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INDUSTRIAL PRODUCT DATASHEET

Feetech HL-3915-C001 12V 14.2Kg Servo

Feetech HL-3915-C001 12V 14.2Kg Servo offers high torque (14.2kg.cm @ 12V), low speed (100RPM), 360° absolute position control with 0.088° resolution, comprehensive feedback, and customizable electronic protection.

SKU	UPDATED	PRICE
100042780	2026-11-08 01:02:43	$40.00(Excl. VAT)



Overview



The Feetech HL-3915-C001 12V 14.2Kg Servo delivers high stall torque of 14.2kg.cm at 12V and low no-load speed of 100RPM, suitable for high-torque applications. It features a 12-bit magnetic encoder for 360° absolute position control with 0.088° resolution, comprehensive feedback on load, position, speed, input voltage, current, and temperature, and robust electronic protection including customizable overload, overvoltage (4V to 14V), and overheat shutdown (>80°C).

Key Features

01 **High Torque and Low-Speed Performance**

Delivers high stall torque (14.2kg.cm @ 12V) and low no-load speed (100RPM), suitable for high-torque applications.

02 **High-precision Control**

Equipped with a 12-bit magnetic encoder for 360° absolute position control with 0.088° resolution, supporting multiple operating modes and multi-turn functionality.

03 **Feedback**

Provides comprehensive feedback on load, position, speed, input voltage, current, and temperature.

04 **Electronic Protection**

Features customizable overload protection, overvoltage protection (4V to 14V range), and overheat protection (shuts down at >80℃).

05 **Robust Electronic Protection Functions**

Ensures reliable operation with customizable overload settings, overvoltage protection, and overheat shutdown.

Product Gallery









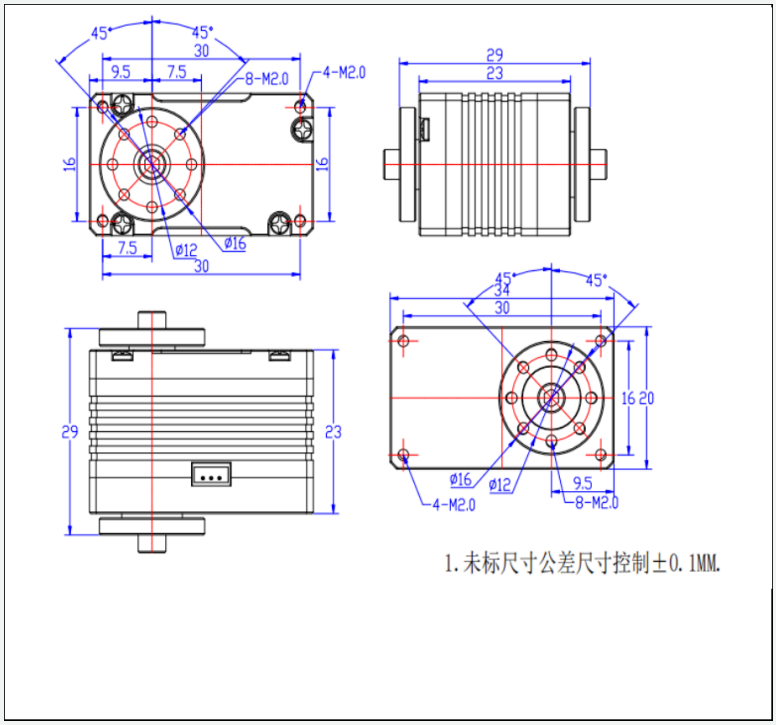


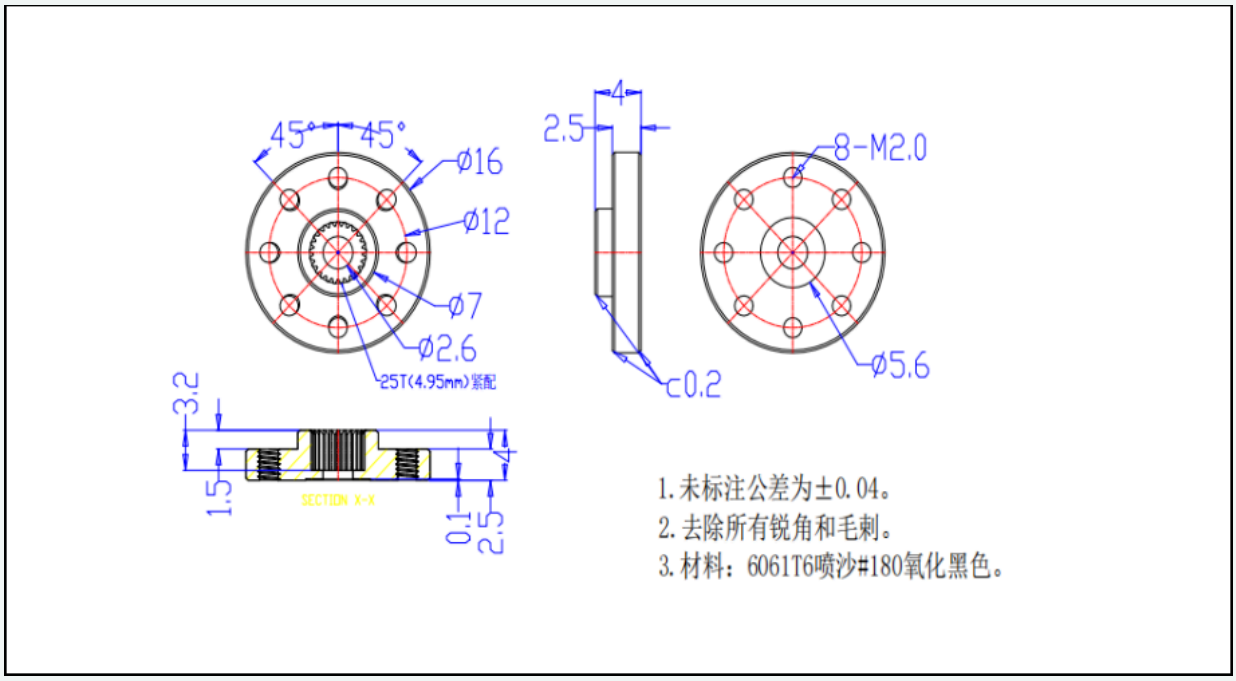


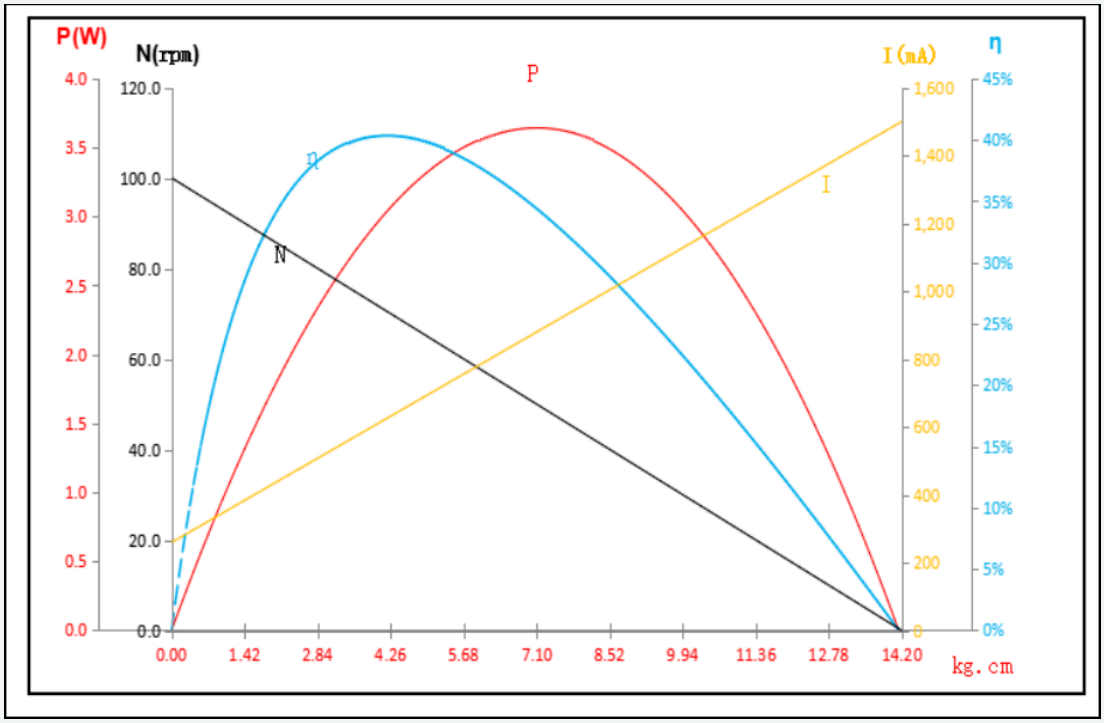

FEETECH
SERVO
HLS3915M

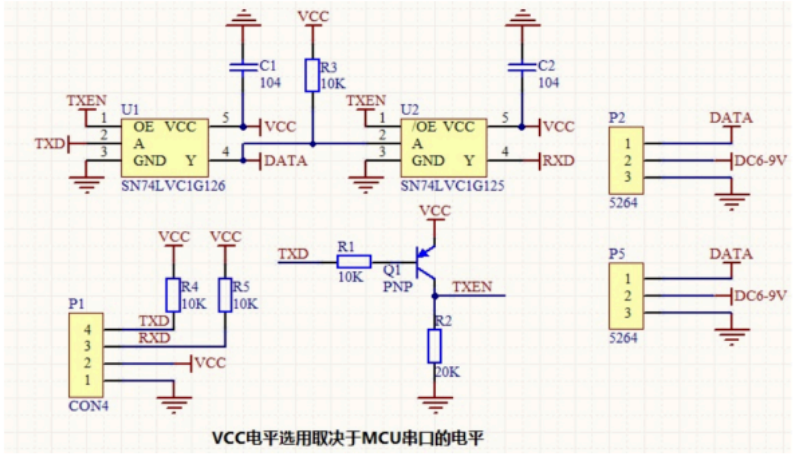

FEETECH
HLS3915M

Hardware Overview






P(W)
N(rpm)
I(mA)
η
P
η
I
N
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1,600
1,400
1,200
1,000
800
600
400
200
0
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
0.00
1.42
2.84
4.26
5.68
7.10
8.52
9.94
11.36
12.78
14.20
kg.cm


VCC
C1
104
R3
10K
C2
104
TXEN
U1
OE VCC
A
GND Y
SN74LVC1G126
TXD
DATA
U2
/OE VCC
A
GND Y
SN74LVC1G125
RXD
P2
DATA
DC6-9V
5264
P5
DATA
DC6-9V
5264
R4
10K
R5
10K
P1
CON4
TXD
RXD
R1
10K
Q1
PNP
R2
20K
VCC电平选用取决于MCU串口的电平



Resource Links

- https://www.seeedstudio.com/Feetech-HLS3915M-C001-Servo-p-6661.html
- https://files.seeedstudio.com/products/Feetech/HL-3915-C001%2012V%201%20320%20.xlsx

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