

电动执行器
Electric Actuator

 吉富隆智能装备制造集团有限公司
GIFLON INTELLIGENT EQUIPMENT MANUFACTURING GROUP CO.,LTD.

总部地址：北京市经济技术开发区中和街16号

Headquarter Add: No.16, Zhonghe street, economy and development zone, Beijing, China

营销中心：北京市朝阳区北苑东路中国铁建广场D-2510

Marketing Center: Room 2510, Block D, China Railway Building Plaza, 19 East Beiyuan Road, Beijing, China

服务热线Service Hotline: 400-603-5969

Website: www.giflon.com Email: gflmkt@giflon.com

吉富隆智能装备制造集团有限公司
GIFLON INTELLIGENT EQUIPMENT MANUFACTURING GROUP CO.,LTD.

企业简介



吉富隆智能装备制造集团有限公司始建于2010年，是一家集自主研发、高端制造、营销服务为一体的现代化集团公司。集团总部坐落于首都北京经济技术开发区，交通十分便利。集团在北京、河北、江苏等地设有生产基地。注册资本10560万元。

公司有产品设计开发中心，现有中高级工程技术人员20余人，使用CAD、CAM辅助开发设计制造系统，采用相关三维等专业技术软件进行产品建模、有限元分析，以保证产品的设计开发。公司经过多年的创新和发展，已成为国内外具有很强的设计开发和科研与生产相结合规模的智能装备制造企业。

公司拥有先进的数控加工中心、数控机床及金加工和切削加工设备；全自动埋弧焊机、气体保护焊机等焊接设备及热处理设备；具备较强检测能力和先进检测设备，有光谱分析仪、硬度计、超声波测厚仪、超声波探伤仪等理化、无损检测设备，拥有先进的阀门综合性能测试、阀门扭矩、寿命试验装置等阀门压力、性能试验装置。

公司致力于智能装备、节能环保等领域，为智能工业系统、智慧热网、智慧水务提供节能方案设计、节能产品制造、工程节能改造、技术维护等服务。同时与哈尔滨工业大学紧密合作，为用户提供智能热网管理中心平台、热网监控、热源控制系、换热站无人值守控制等系统，针对集中供热领域全面提供从热源、热网、热力站到热用户的整体节能解决方案。

公司专业生产大口径和高压力等级的油气长输管线球阀(分体式和全焊接)和供热专用大口径全焊接球阀、轨道球阀、高性能金属密封蝶阀、旋塞阀以及平板闸阀等产品。可按GB、JB、ASME、ANSI、API、DIN、BS等标准生产，广泛应用在石油、天然气长输管线、化工、电厂、区域供热、水处理等诸多领域，产品以卓越的品质和优质服务赢得了国内外客户的信任，产品行销全国，并远销墨西哥、意大利、美国、智利、委内瑞拉、西班牙等国家和地区。

为了更好的适应市场经济，充分发挥企业优势，公司不断引进外来技术、吸纳先进的管理经验，引进培养高端人才，以一流的产品质量和周到的服务来回馈客户。作为高端阀门装备的制造厂家，为市场提供优质的智能装备产品是我们的责任，也是我们的生存发展之道。

诚信天下，合作共赢！欢迎新老客户莅临我公司参观、指导。

Company's profile



GIFLON INTELLIGENT EQUIPMENT MANUFACTURING GROUP CO., LTD. was founded in 2010. It is a modern group company integrating with own R&D, high-class manufacturing, and marketing services. Its headquarter is located in the Beijing Economic and Technological Development Zone within convenience transportation. The group has production bases in Beijing, Hebei, Jiangsu and etc, within RMB 105.6 million registered capital.

The company has more than 20 senior engineers and technicians , using CAD and CAM to develop design and manufacturing systems and applying software such as Pro/E and SolidWorks for products modeling and finite element analysis to guaranty the products design and development. After years of innovation and development, the company has became an intelligent equipment manufacturing enterprise with strong design, development, research and production in both China and abroad.

The company has advanced NCPC, CNC machine tools, metal processing , lathe and milling equipment; automatic submerged arc, gas shield and other welding equipment ; heat treatment equipment; and strong test capability and advanced mechanical and chemical testers, NDT test instruments such as spectrum analyzers, hardness testers, Ultrasonic thickness gauge, ultrasonic flaw detector,etc and advanced comprehensive valve performance testers, torque, and life span testers.

The company is dedicated on intelligent equipment, energy conservation and environmental protection, and provides services such as energy-saving solution design, energy-saving products manufacturing, projects energy-saving renew, and technical maintenance for intelligent industrial systems, intelligent heating networks, and intelligent water networks. Meanwhile, we have closed cooperation with Harbin Institute of Technology to provide intelligent heating network management center platform, heating network monitoring, heat source control system, heat exchange station unattended control and etc. For collective heat supply, we provide integrated solution for energy saving from the heat source, heat network, distribution station, until the end users.

We are professional on the manufacturing of large-diameter and high-pressure ball valves(split body and fully welded) for long-distance oil and gas pipeline and heating network pipeline, orbital ball valves, high-performance metal sealing butterfly valves, plug valves, flat gate valves and other products . Valve products can be produced in accordance with standards as ASME, ANSI, API, GB, DIN, BS and are widely used in petroleum and natural gas pipelines, oil refinery , chemical industry, power plants, heating network, water treatment and many other fields. Our products have won the trust from domestic and foreign customers through excellent quality and service, and have been exported to Mexico, Italy, the USA, Chile, Venezuela, Spain and other countries.

In order to better adapt to the market economy and completely utilize the advantages of our company, We continuously introduce foreign technology, absorb advanced management experience, high class human resource , and present high quality products and thoughtful service to our customers . As a manufacturer and innovator of high-class equipment, it is our responsibility to provide high-quality intelligent equipment products to the market; creating value for our customers is our way to survival and development.

We warmly welcome every new and old customer visits and instructs our company and look forward to build a win-win cooperation with you.

型号编制说明 Way of coding

GEM40-24-S2E0-aB-ZF14(D35K10,IP68)

- IP(IP68以下不备注 No mark below IP68)
- 键槽 Key groove
- 孔径 Hole size
- 法兰尺寸 Flange size
- 连接方式(Y型连接, Z型连接, T型连接)
Connection methods(Y shape, Z shape, T shape)
- 颜色(B1:RAL9004:橘纹黑; B:RAL9005:墨黑色)
Colour(B1:RAL9004,Black with strips B: RAL9005: Ink black)
- 电压 Voltage(a:AC220V1PH,b:AC380V3PH,f:AC415V3PH…)
- E0:不防爆 Non-explosion proof,E3:防爆 Explosion proof CT4
- 控制单元(S1:智能开关型,S2:智能调节型,
Control unit(S1: smart switch type, S2: Smart regulator type)
- B1:基本开关型, B2:基本调节型…)
B1: basic switch type, B2 basic regulator type
- 输出转速 Output rotation speed(18,24,36,48…)
- 机型 Model(GEM10,GEM40,GEM60…)

产品概述 Product Overview

GEM 系列是吉富隆公司技术团队结合用户需求和多年开发经验，研发制造的全新一代多回转电动执行器。

GEM 系列可根据用户需求生产多种机型，如基本型、智能型、总线型、智能分体型等形式，安全、稳定、可靠的满足各个领域不同的应用场景。

GEM 系列多回转电动执行器不但可与调节阀、闸阀、截止阀等直行程阀门配套使用，也可加装部分回转蜗轮箱后与蝶阀、球阀、旋塞阀等角行程阀门配套使用。

GEM 系列直接输出扭矩范围为60N.m – 3000N.m，输出转速范围为18rpm – 144rpm，根据不同转速不同速比，搭配电动专用蜗轮箱可转换出更大更多的扭矩需求。

The GEM series is a new generation of multi-turns electric actuator developed and manufactured by Giflon company's technical team based on users need and years of experience.

The GEM series can be produced to a variety of models according to users need, such as basic model, intelligent model, BUS model, intelligent split model and etc, safe, stable and reliable to meet different applications in various fields and scenarios.

GEM series multi-turns electric actuators can not only be equipped with vertical motion valves such as control valves, gate valves, globe valves, etc. but also with quarter-turn valves such as butterfly valves, ball valves, plug valves, etc after conjunct with a worm gearbox.

The direct output torque range of GEM series is 60N.m – 3000N.m, rotation speed range is 18rpm – 144rpm, bigger torque can be output through equipping an electric special worm gear box according to different speeds, and different speed ratios.



GEM多回转 基本型
GEM Multi-turns Basic Model



GEM多回转 智能型
GEM Multi-turns Smart Model

产品优势 Product Superiority

1、可靠性 Reliability

GEM系列执行器设计已考虑到应用在最恶劣的场合，所用零部件均经过严格的检验和测试，保证设备的长期运行可靠性。基于执行器行业多年设计及制造经验，每一台执行器出厂前均进行层层检验，确保执行器在不同工况长期可靠的运行。新一代执行器具有最优化的控制方式；增强的信号处理方式对控制信号上夹杂的干扰信号具有完全的屏蔽性；电器腔体在双密封防水外壳内，可使用手持式红外设定器即可对电动执行机构进行各种参数的设定，各部件均达到防爆等级的要求。

The design of GEM series actuators has considered to be used in the harshest situations. All parts have been passed strict inspection and testing to ensure reliability of the equipment after long-term operation. Based on many years of design and manufacturing experience in the actuator industry, each actuator must pass several inspections to ensure long-term and reliable operation under different working conditions. The new generation actuator has an optimized control method; the enhanced signal processing method has complete screened interference signals from control signal; the electrical parts are in a double-sealed waterproof shell, and a remote can be used to set Various parameters for the electric actuator, and all components meet the requirements of explosion-proof grade.

2、调试配置简单 Easy to set and configure

调试和软件的配置更加简单和人性化，拥有新设计的人机界面，图形化菜单易懂，结合对应的操作说明使任何参数设置都更加简便。确保参数设置正确并保持其安全是稳定运行的基础。配置接口更加丰富，提供多种接口的选择、配置、诊断等功能，采用高精度点阵液晶，可方便的进行中英文显示切换，用户无需记住繁多标识字符，仅需按屏幕提示，即可进行调试，方便适应不同的运行环境。

Setting and software configuration are simpler and more user-friendly. It has a newly designed human-machine interface and easy-to-understand graphical menus. Any parameter setting is easier corresponding users instructions. Ensuring the correct parameter settings and keeping them safe are the basis for stable operation. The configuration interface is more abundant, providing a variety of interface selection, configuration, diagnosis and other functions. It uses high-precision dot matrix LCD to easily switch between Chinese and English language. Users do not need to remember different symbols and only need to follow the instruction on the screen to make setting and configuration adaptation to different operating environments.

3、多种控制方式 Multiple control methods

GEM系列多回转执行器在原有的开关型、调节型的基础上，可提供多种扩展控制功能，包括Modbus-RTU、Profibus-DP 等各类工业总线。适用于不同的控制需要。

GEM series multi-turns actuators can provide a variety of extended control functions on the basis of the original switch type and regulating type, including various industrial BUS such as Modbus-RTU and Profibus-DP. Suitable for different control needs.

4、完善的自诊断及保护功能

可诊断出电机过载、过热情况及电源的状态等，还能自动识别三相电源相位，不会出现因接线改变而反向误动作的情况；紧急情况时，执行机构可保位或运行到预先设定的安全位置；行机构另具有精确测量输出力矩的能力，在运行过程中对阀门进行保护，防止卡死阀门；如果阀门被卡住，当启动信号发出后，在预设的时间内无任何动作，逻辑电路可将电机断开，以防止电机过热，并发出报警信号；

Complete self-diagnosis and protection functions it can diagnose overload, overheating on motor and power supply and etc. It can also automatically identify the three-phase power supply phases, and there will be no reverse due to wiring mistake; in an emergency, the actuator can keep its position or turn to a preset safe position; the actuator also can measure the output torque accurately, and protect the valve during operation to prevent stuck on the valve; if the valve is stuck, when the start signal is sent, but no action starts in the preset time. the logic circuit can disconnect the motor to prevent overheating on the motor and send out an alarm signal;

GEM多回转 – 功能描述 GEM Multi-turns -- function descriptions

1 双密封保护 Double sealed protection

GEM系列智能型电动执行器采用双密封保护，其外壳是完全防水、防尘而且不“透气”的，在设计时严格执行GB/T4942.2-93规定的相关标准，可选配IP68。GEM series intelligent electric actuators are protected by double seals. The shell is completely waterproof, dustproof and not "breathable". The design strictly follows the relevant standards stipulated in GB/T4942.2-93. and IP68 is optional.

2 智能非侵入设计 Smart non-intrusive design

GEM系列智能型电动执行器采用非侵入式设计，所有电器部件都密封在铝合金外壳内，对装置的操作通过现场按钮就地操作。现场按钮操作采用圆柱磁钢感应式设计，淘汰了传统的旋钮贯通轴设计，使整体电动装置控制更精确，防护更可靠；采用红外设定器对执行机构进行免开盖的参数设定和调试，防止灰尘和潮气的入侵。

GEM series intelligent electric actuators adopt a non-intrusive design. All electrical components are sealed in an aluminum alloy case, and the device can be operated through on-site buttons. The on-site buttons adopt a cylindrical magnet induction design, to instead of traditional knob through-shaft design, making the overall electric device control more precise and the protection more reliable; an infrared remote is used to set and adjust the parameters of the actuator without opening the cover., to prevent the intrusion of dust and moisture.

3 可旋转显示方位及接线腔

Rotatable display position and wiring cavity

GEM系列智能型电动执行器LCD显示窗可变换不同方向，以适应执行机构的安装位置；接线腔出线孔可变换不同方向，以适应现场走线需求。

The LCD display window of GEM series intelligent electric actuator can change in different way to adapt to the installation position of the actuator; the outlet hole of the wiring cavity can change to different way to adapt to on-site wiring condition.

安全的手动操作 Safe manual operation

执行器在手轮处配有离合装置，在紧急或调试状态时，可按压手轮中间的离合按键后，离合装置可有效、安全地断开电机的驱动，便可轻松摇动手轮。当执行器在电动状态下，即使勿操作按压离合按键，那么手轮也不会跟转打伤手。在离合手动情况下，直接摇动手轮便可轻松打开或关闭阀门，无需边推边摇或增加加力杆操作，使得在高空操作执行器时，确保人员作业更加省力安全。

The actuator is equipped with a clutch at the hand wheel. In emergency or configuring conditions, the button in the middle of the hand wheel can be pressed. After pressing the clutch button, the clutch device can effectively and safely disconnect the drive of the motor, and you can easily turn the hand wheel. When the motor is running, even the clutch button is not pressed, the hand wheel will not run and hurt your hand. After the motor stops, the valve can be easily opened or closed by turning the hand wheel, no need to spend big force or add an extension rod to handle, so that when operating the actuator at high altitude, the workers can be more easier and safe.

4 绝对编码器检测阀位

Absolute encoder detects valve position

GEM系列智能型电动执行器采用最先进的光电绝对值编码器检测阀位，输出轴带动绝对编码器转动，形成的编码信号送入主控芯片，计算出精准的阀位值，并显示在LCD上，由于绝对值编码器获取的是阀位的绝对信息，断电或干扰均不会出现阀位丢失的现象。

GEM series intelligent electric actuators use the most advanced photoelectric absolute encoder to detect the valve position. The output shaft drives the absolute encoder to rotate. The encoding signal is sent to the main control chip to calculate the actual valve position and display it on the LCD. There will be no loss of valve position due to power outage or interference. Because the absolute encoder acquires the absolute information of the valve position,

5 防爆结构设计

Explosion-proof structural design

GEM智能型电动执行器防爆系列根据GB3836.1-2021《爆炸性气体环境用电气设备第一部分通用要求》和GB3836.2-2021《爆炸性气体环境用电气设备第2部分隔爆型 "d"》有关规定要求设计的隔爆型产品，隔爆标志为Exd II CT4。适用于ⅡA级、ⅡB级、ⅡC级中的T1-T4级爆炸性混合物的1、2工区环境，大气压力范围为86KPa ~106KPa，环境温度范围为-30℃ ~60℃

The GEM intelligent electric actuator explosion-proof series is accorded to the stipulations on GB3836.1-2021 "General Requirements for Electrical Equipment in Explosive Gas Environments Part 1" and GB3836.2-2021 "Electrical Equipment for Explosive Gas Environments Part 2 Explosion proof Type "d"" For explosion-proof products the mark is Exd IIC T4. It is suitable for work area 1 and 2 environments of T1-T4 explosive mixtures in Class IIA, Class IIB and Class IIC. The atmospheric pressure range is 86KPa ~ 106KPa, and the ambient temperature range is -30℃ ~ 60℃.

6 新一代减速侧装手轮机构，优于传统立柱直驱手轮，无需加力装置设备就可以轻松操作大力矩阀门，现场操作更给力！

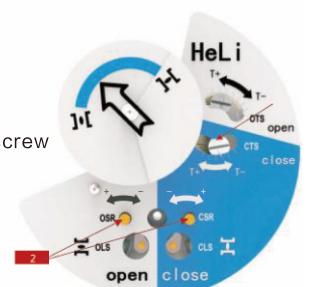
The new generation of deceleration side-mounted hand wheel is better than the traditional column direct-drive hand wheel no need to extra force to operate high-torque valves, making on-site operation much easier.



全新设计的调试引导盘使用安全便捷。
New designed configuration guiding pan is easier to use.

1 力矩调节螺丝
Torque adjustment screw

2 行程调节螺丝
Displacement adjusting screw



GEM基本型 – 局部剖视 Basic model section view



全新设计的人机交互界面 操作清晰简洁
New designed user-computer interface, Easy to operate

- 1 清晰的LCD配备图文符号，观察执行器状态更直观
Clear LCD to show symbols, more direct to observe status
- 2 现场操作按钮
Buttons operation in site
- 3 现场操作按钮
Knobs operation in site



GEM系列 多回转电动执行器 GEM series Multi-turn electric actuator

GEM智能型 – 局部剖视 Intelligent model section view



GEM多回转 – 产品结构 Product Structure GEM multi-turns

可靠的阀门接口 Reliable valves connector

GEM多回转系列提供多种阀门接口类型，标准出货为Y型连接(牙嵌式)——依据JB2920标准，可选择Z型连接(孔键式)或T型连接(推力式)——依据ISO5210标准。The GEM multi-turns series provides a variety of valves connector types. The standard shipment is Y-type connector (tooth embedded type)-according to JB2920 standard, you can choose Z-type connector (hole key type) or T-type connector (thrust type)—Based on ISO5210 standard.

推力轴承连接 Thrust bearing connector

可拆卸的推力底座可适用于推力轴承应用。T型轴套为弹药筒式驱动轴套，可快速拆卸和组装。更多轴向推力的信息，请参考样本中的技术数据部分。Removable thrust base is available for thrust bearing. The T-shaped sleeve is a simple driving sleeve like cartridge , can be quickly disassembled and assembled. For more information, please refer to the Technical Data section of the catalog.



GEM系列 多回转电动执行器 GEM series Multi-turn electric actuator

GEM多回转 – 分体远程安装单元 Split remote installation unit,GEM multi-turns



GEM系列执行器提供了远程控制模块的选项，即执行器和控制单元分离，当阀门位置受到空间限制，环境温度过高或震动水平过高时，可选择该选项。分体控制可最大允许距离是20m。GEM series actuators provide a remote control module, that is, the actuator and control unit are separated. This option can be selected when the valve position is limited by space, the ambient temperature is too high, or the vibration level is too high. The maximum distance for split control is 20m.

多样化需求 Diversified requirement

配套管道和自动化阀门的过程工艺现场遍布全球。不仅仅现场和阀门类型是电动执行器选择的重要因素，而且现场操作的气候环境也至关重要。GEM电动执行器保障各种极端环境条件下安全可靠的服务。独立的国际测试和认证机构发放的产品认证证书确保GEM产品在设计制造和测试阶段符合客户的技术规范。

with supporting piping and automated valves for processing industries are located around the world. The selection of electric actuators does not only depend on the site and valve type, but also the climate and environment of the site. GEM electric actuators ensure safe and reliable service under various extreme environmental conditions. Product certifications issued by independent international testing and certification agencies ensure that GEM products meet customer technical specifications during the design, manufacturing and testing stages.

作为独立的制造商，吉富隆有长期且丰富的经验，与石油天然气行业中的阀门厂，设备工程公司以及最终用户均保持良好的合作关系。

As an independent manufacturer, Giflon has long-time and rich experience and maintains good relationship with valve manufacturers, equipment engineering companies and end users in the oil and gas industry.

GEM系列力矩参数 Torque of GEM series

由于惯性效应和驱动轴套的磨损，故当直接安装在闸阀上时，建议运行速度不宜过快；
 额定力矩是两个方向上设定的最大力矩。最大力矩是其的1.4到2倍，取决于执行器的转速和电压；
 如订购60Hz机型，执行器转速将增加1.2倍；
 如果要求在超过阀门行程的20%时使用最大力矩。请与我们联系。
 Due to the inertia and wear of the drive sleeve, we do not recommend that the running speed is too high when installed directly on the gate valve;
 The rated torque is the maximum torque set in both directions. The maximum torque is 1.4 to 2 times, depending on the actuator speed and voltage;
 If you order a 60Hz model, the rotary speed will increase by 1.2 times;
 If you need to use maximum torque when the valve stroke exceeds 20%. Please contact us.

三相380VAC-开关型及触发频率为600的调节型(可选1200次频繁调节型)
 3phase 380VAC--switch and 600 triggering frequency regulating type (or 1200Hz frequency regulating type)

执行器型号 Actuator Model	18	24	36	48	72	96	144
GEM10/380V	18	100	90	80	70	50	40
GEM15/380V	100	150	130	120	100	75	60
GEM20/380V	150	200	190	180	170	150	100
GEM30/380V	200	300	280	250	200	170	120
GEM40/380V	300	400	350	300	250	230	150
GEM50/380V		500	450	400	350	300	200
GEM60/380V	500	600	550	500	450	400	260
GEM80/380V	600	800	750	650	600	480	350
GEM90/380V	800	900	800	730	630	550	420
GEM100/380V		1000	850	700	X	X	X
GEM150/380V	1000	1500	1300	1000	X	X	X
GEM200/380V		2000	1700	1400	X	X	X
GEM300/380V	2000	3000	2000	1800	1000	750	500

单相220VAC-开关型 Single 220V AC switch

执行器型号 Actuator Model	18	24	36	48	72	96	144
GEM10/220V	88	88	60	45	30	22	15
GEM40/220V	190	190	125	95	65	48	32
GEM60/220V	440	440	300	220	150	110	75

单相220VAC-调节型 Single 220V AC regulating

执行器型号 Actuator Model	18	24	36	48	72	96	144
GEM10/220V	70	70	48	35	24	18	12
GEM40/220V	150	150	100	75	50	40	25
GEM60/220V	350	350	325	175	118	90	60

GEM多 - 回转技术参数 Specification GEM multi-turns

常规参数 General Parameters	扭矩范围 Torque range	60~3000Nm 直接输出 Direct output
	转速 Rotation speed	18~144(rpm)
	环境温度 Ambient temperature	-30°C ~70°C (可选配-40°C ~70°C Optional)
	抗振等级 Anti-vibration grade	依照JB/T8219规定 Accords to JB/T8219
	噪音等级 Noise grade	1m内小于70dB ≤70dB in 1M
	电气接口 Electric terminal	2个NPT 3/4" , 备用1个NPT 3/4" (如果有其他接口要求可联系厂家定制) 2*NPT 3/4", spares 1* NPT 3/4", other requirements for customization
	防护等级 Protection Grade	IP67 , 可选配IP68 Optional
	连接尺寸 Connection size	符合JB2920(三爪型 Three plugs)或ISO5210(推力型、转矩型Thrust or rotation type)
	电机规格 Motor	Class F级, 带热保护器150°C With heat protector 150°C
	工作制 Opening times	开类型: S2~15min , 每小时不超过600次启动 Switch type: S2~15min , not exceed 600 times/H 调节型: S4~50% , 最多不超过每小时600次触发 Regulator type: S4~50%, not exceed 600 times/H
技术参数 Technical Parameters	适用电压 Applicable voltage	三相 : AC380V(±10%) ; 50HZ (±5%)三相三线 3 phase 3 wires
	总线类型 BUS TYPE	可选配: AC220V ; AC415V (其它电压可定制 Other voltage available)
	开关型 Switch type	输入 Input 开关量信号(无源干触点、有源24V、有源220V, 点动保持可切换) Switch signal(dry contact, 24V, 220V, switchable)
		6个非保持型继电器触点输出(5个状态继电器+1个综合故障继电器) 6 non-maintain relay contacts output, (5 status relay+1 fault relay)
		1路模拟量反馈输出 : 4~20mA , 输出负载 : <750Ω (标配4~20mA; 可选配0~10V; 2~10V , 其他可定制) 1 analog quantity feedback output: 4~20mA, output loading: <750Ω (standard 4~20mA; optional: 0~10V; 2~10V , others are available)
		输入 Input 开关量信号(无源干触点、有源24V、有源220V, 点动保持可切换) Switch signal(dry contact, 24V, 220V, switchable)
		模拟量信号: 4~20mA , 输入阻抗 : 65Ω ; (可选配0~10V; 2~10V , 其他可定制) analog quantity input: 4~20mA, input loading: <65Ω (optional: 0~10V; 2~10V , others are available)
		输出 Output 6个非保持型继电器触点输出(5个状态继电器+1个综合故障继电器) 6 non-maintain relay contacts output (5 status relay+1 fault relay)
		1路模拟量反馈输出 : 4~20mA , 输出负载 : <750Ω (标配4~20mA; 可选配0~10V; 2~10V , 其他可定制) 1 analog quantity feedback output: 4~20mA, output loading: <750Ω (standard 4~20mA; optional: 0~10V; 2~10V , others are available)
	死区 Dead Zone	全行程内0.3~9.9%可调 Fully displacement: 0.3~9.9% adjustable
操控模式 Modes of operation	信号反向 Signal reverting	支持 Support
	失信模式设置 Signal lost mode setting	支持 Support
	显示方式 Way of display	四阶灰度LCD液晶开度指示 Four levels gray LCD ON indication
		开/关/远控/故障指示灯(数字显示开度百分比 力矩百分比) ON/OFF/Remote/ Fault indicator(show open %, torque % in digital)
	菜单操作 Menu operation	不开盖設定(通过遥控器或按钮进行菜单設定) Groups setting (e.g. valve position, sort of status feedback, Max torque)
		非侵入式现场控制按钮(开阀/关阀/停止) Non-intrusive site control buttons(Open/Close/Stop)
	现场控制 Site control	非侵入式现场控制旋钮(近控/远控/禁用) Non-intrusive site control knob(Near/Remote/ forbid)
	数据记录 智能诊断 Data recording Intelligent diagnosis	利用红外遥控配合菜单进行故障诊断分析 Fault diagnosis and analysis through infrared remote and menu
		自动校正相序(仅限3相电源) Automatic phase order adjusting(For 3 phase)
	其它功能 Others	报警信号(包括本地和远程) Alarm Signal(In site and remote) 力矩设定和保护 Torque imitation and protection 电机过热保护 Motor overheat protection 力矩旁路 Torque bypass ESD可设置为 : 全开、全关、保位 ESD can set to: Fully open, Fully close, 红外遥控器 Infrared Remote 可选配: 防爆红外遥控器 Explosion proof infrared Remote 防潮加热器(防潮装置) Heater to remove moisture

GEM基本型技术参数 GEM Basic Specification

常规参数 General Parameters	扭矩范围 Torque range	60~3000Nm 直接输出 Direct output
	转速 Rotation speed	18~144(rpm)
	环境温度 Ambient temperature	-30°C~70°C
	抗振等级 Anti-vibration grade	依照JB/T8219规定 Accords to JB/T8219
	噪音等级 Noise grade	1m内小于70dB ≤70dB in 1M
	电气接口 Electric terminal	2个NPT 3/4, 备用1个NPT 3/4(如果有其他接口要求可联系厂家定制) 2*NPT 3/4, spared 1* NPT 3/4, other requirements for customization
	防护等级 Protection Grade	IP67, 可选配IP68(IP68定义为水下15m, 72小时不渗漏之等级) Optional IP68(72 hours underwater 15M)
	连接尺寸 Connection size	符合JB2920(三爪型 Three plugs)或ISO5210(推力型、转矩型Thrust or rotation type)
	电机规格 Motor	Class F级, 带热保护器150°C With heat protector 150°C
	工作制 Opening times	开关型: S2~15min, 每小时不超过600次启动 Switchtype: S2~15min, not exceed 600 times/H
技术参数 Technical Parameters	适用电压 Applicable voltage	三相: AC380V(± 10%) / 50Hz(± 5%)三相四线 3Phase 4 wires
		可选配: 单相AC220V Single phase AC 220V
	总线类型 BUS TYPE	无 N/A
	输入 Input	开关量控制, 内置触点, 可支持5A@250Vac Switch signal(dry contact, 5A@250Vac optional)
	开关型 Switch type	开到位/关到位无源触点 Full open/ Full close dry contact
		开向过矩/关向过矩无源触点 Over torque for open/ over torque for close dry contact
		可选配: 半调节型-位置反馈电位器 Optional : semi-regulator, positioner potentiometer
	显示方式 Way of display	指针式开度指示盘 Open angle indicator pan
	菜单操作 Menu operation	无 N/A
	现场控制 Site control	无 N/A
操控模式 Control Mode	数据记录 智能诊断 Data recording Intelligent diagnosis	无 N/A
	其它功能 Other functions	力矩设定和保护 Torque imitation and protection
		电机过热保护 Motor overheat protection
		可选配: 防爆红外遥控器 Explosion proof infrared Remote
		防潮加热器(防潮装置) Heater to remove moisture

通讯接口 Communicate interface

现代化设备要求执行器与控制室之间的无缝控制与反馈, 以及资产管理数据。现场的管理者需要实时的运行数据, 工艺流程操作人员需要始终能完成控制现场设备。维护管理人员需要资产管理数据, 用于计划更加有效维护计划。

Modern equipment requires seamless control and feedback between actuators and control rooms, as well as asset management data. On-site managers need real-time operating data, and process operators need to be able to control on-site equipment at all times. Maintenance managers need asset management data to plan more effective maintenance.

串口通讯 Serial port communication

吉富隆在开发控制模块时, 就考虑到了行业网络总线系统的持续发展。通过专业的系统支持团队, 合力可以为现场总线网络设计提供专业的兼容的阀门执行器。

When Giflon developed the control module, We considered the continuous development on the industry network BUS system. Through a professional system support team, We can provide professional compatible valve actuators for field BUS network design.

GEM系列所有的现场总线通讯选项均可提升, 以便适应固件更新从而扩展其他功能。

All field BUS communication options of the GEM series can be updated to match with firmware updates and expand additional functions

现场总线通讯既可以单独使用, 也可以根据具体应用或现场要求与数字硬接线控制共同使用。

Field BUS communications can be used alone or with digital hardwired controls together accords on the specific application or site requirements.

Modbus

Modbus通讯卡适用于单通道或双通道通讯, 可装入吉富隆执行器中, 并提供所有执行器控制功能和反馈数据的现场总线通讯。Modbus通讯卡通过RS485接口, 使用Modbus RTU通讯协议。设备地址和数据传输速率等系统变量通过红外线或蓝牙无线进行设定。

The Modbus communication card is suitable for single-channel or dual-channel, can be installed into actuators, and provides field BUS communication for all actuator control functions and feedback data. The Modbus communication card uses the Modbus RTU communication protocol through the RS485 terminal. System variables such as device address and data transfer rate are set wirelessly via infrared or Bluetooth.

Profibus

Profibus DP 接口模块可用于将合力执行器与Profibus网络结合。它完全满足EN50170的要求。Profibus总线可实现完整的执行器控制 并将数据反馈给主机。

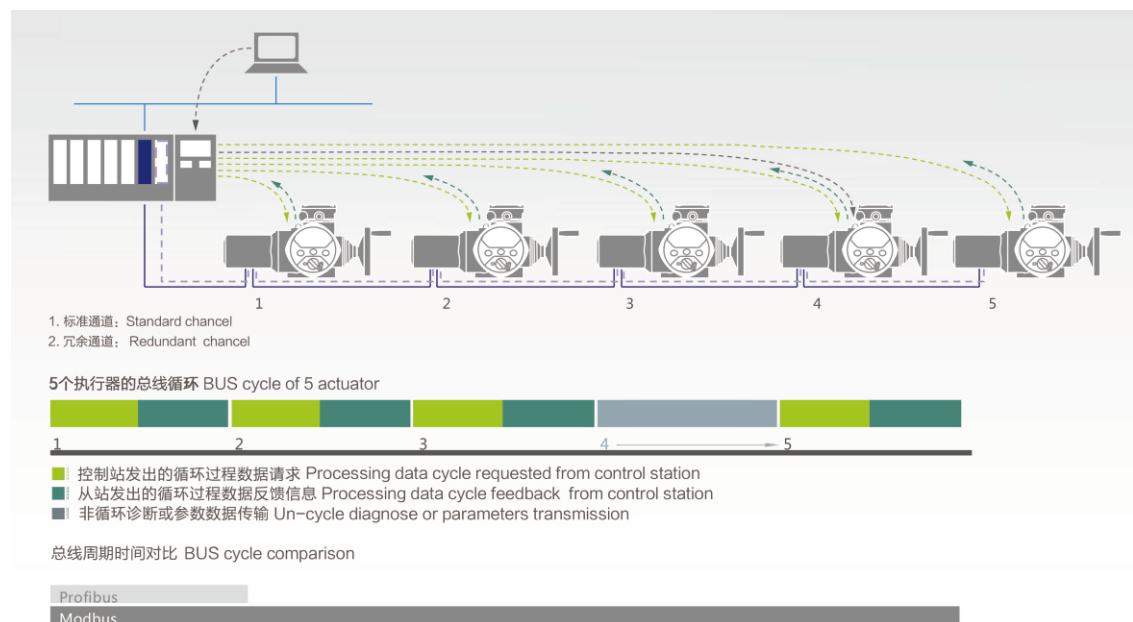
Profibus DP interface module can be used to combine with actuators to connect networks. It fully meets the requirements of EN50170. The Profibus can control actuator completely and feedback data to the host.

Profinet and Modbus TCP

工业以太网目前逐渐成为工业自动化中最流行的解决方案。吉富隆已经为GEM系列执行器设计了Modbus TCP和Profinet连接的以太网解决方案。

Industrial Ethernet is currently becoming the most popular solution in industrial automation. Giflon has designed Modbus TCP and Profinet connected Ethernet solutions for the GEM series of actuators.

现场总线系统解决方案 – GEM多回转 On site BUS system solution–GEM Multi-turns



电动执行器 – 配线性推力单元/蜗轮箱

Electric actuator equipped with linear thrusting unit/ Worm gear box

→ GEM多回转执行机构与线性推力单元组合力矩: 5KN~217KN

适用于截止阀、调节阀
GEM multi turns actuator and linear thrusting unit:
5KN~217KN, for globe valves, control valves

线性单元常用推力规格

Linear thrusting unit specifications

序号 NO.	最大推力 (N) Max thrust	标准行程 (mm) Standard displacement	定制行程 (mm) Customized displacement
1	6500	16-40	可定制行程 Customized displacement
2	10000	16-40	
3	16000	16-40	
4	25000	60-100	
5	35000	60-100	
6	45000	130-150	
7	65000	130-150	

如需详细参数或其余推力规格, 请致电公司
For more details please contact us



→ GEM多回转执行机构与锥齿轮箱组合力矩: 200Nm~50,000Nm

适用于闸阀、截止阀
GEM multi- turns actuator and bevel gearbox: 200Nm~50,000Nm

→ GEM多回转执行机构与角行程减速箱组合力矩: 100Nm~600,000Nm

适用于蝶阀、球阀、旋塞阀
GEM multi- turns actuator and angle turn gearbox: 100Nm~600,000Nm

部分回转电装蜗轮常用扭矩规格

Some electric worm gearbox torque specification

序号 No.	执行器组合输出扭矩 Actuator output torque (N.m)	执行器组合型号 Actuator combination model	执行器输入扭矩 Actuator input torque (N.m)	默认转速 Default rotation speed (r/min)	默认速比 Default speed ratio	开闭时间 Open/ Close time
1	3500	GEM30-24-B1EO-bB1+2J-D	250	24	50:1	31
2	4500	GEM30-24-B1EO-bB1+3-D	300	24	50:1	31
3	7500	GEM50-24-B1EO-bB1+3J-D	500	24	53:1	33
4	12000	GEM80-24-B1EO-bB1+4-D	800	24	55:1	35
5	16500	GEM90-24-B1EO-bB1+4J-D	900	24	57:1	36
6	22000	GEM100-24-B1EO-bB1+5-D	1000	24	62:1	39
7	28000	GEM150-24-B1EO-bB1+5-D	1500	24	67:1	42
8	38000	GEM200-24-B1EO-bB1+6-D	2000	24	65:1	41
9	48000	GEM200-24-B1EO-bB1+6J-D	2000	24	75:1	47
10	63000	GEM300-24-B1EO-bB1+7-D	3000	24	82:1	52
11	80000	GEM300-24-B1EO-bB1+7X-D	3000	24	70:1	44

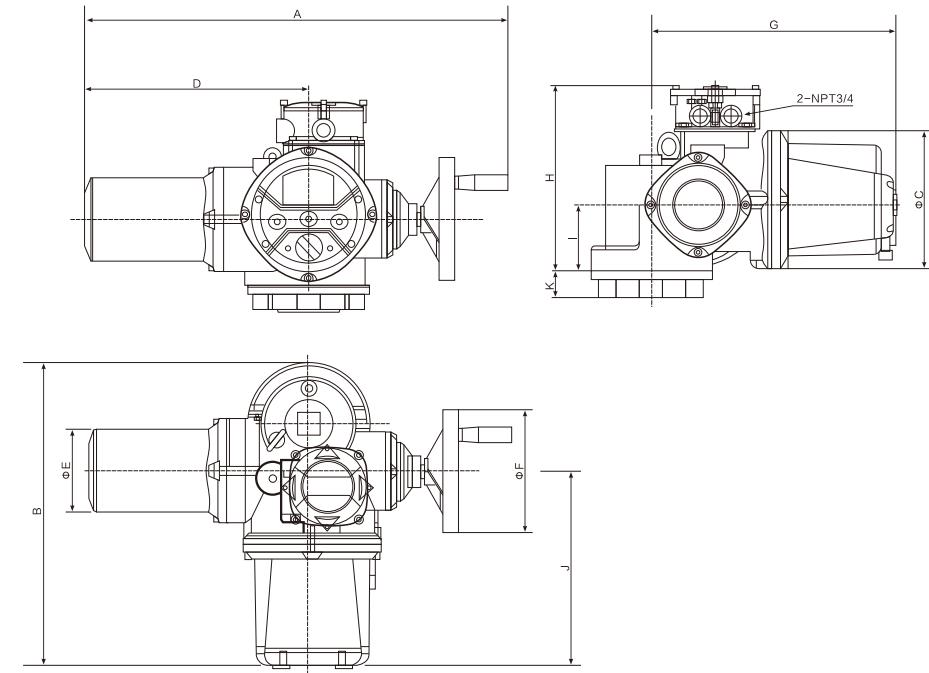
如需详细参数或其余推力规格, 请致电公司
For more details, please contact us



GEM多回转电动执行器外形尺寸(智能型)

GEM Multi-turns electric actuator dimension(intelligent type)

外形尺寸 - GEM多回转
Dimension-GEM Multi-turns

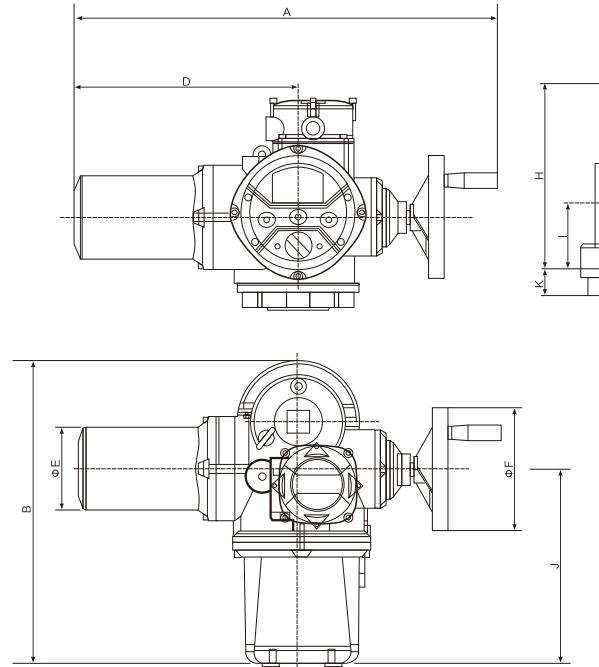


型号 Model	类别 Type	A	B	ΦC	D	ΦE	ΦF	G	H	I	J	K		重量 (kg)
												Z型法兰 flange	T型法兰 flange	
GEM10		569	452	222	293	105	125	378	290	108	318	0	60	26
GEM15		569	452	222	293	105	125	378	290	108	318	0	60	26
GEM20		682	490	222	360	135	200	394	300	108	318	41	60	42
GEM30		682	490	222	360	135	200	394	300	108	318	41	60	42
GEM40		682	490	222	360	135	200	394	300	108	318	41	60	42
GEM50		732	545	222	404	155	200	420	305	114	323	41	62	56
GEM60		732	545	222	404	155	200	420	305	114	323	41	62	56
GEM80		732	545	222	404	155	200	420	305	114	323	41	62	56
GEM90		732	545	222	404	155	200	420	305	114	323	41	62	56
GEM100		855	602	222	519	226	247	445	355	165	323	0	125	165
GEM150		855	602	222	519	226	247	445	355	165	323	0	125	165
GEM200		855	602	222	519	226	247	445	355	165	323	0	125	165
GEM300		855	602	222	519	226	247	445	355	165	323	0	125	165

GEM多回转电动执行器外形尺寸(基本型)

GEM Multi-turns electric actuator dimension(basic type)

外形尺寸 - GEM多回转
Dimension-GEM Multi-turns



单位 Unit: mm

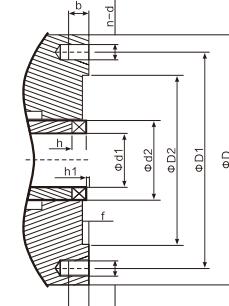
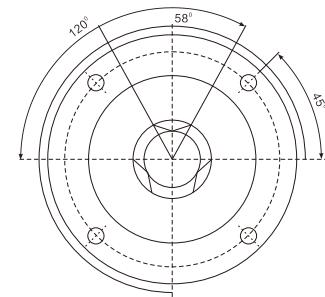
类别 Type 型号 Model	A	B	ΦC	D	ΦE	ΦF	G	H	I	J	K		重量 Weight (kg)
											Z型法兰 flange	T型法兰 flange	
GEM10	569	294	222	293	105	125	219	290	108	160	0	60	20
GEM15	569	294	222	293	105	125	219	290	108	160	0	60	20
GEM20	682	332	222	360	135	200	235	300	108	160	41	60	38
GEM30	682	332	222	360	135	200	235	300	108	160	41	60	38
GEM40	682	332	222	360	135	200	235	300	108	160	41	60	38
GEM50	732	387	222	404	155	200	261	305	114	165	41	60	54
GEM60	732	387	222	404	155	200	261	305	114	165	41	60	54
GEM80	732	387	222	404	155	200	261	305	114	165	41	60	54
GEM90	732	387	222	404	155	200	261	305	114	165	41	60	54
GEM100	855	445	222	519	226	247	287	355	165	165	0	125	145
GEM150	855	445	222	519	226	247	287	355	165	165	0	125	145
GEM200	855	445	222	519	226	247	287	355	165	165	0	125	145
GEM300	855	445	222	519	226	247	287	355	165	165	0	125	145

GEM多回转电动执行器输出接口尺寸

GEM Multi-turns electric actuator output contact dimension

外形尺寸 - GEM多回转
Dimension-GEM Multi-turns

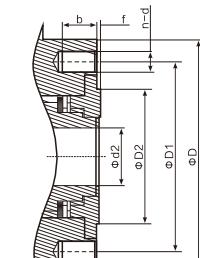
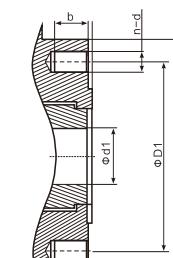
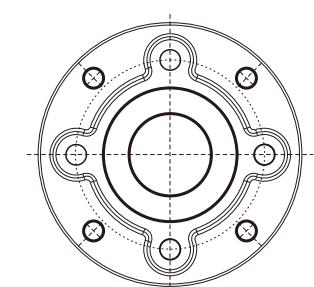
Y型连接(牙嵌式)—— JB2920标准
Y shape(Tooth embedded) —— JB2920 Standard



类别 Type 型号 Model	基座号 Base No.	ΦD	$\Phi D1$	$\Phi D2$	$\Phi d1$	$\Phi d2$	f	h	h1	n-d	b
GEM10/15	JB2	145	120	90	30	45	5	8	2	4-M10	20
GEM20/30/40	JB3	185	160	125	43	58	5	10	2	4-M12	20
GEM50/60/80	JB4	225	195	150	50	72	5	12	2	4-M16	25
GEM100/150	JB5	275	235	180	62	82	5	14	2	4-M20	35
GEM200/300	JB7	330	285	220	65	98	6	16	2	4-M24	35

Z型连接(孔键型)或T型连接(推力型)—— ISO5210标准

Z shape connection, hole key type or T shape connection(Thrust type) —— ISO5210 Standard



Z型连接(孔键型)
Z Shape connection, hole key type

T型连接(推力型)
T Shape connection(thrust type)

类别 Type 型号 Model	基座号 Base No.	ΦD	$\Phi D1$	$\Phi D2$	f	$\Phi d1$ (最大) Maximum	$\Phi d2$ (最大) Maximum	n-d	b
GEM10/15	F10	138	102	70	3	30	Tr28	4-M10	15
GEM20/30/40	F14	175	140	100	4	42	Tr40	4-M16	24
GEM50/60/80	F16	205	165	130	5	50	Tr48	4-M20	30
GEM100/150	F25	338	254	200	5	75	Tr75	8-M16	25
GEM200/300	F30	338	298	230	5	75	Tr75	8-M20	30

型号编制说明 Way of coding

GEQ1-05-B1K4-E0-aB1(F-F07M17)	阀杆尺寸 Stem size 17x17
	法兰尺寸 Flange size F07
	附加功能呼吸阀 Auxiliary function breath valve
	电源AC220V1PH产品颜色RAL9004杨纹里色 Power AC220V1PH, product colour: RAL9004 timber strip
	不防爆产品 Non-explosion proof product
	基本开型带有源、无源触点反馈输出 Basic switch model with source, non-source contact feedback output
	输出扭矩50N.m(数字x10N.m) Output torque: 50N.m (Numbers*10N.m)
	机型 Model GEQ1

产品概述 Products descriptions

GEQ系列产品是新一代的电动执行器产品。进行模块化设计，具有丰富可拓展的功能。适用于蝶阀、球阀、闸阀等多种不同形式的阀门。

GEQ series product is a new generation electric actuator product, with modularization design, and abundant extendable functions, applicable on butterfly valves, ball valves, gate valves and etc.

产品特性 Product Features

- 高效的传动设计，具备结构性自锁
High efficiency driving, with self locking structure
- 双重防凝露设计，电气失效概率更低
Double dew proof design, low possibility to lost electric
- 高防护等级，标配IP67出厂，可选配IP68
High grade protection, Standard for IP67, optional for IP68
- 独立的电控单元设计，强大的前序保护电路为产品安全稳定保驾护航
Unique electric control unit design, strong protection circuit to protect Product

基础参数 Basic Specification

执行器类型 Actuator type	GEQ 系列电动执行器 GEQ series electric actuator
扭矩范围 Torque range	50~3000N.m直连Direct Connection; 4000~10000N.m配齿轮箱With gearbox
防护等级 Protection Grade	IP67, 可选配IP68(IP68定义为水下15m, 72小时不渗漏之等级) IP67, Optional IP68(72 hours underwater 15M)
防爆等级 Explosion-proof grade	默认为非防爆，可选Exd II CT6 Non explosion-proof as default, Exd II CT6 as optional
工作时间 Working time	长时制工作 Long working time
适用电压 Applicable Voltage	AC110V, AC220V ± 10% 1 Phase; 50/60Hz ± 5%, 可选配Optional AC/DC 24V, AC380V
环境温度 Ambient temperature	-25°C ~+70°C
相对湿度 Related Humidity	90% (25°C)
电机规格 Motor Specification	F级绝缘，带有过温保护 F grade insulation with overheat protection
输出连接 Output Connection	ISO5211直连式，八角孔 Direct connection holes, octagon holes
调节型功能配置 Regulating Type Configuration	支持失信模式，信号反转选择功能 Support signal losing mode, signal revert selection mode
手动装置 Manual Assemble	手柄操作(选配手轮) Handle operation (hand wheel optional)
位置指示 Position Indication	开关指针(选配凸盖指示) Switch model: switch source signal, non-source signal
输入信号 Input Signal	开类型: 开关有源信号，无源信号 Switch model: switch source signal, non-source signal 调节型: 标配4-20mA(输入阻抗: 150Ω)。0-10V, 2-10V; (多种信号共存) Regulation type: 4-20mA standard, (input resistance 150Ω)(multi-signals co-exist) 光电隔离 Photo-electric isolatio
输出信号 Output Signal	开类型: 有源+无源反馈 Source signal, non-source feedback 调节型: 标配4-20mA(输出阻抗: 750Ω)。0-10V, 2-10V; (多种信号共存) Regulation type: 4-20mA standard, (input resistance 750Ω) (multi-signals co-exist) 光电隔离 Photo-electric isolatio
电缆接口 Cable Terminal	标配Standard: 2-M20 × 1.5, 其它尺寸可定制 Others for customization
防潮加热器 Dehumidification Heater	标配Standard(25W~30W)
外观颜色 Appearance Colour	RAL:9004(黑Black), 环氧聚脂粉体涂装Epoxy painting
控制精度 Control Precision	1%(更高精度可定制Higher for customization)

规格参数 General Specification

型号 Model		输出扭矩 Output torque (N.m)	运行时间 Running time (S)	电机功率 Motor Power (W)	型号额定电流 Rated Current(A)				重量 Weight (kg)	
					AC380V	AC220V	AC110V	DC24V		
GEQ1	-05	50	20	12	0.11A	0.25A	0.47A	1.5A	12S	4
	-08	80	30	12	0.11A	0.25A	0.47A	1.5A	18S	4
	-10	100	30	15	0.12A	0.31A	0.53A	1.87A	18S	4
GEQ2	-15	150	40	25	0.13A	0.32A	0.55A	2.1A	22S	5
	-20	200	40	30	0.17A	0.41A	0.71A	2.7A	22S	5
GEQ3	-25	250	30	40	0.18A	0.38A	0.72A	4.0A	18S	7
	-40	400	30	60	0.25A	0.5A	1.0A	6.8A	18S	8
	-60	600	30	90	0.3A	0.75A	1.5A	9.5A	18S	9
GEQ4	-80	800	35	90	0.38A	0.75A	1.5A	9.5A	20S	18
	-100	1000	54	90	0.38A	0.75A	1.5A	9.5A	30S	19
	-120	1200	54	120	0.55A	1.1A	2.3A	12.2A	30S	19.5
GEQ5	-150	1500	30	200	0.9A	1.9A	3.9A	13A	35S	28
	-200	2000	40	200	0.9A	1.9A	3.9A	18A	35S	28
	-250	2500	50	200	0.9A	1.9A	3.9A	23A	35S	28
	-300	3000	60	200	0.9A	1.9A	3.9A	30A	35S	28
GEQ4JS	-400	4000	140	90	0.38A	0.75A	1.5A	9.5A	120S	52
GEQ5JS	-600	6000	120	200	0.9A	1.9A	3.9A	13A	120S	62
	-800	8000	160	200	0.9A	1.9A	3.9A	18A	120S	62
	-1000	10000	200	200	0.9A	1.9A	3.9A	23A	160S	62

注：1. 产品出厂标准配置。

2. 额定扭矩为最大扭矩的0.75倍。

3. 上述为50Hz的开关时间，60Hz的开关时间为50Hz开关时间的5/6倍。最大扭矩同上。

4. 上述为执行器的常规参数，如有特殊要求可与本公司联系。

1. Standard delivery

2. Rate torque is 75% of Max torque

3. Above Open/close time is for 50Hz, the time for 60Hz can times 5/6, for the max torque as well

4. About actuators are for normal models, please contact us for any special requirement

可选样式 Optional Style



常规指示
Normal indication



凸盖指示(选配)
Prominent indication(Optional)

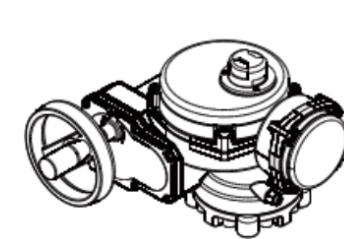
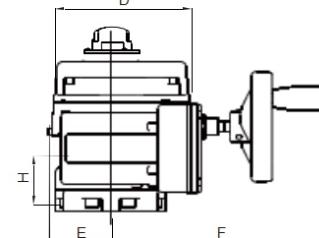
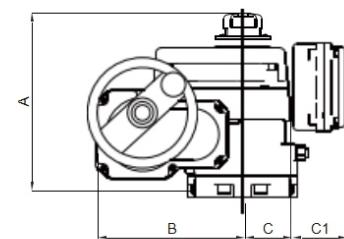


手轮操作(选配)
Handwheel (optional)



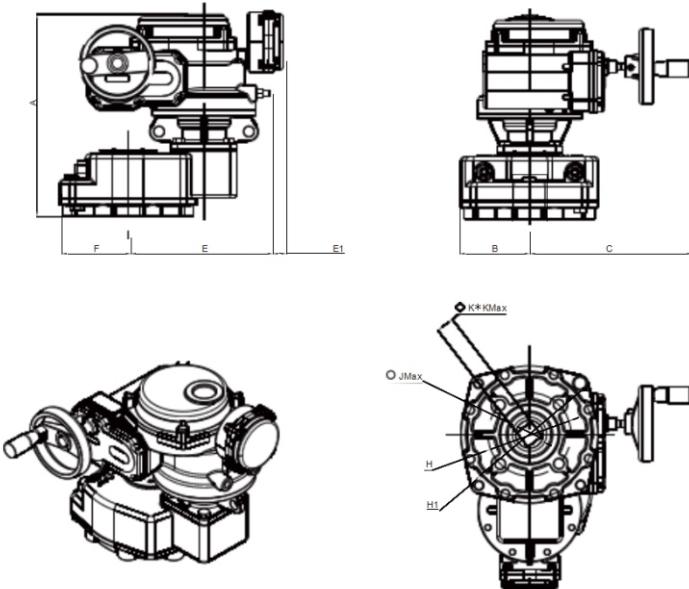
手柄操作
Handle operation

产品尺寸参数 Product Dimension



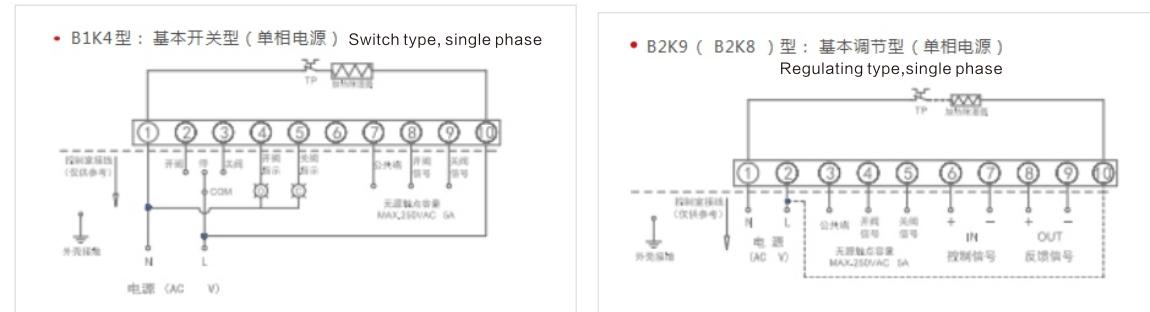
型号 Model		A	B	C	C1	D	E	F	H	I	J	K
GEQ1	-05	181	114	52	70	112	66	200	32	F05/F07	≤ 16	M11 M14 M17
	-08											
	-10											
GEQ2	-15			52	70	130	75	205	32	F05/F07	≤ 16	M14 M17
	-20											
GEQ3	-25			63	70	170	82	243	45	F07/F10 F10/12	≤ 32	M14 M17 M22 M27
	-40											
	-60											
GEQ4	-80	240	200	65	70	185	85	269	66	F12 F10/14	≤ 45	M27 M36
	-100											
	-120											
GEQ5	-150			82	70	212	103	277	85	F14 or F16	≤ 52	M36
	-200											
	-250											
	-300											

产品尺寸参数 Product Dimension



型号 Model	A	B	C	E	E1	F	K	J	H/H1
GEQJS400	365	137	218	240	50	137	50	60	F14/F16/F25
GEQJS600									
GEQJS800	392	137	254	280	26	137	50	60	F14/F16/F25
GEQJS1000									
GEQJS1200									

GEQ基础功能电路图 Wiring Diagram



型号编制说明 Way of coding

GOM2-20-B1 K4-a B1-R

选配功能: 空白-无选配功能、R-过力矩保护、J计数器、F-呼吸阀
Optional functions: blank- no optional, R- over torque protection, J- timer, F-breath valve

颜色代号: B1-RAL9004、S1-RAL5015、L-RQAL7035
Colour code: B1-RAL9004, S1-RAL5015, L-RQAL7035

电压代号: a-AC220V、b-AC380V、C-DC24V、d-AC24V、e-AC110V
Voltage code: a-AC220V, b-AC380V, C-DC24V, d-AC24V, e-AC110V

反馈类型: K4-有源+无源反馈、5-无源+电位器反馈K9-模拟量反馈
Feedback type: K4-source+non-source feedback, 5-non-source+potentiometer feedback,K9-analog quantity feedback

控制类型: B1-开关型、B2-调节型、SF1-非层类型、SF2-非侵调节型
Control types: B1: switch type, B2: regulator type SF1:Non-level type, SF2: basic Non-intrusive type

扭矩代号: 20-执行器扭矩200Nm; 800-执行器扭矩8000Nm
Torque code: 20- actuator torque : 200Nm; 800-actuator torque : 8000Nm

产品机型: GEQ1、GOM1、GOM2、GOM3、GOM4、GOM4JS (详见规格表)
Product model: GEQ1, GOM1, GOM2, GOM3, GOM4, GOM4JS
(Please read specifications for details)

产品概述 Product Overview

GOM系列角行程电动执行器机械传动采用行星齿轮结构，可输出扭矩25~8000Nm，手动操作机构为无离合设计，手动/电动互不干涉，产品在通电时也可转动手轮。产品可适配蝶阀、球阀、旋塞阀等产品应用于电厂/冶金厂/污水处理厂/楼宇自控/城市管网等管路系统。该系列产品具有输出扭矩高，带有自锁，速比多样化等特点，连接法兰均采用ISO5211标准，联轴器采用花键连接方便用户适配不同规格阀门。

The transmission of the GOM series quarter-turn electric actuator adopts a planetary gear structure and can output a torque of 25~8000Nm. The manual operating mechanism is clutchless design. Manual/electric do not interfere with each other. The product can also rotate the handwheel when the product is powered on. The products can be adapted to butterfly valves, ball valves, plug valves, etc. The products are used in pipeline systems such as power plants/metallurgical plants/sewage treatment plants/building automation/urban pipe networks. This series of products has the properties of high output torque, self-locking, and various of speed ratios. The connecting flanges adopt ISO5211 standards, and the couplings adopt spline connection to convenience to users to connect different types of valves.

产品特性 Product Feature

- 扭矩范围: 25Nm~8000Nm
- 适配多样性，可适配蝶阀、球阀、旋塞阀等阀类
- 具有自锁性的行星传动机构
- 一体化ISO5211标准连接法兰
- 3D开度指示器
- 无离合手轮装置
- IP67/IP68高防护等级
- 内置防潮加热器，预防冷凝
- 选配过力矩保护，防止损坏阀体

Torque range: 25Nm~8000Nm
Applicable to butterfly valve,ball valve, plug valve and etc
With self lockable planetary gears
Integrated ISO5211 standard connection flange
3D open angle indicator
Clutch free Handwheel
High grade protection
Build in heater to remove moisture
Over torque protection(optional)

基础参数 Basic Specification

供电电压 Service Voltage	AC 24V/220V/230V/ 380V... ($\pm 10\%$) DC24V... ($\pm 10\%$)
频率Frequency	50/60 Hz($\pm 5\%$)
扭矩范围 Torque range	25Nm -8000Nm
行程角度 Displacement angle	90°
行程开关 Displacement switch	2 × SPDT, 250VAC 5A
辅助开关 Ancillary switch	2 × SPDT, 250VAC 5A
电缆接头 Cable termina	< 100Nm: 2 - M20* 1.5, $\geq 100Nm$: 2 × PG16
开关量 Switching value	输入信号 有源信号 Signal input sourced signal 输出信号 有源信号+无源信号 Signal output sourced signal+un-sourced signa
模拟量 Analog quantity	输入信号 4-20mA(出厂设置Default)/2-10V/0-10V 可调 Adjustable 输出信号 4-20mA(出厂设置Default)/2-10V/0-10V 可调 Adjustable
连接法兰 Connection flange	符合ISO5211标准 Comply to ISO5211
位置指示 Position indicator	3D双色带刻度指示器, 可选指针指示器 3D di-ribbons indicator with scale, needle indicator (optional)
手动机构 Manual device	无离合机械手轮 Clutch less Handwheel
防护等级 Protection Grade	IP67、IP68可选Optional
环境温度 Ambient temperature	-25°C~70°C(非标环境温度可定制, 如-40°C等 Others for customization, e.g.-40°C)
过力矩保护 Over weight protection	选配 Optional
防结露装置 Anti-dew device	内置防潮加热器 Build in heater to remove moisture
过热保护 Over-heat protection	电机内置过热保护, 启动温度125°C ± 5°C build in motor over heat protection, Start temperature125°C ± 5°C
断电状态 Power shutdown status	4 -20mA/2 - 10V: 断信号全开/断信号全关可设置(出厂默认断信号保位) Signal shutdown Full open, full close (selectable, position holding as default)
断信号状态 Off signal condition	0 - 10V: 断信号全关 Signal shutdown full open

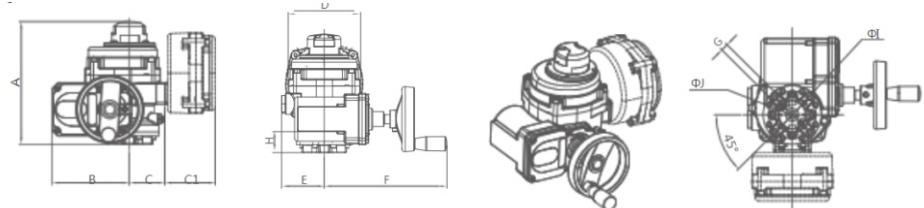
规格参数 General Specification

型号 Model	最大输出扭矩 Max torque (Nm)	运行时间 Running time (秒/90°)	额定电流 Rated current(A)		法兰孔距 Flange PCD (ISO5211)
			AC220V	AC380V	
HEQ1-05	50	20	0.25	0.11	F05/F07
HEQ1-08	80	30	0.25	0.11	F05/F07
GOM2-10	100	19	0.42	0.32	F07/F10
GOM2-20	200	39	0.42	0.32	F07/F10
GOM2-30	300	39	0.46	0.35	F07/F10
GOM3-40	400	29	0.9	0.62	F10/F12
GOM3-60	600	39	0.9	0.62	F10/F12
GOM3-80	800	47	0.9	0.62	F10/F12
GOM3-100	1000	47	1.1	0.8	F10/F12
GOM3-130	1300	47	1.3	0.92	F10/F12
GOM4-170	1700	34	2.2	1.1	F12/F16 or F14
GOM4-200	2000	34	2.5	1.3	F12/F16 or F14
GOM4-230	2300	47	2.2	1.1	F12/F16 or F14
GOM4JS-350	3500	76	2.2	1.1	F16/F25
GOM4JS-500	5000	136	2.2	1.1	F16/F25
GOM4JS-800	8000	188	2.2	1.1	F16/F25

注 : 1.上述产品额定扭矩为最大输出扭矩的0.75倍。Rate torque is 75% of Max torque

产品尺寸参数 Product Dimension

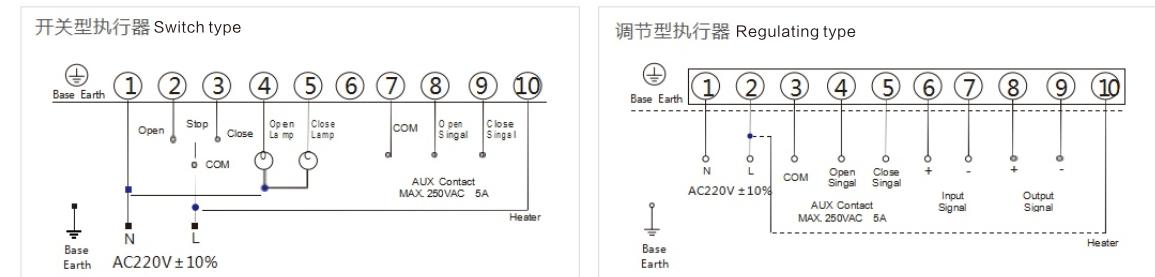
GEQ1外形尺寸图 Overview dimension



注 : 虚线部分为调节型电控拓展单元 , 开类型无此拓展单元
Part of dashed line for regulation type only, not available for switch type

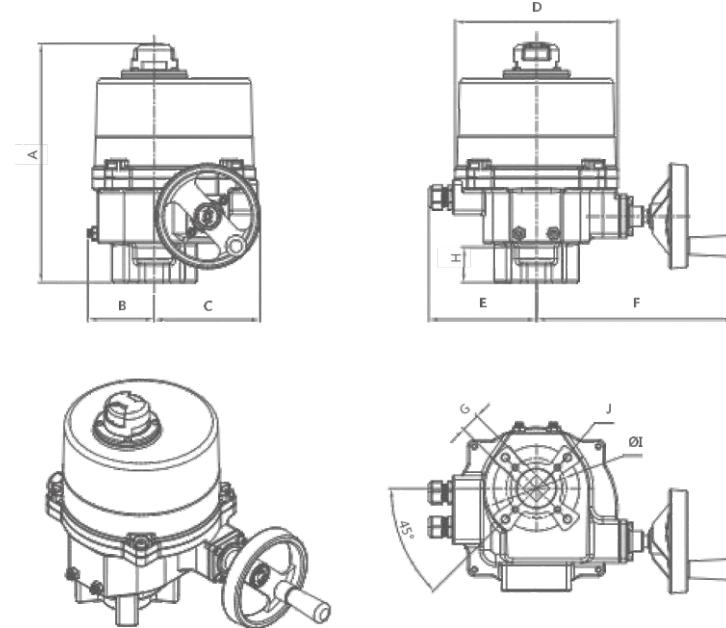
型号 Model	A	B	C	C1	D	E	F	G	H	ΦI	J
GEQ1-05 开关型 Switch-type	182	114	52	/	140	94	190	11×11	30	50	4-M6
GEQ1-08 调节型 Regulatory type	182	114	52	75	140	94	190	14×14		70	4-M8

GEQ基本型电路图 Basic circuit diagram



产品尺寸参数 Product Dimension

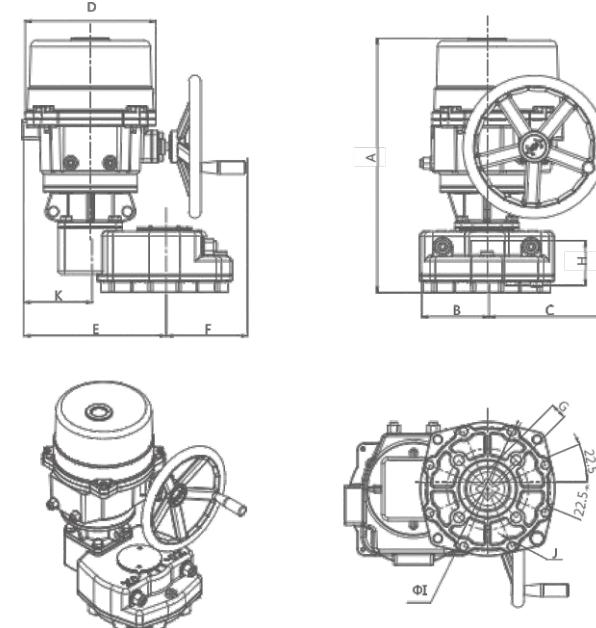
GOM2-4基本型外形尺寸图 Overview dimension



型号 Model	A	B	C	D	E	F	G	H	ΦI	J
GOM2-10	278	78	125	189	125	232	14×14 17×17	35	70 102	4-M8
GOM2-20	278	78	125	189	125	232		35		
GOM2-30	278	78	125	189	125	232		35		
GOM3-40	340	105	190	232	158	290	22×22 22×27	55	102 125	4-M10 4-M12
GOM3-60	340	105	190	232	158	290		55		
GOM3-80	340	105	190	232	158	290		55		
GOM3-100	340	105	190	232	158	290		55		
GOM3-130	340	105	190	232	158	290		55		
GOM4-170	390	129	245	265	165	325	27×27 36×36	65	125 140	4-M12 4-M16
GOM4-200	390	129	245	265	165	325		65		
GOM4-230	390	129	245	265	165	325		65		

产品尺寸参数 Product Dimension

GOM4JS基本型外形尺寸图 Overview dimension

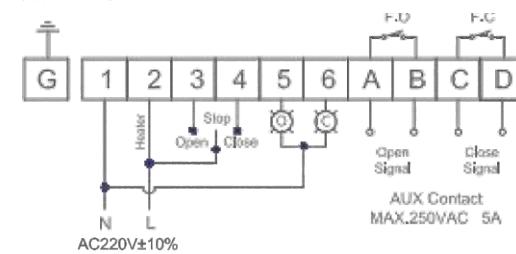


型号 Model	A	B	C	D	E	F	G	H	ΦI	J	K
GOM4JS-350	517	137	242	265	289	165	36×36 46×46	130	165 254	4-M20 8-M16	139
GOM4JS-500	517	137	242	265	289	165		130			139
GOM4JS-800	517	137	242	265	289	165	46×46	130	254	8-M16	139

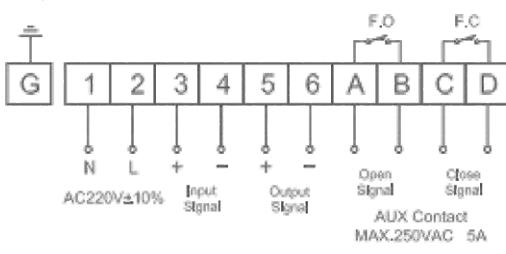
注: 1. 尺寸单位:mm。
2. 表格内未体现的阀轴尺寸可根据客户要求加工, 如圆轴, 双D轴等。
3. 如需特殊法兰连接中心距, 请与我司联系。
1. Unit : mm.
2. For the stem size not shown in the table, we can make it accord to customers' requirement such as dual axel, round axel
3. If require another flange PCD, please contact us.

GOM基本型电路图 Wiring Diagram

开关型执行器 Switch type

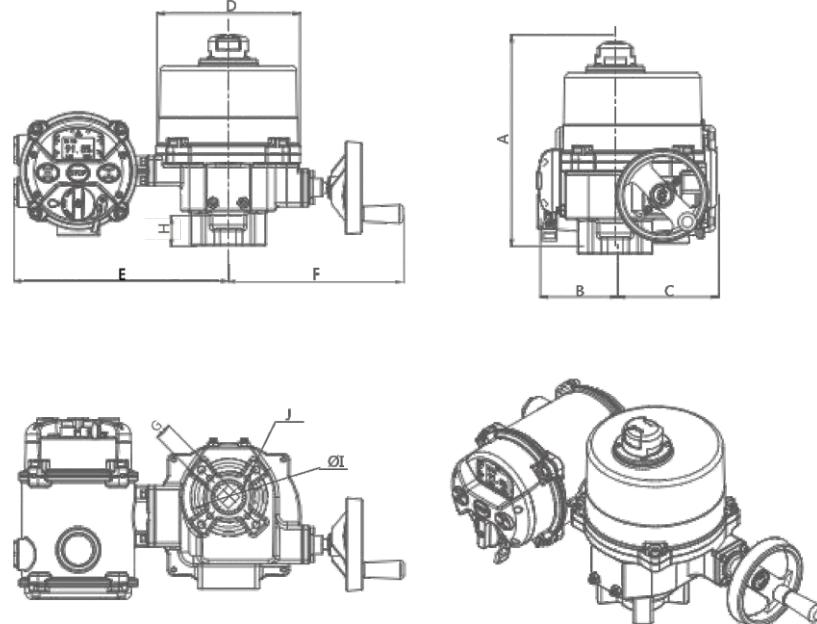


调节型执行器 Regulating type



产品尺寸参数 Product Dimension

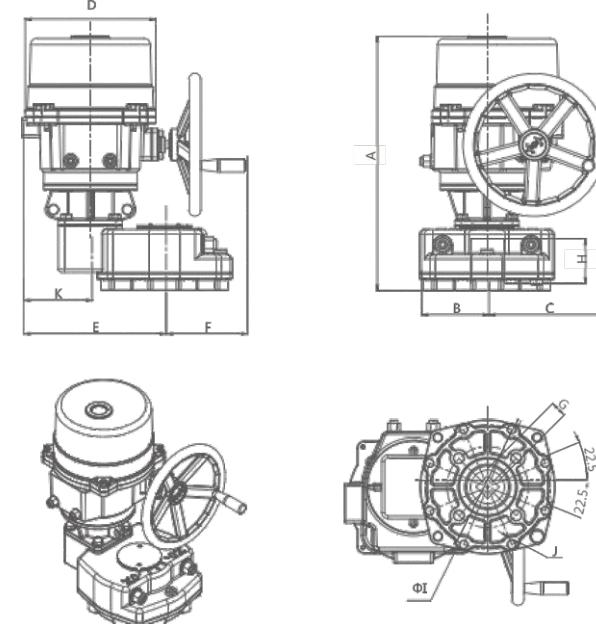
GOM2-4智能型外形尺寸图 Overview dimension



型号 Model	A	B	C	D	E	F	G	H	ΦI	J
GOM2-10	278	78	125	189	125	232	14×14 17×17	35	70 102	4 - M8
GOM2-20	278	78	125	189	125	232		35		
GOM2-30	278	78	125	189	125	232		35		
GOM3-40	340	105	190	232	158	290	22×22 22×27	55	102 125	4 - M10 4 - M12
GOM3-60	340	105	190	232	158	290		55		
GOM3-80	340	105	190	232	158	290		55		
GOM3-100	340	105	190	232	158	290		55		
GOM3-130	340	105	190	232	158	290		55		
GOM4-170	390	129	245	265	165	325	27×27 36×36	65	125 140	4 - M12 4 - M16
GOM4-200	390	129	245	265	165	325		65		
GOM4-230	390	129	245	265	165	325		65		

产品尺寸参数 Product Dimension

GOM4JS基本型外形尺寸图 Overview dimension

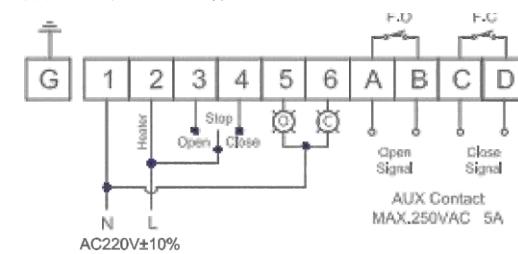


型号 Model	A	B	C	D	E	F	G	H	ΦI	J	K
GOM4JS-350	517	137	242	265	289	165	36×36 46×46	130	165 254	4-M20 8-M16	139
GOM4JS-500	517	137	242	265	289	165		130			139
GOM4JS-800	517	137	242	265	289	165	46×46	130	254	8-M16	139

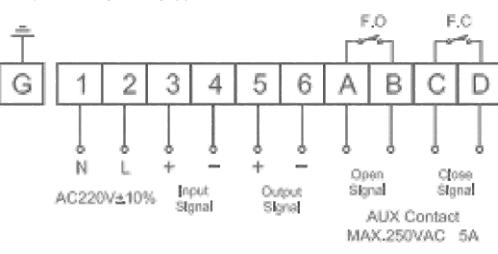
注: 1. 尺寸单位:mm。
2. 表格内未体现的阀轴尺寸可根据客户要求加工，如圆轴，双D轴等。
3. 如需特殊法兰连接中心距，请与我司联系。
1. Unit : mm.
2. For the stem size not shown in the table, we can make it accord to customers' requirement such as dual axel, round axel
3. If require another flange PCD, please contact us.

GOM基本型电路图 Wiring Diagram

开关型执行器 Switch type

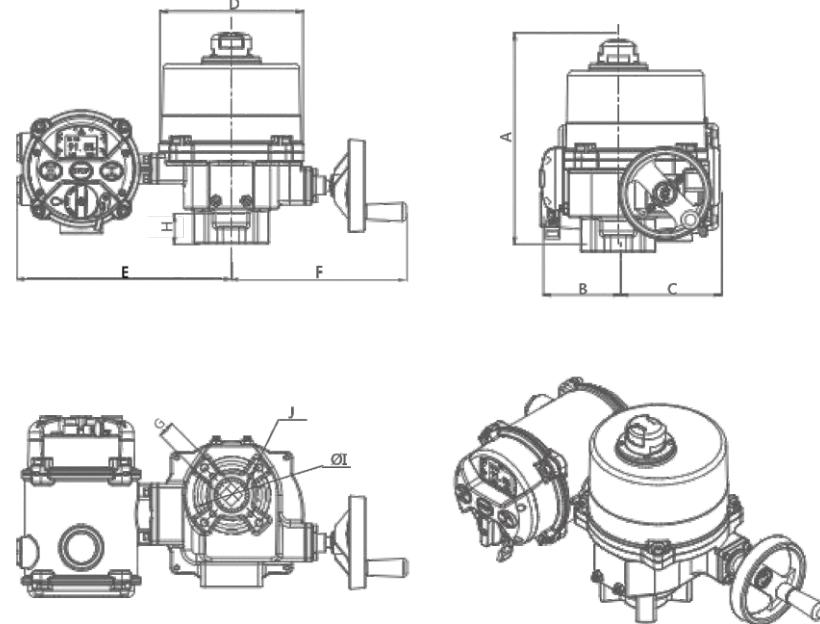


调节型执行器 Regulating type



产品尺寸参数 Product Dimension

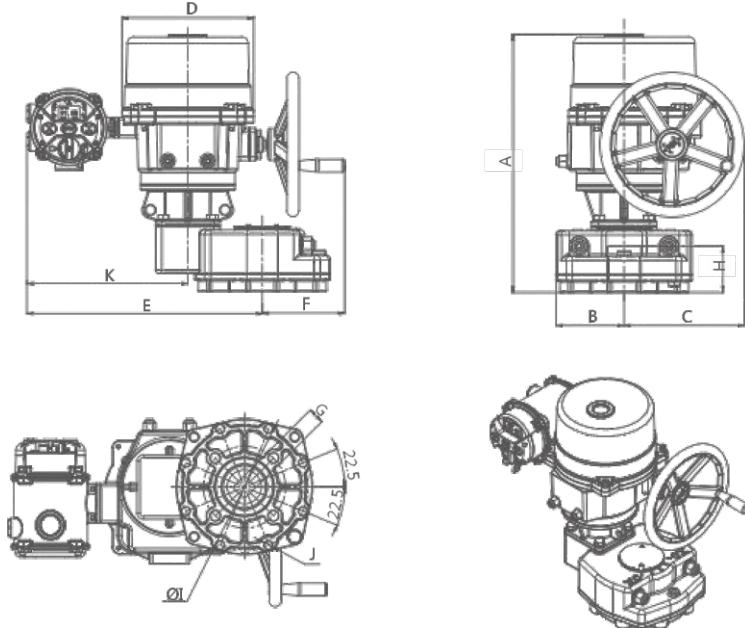
GOM2-4智能型外形尺寸图 Overview dimension



型号 Model	A	B	C	D	E	F	G	H	ΦI	J
GOM2-10	278	102	133	189	281	230	14×14 17×17	35	70 102	4 - M8
GOM2-20	278	102	133	189	281	230		35		
GOM2-30	278	102	133	189	281	230		35		
GOM3-40	337	108	186	232	304	290	22×22 22×27	55	102	4 - M10 4 - M12
GOM3-60	337	108	186	232	304	290		55		
GOM3-80	337	108	186	232	304	290		55		
GOM3-100	337	108	183	232	304	290		55		
GOM3-130	337	108	186	232	304	290		55		
GOM4-170	388	136	241	265	323	325	27×27 36×36	65	125 140	4 - M12 4 - M16
GOM4-200	388	136	241	265	323	325		65		
GOM4-230	388	136	241	265	323	325		65		

产品尺寸参数 Product Dimension

GOM4JS智能型外形尺寸图 Overview dimension



型号 Model	A	B	C	D	E	F	G	H	ΦI	J	K
GOM4JS-350	517	137	242	265	473	165	36×36	130	165	4-M20	323
GOM4JS-500	517	137	242	265	473	165		130			323
GOM4JS-800	517	137	242	265	473	165	46×46	130	254	8-M16	323

注: 1. 尺寸单位:mm。
 2. 表格内未体现的阀轴尺寸可根据客户要求加工, 如圆轴, 双D轴等。
 3. 如需特殊法兰连接中心距, 请与我司联系。
 1. Unit : mm.
 2. For the stem size not shown in the table, we can make it accord to customers' requirement such as dual axel, round axel
 3. If require another flange PCD, please contact us.

型号编制说明 Way of coding

GL1-05 S (a L-F07/F05-M14-IP68	
	IP(IP68以下不备注 No mark below)
	法兰 Flange F07、F05, 阀杆 Stem 14x14
	产品颜色 Product colour: RAL7035(浅灰色RAL)
	电源 Power: AC220V 1PH
	产品功能 Product function: 开关型 Switch type
	输出扭矩时, 表示: 50Nm (数字x10N.m) Output torque: 50N.m (Numbers*10N.m)
	GL1、GL2、GL3、GL4系列产品 Series products

产品概述 Product Overview

GL系列电动执行器结构紧凑，拥有极佳的耐候性和抗震性。在执行器断电时，自锁传动机构确保阀门位置不变，具有电器与机械双重限位，防止超程。可拆卸驱动转接套，方便加工底部安装尺寸符合ISO5211标准，适用于蝶阀，球阀，风阀，旋塞阀等各种阀门，并适用于各种工况和电压等级。

GL series electric actuator has compacted structure, climate and vibration resistance. The valve can be held in the same position when the actuator is powered off, through the self locking device of it. With electric and mechanical double limits to prevent over displacement. With dismantling driving adaptor sleeve, easy to make the installation pan to fit for ISO521 standard, applicable to butterfly, ball, plug valves and various of working conditions and voltage.

产品特性 Product Feature

- 矩矩范围 Torque range: 50NM~6000NM
- 独立接线腔, 防止误操作 Independent terminal, prevent mis-operation
- 90度回转启闭迅速, 调节性能好 Fast start and rotation in 90 degree, good regulation
- 简单高效的机械结构具有自锁且传动精度高
Simple high efficient mechanical structure, with self lock device and high precision driving
- 功能强劲, 多种控制信号与反馈信号供选择 Strong functions, multi-control and feedback signals to select
- IP67高防护等级(可选IP68) High protection grade (IP68 Optional)
- 内置防潮加热除湿器, 防止冷凝 Build-in dehumidification heater to prevent dew
- 模组化设计, 易于拆装及维修 Modularity design, easy to disassemble and maintain



基础参数 Basic Specification

扭矩范围 Torque range	50~6000NM(直连式Direct connection)
供电电压 Service Voltage	AC24V/220V/380V... (± 10%) DC12V/24V/48V... (10%)
频率 Frequency	50/60Hz (± 5%)
行程角度 Displacement angle	0~90° (± 1%)
行程/辅助开关 Displacement/Ancillary switch	2xSPDT, 250VAC 5A
电缆接头 Cable termina	开类型Switch: 1-M20x1.5 调节型/智能型Regulating/ Smart type: 2-M20x1.5
连接法兰 Connection flange	ISO5211
位置指示 Position indicator	平盖指示窗(选配3D双色刻度凸盖指示) Flat cover indicator window(3D Bi-colour scale prominent cover indicator for optional)
手动机构 Manual device	手柄 Handle(选配手轮 Handwheel for optional)
防护等级 Protection Grade	IP67(选配 Optional IP68, 15M-72Hour)
环境温度 Ambient temperature	-25°C~70°C (选配 Optional -40°C~65°C) 环境湿度 Humidity 30%~95%
防结露装置 Anti-dew device	内置防潮加热器 Build in heater to remove moisture
过热保护 Over-heat protection	电机内置过热保护, 启动温度 Build in motor over heat protection 125°C (± 5%)
断电状态 Power shutdown status	断电保位 Position holding
断信号状态 Off signal condition	4~20mA/2~10V 断信号全开/全关(出厂默认断信号保位) 4~20mA/2~10V Signal shutdown Full open, full close (selectable, position holding as default) 0~10V 断信号全关 Full off when signal stops
工作制 Opening times	S4~40%
过力矩保护 Overmoment protection	选配 Optional
抗震性能 Anti-vibration grade	X Y Z 10g, 0.2~34Hz, 30分钟Min
电机 Motor	鼠笼式异步电机, 绝缘等级F级 Squirrel cage motor, insulation grade: F
噪音 Noise	≤60dB(A)-1M

机械参数 Mechanical Parameters

型号 Model	扭矩 Torque (NM)	输出轴套 Output sleeve (MM)	安装法兰 Installation flange ISO5211	开关型 Switch type F03/F05/F07	调节型 Regulator type 重量 Weight(KG) 3	智能型 Smart type 重量 Weight(KG) 6.5
GL1-05	50	14×14	F03/F05/F07	3	3	6.5
GL2-10	100	17×17	F05/F07	4.5	4.5	8
GL2-15	150	17×17	F05/F07	4.5	4.5	8
GL3-25	250	22×22	F07/F10/F12	9.8	10	12.3
GL3-40	400	22×22	F07/F10/F12	9.8	10	12.3
GL3-60	600	27×27	F07/F10/F12	9.8	10	12.3
GL4-100	1000	27×27	F12orF10/F14	14.5	14.7	18
GL4-160	1600	36×36	F12orF10/F14	14.5	14.7	18
GL4-200	2000	36×36	F12orF10/F14	14.5	14.7	18
GL5-250	2500	36×36	F14orF12orF16	24.9	25.1	28.4
GL5-300	3000	36×36	F14orF12orF16	24.9	25.1	28.4
GL6-400	4000	46×46	F16orF25	43.5	43.7	47
GL6-600	6000	46×46	F16orF25	57.1	57.3	60.6

电气性能参数 Electrical Performance Parameters

单相参数 Single phase

型号 Model	扭矩 Torque (NM)	时间 Time (SEC/0~90°)	电机功率 Motor power (W)	110VAC 电流 Electricity(A)		220VAC 电流 Electricity(A)	
				运行 Running	堵转 Braking	运行 Running	堵转 Braking
GL1-05	50	30	10	0.45	0.67	0.24	0.31
GL2-10	100	20	30	0.65	0.96	0.35	0.45
GL2-15	150	30	30	0.65	0.96	0.35	0.45
GL3-25	250	30	40	0.72	1.41	0.38	0.71
GL3-40	400	30	60	1.0	1.74	0.5	0.95
GL3-60	600	30	90	1.5	2.62	0.75	1.48
GL4-100	1000	30	150	3	5.92	1.5	2.87
GL4-160	1600	50	150	3	5.92	1.5	2.87
GL4-200	2000	60	150	3	5.92	1.5	2.87
GL5-250	2500	50	200	3.9	7.24	1.9	3.05
GL5-300	3000	60	200	3.9	7.24	1.9	3.05
GL6-400	4000	100	200	4.1	7.13	2.1	3.17
GL6-600	6000	150	200	4.1	7.13	2.1	3.17

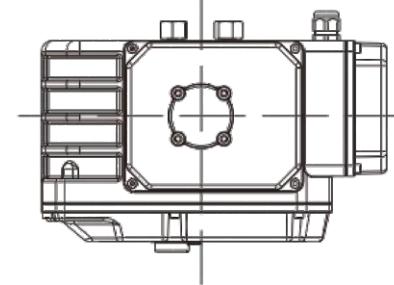
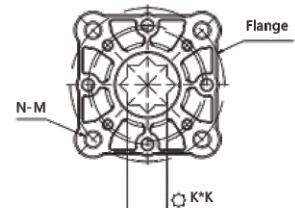
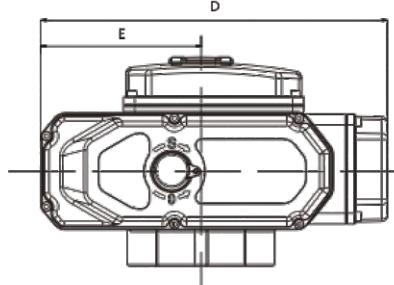
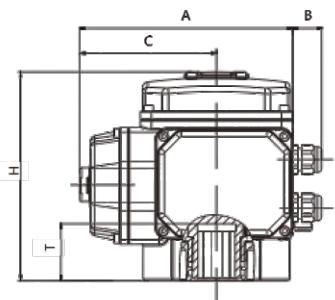
直流参数 DC

型号 Model	扭矩 Torque (NM)	时间 Time (SEC/0~90°)	电机功率 Motor power (W)	110VAC 电流 Electricity(A)		220VAC 电流 Electricity(A)	
				运行 Running	堵转 Braking	运行 Running	堵转 Braking
GL1-05	50	15	12	1.25	2.3	0.7	1.5
GL2-10	100	10	30	3.5	5.3	1.9	3.4
GL2-15	150	15	30	3.5	5.3	1.9	3.4
GL3-25	250	15	40	4.0	6.5	2.1	5.3
GL3-40	400	15	60	6.8	10.3	3.6	5.3
GL3-60	600	15	90	9.5	15.8	4.6	6.5
GL4-100	1000	30	90	9.5	16.4	4.6	6.5
GL4-160	1600	30	120	15	27	8	10.3
GL4-200	2000	30	150	18	27	10	15.8

三相参数 3 Phase

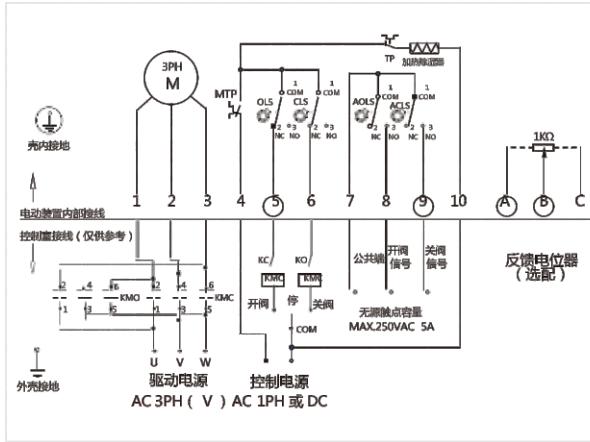
型号 Model	扭矩 Torque (NM)	时间 Time (SEC/0~90°)	电机功率 Motor power (W)	110VAC 电流 Electricity(A)		220VAC 电流 Electricity(A)	
				运行 Running	堵转 Braking	运行 Running	堵转 Braking
GL1-05	50	30	10	0.11	0.13	0.1	0.12
GL2-10	100	20	30	0.12	0.17	0.11	0.13
GL2-15	150	30	30	0.13	0.17	0.12	0.13
GL3-25	250	30	40	0.18	0.25	0.17	0.23
GL3-40	400	30	60	0.25	0.49	0.23	0.47
GL3-60	600	30	90	0.3	0.49	0.27	0.47
GL4-100	1000	30	150	0.67	1.31	0.59	1.11
GL4-160	1600	50	150	0.67	1.31	0.59	1.11
GL4-200	2000	60	150	0.67	1.31	0.59	1.11
GL5-250	2500	50	200	0.9	1.76	0.79	1.54
GL5-300	3000	60	200	0.9	1.76	0.79	1.54
GL6-400	4000	100	200	0.9	1.76	0.79	1.54
GL6-600	6000	150	200	0.9	1.76	0.79	1.54

产品尺寸参数 Product Dimension



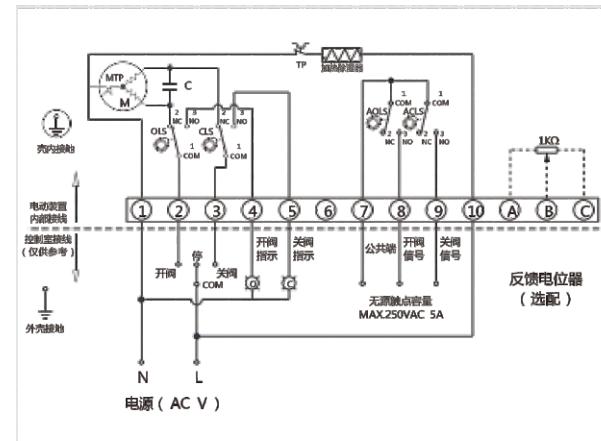
型号 Model	法兰 Flange	A	B	C	D	E	H	T	K*K	N-M
GL1	F03.F05.F07	113	26.5	70.5	178	87	119.5	30	14×14	4-M5.4-M6.4-M8
GL2	F05.F07	124.5	26.5	82.5	217	105	137.5	35	17×17	4-M6.4-M8
GL3	F07.F10.F12	166	26.5	104	291	140	157.5	45	22×22 or 27×27	4-M8.4-M10.4-M12
GL4	F12orF10.F14	198	26.5	124	314	145	198.5	50	27×27 or 36×36	4-M12 or 4-M10.4-M16
GL5	F14orF12.F16	234	26.5	139.5	325	150	257	61	27×27 or 36×36	4-M16 or 4-M12.4-M20
GL6	F16.F25	266	26.5	155	439	189	309	82	36×36 or 46×46	4-M20.8-M16

电路接线图 Circuit Wiring Diagram



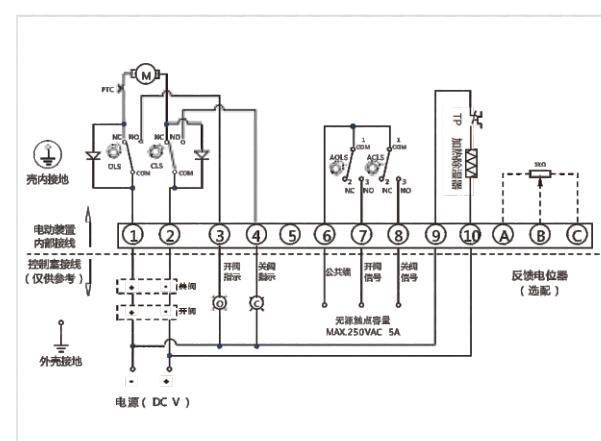
S型：基本开关型(三相电源)
S type: basic switch type (three-phase power supply)

端子接线说明：
 1、端子1、2、3接经过倒相电容后的三相电源；
 2、端子4为控制电路的公共端；
 3、端子5为“开”运行控制，至行程开关OLS动作后，端子5与端子4断开；
 4、端子6为“关”运行控制，至行程开关CLS动作后，端子6与端子4断开；
 5、端子7为无源信号触点公共端，“开”运行到位时与端子8接通，“关”运行到位时与端子9接通；
 6、端子10为加热除湿器接线端；
 7、端子B为电位器动臂；
 8、端子A为电位器低端，端子A、B之间阻值随“开”方向运行时增大9、端子C为电位器高端，端子B、C之间阻值随“开”方向运行时减少。
注意：
 1、三相电源存在相序问题，刚开始调试使用时，要保证行程开关能正确控制电动装置的开和关，否则会造成电动装置失控和损坏电动装置。
 2、无源触点的开阀信号/关阀信号，仅作指示用，比行程开关早约3°触发。
Terminal wiring instructions:
 1. Terminals 1, 2, 3 are connected to the three-phase power supply after inverter circuit;
 2. Terminal 4 is the common terminal of the control circuit;
 3. Terminal 5 is “On” operation control. After the limit switch OLS moves, terminal 5 is disconnected with terminal 4;
 4. Terminal 6 is “Off” operation control. After the limit switch CLS moves, terminal 6 is disconnected with terminal 4;
 5. Terminal 7 is the common end of the Non-source signal contact. It is connected to terminal 8 when it is “on” place, and it is connected to terminal 9 when it is “off” place;
 6. Terminal 10 is terminal for dehumidification heater.
 7. Terminal B is the potentiometer arm;
 8. Terminal A is the low end of the potentiometer, and the resistance between terminals A and B increases with the “on” direction. 9. Terminal C is the high end of the potentiometer, and the resistance between terminals B and C decreases with the “on” direction.
Attention:
 1. There is a phase order problem in the three-phase power supply. When the commissioning starts, make sure the limit switch can control the electric device ON/Off correctly, otherwise it will make the electric device losing control and damage the electric device.
 2. The valve opening signal/valve closing signal of the Non-source contact is for indication only and is triggered about 3° earlier than the travel switch.



S型：基本开关型(单相电源)
S type: basic switch type (single-phase power supply)

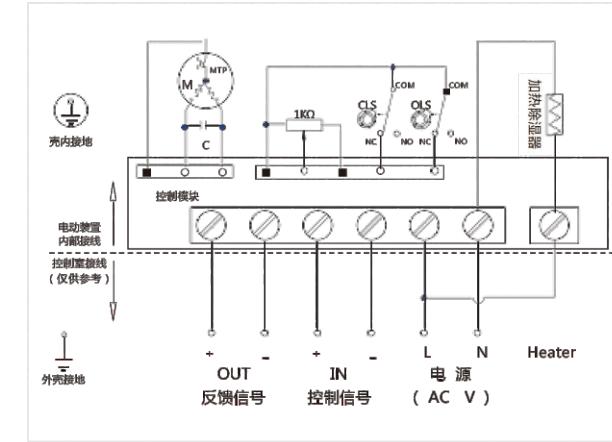
端子接线说明：
 1、端子1接电源零线；
 2、电源相线与端子2接通时为“开”运行，至行程开关OLS动作后停止，同时端子2与端子4接通；
 3、电源相线与端子2接通时为“关”运行，至行程开关CLS动作后停止，同时端子3与端子5接通；
 4、端子7为无源信号触点公共端，“开”运行到位时与端子8接通，“关”运行到位时与端子9接通；
 5、端子10为加热除湿器接线端；
 6、端子B为电位器动臂；
 7、端子A为电位器低端，端子B、C之间阻值随“开”方向运行时增大；
 8、端子C为电位器高端。
注意：
 1、不能将两台或两以上两台以上电动装置并联使用，否则可能会出现开关不到位或电机过热现象；
 2、无源触点的开阀信号/关阀信号，仅作指示用，比行程开关早约3°触发。
Terminal wiring instructions:
 1. Connect terminal 1 to the Zero line;
 2. When the power line is connected to terminal 2, the operation is “On” and will stop after the limit switch OLS is activated. At the same time, terminal 2 and terminal 4 are connected;
 3. When the power line is connected to terminal 2, the operation is “off”, and will stop after the limit switch CLS is activated, and at the same time, terminal 2 and terminal 4 are connected;
 4. Terminal 7 is the common end of the Non-source signal contact. When the “On” operation is in place, it is connected to terminal 8; and connected to terminal 9 when “Off” is in place;
 5. Terminal 10 is terminal for dehumidification heater;
 6. Terminal B is the potentiometer arm;
 7. Terminal A is the low end of the potentiometer, and the resistance between terminals A and B increases with the “on” direction.
 8. Terminal C is the high end of the potentiometer, and the resistance between terminals B and C decreases with the “on” direction.
Attention:
 1. Two or more electric devices cannot be used in parallel, otherwise the switch may not be in place or the motor may overheat.
 2. The valve opening signal/valve closing signal of the Non-source contact is for indication only and is triggered about 3° earlier than the travel switch.



S型：基本开关型(直流电源)
S type: basic switch type (DC power supply)

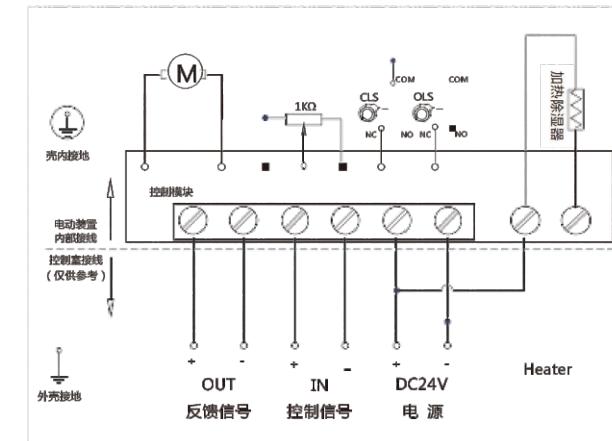
端子接线说明：
 1、端子1接电源正极，端子2接电源负极时，“开”方向运行，至行程开关OLS动作后停止，同时端子1与端子3接通；
 2、端子1接电源负极，端子2接电源正极时，“关”方向运行，至行程开关CLS动作后停止，同时端子2与端子4接通；
 3、端子7为无源信号触点公共端，“开”运行到位时与端子8接通，“关”运行到位时与端子9接通；
 4、端子9、10为加热除湿器接线端；
 5、端子B为电位器动臂；
 6、端子A为电位器低端，端子A、B之间阻值随“开”方向运行时增大；
 7、端子C为电位器高端。
注意：
 1、无源触点的开阀信号/关阀信号，仅作指示用，比行程开关早约3°触发。
Terminal wiring instructions:
 1. When terminal 1 is connected to the positive of the power supply and terminal 2 is connected to the negative, the operation is “On” and will stop after the limit switch OLS is activated. At the same time, terminal 1 and terminal 3 are connected;
 2. When terminal 1 is connected to the negative of the power supply and terminal 2 is connected to the positive, the operation is “off”, and will stop after the limit switch CLS is activated, and at the same time, terminal 2 and terminal 4 are connected;
 3. Terminal 7 is the common end of the Non-source signal contact. When the “On” operation is in place, it is connected to terminal 8; and connected to terminal 9 when “Off” is in place;
 4. Terminal 9, 10 are for dehumidification heater;
 5. Terminal B is the potentiometer arm;
 6. Terminal A is the low end of the potentiometer, and the resistance between terminals A and B increases with the “on” direction.
 7. Terminal C is the high end of the potentiometer, and the resistance between terminals B and C decreases with the “on” direction.
Attention:
 The valve opening signal/valve closing signal of the Non-source contact is for indication only and is triggered about 3° earlier than the travel switch.

电路接线图 Circuit Wiring Diagram



A型：基本调节型(单相电源)
A Type: Basic regulating type (single-phase power supply)

接线说明：
 1、“电源”输入端的“N”接零线，“L”接相线；
 2、“IN”端的“+”接输入信号的正极，“-”接输入信号的负极；
 3、“OUT”端的“+”接输出信号的正极，“-”接输出信号的负极。
注意：
 1、无源触点的开阀信号/关阀信号，仅作指示用，比行程开关早约3°触发。
Wiring instructions:
 1. The “N” terminal of the “power” input is connected to the Zero wire, and the “L” is connected to the phase wire;
 2. The “+” of the “IN” terminal is connected to the positive of the input signal, and the “-” is connected to the negative of the input signal;
 3. The “+” of the “OUT” terminal is connected to the positive of the output signal, and the “-” is connected to the negative of output.
 4. The “Heater” end is the dehumidification heater.
Attention:
 The valve opening signal/valve closing signal of the Non-source contact is for indication only and is triggered about 3° earlier than the travel switch.



A型：基本调节型(直流电源)
A Type: Basic regulating type (DC power supply)

接线说明：
 1、“电源”输入端的“+”接电源正极，“-”接电源负极；
 2、“IN”端“+”接输入信号的正极，“-”接输入信号的负极；
 3、“OUT”端的“+”接输出信号的正极，“-”接输出信号的负极。
注意：
 1、无源触点的开阀信号/关阀信号，仅作指示用，比行程开关早约3°触发。
Wiring instructions:
 1. The “+” of the “power” input terminal is connected to the positive of the power supply, and the “-” is connected to the negative;
 2. The “+” of the “IN” terminal is connected to the positive of the input signal, and the “-” is connected to the negative;
 3. The “+” of the “OUT” terminal is connected to the positive of the output signal, and the “-” is connected to the negative.
 4. The “Heater” end is the dehumidification heater.
Attention:
 The valve opening signal/valve closing signal of the Non-source contact is for indication only and is triggered about 3° earlier than the travel switch.

注：线框内为电动装置内部接线，右边部分仅供用户配线参考。不能将二台或数台电动装置的动力线并联；不能用同一接点去控制二台或数台电动装置，否则会造成失控和电机过热。

温馨提示：常规接线图或其它特殊功能接线图，都会贴在产品接线盖的内壁上。

Note: The wire diagram contains the internal wiring of the electric device, and the right parts are only for user wiring reference. The power lines of two or more electric devices can not be connected in parallel; do not use the same contact to control two or more electric devices, otherwise it will cause loss of control and overheating in motor.

Reminder: Regular wiring diagrams or other special wiring diagrams will be posted on the inner wall of the product wiring cover.

产品特点 Description And Features

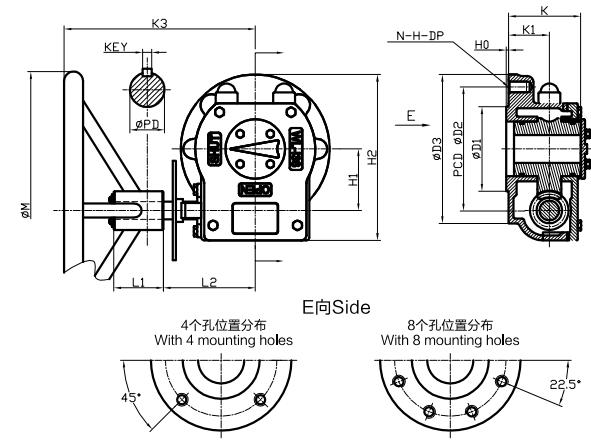


- 该系列适用蝶阀、球阀、旋塞阀等类型阀门；
 - 铸件采用精密铸造，样式新颖，外形美观；
 - 设计标准采用ISO5211技术规范，结构合理；
 - 该装置采用蜗轮蜗杆传动，蜗轮副自锁，传动更加灵活，效率高；
 - 防护等级达到IP66；
 - 产品行程：0~90°（±5°可调）
 - 产品手轮顺时针旋转阀门关闭，逆时针旋转阀门开启，与一般习惯相同；
 - 手轮大小可根据用户需求定制。
1. The gear boxes are applicable to butterfly valve, ball valve, plug valve and so on;
2. Using precision casting, with nice and smooth appearance;
3. The design adopts ISO5211 technical specification, with reasonable structure;
4. Worm gear with self-locking, more flexible and efficient;
5. IP66 standard enclosure;
6. Stroke: 0 ~ 90° (±5° adjustable)
7. Handwheel clockwise to close the valve and anticlockwise to open the valve.
8. Handwheel size can be customized according to requirements.

技术参数 Technical parameters

型号 Model	参数 Para	速比 Ratio	标准法兰 Standard Flange	可以选法兰 Optional Flange	最大阀杆直径 Max. Valve stem	输入转矩 Input	额定输出 Rating Output	机械效益 M.A.	重量 Weight
GWL-I24 F07	24:1	F07	F07	26 (8X7)	56	400	7.1	6.5	7
GWL-I24 F10		F10	F10						
GWL-I36 F10	36:1	F10	F10	35 (10X8)	68	750	11	8.5	9
GWL-I36 F12		F12	F12						
GWL-I41 F14	41:1	F14	F12/F14	45 (14X9)	102	1300	12.7	15	16
GWL-I41 F16		F16	F16						
GWL-I47 F14	47:1	F14	F12/F14	50 (14X9)	125	1800	14.4	17	18
GWL-I47 F16		F16	F16						
GWL-I68 F16	68:1	F16	F16	70 (20X12)	158	3000	19	31	34
GWL-I68 F20		F20	F20						
GWL-I68 F25		F25	F25						
GWL-I68B F16	136:1	F16	F16	70 (20X12)	110	3800	35	36	39
GWL-I68B F20		F20	F20						
GWL-I68B F25		F25	F25						

尺寸表 Dimension table



注:类型A为单级B为双级

单位: mm

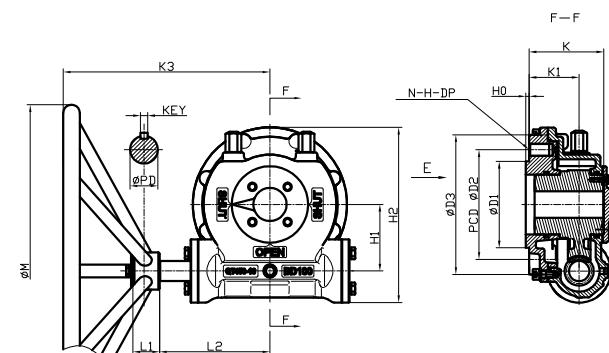
尺寸 DIM.	底座部分 Mounting Base						外形尺寸 Dimension						输入轴部分 Input Shaft Part			手轮 Handwheel	
	型号 Model	类型 Type	法兰 Flange	D1	D2	N-H-DP	D3	H0	H1	H2	K1	K	K3	L2	L1	PD	KEY
GWL-I24 F07	A	F07	55	70	4-M8-12	90	2.5	45	122	31	61	179	94	50	15	5	200
GWL-I24 F10		F10	70	102	4-M10-15	125	2.5		138	41	73	204	104	50	18	6	280
GWL-I36 F10		F10	70	102	4-M10-15	125	2.5		180	48	82	241	131	50	20	6	360
GWL-I36 F12		F12	85	125	4-M12-18	150	2.5		199	54	88	261	131	50	20	6	450
GWL-I41 F14		F14	100	140	4-M16-24	175	3		210	3	261	148	50	25	8	600	
GWL-I41 F16		F16	130	165	4-M20-30	210	3	90	260	59	99	298	148	50	25	8	600
GWL-I47 F14		F14	100	140	4-M16-24	175	3		304	59	99	352	148	50	25	8	600
GWL-I47 F16		F16	130	165	4-M20-30	210	3		352	59	99	352	148	50	25	8	600
GWL-I68 F16		F16	130	165	4-M20-30	210	3		352	59	99	352	148	50	25	8	600
GWL-I68 F20		F20	140	205	8-M16-24	255	3		352	59	99	352	148	50	25	8	600
GWL-I68 F25		F25	200	254	8-M16-24	300	3	B	352	59	99	352	148	50	25	8	600
GWL-I68B F16		F16	130	165	4-M20-30	210	3		352	59	99	352	148	50	25	8	600
GWL-I68B F20		F20	140	205	8-M16-24	255	3		352	59	99	352	148	50	25	8	600
GWL-I68B F25		F25	200	254	8-M16-24	300	3										

技术说明 Features and specifications

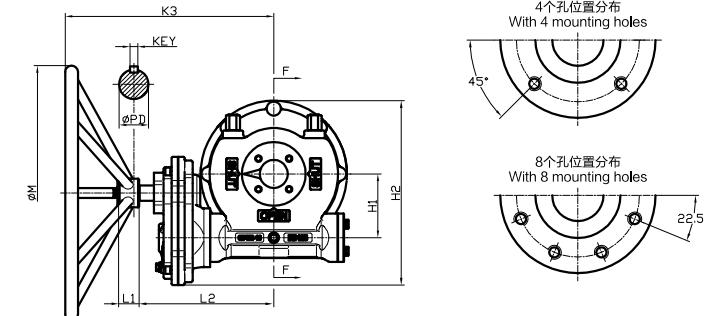
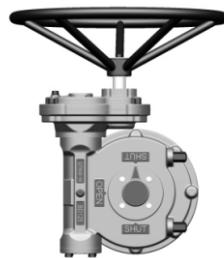
该系列适用蝶阀、球阀、旋塞阀等类型阀门；铸件采用精密铸造，样式新颖，外形美观；设计标准采用ISO5211技术规范，结构合理；该装置采用蜗轮蜗杆传动，蜗轮副自锁，使用圆锥滚子轴承，传动更加灵活，效率高；蜗轮可做成内齿套，与阀门配套会更加方便；该系型号齐全，速比种类多，方便选型；防护等级达到IP66，产品手轮顺时针旋转阀门关闭，逆时针旋转阀门开启，与一般习惯相同。

The gear boxes are applicable to butterfly valve, ball valve, plug valve and so on; Using precision casting, with nice and smooth appearance; The design adopts ISO5211 technical specification, with reasonable structure; Worm gear with self-locking, using high performance tapered roller bearing, more flexible and efficient; Can be with stem bush, which will be more convenient. With complete models and different ratios. IP66 standard enclosure (IP-68 available on request); Handwheel clockwise to close the valve and anticlockwise to open the valve.

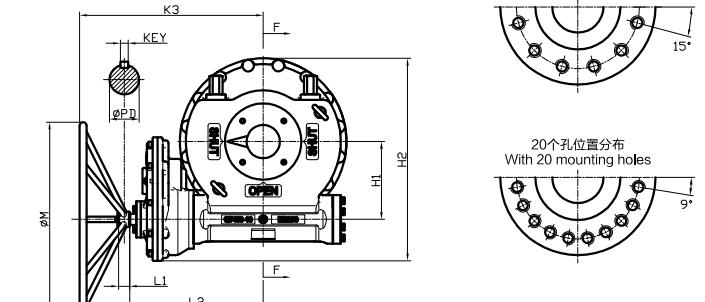
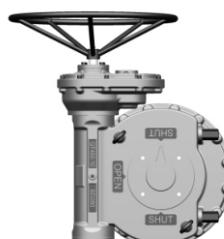
类型type A



类型type B



类型type C



尺寸表 Dimension table

单位: mm

参数 Para 型号 Model	类型 Type Ratio	技术参数 Technical Parameters						底座部分 Base Part				外形尺寸 Dimension						输入轴部分 Input Shaft Part	手轮 handwheel M					
		速比 Ratio	标配 Standard 法兰 flange	可选 Optional Mounting	输入 扭矩 Input Nm	额定 输出 Rating Output Nm	机械 效益 M.A. ±10%	最大 阀杆 Max. Stem mm	D1	D2	N-H-DP	D3	H0	H1	H2	K1	K3	L1	PD	KEY	M			
GD80	A	50:1	F14	F10/F12	126	1800	14.3	50 (14X9)	100	140	4-M16-24	175	3	80	217	66	101	300	153	31	21	6	400	
GD100		54:1	F16	F12/F14	156	2500	16	60 (18X11)	130	165	4-M20-30	210	3	100	263	75	112	346	201	40	28	8	500	
GD125		71:1	F20	F14/F16	167	3500	21	70 (20X12)	140	205	8-M16-24	250	3	125	316	80	117	398	218	40	28	8	600	
GD140		66:1	F25	F16	237	4500	19	90 (25X14)	200	254	8-M16-24	300	4	140	368	90	133	430	250	47	32	10	700	
GD100+M23	B	130:1	F16	F12/F14	100	3800	38	60 (18X11)	130	165	4-M20-30	210	3	100	284	75	112	378	233	31	21	6	450	
GD125+M23		172:1	F20	F14/F16	115	5800	50	70 (20X12)	140	205	8-M16-24	250	3	125	336	80	117	395	250	31	21	6	500	
GD140+M24		225:1	F25	F16	135	8500	63	90 (25X14)	200	254	8-M16-24	300	4	140	397	90	133	418	238	31	21	6	600	
GD160+M25		318:1	F30	F25	130	11000	80	105 (28X16)	230	298	8-M20-30	350	4	160	421	101	153	465	285	31	21	6	600	
GD160+M31	C	382:1	F30	F25	140	14000	103	105 (28X16)	230	298	8-M20-30	350	4	160	459	101	153	562	382	40	28	8	600	
GD180+M31		432:1	F30	F25	165	18000	108	105 (28X16)	230	298	8-M20-30	350	4	180	494	106	163	569	390	40	28	8	600	
GD200+M32		583:1	F35	F25/F30	150	23000	153	120 (32X18)	260	356	8-M30-45	415	4	200	552	129	189	589	409	40	28	8	600	
GD225+M32		666:1	F35	F25/F30	185	32000	176	140 (36X20)	260	356	8-M30-45	415	5	225	619	130	195	602	422	40	28	8	700	
GD225+M32+1S04	D	1752:1			85	32000	393												698	518		600		
GD250+M33		856:1	F40	F30/F35	185	42000	229												641	461	40	28	8	700
GD250+M33+1S04		2251:1			85	42000	510											718	528		600			
GD280+M33		969:1	F40	F30/F35	225	55000	247	165 (40X22)	300	406	8-M36-54	475	5	250	669	139	206	641	481	40	28	8	800	
GD280+M33+1S04	E	2548:1			100	55000	552											738	558		600			
GD315+M34		1278:1	F48	F35/F40	215	73000	339	190 (45X25)	370	483	12-M36-54	560	5	315	835	168	246	776	556	52	45	14	800	
GD315+M34+1S05		3361:1			100	73000	763											825	645	40	28	8	600	
GD355+M34		1447:1	F48	F35/F40	255	93000	368	190 (45X25)	370	483	12-M36-54	560	5	355	910	172	254	801	581	52	45	14	900	
GD355+M34+1S05	F	3806:1			115	93000	830											850	670	40	28	8	700	
GD400+V9		1395:1	F60	F48	430	150000	351	220 (50X28)	470	603	20-M36-54	686	5	400	1002	187	290	844	624	52	45	14	900	
GD400+V9+1S05		4185:1			170	150000	892											890	718	40	28	8	700	
GD450+M51		1680:1	F60	F48	480	210000	436	250 (56X32)	470	603	20-M36-54	686	5	450	1181	214	334	1000	749	52	45	14	1000	
GD450+M51+1SD05	G	7409:1			140	210000	1535											1065	843	40	28	8	800	

技术说明 Features and specifications

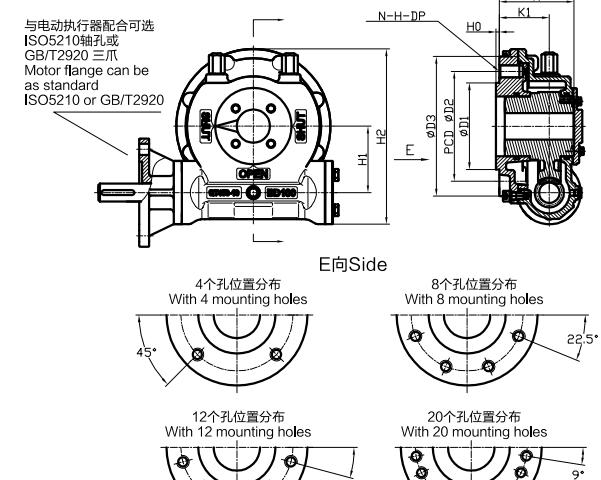
该系列适用蝶阀、球阀、旋塞阀等类型阀门；铸件采用精密铸造，样式新颖，外形美观；设计标准采用ISO5211技术规范，结构合理；该装置采用蜗轮蜗杆传动，蜗轮副自锁，使用圆锥滚子轴承，传动更加灵活，效率高；蜗轮可做成内齿套，与阀门配套会更加方便；防护等级达到IP66。

The gear boxes are applicable to butterfly valve, ball valve, plug valve and so on; Using precision casting, with nice and smooth appearance; The design adopts ISO5211 technical specification, with reasonable structure; Worm gear with self-locking, using high performance tapered roller bearing, more flexible and efficient; Can be with stem bush, which will be more convenient. IP66 standard enclosure(IP-68 available on request);

配ISO5210电动执行器
With ISO5210 motor flange



配GB/T2920电动执行器
With GB/T2920 motor flange



型号 Model	技术参数 Technical Parameters				连接尺寸 Mounting Base				外形尺寸 Dimension				
	速比 Ratio	标准法兰 Standard Flange	可以选法兰 Optional Flange	最大轴孔 Max. Valve stem	D1	D2	N-H-DP	D3	H0	H1	H2	K1	K
D-GD80	50:1	F14	F10 / F12	50 (14X9)	100	140	4-M16-24	175	3	80	217	66	101
D-GD100	40:1	F16	F12 / F14	60 (18X11)	130	165	4-M20-30	210	3	100	263	75	112
D-GD125	53:1	F20	F14 / F16	70 (20X12)	140	205	8-M16-24	250	3	125	316	80	117
D-GD140	51:1	F25	F16	90 (25X14)	200	254	8-M16-24	300	4	140	368	90	133
D-GD160	53:1	F30	F25	105 (28X16)	230	298	8-M20-30	350	4	160	410	101	153
D-GD180	60:1	F30	F25	105 (28X16)	230	298	8-M20-30	350	4	180	445	106	163
D-GD200	56:1	F35	F25 / F30	120 (32X18)	260	356	8-M30-45	415	4	200	500	129	189
D-GD225	64:1	F35	F25 / F30	140 (36X20)	260	356	8-M30-45	415	5	225	548	130	195
D-GD250	61:1	F40	F30 / F35	165 (40X22)	300	406	8-M36-54	475	5	250	608	139	206
D-GD280	69:1	F40	F30 / F35	165 (40X22)	300	406	8-M36-54	475	5	280	668	145	213
D-GD315	68:1	F48	F35 / F40	190 (45X25)	370	483	12-M36-54	560	5	315	765	168	246
D-GD355	77:1	F48	F35 / F40	190 (45X25)	370	483	12-M36-54	560	5	355	840	172	254
D-GD400	68:1	F60	F48	220 (50X28)	470	603	20-M36-54	686	5	400	950	187	290
D-GD450	64:1	F60	F48	250 (56X32)	470	603	20-M36-54	686	5	450	1080	214	334

尺寸表 Dimension table

参数 Para	蜗轮参数 Gear box parameters			与电动执行器组合参数 Electric actuator selection reference					与阀门连接参数 Mounting sizes to Valve	
	型号 Model	最大输出 转矩 Nm Max.Output	速比 Ratio	M.A. ± 10%	额定输出力矩 Rating Output torqueNm	输入力矩 Input Torque Nm	执行器参考 Actuator reference	ISO5210 GB2920 可选法兰 Optional Motor flange	与阀门连接 可选法兰 Optional flange	最大阀杆 Max.Valve Stem Dia. mm
D-GD80	1800	50:1	14	840 / 1680	60 / 120	奥玛	F10 F14 Z10 Z20	F10 F12 F14	50 (14X9)	
				1400 / 1800	100 / 200	扬修				
				1130 / 1510 / 1800	81 / 108 / 135	罗托克				
D-GD100	3800	40:1	14	1680 / 3500 / 3800	120 / 250 275	奥玛	F10 F14 Z10 Z20/Z30	F12 F14 F16	60 (18X11)	
				1400 / 2800 / 3800	100 / 200 / 300	扬修				
				1890 / 2840 / 3800	135 / 203 / 298	罗托克				
D-GD125	5800	53:1	18.6	2220 / 4640 / 5800	120 / 250 / 320	奥玛	F10 F14 Z10 Z20/Z30	F14 F16 F20	70 (20X12)	
				1850 / 3710 / 5560	100 / 200 / 300	扬修				
				3760 / 4520 / 5520	203 / 244 / 298	罗托克				
D-GD140	8500	51:1	16.8	4200 / 6730 / 8410	250 / 400 / 500	奥玛	F14 F16 Z30 Z45/Z60	F16 F25	90 (25X14)	
				5050 / 7570 / 8500	300 / 450 / 600	扬修				
				5010 / 6730 / 8500	298 / 400 / 542	罗托克				
D-GD160	14000	53:1	17.5	8700 / 14000	500 / 800	奥玛	F14 F16 Z25 Z45/Z60	F25 F30	105 (28X16)	
				7800 / 10500 / 14000	450 / 600 / 900	扬修				
				10600 / 11900 / 14000	610 / 680 / 845	罗托克				
D-GD180	18000	60:1	18.6	9300 / 18000	500 / 1000	奥玛	F14 F16 Z25 Z45/Z60	F25 F30	105 (28X16)	
				8370 / 11100 / 16700	450 / 600 / 900	扬修				
				11300 / 15700 / 18000	610 / 845 / 1020	罗托克				
D-GD200	23000	56:1	18.5	18500 / 23000	1000 / 1250	奥玛	F16 F25 Z90/Z120	F25 F30 F35	120 (32X18)	
				16600 / 22100	900 / 1200	扬修				
				18850 / 22000	1020 / 1290	罗托克				
D-GD225	32000	64:1	21	21000 / 32000	1000 / 1600	奥玛	F16 F25 Z90/Z120 Z180	F25 F30 F35	140 (36X20)	
				18900 / 25200 / 32000	900 / 1200 / 1800	扬修				
				21400 / 27100 / 32000	1020 / 1290 / 1700	罗托克				
D-GD250	42000	61:1	20	20000 / 40000	1000 / 2000	奥玛	F25 F30 Z180/Z250	F30 F35 F40	165 (40X22)	
				36000 / 42000	1800 / 2500	扬修				
				29800 / 34000 / 40000	1490 / 1700 / 2030	罗托克				
D-GD280	55000	69:1	22	44000 / 55000	2000 / 2500	奥玛	F25 F30 Z180/Z250	F30 F35 F40	165 (40X22)	
				39600 / 55000	1800 / 2500	扬修				
				44600 / 55000	2030 / 3000	罗托克				
D-GD315	73000	68:1	22.5	45000 / 73000	2000 / 3300	奥玛	F30 Z250 Z350	F35 F40 F48	190 (45X25)	
				56200 / 73000	2500 / 3500	扬修				
				45600 / 67500	2030 / 3000	罗托克				
D-GD355	93000	77:1	24.5	93000	3800	奥玛	F30 Z250 Z350	F35 F40 F48	190 (45X25)	
				61200 / 85700 / 93000	2500 / 3500 / 5000	扬修				
				73000	3000	罗托克				
D-GD400	150000	68:1	21	10500						

尺寸表 Dimension table

参数 Para	蜗轮参数 Gear box parameters			与电动执行器组合参数 Electric actuator selection reference				与阀门连接参数 Mounting sizes to Valve	
	最大输出 转矩 Nm Max.Output	速比 Ratio	M.A. ± 10%	额定输出力矩 Rating Output torqueNm	输入力矩 Input Torque Nm	执行器参考 Actuator reference	ISO5210 GB2920 可选法兰 Optional Motol flange	与阀门连接 可选法兰 Optional flange	最大阀杆 Max.Valve Stem Dia. mm
D-GD180+M31	18000	432:1 标准	107	12800 / 18000	120 / 170	奥玛	F10 F14 F16 Z10 Z20/Z30 Z45	F25 F30	105 (28X16)
				10700 / 18000	100 / 200	扬修			
				11500 / 14400 / 18000	108 / 135 / 176	罗托克			
				9720 / 17800	120 / 220	奥玛			
		330:1	81	8100 / 16200 / 18000	100 / 200 / 300	扬修			
				14200 / 16400 / 18000	176 / 203 / 244	罗托克			
		264:1	65.5	16300 / 18000	250 / 280	奥玛			
				13100 / 18000	200 / 300	扬修			
				13300 / 16000 / 1800	203 / 244 / 298	罗托克			
				12700 / 23000	120 / 220	奥玛			
D-GD200+M31	23000	403:1 标准	106	10600 / 21200	100 / 200	扬修			
				18700 / 21600 / 23000	176 / 203 / 244	罗托克			
				20300 / 23000	250 / 290	奥玛			
				16200 / 23000	200 / 300	扬修			
		308:1	81	19800 / 23000	244 / 298	罗托克			
				16200 / 23000	250 / 360	奥玛			
		246:1	65	13000 / 19400 / 23000	200 / 300 / 450	扬修			
				15800 / 19300 / 23000	244 / 298 / 400	罗托克			
				18400 / 23000	120 / 150	奥玛			
				15400 / 23000	100 / 200	扬修			
D-GD200+M32	23000	583:1 标准	154	16600 / 20778 / 23000	108 / 135 / 176	罗托克	F10 F14 F16 Z10 Z20/Z30 Z45	F25 F30 F35	120 (32X18)
				14300 / 23000	120 / 200	奥玛			
				11900 / 23000	100 / 200	扬修			
		452:1	119	16100 / 21000 / 23000	135 / 176 / 203	罗托克			
				21000 / 33200	120 / 190	奥玛v			
				17500 / 32000	100 / 200	扬修			
D-GD225+M32	32000	666:1 标准	175	23600 / 30800 / 32000	135 / 176 / 203	罗托克	F10 F14 F16 Z10 Z20/Z30 Z45	F25 F30 F35	140 (36X20)
				32700	240	奥玛			
				27300 / 32000	200 / 300	扬修			
				24000 / 27700 / 32000	176 / 203 / 244	罗托克			
		418:1	110	27500 / 32000	250 / 300	奥玛			
				22000 / 32000	200 / 300	扬修			
				22400 / 26900 / 23000	203 / 244 / 298	罗托克			
				41900	250	奥玛			
D-GD250+M32	35000	635:1 标准	167	33500 / 42000	200 / 300	扬修	F14 F16 Z20/Z30	F30 F35 F40	165 (40X22)
				34000 / 40900 / 42000	203 / 244 / 298	罗托克			
D-GD250+M33	42000	856:1 标准	226	27100 / 42000	120 / 190	奥玛v	F10 F14 F16 Z10 Z20/Z30 Z45	F30 F35 F40	165 (40X22)
				22600 / 42000	100 / 200	扬修			
				30500 / 39700 / 42000	135 / 176 / 203	罗托克			
				42000	250	奥玛			
		493:1	130	32800 / 42000	200 / 300	扬修			
				28900 / 33300 / 40000	176 / 203 / 244	罗托克			
				32500 / 42000	250 / 330	奥玛			
				26000 / 39000	200 / 300	扬修			
				31700 / 38700 / 42000	244 / 298 / 400	罗托克			

尺寸表 Dimension table

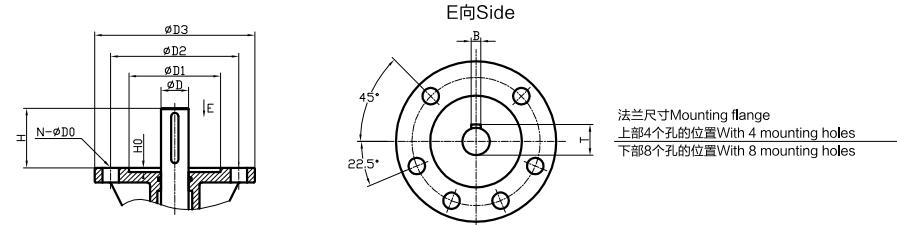
参数 Para	蜗轮参数 Gear box parameters			与电动执行器组合参数 Electric actuator selection reference				与阀门连接参数 Mounting sizes to Valve	
	最大输出 转矩 Nm Max.Output	速比 Ratio	M.A. ± 10%	额定输出力矩 Rating Output torqueNm	输入力矩 Input Torque Nm	执行器参考 Actuator reference	ISO5210 GB2920 可选法兰 Optional Motol flange	与阀门连接 可选法兰 Optional flange	最大阀杆 Max.Valve Stem Dia. mm
D-GD280+M33	55000	969:1 标准	248	29700 / 55000	120 / 230	奥玛	F10 F14 F16 Z10 Z20/Z30 Z45	F25 F30	165 (40X22)
				24800 / 49600	100 / 200	扬修			
				43600 / 50300 / 55000	176 / 203 / 244	罗托克			
				45000 / 55000	250 / 310	奥玛			
		704:1	180	36000 / 54000	200 / 300	扬修			
				36500 / 43900 / 53700	203 / 244 / 298	罗托克			
		557:1	142	55000	390	奥玛			
				42700 / 55000	300 / 450	扬修			
				42500 / 55000	298 / 474	罗托克			
				73000	220	奥玛			
D-GD315+M34	73000	1278:1 标准	337	67400 / 73000	200 / 300	扬修	F14 F16 Z10 Z20/Z30 Z45	F25 F30 F35 F40	190 (45X25)
				59300 / 68500 / 73000	176 / 203 / 244	罗托克			
				69400 / 73000	250 / 310	奥玛			
				55500 / 73000	200 / 300	扬修			
		1052:1	278	56400 / 67700 / 73000	203 / 244 / 298	罗托克			
				73000	370	奥玛			



与电装连接法兰本厂标准尺寸 Standard flange size for actuator

标准尺寸 Standard size

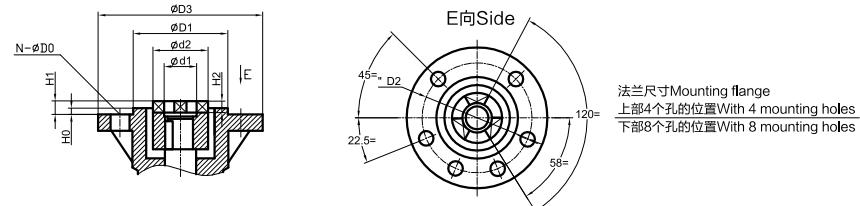
配ISO5210电动执行器
Flange according to ISO5210



配ISO5210电动执行器 Flange sizes for connecting with actuator according to ISO5210

电装型号 Flange size	D3	D2	D1×H0	N-D0	D	B	H	T
F10	125	102	70×3	4-Φ12	20	6	45	22.5
F14	175	140	100×4	4-Φ18	30	8	65	33
F16	210	165	130×5	4-Φ22	40	12	80	43
F25	300	254	200×5	8-Φ18	50	14	100	53.5
F30	350	298	230×5	8-Φ22	60	18	120	64

配GB/T2920电动执行器
Flange according to GB/T2920



配GB/T2920电动执行器 Flange sizes for connecting with actuator according to GB/T2920

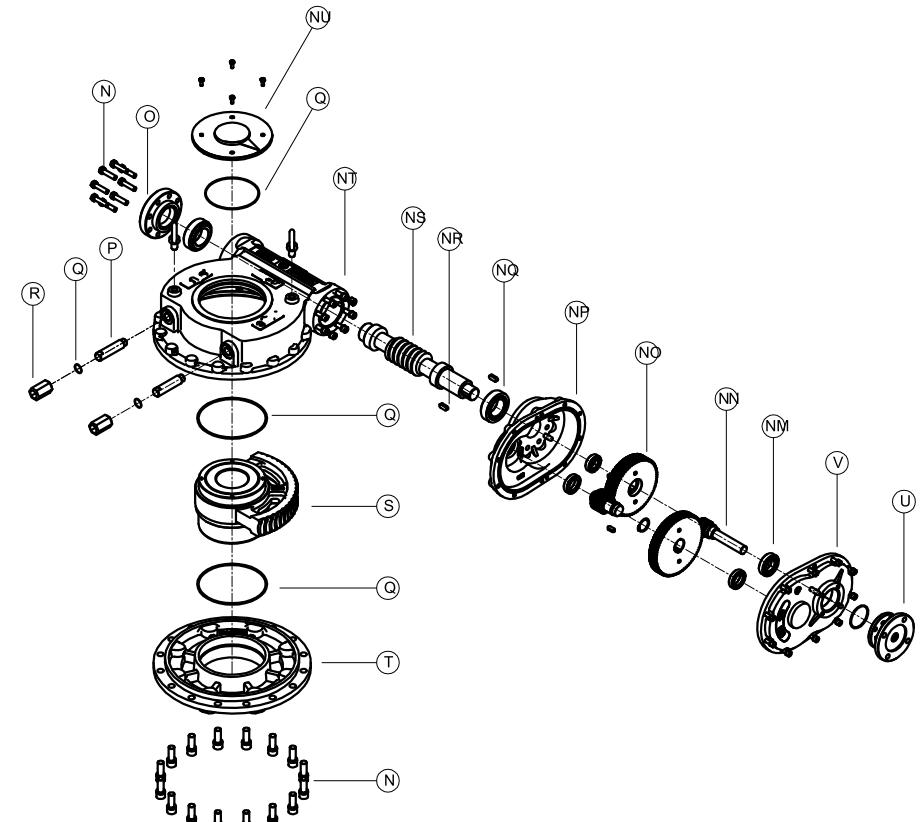
电装型号 Flange size	D3	D2	D1×H0	N-D0	H1	d1	d2	H2
Z05/Z10	145	120	90×4	4-Φ12	10	30	45	8
Z20/Z30	185	160	125×4	4-Φ14	12	42	58	10
Z45/Z60	225	195	150×5	4-Φ18	14	46	72	12
Z90/Z120	275	235	180×5	4-Φ22	16	58	82	14
Z1800/Z250	330	285	220×6	4-Φ26	19	65	98	16
Z350/Z500	380	340	280×6	8-Φ22	23	80	118	20
Z650/Z800	430	380	300×8	8-Φ26	28	128	85	25
Z1000	510	450	360×8	8-Φ33	33	105	158	30



D-GD系列 部分回转阀门驱动装置

D-GD Series worm gear box

驱动装置 Actuating device



序号 No.	名称 Parts Name	材质 Material		序号 No.	名称 Parts Name	材质 Material	
		国标GB	美标ASTM			国标GB	美标ASTM
1	螺栓 Bolts	GB/T5783.8-8	ASTM A29M-1020	10	轴承 Bearing	GB/T18254 GCr15	ASTM A29M52100
2	端盖 End Cover	GB/T12227 QT450-10	ASTM A536 65-45-12	11	齿轮轴 Gear Shaft	GB/T699 45#	ASTM A29M-1020
3	调节螺栓 Adjusting Bolts	GB/T699 45#	ASTM A29M-1020	12	齿轮片 Gears	GB/T699 45#	ASTM A29M-1020
4	O型圈 O-ring	GB/T3452.1 NBR	NBR	13	减速器箱体 Reduction Housing	GB/T12227 QT450-10	ASTM A536 65-45-12
5	螺帽 Bolt Nut	GB/T699 45#	ASTM A29M-1020	14	轴承 Bearing	GB/T18254 GCr15	ASTM A29M52100
6	蜗轮 Worm gear	GB/T12227 QT450-10	ASTM A536 65-45-12	15	平键 Keys	GB/T699 45#	ASTM A29M-1020
7	底座 Base	GB/T12227 QT450-10	ASTM A536 65-45-12	16	蜗杆 Worm	GB/T699 45#	ASTM A29M-1020
8	支架 Motor Flange	GB/T12227 QT450-10	ASTM A536 65-45-12	17	箱体 Housing	GB/T12227 QT450-10	ASTM A536 65-45-12
9	减速器箱盖 Reduction Cover	GB/T12227 QT450-10	ASTM A536 65-45-12	18	指示牌 Indicator Plate	GB/T12227 QT450-10	ASTM A536 65-45-12



(下装埋地式)GD+G系列 部分回转阀门驱动装置 (Bottom mounted buried type)GD+G series partial rotary valve driving device

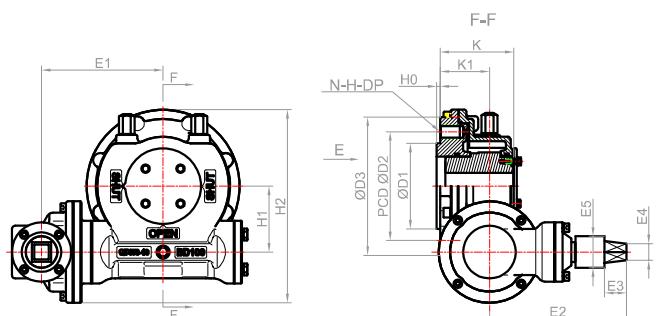
驱动装置 Actuating device

类型/Type：A

单级/Single



1

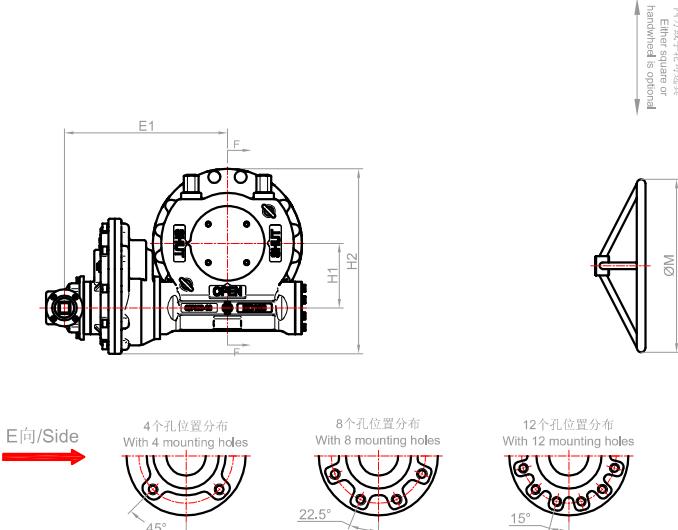


类型/Type：B

多级/Multistage



1



E向/Sid

E向/Sid



(下装埋地式)GD+G系列 部分回转阀门驱动装置
(Bottom mounted buried type)GD+G series partial rotary valve driving device

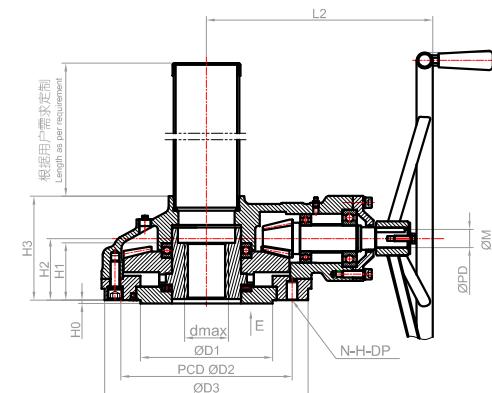
尺寸表 Dimension table

类型 Type	参数 Para.	技术参数 Technical Parameters							标配法兰连接尺寸 Base Part					外形尺寸 Dimension			可选四方或手轮 Optional square or handwheel				
		标配 法兰 Standard flange	可选 法兰 Optional Mounting	速比 Ratio	输入 转矩 Input Nm	输出 转矩 Output Nm	机械 效益 M.A. ±10%	最大 阀杆 Max. Stem mm	D1	P.C.D		D3	H0	K	K1	E1	E2	四方尺寸 Square size		手轮 hand wheel	
										D2	N-H-DP							E3	E4	E5	
	型号 Model																				
A	GD80+G01	F14	F10-F12	125:1	60	1800	30	50	100	140	4-M16-24	175	3	101	66	167	228	42	31	32	350
	GD100+G01	F16	F12-F14	100:1	120	3500	30	60	130	165	4-M20-30	210	3	112	75	185	228	42	31	32	400
	GD125+G01	F20	F16-F25	133:1	125	4800	39	70	140	205	8-M16-24	250	3	117	80	202	228	42	31	32	500
	GD140+G03	F25	F16	255:1	120	8500	71	90	200	254	8-M16-24	300	4	133	90	254	279	42	31	-	600

	GD140+M30+G02	F25	F16	1000:1	50	9000	210	90	200	254	8-M16-24	300	4	133	90	370	265	42	31	32	400
B	GD140+M30+G02	F30	F25	766:1	80	14000	175	105	230	298	8-M20-30	350	4	153	101	409	265	42	31	32	500
	GD140+M30+G02	F30	F25	866:1	100	18000	183	105	230	298	8-M20-30	350	4	163	106	416	265	42	31	32	600
	GD140+M30+G02	F35	F25-F30	1162:1	100	25000	260	120	260	356	8-M30-45	415	4	189	129	436	265	42	31	32	600
	GD140+M30+G02	F35	F25-F30	1332:1	120	36000	300	140	260	356	8-M30-45	415	5	195	130	451	265	42	31	32	600
	GD140+M30+G02	F40	F30-F35	1712:1	125	48000	389	165	300	406	8-M36-54	475	5	206	139	489	265	42	31	32	600
	GD140+M30+G02	F40	F30-F35	1938:1	145	60000	420	165	300	406	8-M36-54	475	5	213	145	509	265	42	31	32	700
	GD140+M30+G02	F48	F35-F40	2556:1	140	80000	576	190	370	483	12-M36-54	560	5	246	168	583	265	42	31	32	700
	GD140+M30+G02	F48	F35-F40	2894:1	160	100000	625	190	370	483	12-M36-54	560	5	254	172	615	265	42	31	32	800

驱动装置 Actuating device

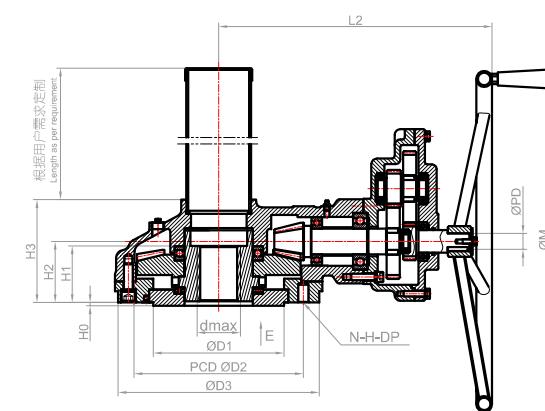
类型/Type : A
单级/Single



电动驱动装置/Electric drive
电装法兰/Electric flange : ISO5210

手动带锁架驱动装置
Manual belt lock

类型/Type : B
双级/Two stage



电动驱动装置/Electric drive
电装法兰/Electric flange : ISO5210

手动带锁架驱动装置
Manual belt lock

尺寸表 Dimension table

参数 Para. 类型 Model	技术参数 Technical Parameters									标配法兰连接尺寸 Base Part				外形尺寸 Dimension				手轮 hand wheel M				
	标配 Standard 法兰 flange	可选 Optional 法兰 Mounting	可选 Optional 速比 ratio	输入 转矩 Input Nm	输出 转矩 Output Nm	机械 效益 M.A. ±10%	最大 阀杆 Max. Stem mm	最大 推力 Max. Thrust KN	大约 重量 Weight Kg	D1	P.C.D		D3	H0	H1	H2	H3	L2	PD	KEY		
											D2	N-H-DP										
A	GRK03	F12	F10	4:1	105	350	3.4	40	93	15	85	125	4-M12-18	150	3	53	68	109	209	21	6	300
	GRK05	F14	F12	4:1	165	550	3.4	52	127	21	100	140	4-M16-24	175	3	65	78	125	237	26	8	400
	GRK1	F16	F14	4:1	265	900	3.4	60	141	29	130	165	4-M20-30	210	4	73	91	138	247	28	8	500
	G2CK2	F20	F16	4.2:1	335	1200	3.6	65	190	41	140	205	8-M16-24	250	4	77	81	140	269	32	10	550
	G2CK3	F25	F16	4.1:1	575	2000	3.5	75	268	54	200	254	8-M16-24	300	4	86	88	152	310	32	10	600
	G2CK5	F30	F25	5.2:1	640	2800	4.4	90	308	88	230	298	8-M20-30	350	4	102	108	181	380	32	10	700
	G2CK8	F35	F30	5.6:1	730	3500	4.8	110	377	160	260	356	8-M30-45	420	5	132	141	238	419	38	10	800
	G2CK10	F40	F35	6.3:1	840	4500	5.4	130	427	215	300	406	8-M36-50	475	6	138	168	270	444	38	10	800

B	G2CK2-1S	F20	F16	13.6:1	145		9.8		65	190	62	140	205	8-M16-24	250	4	77	81	140	378	28	8	500
	G2CK3-1S	F25	F16	18:1	195		13		75	268	78	200	254	8-M16-24	300	4	86	88	152	402	28	8	550
	G2CK5-1S	F30	F25	23:1	245		16.6		90	308	115	230	298	8-M20-30	350	4	102	108	181	489	28	8	600
	G2CK8-1S	F35	F30	37.9:1	220		27.3		110	377	205	260	356	8-M30-45	420	5	132	141	238	544	38	10	700
	G2CK10-1S	F40	F35	42.8:1	290		31		130	427	250	300	406	8-M36-50	475	6	138	168	270	570	38	10	700