BORMAN

重庆博尔曼汽车驱动系统有限公司

CHONGQING BORMAN AUTOMOTIVE DRIVE SYSTEM CO., LTD.

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- **市场概况** Marketing
- **其他合作事宜** Cooperation

公司概况 Company Overview

Group profile

- Founded in Fuzhou in 2000
- Headquartered in Wuxi
  - Product development and design
  - Design and manufacture of tooling and molds
- Vision
  - Focus on continuously creating value for customers.
  - Supporting nearby customers and OEMs.

The Quansheng Group adheres to the business philosophy of "focuse on continuously creating value for customers". Successively, it has established multiple bases near customer bases in China and overseas offices. It has obtained a number of certifications and has cooperated with numerous well-known customers

ISO45001, ISO14001, IATF16949	Thailand, Japan, America, Germany, Brazil, Mexico
Certificate	**Export market**
13 factories in China	About 2000
Factory	**Employee**
In 2023, 278 million dollars (about 2 billion CNY)	Focus on continuously creating value for customers
Sales volume	**Vision**

公司概况 Company Overview

Plant Map



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公司概况 Company Overview

Main Customers

ADIENT
brose Technik für Automobile
LEAR CORPORATION
Yanfeng
NOBLE 诺博
FORVIA
FUTURiS
Valeo 法雷奥
Garrett ADVANCING MOTION
Webasto Feel the drive
MAGNA
GRAMMER
弗迪科技 FinDreams Technology
FIR 富奥石川岛
IHI
TACHI-S
NHKニッパツ 日本発条株式会社
宏立至信 HONGLIZHIXIN
Fonatec Machinery Technology 发那特
化智

公司概况 Company Overview

OEM



公司概况 Company Overview

Chongqing Borman Automotive Drive System Co., Ltd. was established in March 2023 and is a subsidiary of Quansheng Group. It is located in Tongjiaxi Town, Beibei District, Chongqing, with a registered capital of 10 million yuan. Its predecessor was Jiangsu Borman Transmission Technology Co., Ltd. We are a manufacturing enterprise dedicated to the research and development, production, and sales of permanent magnet DC motors, DC reduction motors, and related transmission application solutions. The company has an excellent team with over 10 years of professional experience in the research and development, manufacturing, and sales of micro motors. Our motor product business includes car seat horizontal motors, angle adjustment motors, lifting motors, tilting motors, leg support motors, etc. The company adheres to the concept of "focus first, continuous innovation" and is committed to the research and development and production of the latest transmission technology, creating a competitive enterprise in the market, and providing customers with reliable products and sustainable value.

重庆市北碚区童家溪镇同兴北路196号
No. 196, Tongxing North Road, Tongjiaxi Town, Beibei District, Chongqing City

023-68284190



研发--产品组合 Product Portfolio





调角器电机 Recliner motor

- 驱动座椅靠背调节向前或向后
  Enable seatback to move forward/backward



抬升电机（高度调节） Lift motor

- 驱动座椅座垫向上或向下移动
  Enable seat cushion to move upward/down



倾斜电机 Tilt motor

- 驱动座椅座垫的前部向上或向下倾斜
  Enable seat cushion(front/rear) to incline upward/downward



水平电机 Dual output shaft motor

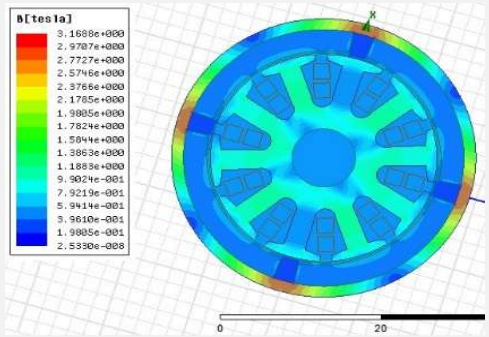
- 驱动滑道前后移动
  Enable track to move forward/backward
- 不同转速的快速响应
  Quick response at different rotational speed

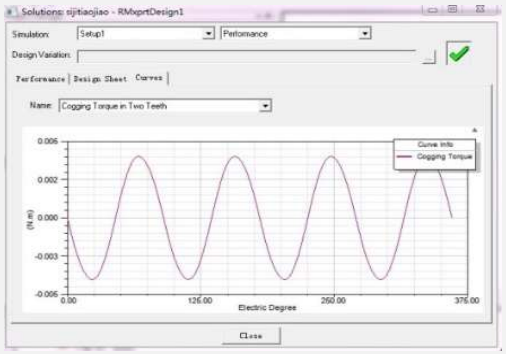
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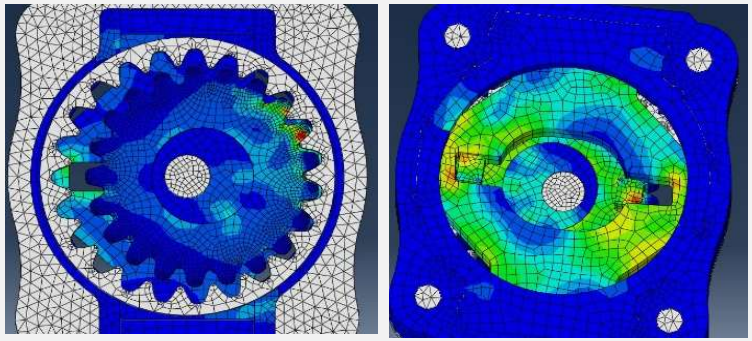
研发能力 R&D Capabilities

开发软硬件保证
R&D Software

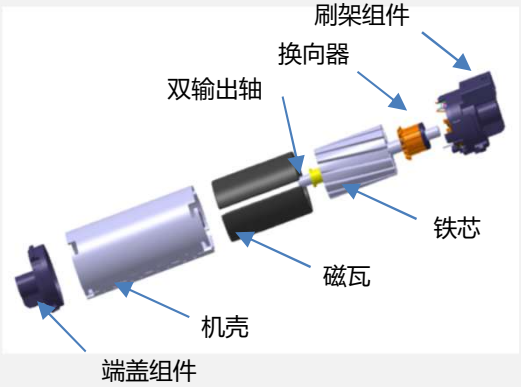
- **高效/安全的设计：基于FEA仿真的电机磁路计算&齿轮箱传动受力分析**
- Efficient/safe design: magnetic circuit calculation based on FEA simulation

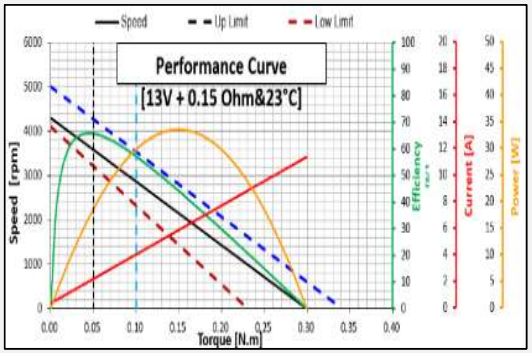




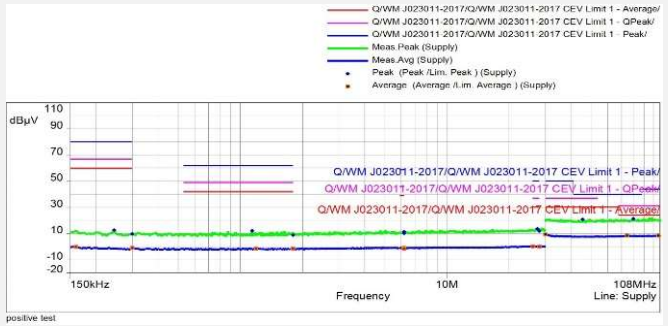


- **小型化/轻量化/低噪音/高品质的电机优化设计**
- Smalle/Lighter/designLow-noise/ high-qualit





- **可靠的EMC Level 3设计**
- Highest level EMC Level 3 design



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研发--试验能力 Testing Capabilities

配套设备专业，实验室设备如下
Supporting equipment is professional, laboratory equipment is as follows

海德NVH测试系统
Hyde NVH Test System
电机性能测试系统
Motor Performance Testing System
耐久实验台控制柜
Durable experimental control cabinet

静音室
Mute Room
高低温湿热试验箱
High Temperature Chamber
盐雾试验箱
Salt spray test chamber

其他设备如可编程电源、磁通计、示波器等。
Other equipment such as programmable power supply, fluxmeter, oscilloscope, etc.



试验内容包括：
testing contents include

- **电性能试验**
  Electrical performanc test
- **噪音试验**
  Noise test
- **热冲击试验**
  Thermal shock test
- **高温老化试验**
  High temperature aging test
- **寿命试验**
  Life test
- **腐蚀试验**
  Corrosion test
  ……

超过85%试验可内部完成
More than 85% of the tests can be completed internally.

制造--新产品试制能力 Prototyping Capabilities

追求更高的品质，电机样件制造能力
Pursuing Higher Quality and Prototyping Capabilities of Motor Samples







充磁机
Magnetizing apparatus



动平衡测试机
Dynamic balance machine



压装机
Press mounting machine



水冷机
Water cooler



绕线机
Winding machine



点焊机
Spot Welding machine



精车机
Automatic commutator cutting machine

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制造能力 Manufacturing Capabilities

全（半）自动化生产线，提供优质产品
Full(Semi) Automation Production Line, Providing high quality products

- **全自动化转子线和半自动化总成线**
  Automatic Rotor Line and Semi-automatic Assembly Line
- **西门子RFID进行工艺参数追溯上传**
  Siemens RFID for tracing and uploading process parameters
- **西门子1200系列PLC和KTP700系列工控机单总线方式控制**
  Siemens1200 series PLC and KTP 700 series IPC Bus Control
- **德国FESTO集中式阀岛控制**
  FESTO centralized valve island control
- **德国西克SICK和FESTO的位移和光电传感器**
  Displacement and Photoelectricity Sensors from SICK and FESTO
- **西门子伺服电机控制系统**
  Siemens Servo Motor Control System

转子自动装配线
Rotor Automatic Assembly Line



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制造能力 Manufacturing Capabilities

全（半）自动化生产线，提供优质产品
Full(Semi) Automation Production Line, Providing high quality products

在线无载测功



定子装配线



电机总成装配线



在线声音检测



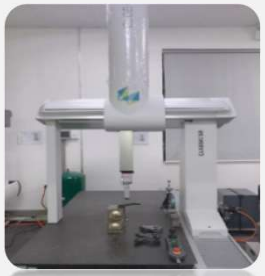
质量检验 Quality

一流的检验设备，精益求精

First-class testing equipment always endeavor to do it better

各种精度尺寸检测设备

Various types of precision dimension testing equipment



三坐标测量仪
three-coordinates measuring machine



圆度仪
roundness measuring equipment



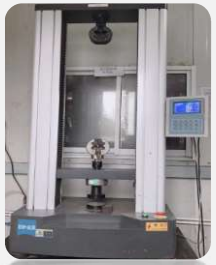
粗糙度仪
roughness tester



影像测量仪
Image measuring instrument

专业的辅助检测设备

Professional Auxiliary Testing Equipment



拉力机
Tensile machine



硬度计
Hardness tester



数显高度尺
Digital heighruler



数显高度计
Digital altimete



千分尺
Micrometer

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质量体系 Quality System

体系证书
System certificate



Certificate of Registration

nqa.

This is to certify that the Quality Management System of:

Chongqing Boerman Automotive Drive System Co., Ltd.
2F East Cross Area, Building 3, No. 196 Tongxing North Road, Tongjiaxi Town, Beibei District, Chongqing City, 400700, China
(IATF USI: PZLHWH)

applicable to:
The design and manufacture of seat motors

has been assessed and registered by NQA, Warwick House, Houghton Hall Park, Houghton Regis, Dunstable, LU5 5ZX, UK

against the provisions of:

IATF 16949:2016

This registration is subject to the company maintaining a quality management system to the above standard, which will be monitored by NQA.

Managing Director

NQA Certificate No: T200117
IATF Certificate No: 0522927
First Issue Date: 12 June 2024
Valid Until: 11 June 2027
Version: 1

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NQA is a trading name of NQA Certification Limited, Registration No. 09351756. Registered Office: Warwick House, Houghton Hall Park, Houghton Regis, Dunstable Bedfordshire LU5 5ZX, United Kingdom. This certificate is the property of NQA and must be returned on request.

Revision Date: Feb 2017 Page 1 of 1 Issue 5

IATF 16949：2016



CERTIFICATE OF ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATION
NO:61624E0147R0S

HEREBY CERTIFY

CHONGQING BORMAN AUTOMOTIVE DRIVE SYSTEM CO., LTD

UNIFIED SOCIAL CREDIT CODE:91500109MACDG15Y0R

REGISTERED ADDRESS: No. 196 Tongxing North Road, Tongjiaxi Town, Beibei District, Chongqing

PRODUCTION ADDRESS: 2F East Cross Area, Building 3, No. 196 Tongxing North Road, Tongjiaxi Town, Beibei District, Chongqing

The environmental management system meets the following standards

GB/T24001-2016 idt ISO14001:2015

Certification coverage

The design and manufacture of automotive seat motors and related management activities

The scope of this certificate only includes the places listed in the certificate. If the scope of coverage involves pre approval of administrative license and compulsory certification, it only covers the products and services within the scope of license qualification and compulsory certification certificate

Issued on: July 19,2024

This certificate is valid from July 19,2024 to July 18,2027

The certificated organization must be subject to regular supervision and audit and pass the audit before the certificate continues to be valid

Company representative (signature)

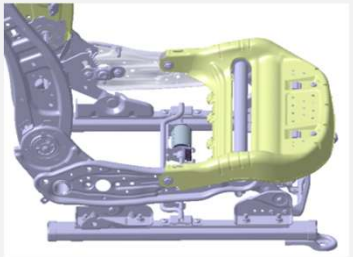
The information of this certificate can be found on the official website of Certification and Accreditation Administration of the People's Republic of China(www.cnca.gov.cn).
The validity and applicability of the certificate can be inquired from the issuing body website. (www.chinazjcc.com) or call: 0571-88095561;
Hangzhou Zijian Certification Co., Ltd.,
Room 207, Building 2, No. 108 Wenhui Road,
Gongshu District, Hangzhou City, Zhejiang Province, China.

ISO 14001:2015

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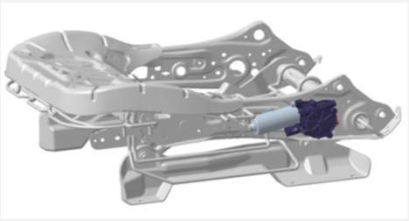
现有及在研产品 Current and in-progress products

水平电机 Dual output shaft motor



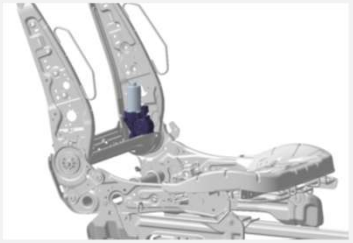


座椅抬升电机 Lift Motor



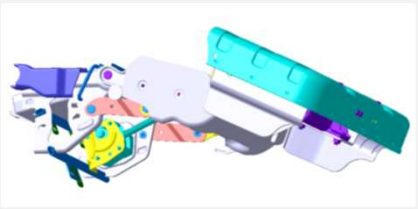


调角器电机 Recliner Motor





座椅倾斜电机 Tilt Motor





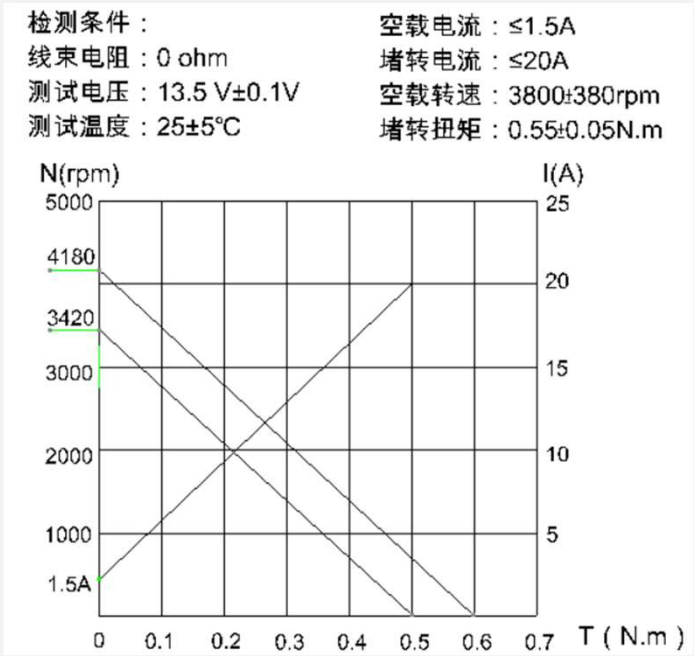
- 已有产品水平电机，抬升电机，调角电机，腿托电机。
- 平台化的设计降低成本，通过调整绕组，抬升、调角、倾斜共用一个电机。

产品介绍—水平电机 products

水平电机　BD381系列

测试电压：13.5V
空转电流：≤1.5A
空转转速：3800±380rpm
堵转电流：　≤ 20A
堵转扭矩：0.55±0.05N.m
噪　　音：＜38dBA
EMC：CISPR25　Level 3
重　　量：330g

Hall 测试数据：
Up：13.5V±0.1V
Rp= 182 ohm±1%
8V≤UL≤9.2V
11.8V≤UH≤13.2V
22mA≤IL≤30mA
2mA≤IH≤8mA
(IH typical 3.3mA)





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产品介绍—抬升电机 products

抬升电机　BL341系列

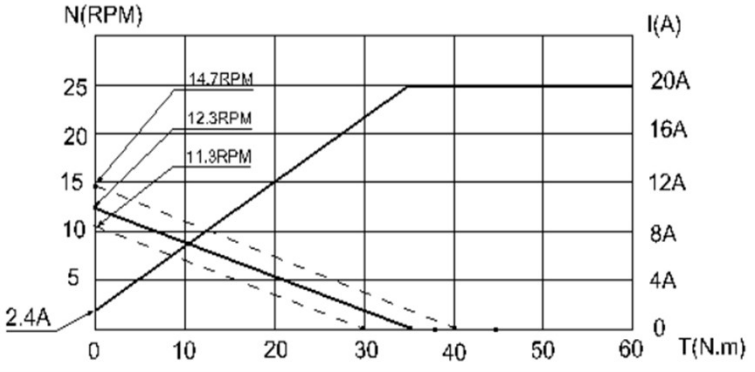
测试电压：13.5V
空转电流：≤2.4A
空转转速：13±1.7rpm
堵转电流：　≤ 15A
扭　矩：35±5N.m
噪　音：＜40dBA
EMC：CISPR25　Level 3
重　量：＜550g
破坏扭矩：＞200N.m

Hall 测试数据：
Up：13.5V±0.1V
Rp= 182 ohm±1%
8V≤UL≤9.2V
11.8V≤UH≤13.2V
22mA≤IL≤30mA
2mA≤IH≤8mA
(IH typical 3.3mA)



检测条件：
测试温度：25±3°
测试电压：DC13.5V±0.1V
线束电阻：0 ohm

空载电流：≤2.4A
空载转速：13±1.7RPM
堵转扭矩：30-40N.m
堵转电流：≤20A
三向合成加速度值：≤5m/s²



输出齿轮（mm）	
齿轮类型	Z1
法向模数Mn	2
齿数Z	8
法向压力角alfn	20
变位系数x	0.4
螺旋角betas	0
分度圆直径d	16
齿顶圆直径da	21.6 0/-0.3
齿根圆直径df	12.6 0/-0.15
法向齿厚sn	3.724 0/-0.04
量棒直径dm	5
跨棒距mdk	25.684 0/-0.077
齿顶倒圆rhoap	0.4
齿根倒圆系数rhofp	0.38
精度等级DIN3962	10

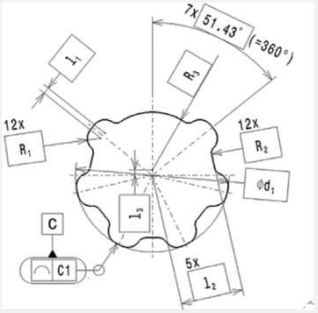
产品介绍—调角电机 products

调角电机　BR341系列

51.5mm

接插头定义：
TYCO ： 2035077-1
FCI：30236652
SUMITOMO：6098-2830





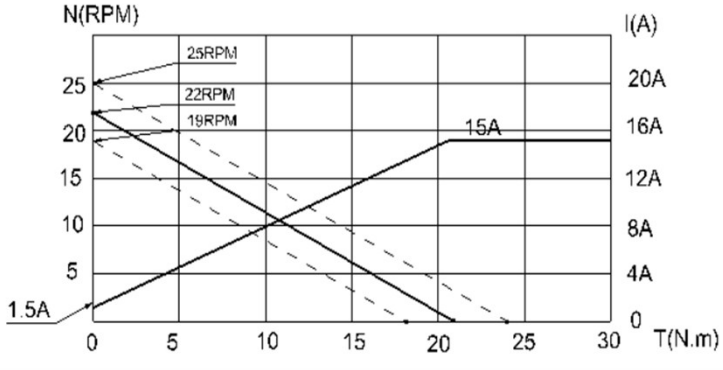
Version	d_1	l_1	l_2	l_3	R_1	R_2	R_3	c_1[SC]
2	∅ 10.28	0.44	4.18	0.36	R 0.9	R 0.5	R 3.86	0.06

测试电压：13.5V
空转电流：　≤ 1.5A
空转转速：22±3rpm
堵转电流：　≤ 15A
堵转扭矩：21±3N.m
噪　音：＜40dBA
EMC：CISPR25　Level 3
重　量：＜420g

Hall 测试数据：
Up：13.5V±0.1V
Rp= 182 ohm±1%
8V≤UL≤9.2V
11.8V≤UH≤13.2V
22mA≤IL≤30mA
2mA≤IH≤8mA
(IH typical 3.3mA)

检测条件：
测试温度：25±3°
测试电压：DC13.5V±0.1V
线束电阻：0.15 ohm

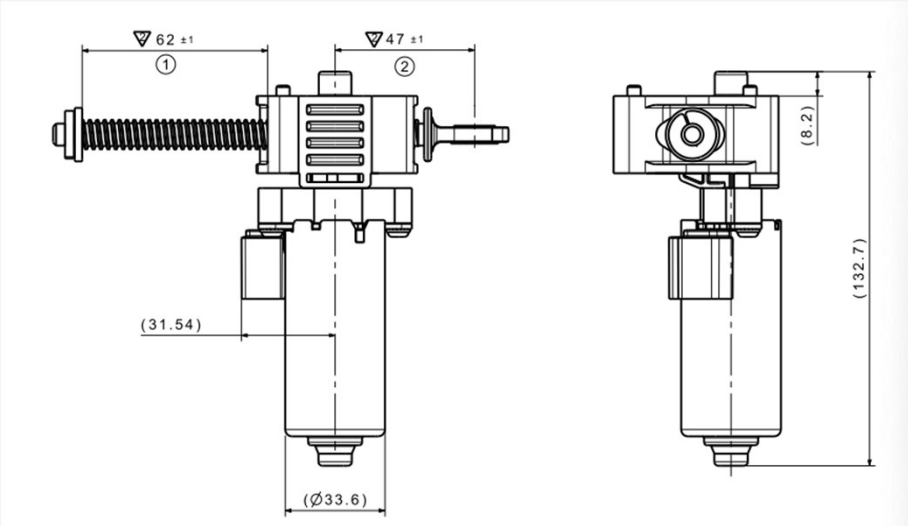
空载电流：≤1.5A
空载转速：22±3RPM
堵转扭矩：21±3N.m
堵转电流：≤15A
三向合成加速度值：≤5m/s²



BORMAN

产品介绍—倾斜电机 products

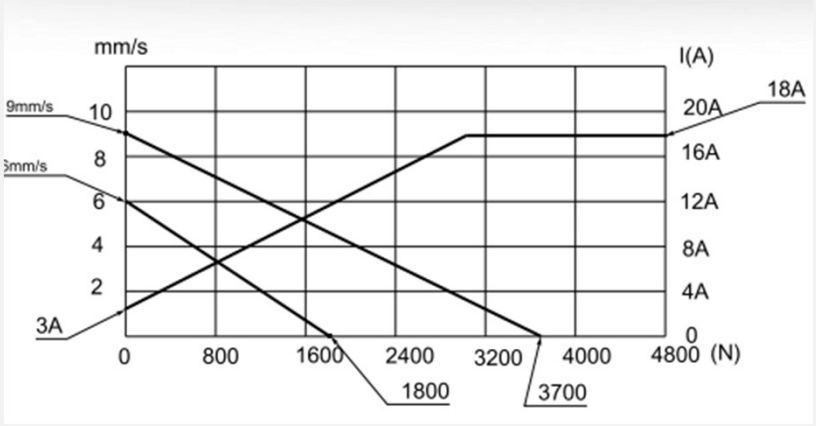
倾斜电机　BT341 系列





测试电压：13.5V
空转电流：　≤ 3A
空载线速度：7.5±1.5mm/s
堵转电流：　≤ 18A
堵转推力：2750±950N
噪　音：＜42dBA
EMC：CISPR25　Level 3
重　量：＜550g

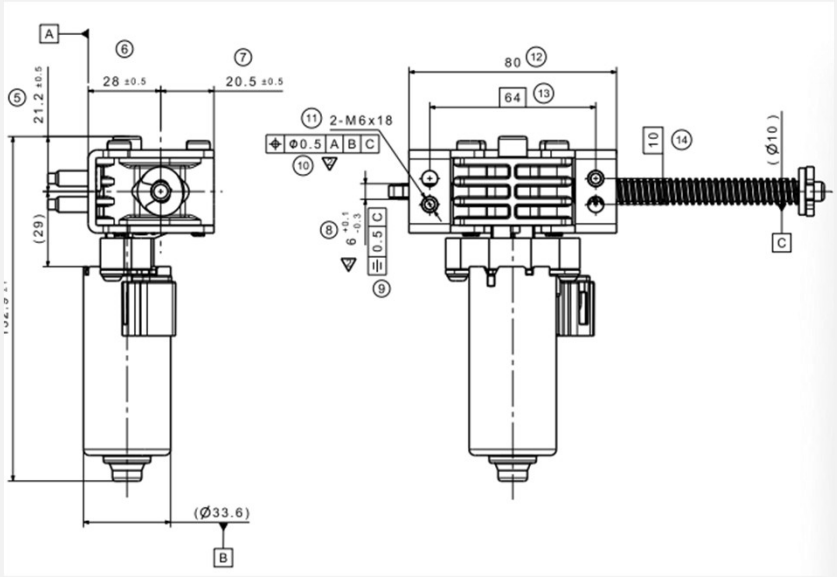
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Up：13.5V±0.1V
Rp= 182 ohm±1%
8V≤UL≤9.2V
11.8V≤UH≤13.2V
22mA≤IL≤30mA
2mA≤IH≤8mA
(IH typical 3.3mA)



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产品介绍—倾斜电机 products

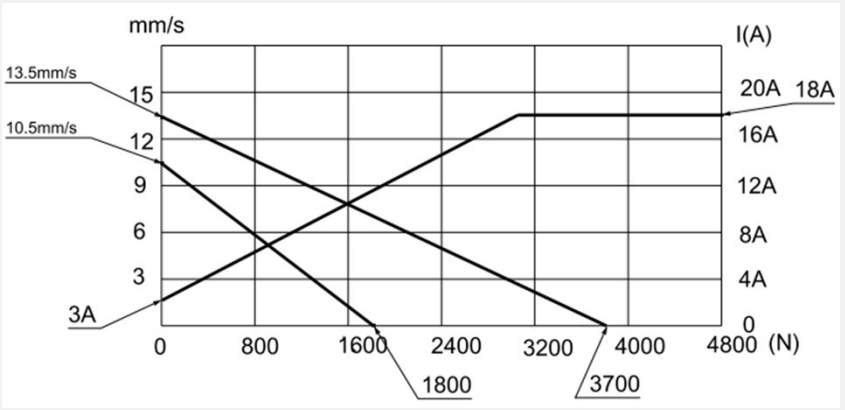
倾斜电机　BT342 系列





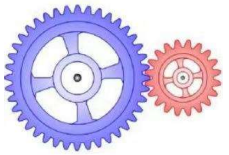
测试电压：13.5V
空转电流：　≤ 3A
空载线速度：12±1.5mm/s
堵转电流：　≤ 18A
堵转推力：2750±950N
噪　音：＜42dBA
EMC: CISPR25 Level 3
重　量：＜550g

Hall 测试数据：
Up：13.5V±0.1V
Rp= 182 ohm±1%
8V≤UL≤9.2V
11.8V≤UH≤13.2V
22mA≤IL≤30mA
2mA≤IH≤8mA
(IH typical 3.3mA)



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市场概况 Marketing



长安汽车 CHANGAN

比亚迪汽车 BYD

CHERY 奇瑞汽车

阿维塔

长安启源

深蓝汽车

上汽通用五菱 SGMW

FOTON 福田汽车

Sales Volume： 2024 60 million CNY,
2025 about 80 million CNY.


THANK YOU FOR WATCHING