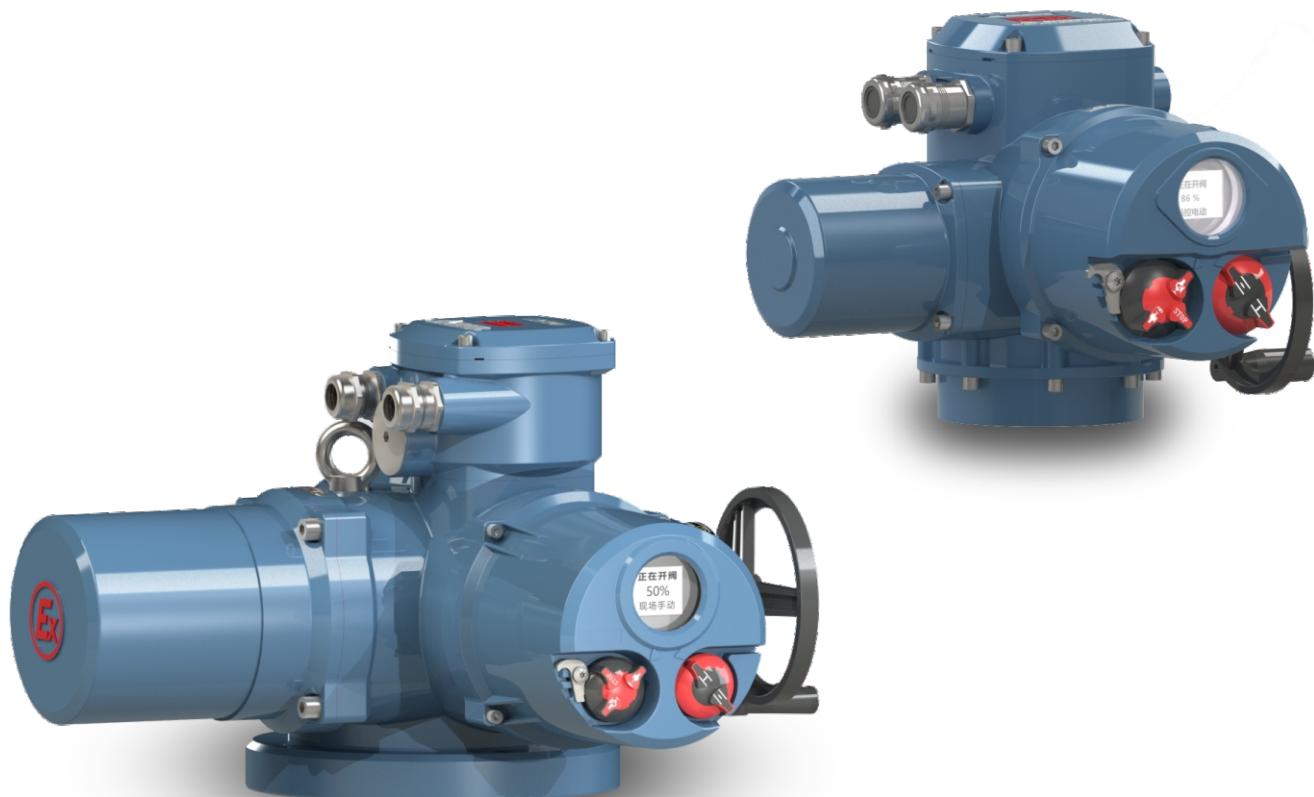


KROM®

专为中国市场的客户提供优质高端产品 专业的解决方案和一流的技术服务



» A系列 阀门电动执行器 Series A Valve Electric Actuators



ISO9001认证



ISO14001认证



CE 认证



我们是德国科隆集团 »

We are Germany KROM Group

KROM 创建于1948年，经过70多年的努力，KROM成为了全球执行器生产的领先者，是世界上最著名的阀门执行器生产厂家之一，其产品范围包括了电动、气动执行器、阀门定位器、限位开关、电磁阀等，具有优秀的性能及良好的性能价格比，广泛应用于化工系统、电力系统、石油天然气系统以及相关的其他工业领域，在帮助用户建立一个100%无泄漏系统中享有极高的声誉。

KROM was founded in 1948. After more than 70 years of efforts, KROM has become a world's leader for producing actuators. As one of the world's most famous manufacturers of valve actuators, we have such products as electric actuators, pneumatic actuators, valve positioners, limit switches, electromagnetic valves, etc. With excellent performance and good performance-price ratio, the products are widely applied in chemical systems, electric systems, oil and gas systems and other related industries, enjoying a high reputation while helping users to establish a 100% leakage-free system.



我们的宗旨 » Our Principle

■ 能力与多样性 Capacity and diversity

德国KROM集团成功地从事产品发展，设计和制造出符合客户特殊需求的系统解决方案，并提供令人满意的售后服务。

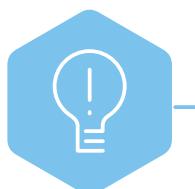
Germany KROM Group is successfully engaged in product development, design and manufacturing of system solutions that meet special needs of customers and providing satisfactory after-sales services.



■ 创新与质量 Innovation and quality

尽管经常专门研发高质量的标准解决方案并提供最好的解决方案，科隆集团有足够的理由为要求严格的客户提供更多。

While frequently and specially developing high-quality standard solutions and providing the best solutions, KROM Group has sufficient reasons to provide more for demanding customers.



■ 专业技能和合作关系 Professional skills and cooperation relationships

无论谁想要高质量地完成工作，都需要一个专业的有着可靠的能力和质量意识的合作伙伴。德国KROM集团就是这样的伙伴，它具有按DIN EN ISO 9001: 2000认证的质量保证体系，最大限度保证运转安全稳定性，受专业培训的安装人员，24小时零配件供货。

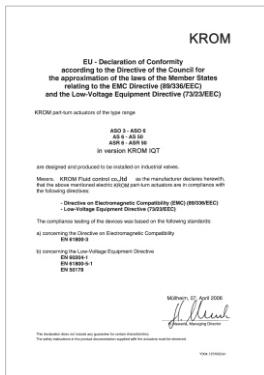
No matter who wants to finish a job with high quality, he needs a professional partner who has reliable capacity and a sense of quality. Germany KROM Group is such a partner. With our DIN EN ISO 9001: 2000 certified quality assurance system, we can guarantee safe and stable operation to the utmost extent. Our installation personnel have received professional training and the spare parts are supplied within 24 hours.



质量与证书 > Quality and Certificate

依据EN ISO 9001我们保证我们的执行器能够按照最高的质量标准完美运行，绝对可靠，甚至是在最恶劣的工况条件下。我们的专业人员以其深厚的专业知识能够确保产品的质量和用户的满意。

According to EN ISO 9001, we guarantee that our actuators will be able to operate perfectly in accordance with the highest quality standards with absolute reliability, even under the worst service conditions. Our professional personnel can ensure product quality and customer satisfaction with their profound expertise.



主要应用范围和工业领域 » Main Application Range and Industries

我们向全世界的用户提供最好的流体控制解决方案
We provide the best fluid control solutions for users throughout the world.

化学工业 Chemical industry

磷化工产品的储存和运输
Storage and transportation of phosphorus chemical products
通用化工过程 General chemical process
石化工业 Petrochemical industry
化肥工业 Fertilizer industry
煤化工 Coal chemical industry

01



电厂 Power plant

地热电厂 Geothermal power plant
煤电厂 Coal power plant
燃气电厂 Gas power plant
垃圾处理电厂 Garbage disposal power plant
供热厂 Heat supply plant
核电厂 Nuclear power plant

02



03



石油和天然气工业 Oil and gas industry

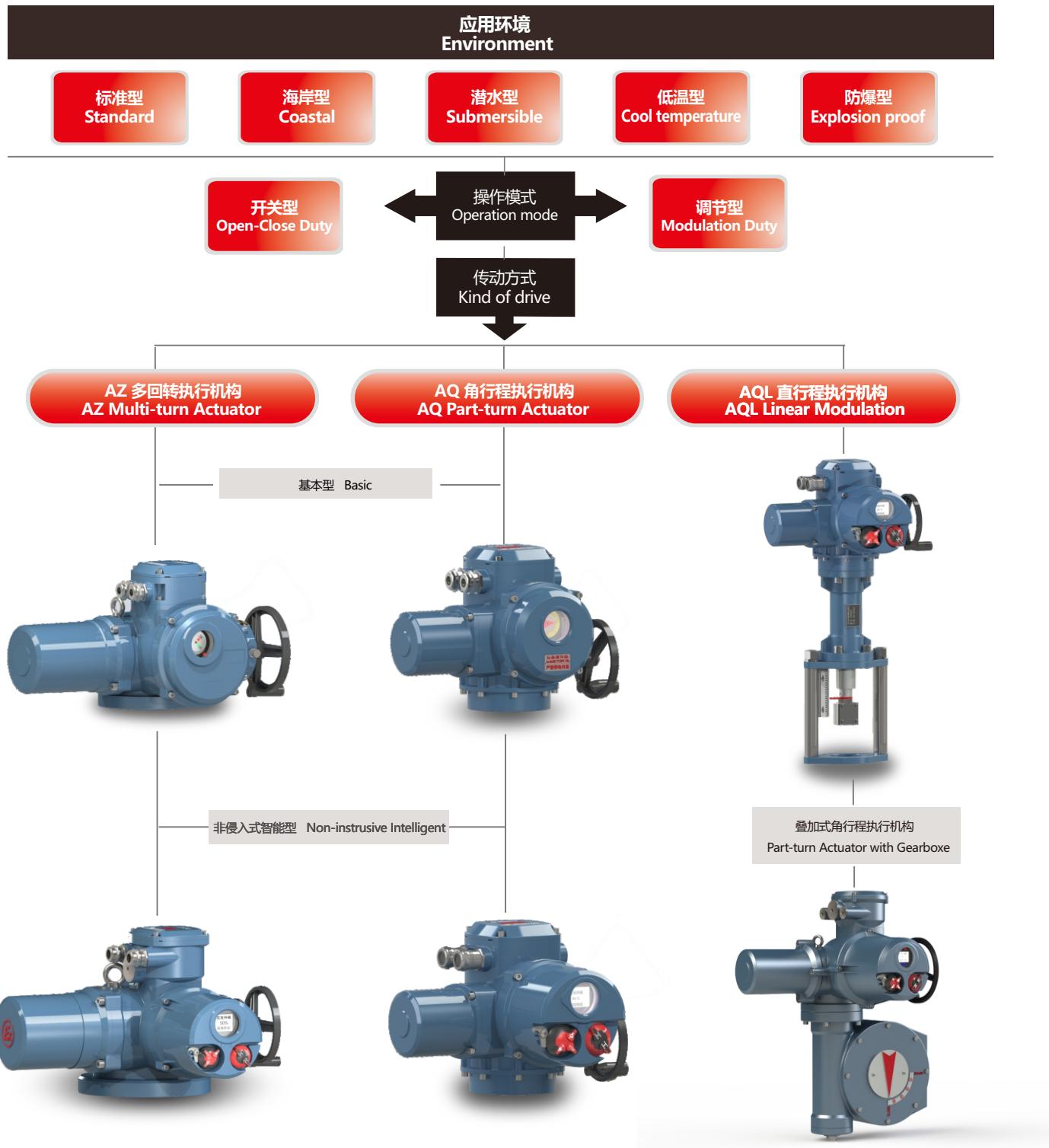
海上石油 Offshore oil
原油处理、储运、分送
Crude oil processing, storage and transportation
燃料油加工 Fuel oil processing
石化基本产品 Basic petrochemical products

水工业和环境保护技术
Water industry and environmental protection technology
水库 Reservoir
水处理 Water treatment
废水处理技术 Waste water treatment technology

04



A 系列电动执行机构产品范围 >> A series electric actuator product range



A 系列电动执行机构功能配置 »

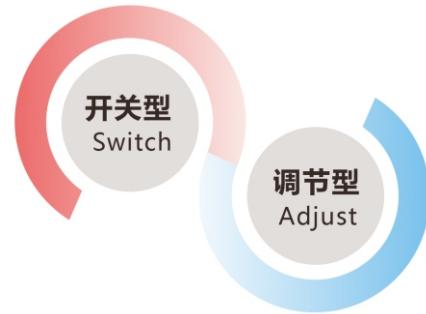
Function configuration of A Series electric actuator

| 功能配置 Function | 基本型 Basic | 整体型 Economic | 智能型 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) | • (o) | • (o) | • (o) |
| 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+角度指示 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 | — | — | • |
| 4组继电器信号输出 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) | — | — | • (o) |
| 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 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：“—”表示无此功能配置，“○”表示可选择功能配置，“•”表示标准功能配置
Note: “—” means no such function configuration, “o” means optional function configuration, and “•” means standard function configuration

A系列电动执行机构主要性能指标》

Main performance index of A series electric actuator



| 项目 Term | 参数 Parameter | |
|---|---|---|
| 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 ~ + 70°C | |
| 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 | Exd II BT4 | |
| 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 : <360/h 调节型 Modulation Duty: 300/h, 600/h, 1200/h | |
| 触点容量 Relay contact rating | 3A 250VAC, 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 | |



A系列执行机构应用环境 » A series of actuator application environment

| 应用环境 Environment | 安装位置 Installation location | 防护等级 Protection level |
|-------------------------|--|--|
| 标准型 Standard | 建筑物内部 Inside the building | IP 65 |
| | 户外掩体下 Under the shelter | IP 67 |
| | 露天环境 Outdoor | IP 67+加热器 IP 67+ heater |
| 海岸型 Coastal | 港口、码头 Port | IP 67+海洋腐蚀防护 IP 67+ Marine corrosion protection |
| 潜水型 Submersible | 沉入水下6米深连续工作72小时 Submerged for 72 h at a depth of 6m | IP 68+加热器 IP 68+ heater |
| 低温型 Cool temperature | 低温至≤ -40°C的场所 Cool temperature to ≤-40°C | IP 68+加热器 IP 68+ heater |



有爆炸危险的环境 » Explosion-proof

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

A 系列防爆执行机构符合表中列出的防爆等级

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;
A explosion-proof actuators meet the explosion-proof levels listed in the table

| 防爆标志 Ex-proof sign | 类别 Category | 代表性气体 GAS | 防护等级 Protection level |
|-----------------------|---|----------------|--------------------------|
| Exd II BT4 | 除煤矿井下之外的其他爆炸性气体环境用电气设备 Electrical equipment for all explosive gas environments except underground coal mines | 乙烯 Ethylene | IP 67 |
| Exd II CT4 | | 氢气 Hydrogen | |
| Exd I Mb | 煤矿井下电气设备 Electrical equipment in coal mine | 甲烷 Methane | |



A 系列电动执行机构操作模式 »

A series of electric actuator operating modes

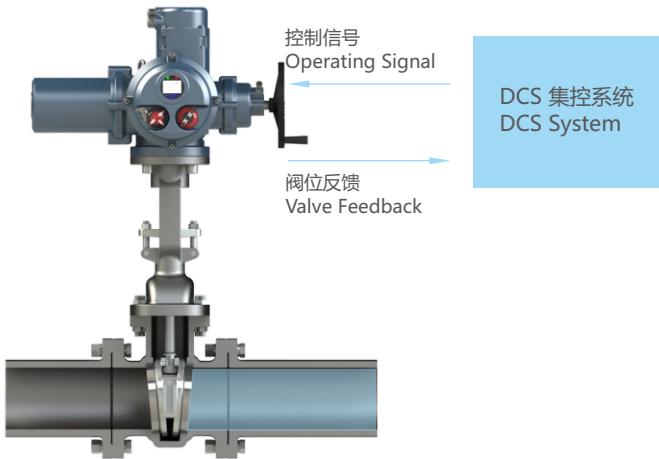
■ 开-关型 Open-dose duty

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；

SA3 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.

SA3 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.



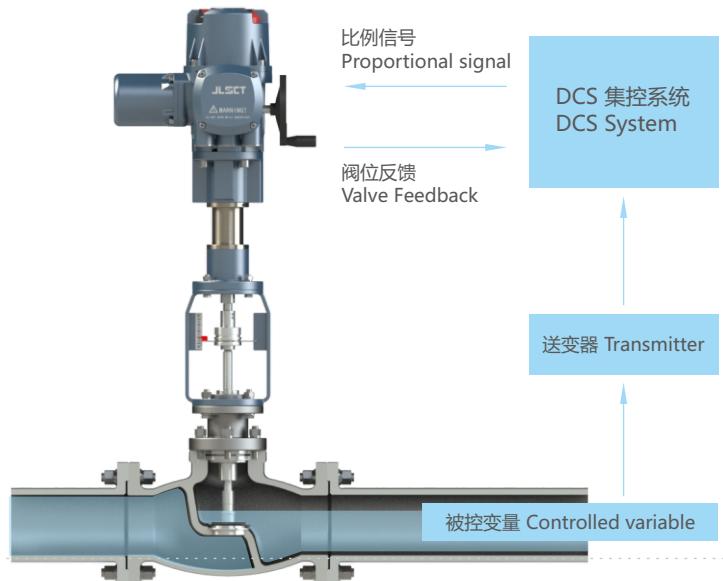
■ 调节型 Modulation duty

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；

SA3 系列调节型执行器，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.

SA3 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.



A 系列电动执行机构的控制选择 >

A series of electric actuator control selection

■ 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。KROM 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. KROM can provide users with standard control unit, or special control unit according to user requirements.

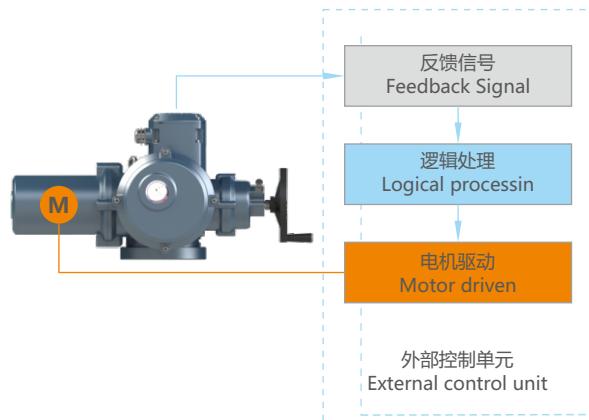
■ 一体化经济型 (整体型) Economic

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，还带有本地操作旋钮，可实现现场控制及“本地—远程”控制的选择。KROM一体化经济型执行机构，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。

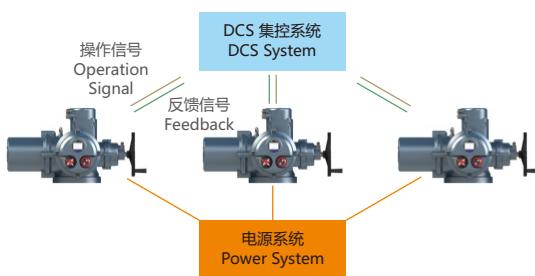
■ 一体化智能型 Intelligent

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。

KROM 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。

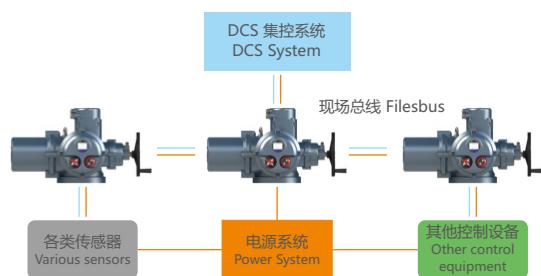


Economic actuator add electrical and logic control unit in the based of basic. It can directly accept control signal from remote control system. It has functions including switch operation, safety protection, status output. These information are displayed on the LCD screen for monitoring local control. In addition, it also has operation knobs, which can realize local control and select local or remote control mode. KROM economic actuator can offer 4-20mA valve feedback and 4 relay output to control system.



整体型和智能型常规集控模式
Economic and Intelligent actuator common DCS control mode

Intelligent actuator add extra functions in the based of economic. Including mechanical & electronic double torque protection, Chinese/English selection, relay configuration output, self-check and field-bus control. KROM intelligent actuator can offer 4-20mA valve feedback and 6 configuration relay output to control system. Field-bus control system (FCS) can support Modbus_RTU and Profibus_DP and different type of hardware interface.



智能型总线集控模式
Intelligent actuator field-bus control mode

电动执行器的产品型号说明 ➤ Product Model Description

1 2 3 4 - 5 / 6 - 7 - 8

1. 产品系列
AZ — 多回转
AQ — 角行程
ADQ — 叠加式角行程
AQL — 直行程

Sub-series:
AZ — Multi-turn
AQ — Part-turn
ADQ — Quarter-turn with gearboxes
AQL — Linear Modulation

2. 防爆需求
一般环境不标注
B — 有爆炸风险的环境

Explosion-proof
No Marked
B — In explosive environments

3. 额定转矩: kgf.m (* 10 N.m)
Rated torque:kgf.m (* 10 N.m)

4. 法兰接口
Jb2920 转矩型不标注
A — ISO5210 推力型
B1 — ISO5210 非推力型
B4 — ISO5210 非推力型

Flange connection
Jb2920 No marked
A — ISO5210 Thrust type
B1 — ISO5210 Not thrust type
B4 — ISO5210 Not thrust type

5. 额定转速: (单位: r/min)
Rated rotation speed: (unit:r/min)

6. 控制模式:
基本型不标注
ZK — 整体开关型 (一体化经济型)
ZT — 整体调节型 (一体化经济型)
IS — 非侵入式智能开关型
IM — 非侵入式智能调节型

Control type:
Basic no marked
ZK — Economic open-close
ZT — Economic modulation
IS — Intelligent open-close
IM — Intelligent modulation

7. 总线控制(可选)
RM — Modbus-RTU
RP — PROFIBUS-DP

Filed Bus(Optional)
RM — Modbus-RTU
RP — PROFIBUS-DP

8. 分体控制(可选)
FT — 包含分体控制部件

Spilt control(Optional)
FT — With Spilt control part

电动执行器的技术参数 >> Technical Parameters

AZ多回转执行机构 >> AZ Multi-turn actuator

| 型号 Model | 公称转矩 Torque | 输出转速 Speed | 电机功率 Power | 额定电流 Current | 手动速比 Gear ratio | 最大阀杆直径 Max. stem diameter | 参考重量 weight |
|-------------|----------------|---------------|---------------|-----------------|--------------------|------------------------------|----------------|
| 单位: Unit | N.m | R/min | Kw | A | 1 | Mm | Kg |
| AZ10 | 100 | 24 | 0.25 | 1.5 | 1: 30 | 28 | 30 |
| | | 36 | 0.37 | 2.1 | | | |
| | | 48 | 0.55 | 2.8 | | | 33 |
| | | 72 | 0.75 | 3.3 | | | |
| | | 96 | 1.1 | 4.4 | | | |
| AZ15 | 150 | 24 | 0.37 | 2.1 | 1: 30 | 28 | 31 |
| | | 36 | 0.55 | 2.8 | | | |
| | | 48 | 0.75 | 3.3 | | | 33 |
| | | 72 | 1.1 | 4.4 | | | |
| | | 96 | 1.5 | 5.7 | | | |
| AZ20 | 200 | 24 | 0.55 | 2.8 | 1: 28.5 | 40 | 33 |
| | | 36 | 0.75 | 3.3 | | | |
| | | 48 | 1.1 | 4.4 | | | 35 |
| | | 72 | 1.5 | 5.7 | | | |
| | | 96 | 2.2 | 7.4 | | | |
| AZ30 | 300 | 24 | 0.75 | 3.3 | 1: 28.5 | 40 | 35 |
| | | 36 | 1.1 | 4.4 | | | |
| | | 48 | 1.5 | 5.7 | | | 37 |
| | | 72 | 2.2 | 7.4 | | | |
| | | 96 | 3.0 | 11.3 | | | |
| AZ45 | 450 | 24 | 1.1 | 4.4 | 1: 26 | 48 | 47 |
| | | 36 | 1.5 | 5.7 | | | |
| | | 48 | 2.2 | 7.4 | | | 49 |
| | | 72 | 3.0 | 11.3 | | | |
| | | 96 | 4.0 | 13.3 | | | |
| AZ60 | 600 | 24 | 1.5 | 5.7 | 1: 26 | 48 | 49 |
| | | 36 | 2.2 | 7.4 | | | |
| | | 48 | 3.0 | 11.3 | | | 51 |
| | | 72 | 4.0 | 13.3 | | | |
| | | 96 | 5.5 | 15.2 | | | |
| AZ90 | 900 | 24 | 2.2 | 7.4 | 1: 26 | 60 | 65 |
| | | 36 | 3.0 | 11.3 | | | |
| | | 48 | 4.0 | 13.3 | | | 68 |
| | | 72 | 5.5 | 15.2 | | | |
| AZ120 | 1200 | 24 | 3.0 | 11.3 | 1: 26 | 60 | 68 |
| | | 36 | 4.0 | 13.3 | | | |
| | | 48 | 5.5 | 15.2 | | | |
| AZ180 | 1800 | 24 | 4.0 | 13.3 | 1: 30 | 70 | 147 |
| | | 48 | 5.5 | 15.2 | | | |
| AZ250 | 2500 | 24 | 5.5 | 15.2 | 1: 30 | 70 | 152 |
| | | 48 | 7.5 | 20.7 | | | |
| AZ350 | 3500 | 24 | 7.5 | 20.7 | 1: 30 | 80 | 168 |

AQ 部分回转执行机构 >

AQ part-turn actuator

| 型号 Model | 公称转矩 Torque | 输出转速 Speed | 电机功率 Power | 额定电流 Current | 手动速比 Gear ratio | 最大阀杆直径 Max. stem diameter | 参考重量 weight |
|-------------|----------------|---------------|---------------|-----------------|--------------------|------------------------------|----------------|
| 单位: Unit | N.m | R/min | Kw | A | I | Mm | Kg |
| AQ10 | 100 | 1 | 0.06 | 0.65 | 1: 76 | 28 | 13 |
| AQ20 | 200 | 1 | 0.09 | 0.78 | | | |
| AQ30 | 300 | 1 | 0.12 | 0.86 | | | |
| AQ40 | 400 | 1 | 0.18 | 1.1 | | | |
| AQ60 | 600 | 1 | 0.18 | 1.1 | 1: 76 | 38 | 25 |
| AQ90 | 900 | 1 | 0.25 | 1.27 | | | |
| AQ120 | 1200 | 1 | 0.37 | 1.87 | | | |
| AQ200 | 2000 | 1 | 0.55 | 2.79 | | | |

ADQ(叠加式)直角回转执行机构 >

ADQ quarter-turn actuator with gearboxes

| 型号 Model | 公称转矩 Torque | 输出转速 Speed | 一级执行器 First level | 电机功率 Power | 额定电流 Current | 减速箱 Gearbox | | 参考重量 weight |
|-------------|----------------|---------------|----------------------|---------------|-----------------|-------------|---------------|----------------|
| | | | | | | 型号 Model | 速比 Gear ratio | |
| 单位: Unit | N.m | R/min | | Kw | A | # | I | Kg |
| ADQ650 | 6500 | 0.43 | AZ45-24 | 1.1 | 4.4 | 35D | 56: 1 | 102 |
| ADQ1000 | 10000 | 0.43 | AZ60-24 | 1.5 | 5.7 | 4D | 56: 1 | 134 |
| ADQ1500 | 15000 | 0.4 | AZ90-24 | 2.2 | 7.4 | 5D | 60: 1 | 160 |
| ADQ2000 | 20000 | 0.42 | AZ120-24 | 3.0 | 11.3 | 55D | 57: 1 | 198 |
| ADQ3200 | 32000 | 0.38 | AZ180-24 | 4.0 | 13.3 | 6D | 64: 1 | 341 |
| ADQ4000 | 40000 | 0.44 | AZ250-24 | 5.5 | 15.2 | 65D | 54: 1 | 346 |
| ADQ5100 | 51000 | 0.35 | AZ250-24 | 5.5 | 15.2 | 7D | 68: 1 | 424 |
| ADQ6400 | 64000 | 0.37 | AZ350-24 | 7.5 | 20.7 | 75D | 65: 1 | 440 |

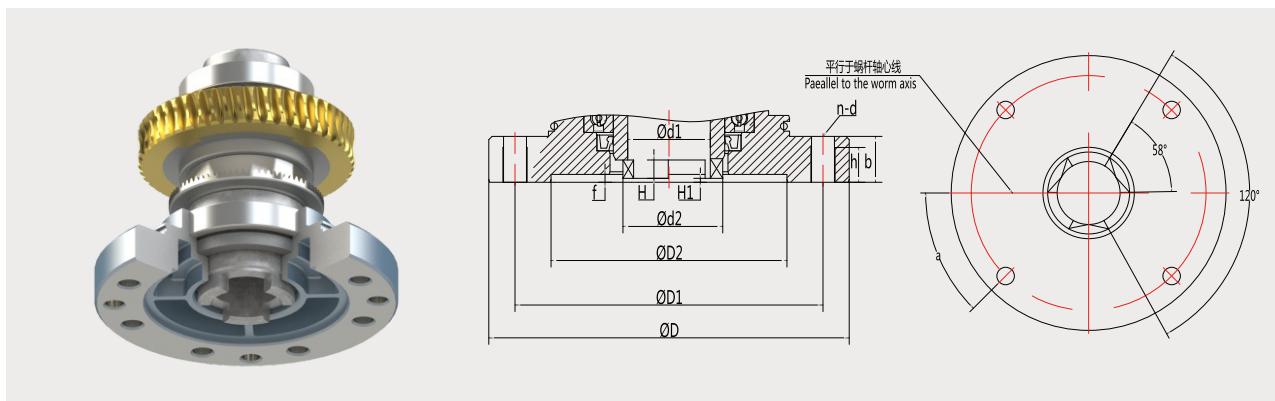
AQL线性调节执行机构 >

AQL linear modulation actuator

| 型号 Model | 公称推力 Thrust | 整定转矩 Torque | 运行速度 Speed | 最大行程 Max stroke | 电机功率 Power | 额定电流 Current |
|-------------|----------------|----------------|---------------|--------------------|---------------|-----------------|
| 单位: Unit | N | N.m | mm/s | mm | Kw | A |
| AQL4000 | 4000 | 30 | 0.4 | 60 | 0.06 | 0.5 |
| AQL6300 | 6300 | 40 | 0.4 | 60 | 0.09 | 0.6 |
| AQL10000 | 10000 | 50 | 0.4 | 60 | 0.12 | 0.7 |
| AQL16000 | 16000 | 80 | 0.4 | 100 | 0.18 | 0.8 |
| AQL25000 | 25000 | 100 | 0.4 | 100 | 0.25 | 1.0 |

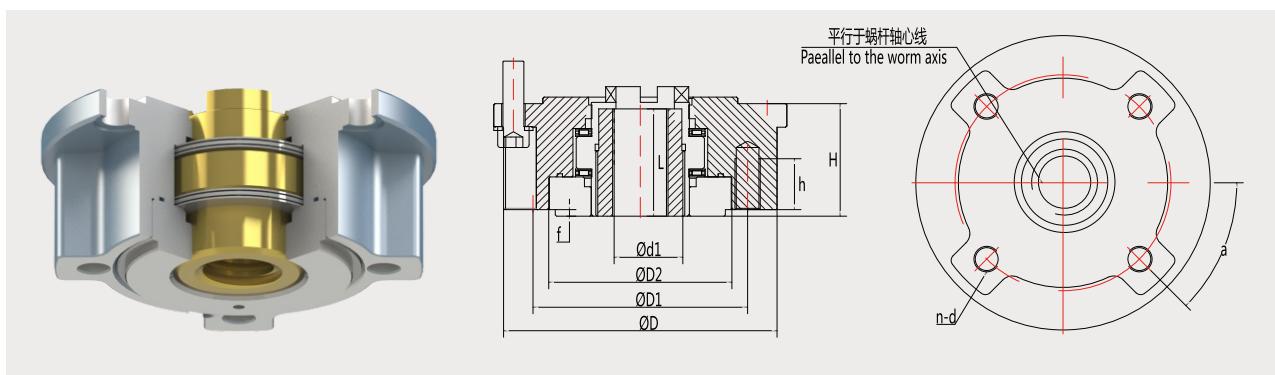
AZ-法兰结构及尺寸 > Flange size of AZ multi-turn actuator

标准配置 The standrd: JB2920



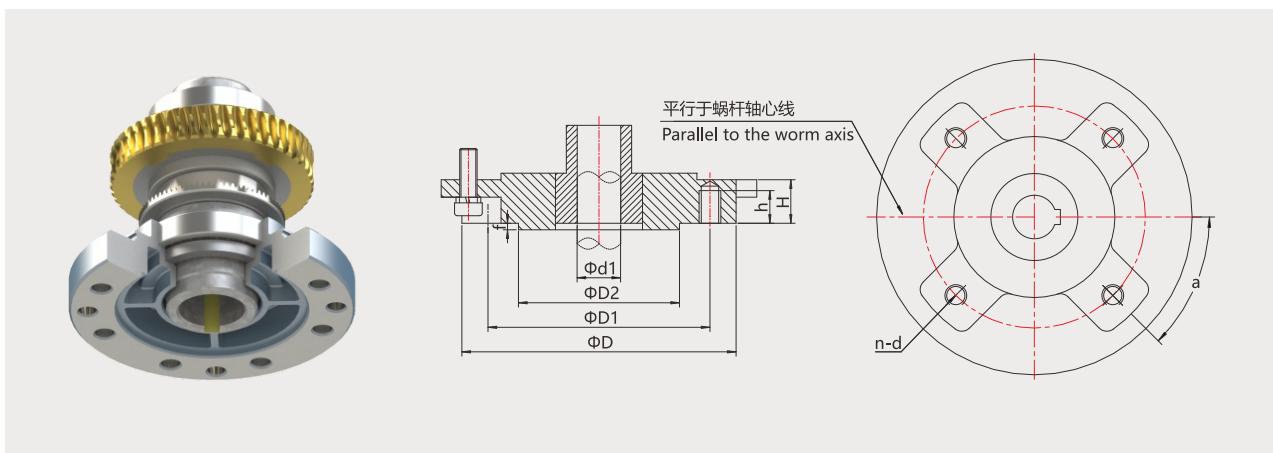
| MODEL | FLANGE | D | D1 | D2 | d1 | d2 | h | h1 | f | b | n-d | a |
|-------------|--------|-----|-----|-----|----|-----|----|----|---|----|-------|-------|
| AZ10/AZ15 | J2 | 145 | 120 | 90 | 30 | 45 | 8 | 2 | 5 | 12 | 4-M10 | 45° |
| | J2 I | 115 | 95 | 75 | 26 | 39 | 6 | | | 10 | 4-M8 | |
| AZ20/AZ30 | J3 | 185 | 160 | 125 | 42 | 58 | 10 | 3 | 6 | 15 | 4-M12 | 45° |
| | J3 I | 145 | 120 | 90 | 30 | 45 | 8 | | | 12 | 4-M10 | |
| AZ45/AZ60 | J4 | 225 | 195 | 150 | 50 | 72 | 12 | 3 | 6 | 20 | 4-M16 | 45° |
| AZ90/AZ120 | J5 | 275 | 235 | 180 | 62 | 82 | 14 | | | 25 | 4-M20 | |
| | J5 I | 230 | 195 | 150 | 50 | 72 | 12 | | | 20 | 4-M16 | |
| AZ180/AZ250 | J7 | 330 | 285 | 220 | 72 | 98 | 16 | | | 30 | 4-Ø27 | |
| AZ350 | J8 | 380 | 340 | 280 | 82 | 118 | 20 | | | 35 | 8-Ø22 | 22.5° |

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



| MODEL | FLANGE | D | D1 | D2 | L | f | d1(max) | h | n-d | H | a |
|-------------|--------|-----|-----|-----|-----|---|---------|----|-------|-----|-------|
| AZ10/AZ15 | F10/A | 125 | 102 | 70 | 40 | 3 | Tr28 | 20 | 4-M10 | 49 | 45° |
| AZ20/AZ30 | F14/A | 175 | 140 | 100 | 60 | 4 | Tr40 | 30 | 4-M16 | 56 | |
| AZ45/AZ60 | F16/A | 210 | 165 | 130 | 80 | 5 | Tr48 | 30 | 4-M20 | 81 | |
| AZ90/AZ120 | F25/A | 300 | 254 | 200 | 85 | | Tr60 | 30 | 8-M16 | 83 | 22.5° |
| AZ180/AZ250 | F30/A | 350 | 298 | 230 | 130 | | Tr70 | 30 | 8-M20 | 128 | |

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

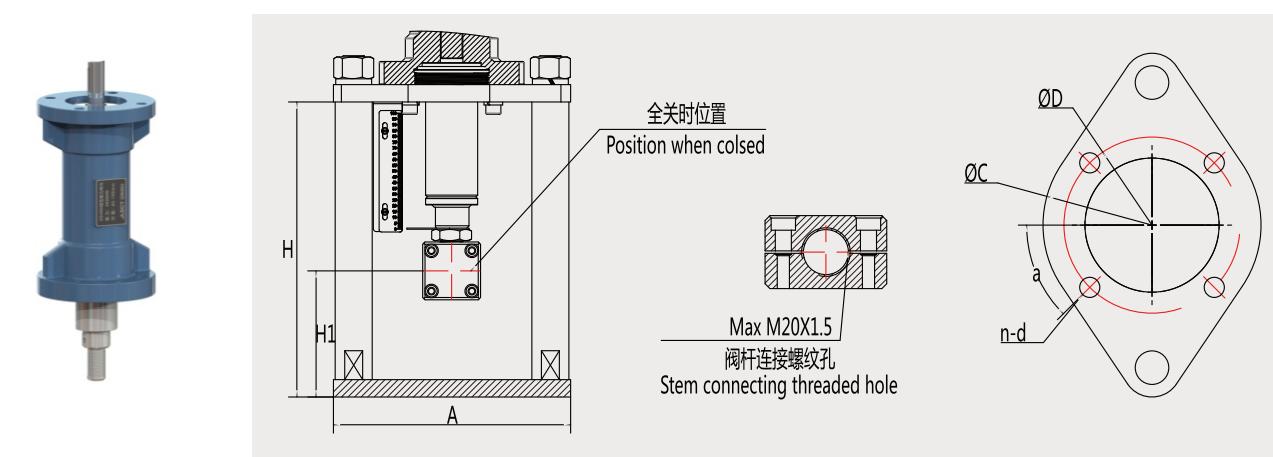


| MODEL | FLANGE | D | D1 | D2 | f | d1(max) | h | n-d | H | a |
|-------------|--------|-----|-----|-----|---|---------|----|-------|----|-------|
| AZ10/AZ15 | F10/B4 | 125 | 102 | 70 | 3 | Ø20 | 15 | 4-M10 | 20 | 45° |
| AZ20/AZ30 | F14/B4 | 175 | 140 | 100 | | Ø30 | 15 | 4-M16 | 25 | |
| AZ45/AZ60 | F16/B4 | 210 | 165 | 130 | | Ø40 | 20 | 4-M20 | 25 | |
| AZ90/AZ120 | F25/B4 | 300 | 254 | 200 | 5 | Ø50 | 20 | 8-M16 | 30 | 22.5° |
| AZ180/AZ250 | F30/B4 | 350 | 298 | 230 | | Ø60 | 20 | 8-M20 | 30 | |

AQL-法兰结构及尺寸 >

Flange size of AQL linear multi-turn actuator

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

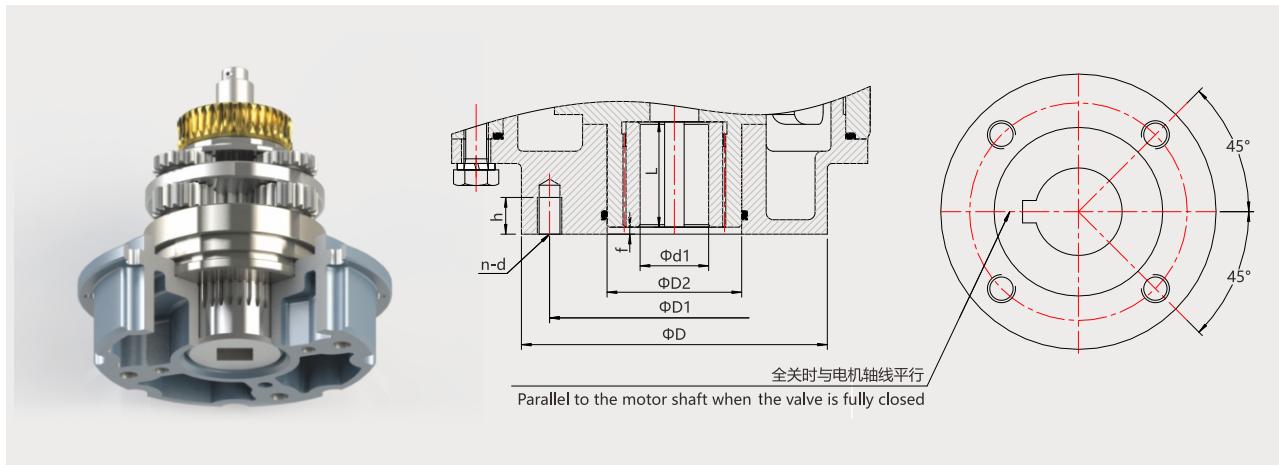


| MODEL | H | H1 | A | ØC | ØD | n-Ød | M |
|----------|-----|-----|-----|-----|-----|------|------|
| AQL4000 | 107 | 225 | 168 | 100 | 80 | 4-10 | Tr28 |
| AQL6300 | 107 | 225 | 168 | 130 | 105 | 4-12 | Tr40 |
| AQL10000 | 107 | 225 | 168 | 130 | 118 | 4-14 | Tr48 |
| AQL16000 | 107 | 225 | 168 | 130 | 118 | 4-14 | Tr60 |
| AQL25000 | 107 | 225 | 168 | 168 | 130 | 4-18 | Tr70 |

AQ/ADQ-法兰结构及尺寸 »

Flange size of AQ part-turn actuator an ADQ quarter-turn actuator with gearboxes

标准配置 The standard configuration: ISO5211: 2001 (GB/T12223-2005)



| MODEL | FLANGE | ØD | ØD1 | ØD2 | n-d | Ød1(Max) | L | f | h |
|---------|--------|-----|-----|-----|-------|----------|-----|---|----|
| AQ10 | F05 | 65 | 50 | 35 | 4-M6 | 20 | 45 | 5 | 15 |
| AQ20 | F07 | 90 | 70 | 55 | 4-M8 | 28 | 45 | 5 | 15 |
| AQ30 | F10 | 125 | 102 | 70 | 4-M10 | 28 | 45 | 5 | 15 |
| AQ40 | | | | | | | | | |
| AQ60 | F10 | 125 | 102 | 70 | 4-M10 | 40 | 65 | 5 | 24 |
| AQ90 | F12 | 150 | 125 | 85 | 4-M12 | 40 | 65 | 5 | 24 |
| AQ120 | F14 | 175 | 140 | 100 | 4-M16 | 40 | 65 | 5 | 24 |
| AQ200 | | | | | | | | | |
| ADQ300 | F16 | 210 | 165 | 130 | 4-M20 | 60 | 80 | 5 | 30 |
| ADQ450 | F20 | 260 | 200 | 160 | 8-M16 | 75 | 100 | 5 | 24 |
| ADQ650 | F25 | 300 | 254 | 200 | 8-M16 | 80 | 105 | 5 | 24 |
| ADQ1000 | | | | | | 95 | | | |
| ADQ1500 | F30 | 350 | 298 | 230 | 8-M20 | 115 | 125 | 5 | 45 |
| ADQ2000 | | | | | | 125 | | | |
| ADQ3200 | F35 | 415 | 356 | 260 | 8-M30 | 140 | 160 | 8 | 54 |
| ADQ4000 | | | | | | | | | |
| ADQ4000 | F40 | 475 | 406 | 300 | 8-M36 | 180 | 125 | 5 | 45 |
| ADQ6400 | | | | | | 190 | | | |

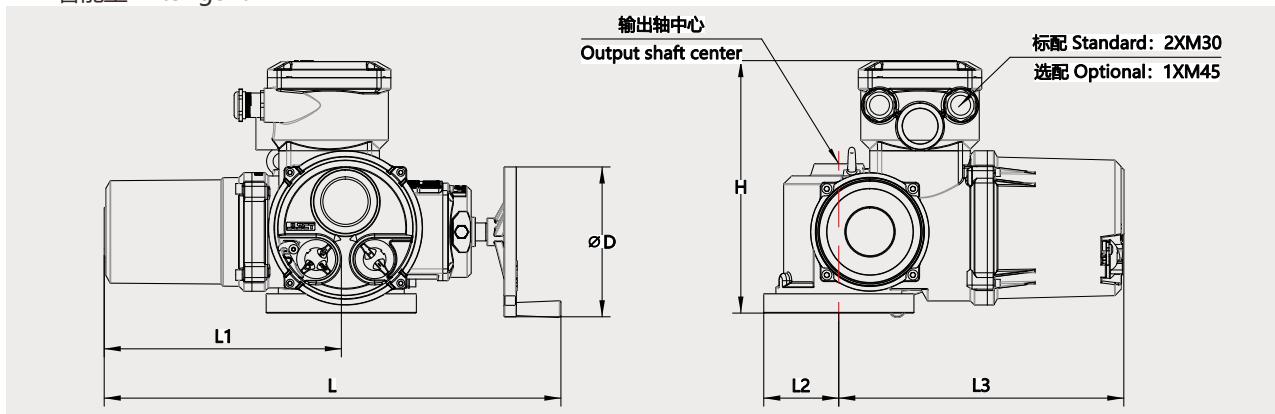
Note: 联轴轴套标准配置为实芯，由客户按需要自行加工，但最大孔径不能超过表中Ød1所列尺寸。

The standard configuration of the coupling sleeve is a solid core, which is processed by the customer as required, but the maximum hole diameter cannot exceed the size listed in Ød1 in the table.

AZ-电动执行机构外形和结构尺寸»

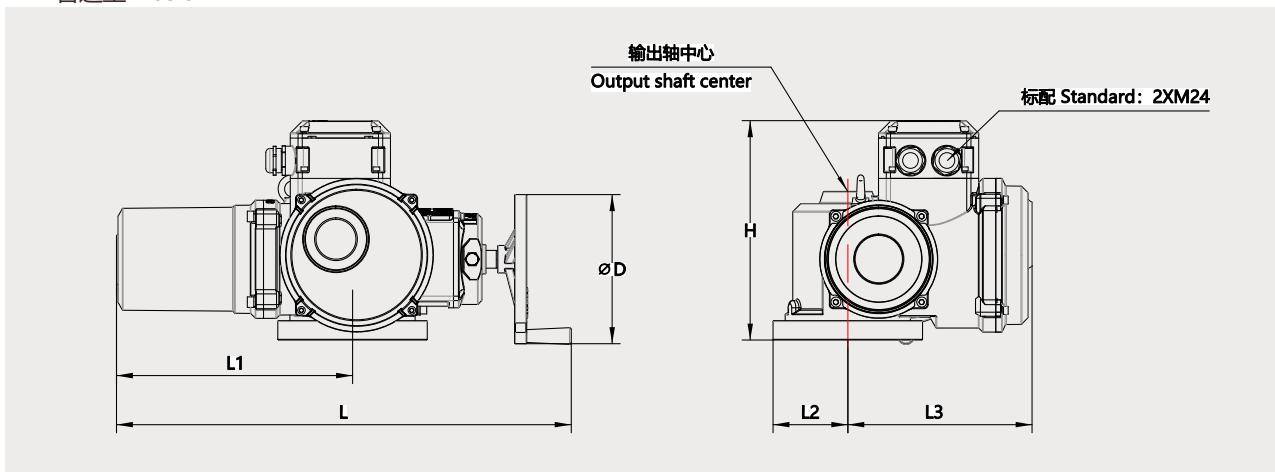
Size of AZ multi-turn actuator

AZ-智能型 Intelligent



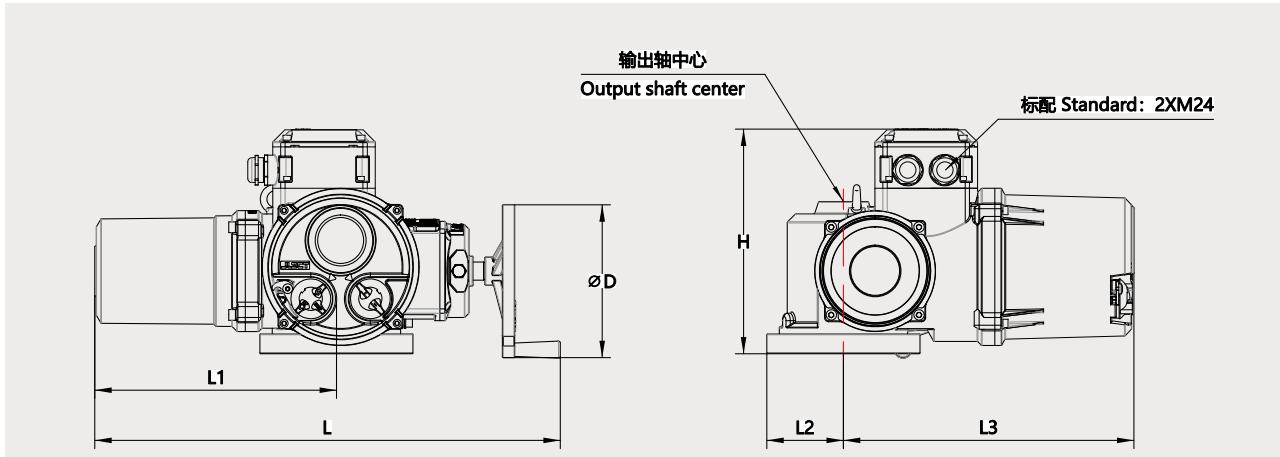
| MODEL | H | L | L1 | L2 | L3 | ØD |
|-------------|-----|-----|-----|-----|-----|-----|
| AZ10/AZ15 | 305 | 507 | 521 | 73 | 345 | 160 |
| AZ20/AZ30 | 305 | 565 | 295 | 93 | 351 | 200 |
| AZ45/AZ60 | 352 | 627 | 346 | 113 | 388 | 250 |
| AZ90/AZ120 | 352 | 688 | 407 | 138 | 388 | 250 |
| AZ180/AZ250 | 432 | 780 | 466 | 165 | 423 | 350 |
| AZ350 | 432 | 780 | 466 | 190 | 423 | 350 |

AZ-普通型 Basic



| MODEL | H | L | L1 | L2 | L3 | ØD |
|-------------|-----|-----|-----|-----|-----|-----|
| AZ10/AZ15 | 271 | 507 | 251 | 73 | 222 | 160 |
| AZ20/AZ30 | 271 | 565 | 295 | 93 | 228 | 200 |
| AZ45/AZ60 | 318 | 627 | 346 | 113 | 265 | 250 |
| AZ90/AZ120 | 318 | 688 | 407 | 138 | 265 | 250 |
| AZ180/AZ250 | 398 | 780 | 466 | 165 | 300 | 350 |
| AZ350 | 398 | 780 | 466 | 190 | 300 | 350 |

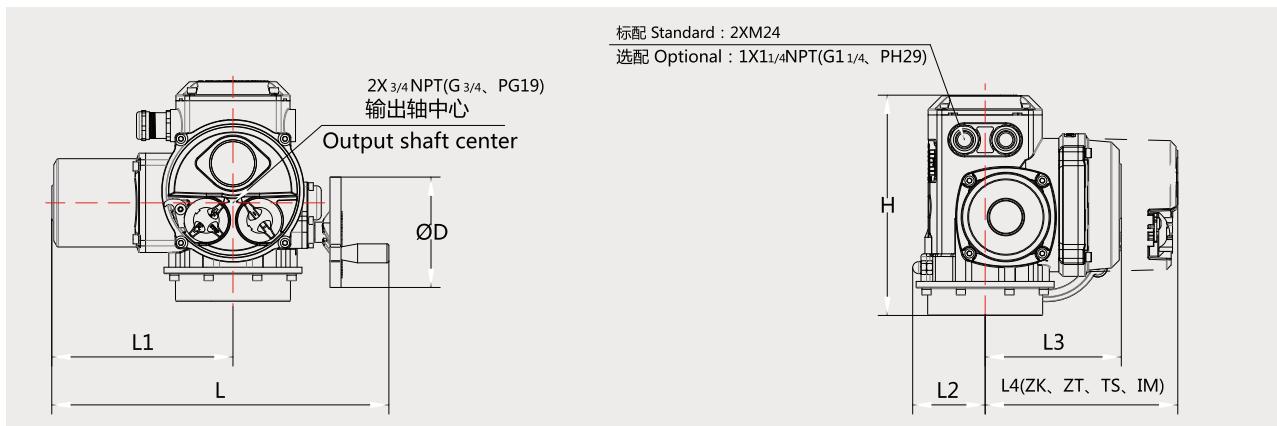
AZ-整体型 Economic



| MODEL | H | L | L1 | L2 | L3 | ØD |
|-------------|-----|-----|-----|-----|-----|-----|
| AZ10/AZ15 | 271 | 507 | 251 | 73 | 345 | 160 |
| AZ20/AZ30 | 271 | 565 | 295 | 93 | 351 | 200 |
| AZ45/AZ60 | 318 | 627 | 346 | 113 | 388 | 250 |
| AZ90/AZ120 | 318 | 688 | 407 | 138 | 388 | 250 |
| AZ180/AZ250 | 398 | 780 | 466 | 165 | 423 | 350 |
| AZ350 | 398 | 780 | 466 | 190 | 423 | 350 |

AQ电动执行机构外形和结构尺寸 »

Size of AQ part-turn actuator



| MODEL | H1 | L | L1 | L2 | L3 | L4 | ØD |
|-----------------|-----|-----|-----|-----|-----|-----|-----|
| AQ10/20/30/40 | 240 | 314 | 197 | 80 | 140 | 224 | 120 |
| AQ60/90/120/200 | 292 | 412 | 263 | 120 | 163 | 249 | 160 |

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.

阀门与电动执行器选配表 > Valve and electric actuator selection table

闸阀 Gate valve

| PN \ DN | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| 1 | 2.5 | 2.5 | 2.5 | 5 | 5 | 10 | 10 | 15 | 15 | 20 | 30 | 30 | 45 | 45 | 60 | 60 |
| 2.5 | 2.5 | 2.5 | 5 | 10 | 10 | 15 | 15 | 20 | 20 | 30 | 30 | 45 | 45 | 60 | 60 | 90 |
| 6 | 2.5 | 5 | 10 | 10 | 15 | 15 | 20 | 20 | 30 | 30 | 45 | 45 | 60 | 90 | 90 | 90 |
| 10 | 10 | 10 | 10 | 15 | 15 | 20 | 20 | 30 | 45 | 45 | 60 | 90 | 90 | 90 | 120 | 120 |
| 16 | 10 | 10 | 15 | 20 | 20 | 30 | 30 | 45 | 60 | 90 | 120 | 120 | 180 | 180 | 180 | 250 |
| 25 | 10 | 10 | 15 | 20 | 30 | 30 | 45 | 60 | 90 | 90 | 120 | 120 | 180 | 250 | 350 | 500 |
| 40 | 10 | 10 | 15 | 20 | 30 | 45 | 60 | 90 | 90 | 120 | 180 | 180 | 250 | 350 | 500 | 650 |
| 64 | 10 | 10 | 20 | 30 | 45 | 60 | 60 | 90 | 120 | 180 | 250 | 250 | 350 | 500 | 800 | 1000 |
| 100 | 15 | 20 | 30 | 45 | 60 | 60 | 90 | 120 | 180 | 250 | 350 | 500 | 600 | 800 | 1000 | 1500 |
| 160 | 20 | 30 | 45 | 60 | 90 | 90 | 120 | 180 | 250 | 350 | 500 | 800 | 1000 | 1200 | 1500 | 2000 |
| 200 | 20 | 45 | 60 | 90 | 90 | 120 | 180 | 250 | 350 | 500 | 700 | 1000 | 1200 | 1600 | 2000 | 3000 |
| 320 | 30 | 60 | 90 | 120 | 180 | 250 | 350 | 500 | 700 | 1000 | 1500 | 2000 | 2400 | 3000 | 4000 | |

截止阀 Globe valve

| PN \ DN | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 225 | 250 | 300 | 350 |
|---------|----|----|----|----|----|----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 10 | 15 | 20 | 30 | 45 | 60 | 60 | 90 |
| 10 | 5 | 5 | 5 | 5 | 5 | 5 | 8 | 10 | 15 | 20 | 30 | 45 | 60 | 60 | 90 | 120 |
| 16 | 5 | 5 | 5 | 5 | 10 | 10 | 10 | 20 | 30 | 30 | 45 | 60 | 90 | 120 | 180 | 180 |
| 25 | 5 | 5 | 5 | 10 | 10 | 15 | 20 | 30 | 30 | 45 | 50 | 90 | 120 | 180 | 250 | 350 |
| 40 | 5 | 5 | 10 | 10 | 20 | 30 | 30 | 45 | 45 | 60 | 90 | 120 | 180 | 250 | 350 | 500 |
| 64 | 5 | 10 | 10 | 20 | 30 | 30 | 45 | 45 | 60 | 120 | 120 | 180 | 250 | 350 | 500 | 700 |
| 100 | 10 | 10 | 20 | 25 | 30 | 30 | 45 | 60 | 90 | 120 | 180 | 350 | 400 | 550 | 800 | 1000 |
| 160 | 10 | 10 | 30 | 30 | 45 | 45 | 60 | 100 | 120 | 180 | 350 | 550 | 650 | 800 | 1200 | 1600 |
| 320 | 10 | 20 | 30 | 45 | 60 | 90 | 100 | 180 | 250 | 350 | 600 | 1000 | 1300 | 1600 | 2400 | 3200 |

球阀 Ball valve

| PN \ DN | 50 | 65 | 80 | 100 | 150 | 200 | 225 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
|---------|----|----|----|-----|-----|------------|------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| 16 | 5 | 10 | 10 | 20 | 60 | 60 | 90 | 120 | 200 | 250 Z15 | 400 Z20 | 500 Z30 | 600 Z30 | 800 Z45 | 1200 Z60 | 2500 Z120 |
| 25 | 5 | 10 | 20 | 20 | 60 | 90 | 120 | 200 | 250 Z15 | 400 Z20 | 500 Z30 | 600 Z30 | 800 Z45 | 1200 Z60 | 2000 Z90 | 3000 Z120 |
| 40 | 10 | 20 | 20 | 40 | 90 | 200 | 200 | 250 Z15 | 400 Z20 | 500 Z30 | 600 Z30 | 800 Z45 | 1200 Z60 | 2000 Z90 | 3000 Z120 | 6000 Z250 |
| 64 | 20 | 20 | 30 | 60 | 200 | 200 | 300 Z20 | 400 Z20 | 600 Z30 | 800 Z45 | 1000 Z60 | 1200 Z60 | 1500 Z90 | 3000 Z120 | 4500 Z180 | 8500 Z350 |
| 100 | 20 | 40 | 60 | 90 | 200 | 400 Z20 | 500 Z30 | 700 Z45 | 1000 Z60 | 1200 Z60 | 1500 Z90 | 2000 Z90 | 3000 Z120 | | | |

蝶阀 Butterfly valve

| PN \ DN | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1600 |
|---------|-----|-----|------------|------------|------------|------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| 2.5 | 10 | 20 | 40 | 60 | 90 | 120 | 120 | 200 | 250 Z15 | 400 Z20 | 500 Z30 | 700 Z45 | 800 Z45 | 1000 Z60 | 1500 Z90 | 2500 Z120 |
| 6 | 10 | 20 | 40 | 60 | 90 | 120 | 200 | 250 Z15 | 300 Z20 | 500 Z30 | 700 Z45 | 1000 Z60 | 1500 Z90 | 2000 Z90 | 2500 Z120 | 3800 Z180 |
| 10 | 10 | 30 | 60 | 90 | 120 | 200 | 300 Z20 | 400 Z20 | 500 Z30 | 600 Z30 | 800 Z45 | 1200 Z60 | 1500 Z90 | 2000 Z90 | 3000 Z120 | 4500 Z180 |
| 16 | 20 | 40 | 90 | 120 | 200 | 250 Z15 | 300 Z20 | 400 Z20 | 500 Z30 | 700 Z45 | 800 Z45 | 1200 Z60 | 2000 Z90 | 2500 Z120 | 3500 Z180 | 6000 Z250 |
| 25 | 30 | 60 | 120 | 200 | 300 Z20 | 400 Z20 | 450 Z30 | 500 Z30 | 700 Z45 | 1000 Z60 | 1500 Z90 | 2500 Z120 | 3500 Z120 | 4500 Z180 | 6000 Z250 | 7500 Z350 |
| 40 | 40 | 90 | 200 | 250 Z15 | 400 Z20 | 600 Z30 | 700 Z45 | 800 Z45 | 1000 Z60 | 2000 Z90 | | | | | | |
| 64 | 90 | 200 | 250 Z15 | 300 Z20 | 500 Z30 | 700 Z45 | 1000 Z60 | 1500 Z90 | 2500 Z120 | 3800 Z180 | | | | | | |

注：本选型表仅供参考 Note: The model selection table is only for reference.

- ▶ 严酷条件下的流体控制专家
Fluid control expert under severe conditions
- ▶ 高性能和高可靠性
High performance and high reliability
- ▶ 全面符合最新国际规范
Fully complying with the latest international norms
- ▶ 更多的适用规格和更高的性价比
More applicable specifications and higher performance-price ratio
- ▶ 更好的工业造型更适合各种应用环境
Better industrial modeling, more suitable for a variety of application environments



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