

Planetary Gear Motor

行星减速电机

Product Manual • 产品手册



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20mm法兰行星减速电机

Planetary Gear Motor-Nema 8

20法兰减速步进电机，所有电机支持选装HE系列增量编码器、BE系列多圈绝对值编码器，支持编码器反馈的全闭环控制。所有电机提供丰富的总线驱动器规格。主机支持各类PLC，电脑PC，嵌入式系统等。详细信息请浏览网站或与我们联系。

NEMA 8 Flange Geared Stepper Motors.This series of geared stepper motors supports optional installation of HE-series incremental encoders or BE-series multi-turn absolute encoders, enabling fully closed-loop control with encoder feedback. All motors are compatible with a comprehensive range of bus-compatible drivers and can be seamlessly integrated with various host systems including PLCs, PCs, and embedded devices.For detailed specifications and technical support, please visit our website or contact us.

Feature

- NEMA 8 Series Flange 20系列法兰
- Encoder Compatible / Supports Encoder Integration 可配套编码器
- Extended Service Life and Enhanced Precision 更长的寿命和更高的精度
- Available in Different Lengths 提供不同长度
- Motor Controllers/Drivers Available 电机控制器/驱动器可用

VERSIONS

系列代码 Series models	8HY30	8HY40
相电阻 Phase resistance ohm±10%	6.5	6
相电感 Phase inductance mH± 20%	2.2	2
额定电流 Rated current A	0.6	0.6
保持转矩 Holding torque mN.m	18	32
机身 L(max)mm	30	40
电机重量 Motor weight g	60	100
转动惯量 Rotary inertia g.cm²	2	3
定位转矩 Positioning torque mN.m	2	4

* 衍生品可以与我们沟通 Derivatives can communicate with us

减速箱技术参数 Technical parameters of gearbox

减速比reduction ratio	4	4 ³ / ₄	16	19	22 ³ / ₁₆	64	76	90 ¹ / ₄	107 ¹¹ / ₈₁
减速级数Deceleration series	1		2			3			
L1箱体长度L1 box length	20.5mm		25.7mm			30.95mm			
最大允许转矩Maximum allowable torque	0.5N.m		0.7N.m			0.9N.m			
回程间隙Return clearance	≤3°		≤3°			≤3°			
传动效率Transmission efficiency	90%		80%			70%			

最大允许径向负载(离法兰10mm) Maximum allowable radial load (10mm from flange)	<20N	输出轴径向间隙 Radial clearance of output shaft	<0.08mm
最大允许轴向负载 Maximum allowable axial load	<10N	输出轴轴向间隙 Axial clearance of output shaft	<0.3mm

减速电机输出扭矩=电机输出扭矩*速比*传动效率
Output torque of deceleration motor = motor output torque * speed ratio * transmission efficiency
电机输出扭矩具体可以参照8HY系列距频特性曲线
Motor output torque can refer to 8HY series range–frequency characteristic curve.

20mm法兰行星减速电机

Planetary Gear Motor-Nema 8

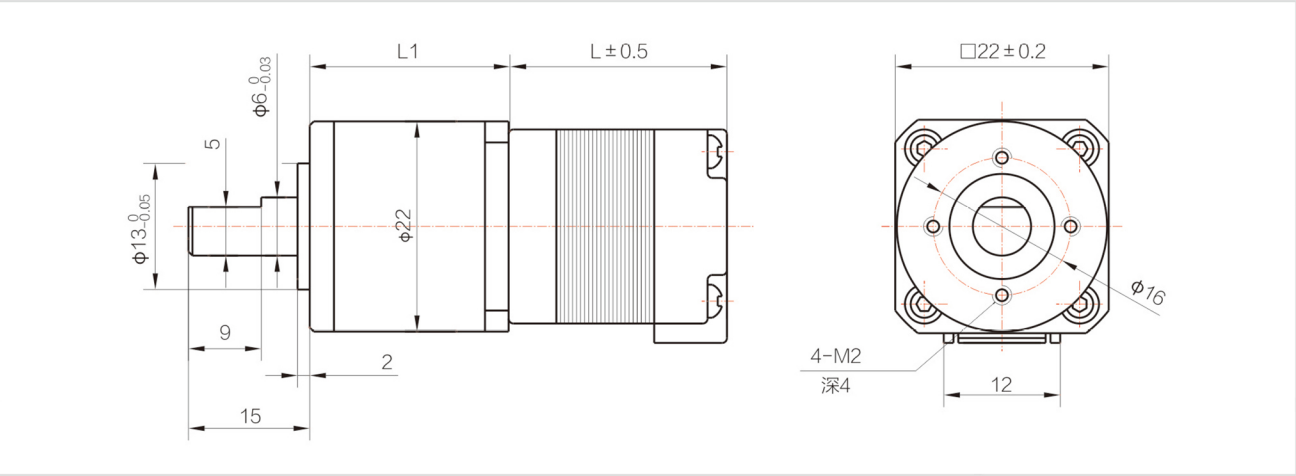
订货代号 ORDER IDENTIFIER

8HY3001-G1-HE1000
8HY30=机身高度30mm（Length）
01（04）=出线方式，01代表插件，04代表直接出线
01（04）=Motor outlet mode:01 stands for plug-in and 04 stands for lead
G1=减速级数
G1=Deceleration series
E1000=编码器（可选增量/多圈编码器）
E1000=Encoder（Optional ABI/Multi-turn encoder）

可选配件 ACCESSORIES

- Encoder 高精度编码器
- Motor Controllers/Drives 电机驱动控制器
- 编码器/控制器 规格多样，具体信息 请与我们联系。Multiple encoders Drives supported, please contactus.

外形尺寸 Outline dimension



28mm法兰行星减速电机

Planetary Gear Motor-Nema 11

28法兰减速步进电机，所有电机支持选装HE系列增量编码器、BE系列多圈绝对值编码器，支持编码器反馈的全闭环控制。所有电机提供丰富的总线驱动器规格。主机支持各类PLC，电脑PC，嵌入式系统等。详细信息请浏览网站或与我们联系。

NEMA 11 Flange Geared Stepper Motors.This series of geared stepper motors supports optional installation of HE-series incremental encoders or BE-series multi-turn absolute encoders, enabling fully closed-loop control with encoder feedback. All motors are compatible with a comprehensive range of bus-compatible drivers and can be seamlessly integrated with various host systems including PLCs, PCs, and embedded devices.For detailed specifications and technical support, please visit our website or contact us.

Feature

- NEMA 11 Series Flange 28系列法兰
- Encoder Compatible / Supports Encoder Integration 可配套编码器
- Extended Service Life and Enhanced Precision 更长的寿命和更高的精度
- Available in Different Lengths 提供不同长度
- Motor Controllers/Drivers Available 电机控制器/驱动器可用

VERSIONS

系列代码 Series models	11HY41	11HY34	11HY45	11HY51
相电阻 Phase resistance ohm±10%	7.5	6.5	6.7	9.2
相电感 Phase inductance mH± 20%	6	4.2	3.8	9
额定电流 Rated current A	0.75	0.75	0.75	0.67
保持转矩 Holding torque mN.m	80	60	95	120
机身 L(max)mm	41	34	45	51
电机重量 Motor weight g	140	120	160	180
转动惯量 Rotary inertia g.cm²	12	9	15	18
定位转矩 Positioning torque mN.m	6	5	8	10

* 衍生品可以与我们沟通 Derivatives can communicate with us

减速箱技术参数 Technical parameters of gearbox

减速比reduction ratio	3 ¹² ₁₇	5 ² ₁₁	13 ²¹² ₂₈₉	19 ³⁸ ₁₈₇	26 ¹⁰³ ₁₂₁	50 ⁴³⁹⁷ ₄₉₁₃	71 ² ₂₅	99 ¹⁰⁴⁴ ₂₀₅₇	139 ¹⁸⁴ ₁₂₂₁
减速级数Deceleration series	1		2			3			
L1箱体长度L1 box length	29.2mm		36.8mm			44.6mm			
最大允许转矩Maximum allowable torque	2N.m		3N.m			4N.m			
回程间隙Return clearance	≤2°		≤2°			≤2°			
传动效率Transmission efficiency	90%		80%			70%			

最大允许径向负载(离法兰10mm) Maximum allowable radial load (10mm from flange)	<35N	输出轴径向间隙 Radial clearance of output shaft	<0.07mm
最大允许轴向负载 Maximum allowable axial load	<25N	输出轴轴向间隙 Axial clearance of output shaft	<0.3mm

减速电机输出扭矩=电机输出扭矩*速比*传动效率
Output torque of deceleration motor = motor output torque * speed ratio * transmission efficiency
电机输出扭矩具体可以参照11HY系列距频特性曲线
Motor output torque can refer to 11HY series range-frequency characteristic curve.

28mm法兰行星减速电机

Planetary Gear Motor-Nema 11

订货代号 ORDER IDENTIFIER

11HY410I-G1-HE1000

11HY41=机身高度41mm（Length）

01（04）=出线方式，01代表插件，04代表直接出线
01（04）=Motor outlet mode:01 stands for plug-in and 04 stands for lead

G1=减速级数

G1=Deceleration series

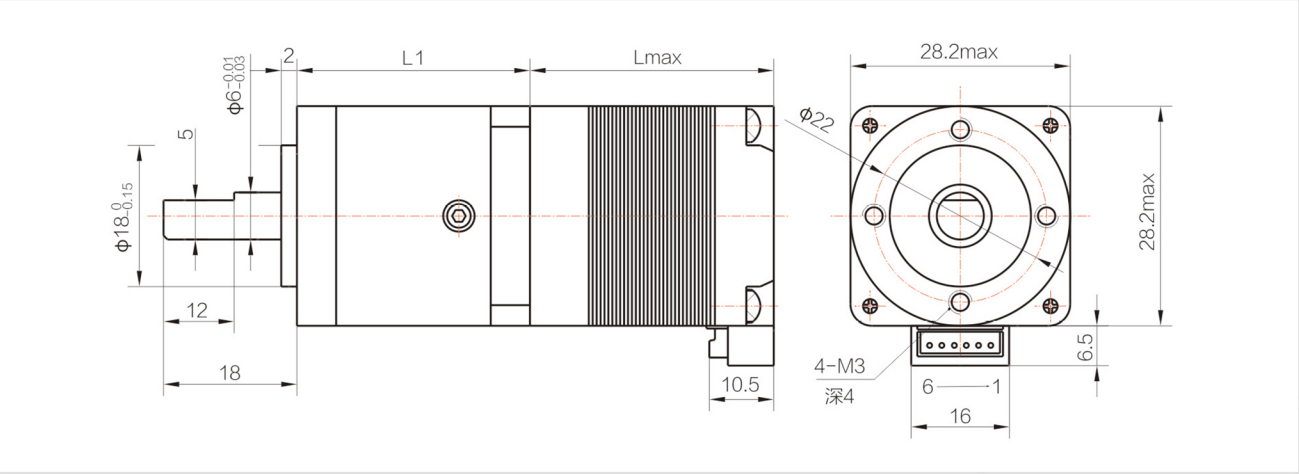
E1000=编码器（可选增量/多圈编码器）

E1000=Encoder（Optional ABI/Multi-turn encoder）

可选配件 ACCESSORIES

- Encoder 高精度编码器
- Motor Controllers/Drives 电机驱动控制器
- 编码器/控制器 规格多样，具体信息
请与我们联系。Multiple encoders
Drives supported, please contactus.

外形尺寸 Outline dimension



35mm法兰行星减速电机

Planetary Gear Motor-Nema 14

35法兰减速步进电机，所有电机支持选装HE系列增量编码器、BE系列多圈绝对值编码器，支持编码器反馈的全闭环控制。所有电机提供丰富的总线驱动器规格。主机支持各类PLC，电脑PC，嵌入式系统等。详细信息请浏览网站或与我们联系。

NEMA 14 Flange Geared Stepper Motors.This series of geared stepper motors supports optional installation of HE-series incremental encoders or BE-series multi-turn absolute encoders, enabling fully closed-loop control with encoder feedback. All motors are compatible with a comprehensive range of bus-compatible drivers and can be seamlessly integrated with various host systems including PLCs, PCs, and embedded devices.For detailed specifications and technical support, please visit our website or contact us.

Feature

- NEMA 14 Series Flange 35系列法兰
- Encoder Compatible / Supports Encoder Integration 可配套编码器
- Extended Service Life and Enhanced Precision 更长的寿命和更高的精度
- Available in Different Lengths 提供不同长度
- Motor Controllers/Drivers Available 电机控制器/驱动器可用

VERSIONS

系列代码 Series models	14HS34	14HS48
相电阻 Phase resistance ohm±10%	2.7	2.3
相电感 Phase inductance mH± 20%	3.7	2.8
额定电流 Rated current A	1	1.5
保持转矩 Holding torque mN.m	160	320
机身 L(max)mm	34	48
电机重量 Motor weight g	180	280
转动惯量 Rotary inertia g.cm²	18	26
定位转矩 Positioning torque mN.m	12	18

* 衍生品可以与我们沟通 Derivatives can communicate with us

减速箱技术参数 Technical parameters of gearbox

减速比reduction ratio	3 ¹² ₁₇	5 ² ₁₁	13 ²¹² ₂₈₉	19 ³⁸ ₁₆₇	26 ¹⁹³ ₁₂₁	50 ⁴³⁹⁷ ₄₉₁₃	71 ² ₂₅	99 ¹⁰⁴⁴ ₂₀₅₇	139 ¹⁸⁴ ₁₂₂₁
减速级数Deceleration series	1		2			3			
L1箱体长度L1 box length	29.2mm		36.8mm			44.6mm			
最大允许转矩Maximum allowable torque	2N.m		3N.m			4N.m			
回程间隙Return clearance	≤ 2°		≤ 2°			≤ 2°			
传动效率Transmission efficiency	90%		80%			70%			

最大允许径向负载(离法兰10mm) Maximum allowable radial load (10mm from flange)	<35N	输出轴径向间隙 Radial clearance of output shaft	<0.07mm
最大允许轴向负载 Maximum allowable axial load	<25N	输出轴轴向间隙 Axial clearance of output shaft	<0.3mm

减速电机输出扭矩=电机输出扭矩*速比*传动效率
Output torque of deceleration motor = motor output torque * speed ratio * transmission efficiency
电机输出扭矩具体可以参照14HS系列距频特性曲线
Motor output torque can refer to 14HS series range-frequency characteristic curve.

35mm法兰行星减速电机

Planetary Gear Motor-Nema 14

订货代号 ORDER IDENTIFIER

14HS3401-G1-HE1000

14HS34=机身高度34mm（Length）

01（04）=出线方式，01代表插件，04代表直接出线
01（04）=Motor outlet mode:01 stands for plug-in and 04 stands for lead

G1=减速级数

G1=Deceleration series

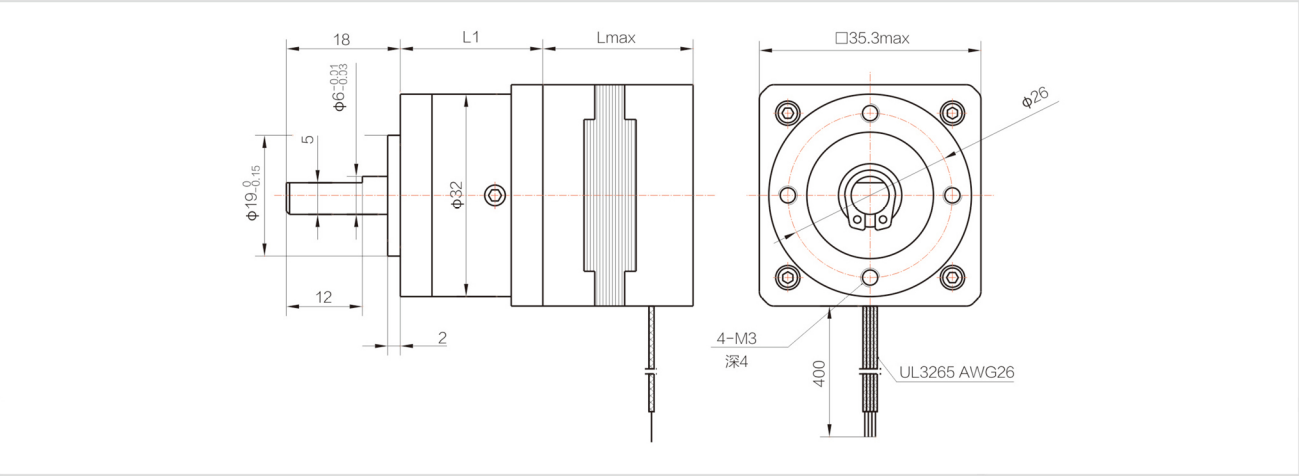
E1000=编码器（可选增量/多圈编码器）

E1000=Encoder（Optional ABI/Multi-turn encoder）

可选配件 ACCESSORIES

- Encoder 高精度编码器
- Motor Controllers/Drives 电机驱动控制器
- 编码器/控制器 规格多样，具体信息
请与我们联系。Multiple encoders
Drives supported, please contactus.

外形尺寸 Outline dimension



42mm法兰行星减速电机

Planetary Gear Motor-Nema 17

42法兰减速步进电机，所有电机支持选装HE系列增量编码器、BE系列多圈绝对值编码器，支持编码器反馈的全闭环控制。所有电机提供丰富的总线驱动器规格。主机支持各类PLC，电脑PC，嵌入式系统等。详细信息请浏览网站或与我们联系。

NEMA 17 Flange Geared Stepper Motors.This series of geared stepper motors supports optional installation of HE-series incremental encoders or BE-series multi-turn absolute encoders, enabling fully closed-loop control with encoder feedback. All motors are compatible with a comprehensive range of bus-compatible drivers and can be seamlessly integrated with various host systems including PLCs, PCs, and embedded devices.For detailed specifications and technical support, please visit our website or contact us.

Feature

- NEMA 17 Series Flange 42系列法兰
- Encoder Compatible / Supports Encoder Integration 可配套编码器
- Extended Service Life and Enhanced Precision 更长的寿命和更高的精度
- Available in Different Lengths 提供不同长度
- Motor Controllers/Drivers Available 电机控制器/驱动器可用

VERSIONS

系列代码 Series models	17HS22	17HS34	17HS40	17HS48	17HS60
相电阻 Phase resistance ohm±10%	3.3	1.56	1.9	2	2.7
相电感 Phase inductance mH± 20%	4.5	2	4.5	3.85	6.5
额定电流 Rated current A	0.8	1.5	1.67	1.5	1.5
保持转矩 Holding torque mN.m	120	260	400	430	650
机身 L(max)mm	22	34	40	48	60
电机重量 Motor weight g	140	200	240	340	500
转动惯量 Rotary inertia g.cm²	15	38	57	82	102
定位转矩 Positioning torque mN.m	3	12	18	24	40

* 衍生品可以与我们沟通 Derivatives can communicate with us

减速箱技术参数 Technical parameters of gearbox

减速比reduction ratio	3 ¹² ₁₇	5 ² ₁₁	13 ²¹² ₂₈₉	19 ³⁸ ₁₆₇	26 ¹⁰³ ₁₂₁	50 ⁴³⁸⁷ ₄₉₁₃	71 ² ₂₅	99 ¹⁰⁴⁴ ₂₀₅₇	139 ¹⁸⁴ ₁₂₂₁
减速级数Deceleration series	1		2				3		
L1箱体长度L1 box length	27.2mm		35mm				42.7mm		
最大允许转矩Maximum allowable torque	2N.m		3N.m				4N.m		
回程间隙Return clearance	≤2°		≤2°				≤2°		
传动效率Transmission efficiency	90%		80%				70%		

最大允许径向负载(离法兰10mm) Maximum allowable radial load (10mm from flange)	<35N	输出轴径向间隙 Radial clearance of output shaft	<0.07mm
最大允许轴向负载 Maximum allowable axial load	<25N	输出轴轴向间隙 Axial clearance of output shaft	<0.3mm

减速电机输出扭矩=电机输出扭矩*速比*传动效率
Output torque of deceleration motor = motor output torque * speed ratio * transmission efficiency
电机输出扭矩具体可以参照17HS系列距频特性曲线
Motor output torque can refer to 17HS series range-frequency characteristic curve.



42mm法兰行星减速电机

Planetary Gear Motor-Nema 17

订货代号 ORDER IDENTIFIER

17HS2201-G1-HE1000

17HS22=机身高度22mm（Length）

01（04）=出线方式，01代表插件，04代表直接出线
01（04）=Motor outlet mode:01 stands for plug-in and 04 stands for lead

G1=减速级数

G1=Deceleration series

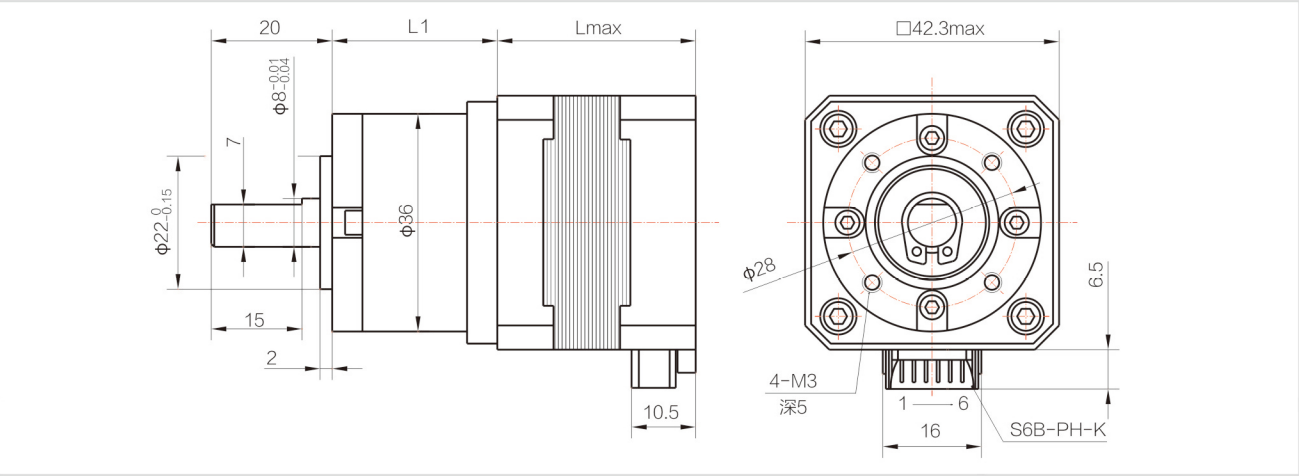
E1000=编码器（可选增量/多圈编码器）

E1000=Encoder（Optional ABI/Multi-turn encoder）

可选配件 ACCESSORIES

- Encoder 高精度编码器
- Motor Controllers/Drives 电机驱动控制器
- 编码器/控制器 规格多样，具体信息请与我们联络。Multiple encoders Drives supported, please contactus.

外形尺寸 Outline dimension



57mm法兰行星减速电机

Planetary Gear Motor-Nema 23

57法兰减速步进电机，所有电机支持选装HE系列增量编码器、BE系列多圈绝对值编码器，支持编码器反馈的全闭环控制。所有电机提供丰富的总线驱动器规格。

主机支持各类PLC，电脑PC，嵌入式系统等。详细信息请浏览网站或与我们联系。

NEMA 23 Flange Geared Stepper Motors. This series of geared stepper motors supports optional installation of HE-series incremental encoders or BE-series multi-turn absolute encoders, enabling fully closed-loop control with encoder feedback. All motors are compatible with a comprehensive range of bus-compatible drivers and can be seamlessly integrated with various host systems including PLCs, PCs, and embedded devices. For detailed specifications and technical support, please visit our website or contact us.



© Feature

- NEMA 23 Series Flange 57系列法兰
- Encoder Compatible / Supports Encoder Integration 可配套编码器
- Extended Service Life and Enhanced Precision 更长的寿命和更高的精度
- Available in Different Lengths 提供不同长度
- Motor Controllers/Drivers Available 电机控制器/驱动器可用

© VERSIONS

系列代码 Series models	23HS45	23HS54	23HS56	23HS76	23HS82	23HS100
相电阻 Phase resistance ohm±10%	1.63	0.62	1.1	0.5	0.55	0.8
相电感 Phase inductance mH± 20%	4.2	2.5	3.2	1.7	2.3	3
额定电流 Rated current A	2	3	3	4	4	4.5
保持转矩 Holding torque N.m	0.7	1.2	1.3	1.6	2.1	2.5
机身 L(max)mm	45	54	56	76	82	100
电机重量 Motor weight g	500	600	620	1000	1000	1500
转动惯量 Rotary inertia g.cm ²	155	260	280	400	520	660
定位转矩 Positioning torque mN.m	25	40	45	70	78	100

* 衍生品可以与我們溝通 Derivatives can communicate with us

减速箱技术参数 Technical parameters of gearbox

减速级数Deceleration series	1							2											
减速比reduction ratio	3	4	5	6	7	9	10	15	16	20	25	30	36	40	50	63	70	90	100
最大允许转矩Maximum allowable torque(N.m)	30	24	30	25	25	20	20	30	30	24	30	28	25	25	25	25	20	20	20
L1箱体长度L1 box length(mm)	53mm							70.5mm											
回程间隙Return clearance(Arcmin)	≤10							≤25											
传动效率Transmission efficiency	95							90											

减速电机输出扭矩=电机输出扭矩*速比*传动效率
Output torque of deceleration motor = motor output torque * speed ratio * transmission efficiency

电机输出扭矩具体可以参照 23HS 系列距频特性曲线
Motor output torque can refer to 23HS series range-frequency characteristic curve.

57mm法兰行星减速电机

Planetary Gear Motor-Nema 23

订货代号 ORDER IDENTIFIER

23HS4501-G1-HE1000

23HS45=机身高度45mm (Length)

01 (04) =出线方式, 01代表插件, 04代表直接出线
01 (04) =Motor outlet mode:01 stands for plug-in
and 04 stands for lead

G1=减速级数

G1=Deceleration series

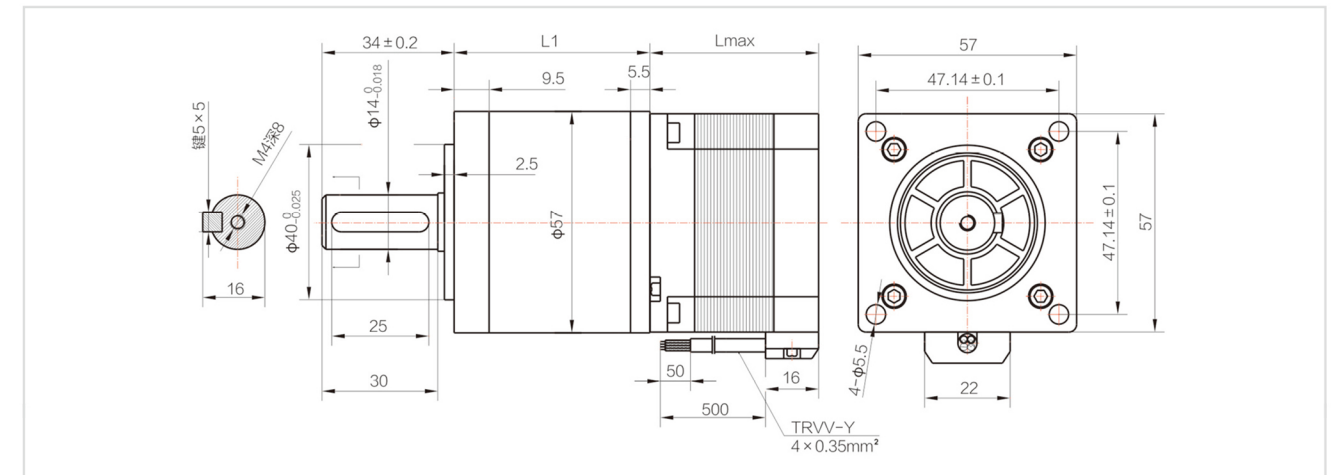
E1000=编码器 (可选增量/多圈编码器)

E1000=Encoder (Optional ABI/Multi-turn encoder)

可选配件 ACCESSORIES

- Encoder 高精度编码器
- Motor Controllers/Drives 电机驱动控制器
- 编码器/控制器 规格多样，具体信息
请与我们联系。Multiple encoders
Drives supported, please contact us.

外形尺寸 Outline dimension



86mm法兰行星减速电机

Planetary Gear Motor-Nema 34

86法兰减速步进电机，所有电机支持选装HE系列增量编码器、BE系列多圈绝对值编码器，支持编码器反馈的全闭环控制。所有电机提供丰富的总线驱动器规格。主机支持各类PLC，电脑PC，嵌入式系统等。详细信息请浏览网站或与我们联系。

NEMA 34 Flange Geared Stepper Motors.This series of geared stepper motors supports optional installation of HE-series incremental encoders or BE-series multi-turn absolute encoders, enabling fully closed-loop control with encoder feedback. All motors are compatible with a comprehensive range of bus-compatible drivers and can be seamlessly integrated with various host systems including PLCs, PCs, and embedded devices.For detailed specifications and technical support, please visit our website or contact us.

Feature

- NEMA 34 Series Flange 86系列法兰
- Encoder Compatible / Supports Encoder Integration 可配套编码器
- Extended Service Life and Enhanced Precision 更长的寿命和更高的精度
- Available in Different Lengths 提供不同长度
- Motor Controllers/Drivers Available 电机控制器/驱动器可用

VERSIONS

系列代码 Series models	34HS76	34HS98	34HS112	34HS128	34HS150
相电阻 Phase resistance ohm±10%	0.5	0.4	0.6	0.6	0.9
相电感 Phase inductance mH± 20%	3.7	4	5	5.5	11
额定电流 Rated current A	4	6	5	6	5
保持转矩 Holding torque N.m	3.5	7	7.6	10	13
机身 L(max)mm	76	98	112	128	150
电机重量 Motor weight g	1400	2700	3500	4200	5300
转动惯量 Rotary inertia g.cm²	1400	1700	2700	2800	3600
定位转矩 Positioning torque N.m	0.14	0.19	0.23	0.24	0.32

* 衍生品可以与我们沟通 Derivatives can communicate with us

减速箱技术参数 Technical parameters of gearbox

减速级数Deceleration series	1						2								
减速比reduction ratio	3	4	5	7	9	10	16	20	25	35	40	50	81	90	100
最大允许转矩Maximum allowable torque(N.m)	80	60	80	68	55	50	80	80	80	70	60	50	50	50	50
L1箱体长度L1 box length(mm)	83mm						87mm								
回程间隙Return clearance(Arcmin)	≤10						≤15								
传动效率Transmission efficiency	95						90								

减速电机输出扭矩=电机输出扭矩*速比*传动效率
Output torque of deceleration motor = motor output torque * speed ratio * transmission efficiency
电机输出扭矩具体可以参照34HS系列距频特性曲线
Motor output torque can refer to 34HS series range–frequency characteristic curve.

86mm法兰行星减速电机

Planetary Gear Motor-Nema 34

订货代号 ORDER IDENTIFIER

34HS7601-G1-HE1000

34HS76=机身高度76mm（Length）

01（04）=出线方式，01代表插件，04代表直接出线
01（04）=Motor outlet mode:01 stands for plug-in and 04 stands for lead

G1=减速级数

G1=Deceleration series

E1000=编码器（可选增量/多圈编码器）

E1000=Encoder（Optional ABI/Multi-turn encoder）

可选配件 ACCESSORIES

- Encoder 高精度编码器
- Motor Controllers/Drives 电机驱动控制器
- 编码器/控制器 规格多样，具体信息 请与我们联系。Multiple encoders Drives supported, please contactus.

外形尺寸 Outline dimension

