

FEETECH RC Model Co.,Ltd.

产品规格书

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产品名称: 24V 45kg RS485串行总线舵机

Product Name: 24V 45kg.cm Serial Control RS485 Servo

产品型号 Model No.SM45BL

1. 使用环境条件 Apply Environmental Condition

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

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	$150 \text{mm} \pm 5 \text{ mm}$
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)

No.	工作电压 Operating Voltage Range	24V	12V
4-1*	静态电流 Idle current(at stopped)	17mA	40mA
4-2*	空载速度 No load speed	0.142sec/60degree 70RPM	0.285sec/60degree 35RPM
4-3*	空载电流 Runnig current(at no load)	160 mA	120mA
4-4	堵转扭矩 Peak stall torque	45kg.cm	25kg.cm
4-4		626.02oz.in	347.8oz.in
4-5	堵转电流 Stall current	2300 mA	1300 mA
4-6	额定负载 Rated Load	15kg.cm≤	8kg.cm≤
4-7	额定电流 Rated current	900mm≤	900mm≤
4-8	KM常数	19kg	.cm/A
4-9	电机内阻 Terminal resistance	7	Ω

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



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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° (when $0\sim4096$)-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)	12Bits Magnetic Coding (360°/4096)

6.外形图 The Drawings

