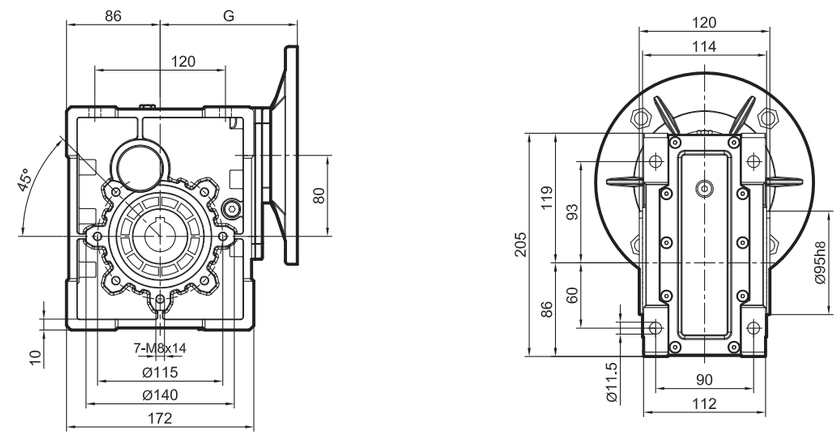
不包括马达
Weight without motor



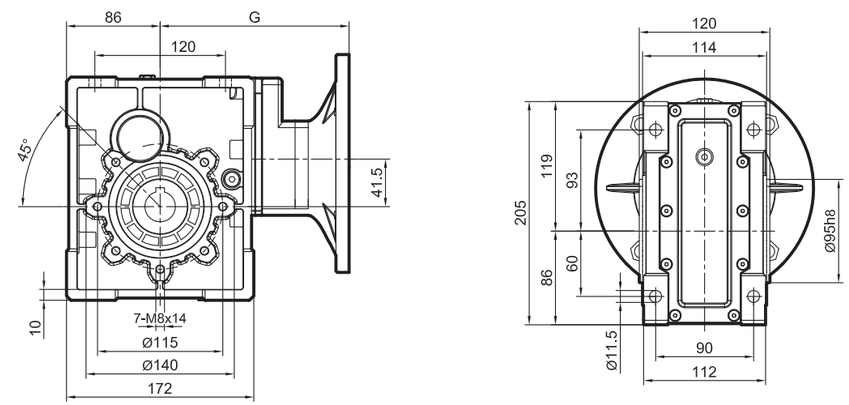


## 外形尺寸图表 / OUTLINE DIMENSION SHEET

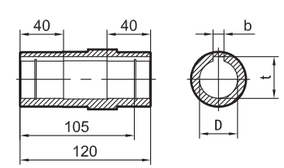
### SKM48-B-IEC




### SKM48-C-IEC




### 输出孔/Output hole




| IEC | SKM | G |
|---|---|---|
| 63B5 | 48C | 154 |
| 71B5 | 48B | 161 |
| | 48C | 191 |
| 80B5/B14 | 48B | 151 |
| | 48C | 181 |
| 90B5/B14 | 48B | 151 |
| | 48C | 181 |
| 100/112B5 | 48B | 161 |
| 100/112B14 | 48B | 161 |

| DH8 | b | t |
|---|---|---|
| 28 | 8 | 31.3 |
| 30* | 8 | 33.3 |
| 35* | 10 | 38.3 |

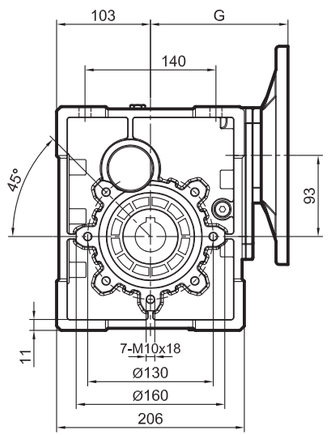
*非标孔，订单时请说明。
*Only on request

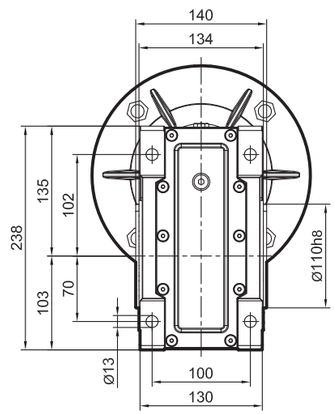
| SKM | Kg(重量) |
|---|---|
| 48B | 9.2 |
| 48C | 10.8 |

不包括马达
Weight without motor

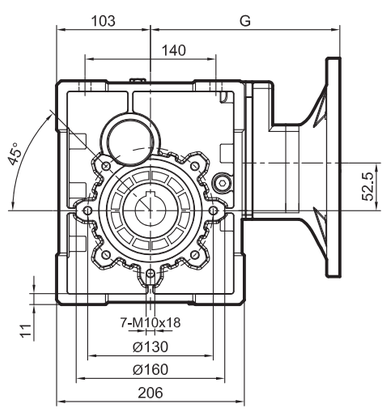
## 外形尺寸图表 / OUTLINE DIMENSION SHEET

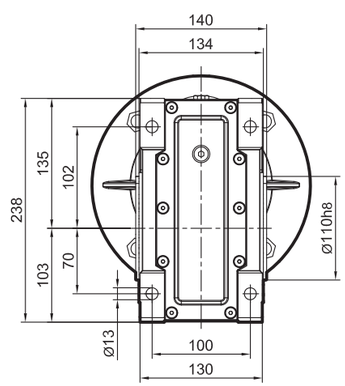
### SKM58-B-IEC



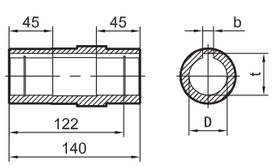




### SKM58-C-IEC




### 输出孔/Output hole




| IEC | SKM | G |
|---|---|---|
| 63B5 | 58C | 176.5 |
| 71B5 | 58B | 174 |
| | 58C | 213.5 |
| 80B5/B14 | 58B | 164 |
| | 58C | 203.5 |
| 90B5/B14 | 58B | 164 |
| | 58C | 203.5 |
| 100/112B5 | 58B | 174 |
| 100/112B14 | 58B | 174 |

| DH8 | b | t |
|---|---|---|
| 35 | 10 | 38.3 |
| 38* | 10 | 41.3 |

*非标孔，订单时请说明。
*Only on request

| SKM | Kg(重量 ) |
|---|---|
| 58B | 13.3 |
| 58C | 14.8 |

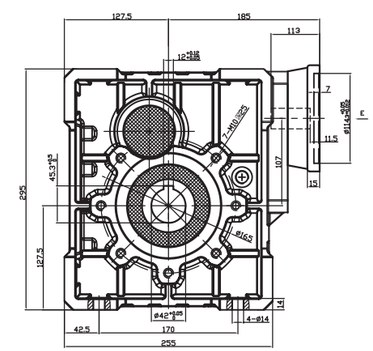
不包括马达
Weight without motor

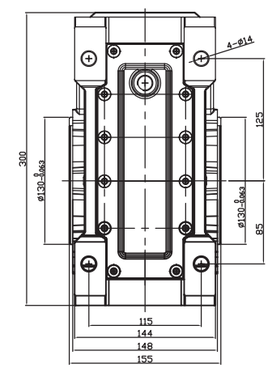




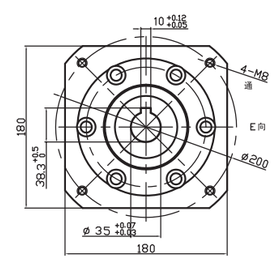
## 外形尺寸图表 / OUTLINE DIMENSION SHEET

### SKM68-B-IEC





### 输出孔/Output hole

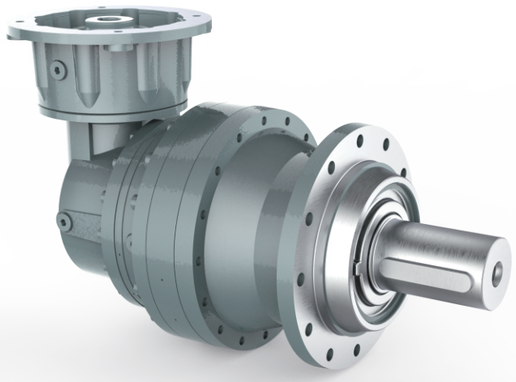


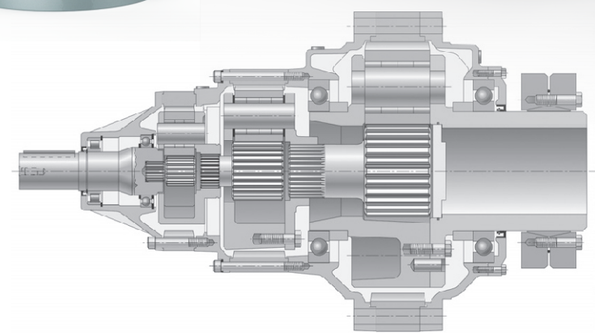
| DH8 | b | t |
|---|---|---|
| 35 | 10 | 38.3 |
| 38* | 10 | 41.3 |

*非标孔，订单时请说明。
*Only on request

| SKM | Kg(重量 ) |
|---|---|
| 68B | 28 |
| 68C | 30 |

不包括马达
Weight without motor







## 基本资料

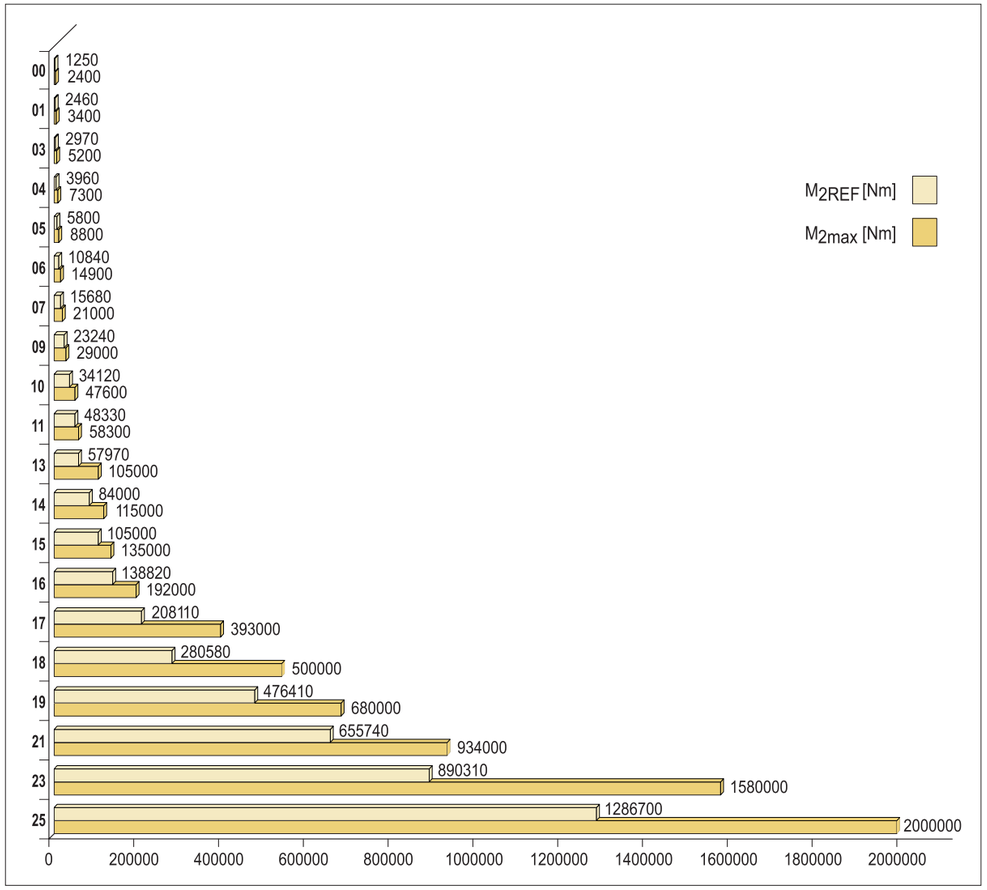
以下段落包含选择和正确使用齿轮马达的基本要素信息

## GENERAL INFORMATION

The following paragraphs contain information on essential elements for selection and correct use of gearmotors.

### 4 输出扭矩 OUTPUT TORQUE

(A 2)




注：13-25号减速机我司暂未开发

Note：No13-15 reducer has not been developedby our company

#### 4.1 参考扭矩

这是机型很重要的数值。在寿命系数$n_2$ x h=10000（指单级配置L1）的情况下，它相当于额定扭矩$Mn_2$的最大值。

#### 4.1 Reference torque $M_{2REF}$ [Nm]

It is the significant value for the size. It is equivalent to the maximum value of nominal torque $Mn_2$ for a life factor $n_2$ x h = 10000 (referred to single stage configuration L1).

#### 4.2 额定输出扭矩

它是在计算方法规定的工况下，齿轮箱在稳定负载下所能输出的扭矩。

#### 4.2 Rated output torque $M_{n2}$ [Nm]

It is the output torque which the gearbox can transmit with steady load under working condition spec ified in the calculation method.

## 17 FK系列减速机命名说明

## 17 FK GEARBOX DESIGNATION

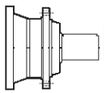
**FK 11 L 2 16.7 HZ**

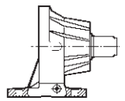
输出型式 OUTPUT VERSION

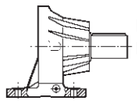

MZ: 花键实心轴输出
MZ: Splined male shaft


MC: 平键实心轴输出
MC: Solid keyed shaft

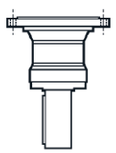

HZ: 重型花键实心轴输出
HZ: Heavy duty splined male shaft


HC: 重型平键实心轴输出
HC: Heavy duty solid keyed shaft


PZ: 底脚安装花键实心轴输出
PZ: Foot base with splined shaft


PC: 底脚安装平键实心轴输出
PC: Foot base with solid keyed shaft


FZ / FZB: 花键空心轴输出
FZ / FZB: Hollow splined shaft


VK: 搅拌机用加强型平键实心轴
VK: Reinforced output with heavy duty keyed shaft for stirrers and mixer


FP: 配收缩盘空心轴输出
FP: Hollow shaft for shrink disc

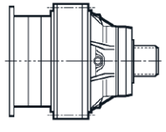

FDK: 带双键槽的空心轴输出
FDK: Hollow shaft with double keyway


FZP: 带轴向堵塞装置的花键空心轴输出（推荐用于轴安装）
FZP: Hollow splined shaft with axial blockage device (recommendedfor shaft mounted installation)

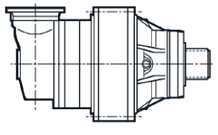
减速比 Reduction ratio
Es.:1/5.33=5.33 1/44.6=44.6 1/131=131

传动级数 No. OF REDUCTIONS
1, 2, 3, 4

设计型 DESIGN
同轴式 L=Linear



直角轴式 R=Right angle



减速机型号 GEARBOX SIZE

| | | | | | |
|---|---|---|---|---|---|
| 00 = FK00 | 141 | 05 = FK05 | 177 | 10 = FK10 | 217 |
| 01 = FK01 | 145 | 06 = FK06 | 187 | 11 = FK11 | 227 |
| 03 = FK03 | 157 | 07 = FK07 | 197 | | |
| 04 = FK04 | 167 | 09 = FK09 | 207 | | |

系列 SERIES





**S5EC A A W0A ... ...**

可选项 OPTIONS

密封件 GASKET

标准=NBR STANDARD = NBR

PV=氟橡胶
PV = Fluoro elastomer

仅用于直角设计
ONLY FOR RIGHT ANGLE DESIGN

优先输入旋转方向
preferential input direction of rotation

RA=左旋 RA=left
RO=右旋 RO=right


外置冷却系统 SUPPLEMENTARY COOLING SYSTEM
CR1, CR2, CR3

15

输出配件 OUTPUT FITTINGS


**P... =** Pinions
小齿轮


**B0A =** Splined bar
花键棒


**M0A =** Sleeve coupling
套筒联轴节


**G0A =** Shrink disc
收缩盘


**W0A =** Flange
法兰

安装位置 MOUNTING POSITION

26

输入 INPUT


无马达适配器
Without motor adaptor

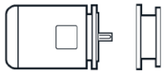
| | | | | | |
|---|---|---|---|---|---|
| V9AA | V9AC | V9AE | V9AG | V9AL |
| V9AB | V9AD | V9AF | V9AH | |


平键实心轴输入
Input keyed shaft

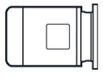
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | V01A | V01B | V05B | V06B | V07A | V07B | V10B | V11B | V15B |
| diam. | Ø24 | Ø38 | Ø48 | Ø60 | Ø60 | Ø80 | Ø80 | Ø80 | Ø120 |


带风扇的实心轴输入
Solid input shaft with fan

| | | | | | | |
|---|---|---|---|---|---|---|
| | FV05B | FV06B | FV07A | FV07B | FV10B | FV11B |
| diam. | Ø48 | Ø60 | Ø60 | Ø80 | Ø80 | Ø80 |


电机连接
Electric motor connection

**P+IEC**(P71...P250)


带内置紧凑型电动机的集成式减速机（型号可达07）
Integrated gearmotor with in-built compact electric motor(available up to size 07)
**S2,S3,S4**