

STEPPER MOTOR  
PRODUCT CATALOG

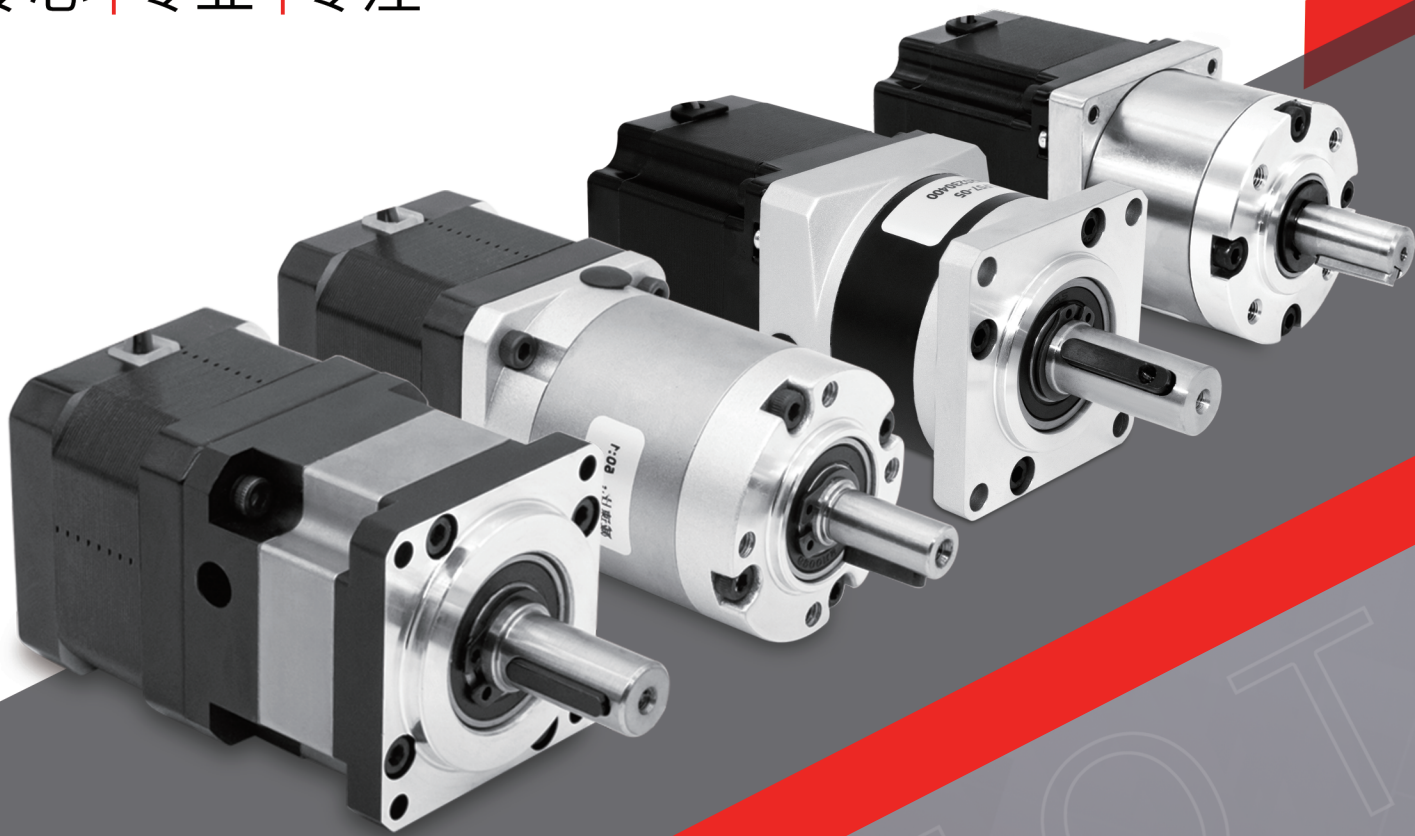
UMot 优摩特®

# 减速步进电机 选型手册

致力于研发、销售步进电机、  
直线模组及相关运动控制产品

Committed to R&D and sales of stepper motors,  
linear modules and related motion control products

专心 | 专业 | 专注



CHONGQING UMOT  
TECHNOLOGY CO.,LTD

重庆优摩特科技有限公司

V2.1



# ABOUT US

## 关于我们

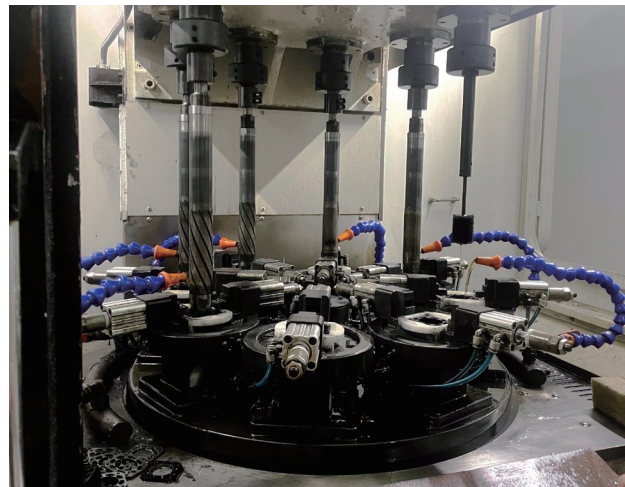
重庆优摩特科技有限公司专业致力于研发、销售步进电机、直线模组及相关运动控制产品，面向全球有专项需求的用户订制、设计高品质电机产品，提供运动控制系统整体解决方案，产品远销美、德、法、意大利、俄罗斯、瑞士等30多个国家和地区。公司主打产品和系统设计目前已广泛应用于自动化控制、精密仪器、医疗设备、智能家居、3D打印等诸多领域。

Chongqing UMot Technology Co., Ltd, which is dedicated to R&D and sales of stepper motor, linear module and related motion control products. It provides customized and designed high-quality motor for customers all over the world, and provides full solutions for motion control systems. Our products are exported to more than 30 countries and regions, such as The United States, Germany, France, Italy, Russia, and Switzerland. Our main product and solution has been widely applied to many industry, such as automation control, precision instruments, medical equipment, smart home, 3D printing and so on.

## 企业简介

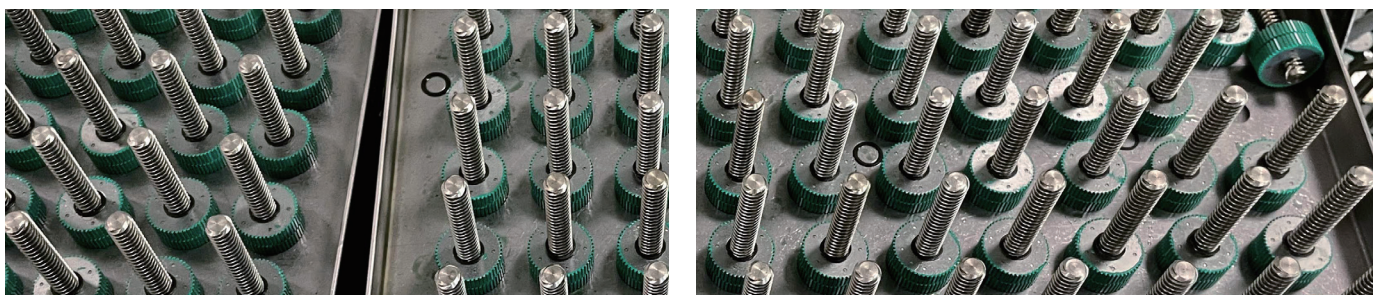
公司已获相关部门认定为高新技术企业,拥有完善的质量管理体系,获得了ISO9001、CE、RoHs等相关认证,并持有多项电气类专利证书。

The company has been recognized as a high-tech enterprise by the relevant departments. It has obtained ISO9001, CE, RoHs and other related certifications under the complete quality management system, as well as holds a number of electrical patent certificates.



“专心、专业、专注”于电机研发、系统控制方案的自动化领域是公司的经营宗旨。“做您最信赖的伙伴”是公司的服务理念。我们一直以“用专业的技术做一流的产品”为目标,与时俱进、不断创新,为更多的用户提供更好的产品和服务。

" Concentrate, professional, focus " in the motor and motion control solution for automation industry is the company's business objectives."Be your most trusted partner" is the company's persistent pursuit. We have been aiming at "making best quality products with professional technology ". Developing with the advance of the times and making unceasing innovation., and providing better products and services to more customers.





专心·专业·专注

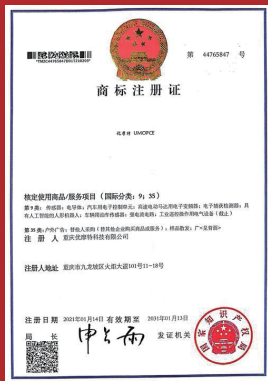
---

# 企业简介

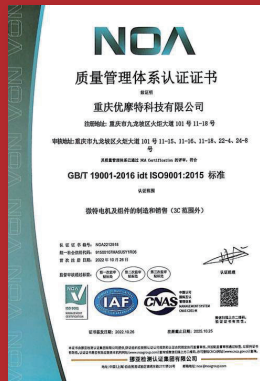
# CERTIFICATE DISPLAY 证书展示



高新技术企业证书



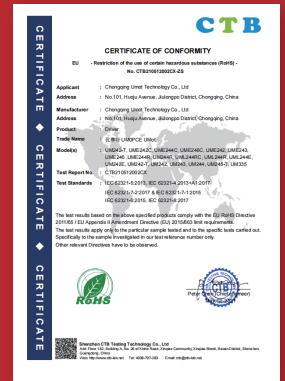
商标注册证



质量管理体系认证证书



CE证书



ROHS证书

# PATENT DISPLAY 专利展示



# GLOSSARY

## 名词解释

### 重复定位精度

在特定条件下,电机被指令到同一目标位置范围的一致程度

### 步距角精度

步进电机每转过一个步距角的实际值与理论值的误差。用百分比表示:误差/步距角\*100%

### 震动与噪音

当电机运行频率接近电机固有震荡频率,就会产生共振,并发出较大噪音。共振区间为60~120RPM之间,微步驱动可以改善低频共振现象

### 定位力矩

步进电机没有通电的情况下,定子锁住转子的力矩

### 动态力矩

在一定步进速率下电机所产生的力矩。动态力矩可由牵入力矩或牵出力矩所表示

### 保持力矩

步进电机通电但没有转动时,定子锁住转子的力矩

### 额定电流

额定电流是指用电设备在额定电压下,按照额定功率运行时的电流

### 额定电压

额定电压是指电气设备长时间正常工作时的最佳电压,额定电压也称为标称电压

### 线圈电阻

一相定子绕组的直流电阻

### 线圈电感

一相定绕组的最大电感

### 脉冲频率

单位时间内用于驱动步进马达的脉冲数,每秒脉冲数作为单位,也用做PPS

### 牵出力矩

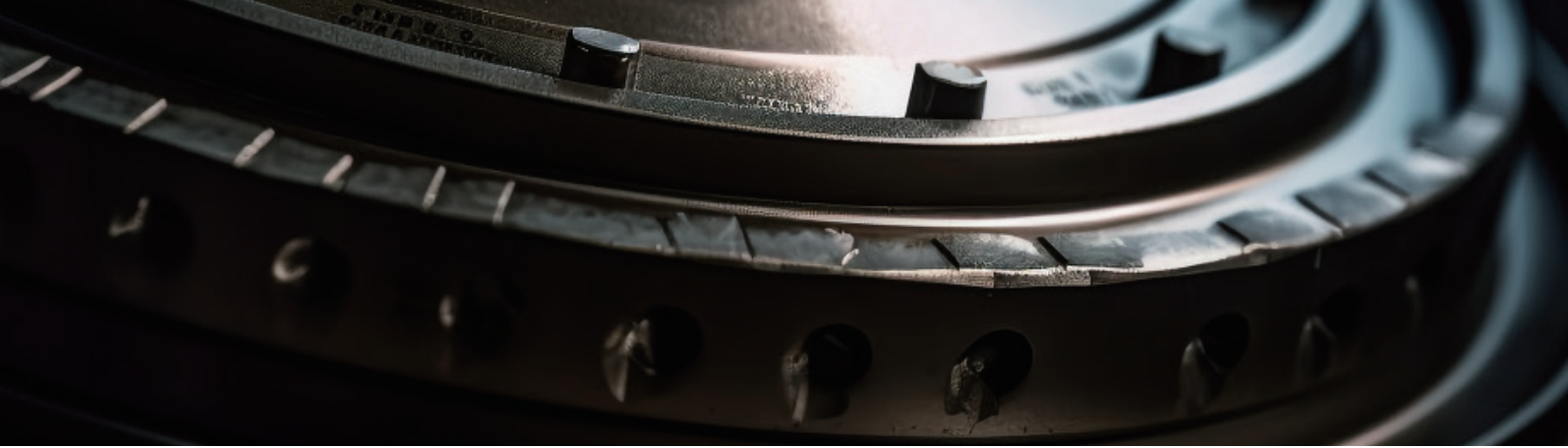
在规定驱动条件下,步进电机在给定脉冲频率下运行,不丢步时转轴上所能承受的最大负载转矩

### 牵入力矩

必须克服转子惯量的加速转矩,以及加速时固定连接的外接负载和各种摩擦转矩。因此牵入力矩通常小于牵出力矩

### 驱动器

是指用来运行步进电机的电气控制装置,包括电源、逻辑程序器、开关元件及确定步进速率的变频脉冲源



分辨率	电机每接收一个脉冲理论上转动的角度
步角距	电机的步距角表示控制系统每发送一个脉冲信号，电机所转动的角度。或者说，每输入一个脉冲电信号转子转过的角度称为步距角
温升	电机与环境的温度差，是由电机发热引起的
效率	有用功率对驱动功率的比值
惯性	物体对加速度或者减速度惯性测量值
负载力矩	阻力力矩和惯性力矩之和
径向负荷	径向负荷是指与丝杆中心轴线垂直的负载
轴向负荷	轴向负荷是指与丝杆中心轴线平行的负载
力矩	力矩在物理学里是指作用力使物体绕着转动轴或支点转动的趋向。力矩的单位是牛顿-米
扭矩	扭矩是使物体发生转动的一种特殊的力矩。发动机的扭矩就是指发动机从曲轴端输出的力矩
堵转	电机堵转是电机在转速为0转时仍然输出扭矩的一种情况，一般都是机械的或者人为的
频率	频率是单位时间内完成周期性变化的次数，是描述周期运动频繁程度的量
脉冲	指电流或电压的短暂的起伏变化

## NAMEPLATE DEFINITION OF THE PLANETARY GEARED STEPPER MOTOR 行星减速步进电机命名规则

28HS	7401	T15	-22	PG	051	JM	-SC	-300
								Number: wire length 数字: 电机引出线长度 (mm)
							with brake SC: 带刹车	with encoder E: 带编码器
						J: 行星减速步进电机 Backlash ≤ 1.8° PM: 精密行星减速步进电机 Backlash ≤ 30 arcmin JM: 高精度行星减速步进电机 Backlash ≤ 15 arcmin		
					Ratio 减速比: 3.71:1 5.18:1 14:1 19:1 27:1 51:1 100:1 139:1 189:1 264:1 369:1			
				Planetary gearbox 行星齿轮减速器				
			Gearbox size 减速机尺寸 (mm): 22 28 36 42 56 60					
		T15: Back shaft 15mm T15: 电机底部出轴15mm	No mark: no backshaft 无记号: 电机底部不出轴					
	Motor height 电机机身高度: 20电机: 30 40 28电机: 25 32 45 52 35电机: 28 39 48 42电机: 34 40 48 57电机: 55 76 60电机: 55							
	Size frame 机座号: 表示电机尺寸规格。如: 20 28 35 42 57 60							



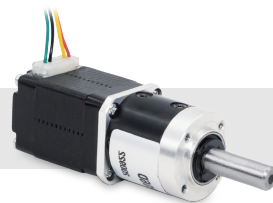




P.1

## 行星减速步进电机

Planetary Geared Stepper Motor (Backlash  $\leq 1.8^\circ$ )



20行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 1.8^\circ$ )	1
28行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 1.8^\circ$ )	3
35行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 1.8^\circ$ )	7
42行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 1.8^\circ$ )	9
57行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 1.8^\circ$ )	11
60行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 1.8^\circ$ )	13

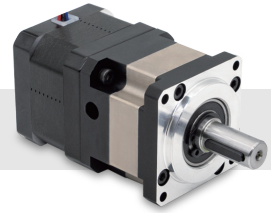
P.15

## 精密行星减速步进电机

Planetary Geared Stepper Motor (Backlash  $\leq 30$  arcmin)



42精密行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 30$ arcmin)	15
57精密行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 30$ arcmin)	17



P.19

## 高精度行星减速步进电机

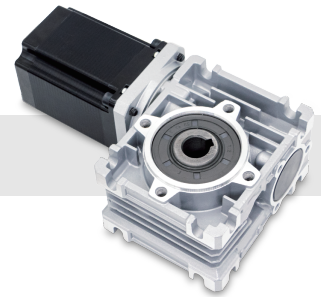
Planetary Geared Stepper Motor (Backlash  $\leq 15$  arcmin)

28高精度行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 15$ arcmin)	19
35高精度行星减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 15$ arcmin)	23
42高精度方形法兰减速步进电机	Square Flange Planetary Geared Stepper Motor (Backlash $\leq 15$ arcmin)	25
42高精度圆形法兰减速步进电机	Round Flange Planetary Geared Stepper Motor (Backlash $\leq 15$ arcmin)	27
57高精度减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 15$ arcmin)	29
60高精度减速步进电机	Planetary Geared Stepper Motor (Backlash $\leq 15$ arcmin)	31

P.33

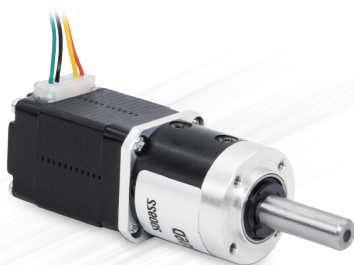
## 蜗轮蜗杆减速步进电机

Worm Geared Stepper Motor



42传动型蜗轮蜗杆减速步进电机	Worm Geared Stepper Motor(Backlash $\leq 1.5^\circ$ )	33
42精密型蜗轮蜗杆减速步进电机	Worm Geared Stepper Motor(Backlash $\leq 15$ arcmin)	35
57精密型蜗轮蜗杆减速步进电机	Worm Geared Stepper Motor(Backlash $\leq 15$ arcmin)	39
86精密型蜗轮蜗杆减速步进电机	Worm Geared Stepper Motor(Backlash $\leq 15$ arcmin)	43

## I Size 20/Nema 8



## 选件/Options



## 20混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
20HS1405	3.25	0.5	6.5	1.5	15	4	2	0.06	30	$\leq 1:369$
20HS6401	4.40	0.8	5.5	1.5	30	4	3	0.10	41	$\leq 1:369$

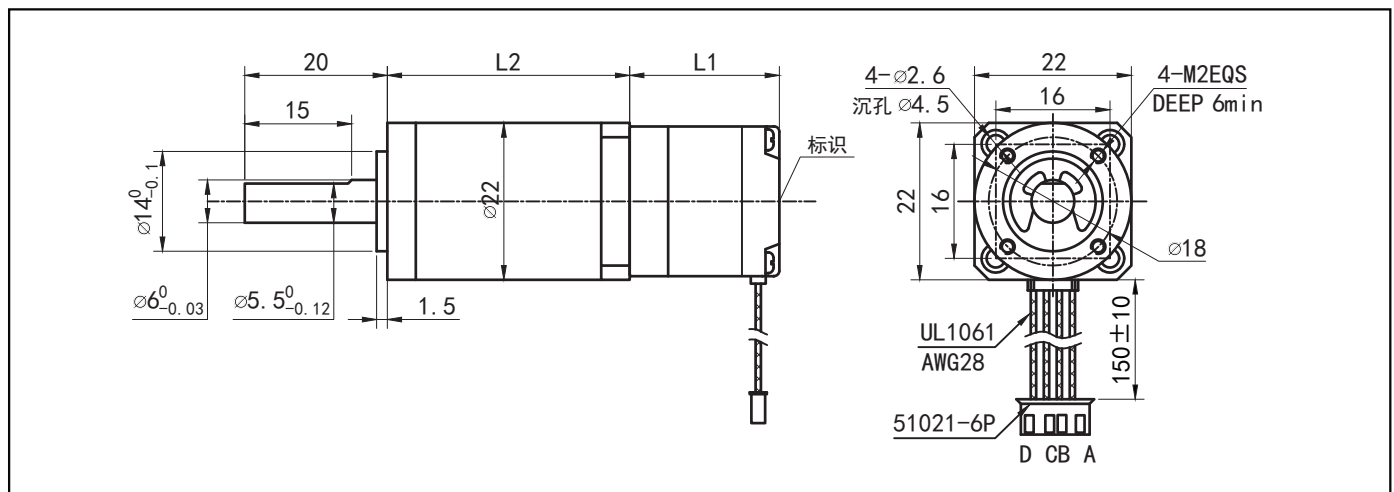
## 减速电机性能参数 (20HS1405) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2) mm	53.4	53.4	60	60	60	66.4	66.4	66.4	66.4	72.8	72.8	72.8
减速电机输出扭矩 Torque for gearbox(mN.m)	50	70	170	231	328	558	777	1095	1522	1871	2000	2000
减速电机总重量 Total Weight (g)	91	91	97	97	97	103	103	103	103	109	109	109
减速级数 Reduction Stage	1		2			3			4			
减速器长度(L2) Gearbox Length(L2) mm	23.4		30.0			36.4			42.8			
背隙 (无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$			$\leq 1.5^\circ$			$\leq 1.8^\circ$			
效率 Efficiency	90%		81%			73%			66%			

## 减速电机性能参数 (20HS6401) / Geared Stepper Motor Specifications

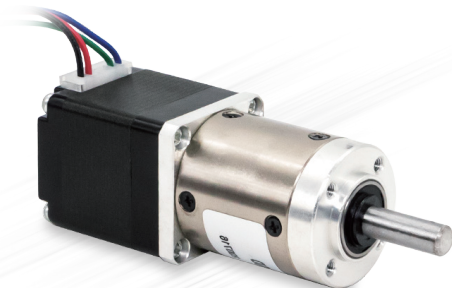
减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2) mm	64.4	64.4	71	71	71	77.4	77.4	77.4	77.4	83.8	83.8	83.8
减速电机输出扭矩 Torque for gearbox(mN.m)	100	140	340	462	656	1117	1555	2000	2000	2000	2000	2000
减速电机总重量 Total Weight (g)	131	131	137	137	137	143	143	143	143	149	149	149
减速级数 Reduction Stage	1		2			3			4			
减速器长度(L2) Gearbox Length(L2) mm	23.4		30.0			36.4			42.8			
背隙(无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$			$\leq 1.5^\circ$			$\leq 1.8^\circ$			
效率 Efficiency	90%		81%			73%			66%			

## 减速电机尺寸图 / Dimensions



## I Size 28/Nema 11

## 选件/Options



## 28混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Lnductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
28HS0405	2.8	0.8	3.5	1.5	25	4	6	0.08	25.5	$\leq 1:369$
28HS2401	3.88	0.67	5.8	4.2	70	4	15	0.13	32.5	$\leq 1:369$
28HS5401	4.9	0.7	7	5	95	4	28	0.2	45	$\leq 1:369$
28HS7401	6.03	0.67	9	7	110	4	45	0.25	52	$\leq 1:369$

## 减速电机性能参数 (28HS0405) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2) mm	54.5	54.5	61.6	61.6	61.6	68.5	68.5	68.5	68.5	75.4	75.4	75.4
减速电机输出扭矩 Torque for gearbox(mN.m)	83	117	284	385	547	931	1296	1825	2537	3119	4000	4000
减速电机总重量 Total Weight (g)	155	155	177	177	177	199	199	199	199	221	221	221
减速级数 Reduction Stage	1			2				3				4
减速器长度(L2) Gearbox Length(L2) mm	29.0			36.1				43.0				49.9
背隙(无负载时) Backlash at no-load	$\leq 1^\circ$			$\leq 1.2^\circ$				$\leq 1.5^\circ$				$\leq 1.8^\circ$
效率 Efficiency	90%			81%				73%				66%

## 减速电机性能参数 (28HS2401) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2) mm	61.5	61.5	68.6	68.6	68.6	75.5	75.5	75.5	75.5	82.4	82.4	82.4
减速电机输出扭矩 Torque for gearbox(mN.m)	234	326	794	1077	1531	2606	3628	4000	4000	4000	4000	4000
减速电机总重量 Total Weight (g)	205	205	227	227	227	249	249	249	249	271	271	271
减速级数 Reduction Stage	1		2					3			4	
减速器长度(L2) Gearbox Length(L2) mm	29.0		36.1					43.0			49.9	
背隙(无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$					$\leq 1.5^\circ$			$\leq 1.8^\circ$	
效率 Efficiency	90%		81%					73%			66%	

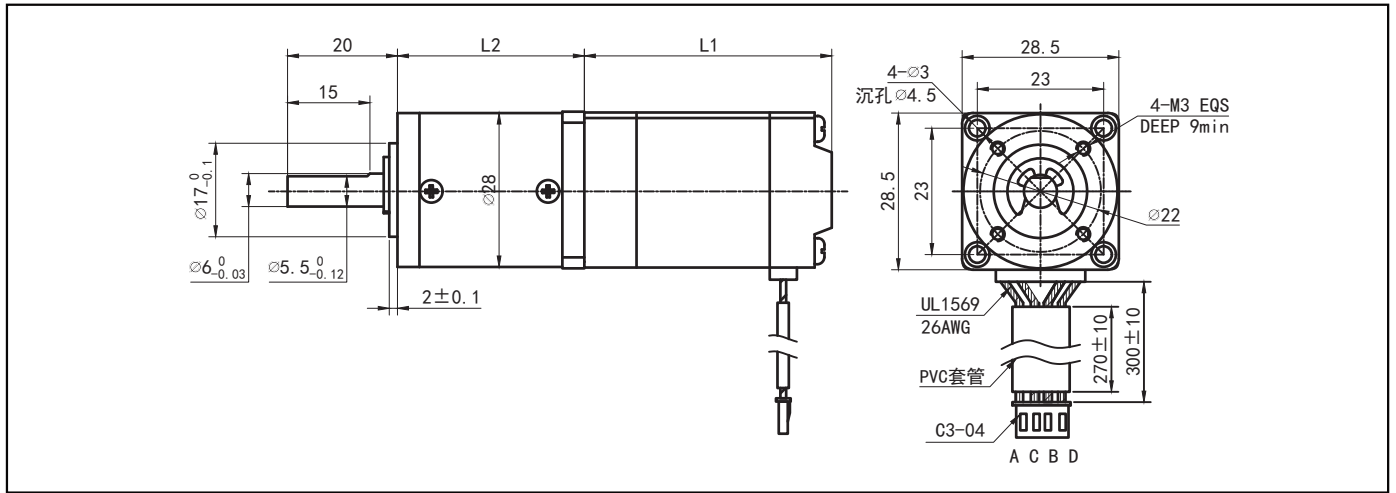
## 减速电机性能参数 (28HS5401) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2) mm	74	74	81.1	81.1	81.1	88	88	88	88	94.9	94.9	94.9
减速电机输出扭矩 Torque for gearbox(mN.m)	317	443	1077	1462	2000	3537	4000	4000	4000	4000	4000	4000
减速电机总重量 Total Weight (g)	275	275	297	297	297	319	319	319	319	341	341	341
减速级数 Reduction Stage	1		2					3			4	
减速器长度(L2) Gearbox Length(L2) mm	29.0		36.1					43.0			49.9	
背隙(无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$					$\leq 1.5^\circ$			$\leq 1.8^\circ$	
效率 Efficiency	90%		81%					73%			66%	

## 减速电机性能参数 (28HS7401) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2) mm	81	81	88.1	88.1	88.1	95	95	95	95	101.9	101.9	101.9
减速电机输出扭矩 Torque for gearbox(mN.m)	367	513	1247	1693	2000	4000	4000	4000	4000	4000	4000	4000
减速电机总重量 Total Weight (g)	325	325	347	347	347	369	369	369	369	391	391	391
减速级数 Reduction Stage	1		2					3			4	
减速器长度(L2) Gearbox Length(L2) mm	29.0		36.1					43.0			49.9	
背隙(无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$					$\leq 1.5^\circ$			$\leq 1.8^\circ$	
效率 Efficiency	90%		81%					73%			66%	

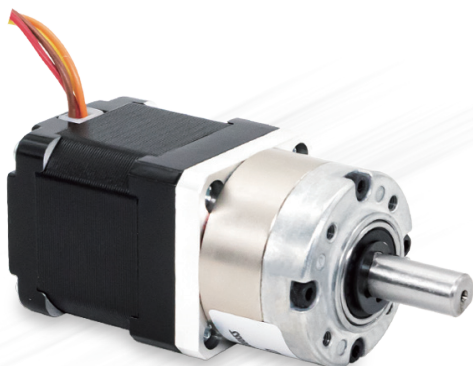
减速电机尺寸图 / Dimensions







## I Size 35/Nema 14



## 选件/Options



## 35混合式步进电机技术参数 / Technical Data

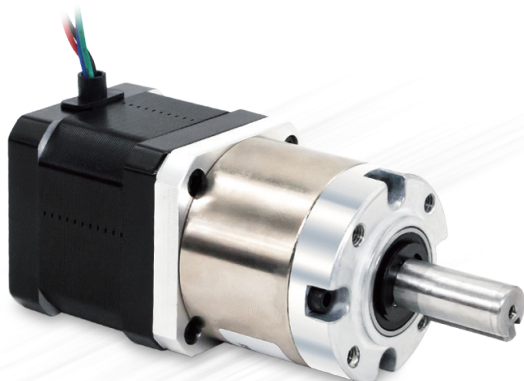
Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
35HSH2408	4.5	1.0	4.5	5.5	200	4	25	0.15	28	$\leq 1:139$
35HSH5401	4.5	1.0	4.5	7	250	4	35	0.25	38.5	$\leq 1:139$

## 减速电机性能参数 (35HSH2408) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139
减速电机总高度 Total Length(L1+L2) mm	55	55	62.2	62.2	62.2	69.1	69.1	69.1	69.1
减速电机输出扭矩 Torque for gearbox(mN.m)	668	932	2268	3000	3000	6000	6000	6000	6000
减速电机总重量 Total Weight (g)	284	284	323	323	323	362	362	362	362
减速级数 Reduction Stage	1		2			3			
减速器长度(L2) Gearbox Length(L2) mm	27		34.2			41.1			
背隙(无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$			$\leq 1.5^\circ$			
效率 Efficiency	90%		81%			73%			



## I Size 42/Nema 17



## 选件/Options



## 42混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
42HSC1409	2.93	1.33	2.2	3.5	270	4	30	0.22	34	$\leq 1:369$
42HSC4409	2.5	1.5	1.65	3.3	380	4	40	0.3	40	$\leq 1:369$

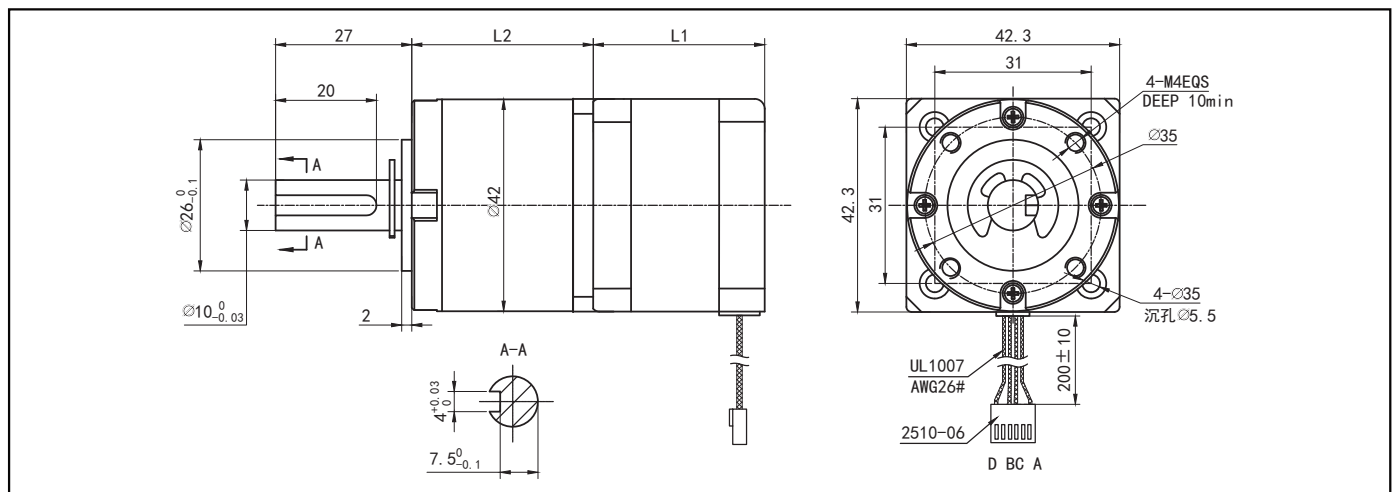
## 减速电机性能参数 (42HSC1409) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2)mm	65.5	65.5	76.1	76.1	76.1	86.5	86.5	86.5	86.5	96.9	96.9	96.9
减速电机输出扭矩 Torque for gearbox(mN.m)	902	1259	3062	4155	5000	10000	10000	10000	10000	10000	10000	10000
减速电机总重量 Total Weight (g)	428	428	510	510	510	592	592	592	592	674	674	674
减速级数 Reduction Stage	1			2				3			4	
减速器长度(L2) Gearbox Length(L2) mm	31.5			42.1				52.5			62.9	
背隙 (无负载时) Backlash at no-load	$\leq 1^\circ$			$\leq 1.2^\circ$				$\leq 1.5^\circ$			$\leq 1.8^\circ$	
效率 Efficiency	90%			81%				73%			66%	

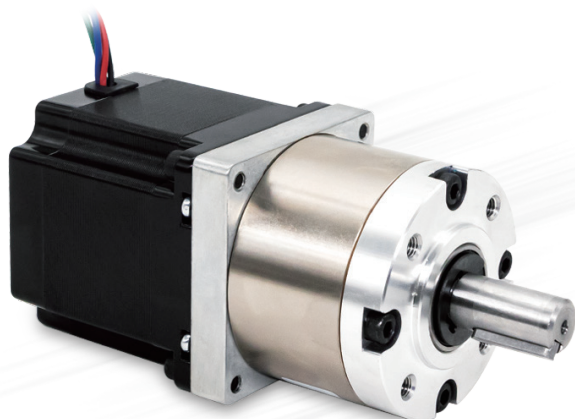
## 减速电机性能参数 (42HSC4409) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.71	5.18	14	19	27	51	71	100	139	189	264	369
减速电机总高度 Total Length(L1+L2)mm	71.5	71.5	82.1	82.1	82.1	92.5	92.5	92.5	92.5	102.9	102.9	102.9
减速电机输出扭矩 Torque for gearbox(mNm)	1269	1772	4309	5000	5000	10000	10000	10000	10000	10000	10000	10000
减速电机总重量 Total Weight (g)	508	508	590	590	590	672	672	672	672	754	754	754
减速级数 Reduction Stage	1		2			3				4		
减速器长度(L2) Gearbox Length(L2) mm	31.5		42.1			52.5				62.9		
背隙(无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$			$\leq 1.5^\circ$				$\leq 1.8^\circ$		
效率 Efficiency	90%		81%			73%				66%		

## 减速电机尺寸图 / Dimensions



## I Size 57/Nema 23



## 选件/Options



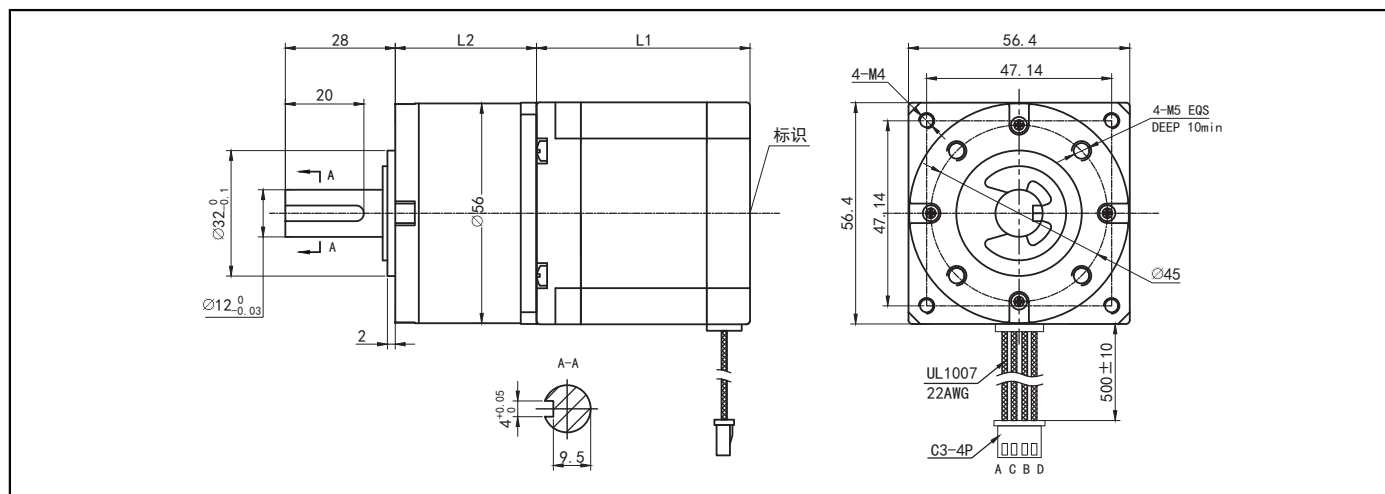
## 57混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
57HS5417	1.7	2.0	0.85	2.5	950	4	200	0.64	55	$\leq 1:187$

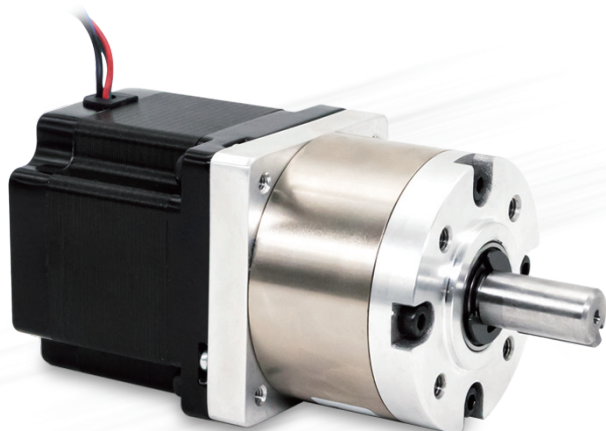
## 减速电机性能参数 (57HS5417) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.6	4.25	13	15	18	23	47	55	65	77	96	121	153	187
减速电机总高度 Total Length(L1+L2)mm	92.8	92.8	104.4	104.4	104.4	104.4	115.8	115.8	115.8	115.8	115.8	115.8	126.9	126.9
减速电机输出扭矩 Torque for gearbox(mN.m)	3078	3634	10004	11543	13851	15000	30000	30000	30000	30000	30000	30000	30000	30000
减速电机总重量 Total Weight (g)	1095	1095	1250	1250	1250	1250	1405	1405	1405	1405	1405	1405	1560	1560
减速级数 Reduction Stage	1		2				3				4			
减速器长度(L2) Gearbox Length(L2) mm	37.8		49.4				60.8				71.9			
背隙 (无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$				$\leq 1.5^\circ$				$\leq 1.8^\circ$			
效率 Efficiency	90%		81%				73%				66%			

减速电机尺寸图 / Dimensions



## I Size 60/Nema 24



## 选件/Options



## 60混合式步进电机技术参数 / Technical Data

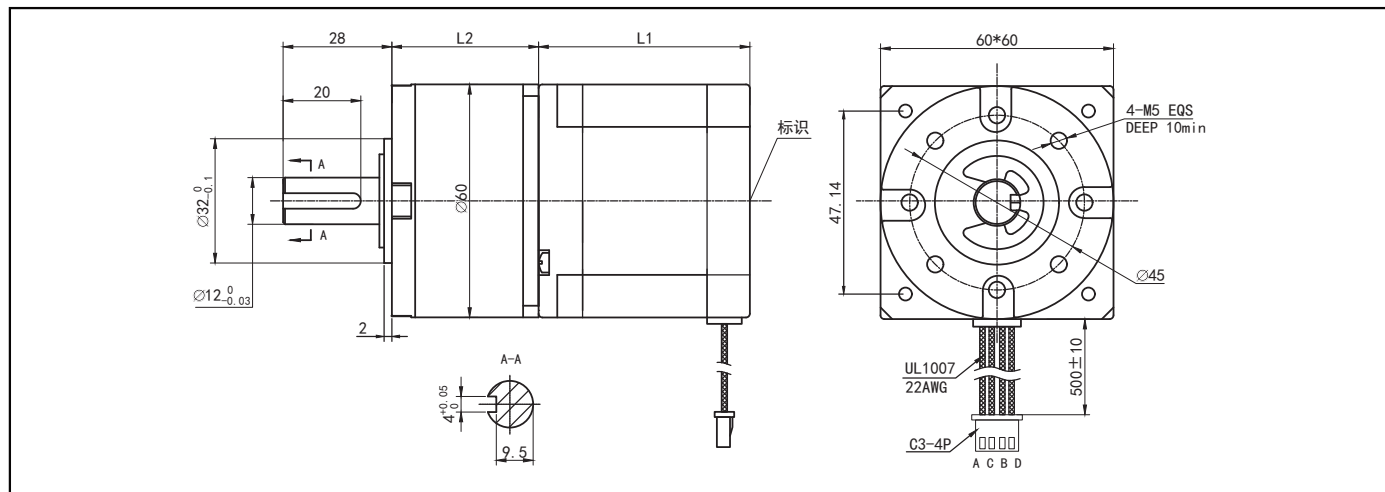
Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
60HS5405	2.98	3.5	0.85	3	1900	4	300	0.7	55	$\leq 1:187$

## 减速电机性能参数 (60HS5405) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3.6	4.25	13	15	18	23	47	55	65	77	96	121	153	187
减速电机总高度 Total Length(L1+L2)mm	92.8	92.8	104.4	104.4	104.4	104.4	115.8	115.8	115.8	115.8	115.8	115.8	126.9	126.9
减速电机输出扭矩 Torque for gearbox(mN.m)	6156	7268	15000	15000	15000	15000	30000	30000	30000	30000	30000	30000	30000	30000
减速电机总重量 Total Weight (g)	1200	1200	1388	1388	1388	1388	1576	1576	1576	1576	1576	1576	1620	1620
减速级数 Reduction Stage	1		2				3				4			
减速器长度(L2) Gearbox Length(L2) mm	37.8		49.4				60.8				71.9			
背隙 (无负载时) Backlash at no-load	$\leq 1^\circ$		$\leq 1.2^\circ$				$\leq 1.5^\circ$				$\leq 1.8^\circ$			
效率 Efficiency	90%		81%				73%				66%			



减速电机尺寸图 / Dimensions



## I Size 42/Nema 17



### 选件/Options



### 42混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
42HSC1409	2.93	1.33	2.2	3.5	270	4	30	0.22	34	$\leq 1:100$
42HSC4409	2.5	1.5	1.65	3.3	380	4	40	0.3	40	$\leq 1:100$
42HSC6413	3	1.5	2	3.5	520	4	68	0.4	48	$\leq 1:100$

### 减速电机性能参数 (42HSC1409) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	10	20	25	50	100
减速电机总高度 Total Length(L1+L2) mm	74	74	74	85	85	85	85
减速电机输出扭矩 Torque for gearbox(mN.m)	927	1215	2430	4230	5400	10000	5000
减速电机总重量 Total Weight (g)	470	470	470	570	570	570	570
减速级数 Reduction Stage		1				2	
减速器长度(L2) Gearbox Length(L2) mm		40				51	
背隙 (无负载时) Backlash at no-load		$\leq 30'$				$\leq 45'$	
效率 Efficiency		90%				80%	

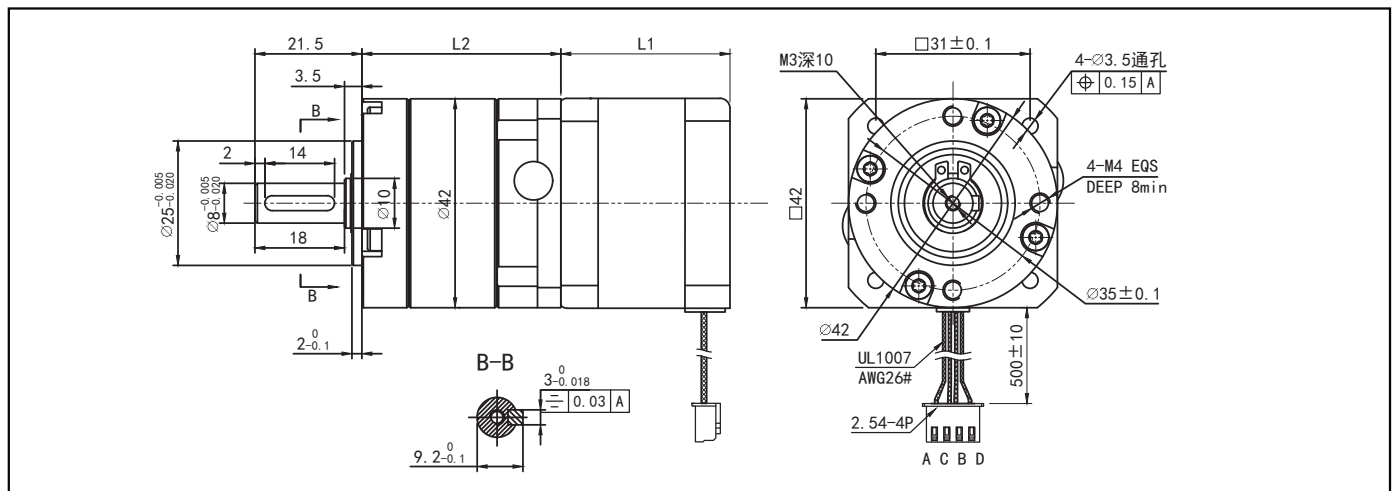
减速电机性能参数 (42HSC4409) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	10	20	25	50	100
减速电机总高度 Total Length(L1+L2)mm	80	80	80	91	91	91	91
减速电机输出扭矩 Torque for gearbox(mNm)	1368	1710	3420	6080	7600	10000	5000
减速电机总重量 Total Weight (g)	550	550	550	650	650	650	650
减速级数 Reduction Stage		1				2	
减速器长度(L2) Gearbox Length(L2) mm		40				51	
背隙(无负载时) Backlash at no-load		≤30'				≤45'	
效率 Efficiency		90%				80%	

减速电机性能参数 (42HSC6413) / Geared Stepper Motor Specifications

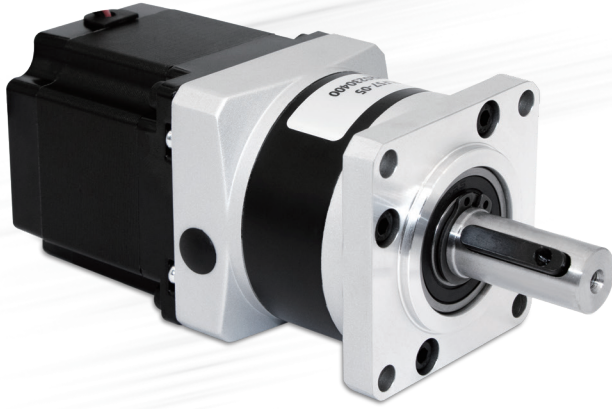
减速比 Reduction ratio	4	5	10	20	25	50	100
减速电机总高度 Total Length(L1+L2)mm	88	88	88	99	99	99	99
减速电机输出扭矩 Torque for gearbox(mNm)	1872	2340	4680	8320	10000	10000	5000
减速电机总重量 Total Weight (g)	650	650	650	750	750	750	750
减速级数 Reduction Stage		1				2	
减速器长度(L2) Gearbox Length(L2) mm		40				51	
背隙(无负载时) Backlash at no-load		≤30'				≤45'	
效率 Efficiency		90%				80%	

减速电机尺寸图 / Dimensions



精密级行星减速电机

# I Size 57/Nema 23



## 选件 / Options



## 57混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	Ω	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
57HS5417	1.7	2.0	0.85	2.5	950	4	200	0.64	55	≤1:50
57HS7407	2.64	4.0	0.66	2.3	2400	4	480	1.00	76	≤1:50
57HS11402	3.6	4.5	0.80	3.5	3600	4	680	1.70	113.5	≤1:50

## 减速电机性能参数 (57HS5417) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	10	20	25	50
减速电机总高度 Total Length(L1+L2) mm	110.5	110.5	110.5	123	123	123
减速电机输出扭矩 Torque for gearbox(mN.m)	3420	4275	8550	15200	19000	20000
减速电机总重量 Total Weight (g)	1290	1290	1290	1440	1440	1440
减速级数 Reduction Stage		1			2	
减速器长度(L2) Gearbox Length(L2) mm		55.5			68	
背隙 (无负载时) Backlash at no-load		≤30'			≤45'	
效率 Efficiency		90%			80%	

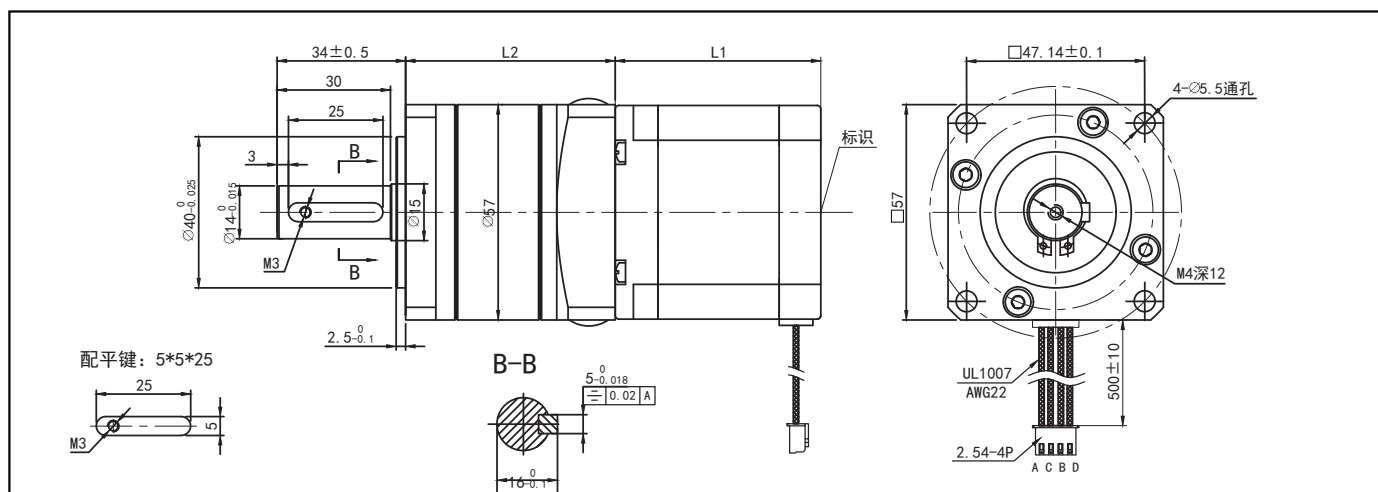
减速电机性能参数 (57HS7407) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	10	20	25	50
减速电机总高度 Total Length(L1+L2) mm	131.5	131.5	131.5	144	144	144
减速电机输出扭矩 Torque for gearbox(mNm)	8640	10800	10000	25000	25000	20000
减速电机总重量 Total Weight (g)	1650	1650	1650	1800	1800	1800
减速级数 Reduction Stage		1			2	
减速器长度(L2) Gearbox Length(L2) mm		55.5			68	
背隙(无负载时) Backlash at no-load		≤30'			≤45'	
效率 Efficiency		90%			80%	

减速电机性能参数 (57HS11402) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	10	20	25	50
减速电机总高度 Total Length(L1+L2) mm	169	169	169	181.5	181.5	181.5
减速电机输出扭矩 Torque for gearbox(mNm)	12960	16200	10000	25000	25000	20000
减速电机总重量 Total Weight (g)	2350	2350	2350	2500	2500	2500
减速级数 Reduction Stage		1			2	
减速器长度(L2) Gearbox Length(L2) mm		55.5			68	
背隙(无负载时) Backlash at no-load		≤30'			≤45'	
效率 Efficiency		90%			80%	

减速电机尺寸图 / Dimensions



精密级行星减速电机

# I Size 28/Nema 11



## 选件/Options



## 28混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
28HS0405	2.8	0.8	3.5	1.5	25	4	6	0.08	25.5	$\leq$ 1:100
28HS2401	3.88	0.67	5.8	4.2	70	4	15	0.13	32.5	$\leq$ 1:100
28HS5401	4.9	0.7	7	5	95	4	28	0.2	45	$\leq$ 1:100
28HS7401	6.03	0.67	9	7	110	4	45	0.25	52	$\leq$ 1:100

## 减速电机性能参数 (28HS0405) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	7	10	16	20	25	28	35	40	50	70
减速电机总高度 Total Length(L1+L2) mm	58.5	58.5	58.5	58.5	67	67	67	67	67	67	67	67
减速电机输出扭矩 Torque for gearbox(mN.m)	96	120	168	240	376	470	587.5	685	822.5	940	1175	1645
减速电机总重量 Total Weight (g)	176	176	176	176	210	210	210	210	210	210	210	210
减速级数 Reduction Stage	1				2							
减速器长度(L2) Gearbox Length(L2) mm	33.0				41.5							
背隙(无负载时) Backlash at no-load	$\leq$ 15'				$\leq$ 20'							
效率 Efficiency	96%				94%							

减速比 Reduction ratio	64	80	100	125	140	175	200
减速电机总高度 Total Length(L1+L2) mm	74.5	74.5	74.5	74.5	74.5	74.5	74.5
减速电机输出扭矩 Torque for gearbox(mN.m)	1440	1800	2550	2812.5	3150	3937.5	4500
减速电机总重量 Total Weight (g)	240	240	240	240	240	240	240
减速级数 Reduction Stage	3						
减速器长度(L2) Gearbox Length(L2) mm	50.0						
背隙(无负载时) Backlash at no-load	≤25'						
效率 Efficiency	90%						

减速电机性能参数 (28HS2401) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	7	10	16	20	25	28	35	40	50	70
减速电机总高度 Total Length(L1+L2) mm	65	65	65	65	74	74	74	74	74	74	74	74
减速电机输出扭矩 Torque for gearbox(mN.m)	268	360	470.4	700.96	1052.8	1316	1654	1842.4	2303	2632	3000	3000
减速电机总重量 Total Weight (g)	226	226	226	226	260	260	260	260	260	260	260	260
减速级数 Reduction Stage	1							2				
减速器长度(L2) Gearbox Length(L2) mm	33.0							41.5				
背隙(无负载时) Backlash at no-load	≤15'							≤20'				
效率 Efficiency	96%							94%				

减速比 Reduction ratio	64	80	100	125	140	175	200
减速电机总高度 Total Length(L1+L2) mm	81.5	81.5	81.5	81.5	81.5	81.5	81.5
减速电机输出扭矩 Torque for gearbox(mN.m)	4032	5040	6000	6000	6000	6000	6000
减速电机总重量 Total Weight (g)	290	290	290	290	290	290	290
减速级数 Reduction Stage	3						
减速器长度(L2) Gearbox Length(L2) mm	50.0						
背隙(无负载时) Backlash at no-load	≤25'						
效率 Efficiency	90%						

减速电机性能参数 (28HS5401) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	7	10	16	20	25	28	35	40	50	70
减速电机总高度 Total Length(L1+L2) mm	78	78	78	78	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
减速电机输出扭矩 Torque for gearbox(mNm)	364.8	456	638.4	912	1422.8	1786	2232.5	2500.4	3125.5	3000	3000	3000
减速电机总重量 Total Weight (g)	296	296	296	296	330	330	330	330	330	330	330	330
减速级数 Reduction Stage	1				2							
减速器长度(L2) Gearbox Length(L2) mm	33.0				41.5							
背隙(无负载时) Backlash at no-load	≤15'				≤20'							
效率 Efficiency	96%				94%							

减速比 Reduction ratio	64	80	100	125	140	175	200
减速电机总高度 Total Length(L1+L2) mm	95	95	95	95	95	95	95
减速电机输出扭矩 Torque for gearbox(mNm)	5472	6000	6000	6000	6000	6000	6000
减速电机总重量 Total Weight (g)	360	360	360	360	360	360	360
减速级数 Reduction Stage	3						
减速器长度(L2) Gearbox Length(L2) mm	50.0						
背隙(无负载时) Backlash at no-load	≤25'						
效率 Efficiency	90%						

减速电机性能参数 (28HS7401) / Geared Stepper Motor Specifications

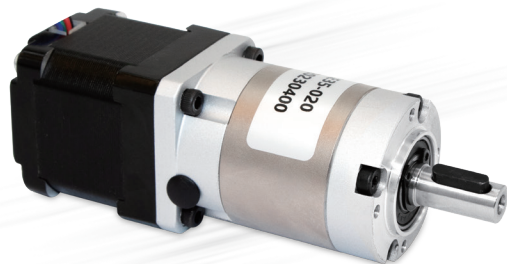
减速比 Reduction ratio	4	5	7	10	16	20	25	28	35	40	50	70
减速电机总高度 Total Length(L1+L2) mm	85	85	85	85	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
减速电机输出扭矩 Torque for gearbox(mNm)	422.4	528	379.2	1000	1654.4	2068	2475	2895.2	3619	3000	3000	3000
减速电机总重量 Total Weight (g)	346	346	346	346	380	380	380	380	380	380	380	380
减速级数 Reduction Stage	1				2							
减速器长度(L2) Gearbox Length(L2) mm	33.0				41.5							
背隙(无负载时) Backlash at no-load	≤15'				≤20'							
效率 Efficiency	96%				94%							





# I Size 35/Nema 14

## 选件/Options



## 35混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Lnductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	Ω	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
35HSH2408	4.5	1.0	4.5	5.5	200	4	25	0.15	28	≤1:210
35HSH5401	4.5	1.0	4.5	7	250	4	35	0.25	38.5	≤1:210
35HSH6403	2.77	1.68	1.7	2.5	320	4	40	0.28	48	≤1:210

## 减速电机性能参数 (35HSH2408) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3	4	5	6	7	9	15	20	25	30	35	42	45	100	120	140	150	175	210
减速电机总高度 Total Length(L1+L2)mm	68	68	68	68	68	77.5	77.5	77.5	77.5	77.5	77.5	77.5	87	87	87	87	87	87	87
减速电机输出扭矩 Torque for gearbox(mN.m)	576	768	960	1152	1344	1692	2820	3760	4700	5640	6580	7000	8100	9000	9000	9000	8500	8500	8500
减速电机总重量 Total Weight (g)	320	320	320	320	320	370	370	370	370	370	370	370	430	430	430	430	430	430	430
减速级数 Reduction Stage	1					2						3							
减速器长度(L2) Gearbox Length(L2) mm	40					49.5						59							
背隙(无负载时) Backlash at no-load	≤15'					≤20'						≤25'							
效率 Efficiency	96%					94%						90%							

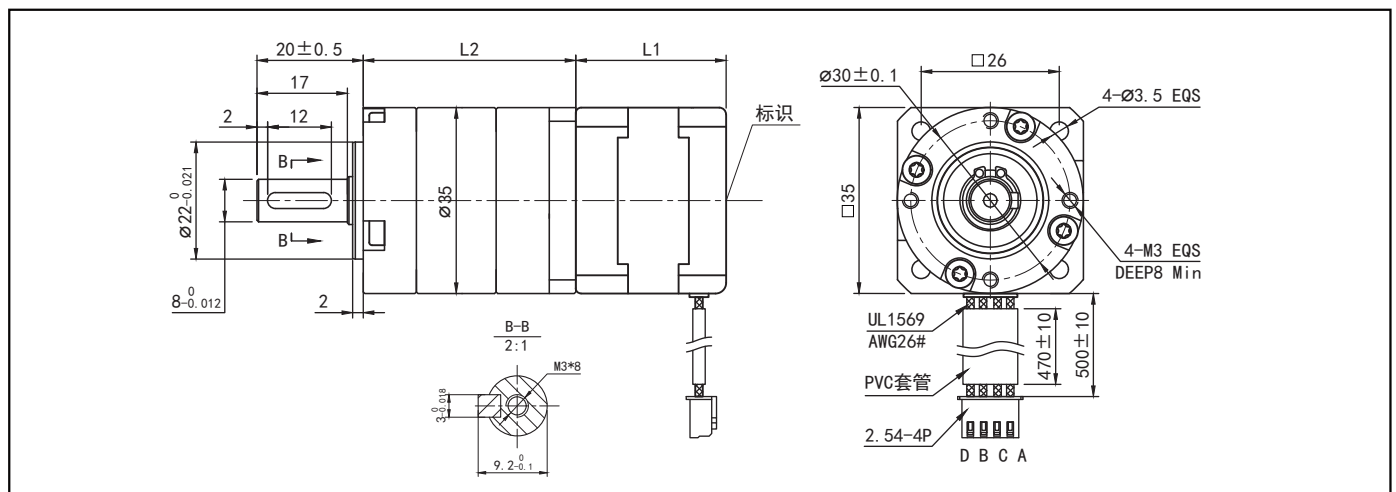
减速电机性能参数 (35HSH5401) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3	4	5	6	7	9	15	20	25	30	35	42	45	100	120	140	150	175	210
减速电机总高度 Total Length(L1+L2)mm	78.5	78.5	78.5	78.5	78.5	88	88	88	88	88	88	88	97.5	97.5	97.5	97.5	97.5	97.5	97.5
减速电机输出扭矩 Torque for gearbox(mNm)	720	960	1200	1440	1680	2115	3525	4700	5875	7000	7000	7000	10000	9000	9000	9000	8500	8500	8500
减速电机总重量 Total Weight (g)	420	420	420	420	420	470	470	470	470	470	470	470	530	530	530	530	530	530	530
减速级数 Reduction Stage	1					2					3								
减速器长度(L2) Gearbox Length(L2) mm						49.5					59								
背隙 (无负载时) Backlash at no-load	≤15'					≤20'					≤25'								
效率 Efficiency	96%					94%					90%								

减速电机性能参数 (35HSH6403) / Geared Stepper Motor Specifications

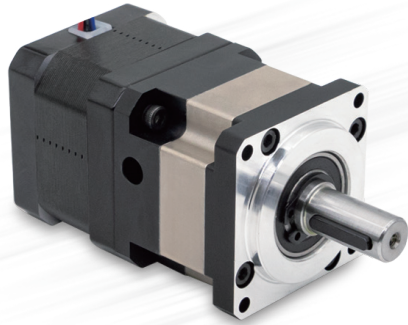
减速比 Reduction ratio	3	4	5	6	7	9	15	20	25	30	35	42	45	100	120	140	150	175	210
减速电机总高度 Total Length(L1+L2)mm	88	88	88	88	88	97.5	97.5	97.5	97.5	97.5	97.5	97.5	107	107	107	107	107	107	107
减速电机输出扭矩 Torque for gearbox(mNm)	921.6	1228.8	1536	1843.2	2000	2707.2	4512	6016	7520	7000	7000	7000	10000	9000	9000	9000	8500	8500	8500
减速电机总重量 Total Weight (g)	450	450	450	450	450	500	500	500	500	500	500	500	560	560	560	560	560	560	560
减速级数 Reduction Stage	1					2					3								
减速器长度(L2) Gearbox Length(L2) mm						49.5					59								
背隙 (无负载时) Backlash at no-load	≤15'					≤20'					≤25'								
效率 Efficiency	96%					94%					90%								

减速电机尺寸图 / Dimensions



高精度行星减速电机

## I Size 42 方形法兰/Nema 17 Square Flange



### 选件/Options



### 42混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
42HSC1409	2.93	1.3	2.2	3.5	270	4	30	0.22	34	$\leq$ 1:100
42HSC4409	2.5	1.5	1.65	3.3	380	4	40	0.3	40	$\leq$ 1:100

### 减速电机性能参数 (42HSC1409) / Geared Stepper Motor Specifications

减速比 Reduction ratio	4	5	7	10	16	20	25	28	35	40	50	70
减速电机总高度 Total Length(L1+L2) mm	69	69	69	69	80	80	80	80	80	80	80	80
减速电机输出扭矩 Torque for gearbox(mN.m)	1036	1296	1814	2592	4060	5076	6345	7106	8883	10000	10000	10000
减速电机总重量 Total Weight (g)	470	470	470	470	570	570	570	570	570	570	570	570
减速级数 Reduction Stage	1				2							
减速器长度(L2) Gearbox Length(L2) mm	35				46							
背隙(无负载时) Backlash at no-load	$\leq$ 15'				$\leq$ 20'							
效率 Efficiency	96%				94%							



## I Size 42 圆形法兰/Nema 17 Round Flange



### 选件/Options



### 42混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	Ω	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
42HSC1409	2.93	1.3	2.2	3.5	270	4	30	0.22	34	≤1:100
42HSC4409	2.5	1.5	1.65	3.3	380	4	40	0.3	40	≤1:100

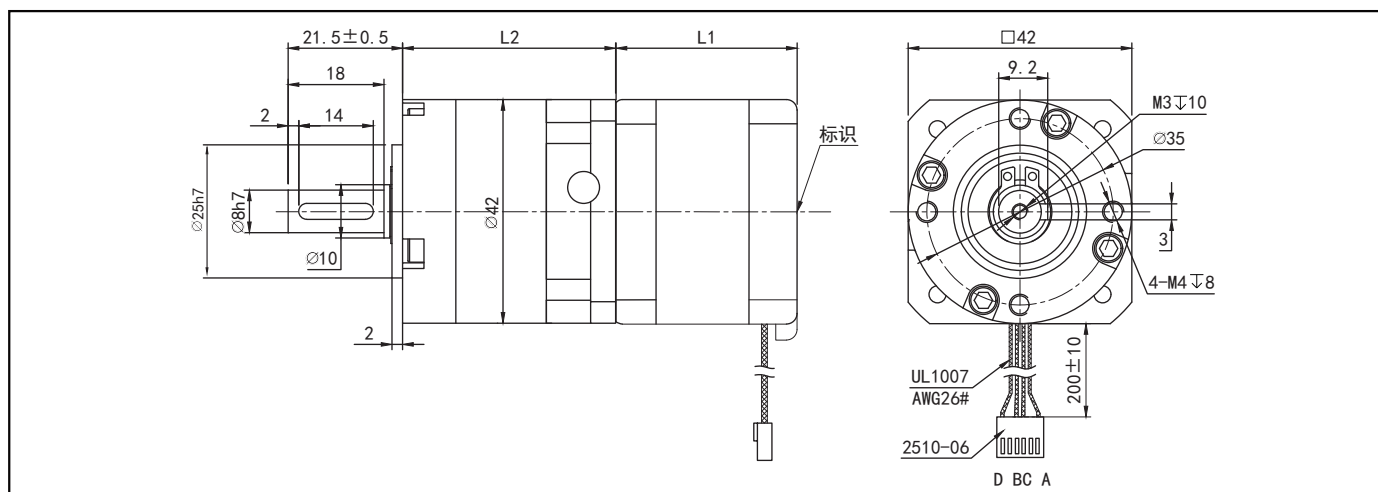
### 减速电机性能参数 (42HSC1409) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3	4	5	7	10	12	15	16	20	25	28	35	40	50	70	100
减速电机总高度 Total Length(L1+L2) mm	74	74	74	74	74	85	85	85	85	85	85	85	85	85	85	85
减速电机输出扭矩 Torque for gearbox(mN.m)	777	1036	1296	1814	2592	3045	3807	4060	5076	6345	7106	8883	10000	10000	10000	10000
减速电机总重量 Total Weight (g)	470	470	470	470	470	570	570	570	570	570	570	570	570	570	570	570
减速级数 Reduction Stage	1					2										
减速器长度(L2) Gearbox Length(L2) mm	40					51										
背隙 (无负载时) Backlash at no-load	≤15'					≤20'										
效率 Efficiency	96%					94%										

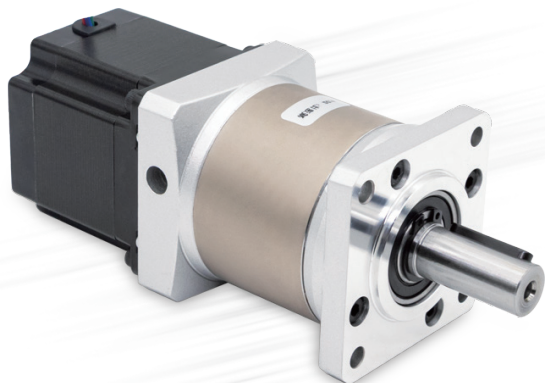
减速电机性能参数 (42HSC4409) / Geared Stepper Motor Specifications

减速比 Reduction ratio	3	4	5	7	10	12	15	16	20	25	28	35	40	50	70	100
减速电机总高度 Total Length(L1+L2) mm	80	80	80	80	80	91	91	91	91	91	91	91	91	91	91	91
减速电机输出扭矩 Torque for gearbox(mNm)	1094	1459	1824	2553	3648	4286	5358	5715	7144	8930	10000	10000	10000	10000	10000	10000
减速电机总重量 Total Weight (g)	550	550	550	550	550	650	650	650	650	650	650	650	650	650	650	650
减速级数 Reduction Stage	1					2										
减速器长度(L2) Gearbox Length(L2) mm						40					51					
背隙(无负载时) Backlash at no-load						≤15'					≤20'					
效率 Efficiency						96%					94%					

减速电机尺寸图 / Dimensions



## I Size 57/Nema 23



### 选件/Options



### 57混合式步进电机技术参数 / Technical Data

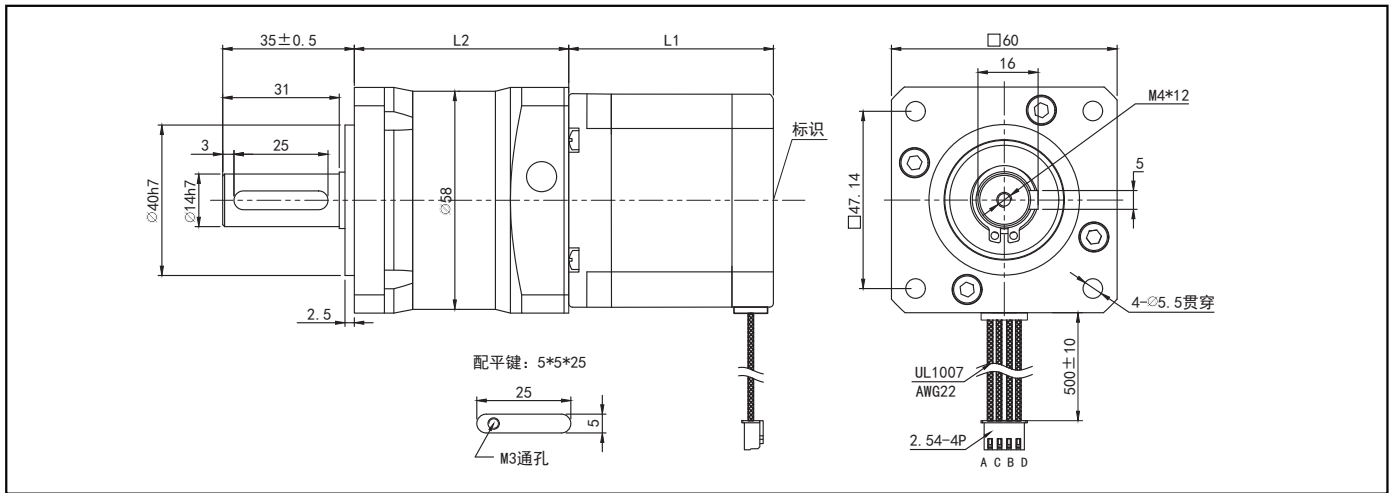
Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
57HS5417	1.7	2.0	0.85	2.5	950	4	200	0.64	55	$\leq$ 1:70

### 减速电机性能参数 (57HS5417) / Geared Stepper Motor Specifications

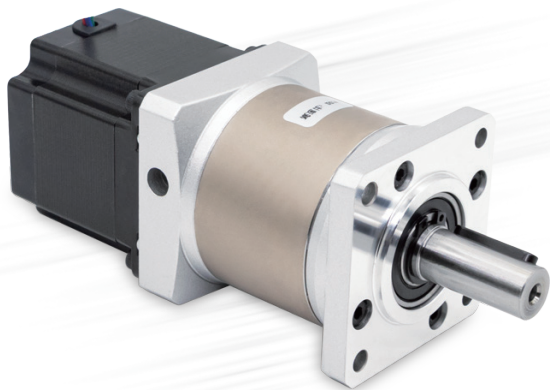
减速比 Reduction ratio	4	5	7	10	16	20	25	28	35	40	50	70
减速电机总高度 Total Length(L1+L2)mm	112	112	112	112	128	128	128	128	128	128	128	128
减速电机输出扭矩 Torque for gearbox(mN.m)	3648	4560	6384	9120	14288	17860	22325	25004	30000	25000	25000	20000
减速电机总重量 Total Weight(g)	1360	1360	1360	1360	1590	1590	1590	1590	1590	1590	1590	1590
减速级数 Reduction Stage	1				2							
减速器长度(L2) Gearbox Length(L2) mm	57				73							
背隙(无负载时) Backlash at no-load	$\leq$ 15'				$\leq$ 20'							
效率 Efficiency	96%				94%							



减速电机尺寸图 / Dimensions



## I Size 60/Nema 24



### 选件/Options



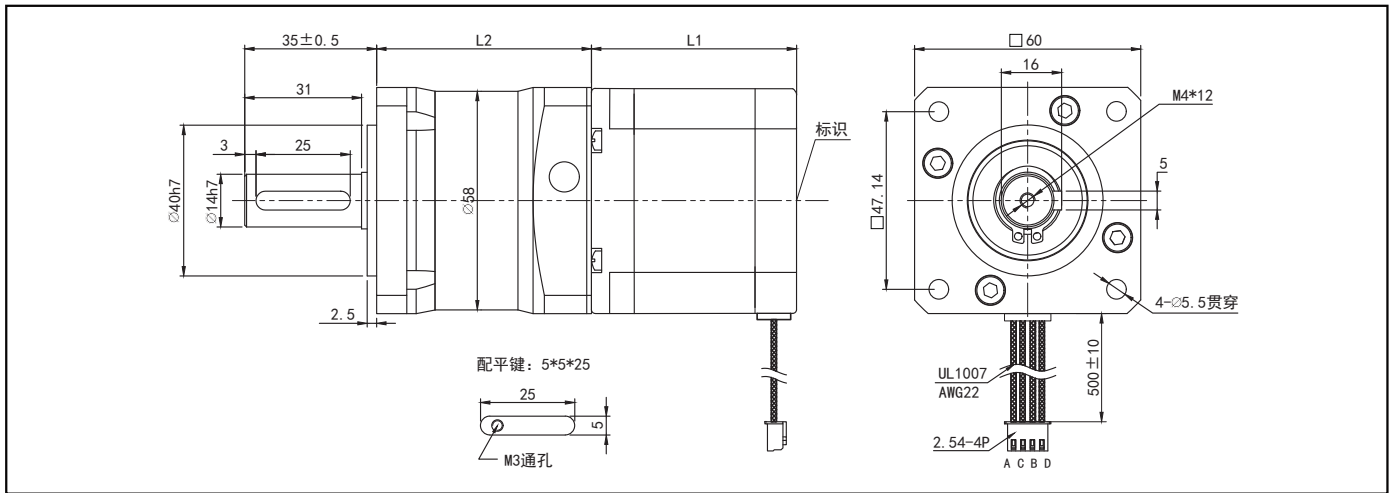
### 60混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 L1 Length L1	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
60HS5405	2.98	3.5	0.85	3	1900	4	300	0.7	55	$\leq$ 1:70

### 减速电机性能参数 (60HS5405) / Geared Stepper Motor Specifications

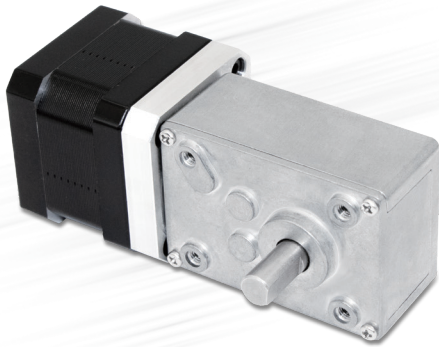
减速比 Reduction ratio	4	5	7	10	16	20	25	28	35	40	50	70
减速电机总高度 Total Length(L1+L2)mm	112	112	112	112	128	128	128	128	128	128	128	128
减速电机输出扭矩 Torque for gearbox(mN.m)	7296	9120	12768	10000	28576	30000	32000	30000	30000	25000	25000	20000
减速电机总重量 Total Weight(g)	1420	1420	1420	1420	1650	1650	1650	1650	1650	1650	1650	1650
减速级数 Reduction Stage	1				2							
减速器长度(L2) Gearbox Length(L2) mm	57				73							
背隙 (无负载时) Backlash at no-load	$\leq$ 15'				$\leq$ 20'							
效率 Efficiency	96%				94%							

减速电机尺寸图 / Dimensions



高精度行星减速电机

## I Size 42/Nema 17



### 选件 / Options



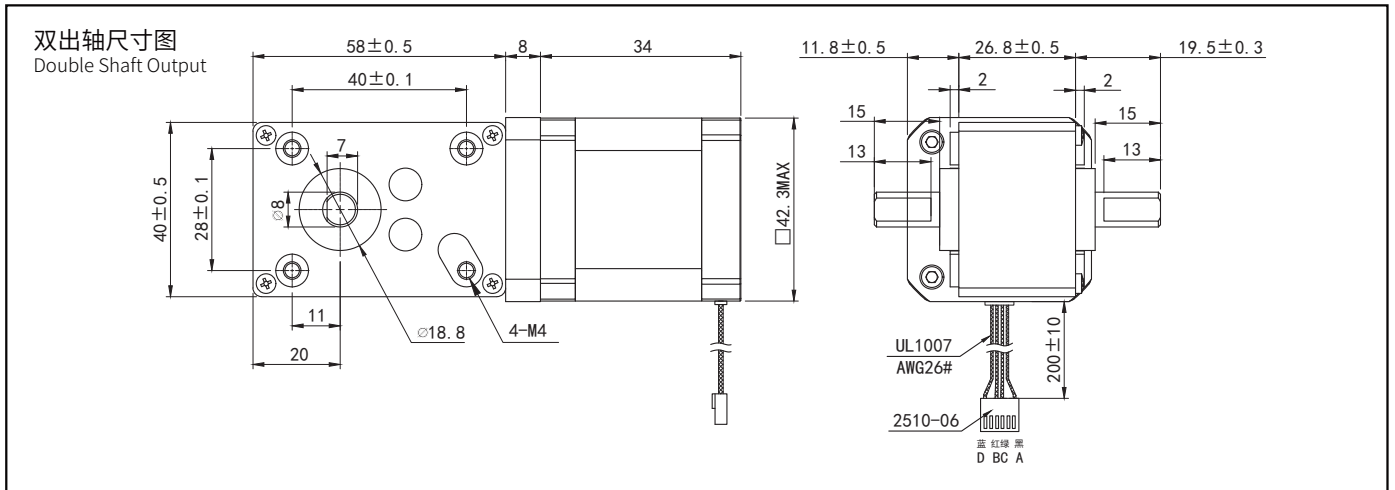
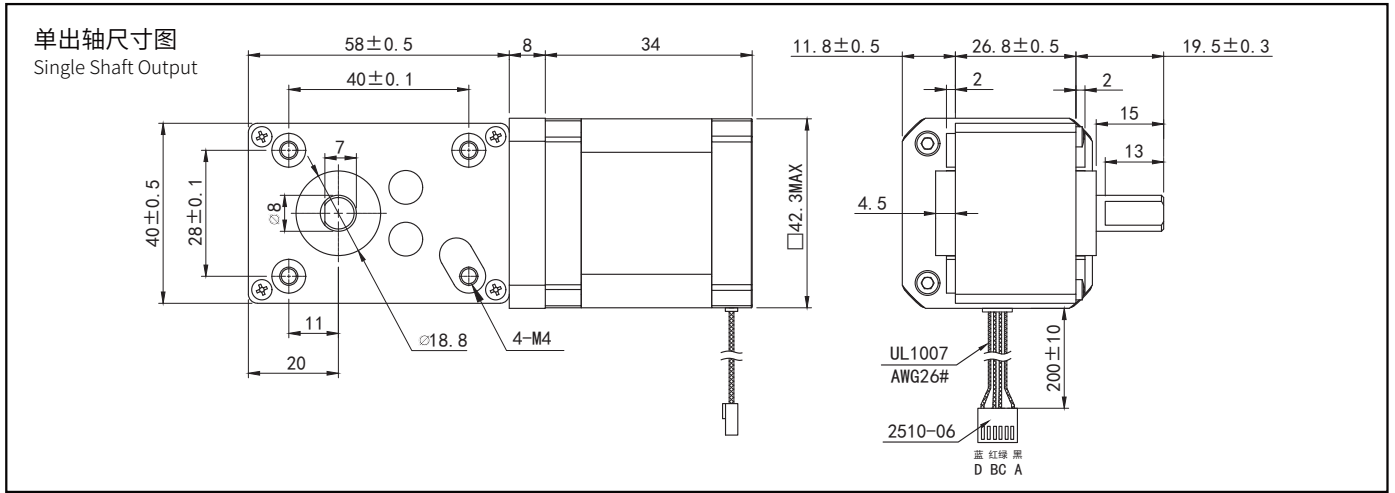
### 42混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 Length	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	$\Omega$	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
42HSC1409	2.93	1.33	2.2	3.5	270	4	30	0.22	34	$\leq$ 1:505

### 减速电机性能参数 (42HSC1409) / Geared Stepper Motor Specifications

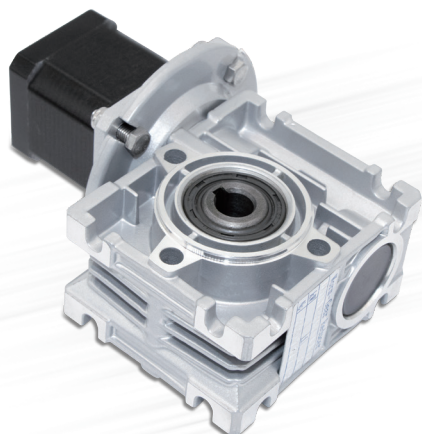
减速比 Reduction ratio	17	31	50	100	290	505
减速电机总高度 Total Length(L1+L2)mm	100					
减速电机输出扭矩 Torque for gearbox(mN.m)	1100	2200	3000	5000	5000	5000
减速电机总重量 Total Weight(g)	600					
减速器长度 Length(mm)	66					
减速后速度 Speed after gearbox	52.94	29.03	18.00	9.00	3.10	1.78
背隙(无负载时) Backlash at no-load	1°~1.5°					
效率 Efficiency	81%	81%	73%	73%	66%	50%

蜗轮蜗杆尺寸图 / Dimensions



传动型蜗轮蜗杆减速电机

# I Size 42/Nema 17



## 选件 / Options



## 42混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 Length	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	Ω	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
42HS3418	1.5	1.5	1	2.1	410	4	70	0.35	40	≤1:60
42HS6403	3.8	1.2	3.2	6	450	4	80	0.40	48	≤1:60

## 减速电机性能参数 (42HS3418) / Geared Stepper Motor Specifications

减速比 Reduction ratio	5	7.5	10	15	20	25	30	40	50	60
减速电机总高度 Total Length(L1+L2)mm	126									
减速电机输出扭矩 Torque for gearbox(mN.m)	1763	2583	3362	4797	6068	7175	8118	10000	11685	13284
减速电机总重量 Total Weight (g)	1000									
减速器长度 Length(mm)	86									
减速后速度 Speed after gearbox	180	120	90	60	45	36	30	22.5	18	15
背隙(无负载时) Backlash at no-load	15'~18'									
效率 Efficiency	86%	84%	82%	78%	74%	70%	66%	61%	57%	54%

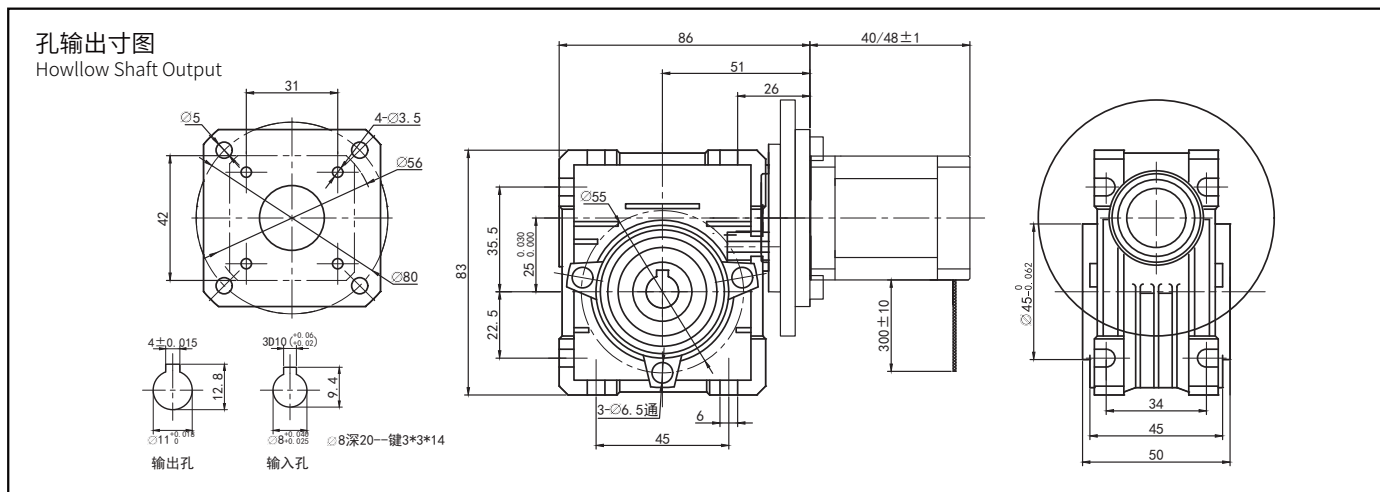
减速电机性能参数 (42HS6403) / Geared Stepper Motor Specifications

减速比 Reduction ratio	5	7.5	10	15	20	25	30	40	50	60
减速电机总高度 Total Length(L1+L2)mm	134									
减速电机输出扭矩 Torque for gearbox(mNm)	1800	2600	3400	4900	6100	7875	8200	10000	12000	14000
减速电机总重量 Total Weight (g)	1100									
减速器长度 Length(mm)	86									
减速后速度 Speed after gearbox	180	120	90	60	45	36	30	22.5	18	15
背隙 (无负载时) Backlash at no-load	15'~18'									
效率 Efficiency	86%	84%	82%	78%	74%	70%	66%	61%	57%	54%

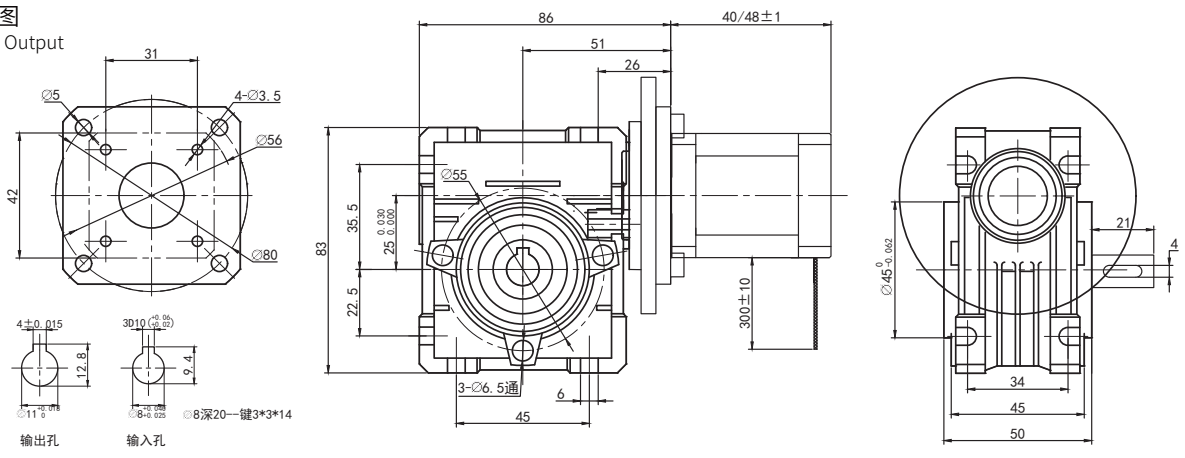
减速机出轴选择 / Gearbox shaft options



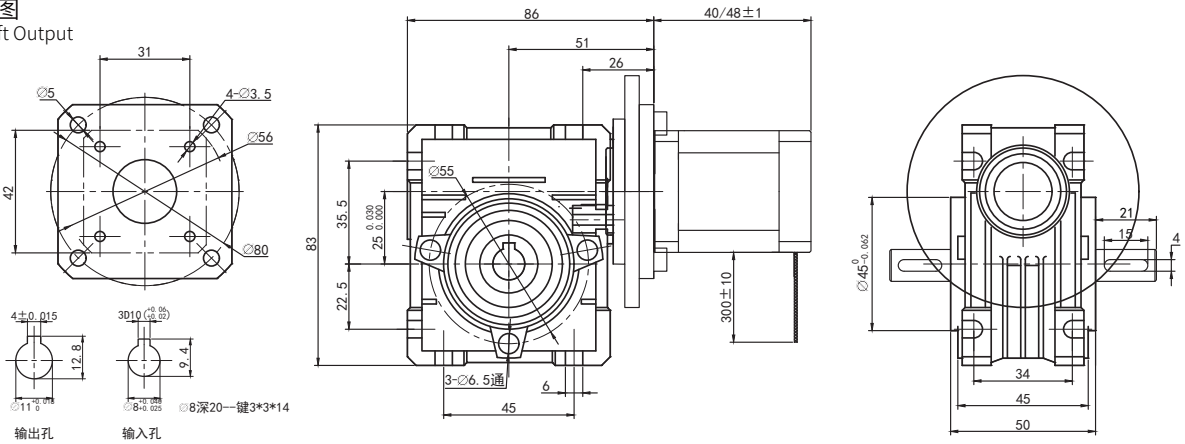
蜗轮蜗杆尺寸图 / Dimensions



单出轴寸图  
Single Shaft Output



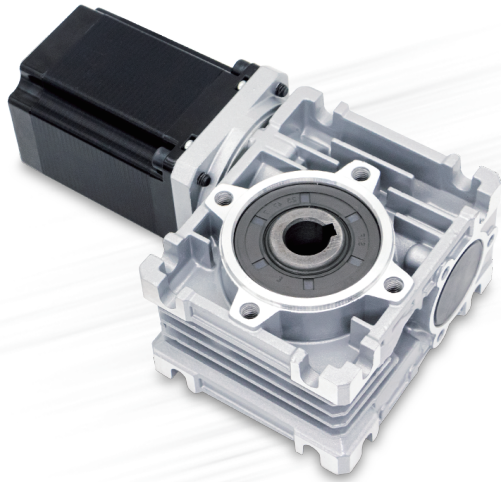
双出轴寸图  
Double Shaft Output







# I Size 57/Nema 23



## 选件 / Options



## 57混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 Length	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	Ω	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
57HS5417	1.7	2.0	0.85	2.5	950	4	200	0.64	55	≤1:80
57HS7407	2.1	3.0	0.7	2.0	1900	4	230	1.1	76	≤1:80

## 减速电机性能参数 (57HS5417) / Geared Stepper Motor Specifications

减速比 Reduction ratio	5	7.5	10	15	20	25	30	40	50	60	80
减速电机总高度 Total Length(L1+L2)mm	150										
减速电机输出扭矩 Torque for gearbox(mN.m)	4085	5985	7695	10830	13680	15913	18240	20000	18000	17000	15000
减速电机总重量 Total Weight (g)	1860										
减速器长度 Length(mm)	95										
减速后速度 Speed after gearbox	180	120	90	60	45	36	30	22.5	18	15	11.25
背隙(无负载时) Backlash at no-load	15'~18'										
效率 Efficiency	86%	84%	81%	76%	72%	67%	64%	58%	54%	50%	44%

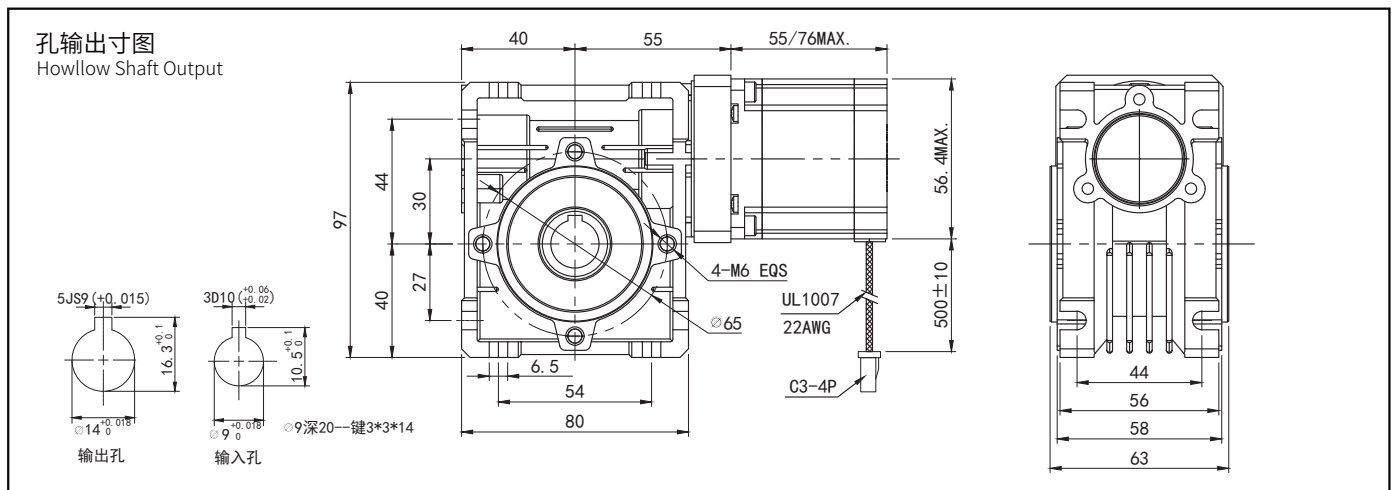
减速电机性能参数 (57HS7407) / Geared Stepper Motor Specifications

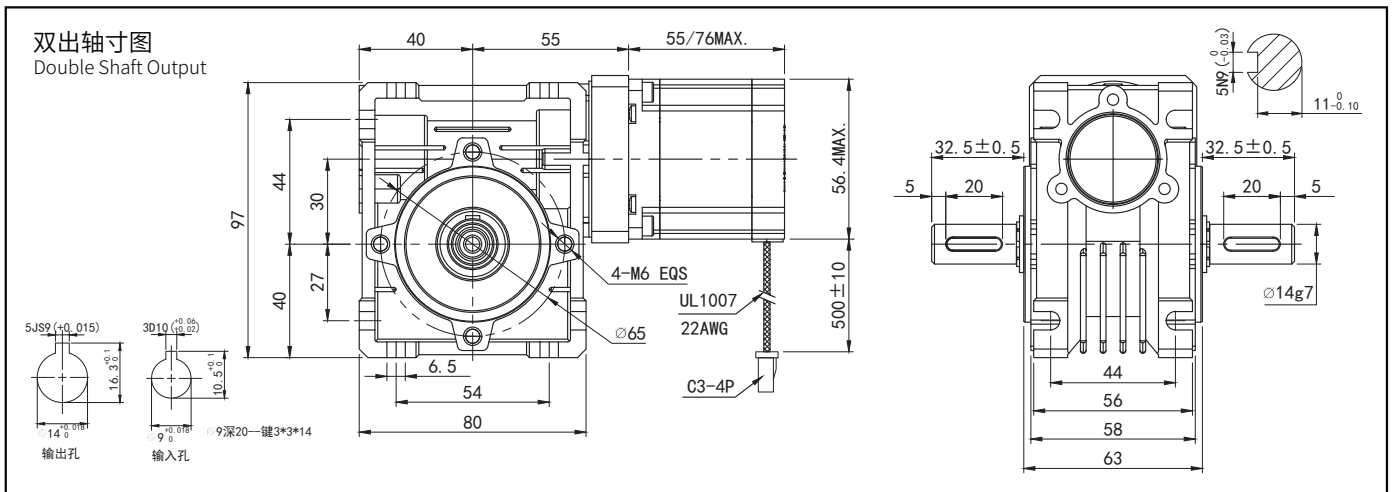
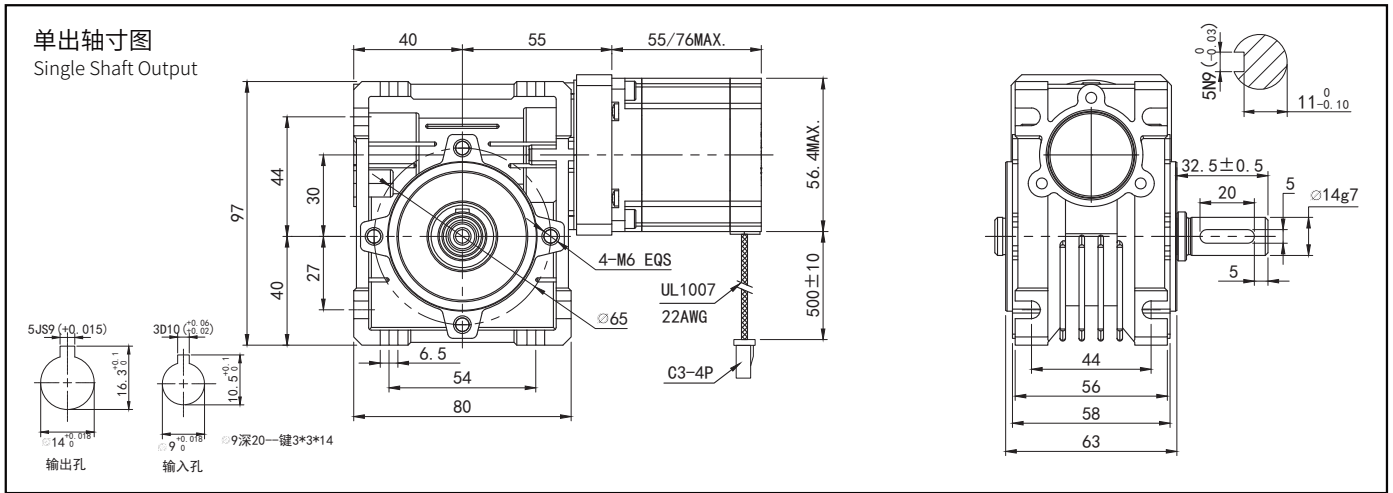
减速比 Reduction ratio	5	7.5	10	15	20	25	30	40	50	60	80
减速电机总高度 Total Length(L1+L2)mm	171										
减速电机输出扭矩 Torque for gearbox(mNm)	8170	11970	15390	20000	20000	23000	21000	20000	18000	17000	15000
减速电机总重量 Total Weight(g)	2320										
减速器长度 Length(mm)	95										
减速后速度 Speed after gearbox	180	120	90	60	45	36	30	22.5	18	15	11.25
背隙 (无负载时) Backlash at no-load	15'~18'										
效率 Efficiency	86%	84%	81%	76%	72%	67%	64%	58%	54%	50%	44%

减速机出轴选择 / Gearbox shaft options



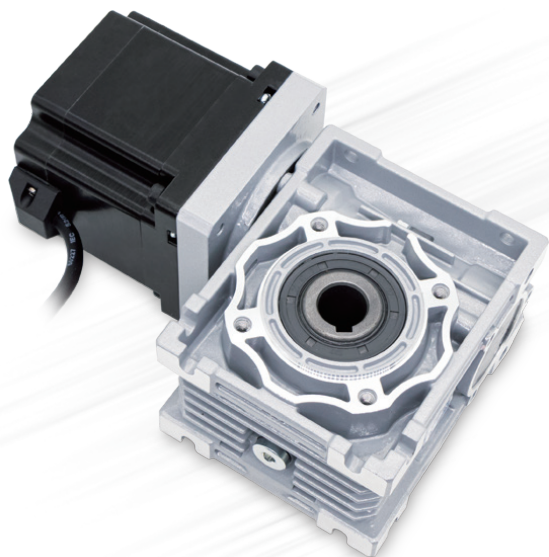
蜗轮蜗杆尺寸图 / Dimensions







## I Size 86/Nema 34



### 选件 / Options



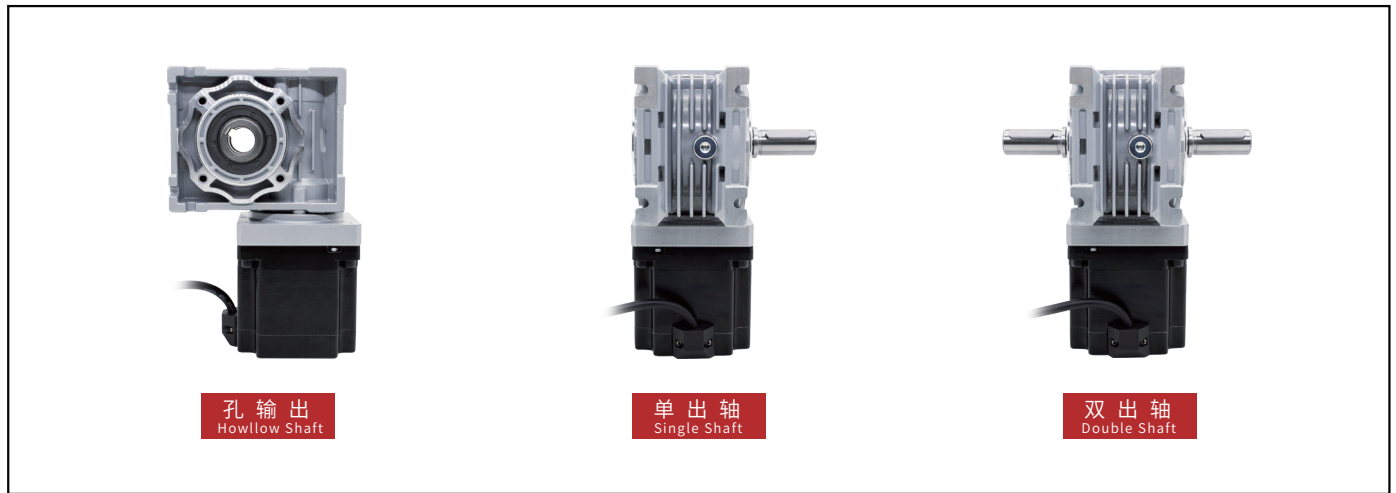
### 86混合式步进电机技术参数 / Technical Data

Model No.	额定电压 Rated Voltage	每相电流 Current /Phase	每相电阻 Resistance /Phase	每相电感 Inductance /Phase	保持转矩 Holding Torque	引出线数 #of Leads	转动惯量 Rotor Inertia	重量 Weight	长度 Length	适配减速比 Max. Gear Ratio
单轴 Single Shaft	V	A	Ω	mH	mN.m		g-cm <sup>2</sup>	kg	mm	
86HS2401	1.36	4	0.34	2.86	4500	4	1400	2.35	80	≤1:100

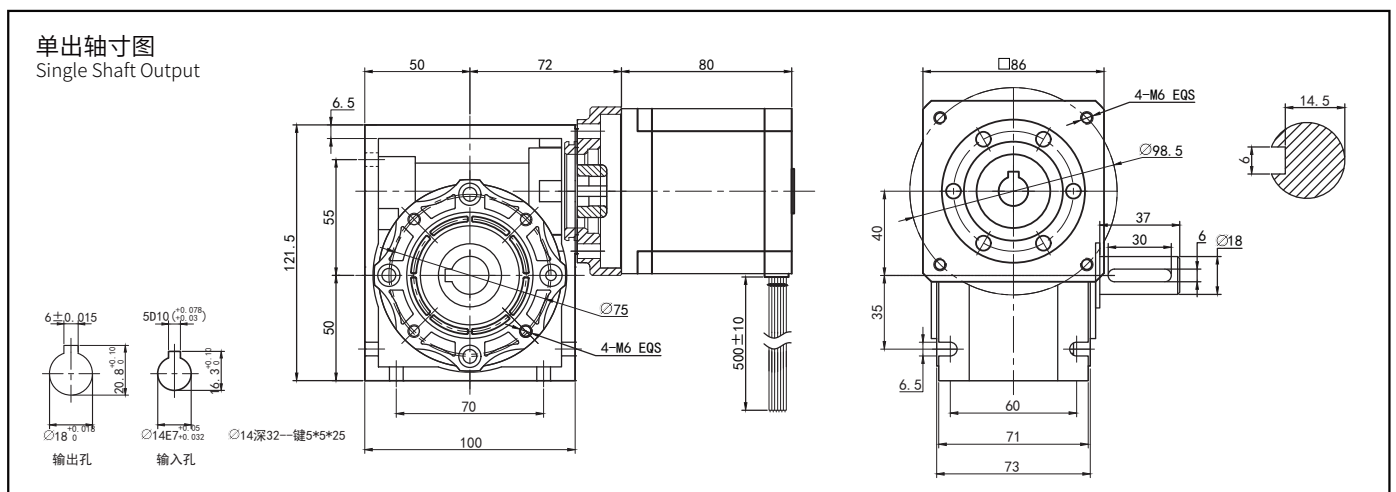
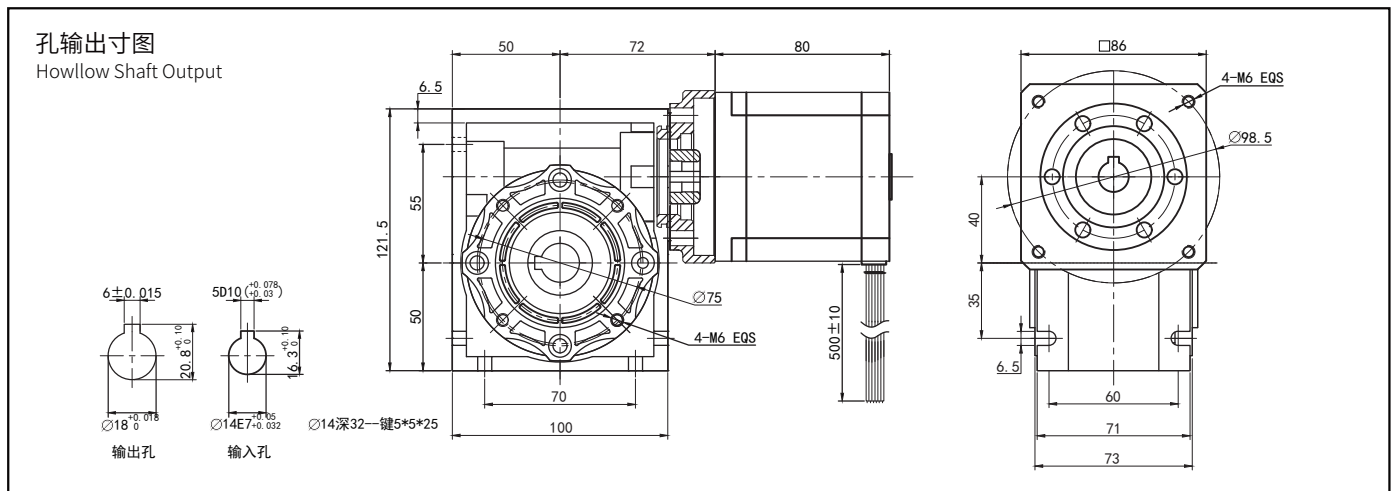
### 减速电机性能参数 (86HS2401) / Geared Stepper Motor Specifications

减速比 Reduction ratio	5	7.5	10	15	20	25	30	40	50	60	80	100
减速电机总高度 Total Length(L1+L2)mm	202											
减速电机输出扭矩 Torque for gearbox(mN.m)	19800	29025	38250	45000	44000	43000	49000	45000	42000	39000	35000	32000
减速电机总重量 Total Weight (g)	4900											
减速器长度 Length(mm)	122											
减速后速度 Speed after gearbox	180	120	90	60	45	36	30	22.5	18	15	11.25	9
背隙(无负载时) Backlash at no-load	15'~18'											
效率 Efficiency	88%	86%	85%	81%	77%	74%	69%	64%	61%	57%	51%	47%

减速机出轴选择 / Gearbox shaft options



蜗轮蜗杆尺寸图 / Dimensions











+86 2386132606

---



info@umottech.com

---



www.umotmotor.cn

---



重庆市九龙坡区火炬大道101号1118号