

## FEETECH RC Model Co.,Ltd.

# 产品规格书

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产品名称: 12V 40kg RS485串行总线舵机

Product Name: 12V 40kg.cm Serial Control RS485 Servo

产品型号 Model No.SM40BL

#### 1. 使用环境条件 Apply Environmental Condition

No.	Item	Specification
1-1	存储温度 Storage Temperature Range	-30°C ~80°C
1-2	运行温度 Operating Temperature Range	-20℃~80℃

### 2. 测试环境 Standard Test Environment

No.	Item	Specification
2-1	温度 Temperature range	25℃ ±5℃
2-2	湿度 Humidity range	$65\% \pm 10\%$

### 3. 机械特性 Mechanical Specification

No.	Item	Specification
3-1	尺寸 Size	A: 46.5mm B: 28.5mm C: 34mm
3-2	重量 Weight	100g
3-3	齿轮类型 Gear type	Steel Gear (Gear Ratio 353:1)
3-6	机构极限角度 Limit angle	No Limiter
3-7	轴承 Bearing	2 Ball bearings
3-8	出力轴 Horn gear spline	25T (OD5. 96mm)
3-9	摆臂 Horn type	Aluminium
3-10	外壳 Case	Aluminium
3-11	舵机线 Connector wire	150mm ±5 mm
3-12	马达 Motor	Brushless motor
3-13	防水性能 Splash water resistance	NO

#### 4. 电气特性 Electrical Specification (Function of the Performance)

4-1*   静态电流 Idle current (at stopped)   40mA     4-2*   空载速度 No load speed   0.153sec/60degree 65RPM     4-3*   空载电流 Runnig current (at no load)   200mA     4-4   堵转扭矩 Peak stall torque   40kg. cm     556. 5oz. in   556. 5oz. in     4-5   堵转电流 Stall current   2500 mA     4-6   额定负载 Rated Load   12kg. cm ≤		12V	工作电压 Operating Voltage Range	No.
4-3*   空载电流 Runnig current (at no load)   200mA     4-4   堵转扭矩 Peak stall torque   40kg. cm     4-5   堵转电流 Stall current   2500 mA		40mA	争态电流 Idle current(at stopped)	4-1*
4-4 堵转扭矩 Peak stall torque 40kg. cm   4-5 堵转电流 Stall current 556. 5oz. in   2500 mA	PM	0.153sec/60degree 65RPM	ご载速度 No load speed	4-2*
4-4   堵转扭矩 Peak stall torque   556.5oz.in     4-5   堵转电流 Stall current   2500 mA		200mA	三载电流 Runnig current(at no load)	4-3*
556. 5oz. in   4-5   堵转电流 Stall current   2500 mA		40kg.cm	L+++++++++++++++++++++++++++++++++++++	1 1
		556.5oz.in	有专用是 reak stall torque	4-4
4-6 额定负载 Rated Load 12kg.cm≤		2500 mA	皆转电流 Stall current	4-5
		12kg.cm≤	页定负载 Rated Load	4-6
4-7 额定电流 Rated current 800mm≤		800mm≤	页定电流 Rated current	4-7
4-8 KM常数 14.5kg.cm/A	5kg.cm/A	14.51	M常数	4-8
4-9 电机内阻 Terminal resistance 2.2Ω	2. 2 Ω	2.	包机内阻 Terminal resistance	4-9

Note: "\*" definition is average value when the servo runing with no load



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产品名称: 12V 40kg RS485串行总线舵机

Product Name: 12V 405kg.cm Serial Control RS485 Servo

产品型号 Model No. SM40BL

### 5. 控制特性 Control Specification:

No.	Item	Specification
5-1	控制信号 Command signal	Bus Packet Communication RS485
5-2	协议类型 Protocol Type	Half duplex Asynchronous Serial Communication
5-3	ID范围 ID range	0-253
5-4	通读速率 Communication Speed	38400bps ~ 1 Mbps
5-5	旋转角度 Running degree	$360^{\circ}$ (when $0{\sim}4096$ )-CW
5-6	反馈 Feedback	Load, Position, Speed, Input Voltage, Current, Temperature
5-7	位置传感器分辨率 Position Sensor (Resolution)	

# 6.外形图 The Drawings

