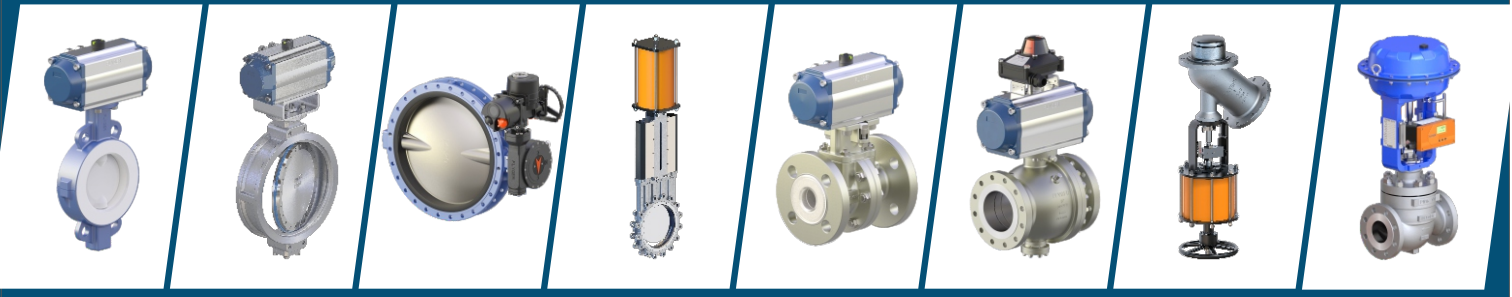
FLYGER VALVE

FLYGER® FLYGER VALVE

PRODUCT CATALOGUE



valve application expert value-added services

Company Profile

UK FLYGER Valve is one of world-leading valve manufacturers always engaged in the R&D, manufacturing and services of fluid control valves. With mature design, exquisite process, precise manufacturing and processing and professional field solutions for customers, FLYGER Valve's products are highly recognized and praised by customers. Its products are applied in many fields, such as petroleum industry, chemical industry, natural gas industry, coal chemical industry,metallurgical industry, power station, food and drug industries, papermaking industry, ship building industry, buildings, municipal engineering, electronic engineering, water treatment, environmental protection and mining industry,etc.

The main products of UK FLYGER Valve Co., Ltd. include the following series: soft seal ball valve, hard seal ball valve, double eccentric butterfly valve, triple eccentric butterfly valve, soft seal butterfly valve, three-link butterfly valve, fluorine lined valve, fully lined ceramic ball valve, gate valve, globe valve, check valve, diaphragm valve, knife gate valve, regulating valve, electric actuator, pneumatic actuator and related accessories. Design, manufacturing and relevant services of special valves are also provided.

Quality is central to FLYGER’s approach to fluid control. Products are manufactured in accordance with applicable ASME, API, DIN, EN, GB and IEC standards, with requirements defined by product type, application and project specifications. FLYGER’s manufacturing and product qualification activities include ISO 9001, ISO 14001 and ISO 45001 management-system certification; TÜV-CE/PED conformity assessment; TÜV-SIL3 functional safety assessment to IEC 61508; ISO 15848 and TA Luft fugitive-emissions testing; API 6FA fire testing; and CCS and DNV marine approvals for applicable product ranges. Certification scope, validity and supporting documentation are confirmed for each product and project.

FLYGER provides sales and technical support for customers worldwide, helping identify valve and actuation solutions suited to each application. From initial enquiry and product selection to after-sales service, our focus is clear communication, practical guidance and responsive support. We work closely with customers to understand their operating requirements and support their projects at every stage.



valve application expert
value-added services

Contents

05 Butterfly Valve

10 Ball Valve

14 Control Valve

18 Gate Valve

19 Check Valve

21 Globe Valve

22 Other Valve

25 Actuator

27 Accessory

FLYGER®

Certification

The choice of quality
Cast by heart



FLYGER has always been adhering to the "valve application expert, value added services" philosophy, constantly improved the quality management system; It has passed ISO9001 quality management system and CE certification; Products comply with ISO, BSI, DIN, ANSI, JIS, GB, API and other related standards.

Industry Application

Committed to the industry valve applications and solutions to achieve the greatest value for users.


Electric Energy


Industrial Water Treatment


Municipal Engineering


Food Drug


Iron Steel Metallurgy


Environmental Protection Engineering


Petroleum Chemical Industry


Building Works


Paper Industry


Mining


Auto Industry

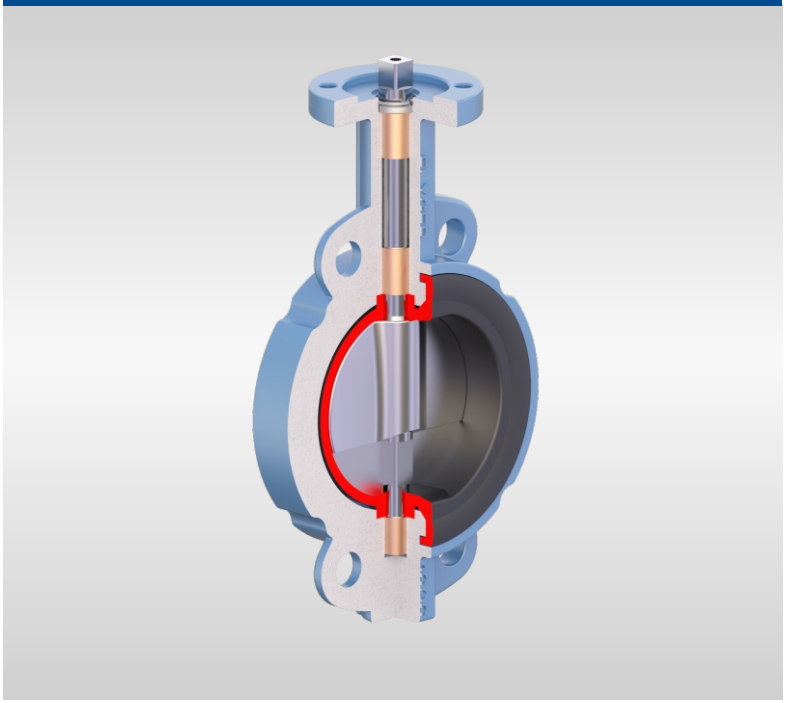
◆ Please consult FLYGER's sales office and agent for more applications in industries.

We promise to provide our customers with perfect and reliable solutions to valve application under all working conditions.

BUTTERFLY VALVE

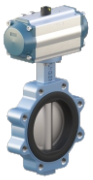
FLYGER®

FD-D series Center Line-Type Rubber Lined Butterfly Valve





FD-DJL
Wafer type



FD-DJA
Lug type



FD-DJF
Flange type

Overview and application

Center line-type rubber lined butterfly valve is widely applied for cutting off or controlling device on fluid, gas and semi-fluid pipes in the industries including electric power industry, metallurgical industry, chemical industry, food industry, municipal engineering and energy industry, such as wet desulphurization, water treatment, fire fighting and municipal pipelines.

Product features

- ISO5211 standard top flange
- Full rubber lined design for valve body
- Through shaft without pin, arc-shaped valve plate
- Bi-directional pressure bearing and bi-directional sealing
- Triple seal of valve rod
- Different materials applicable to different media

Technical parameters

- Nominal diameter: DN50~DN3000 (2"~120")
- Pressure rating: PN6~PN16(class 150)
- Working temperature: -20℃~200℃
- Connection: Wafer type, lug type, flange type

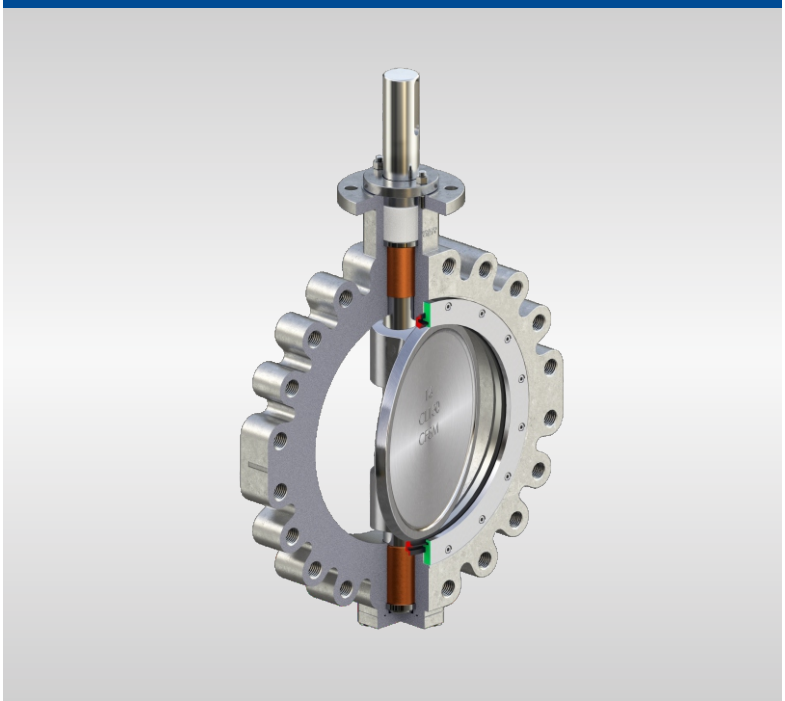
Materials

- Valve body: ductile iron, carbon steel, stainless steel
- Valve plate: Ductile iron, carbon steel, stainless steel, dual-phase steel, alloy steel
- Valve seat: EPDM, NBR, VITON

BUTTERFLY VALVE

FLYGER®

FD-H Series Bi-eccentric High-Performance Butterfly Valve





FD-HRA/FD-HYA
Lug type



FD-HRL/FD-HYL
Wafer type



FD-HRF/FD-HYF
Flange type

Overview and application

Bi-eccentric high-performance butterfly valve is an energy-saving valve with a long service life that applies eccentrically designed structure. It is widely applied on pipes with corrosive media such as air, coal gas, combustible gas and water in industries like metallurgical industry, electric power industry, petroleum industry and chemical industry, like working conditions involving sea water desalination, air separation, high and intermediate pressure condensate and coal gas.

Product features

- Is05211 standard top flange
- Integrated valve rod, packing can be tightened on the spot
- Low friction on sealing surface, low torque and wear-resistance
- One-way seal and bi-directional seal for option
- High pressure resistance, corrosion resistance, wear resistance and long service life

Technical parameters

- Nominal diameter: DN50~DN1600 (2"~64")
- Pressure rating: PN6~PN100 (class 150~600)
- Working temperature: -45°C~200°C
- Connection: Lug, flange, wafer

Materials

- Valve body: carbon steel, stainless steel
- Valve plate: carbon steel, stainless steel
- Valve rod: stainless steel, carbon steel,
- Valve seat: R-PTFE, PPL, stainless steel

BUTTERFLY VALVE

FLYGER®

FD-T Series Tri-eccentric High-Performance Butterfly Valve





FD-TRA/FD-TYA
Lug type



FD-TRL/FD-TYL
Wafer type



FD-TRF/FD-TYF
Flange type

Overview and application

When the tri-eccentric high-performance butterfly valve is closed, its sealing face bears uniform stress and has high pressure bearing capacity. In the chemical industry, electric power industry, metallurgical industry and air separation industry, it is widely applied in working conditions with abrasive, corrosive, high-temperature and high-pressure liquids, gases and high-viscosity media.

Product features

- The mounting bracket of actuator and valve rod connection comply with standard IS05211.
- It combines pure metal seal with multiple-layer hard seal.
- The packing can be tightened automatically, the switch is flexible and the torque is small.
- The valve seat/ seals system can be replaced or repaired at site according to actual conditions.

Materials

- Valve body: carbon steel, stainless steel, alloy steel
- Valve plate: carbon steel, stainless steel, alloy steel, graphite\PTFE can be added for compound seal
- Valve seat: stainless steel, alloy steel

Technical parameters

- Nominal diameter: DN50~DN2600 (2"~104")
- Pressure rating: PN6~PN100 (class 150~600)
- Working temperature: -45℃~500℃
- Connection: Wafer type, lug type, flange type, welded type

FD-DT SeriesFluorine Lined Anti-Corrosion Butterfly Valve



Overview and application

- With good anti-corrosion performance, the fluorine lined anti-corrosion butterfly valve is applicable for chemical corrosion prevention and sealing protection and widely used in working conditions with strongly corrosive media such as strong acid and alkali.

Technical parameters

- Nominal diameter: DN50~DN900 (2"~36")
- Pressure rating: PN6~PN16 (class 150)
- Working temperature: -20℃~160℃
- Connection mode: Flange, wafer

Materials

- Valve body: Ductile iron, carbon steel, stainless steel
- Valve plate: Stainless steel+PTFE\PFA
- Valve seat: PTFE, PFA

FD-M Series Ultra-Low Temperature Butterfly Valve



Overview and application

- The bi-eccentric soft seal butterfly valve is mainly used for wastewater treatment of municipal pipe network, electric circulating water system and industrial wastewater treatment.

Technical parameters

- Nominal diameter: DN100~DN3000 (4"~120")
- Pressure rating: PN6~PN16 (class 150~300)
- Working temperature: -20℃~120℃
- Connection mode: Flange

Materials

- Valve body: Ductile iron, carbon steel, stainless steel
- Valve plate: Ductile iron, carbon steel, stainless steel
- Valve seat: EPDM, NBR

FD-S Series Aeration Butterfly Valve



Overview and application

- With light torque and simple structure, the aeration butterfly valve is mainly used for flow regulation and checking in ventilation system in chemical industry, building materials industry, power stations and glass industry.

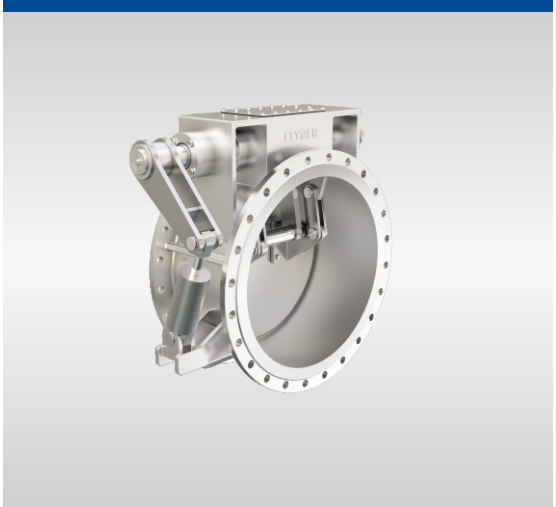
Technical parameters

- Nominal diameter: DN100~DN5000 (4"~200")
- Pressure rating: PN1~PN16 (class 150)
- Working temperature: -20℃~700℃
- Connection mode: Flange

Materials

- Valve body: Ductile iron, carbon steel, stainless steel
- Valve plate: Ductile iron, carbon steel, stainless steel

FD-F Series Three-Lever Type Butterfly Valve



Overview and application

- With flexible operation and good sealing performance, the three-lever type butterfly valve is applicable to media including air and gases in metallurgical industry, chemical industry, electric power industry and air separation industry.

Technical parameters

- Nominal diameter: DN300~DN3000 (12"~120")
- Pressure rating: PN6~PN16 (class 150)
- Working temperature: -20℃~500℃
- Connection: Flange

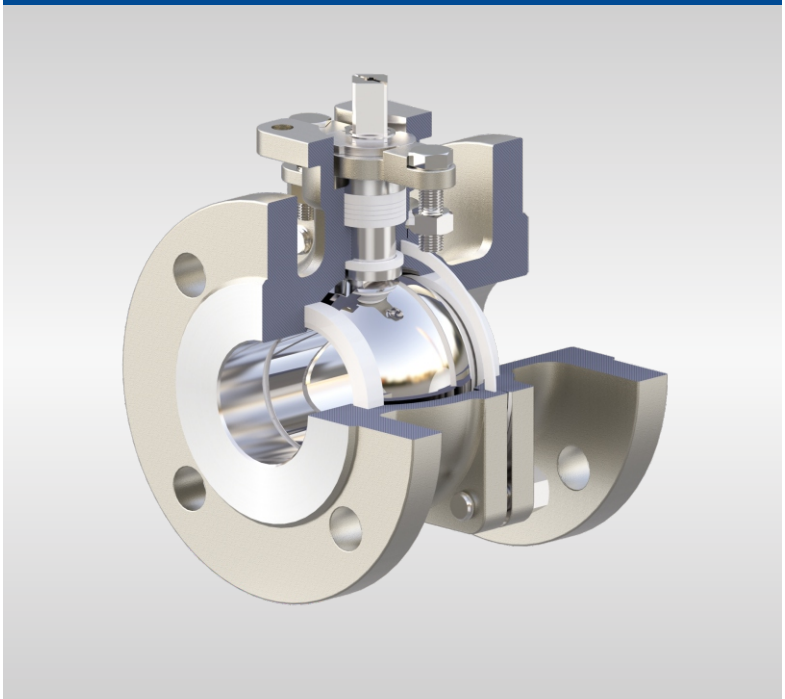
Materials

- Valve body: Ductile iron, carbon steel, stainless steel
- Valve plate: Ductile iron, carbon steel, stainless steel
- Valve seat: Soft seal, hard alloy

BALL VALVE

FLYGER®

FB-A Series Floating Ball Valve

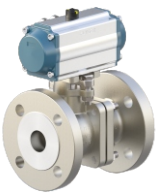




FB-ARW/FB-WRW
Threaded type



FB-ARB/FB-WRB
Welded type



FB-ARF/FB-AYF
Flange type

Overview and application

Without back shaft, the ball of the floating ball valve is clamped as floated by the valve seat. It is widely applied for cutting off or seldom regulating in petroleum industry, chemical industry, natural gas industry, electric power industry and metallurgical industry.

Product features

- The mounting of actuator complies with international standard ISO52111.
- It adopts full-diameter structure and locking device design.
- It has strong flow capacity, small flow resistance and bi-directional seal.
- Anti-blow out shaft applied and fire-proof and anti-static design.

Technical parameters

- Nominal diameter: DN15~DN200 (1/2"~8")
- Pressure rating: PN16~PN100 (class 150~600)
- Working temperature: -45℃~450℃
- Connection mode: Flange, screw, weld
- Seal form: Soft seal, metal seal

Materials

- Valve body: Carbon steel, stainless steel, dual-phase steel, alloy steel
- Valve ball: Stainless steel, dual-phase steel
- Valve seat: Soft seal: PTFE, R-PTFE, PPL, PEEK
- Metal seal by painting: STL, WC, Ni60, Cr3C2

BALL VALVE

FLYGER®

FB-D Series Trunnion-Mounted Ball Valve





FB-DRF/FB-DYF
casting



FB-DRF/FB-DYF
forging



FB-CRF/FB-CYF
Ultra-low temperature

Overview and application

The structure of fixed ball ensures the valve will not move under pressure. It is widely applied in petroleum industry, chemical industry, natural gas industry, electric power industry, metallurgical industry and food industry.

Product features

- Fire-proof design, with anti-static device.
- Full-diameter design, strong flow capacity, small flow resistance.
- Automatic pressure relief in valve chamber, good safety protection performance.
- Several structure styles for selection.

Materials

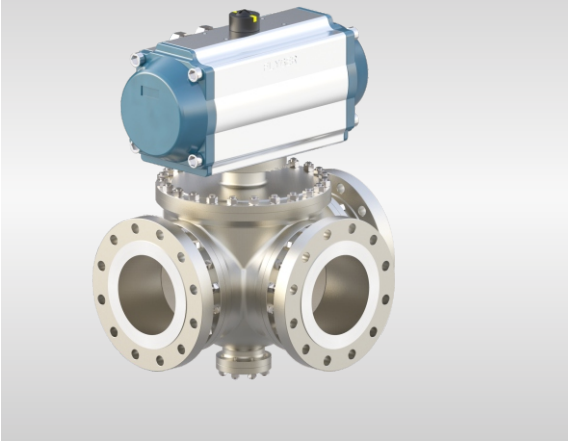
- Valve body: Carbon steel, stainless steel, dual-phase steel, alloy steel
- Ball: Stainless steel, dual-phase steel
- Valve seat: Soft seal: PTFE, R-PTFE, PPL, PEEK
- Metal seal by painting: STL, WC, Ni60, Cr3C2

Technical parameters

- Nominal diameter: DN50~DN1200 (2"~48")
- Pressure rating: PN16~PN420 (class 150~2500)
- Working temperature: -40℃~450℃
- Connection mode: Flange, weld
- Seal form: Soft seal, metal seal

BALL VALVE

FB-S Series Three-Way Ball Valve



Overview and application

- The top flange is designed according to ISO standards and the structure of four valve seats is applied. It is widely used for flow direction change, flow convergence and diversion in petroleum industry, chemical industry, natural gas industry, electric power industry, food industry and water treatment.

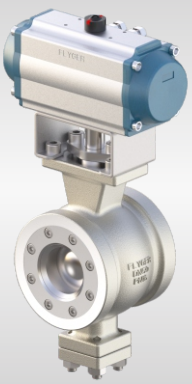
Technical parameters

- Nominal diameter: DN15~DN600 (1/2"~24")
- Pressure rating: PN16~PN100 (class 150~600)
- Working temperature: -40℃~500℃
- Connection: Flange, screw, weld
- Seal: Soft seal, metal seal
- Flow channel: T-type, L-type, Y-type

Material

- Valve body: Carbon steel, stainless steel, alloy steel
- Ball: Stainless steel
- Valve seat: Soft seal: PTFE, R-PTFE, PPL, PEEK
- Metal seal by painting: STL, WC, Ni60, Cr3C2

FB-V Series V-Notch Control Ball Valve



Overview and application

- Applying V-notch ball and single valve seat, the V-notch control ball valve has strong flow capacity and great shearing force and self-cleaning function. It is especially applicable to media containing fiber or small solid particles, such as fiber, sludge and slurry. It is widely used in oil refining industry, papermaking industry, chemical industry and petrochemical industry.

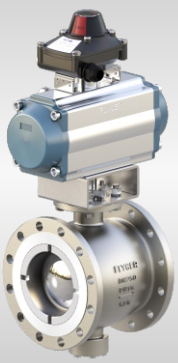
Technical parameters

- Nominal diameter: DN25~DN500 (1"~20")
- Pressure rating: PN16~PN64 (class 150-400)
- Working temperature: -40℃~500℃
- Connection: Flange, wafer

Material

- Valve body: Carbon steel, stainless steel, alloy steel
- Valve core: Stainless steel
- Valve seat: Soft seal: PTFE, R-PTFE, PPL, PEEK
- Metal seal by painting: STL, WC, Ni60, Cr3C2

FB-P Series Eccentric Semi-Ball Valve



Overview and application

- The eccentric semi-ball valve applies pure metal seal and forced fixed valve seat and ball seals to ensure its sealing performance. It is used for cutting off media containing particles such as fiber, sludge, slurry and coal ash in electric power industry, mining industry and papermaking industry.

Technical parameters

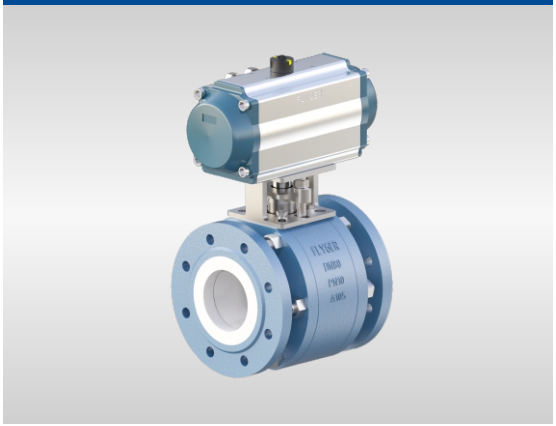
- Nominal diameter: DN50~DN500 (2"~20")
- Pressure rating: PN6~PN40 (class 150~300)
- Working temperature: -40℃~500℃
- Connection: Flange, wafer

Materials

- Valve body: Carbon steel, stainless steel
- Ball: Stainless steel
- Valve seat: Stainless steel+hardening treatment

BALL VALVE

FB-C Series Ceramic Ball Valve



Overview and application

- The ceramic ball valve is fully lined with ceramic and the valve body applies full forging structure. It is applicable to working conditions involving high corrosion, high abrasion, high temperature and intermediate pressure as well as highly corrosive media, fiber and highly hard particle media.

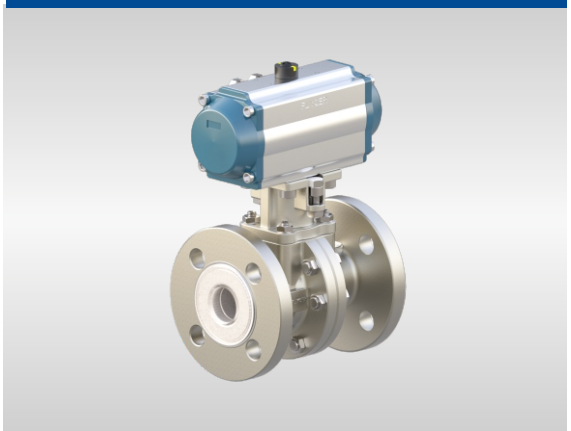
Technical parameters

- Nominal diameter: DN15~DN300 (1/2"~12")
- Pressure rating: PN16~PN40 (class 150~300)
- Working temperature: Max. 500℃
- Connection mode: Flange

Materials

- Valve body: Carbon steel, stainless steel
- Ball: Ceramic
- Valve seat: Ceramic

FB-AT Series Fluorine Lined Ball Valve



Overview and application

- The valve body and internals of the valve are fully lined with or coated with PTFE/PFA/FEP. It applies dual seal design and is applicable to highly corrosive fluids, such as acid and alkali. It is widely used in petroleum industry, chemical industry, metallurgical industry and pharmaceutical industry.

Technical parameters

- Nominal diameter: DN15~DN200 (1/2"~8")
- Pressure rating: PN10~PN25 (class 150~300)
- Working temperature: -40℃~220℃
- Connection: Flange

Material

- Valve body: Carbon steel, stainless steel
- Valve ball: Stainless steel lined with PFA
- Valve seat: PTFE, F46, PFA

FB-J Series Insulated Ball Valve



Overview and application

- Insulated ball valve has good heat preservation and cold preservation characteristics, most of them are conveying high viscosity medium that will solidify at room temperature; Widely used in chemical, petroleum, pharmaceutical, metallurgy and other industries system pipelines, such as heavy oil, glue and other easy to solidify working conditions.

Technical parameters

- Nominal diameter: DN15~DN200 (3/4"~8")
- Pressure rating: PN16~PN25(class 150-300)
- Working temperature: -40℃~500℃
- Connection: Flange type

Material

- Valve body: Carbon steel, stainless steel
- Valve plate: stainless steel
- Valve seat:R-PTFE, PEEK, metal seal

FC-S Series Single-Seated Control Valve



Overview and application

- Applying an unbalanced guiding structure at the top, the single-seated control valve has characteristics including high strength, small pressure drop loss, large flow coefficient, wide adjustable range and high precision of flow characteristics. It is widely applied in working conditions with small pressure difference in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry. It can be closed tightly and is applicable to media flow or pressure regulation.

Technical parameters

- Nominal diameter: DN15~DN200 (1/2"~8")
  (micro flow control valve DN1~DN10)
- Pressure rating: PN16~PN420 (class 150-2500)
- Flow characteristics: Linear, equal percentage and quick opening
- Bonnet: Standard: -30~260℃ Radiation type: -45-530℃
- Low temperature type: -196~45℃ Bellows type: -60~530℃
- Connection: Flange type, welded type

Materials

- Valve body: Carbon steel, stainless steel
- Valve plug: Stainless steel
- Valve seat: Stainless steel+hardening treatment

FC-ST Series Fluorine Lined Single-Seated Control Valve



Overview and application

- Applying single-seat structure and lining the King of Anti-corrosion teflon material on inner chamber of valve, the valve ensures the part contacting media is of teflon material. With features including good corrosion resistance, small volume, light weight, stable operation and high reliability, the valve is widely applied in working conditions involving different strongly corrosive media (such as hydrochloric acid, chlorine and sulfuric acid) in petroleum industry, chemical industry, metallurgical industry and pharmaceutical industry.

Technical parameters

- Nominal diameter: DN15~DN300 (1/2"~12")
- Pressure rating: PN16-PN25 (class 150)
- Leakage class: ASMEB16.104VI (soft valve seat)
- Bonnet: Standard: -30~180℃ Bellows type: -30~180℃
- Connection: flange type

Materials

- Valve body: Carbon steel+F46, stainless steel+F46
- Valve trim: Stainless steel+F46

FC-C Series Cage-Type Control Valve



Overview and application

- The cage-type control valve applies sleeve and pressure balanced valve plug to ensure good sealing performance and allow large pressure difference. With good stability and compact structure, it is widely applied for the fluid control of intermediate and low temperature, intermediate and low pressure pipes that have high requirements on dynamic stability in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry, especially for conditions with large pressure difference.

Technical parameters

- Nominal diameter: DN40-400 (1-1/2”~16”)
- Pressure rating: PN16~PN420 (class 150-2500)
- Bonnet: Standard: -30~260℃ Radiation type: -45-530℃
- Low temperature type: -196~45℃ Bellows type: -60~530℃
- Connection: Flange type, welded type

Material

- Valve body: Carbon steel, stainless steel, alloy steel
- Valve internals: Stainless steel, STL hardfacing for valve plug and valve seat, ion nitriding treatment
- Actuator：Pneumatic diaphragm actuator, pneumatic piston actuator, electric actuator, electrohydraulic actuator

FC-B Series Bellows Control Valve



Overview and application

- The valve applies sleeve and pressure balanced valve plug to ensure good sealing performance and allow large pressure difference. With good stability, compact structure and the sealing upper bonnet and bellows component on bellows, it can ensure no leakage of media. It is widely applied in working conditions involving poisonous and corrosive media that has high requirements on sealing in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry.

Technical parameters

- Nominal diameter: DN20~DN400 (3/4"~16")
- Pressure rating: PN16-PN63 (class 150-600)
- Leakage class: ASMEB16.104V (metal valve seat)
- Bonnet: Bellows type: -60~530℃
- Connection: Flange type, welded type

Material

- Valve body: Carbon steel, stainless steel, alloy steel
- Valve internals: Stainless steel, STL hardfacing for valve plug and valve seat, ion nitriding treatment
- Actuator:Pneumatic diaphragm actuator, pneumatic piston actuator, electric actuator, electrohydraulic actuator

FC-T Series Three-Way Control Valve



Overview and application

- The converging/ dividing three-way control valve applies sleeve and pressure unbalanced valve plug The standard converging/ dividing three-way control valve is designed in unbalanced dual-seat structure. It can also be designed in special cage structure that reduces noise and prevents cavitation according to working conditions. It is widely applied for media flow or pressure regulation and control (flow converging or dividing) in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry.

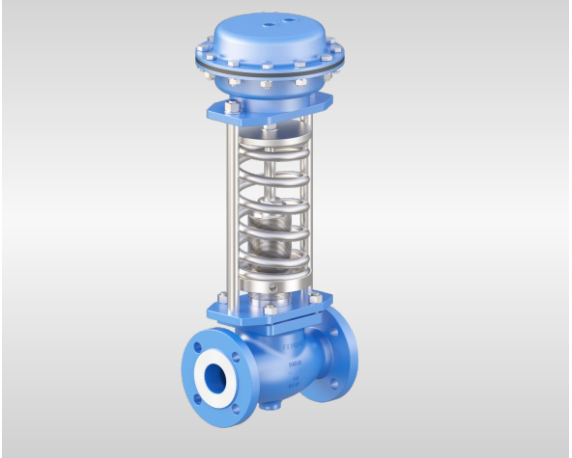
Technical parameters

- Nominal diameter: DN25~DN400 (1"~16")
- Pressure rating: PN16-PN63 (class 150-600)
- Leakage class: ASMEB16.104V (metal valve seat)
- Bonnet: Standard: -30~260°C
- Radiation type: -45-530C°
- Bellows type: -60~530°C
- Connection: Flange type, welded type

Materials

- Valve body: Carbon steel, stainless steel, alloy steel
- Valve trims: Stainless steel, STL hardfacing for valve plug and valve seat, ion nitriding treatment
- Pneumatic diaphragm actuator, pneumatic piston actuator, electric actuator, electrohydraulic actuator

FC-Z Series Self-Actuated Control Valve



Overview and application

- The self-actuated control valve can be designed with single-seat valve plug or sleeve valve plug according to working conditions. It can accurately control the upstream/ downstream pressure at a preset value. It is widely applied for working conditions that require automatic control of downstream pressure but there is no power source at site such as gas or electricity in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry.

Technical parameters

- Nominal diameter: DN20~DN300 (3/4"~12")
- Pressure rating: PN16~PN63 (class 150~400)
- Flow characteristics: Quick opening
- Leakage class: ASMEB16. 104V (metal valve seat) ASMEB16. 104VI (soft valve seat)
- Bonnet: Standard: -30~120°C Intermediate temperature type: -30~350°C
- Connection: Flange type, welded type

Material

- Valve body: Carbon steel, stainless steel, alloy steel
- Valve trims: Stainless steel, STL hardfacing for valve plug and valve seat, ion nitriding treatment
- Actuator :Diaphragm actuator (self-provided), piston actuator (self-provided)

FC-A Series Angle Type Control Valve



Overview and application

- According to different working conditions, the angle type multi-stage decompression valve designs several different cages to combine into a multi-stage decompression valve trim. The standard valve is provided with an unbalanced single-seat valve plug. The valve plug seat has received hardening treatment to lengthen the service life of valve trims. It is widely applied in working conditions involving great pressure difference, flash evaporation or cavitation in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry.

Technical parameters

- Nominal diameter: DN15~DN300 (1/2"~12")
- Pressure rating: PN160~PN420 (class 900~2500)
- Flow characteristics: Linear, equal percentage and quick opening
- Leakage class: ASMEB16.104V (metal valve seat) ASMEB16.104VI (soft valve seat)
- Bonnet: Standard: -30~260°C Radiation type: -45-530°C
- Connection: Flange type, welded type

Materials

- Valve body: Carbon steel, stainless steel, alloy steel
- Valve trims: Stainless steel, STL hardfacing for valve plug and valve seat, ion nitriding treatment
- Pneumatic diaphragm actuator, pneumatic piston actuator, electric actuator, electrohydraulic actuator

GATE VALVE

FLYGER®

FZ-M Series Soft Seal Gate Valve



Overview and application

- Soft sealing gate valve is a kind of gate valve which can achieve good sealing effect by the compensation of elastic deformation caused by the integral sealing of valve plate. It is mainly applicable to tap water, light textile, electric power, ship, metallurgy and energy system and other industries.

Technical parameters

- Nominal diameter: DN50~DN1000 (2"~40")
- Pressure rating: PN6~PN16 (class 150)
- Working temperature: -40°C~80°C
- Connection: Flange

Materials

- Valve body: Ductile iron, carbon steel, stainless steel
- Plate: Ductile iron lined with EPDM, stainless steel
- Valve seat: Ductile iron, carbon steel, stainless steel

FZ-B Series Hard Seal Gate Valve



Overview and application

- Hard - sealed gate valves are usually suitable for operating conditions where frequent opening and closing is not required and where the gate is fully open or fully closed. It is mainly used to cut off or connect the pipeline medium in petroleum, chemical, hydraulic, thermal power station and other systems.

Technical parameters

- Nominal diameter: DN50~DN1200 (2"~48")
- Pressure rating: PN6~PN420 (class 150-2500)
- Working temperature: -40°C~500°C
- Connection: Flange

Materials

- Valve body: Ductile iron, carbon steel, stainless steel
- Plate: Carbon steel, stainless steel
- Valve seat: Hardfacing alloy, stainless steel

FZ-D Series Knife Gate Valve



Overview and application

- The bottom of the knife gate valve plate adopts the knife shape design, which has a strong cutting force, especially suitable for working conditions containing fiber and suspended particles. Widely used in papermaking, sewage treatment, mining, chemical fiber and other industries.

Technical parameters

- Nominal diamete:DN50~DN1200(2"~48")
- Pressure rating:PN6~PN16(class150)
- Working temperature:-40°C~450°C
- Connection: Flange,wafer type

Materials

- Valve body:Ductile iron, carbon steel, stainless steel
- Valve plate: Stainless steel
- Valve seat: EPDM、stainless steel、stainless steel

CHECK VALVE

FLYGER®

FU-D Series Double Disc Swing Check Valve



Overview and application

- Double disc swing check valve is composed of valve body, disc, stem and spring, etc. The disc has short closing stroke, spring loading and fast closing speed, which can significantly reduce the water hammer phenomenon.

Technical parameters

- Nominal diameter: DN50~DN1200(2 "~48")
- Pressure class: PN16~PN160(Class150 ~900)
- Operating temperature: -40°C~500°C
- Connection: clamping, flange type

Materials

- Valve body: carbon steel, stainless steel,
- Valve plate: carbon steel, stainless steel,
- Seat: Rubber, stainless steel, hard alloy

FU-S Series Swing Type Rubber Lined Check Valve



Overview and application

- The disc can be made entirely of metal or wrapped in rubber; the pressure drop through the valve is relatively small as the pressure of the flow is virtually unimpeded by the presence of a fully open valve.

Technical parameters

- Nominal diameter: DN50~DN600(2 "~24")
- Pressure grade: PN10~PN16(Class150)
- Operating temperature: -20°C~120°C
- Connection: clamping, flange type

Materials

- Valve body: carbon steel, stainless steel,
- Valve plate: stainless steel, alloy steel,
- Lining: EPDM, NBR,

FU-XRL Series Single Flap Check Valve



Overview and application

- With no leakage, installed in any position, good sealing performance, small vibration, small pressure drop and other advantages. The valve is mainly used in water system, petroleum, chemical industry, metallurgy and other working conditions of the pipeline, to prevent the backflow of media.

Technical parameters

- Nominal diameter: DN50~DN500(2 "~20")
- Pressure grade: PN16~PN100(Class150 ~600)
- Operating temperature: -40°C~500°C
- Connection: in - between

Materials

- Valve body: carbon steel, stainless steel,
- Disc: carbon steel, stainless steel,
- Seat: stainless steel, hard alloy,

FU-XYF Series Single Disc Swing Flange Type Check Valve



Overview and application

- Adopt inner rocker arm rotating structure, all opening and closing parts are installed in the valve, and do not penetrate the valve body, suitable for oil, chemical, pharmaceutical, electric power and other industries working condition pipeline, to prevent media backflow.

Technical parameters

- Nominal size: DN50~DN750(2 "~30")
- Pressure class: PN16~PN160(Class150 ~900)
- Operating temperature: -40°C~500°C
- Connection: Flange type

Materials

- Valve body: Carbon steel, stainless steel
- Disc: carbon steel, stainless steel
- Seat: stainless steel, hard alloy

FU-H Series Lift Check Valve



Overview and application

- Lifting type check valve body structure uses globe valve body, disc along the center line of the channel for lifting movement, reliable but greater fluid resistance, suitable for small diameter occasions, generally installed in the horizontal pipeline.

Technical parameters

- Nominal size: DN25~DN500(1 "~20")
- Pressure class: PN16~PN160(Class150 ~900)
- Operating temperature: -40°C~500°C
- Connection: Flange type

Materials

- Valve body: Carbon steel, stainless steel
- Disc: carbon steel, stainless steel
- Seat: stainless steel, hard alloy

GLOBE VALVE

FLYGER®

FQ-H/FQ-Y Series Globe Valve



Overview and application	◆ The globe valve allows media to flow in one direction only and it is generally used for cutting off or in throttling conditions. It has three types of structures, straight type, longitudinal type and inclined type. It is widely applied in working conditions involving water, oil, gas or steam.
Technical parameters	◆ Nominal diameter: DN15~DN600 (1/2"~24") ◆ Pressure rating: PN60-PN160 (class 150-900) ◆ Working temperature: -40℃~500℃ ◆ Connection: Flange type, screwed type
Materials	◆ Valve body: Carbon steel, stainless steel, alloy steel ◆ Plug: Carbon steel, alloy steel, stainless steel ◆ Valve seat: PTFE, hardfacing alloy, stainless steel

FQ-B Series Bellows Globe Valve



Overview and application	◆ The globe valve allows media to flow in one direction only and it is generally used for cutting off or in throttling conditions. It has three types of structures, straight type, longitudinal type and inclined type. It is widely applied in working conditions involving water, oil, gas or steam.
Technical parameters	◆ Nominal diameter: DN15~DN300 (8"~12") ◆ Pressure rating: PN10~PN40 (class 150-300) ◆ Working temperature: -40℃~500℃ ◆ Connection: Flange type
Materials	◆ Valve body: Carbon steel, alloy steel, stainless steel ◆ Plug: Carbon steel, alloy steel, stainless steel ◆ Valve seat: PTFE, hardfacing alloy, stainless steel
Product features	◆ Dual-seal design (bellows+packing) ◆ In conformity with international seal standard to ensure 0 leakage. ◆ Stainless steel bellows used for design. ◆ No fault in 10000 times of reciprocating of bellows.

OTHER VALVE

FLYGER®

FW-C Series Hydraulic Control Valve



Overview and application

- Hydraulic control valve with the pressure of the pipeline medium as the power to open and close, adjust the valve, suitable for raw water, sewage, clean water and other occasions.

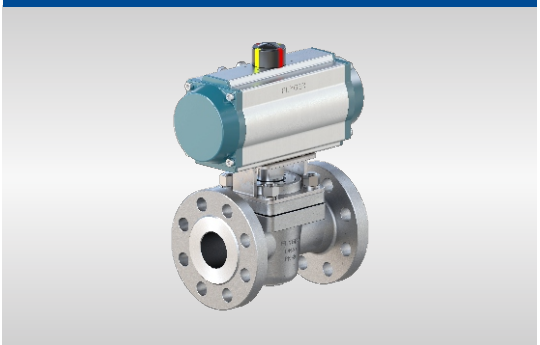
Technical parameters

- Nominal diameter: DN50~DN600 (2"~24")
- Pressure rating: PN6~PN16 (class 150)
- Working temperature: -40°C~220°C
- Connection: flange type

Materials

- Valve body: Ductile iron, carbon steel, stainless steel
- Valve seat：Ductile iron, carbon steel, Copper alloy
- Bonnet: Ductile iron, carbon steel,

FX-X Series Plug Valve



Overview and application

- Take the plug body with through-hole as the opening and closing part, make 90 degree turning under the drive of the valve stem to realize the opening and closing of the valve, in petroleum, chemical, pharmaceutical, chemical fertilizer, electric power and other industrial pipelines to cut off or connect the role of the pipe line.

Technical parameters

- Nominal size :DN15~500(1/2"~20")
- Pressure rating :PN6~150(Class150 ~900)
- Operating temperature :-40~500°C
- Connection: Flange type

Materials

- Valve body:Carbon steel, alloy steel, stainless steel, duplex steel
- Plug:Carbon steel, alloy steel, stainless steel, duplex steel

FG Series Diaphragm Valve



Overview and application

- The valve body is lined with different corrosion resistant or abrasion resistant materials. Rubber and teflon are generally diaphragm materials. The lined diaphragm has strong corrosion resistance and it is applicable to the regulation of corrosive and viscid media and pulp media.

Technical parameters

- Nominal diameter: DN15~DN400 (1/2"~16")
- Pressure rating: PN6~PN16 (class 150)
- Working temperature: -40°C~150°C
- Connection mode: flange

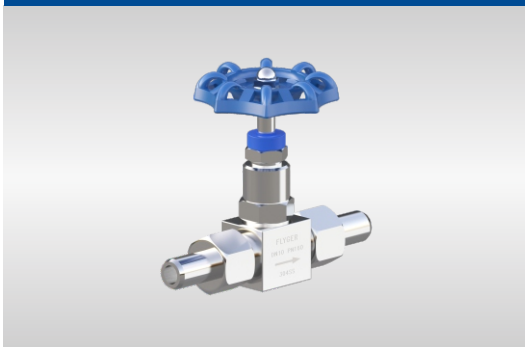
Materials

- Valve body: Ductile iron, carbon steel
- Diaphragm: EPDM, PFA, FEP
- Valve seat: HR, BR, PFA, FEP

OTHER VALVE

FLYGER®

FQ-Z Series Needle Valve



Overview and application	◆ Pressure resistance, good sealing, often used in power station, oil refining, chemical plant and instrument measuring pipeline.
Technical parameters	◆ Nominal size :DN6~DN40(1/4"~2") ◆ Pressure grade :PN6~PN320(Class150 ~2000) ◆ Operating temperature :-40°C~500°C ◆ Connection: flange type, thread type, welding type
Materials	◆ Valve body: stainless steel ◆ Spool: stainless steel hard treatment ◆ Seat: stainless steel hard handling

FS Series Drain Valve



Overview and application	◆ It includes inversed bucket type and floating ball type. It is widely applied on steam heating equipment and steam pipeline.
Technical parameters	◆ Nominal diameter: DN15~DN150 (1/2"~16") ◆ Pressure rating: PN6~PN40 (class 150~300) ◆ Working temperature: -4°C~35°C ◆ Connection mode: flange type
Materials	◆ Valve body: Carbon steel, stainless steel ◆ Valve ball: Stainless steel ◆ Strainer: Stainless steel

FW-M Series Mud Valve



Overview and application	◆ Mud discharge valve is an Angle of the truncated valve with hydraulic source or pneumatic source as actuator, usually in rows installed in the bottom of the sedimentation tank wall, to remove the sediment sand and dirt at the bottom.
Technical parameters	◆ Nominal diameter: DN100~DN400(4 "~16") ◆ Pressure grade: PN6~PN16(Class150) ◆ Working temperature: 0 ~ 80°C
Materials	◆ The valve body. GG25, GGG40, WCB ◆ Valve cover: GG25, GGG40, WCB ◆ Diaphragm: Nylon reinforced rubber ◆ Diaphragm pressure plate: GGG40, aluminum bronze ◆ Stem: stainless steel

OTHER VALVE

FLYGER®

FW-T Series Piston Type Regulating Valve



Overview and application

- It is multi-function valves often used in water works, power plants, water diversion projects and other, regulating the pressure, flow control and flow state of the pipe network system medium, linear regulation of high precision, no cavitation, no vibration and noise, it is the ideal products for water industry pressure and flow regulation and energy dissipation.

Technical parameters

- Nominal diameter: DN200~DN2000
- Pressure grade: PN2.5~PN63
- Adjustment range: PN63~PN0.1 linear adjustment
- Structure: Ring jet type, fan coil type, Slotted squirrel cage, mesh cage

Materials

- Valve body: GGG40, WCB
- Squirrel cage piston: 304
- Sealing ring: NBR, EPDM
- Guide bar: aluminum bronze

FL-U/FL-D Up/Down Expansion Discharge Valve



Overview and application

- It is mainly used for discharging at the bottom of reactors, tanks and other containers. Welding at the bottom of tanks and other containers, by means of the bottom flange of the valve, it can eliminate the residuals of the process medium at the outlet of the containers. Widely used in chemical industry, petroleum, metallurgy, pharmaceutical, pesticide, dye, food processing and other industries.

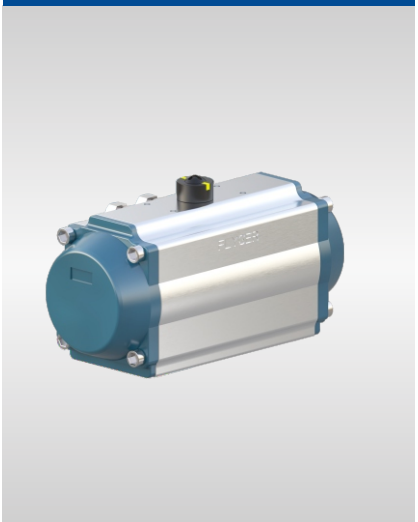
Technical parameters

- Nominal diameter: DN25 ~ DN250
- Pressure grade: PN16 ~ PN25
- Operating temperature: ⩽150°C
- Connection: Flange type

Materials

- Valve body: Carbon steel, stainless steel
- Spool: stainless steel hardened

FN-C Series Pneumatic Actuator



Overview and application

- With features including light weight, small volume and large output torque, FN-C series pneumatic actuator is widely applied in production processes in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry.

Technical parameters

- Scope of supply: Single-acting FN-CS05~40 Dual-acting FN-CD05~40
- Output torque: Single-acting 5~9697N.m Dual-acting 11~12406N.m
- Air pressure range: 3bar~8bar
- Ambient temperature: -20°C~+80°C (standard) -40°C+150°C (special)
- Top flange standard: ISO5211

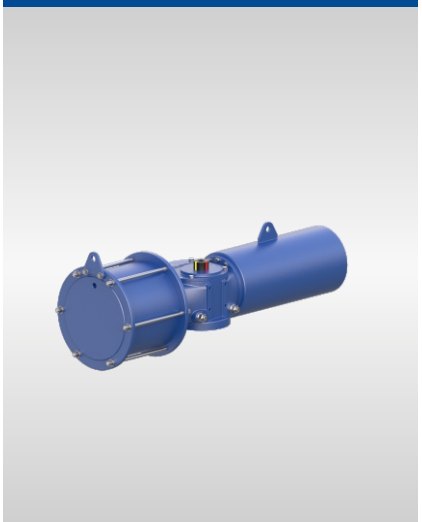
Product features

- The air port complies with VDI/VDE3845 NAMUR standard.
- Independent stroke adjustment, precise adjustment of full-open and full-close position, adjustable range of angle ±5°.
- Top mounting hole complies with VDI/VDE3845. Accessories including locator and limit switch can be mounted.
- The cylinder is of extrusion aluminum alloy and anodic oxidation and treatment with epoxy resin have been carried out for surface.
- High-precision tooth form on gear and rack, small engagement clearance, precise drive and large output power.
- High-performance spring modular design, safe and simple disassembly to single-acting actuator.
- Number of springs can be changed to meet different output torque.

Optional accessories

- Solenoid valve, positioner, filter regulator and limit switch.

FN-M Series Pneumatic Actuator



Overview and application

- With the main feature of large output torque, FM series pneumatic actuator is especially applicable to the automatic and remote control and operation of medium and large-diameter valves in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry.

Technical parameters

- Scope of supply: Single-acting FM-S20~110 Dual-acting FM-D20~110
- Output torque: Single-acting 450~112369N.m Dual-acting 850~263894N.m
- Air pressure range: 3bar~10bar
- Ambient temperature: Standard (ST)-20°C ~ +80°C (buna-N rubber) High temperature (HT)-15°C ~ +150°C (fluororubber) Low temperature (LT)-40°C ~ +8°C (silicone rubber)
- Top flange standard: ISO5211

Product features

- Modular design: Functional modules can be mutually combined or replaced to meet different control demands of different processes.
- Safety: The pre-mounted spring module can eliminate accident relief of spring force to prevent mis-operation.
- Protection: It complies with IP65 or IP67 standard and an O-ring is provided at the connection of all components.
- Abrasion resistance and lubrication: Self-lubricating bearing is provided at the sliding and friction part of piston rod and piston.
- Standarization: The interface size of top drive shaft complies with NAMUR standard to ensure the installation of accessories such as locator.

Optional accessories

- Solenoid valve, positioner, filter regulator and limit switch.

FE-R Series Electric Actuator



Overview and application

- The electric actuator includes three types, split type, integrated type and intelligent type. It is widely applied in production processes in petroleum industry, chemical industry, metallurgical industry, pharmaceutical industry and electric power industry.

Technical parameters

- Scope of supply: FE-R02-R48
- Output torque: 60-130000N.m
- Working voltage (optional): Single-phase: AC220V/110V±10% 50/60Hz Three-phase: AC380V/415V/440V±10% 50/60HZ
- Control signal: DC0 ~ 10V, DC4 ~ 20mA or ON-OFF
- Analog signal output: 4-20mA (standard) or 0-10V
- Regulation precision: 1.5%; Dead zone: 0.5~9.9% adjustable
- Ambient temperature: -20°C ~ 60°C; Relative humidity: <90%(25°C)
- Working environment: No strongly corrosive media
- Working time: S2 working system
- IP grade: IP67/EN 60529

Product features

- Connection: Installation and connection with valves comply with ISO 5211 standard.
- Self-lock function: The double worm gear is provided with self-lock function that can prevent reverse rotation.
- Motor: Specially designed induction motor, provided with thermal protection element inside, grade F insulation.
- Manual mechanism: Hand wheel operation can be conducted after connecting the switching handle and it will reset automatically after power-on.
- Protection function: Phase sequence, phase loss, overheating, overload protection, ESD operation.
- Position sensor: Encoder technology, arbitrary positioning of angle, high control precision.

FE-B Series Electric Actuator



Overview and application

- With outstanding features as light weight and small volume, it is widely applied in the production processes in light industry, pharmaceutical industry, food industry, water treatment, environmental protection, fire fighting and electric power industry.

Technical parameters

- Scope of supply: FE-B02~B16
- Output torque: 50~6000N.m
- Working voltage: Single-phase AC220V/110V 50/60HZ Three-phase AC380 50/60HZ
- Control signal: DC4-20mA, ON-OFF
- Signal output: 4-20mA, ON-OFF
- Regulation precision: 0.3~5% (adjustable) Dead zone: 0.3~5% (adjustable)
- Ambient temperature: -20~60°C
- IP grade: IP67/EN60529
- Product type: Intelligent, proportional, switch

Product features

- Connection: Installation and connection with valves comply with ISO S211 standard.
- Precision: Integrated design of worm gear output shaft, high drive precision; special copper alloy for forging, high strength and good abrasion resistance.
- Safety: Passed AC1500V voltage withstand test, grade F insulation motor, high safety.
- Intelligence: The intelligent control module is highly integrated in the body of electric device and no external locator is required; intelligent setting.
- Use: Refueling and spot inspection not required; water proof, rust proof, and installation at an arbitrary angle.

FY-R Series Hydraulic Actuator



Overview and application

- The output torque of FY-R series hydraulic actuators can be precisely adjusted according to requirements, with good anti-offset ability and very stable adjustment; Stable and reliable transmission, no impact buffering, suitable for high transmission requirements of the working environment.

Technical parameters

- Scope of supply: FY-R05~28
- Output torque: 500N.m~ 64000N. m
- Working pressure: 6.3mpa ~ 16.0mpa
- Working temperature: -40°C~120°C

Product features

- Overall structure: piston thrust design, pinion and rack torque drive, small transmission clearance;
- Cylinder block structure: the cylinder block is processed and formed by forging, with tight material structure and strong bearing capacity;
- Safety design: dual position protection with mechanical limit device and electronic limit switch.

ACCESSORY

FLYGER®

F6800C Series Smart Positioner



Overview and application

- The F6800 series smart positioner are equipped with communication capability and are mounted on pneumatic actuators with straight or angular travel. Adopt modular structure design; Control valve opening by receiving 4-20mA current signal from DCS; Built-in microprocessor and advanced control algorithm to achieve accurate valve control. The F6800 series intelligent positioning devices are equipped with communication capability and are mounted on pneumatic actuators with straight or angular travel. Adopt modular structure design; Control valve opening by receiving 4-20mA current signal from DCS; Built-in microprocessor and advanced control algorithm to achieve accurate valve control.

Technical parameters

- Input signal: 4-20mA (divisible control)
- Output signal:4~20mA@24.DC
- Resistance resistance: 460 Ω(Max)/ 20 ma (DC)
- Control precision:± 0.3% F.S.
- Protection class: IP65/NEMA 4X(customizable)
- Explosion protection class: Exdb II CT4 ··· T6Gb
- Working stroke: 10-150mm or 0-120°
- Working temperature: -30~80°C
- Output features: equal percentage (1:25/1:50/25:1/50:1), linear, fast open, user defined

Product features

- Using the nozzle baffle three way slide valve technology, improve the ability of dust, water, oil;
- Using digital (PWM) I/P driving module, one-key self-setting, high control precision, easy to adjust;
- Adopt modular design, choose different module to realize different function;
- Unique online replacement function, to solve the online replacement locator without stopping production problem.

ANS Series Limit Switch



Overview and application

- ANS series limit switches realize field visual and remote signal transmission of valve position and are widely used in automatic control system of pneumatic valves. Different limit switches can be installed in the switch box to meet customer requirements.

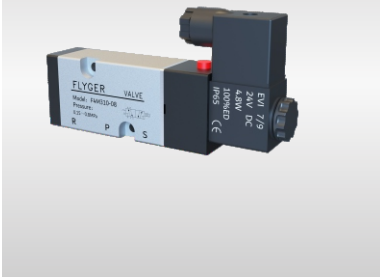
Technical parameters

- Shell material: aluminum alloy, stainless steel
- Microswitch: mechanical, inductive, magnetic induction
- Ambient temperature: -20~80°C standard; - 40 ~ 50 °C low temperature type
- Rotation Angle: 0~90° Protection class: Ip67
- Explosion-proof grade: ExdbIICT6 Gb, Extb III CT80°C.Db;ExiaIICT6

Product features

- Visible valve position indication, compact structure, simple operation, convenient;
- Built-in micro switch optional, to meet the requirements of different customers;
- Small volume, simple connection with the actuator, stable operation;
- The valve position adjustment device adopts the special rotating adjustable CAM.

FP-S Series Solenoid valve



Overview and application

- Internal pilot structure is adopted to meet the requirements of different pneumatic actuators, single and double electric control to meet the requirements of different working conditions, with the advantages of accurate airflow conversion, fast and reliable action, long-term trouble-free operation, etc.

Technical parameters

- Number of locations: 2/3; 2/5; 3/5
- Pipe diameter: NPT1/4; NPT3/8; NPT1/2
- Pressure range: 0.15~ 0.8mpa Environmental temperature: -5~60°C
- Standard voltage: AC220V; AC110V; AC24V; DC24V; DC12V
- Power consumption: AC:5.5VA; DC: 4.8 W
- Insulation and protection class: F.IP65(DIN40050)
- Wiring: outlet type or DIN socket type

Product features

- Double-head two-position solenoid valve has memory function;
- NAMUR/in-line;
- Sliding column structure, responsive;Three-position solenoid valves have three central functions to choose from;
- Special process for inner hole, low resistance, low starting pressure.

FP-G Series Filter Regulator



Overview and application

- FF series filter pressure-relief device is widely used in industrial automation industry to prevent the set pressure from abnormal movement caused by external interference, protect the pneumatic industrial instrument from moisture and dirt in the air supply, and avoid the occurrence of faults.

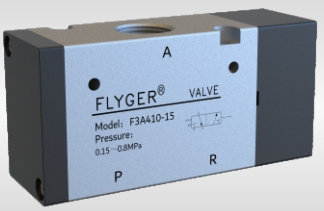
Technical parameters

- Structural form: triplet; Duplex; monomer
- Filtration accuracy: 40um or 5um
- Pipe diameter: NPT1/4; NPT3/8; NPT1/2; NPT1
- Pressure regulating range: 0.05~ 0.9mpa
- Environmental temperature: -20~70°C

Product features

- Embedded pressure gauge with self-locking mechanism design;
- Pressure regulation adopts balanced design, stable regulation, small drift;
- Standard type, high temperature type and low temperature type are available.
- Automatic, differential pressure, manual drainage of three ways to choose.

FP-P Series Pilot-Operated Valve



Overview and application

- FP series piloted operated valve adopts the structure form of external air control and sliding column type, single and double air control can meet the requirements of different working conditions, with the advantages of accurate airflow conversion, fast and reliable operation, long-term trouble-free operation and so on.

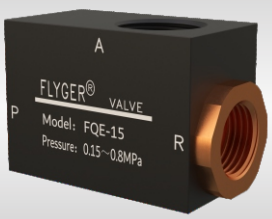
Technical parameters

- Number of locations: 2/3; 2/5; 3/5
- Pipe diameter: NPT1/4; NPT3/8; NPT1/2
- Pressure range: 0.15~ 0.8mpa
- Ambient temperature: -20~70°C

Product features

- Sliding column structure, good sealing, sensitive reaction;
- Three-position air control valve has three intermediate functions to choose from;
- Double-head two-position air control valve has memory function;
- Special process for inner hole, low resistance, low starting pressure.

FP-Q Series Quick Exhaust Valve



Overview and application

- It is mainly used in the occasions with pneumatic actuators and switch time requirements to quickly drain the compressed air in the cylinder to achieve the effect of quick closing or quick opening of the valve.

Technical parameters

- Pipe diameter: NPT1/4; NPT3/8; NPT1/2
- Service pressure range: 0~ 1.0mpa
- Ambient temperature: -5~60°C

Product features

- Light and compact in structure.
- Large effective circulation area, large flow.

FP-O Series Uni-Directional Throttle Valve



Overview and application

- FO series uni-directional throttle valves are mainly used in pneumatic actuators with switching time requirements of the occasion, adjust the switching speed of the actuator, protect the service life of the valve.

Technical parameters

- Pipe diameter: NPT1/4; NPT3/8; NPT1/2
- Pressure range: 0.05~ 0.95mpa
- Adjust flow lap number: 8~9
- Ambient temperature: -5~60°C

Product features

- Exhaust throttle, adjust sensitive, high precision.
- Multi - position installation, easy to install and use.

FLYGER®

Centered on customer-oriented services, dedicated in professional valve applications and solutions



As a world-leading valve manufacturer,FLYGER Valve always adheres to the idea of customer-oriented services and formulates targeted customized industrial applications and solutions, concerns and deeply understands customers' demands so as to form a valuable ecology shared with customers with its excellent products and services.

FLYGER

FLYGER VALVE

FLYGER VALVE

sales@flyger.co.uk

Tricor Suite, 4th Floor, 50 Mark Lane, London
EC3R 7QR, United Kingdom

Information, please visit: https://flyger.co.uk/

© FLYGER reserves the right to update the product design and technical changes without notice

FLY-PC-20-08A