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执行器行业数智创新者
A DIGITAL INTELLIGENCE INNOVATOR IN THE ACTUATOR INDUSTRY

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博普(山东)工程技术有限公司

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电动执行器 ELECTRIC ACTUATORS



WORLD-CLASS STANDARDS AND LOCAL CAPABILITIES

世界标准打造本土能力

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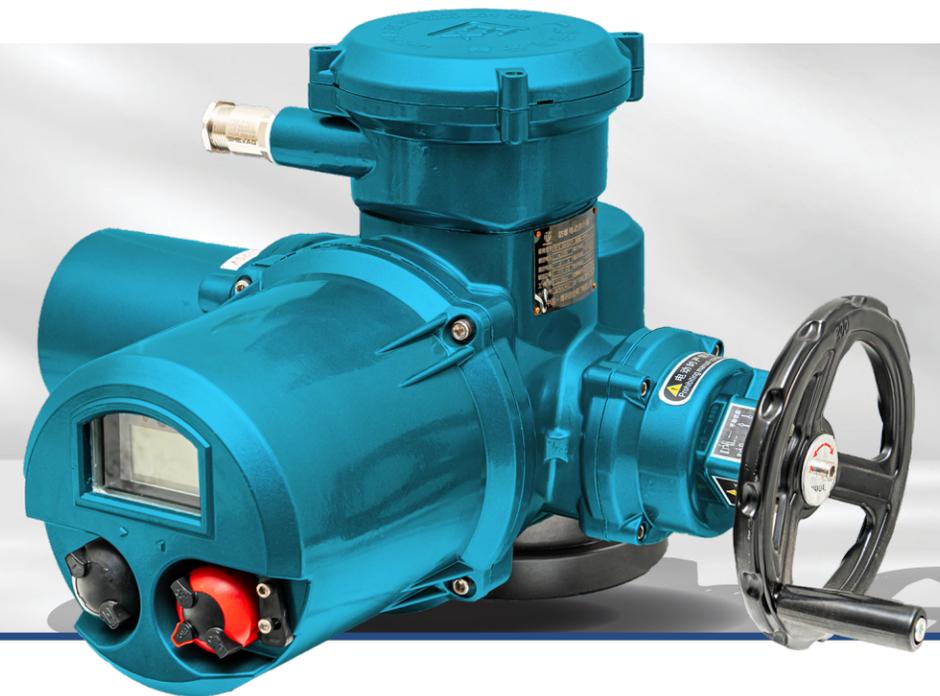
ELECTRIC ACTUATOR SYSTEM
电动执行器系统

ABOUT US

关于我们

保障客户生产更加高效、安全

Ensure That Customers' Production Is More Efficient And Safer



博普（山东）工程技术有限公司位于中国泉城—济南，专注于智能电动执行机构和气动执行器的生产销售。作为集研发、设计、制造、落地服务为一体的科研型生产企业。博普凭借卓越的技术创新和尖端的工艺制造，逐渐树立了可靠、专业、值得信赖的品牌形象。

在全球化战略创新上，与英国B&P公司深度合作，在业内率先引入“5G+工业+互联网”理念，为客户提供了“智能化整体解决方案”。在自身领先控制技术基础上，产品按照严格的工程标准而设计和生产。博普智能电动装执行器集各项优点，超大规模的数字集成，专业的数字力矩传感器和数字位移传感器、显示、智能、高效、人性化的结构设计等。

为了更好地服务客户，博普结合了多年现场应用经验，对技术和制造工艺进行全面升级，确保出厂产品质量更加稳定，产品性能更加可靠。公司拥有一整套完善的检验设备，每个产品从投入到产出，都经过严格的检验程序，确保产品质量稳定、性能可靠，以保障客户生产更加高效、安全。

目前公司已获得多项发明和实用新型专利，产品广泛应用于石油、化工、电力、冶金、市政和环保等专业领域。

Bopu (Shandong) Engineering Technology Co., Ltd. is located in Quancheng—Jinan, China, focusing on the production and sales of intelligent electric actuators and pneumatic actuators. As a scientific research production enterprise integrating R&D, design, manufacturing and landing services. With excellent technological innovation and cutting-edge manufacturing, Bopu has gradually established a reliable, professional and trustworthy brand image.

In terms of global strategic innovation, it has in-depth cooperation with United Kingdom B&P, and is the first in the industry to introduce the concept of "5G + industry + Internet", providing customers with "intelligent overall solutions". On the basis of its own leading control technology, the products are designed and produced in accordance with strict engineering standards. Bopu intelligent electric actuator combines various advantages, ultra-large-scale digital integration, professional digital torque sensor and digital displacement sensor, display, intelligent, efficient and humanized structural design, etc.

In order to better serve customers, Bopu has combined years of on-site application experience to comprehensively upgrade the technology and manufacturing process to ensure that the quality of the factory products is more stable and the product performance is more reliable. The company has a complete set of perfect inspection equipment, each product from input to output, have undergone strict inspection procedures to ensure stable product quality and reliable performance, **So as to ensure that customers produce more efficient and safe.**

At present, the company has obtained a number of invention and utility model patents, and its products are widely used in petroleum, chemical, electric power, metallurgy, municipal and environmental protection and other professional fields.

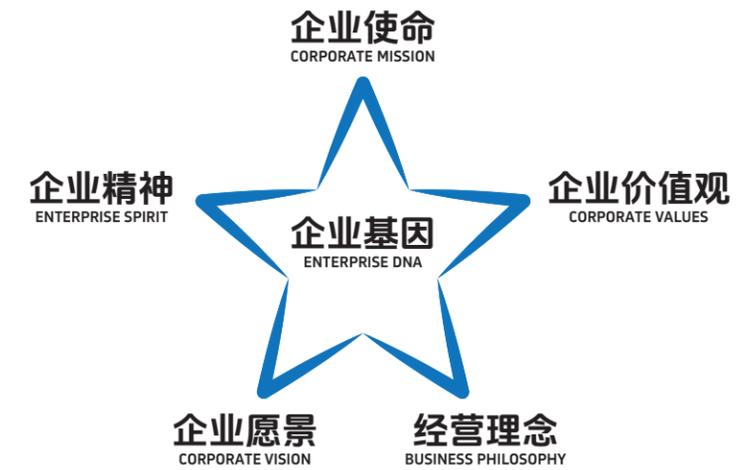


PART
01
企业简
COMPAN
执 / 行 / 器 / 行 / 业

CORPORATE CULTURE

企业文化

博普始终相信成就客户就是成就自己, 坚持以先进, 稳定的产品服务客户。
Bopu Always Believes That The Achievement Of Customers Is The Achievement Of Itself,
And Insists On Serving Customers With Advanced And Stable Products.



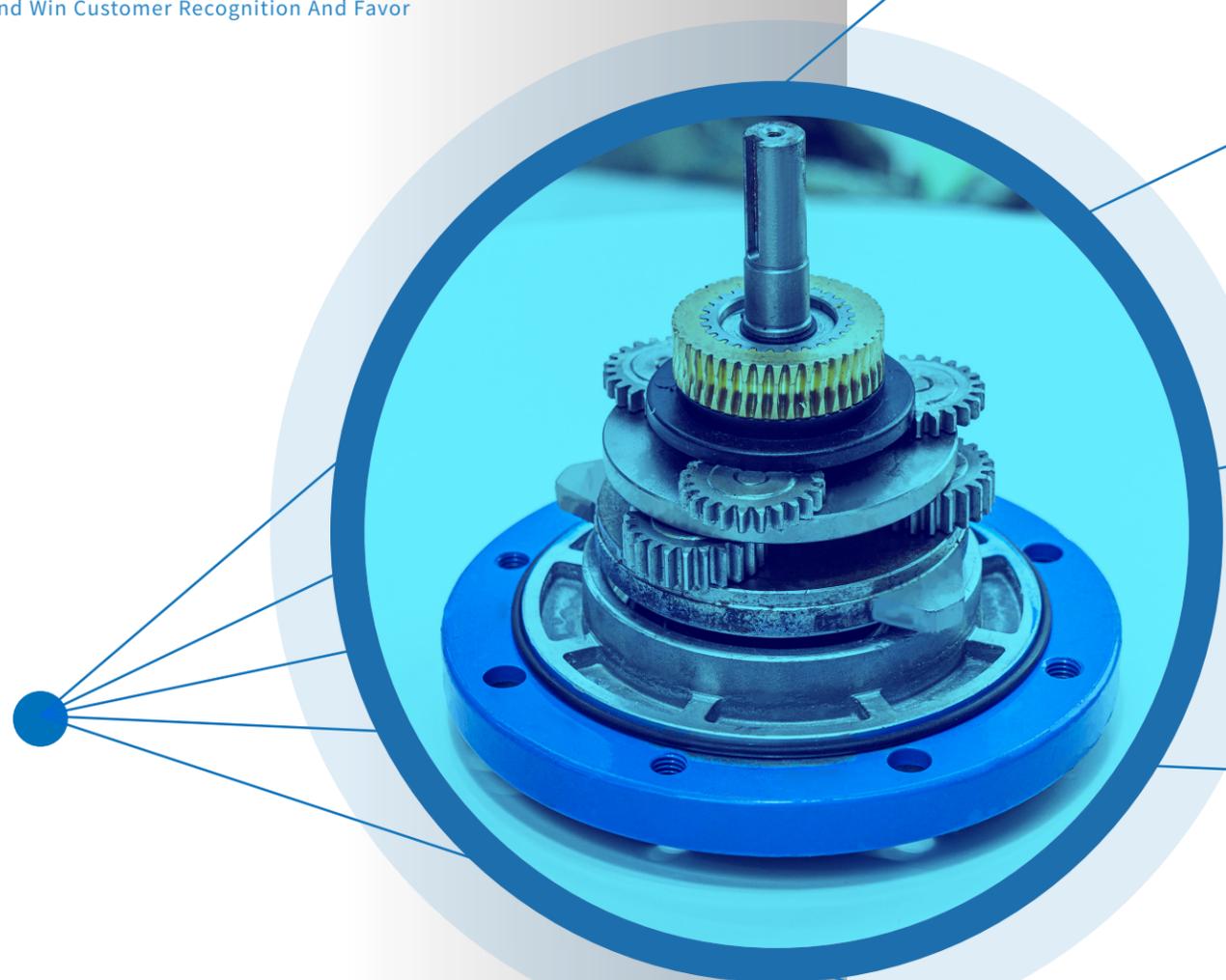
- 企业使命**
CORPORATE MISSION
 - 更智能-Smarter
 - 更安全-Safer
 - 更优质-Better quality
- 企业精神**
ENTERPRISE SPIRIT
 - 用心做服务-Attentive service
 - 踏实做产品-Make products steadfastly
- 企业愿景**
CORPORATE VISION
 - 成为客户值得信赖的合作伙伴-To be a trusted partner to our customers
- 经营理念**
BUSINESS PHILOSOPHY
 - 唯专唯精-Only specialization and refinement
 - 至诚至信-Sincerity and Faith
 - 为客户创造价值-Create value for customers
- 企业价值观**
CORPORATE VALUES
 - 卓越品质-Superior Quality
 - 普智创新-universal Innovation
 - 信赖共赢-Trust and win-win

COMPREHENSIVE ABILITY

综合能力

卓越技术服务赋能，赢得客户认可与青睐

Empower With Excellent Technical Services And Win Customer Recognition And Favor



设计研发

Design and development



生产智造

Intelligent production
manufacturing



勇于创新

Be innovative



品质保证

Quality Assurance



全程服务

Full service

HISTORY

发展历程

2014年

济南菲尼自动化技术有限公司成立

2014

Jinan Feini Automation Technology Co., Ltd. was established

2015年

上海锐川仪器仪表有限公司成立

2015

Shanghai Ruichuan Instrument Co., Ltd. was established

2023年

博普(山东)工程技术公司正式成立, 公司总部设在济南, 生产研发基地落户淄博

2023

Bopu (Shandong) Engineering Technology Co., Ltd. was formally established, the company is headquartered in Jinan, and the production and R&D base is located in Zibo

2023年

博普形成三大业务板块, 覆盖执行器、仪器仪表、阀门等多线产品

2023

Bopu has formed three major business segments, covering actuators, instrumentation, valves and other multi-line products

2024年

博普整合业务, 形成“研发、生产、销售、服务”全链路架构

2024

Bopu integrates business to form a full-link architecture of "R&D, production, sales and service".

在未来

.....

In the future

.....

ELECTRIC ACTUATOR SYSTEM

电动执行器系统

博普智能执行器目前涵盖电动执行器系统、气动执行器系统,可满足众多工业领域。作为勇于创新的企业,博普执行器系统更是引入5G万物互联概念,可助力客户实现远程监测及在线或终端设备上控制,客户不仅可以本地实时监测执行器的运行状态,还可以通过先进的网络技术,将数据上传至监控系统或管理者手机端,有助于系统控制调节执行器各项的工作状态,实现执行器的智能化发展。

Bopu intelligent actuators currently cover electric actuator systems, pneumatic actuator systems, which can meet many industrial fields. As an innovative enterprise, Bopu actuator system is the introduction of the concept of 5G Internet of Everything, which can help customers realize remote monitoring and online or terminal equipment control, customers can not only monitor the operation status of the actuator locally in real time, but also upload the data to the monitoring system or the manager's mobile phone through advanced network technology, which helps the system control and adjust the working status of the actuator and realize the intelligent development of the actuator.



PECULIARITY

产品特点

- 中英文语言选择 Chinese and English language selection
- 具有双速(变速慢关)功能 It has a two-speed (variable speed slow off) function
- 全面的数据记录 Comprehensive data logging
- 自诊断自适应功能 Self-diagnostic, adaptive features
- 运行中故障诊断功能 Fault diagnosis function during operation
- 电机过热保护 Motor overheating protection
- 瞬时反转保护 Instantaneous reversal protection



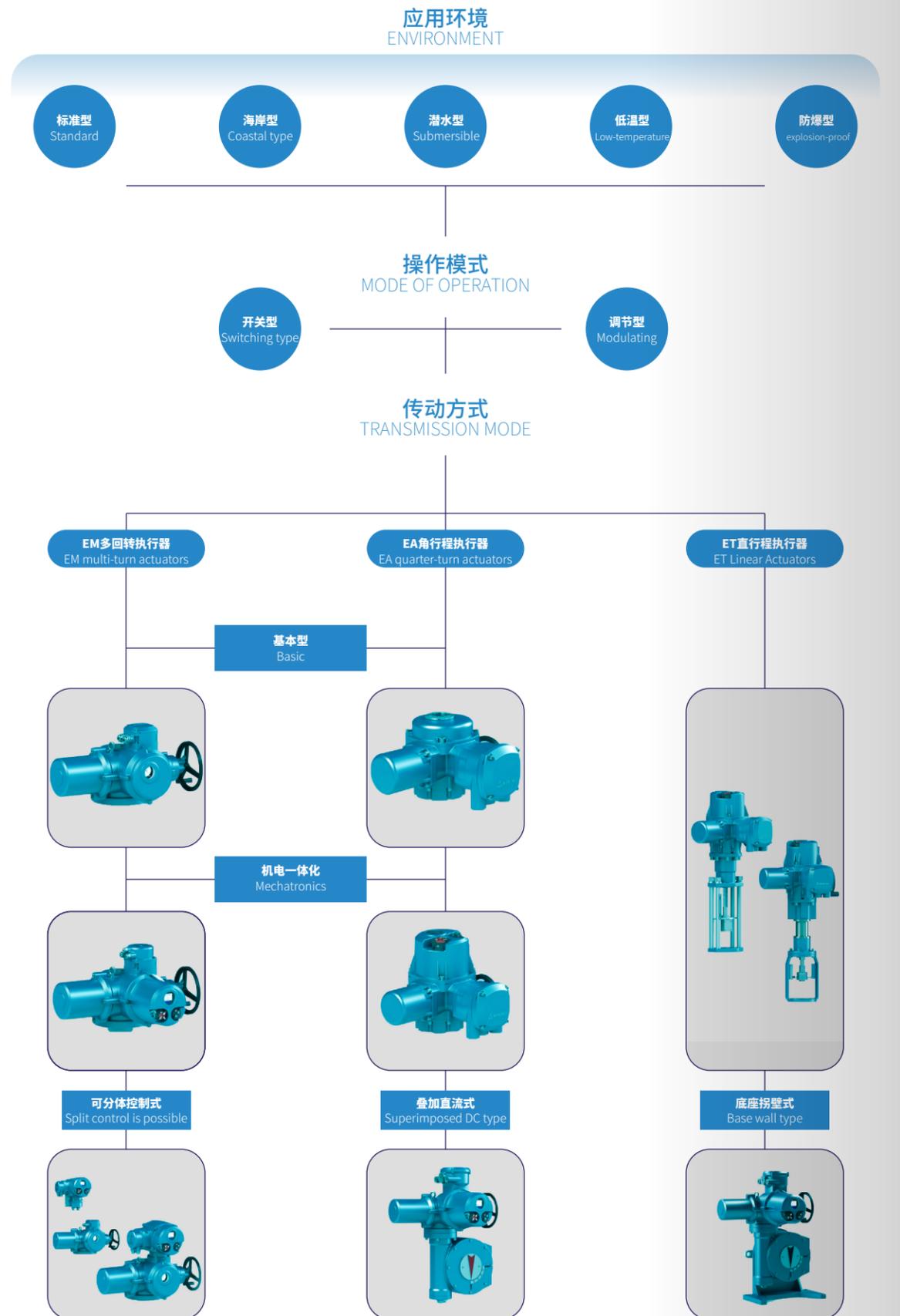
选择博普: Choose BoPo:

- >生产管理:采用6S精细化管理模式统筹生产和运维的各个环节
- >核心部件:以绝对值编码器和先进智能控制为主体
- >检测标准:对产品进行100%测试
- >认证体系:ISO国际质量认证体系;SIL3安全等级认证;NEPSI防爆认证

- > production management: 6s refined management mode is adopted to coordinate all aspects of production and operation and maintenance
- > Core components: high-end solenoid valves as the main body
- > Testing standard: 100% testing of the product
- > Certification system: ISO international quality certification system; SIL3 safety level certification; NEPSI explosion-proof certification

BP-E执行器产品范围

BP-E ACTUATOR PRODUCT RANGE



BP-E执行器主要技术参数

THE MAIN TECHNICAL PARAMETERS OF BP-E ACTUATOR

执行器功能配置 ACTUATOR FUNCTION CONFIGURATION	基本型	功能型	智能型
	BASIC	FUNCTIONAL	INTELLIGENT
非侵入免开盖调试 Non-intrusive commissioning	—	•	•
操作模式可选:开关型和调节型 Support open-close duty and modulation duty	—	•	•
控制方式具备:手动操作和电动控制 Support manual and electric control	•	•	•
防护等级:IP65~IP67(可选:IP68) Protection level: IP65-IP67 (optional: IP68)	•○	•○	•○
特殊环境要求:海岸、低温、潜水、防爆 Special environment: coastal, cool temperature, submersible, explosion-proof	○	○	○
端子式外部接线 External terminals	•	•	•
插件式外部接线 External plug-pull terminals	○	○	○
机械式行程限位保护+开度指示 Mechanical limit positioning and scale indication	•	—	○
绝对值编码器行程限位保护 Absolute encoder limit positioning	—	•	•
机械式力矩限位保护 Mechanical torque limit protection	•	•	•
智能电子式力矩限位保护 Electronic torque limit protection	—	—	•
远方/现场控制选择 Remote/Local control options	—	•	•
液晶屏显示运行状态 LCD status display	—	•	•
支持中英文双语 Chinese/English language options	—	—	•
电机缺相保护 Motor phase-loss protection	—	•	•
电机过热保护 Motor overheating protection	•	•	•
电机过载、短路、瞬时反转保护 Motor overload and short circuit protection	—	—	•
电子刹车((调节型) Electronic brake of modulation duty	—	—	•
相序自识别 Phase sequence self-identification	—	•	•
过压和欠压保护 Over-voltage and under-voltage protection	—	—	•
故障自诊断、实时运行参数记录和导出 Self-check, parameter recording and export	—	—	•
继电器信号输出 4 relay outputs	—	•	—
6组可组态继电器信号输出(选配:可扩展4组) 6 configurable relay outputs (optional: expandable 4 relay)4-20mA	—	—	•○
模拟量位置反馈信号输出 4-20mA analog output corresponding valve percentage	○	•	•
支持手持式红外线遥控器 Supports hand-held infrared intrinsically safe remote control	—	—	•
控制电气分体安装 Split installing of control part	—	—	○
断电阀位显示 Valve percentage display without power	—	—	○
现场总线控制(支持Modbus_RTU、Profibus_DP) Fieldbus control (supports Modbus_RTU, Profibus_DP)	—	—	○
物联网云平台远程控制及数据分析 Remote control and data analysis in cloud platform	—	—	○

注:“—”表示无此功能,“○”表示可选功能配置,“•”表示标准功能配置

BP-E执行器主要性能指标

THE MAIN PERFORMANCE INDICATORS OF BP-E ACTUATORS

项目 ACTUATOR FUNCTION CONFIGURATION		参数 INTELLIGENT
工作电源 Main Power	电压 Voltage	标准 Standard: 3-380VAC±10%; 特殊 Options: 3-220VAC --660VAc
	频率 Frequencies	标准 Standard: 50Hz ±5%; 特殊 Options: 60Hz±5%
环境温度 Ambient temperature		标准 Standard: -20°C~+60 °C; 特殊 Options: -45~°C~+ 70C
相对湿度 Relative humidity		≤95%(25°C),
大气压力 Atmospheric pressure		86kPa -106kPa
防护等级 Protection level		IP65, IP67, IP68
防爆等级 Explosion-proof level		ExdIBT4, ExdICT4, Exd I Mb
绝缘等级 Motor insulation level		F级
工作制式 Motor working duty		开关型 Open-Close Duty: S2-15min 调节型 Modulation Duty: S4-25%
启动频率 Starting frequency		开关型 Open-Close Duty: <360yh 调节型 Modulation Duty: 300/h, 600/h, 1200/h
触点容量 Relay contact rating		3A250AC, 3A 30VDC
开关量输入隔离电压 Discrete input isolation voltage		3750Vrms. 光耦隔离
模拟量输出 Modulation analog output		4-20mA DC24V
模拟量输出负载 Modulation analog output load		≤750Ω
调节型特殊参数 Modulation duty parameter	模拟量输入 Analog input	4-20mA
	采样精度 Sampling accuracy	0.1%
	模拟量输入模式 Analog input mode	光耦隔离 Optocoupler isolation
	模拟量输入隔离电压 Analog input isolation voltage	5000Vrms
	可调死区 Dead zone	0.1%~10%
启动最大电流 Max starting current		瞬间小于7倍额定电流 Less than 7 times the rated current instantly
断路器额定电流 Air circuit breaker rated current		额定电流不低于5倍执行器额定电流 Not less than 5 times the actuator rated current
现场总线 Fieldbus		支持请参考总线技术手册 Please refer to the fieldbus technical manual

BP-E执行器主要应用环境

THE MAIN APPLICATION ENVIRONMENT OF BP-E ACTUATORS

应用环境 APPLICATION ENVIRONMENT	安装位置 INSTALLATION LOCATION	防护等级 INGRESS PROTECTION
标准型 Standard	建筑物内部 Interior of the building	IP 56
	户外掩体下 Under outdoor cover	IP 67
	露天环境 Open-air environment	IP 67+加热器
海岸型 Coastal type	港口·码头 Ports and docks	IP 67+海洋防腐防护
潜水型 Submersible type	沉入水下6米深连续工作72小时 Submerged for 72 h at a depth of 6m	IP 67+加热器
低温型 Low-temperature type	低温至≤-40°C的场所 Places with low temperatures to ≤-40°C	IP 67+加热器

BP-E执行器有爆炸危险的环境

BP-E ACTUATORS HAVE AN EXPLOSION HAZARD ATMOSPHERE

防爆标志 EXPLOSION-PROOF SIGNS	类别 CATEGORY	代表性气体 REPRESENTATIVE GASES	防护等级 INGRESS PROTECTION
Ex d IBT4	除煤矿井下之外的 其他爆炸性气体环境用电气设备	乙烯 ETHYLENE	IP 67
Ex d ICT4	Except for underground coal mines Other electrical equipment for explosive atmospheres	氢气 HYDROGEN	
Ex d I Mb	煤矿井下电气设备 Underground electrical equipment in coal mines	甲烷 METHANE	

被强制执行的CNCA-C23-01标准(@防爆电气强制性产品认证), 具体明确了设备在爆炸危险环境下使用时应符合的条件;

The mandatory CNCA-C23-01 standard (@mandatory certification of explosion-proof electrical products) specifically specifies

the conditions that the equipment should meet when used in an explosion-hazardous environment;

BP-E防爆执行器符合表中列出的防爆等级

BP-E explosion-proof actuators meet the explosion-proof levels listed in the table



BP-E 执行器操作模式

BP-E ACTUATOR MODE OF OPERATION

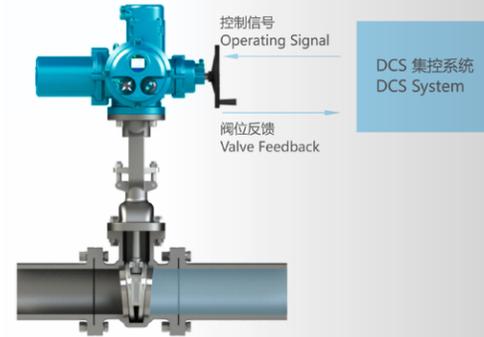
开-关型 ON-OFF TYPE

将一个或几个控制信号输入到系统中, 并对其施加影响的一个过程; 这种控制的特性是开环的, 在这一控制环路中, 输入的指令不受被控制的阀门的流量变化而影响;

BP-E 开-关型执行器, 电机为 S2-15min 短时工作制, 最大启动频率为 360 次/小时; 支持接收集控系统输出的非连续性信号, 并提供到位继电器反馈;

Sending one or more input control signals into a system and influences the system. And characteristics of this control are open-loop. Input command is not controlled by the changing flow of the valve

BP-E open-close duty actuator can be used for isolation duties of up to 360 starts per hour. Motor working duty is S2 short-time. It can support accept discontinuity signal from control system and provide relay feedback of position.



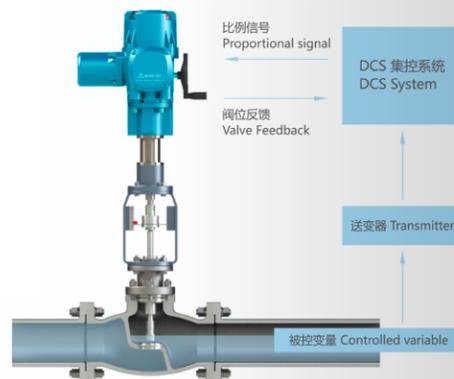
调节型 MODULATING TYPE

在控制过程中, 被控制的变量被连续不断地监视并同指令信号进行比较和修正, 以便保持希望得到的值; 这种控制的特性是闭环的, 在这一控制环路中, 被控制的变量不断地影响输入的控制指令本身;

BP-E 调节型执行器, 在中级负荷强度 S4-25% 负荷率下, 启动频率可达 1200 次/小时; 支持接收集控系统输出线性 4-20mA 电流信号, 并提供模拟量电流信号反馈。

During the control process, the controlled variable is continuously monitored and compared with the command signal in order to maintain the expected value. The characteristic of control is closed loop. And the controlled variable continuously affects the input control instruction.

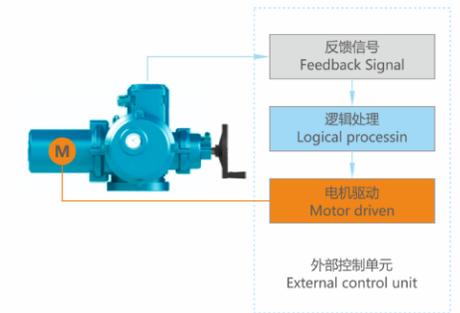
BP-E modulation duty actuator can be used for isolation duties of up to 1200 starts per hour under the 25% rated load. Motor working duty is S4. It can support accept 4-20mA signal from control system and provide 4-20mA feedback.



基本型 BASIC

电气和逻辑控制单元由外部提供。因此, 电机的启动和传感器提供的信息(行程限位、扭矩限位、过热等)都要有外部控制单元来处理。BP 可为用户提供标准的控制器, 或按用户要求设计、定制。

The electrical and logic control unit is provided externally. The start of motor and the feedback signal from sensors (position limit, torque limit, overheating) must be handled by an external control unit. BP can provide users with standard control unit, or special control unit according to user requirements.



一体化经济型(整体型) ALL-IN-ONE ECONOMY (MONOLITHIC)

在基本型的基础上集成了电气和逻辑控制单元, 直接处理来自远程控制系统的各种命令。拥有包括开关运行、安全保护、状态输出等功能, 并在液晶显示屏显示这些信息, 用于现场监控运行状态。此外, 还带有本地操作旋

On the basis of the basic version, an electrical and logic control unit is integrated, which directly processes various commands from the remote control system. It has functions including switch operation, safety protection, status output, etc., and displays this information on the LCD screen for on-site monitoring of the operation status. In addition, it has a local

按钮, 可实现现场控制及“本地-远程”控制的选择。BP 一体化经济型执行器, 可向控制系统输出 1 路 4-20mA 的模拟量位置反馈信号, 及 4 个开关量的状态反馈信号。

operation knob for on-site control and "local-remote" control. BP is an all-in-one economical actuator that can output one analog position feedback signal of 4-20mA and four switching status feedback signals to the control system.

一体化智能型 All-in-one intelligence

一体化智能型, 除具备经济型的功能外, 增加了双力矩保护、双语言界面、继电器组态输出、故障自诊断等功能, 并支持现场总线控制功能。

BP 一体化智能型执行器, 可向控制系统输出一路 4-20mA 位置反馈信号, 及 6

On the basis of the basic version, an electrical and logic control unit is integrated, which directly processes various commands from the remote control system. It has functions including switch operation, safety protection, status output, etc., and displays this information on the LCD screen for on-site monitoring of the

组可组态的开关量状态反馈信号; 现场总线控制(FCS)支持接收集控系统输出 Modbus_RTU 或 Profibus_DP 数字信号, 同时支持各类型硬件接口。

operation status. In addition, it has a local operation knob for on-site control and "local-remote" control. BP is an all-in-one economical actuator that can output one analog position feedback signal of 4-20mA and four switching status feedback signals to the control system.



BP-E系列智能型多回转执行器

BP-E SERIES INTELLIGENT MULTI-TURN ACTUATOR

BP专注于阀门电动执行器的研发和制造，雄厚强劲的技术研发能力，严谨先进的管理体制和质保体系，成熟完善的生产工艺，使产品在同行业中处于领先地位。

BP focuses on the R&D and manufacturing of valve electric actuators, with strong technical research and development capabilities, rigorous and advanced management system and quality assurance system, and mature and perfect production technology, so that the products are in a leading position in the same industry.

专为阀门执行器的应用而设计的三相电动机，采用具有启动转矩大和惯性低特性的电机，提高阀门的定位精度，绝缘等级为F级，并设有热保护。

The three-phase motor specially designed for the application of valve actuators, adopts a motor with the characteristics of large starting torque and low inertia, improves the positioning accuracy of the valve, and has an insulation grade of F and is equipped with thermal protection.

03

力矩保护(Torque protection)

双重力矩保护是BP-E智能执行器的全新技术亮点和突破，既设置了成熟、稳定的机械式力矩限位保护，同时又采用了智能电子式力矩；通过实时测量开阀或关阀过程中的扭矩变化，监控和保护电动机，进而保护执行器和阀门。充分体现了全方位的智能化技术和安全、可靠的承诺。

Double torque protection is a new technical highlight and breakthrough of BP-E intelligent actuator, which not only sets up mature and stable mechanical torque limit protection, but also adopts intelligent electronic torque; Monitor and protect the motor by measuring the torque change during valve opening or closing in real time, which in turn protects the actuator and valve. It fully embodies the commitment of all-round intelligent technology and safety and reliability.

行程控制(Stroke Control)

BP-E智能执行器采用24位绝对值编码器，通过测量阀门的行程来控制阀位。在电动和手轮操作时，均可对阀门位置进行测，无需使用电池或后备电源。绝对值编码器采用先进的边界防抖动技术，保证输出数据高速、稳定、可靠和抗干扰。

The BP-E smart actuator uses a 24-bit absolute encoder to control the valve position by measuring the stroke of the valve. Valve position can be measured in both motorized and handwheel operation without the use of batteries or backup power supplies. The absolute encoder adopts advanced boundary anti-shake technology to ensure that the output data is high-speed, stable, reliable and anti-interference.

BP-E智能执行器采用双层密封。非侵入式设计，防护等级标准为IP67，最高可达IP68。

BP-E intelligent actuator with double seal. Non-intrusive design, the standard for protection stop is IP67, up to IP68.

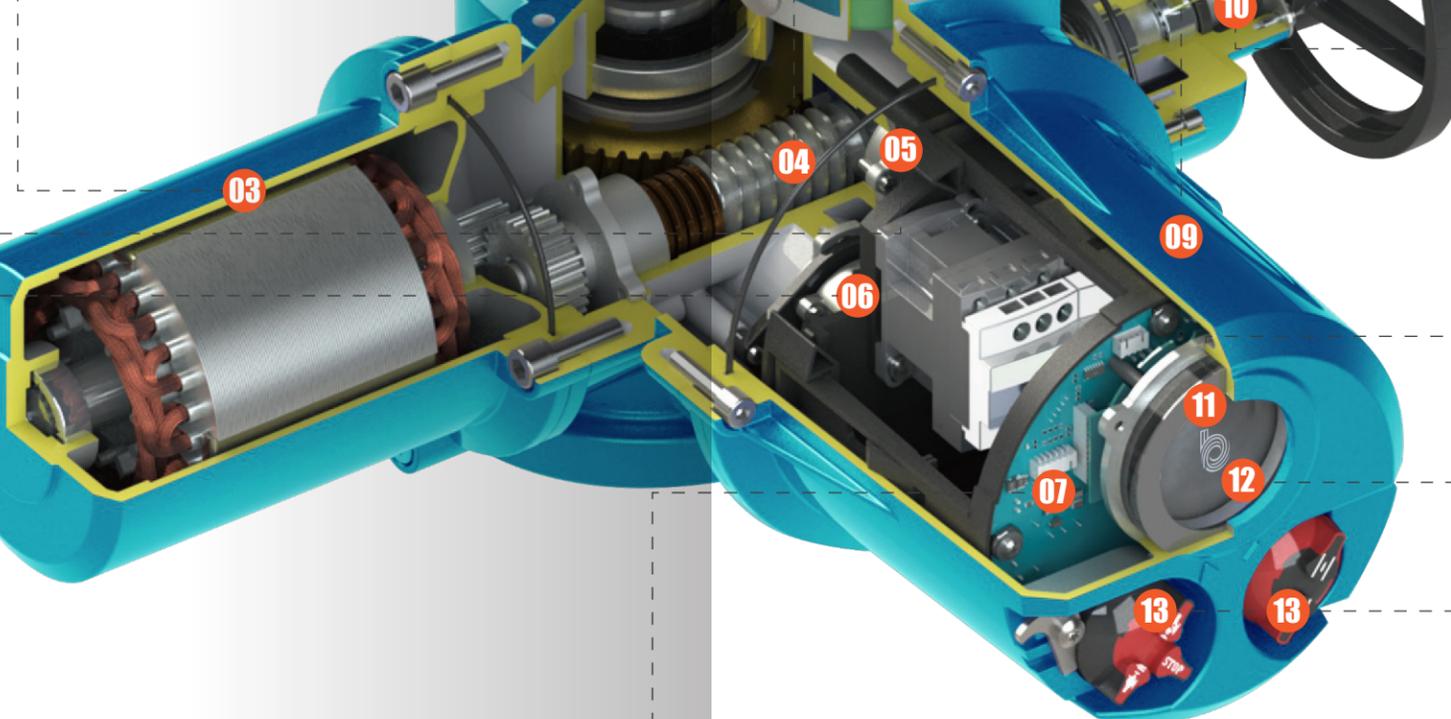
电缆导管入口(Cable guide):

标配(Standard) 2 x M24, 可选(Optional) 1x112NPT (G114PG-361、2x NPT(G 3%、PG-21'

耐用的齿轮组是由硬质合金钢蜗杆和青铜涡轮组成，它们浸在能延长其使用寿命的特级合成齿轮油中。齿轮传动装置是完全由轴承支撑的。

The durable gear set consists of a tungsten carbide steel worm and a bronze turbine that is immersed in a premium synthetic gear oil that extends its service life. The gearing is fully supported by bearings.

04



控制组件由控制、监视、保护模块组成。采用插接式连接，保证快速、无误地拆卸和更换。控制单元具备相序自识别、缺相、瞬时反转、过载、短路、过压、欠压、电子刹车(调节型)等保护，以及自我检测和诊断功能，同时可以提供实时运行参数并支持导出。

The control component consists of control, monitoring, and protection modules. Plug-in connections ensure quick and error-free disassembly and replacement. The control unit has phase sequence self-identification, phase loss, instantaneous reversal, overload, short circuit, overvoltage, undervoltage, electronic brake (adjustment type) and other protections, as well as self-detection and diagnosis functions, and can provide real-time operating parameters and support export.

06

07

双密封系统使防水接线端子把控制组件腔与外部接线腔隔离，即使是在现场接线期间移去端盖，控制组件也不会暴露在外面，确保内部元件受到保护。E系列智能型接线端子有二种：圆盘形端子(默认)和插接式端子(选配)。

The double sealing system isolates the control component cavity from the external wiring chamber so that the control assembly is not exposed even when the end cap is removed during field wiring, ensuring that the internal components are protected. There are two types of intelligent terminal blocks of the E series: disc terminal (default) and plug-in terminal (optional).



执行器采用合金铝压铸外壳，可根据工况环境需要喷涂不同保护涂料。

The actuator is made of alloy aluminum die-cast shell, which can be sprayed with different protective coatings according to the needs of the working environment.

采用电动优先的结构设计，设置了防止误操作的机械锁定机构，并确保在手动状态下自动切断电动机控制回路，以确保手动操作的安全性。

The electric priority structure is designed, and a mechanical locking mechanism is set up to prevent misoperation, and the motor control loop is automatically cut off in the manual state to ensure the safety of manual operation.

为应对执行器断电的情况。执行器可提供断电阀位显示(选配)，方便在失电状态下确认阀门当前位置。

In case of power failure of the actuator. The actuator can provide a power-off valve position display (optional) to facilitate confirmation of the current position of the valve in the event of a power failure.

控制面板人机界面液晶屏显示，提供当前执行器的实时状态信息和阀位信息；有中、英文可供选择。

The control panel has an LCD display of the man-machine interface, which provides the real-time status information and valve position information of the current actuator; Available in Chinese and English.

设置和诊断采用旋钮或红外遥控器，通过密封的指示窗口进行，而不必要现场移去机盖，暴露内部控制组件。

Setup and diagnostics are carried out via a sealed indication window using a rotary knob or IR remote control, without the need to remove the lid on site, exposing the internal control components.



现场控制开关可以提供执行器在现场控制状态下的开启，停止和关闭阀门的功能。远方/现场转换开提供切换执行器控制模式的功能。这些开关均采用了霍尔效应元件，通过磁感应实现信号的传输，开关与控制板不存在物理连接，保证了密封性和可靠性。

The field control switch can provide the function of opening, stopping and closing the valve of the actuator in the field control state. Remote/field switching provides the ability to switch actuator control modes. These switches all use Hall-effect components, which realize the transmission of signals through magnetic induction, and there is no physical connection between the switch and the control board, which ensures the sealing and reliability.

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BP-E执行器主要技术参数

THE MAIN TECHNICAL PARAMETERS OF BP-E ACTUATOR

编号 NUMBERING		单元定义 UNIT DEFINITION	
编码方式(Coding mode) : ① ② ③ ④ - ⑤ / - ⑥ - ⑧			
①	产品系列 PRODUCT RANGE	M	多回转 Multi-turn
		A	角行程 Part-turn
		T	直行程 Linear modulation
②	防爆需求 EXPLOSION-PROOF	T	一般环境不标注 No marked
		EX	有爆炸风险的环境 In explosive environments
③	额定转矩 RATED TORQUE		Kgf.m (*10 N.m) Kgf.m (*10 N.m)
④	额定转矩 RATED TORQUE		Jb2920转矩型不标注 No marked
		L	ISO5210推力型 Thrust type
		B1	ISO5210非推力型 Not thrust type ISO5210
		B4	非推力型 Not thrust type
⑤	额定转速 SPEED		r/min r/min
⑥	控制模式 WORKING DUTY		基本型不标注 Basic no marked
		S	非侵入式智能开关型 Intelligent open-close
		V	非侵入式智能调节型 Intelligent modulation
⑦	总线控制(可选) Filed Bus (Optional)	MDB	Modbus-RTU Modbus-RTU
		DP	PROFIBUS-DP PROFIBUS-DP
⑧	分体控制(可选) Spilt control (Optional)	FT	包含分体控制部件 With Spilt control part

BP-E执行器主要技术参数

THE MAIN TECHNICAL PARAMETERS OF BP-E ACTUATOR

BP-EM MULTI-TURN ACTUATOR

型号 MODEL 单位 UNIT	公称转矩 Torque N.m	输出转速 Speed R/min	电机功率 Power kw	额定电流 Current A	手动速比 Gear ratio I	最大阀杆直径 Max stem diameter kw	重量 Weight kg
BP-EM01	100	18	0.25	1.27	1:24	28	30
		24	0.37	1.87	1:16		
		36	0.55	2.79	1:12		
		48	0.75	3.26	1:16		
BP-EM01.5	150	72	0.75	4.40	1:12	28	33
		18	0.37	1.87	1:24		
		24	0.55	2.79	1:16		
		36	0.75	3.26	1:12		
BP-EM02	200	48	0.75	4.40	1:16	40	31
		72	0.75	5.70	1:12		
		18	0.55	2.79	1:24		
		24	0.75	3.26	1:16		
BP-EM03	300	36	0.75	4.40	1:12	40	33
		48	1.1	4.40	1:16		
		72	1.5	7.43	1:12		
		18	0.75	3.26	1:24		
BP-EM04.5	450	24	1.1	4.40	1:16	48	35
		36	1.1	5.70	1:12		
		48	1.5	7.43	1:16		
		72	1.5	9.12	1:12		
BP-EM06	600	24	1.5	4.40	1:24	48	37
		36	2.2	4.40	1:16		
		48	3.0	10.10	1:12		
		72	2.2	9.12	1:16		
BP-EM09	900	24	2.2	5.70	1:24	60	47
		36	3.0	7.43	1:12		
		48	3.0	11.05	1:16		
		72	4.0	13.25	1:12		
BP-EM12	1200	24	3.0	10.10	1:24	60	49
		36	3.0	11.05	1:16		
		48	4.0	13.25	1:12		
BP-EM18	1800	24	4.0	13.25	1:30	70	51
		48	5.5	15.19	1:15		
BP-EM025	2500	24	5.5	15.19	1:30	70	65
		48	7.5	20.72	1:15		
BP-EM035	3500	24	7.5	20.72	1:30	80	68

BP-E执行器主要技术参数

THE MAIN TECHNICAL PARAMETERS OF BP-E ACTUATOR

BP-EA Part-turn Actuator

型号 MODEL 单位 UNIT	公称转矩 Torque N.m	输出转速 Speed R/min	电机功率 Power kw	额定电流 Current A	手动速比 Gear ratio I	最大阀杆直径 Max stem diameter kw	重量 Weight kg
BP-EA01	100	0.5	0.06	0.65	1:88	20	11
BP-EA02	200	0.5	0.09	0.78	1:88	28	13
BP-EA03	300	0.5	0.12	0.86	1:88	28	13
BP-EA04	400	0.5	0.18	1.1	1:88	28	13
BP-EA06	600	0.5	0.18	1.1	1:74	20	25
BP-EA09	900	0.5	0.25	1.27	1:74	20	25
BP-EA012	1200	0.5	0.37	1.87	1:74	20	25
BP-EA018	1800	0.5	0.55	2.79	1:74	20	25

BP-EA quarter-turn actuator with gearboxes

型号 MODEL 单位 UNIT	公称转矩 Torque N.m	输出转速 Speed R/min	一级执行器 Power	电机功率 Motor power KW	额定电流 Current A	减速箱 Gearbox		重量 Weight kg
						型号 Model	速比 Ratio	
BP-EA030	3000	0.43	BP-EM02	0.55	2.39	D6	55:1	53
BP-EA040	4000	0.43	BP-EM03	0.75	3.26	D6	55:1	55
BP-EA050	5000	0.36	BP-EM03	0.75	3.26	D8	67:1	77
BP-EA080	8000	0.36	BP-EM04.5	1.1	4.18	D8	67:1	79
BP-EA0120	12000	0.3	BP-EM06	1.5	5.70	D9	81:1	95
BP-EA0160	16000	0.3	BP-EM09	2.2	7.43	D9	81:1	108
BP-EA0250	25000	0.31	BP-EM012	3.0	9.12	D10	78:1	135
BP-EA0320	32000	0.31	BP-EM018	4.0	11.05	D10	78:1	226
BP-EA0630	63000	0.29	BP-EM025	5.5	15.19	D11	82:1	235

BP-EA Part-turn Actuator

型号 MODEL 单位 UNIT	公称推力 Nominal Thrust N	整定转矩 Set the torque R/min	运行速度 Speed mm/s	最大行程 Maximum stroke mm	电机功率 Motor power kw	额定电流 Current rating A
BP-EA040	4000	30	0.5	40	0.06	0.65
BP-EA063	6300	40	0.5	40	0.09	0.78
BP-EA0100	10000	50	0.83	60	0.12	0.86
BP-EA0160	16000	80	0.83	60	0.18	1.1
BP-EA0250	25000	100	0.83	100	0.25	1.27

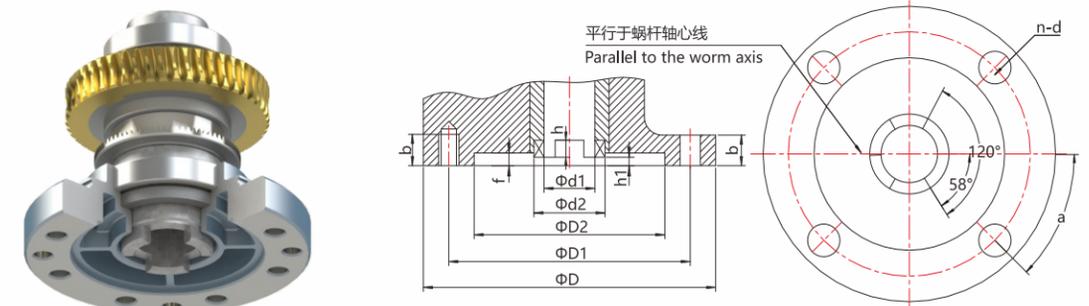
法兰结构及尺寸

FLANGE STRUCTURE AND SIZE

BP-EM法兰结构及尺寸

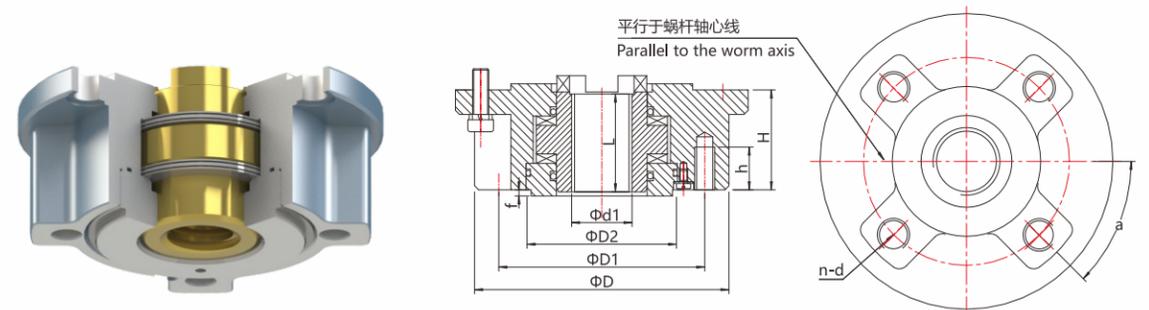
型号 MODEL	法兰 FLANGE	D	D1	D2	d1	d2	h	h1	f	b	n-d	a
BP-EM01/01.5	J2	145	120	90	30	45	8	2	5	12	4-M10	45°
	J2I	115	95	75	26	39	6	2	5	10	4-M8	45°
BP-EM02/03	J3	185	160	125	42	58	10	2	5	15	4-M12	45°
	J3I	145	120	90	30	45	8	2	5	12	4-M10	45°
BP-EM04.5/06	J4	225	195	150	50	72	12	2	5	20	4-M16	45°
BP-EM09/012	J5	275	235	180	62	82	14	3	6	25	4-M20	45°
	J5I	230	195	150	50	72	12	3	6	20	4-M16	45°
BP-EM018/025	J7	330	285	220	72	98	16	3	6	30	4-φ27	45°
BP-EM035	J8	380	340	280	82	118	20	3	6	35	8-φ22	22.5°

标准配置 The standard: JB2920



型号 MODEL	法兰 FLANGE	D	D1	D2	l	f	d1(max)	h	n-d	H	a
BP-EL01/01.5	F10/A	125	102	70	340	3	Tr28	20	4-M10	49	45°
BP-EL02/03	F14/A	175	140	100	60	4	Tr40	30	4-M16	56	45°
BP-EL04.5/06	F16/A	210	165	130	80	5	Tr48	30	4-M20	81	45°
BP-EL09/012	F25/A	300	254	200	85	5	Tr60	30	8-M16	83	22.5°
BP-EL018/025	F30/A	350	298	230	130	5	Tr70	30	8-M20	128	22.5°

可选配 Optional: ISO5210-A (GB/T12222-2005推力型 Thrust type)



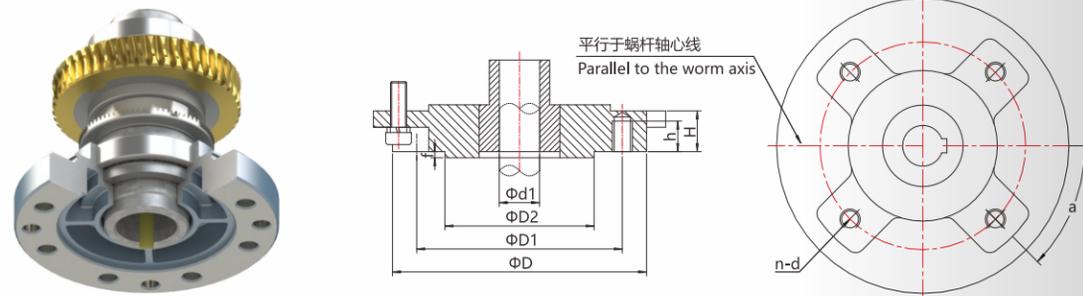
法兰结构及尺寸

FLANGE STRUCTURE AND SIZE

BP-EM法兰结构及尺寸

型号 MODEL	法兰 FLANGE	D	D1	D2	f	d1(max)	h	n-d	H	a
BP-EM01/01.5	F10/B4	125	102	70	3	φ20	15	4-M10	20	45°
BP-EM02/03	F14/B4	175	140	100	4	φ30	15	4-M16	25	45°
BP-EM04.5/06	F16/B4	210	165	130	5	φ40	20	4-M20	25	45°
BP-EM09/012	F25/B4	300	254	200	5	φ50	20	8-M16	30	22.5°
BP-EM018/025	F30/B4	350	298	230	5	φ60	20	8-M20	30	22.5°

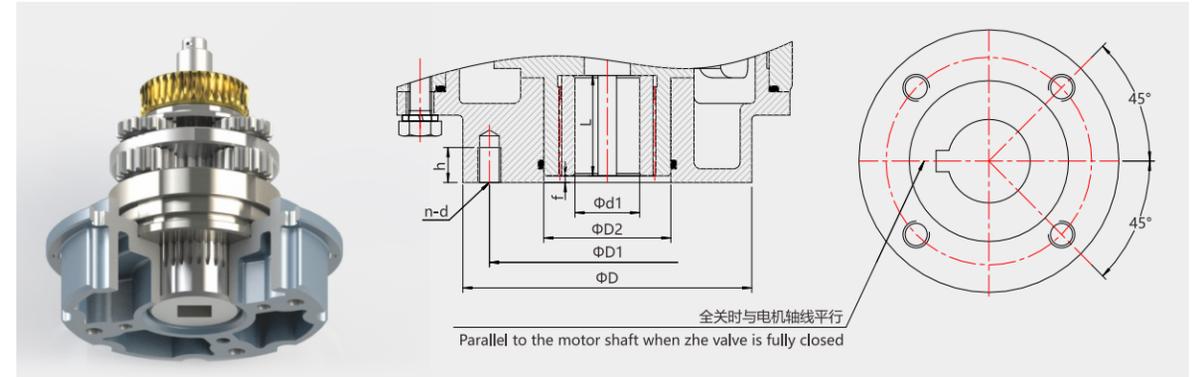
可选配Optional: ISO5210-B4(GB/T12222-2005)



法兰结构及尺寸

FLANGE STRUCTURE AND SIZE

BP-EA法兰结构及尺寸



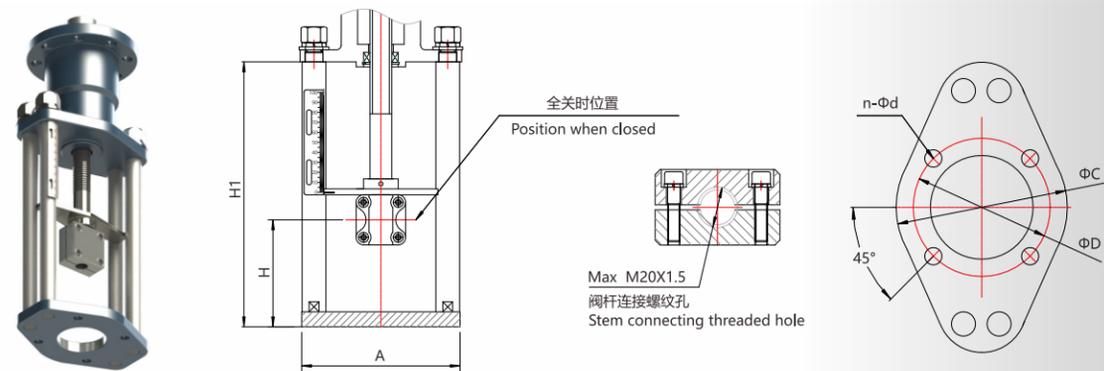
Note: 联轴轴套标准配置为实心, 由客户按需要自行加工, 但最大孔径不能超过表中d1所列尺寸。

Note: The coupling bushing is equipped with a solid core as standard, which can be machined by the customer as required, but the maximum bore diameter cannot exceed the size listed in D1 in the table.

BP-ET法兰结构及尺寸

型号 MODEL	H	H1	A	φC	φD	n-φd	M
BP-ET040	107	225	16B	100	80	4-10	Tr28
BP-ET063	107	225	168	130	105	4-12	Tr40
BP-ET0100	107	225	168	130	118	4-14	Tr48
BP-ET0160	107	225	168	130	118	4-14	Tr60
BP-ET0250	107	225	168	168	130	4-18	Tr70

可选配Optional: ISO5210-A (GB/T12222-2005推力型Thrust type)



型号 MODEL	法兰 FLANGE	φD	φD1	φD2	n-d	φd1(max)	L	f	h
BP-EA01	F05	65	50	35	4-M6	20	45	5	15
BP-EA02	F07	90	70	55	4-M8	28	45	5	15
BP-EA03	F10	125	102	70	4-M10	28	45	5	15
BP-EA04	F10	125	102	70	4-M10	28	45	5	15
BP-EA06	F10	125	102	70	4-M10	40	65	5	24
BP-EA09	F12	150	125	85	4-M12	40	65	5	24
BP-EA012	F14	175	140	100	4-M16	40	65	5	24
BP-EA018	F14	175	140	100	4-M16	40	65	5	24
BP-EA030	F16	210	165	130	4-M20	45	80	5	30
BP-EA040	F16	210	165	130	4-M20	45	80	5	30
BP-EA050	F25	300	165	200	8-M16	70	100	5	24
BP-EA080	F25	300	165	200	8-M16	70	100	5	24
BP-EA0120	F30	350	165	230	8-M20	90	105	5	30
BP-EA0160	F30	350	165	230	8-M20	90	105	5	30
BP-EA0250	F35	415	165	260	12-M20	105	125	5	45
BP-EA0320	F35	415	165	260	12-M20	105	125	5	45
BP-EA0630	F40	475	406	300	12-M20	130	160	8	54

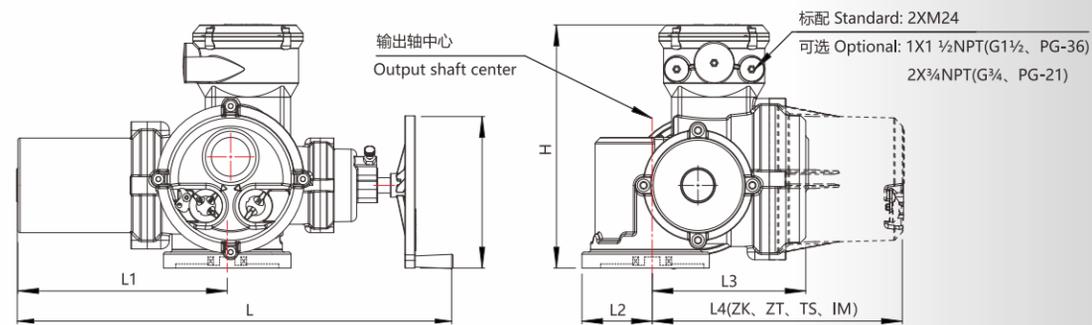
标准配置The standard: JB2920

法兰结构及尺寸

FLANGE STRUCTURE AND SIZE

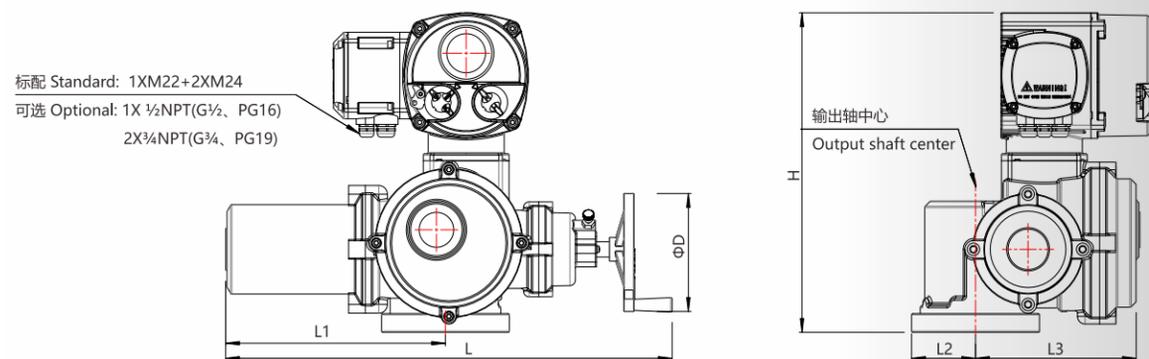
BP-EM电动执行器外形和结构尺寸

型号 MODEL	H	L	L1	L2	L3	L4	φD
BP-EM01/01.5	285	560	250	75	200	310	160
BP-EM02/03	335	640	300	95	245	385	200
BP-EM04.5/06	340	710	335	115	265	405	250
BP-EM09/012	350	795	390	135	285	425	250
BP-EM018/025	425	830	460	165	315	455	350
BP-EM035	425	865	495	165	315	455	350



BP-EM/FT可分体控制式电动执行器外形和结构尺寸

型号 MODEL	H	L	L1	L2	L3	φD
BP-EM01/01.5	300	560	250	75	200	160
BP-EM02/03	370	640	300	95	240	200
BP-EM04.5/06	375	710	335	115	265	250
BP-EM09/012	385	795	390	135	285	250
BP-EM018/025	465	830	460	165	315	350
BP-EM035	465	865	495	165	315	350

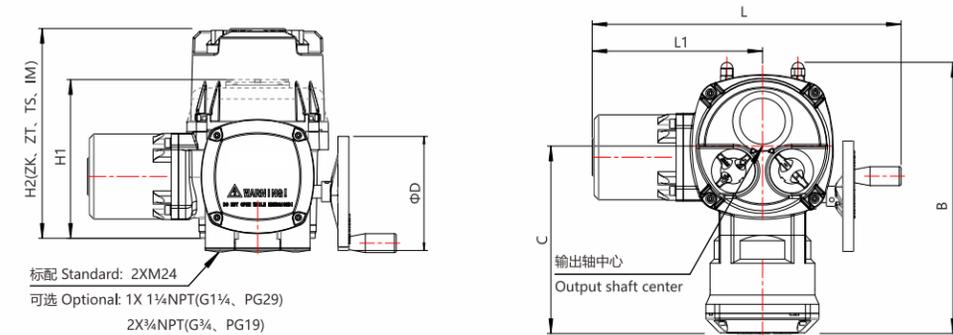


BP-E执行器主要技术参数

THE MAIN TECHNICAL PARAMETERS OF BP-E ACTUATOR

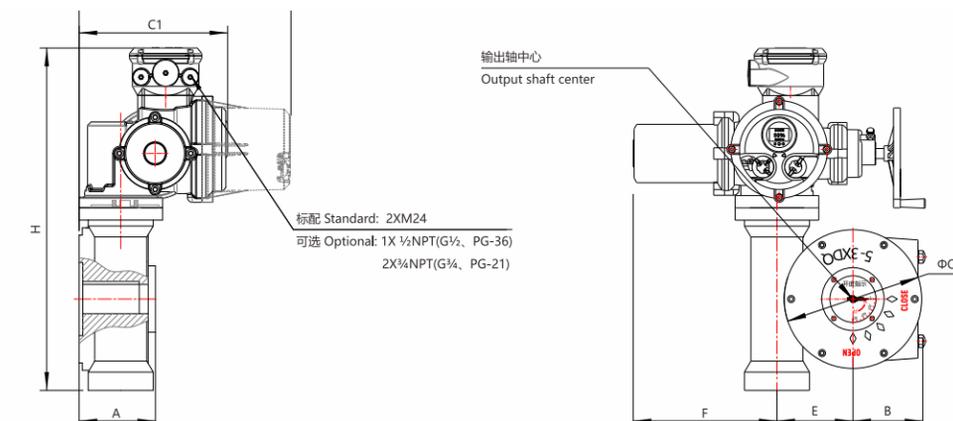
BP-EA电动执行器外形和结构尺寸

型号 MODEL	H1	H2	L1	L	B	C	φD
BP-EA01-02	175	230	190	340	245	205	160
BP-EA03-06	230	285	240	465	355	240	200
BP-EA09-018	227	310	232	500	350	203	250



BP-EA叠加式电动执行器外形和结构尺寸

型号 MODEL	变速箱 GEARBOX	H	A	C1	C2	B	E	F	φQ
BP-EA030	D6	645	121	340	480	135	128.5	340	270
BP-EA040	D6	645	121	340	480	135	128.5	340	270
BP-EA050	D8	730	150	340	480	165	154.5	340	330
BP-EA080	D8	735	150	380	520	165	154.5	375	330
BP-EA0120	b9	775	150	380	520	200	186.5	375	400
BP-EA0160	D9	785	150	420	560	200	186.5	405	400
BP-EA0250	D10	825	170	420	560	232.5	223	405	460
BP-EA0320	D10	900	170	480	620	232.5	223	370	460
BP-EA0630	D11	1035	205	480	620	285	276	370	580

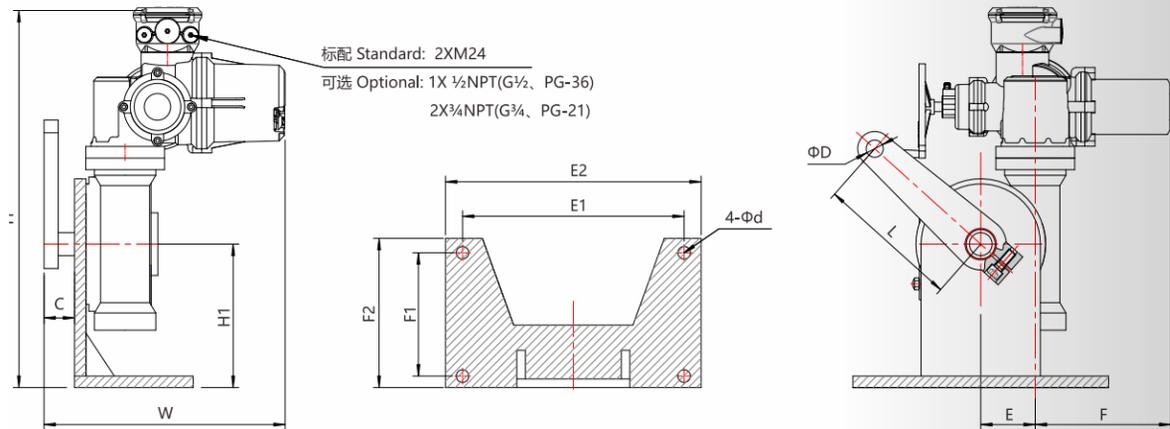


BP-E执行器主要技术参数

THE MAIN TECHNICAL PARAMETERS OF BP-E ACTUATOR

BP-EA底座式电动执行器外形和结构尺寸

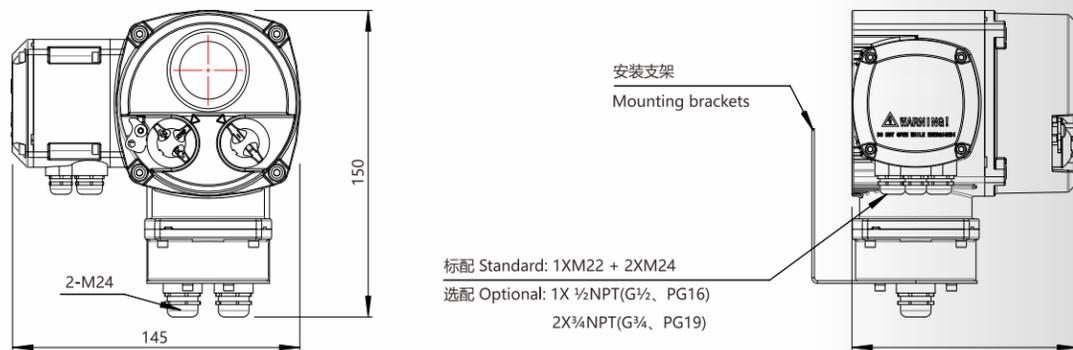
型号 MODEL	H1	C	F1	F2	E1	E2	E	F	L	φD	4-φd
BP-EA01-04	200	56	165	220	330	370	—	235	150	20	4-22
BP-EA06-018	230	56	165	220	330	370	—	285	200	20	4-22
BP-EA030	215	56	180	210	390	420	128.5	300	170	20	4-22
BP-EA040	215	56	180	210	390	420	128.5	300	170	20	4-22
BP-EA050	250	76	200	250	450	480	154.5	300	170	30	4-22
BP-EA080	250	76	200	250	450	480	154.5	335	170	30	4-22
BP-EA0120	250	76	200	250	450	480	186.5	335	170	30	4-22
BP-EA0160	250	76	200	250	450	480	186.5	390	170	30	4-22
BP-EA0250	300	82	270	315	510	560	223	390	250	30	4-33



FT控制器外形和结构尺寸

以上产品参数如有国家或行业等标准规范,则按现行标准规范执行;其他按本公司企业标准执行;部分参数为近似值,仅供参考,如需详细参数信息,请咨询本公司技术部。

The above product parameters will be performed national or industry standards if national or industry standards exist. Otherwise will be performed company standards. Some parameters are approximate and are for reference only. For detailed parameters, please consult our technical department.



大综合服务体系

COMPREHENSIVE SERVICE SYSTEMS

客户需求

CUSTOMER NEEDS

及时响应客户对产品服务提出的任何需求,包括产品咨询,问题投诉和潜在新产品的需求等。

Respond to any customer needs for products and services in a timely manner, including product inquiries, problem complaints, and potential new product needs.

响应体系

RESPONSE SYSTEM

销售工程师、售后工程师负责

Sales engineer and after-sales engineer are responsible

第一时间受理客户售后需求,快速响应并解决使用突发问题,保障客户生产秩序。加强与客户的技术沟通对接,及时解答客户的有关关切。

Accept customer after-sales needs at the first time, quickly respond to and solve unexpected problems in use, and ensure customer production order. Strengthen technical communication with customers and answer customers' concerns in a timely manner.

质量监督体系

QUALITY SUPERVISION SYSTEM

销售工程师,技术经理负责

Sales engineer, technical manager is responsible

销售工程师、产品经理定期对客户所使用产品进行运行跟踪,监督产品使用质量,保障产品稳定运行,定期反馈客户使用满意度,提升产品竞争力。

Sales engineers and product managers regularly track the operation of the products used by customers, supervise the quality of products, ensure the stable operation of products, regularly feedback customer satisfaction, and enhance product competitiveness.

全生命周期的“三全”服务体系

THE "THREE-FULL" SERVICE SYSTEM OF THE WHOLE LIFE CYCLE

销售工程师、技术经理、售后工程师负责

Sales engineers, technical managers, and after-sales engineers are responsible

强化售前,售中,售后的“三全”服务,把服务贯穿在产品生产,使用和维护的全过程确保产品使用满意度。售前向客户全面提供产品介绍,技术咨询以及方案推荐;售中全程做好技术交流,技术跟踪和现场调研以确保所选产品满足客户现场的最佳使用;售后工程师24小时全速响应产品运行中遇到的问题并提出最优解决方案。全面、全程、全速为客户生产保驾护航。

Strengthen the "three full" services of pre-sale, in-sale and after-sale, and ensure product satisfaction through the whole process of product production, use and maintenance. Provide customers with comprehensive product introduction, technical consultation and program recommendation before sales; Do a good job of technical communication, technical tracking and on-site research throughout the sale to ensure that the selected products meet the best use of the customer's site; After-sales engineers respond to problems encountered in product operation 24 hours a day and propose the best solution. Comprehensive, full process and full speed escort for customer production.