



科技化、专业化、国际化

Scientific, Professional and International

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选型手册
Products Summary



郑州孚瑞流体控制技术有限公司

Zhengzhou Free Fluid Control Technology Co., Ltd

双向密封刀闸阀 / Bi-directional knife gate valve

刀闸阀 / Standard Knife Gate Valve



产品优点 / Product Benefits:

- 一体式刀闸双向密封，零泄漏，承受高压差和全通径，可达到最大流量的阀门。
- 无凹槽阀座设计，防止介质在密封面堆积，避免因介质堆积造成密封面漏水或闸板卡阻现象。
- 精密铸造整体式结构阀体。
- 弹性阀座U形设计，嵌入到阀体内部与闸板相互吻合，闸板上下运动，摩擦力小，大大延长了阀座使用寿命，并且达到双向密封。
- 橡胶O形圈嵌入法兰凹槽内，阀门与管路连接安装方便，密封可靠。
- 产品广泛用于城市污水处理、造纸、矿山排渣这些领域。
- Knife gate valve is Bi-directional, Zero Leakage, withstanding high differential pressure and full bore valve with minimal seat cavity for maximum flow capacity.
- No groove is designed on the valve seat, which prevents accumulating media on the sealing surface, and thus avoids sealing surface leakage or disc blockage caused by media accumulation.
- The integrated body structure with precision casting.
- U-shaped resilient seat is embedded into the body and is well-connected with the gate, and the friction force is reduced during the upward and downward movements of the gate. This greatly prolongs the using life of the seat and realizes bi-directional sealing.
- The rubber O-ring is embedded into the flange groove, which makes it convenient to connect the valve to pipe and provides reliable sealing.
- Knife gate valve is widely used in urban sewage treatment, paper-making, mine slag discharge and the fields alike.

技术参数 / Technical Parameter:

| | | |
|-----------------------------|------------------------------------|--|
| 公称口径 / Size | DN50-1200 2"-48" | |
| | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| 压力等级 / Pressure Rating | ASME CLASS 150 | DN50-250 10 Bar DN300-400 6 Bar DN450 5 Bar DN500-600 4 Bar DN700-1200 2 Bar |
| 适用温度 / Suitable Temperature | -20℃~+170℃ | |
| 泄漏等级 / Leakage Class | 零泄漏 / Zero Leakage | |



气动
Pneumatic actuated Knife Gate Valve



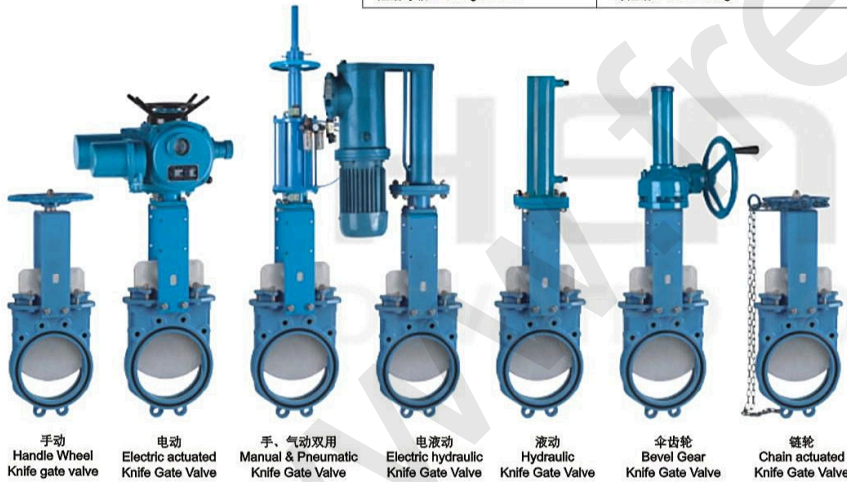
电动
Electric actuated Knife Gate Valve

产品优点 / Product Benefits:

- 刀闸阀是由狭窄的阀体和滑动闸板构成。
- 闸板有锋利的刀口，能够将流体介质中的固体颗粒排开或切割。
- 闸板表面抛光处理加强了闸板穿透力，有效保护了填料和阀座的使用寿命。
- 闸板底部配置了闸板压紧装置，能够安全地将闸板支撑压紧在阀座上，确保关闭紧密有效。
- 产品广泛用于造纸、水处理、电力、化工、钢铁、采矿等行业。
- Knife gate valve is composed of narrow body and sliding Gate
- The gate has sharp blade that can separate or cut the solid particles in the fluid media.
- The polishing treatment on the gate surface strengthens its penetrating power and effectively guarantees the service life of both packing and valve seat.
- The bottom of the valve body is provided with the gate hold-down device that can safely presses the gate tightly on the valve seat in order to ensure valid tight-seal.
- Products are widely used in water treatment, paper-making, Power industry, Chemical industry, Iron and Steel industry, mining and so on.

技术参数 / Technical Parameter:

| | | |
|-----------------------------|--|--|
| 公称口径 / Size | DN50-1200 2"-48" | |
| | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| 压力等级 / Pressure Rating | ASME CLASS 150 | DN50-250 10 Bar DN300-400 6 Bar DN450 5 Bar DN500-600 4 Bar DN700-1200 2 Bar |
| 适用温度 / Suitable Temperature | -60℃~+1100℃ | |
| 泄漏等级 / Leakage Class | 最高40ml/min/in 金属密封阀座 最高0ml/min/in PTFE密封阀座 最高0ml/min/in 橡胶密封阀座 | Max.40ml/min/in metal seated Max. 0ml/min/in PTFE seated Max. 0ml/min/in Rubber seated |



手动 Handle Wheel Knife gate valve
 电动 Electric actuated Knife Gate Valve
 手、气动双用 Manual & Pneumatic Knife Gate Valve
 电液动 Electric hydraulic Knife Gate Valve
 液动 Hydraulic Knife Gate Valve
 伞齿轮 Bevel Gear Knife Gate Valve
 链轮 Chain actuated Knife Gate Valve



手动 Handle Wheel Knife gate valve
 气动 Pneumatic actuated Knife Gate Valve
 手、气动双用 Manual & Pneumatic Knife Gate Valve
 电液动 Electric hydraulic Knife Gate Valve
 液动 Hydraulic Knife Gate Valve
 伞齿轮 Bevel Gear Knife Gate Valve
 链轮 Chain actuated Knife Gate Valve

陶瓷刀闸阀 / Ceramic Knife Gate Valve

產品優點 / Product Benefits:

- 密封面采用高档增韧结构陶瓷, 有极高的耐磨损、耐腐蚀性能。
- 刀闸阀是由狭窄的阀体和滑动闸板构成。
- 闸板有锋利的刀口, 能够将流体介质中的固体颗粒排开或切割。
- 闸板表面抛光处理加强了闸板穿透力, 有效保护了填料和阀座的使用寿命。
- 阀体底部配置了闸板压紧装置, 能够安全地将闸板支撑压紧在阀座上, 确保关闭紧密有效。
- 产品广泛用于煤炭、炉渣、水泥浆、电力、化工、钢铁、采矿等行业。

- The sealing surface uses high-end ceramics with toughened structure which has exceedingly high - wear and corrosion-resistant performances.
- Knife gate valve is composed of narrow body and sliding Gate.
- The gate has sharp blades that can separate or cut the solid particles in the fluid media.
- The polishing treatment on the gate surface strengthens its penetrating power and effectively guarantees the service life of both packing and valve seat.
- The bottom of the valve body is provided with the gate hold-down device that can safely presses the gate tightly on the valve seat in order to ensure effective tight-seal.
- Products are widely used in water treatment, paper-making, Power industry, Chemical industry, Iron and Steel industry, mining and so on.

技術參數 / Technical Parameter:

| | | |
|----------------------------|---|-----------------|
| 公称口径 /Size | DN50-600 2"~24" | |
| | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| 压力等级 /Pressure Rating | ASME | DN50~250 10 Bar |
| | CLASS | DN300~400 6 Bar |
| | 150 | DN450 5 Bar |
| | | DN500~600 4 Bar |
| 适用温度 /Suitable Temperature | -29℃ ~+200℃ | |
| 泄漏等级 /Leakage Class | 最高40ml/min/in 陶瓷密封阀座 Max.40ml/min/in metal seated | |



液动
Hydraulic Knife Gate Valve

刀闸阀 / Standard Knife Gate Valve



產品優點 / Product Benefits:

- 刀闸阀是由狭窄的阀体和滑动闸板构成。
- 闸板有锋利的刀口, 能够将流体介质中的固体颗粒排开或切割。
- 闸板表面抛光处理加强了闸板穿透力, 有效保护了填料和阀座的使用寿命。
- 阀体底部配置了闸板压紧装置, 能够安全地将闸板支撑压紧在阀座上, 确保关闭紧密有效。
- 产品广泛用于造纸、水处理、电力、化工、钢铁、采矿等行业。

- Knife gate valve is composed of narrow body and sliding Gate.
- The gate has sharp blade that can separate or cut the solid particles in the fluid media.
- The polishing treatment on the gate surface strengthens its penetrating power and effectively guarantees the service life of both packing and valve seat.
- The bottom of the valve body is provided with the gate hold-down device that can safely presses the gate tightly on the valve seat in order to ensure effective tight-seal.
- Products are widely used in water treatment, paper-making, Power industry, Chemical industry, Iron and Steel industry, mining and so on.

技術參數 / Technical Parameter:

| | | |
|----------------------------|---|-------------------------------------|
| 公称口径 /Size | DN50-1200 2"~48" | |
| | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| 压力等级 /Pressure Rating | ASME | DN50~250 10 Bar |
| | CLASS | DN300~400 6 Bar |
| | 150 | DN450 5 Bar |
| | | DN500~600 4 Bar DN700~1200 2 Bar |
| 适用温度 /Suitable Temperature | -60℃ ~+1100℃ | |
| 泄漏等级 /Leakage Class | 最高40ml/min/in 金属密封阀座 Max.40ml/min/in metal seated 最高0ml/min/in PTFE密封阀座 Max. 0ml/min/in PTFE seated 最高0ml/min/in 橡胶密封阀座 Max. 0ml/min/in Rubber seated | |



伞齿轮
Bevel Gear Knife Gate Valve



手动 Handle Wheel Knife gate valve
 电动 Electric actuated Knife Gate Valve
 气动 Pneumatic actuated Knife Gate Valve
 手、气动双用 Manual & Pneumatic actuated Knife Gate Valve
 电液动 Electric hydraulic Knife Gate Valve
 伞齿轮 Bevel Gear Knife Gate Valve
 链轮 Chain actuated Knife Gate Valve



手动 Handle Wheel Knife gate valve
 电动 Electric actuated Knife Gate Valve
 气动 Pneumatic actuated Knife Gate Valve
 手、气动双用 Manual & Pneumatic actuated Knife Gate Valve
 电液动 Electric hydraulic Knife Gate Valve
 液动 Hydraulic Knife Gate Valve
 链轮 Chain actuated Knife Gate Valve

刀闸阀 / Standard Knife Gate Valve

產品優點 / Product Benefits:

- 刀闸阀是由狭窄的闸体和滑动闸板构成。
- 闸板有锋利的刀口，能够将流体介质中的固体颗粒排开或切割。
- 闸板表面抛光处理加强了闸板穿透力，有效保护了填料和闸座的使用寿命。
- 闸体底部配置了闸板压紧装置，能够安全地将闸板支撑压紧在闸座上，确保关闭紧密有效。
- 产品广泛用于造纸、水处理、电力、化工、钢铁、采矿等行业。

- Knife gate valve is composed of narrow body and sliding Gate.
- The gate has sharp blade that can separate or cut the solid particles in the fluid media.
- The polishing treatment on the gate surface strengthens its penetrating power and effectively guarantees the service life of both packing and valve seat.
- The bottom of the valve body is provided with the gate hold-down device that can safely presses the gate tightly on the valve seat in order to ensure effective tight-seal.
- Products are widely used in water treatment, paper-making, Power industry, Chemical industry, Iron and Steel industry, mining and so on.

技術參數 / Technical Parameter:

| | | |
|----------------------------|--|--|
| 公称口径 /Size | DN50-1200 2"-48" | |
| 压力等级 /Pressure Rating | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| | ASME CLASS 150 | DN50-250 10 Bar DN300-400 6 Bar DN450 5 Bar DN500-600 4 Bar DN700-1200 2 Bar |
| 适用温度 /Suitable Temperature | -60℃~+1100℃ | |
| 泄漏等级 /Leakage Class | 最高40ml/min/in 金属密封闸座 最高0ml/min/in PTFE密封闸座 最高0ml/min/in 橡胶密封闸座 | Max.40ml/min/in metal seated Max. 0ml/min/in PTFE coated Max. 0ml/min/in Rubber seated |



电液动
Electric hydraulic Knife Gate Valve

带阀盖刀闸阀 / Bolted Bonnet Knife Gate Valve



產品優點 / Product Benefits:

- 全封闭式刀闸阀，闸板埋在闸体内腔，完全与外界环境隔绝，阀盖设有圆形填料箱，能有效避免流体介质外泄。
- 闸板上端和闸体底部配置了闸板压紧装置，由两杆垂直推力转换成侧向力来实现闸板贴紧闸座形成有效密封。
- 本产品特别适用于开启关闭频繁、环保要求较高的食品、酿造、煤炭液化、污水处理、化工、钢铁等工业部门的自动控制系统中。

- The gate of the fully closed knife gate valve is embedded inside the valve body, totally isolated from exterior environment. The valve cap is provided with round stuffing box which can effectively avoid the leakage of fluid media.
- Both top part of the gate and bottom part of the valve body are provided with hold-down devices. Effective seal may be achieved by changing the vertical pushing force of the valve rod into lateral force so that the gate presses tightly against the valve seat.
- This product is extremely suitable for being applied in automation control systems that call for frequent startups and shutdowns, and high environment requirements, including food, brewing, coal liquefaction, sewage treatment, petrochemical, steel and other industries.

技術參數 / Technical Parameter:

| | | |
|----------------------------|--|--|
| 公称口径 /Size | DN50-1600 2"-64" | |
| 压力等级 /Pressure Rating | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| | ASME CLASS 150 | DN50-250 10 Bar DN300-400 6 Bar DN450 5 Bar DN500-600 4 Bar DN700-1600 2 Bar |
| 适用温度 /Suitable Temperature | -60℃~+1100℃ | |
| 泄漏等级 /Leakage Class | 最高40ml/min/in 金属密封闸座 最高0ml/min/in PTFE密封闸座 最高0ml/min/in 橡胶密封闸座 | Max.40ml/min/in metal seated Max. 0ml/min/in PTFE coated Max. 0ml/min/in Rubber seated |



手、气动双用
Manual & Pneumatic Knife Gate Valve



手动 Handle Wheel Knife gate valve
 电动 Electric actuated Knife Gate Valve
 气动 Pneumatic actuated Knife Gate Valve
 手、气动双用 Manual & Pneumatic Knife Gate Valve
 液动 Hydraulic Knife Gate Valve
 伞齿轮 Bevel Gear Knife Gate Valve
 链轮 Chain actuated Knife Gate Valve



手动 Handle Wheel Knife gate valve
 电动 Electric actuated Knife Gate Valve
 气动 Pneumatic actuated Knife Gate Valve
 电液动 Electric hydraulic Knife Gate Valve
 液动 Hydraulic Knife Gate Valve
 伞齿轮 Bevel Gear Knife Gate Valve
 链轮 Chain actuated Knife Gate Valve

带阀盖刀闸阀 / Bolted Bonnet Knife Gate Valve

产品优点 / Product Benefits:

- 全封闭式刀闸阀，闸板埋在阀体内腔，完全与外界环境隔绝。阀盖设有圆形填料桶，能有效的避免流体介质外泄漏。
- 闸板上端和阀体底部配置了闸板压紧装置，由闸杆垂直推力转换成侧向力来实现闸板贴紧阀座形成有效密封。
- 本产品特别适用于开启关闭频繁，环保要求较高的食品、酿造、煤炭液化、污水处理、化工、钢铁等工业部门的自动控制系统中。
- The gate of the fully closed knife gate valve is embedded inside the valve body, totally isolated from exterior environment. The valve cap is provided with round stuffing box which can effectively avoid the leakage of fluid media.
- Both top part of the gate and bottom part of the valve body are provided with hold-down devices. Effective seal may be achieved by changing the vertical pushing force of the valve rod into lateral force so that the gate presses tightly against the valve seat.
- This product is extremely suitable for being applied in automation control systems that call for frequent startups and shutdowns, and high environment requirements, including food, brewing, coal liquefaction, sewage treatment, petrochemical, steel and other industries.

技术参数 / Technical Parameter:

| | | |
|----------------------------|------------------------------------|-------------------------------|
| 公称口径 /Size | DN50-1600 2"-64" | |
| | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| 压力等级 /Pressure Rating | ASME | DN50~250 10 Bar |
| | CLASS | DN300~400 6 Bar |
| | 150 | DN450 5 Bar |
| | | DN500~600 4 Bar |
| | | DN700~1600 2 Bar |
| 适用温度 /Suitable Temperature | -60℃→+110℃ | |
| 泄漏等级 /Leakage Class | 最高40ml/min/in 金属密封阀座 | Max.40ml/min/in metal seated |
| | 最高0ml/min/in PTFE密封阀座 | Max. 0ml/min/in PTFE seated |
| | 最高0ml/min/in 橡胶密封阀座 | Max. 0ml/min/in Rubber seated |



手动
Handle Wheel Knife gate valve

浆液阀 / Slurry Valve



产品优点 / Product Benefits:

- 基本结构类似于双向密封刀闸阀，不同之处，阀体由两片组合并用螺栓连接成一体。
- 双向密封，零泄漏，承受高压差工况使用。
- 无凹槽阀座设计，防止介质在密封面堆积，避免因介质堆积造成密封面漏水或闸板卡阻现象。
- 弹性阀座U形设计，嵌入到阀体内部与闸板相互吻合。闸板上下运动，摩擦力小，大大延长了阀座使用寿命，并且达到双向密封。
- 产品广泛用于城市污水处理、造纸、矿山排渣这些领域。
- Basic Structure is similar to bi-directional sealing Knife gate valve, The differences is that body is two pieces constitution and integrate with bolts.
- Used under conditions of Bi-directional sealing. Zero Leakage and withstanding high differential pressure.
- No groove is designed on the valve seat, which prevents accumulating media on the sealing surfaces, and thus avoids sealing surface leakage or disc blockage caused by media accumulation.
- U-shaped resilient seat is embedded into the body and is well-connected with the gate, and the friction force is reduced during the upward and downward movements of the gate. This greatly prolongs the using life of the seat and realizes bi-directional sealing.
- Products are widely used in urban sewage treatment, paper-making, mine slag discharge and the fields alike.

技术参数 / Technical Parameter:

| | | |
|----------------------------|------------------------------------|------------------|
| 公称口径 /Size | DN50-1200 2"-48" | |
| | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| 压力等级 /Pressure Rating | ASME | DN50~250 10 Bar |
| | CLASS | DN300~400 6 Bar |
| | 150 | DN450 5 Bar |
| | | DN500~600 4 Bar |
| | | DN700~1200 2 Bar |
| 适用温度 /Suitable Temperature | -20℃→+170℃ | |
| 泄漏等级 /Leakage Class | 零泄漏 /Zero Leakage | |



链轮
Chain actuated Knife Gate Valve



电动
Electric actuated Knife Gate Valve

气动
Pneumatic actuated Knife Gate Valve

手、气动双用
Manual & Pneumatic Knife Gate Valve

电液动
Electric hydraulic Knife Gate Valve

液动
Hydraulic Knife Gate Valve

伞齿轮
Bevel Gear Knife Gate Valve

链轮
Chain actuated Knife Gate Valve



手动
Handle Wheel Knife gate valve

电动
Electric actuated Knife Gate Valve

手、气动双用
Manual & Pneumatic Knife Gate Valve

气动
Pneumatic actuated Knife Gate Valve

电液动
Electric hydraulic Knife Gate Valve

伞齿轮
Bevel Gear Knife Gate Valve

液动
Hydraulic Knife Gate Valve

產品優點 / Product Benefits:

- 介质过流部件整体采用聚脲酯衬里, 具备耐磨损、寿命长。
- 全通径、零泄漏。
- 填料采用整体模压橡胶体, 使上密封实现零泄露。
- 可更换的整体式聚脲酯衬里和不锈钢闸板, 节约了闸门的维护成本。
- 产品广泛用于矿山排渣、电力、造纸、城市污水处理这些领域。

- The entire media overflow parts generally adopts polyurethane lining which is wear-resistant and has a long service life.
- Full Port, Zero Leakag .
- Packing uses one-piece molded rubber to achieve zero leakage in the upper seal.
- Replaceable one-piece polyurethane lining and stainless steel gate that saves the maintenance cost of the gate.
- This product is widely used in mine discharge, electric power, paper making, and urban sewage treatment industries.

技術參數 / Technical Parameter:

| | | |
|----------------------------|---------------------------|-----------------|
| 公称通径 /Size | DN50-600 2"-24" | |
| | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa | |
| 压力等级 /Pressure Rating | ASME CLASS 150 | DN50-250 10 Bar |
| | | DN300-400 8 Bar |
| | | DN450 5 Bar |
| | | DN500-600 4 Bar |
| 适用温度 /Suitable Temperature | -20℃ ~ +100℃ | |
| 泄漏等级 /Leakage Class | 零泄漏 /Zero Leakage | |

產品優點 / Product Benefits:

- 嵌入式加强环的橡胶阀座可以保证在恶劣工况下安全使用, 具备耐磨损、寿命长。
- 可更换的橡胶阀座和不锈钢闸板, 节约了闸门的维修成本。
- 产品广泛用于矿渣、砂浆、泥浆、煤浆、造纸、城市污水处理这些领域。

- Rubber valve seat of embedded reinforcing ring may guarantee safe usage under poor working environment. It is wear resistant and has long service life.
- Replaceable rubber valve seat and stainless steel gate that save the repair cost of the valve.
- This product is widely used in mine waste, mortar, slurry, coal slurry, paper making and urban sewage treatment industries.

技術參數 / Technical Parameter:

| | | |
|---------------------------|------------------------------|------------------|
| 公称通径/Size | DN50-600 2"-24" | |
| 压力等级/Pressure Rating | 0.25 Mpa | |
| | ASME CLASS 150 | DN50-600 2.5 Bar |
| 适用温度/Suitable Temperature | -10℃ ~ +120℃ | |
| 泄漏等级/Leakage Class | 零泄漏 (闸板全启或全闭时) /Zero Leakage | |



手动
Handle Wheel Knife gate valve



伞齿轮
Bevel Gear Knife Gate Valve



电动
Electric actuated Knife Gate Valve

气动
Pneumatic actuated Knife Gate Valve

手、气动双用
Manual & Pneumatic Knife Gate Valve

电液动
Electric hydraulic Knife Gate Valve

液动
Hydraulic Knife Gate Valve

伞齿轮
Bevel Gear Knife Gate Valve

链轮
Chain actuated Knife Gate Valve



手动
Handle Wheel Knife gate valve

电动
Electric actuated Knife Gate Valve

手、气动双用
Manual & Pneumatic Knife Gate Valve

电液动
Electric hydraulic Knife Gate Valve

液动
Hydraulic Knife Gate Valve

气动
Pneumatic actuated Knife Gate Valve

链轮
Chain actuated Knife Gate Valve

穿透式刀闸阀 / Through conduit knife gate valve

产品优点 / Product Benefits:

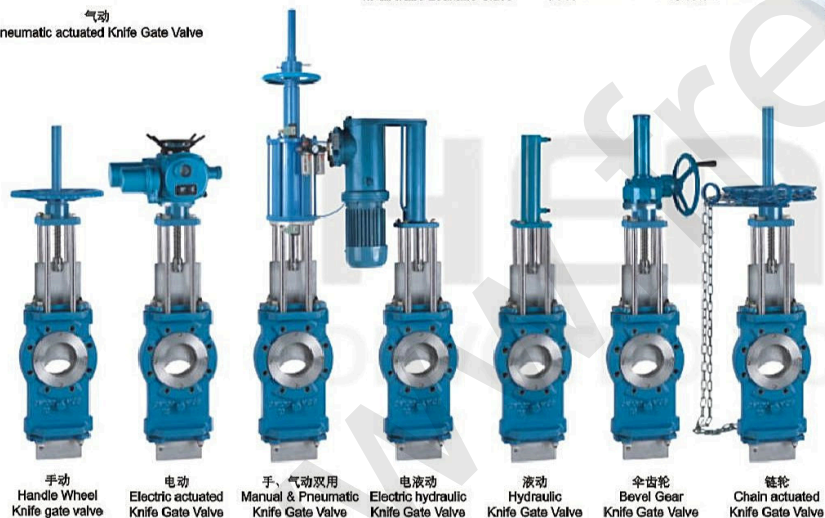
- 双向密封，带两个闸座密封圈。此闸板更长且底部伸出阀体，需要两个密封填料装置。
- 闸板形成一个孔状通道，其作用是，闸板开启时，介质能全部流走，没有滞留，闸板关闭时能完全密封。
- 在介质浓度较高条件下，也能保持闸座密封，由于没有滞留区，闸板底部无介质堆积。
- 该产品适用于制糖、化学设备(干燥器、反应器)的装卸和造纸厂的浆料出口处，用于回收混有大量杂质的旧纸张。
- Two-way sealing with two seal rings on the valve seat, this gate is longer and the bottom extends out of the valve body and requires two packing glands.
- The gate forms a cavernous Port whose role is that when the gate opens, medium may flow away completely without any detention; when the gate closes, it may be completely sealed.
- When the media are of high concentration, it may also keep the valve seat sealed. As there is no detention area, the bottom of the gate without medium accumulation.
- This product is suitable for the loading and unloading of sugar-making and chemical equipment (dryer and reactor) and the outlet of sizing agent in paper making plants. It may also be used for the recycling of old paper mingled with a large amount of impurities.

技术参数 / Technical Parameter:

| | | |
|-----------------------------|------------------------------------|---|
| 公称口径 / Size | DN50-600 2"-24" | |
| | 0.8 Mpa, 1.0 Mpa, 1.6 Mpa, 2.5 Mpa | |
| 压力等级 / Pressure Rating | ASME | DN50~250 10 Bar |
| | CLASS | DN300~400 6 Bar |
| | 150 | DN450 5 Bar |
| | | DN500~600 4 Bar |
| 适用温度 / Suitable Temperature | -60℃~+1100℃ | |
| 泄漏等级 / Leakage Class | 最高40ml/min/in 金属密封闸座 | Max.40ml/min/in metal seated |
| | 最高0ml/min/in PTFE密封闸座 | Max. 0ml/min/in PTFE seated ubber seated |



气动
Pneumatic actuated Knife Gate Valve



手轮
Handle Wheel Knife gate valve

电动
Electric actuated Knife Gate Valve

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液动
Hydraulic Knife Gate Valve

伞齿轮
Bevel Gear Knife Gate Valve

链轮
Chain actuated Knife Gate Valve

方形闸门 \ Square knife gate valve

产品优点 / Product Benefits:

- 结构和标准刀闸阀相似。
- 阀体成方形或长方形。
- 驱动装置、探测仪及附件和标准刀闸阀相同。
- 外杆密封系列。
- 方形法兰连接。
- Same construction as standard knife gate valve.
- Body and gate in rectangular valve shape.
- Same actuators and accessories as standard.
- Rising stem tight model.
- Square flange ends.

技术参数 / Technical Parameter:

| | |
|-----------------------------|--|
| 公称口径 / Size | DN200 × 200……DN1000 × 1000 8" × 8"……40" × 40" |
| 压力等级 / Pressure Rating | 0.6 Mpa, 1.0 Mpa, 1.6 Mpa |
| 适用温度 / Suitable Temperature | -20℃~+200℃ |
| 主体材料 / Main Material | Q235A, 304, 316, 304L, 316L |
| 密封形式 / Seal Type | 金属密封闸座 / Metal Seated |
| | 橡胶密封闸座 / Rubber Seated |



气动
Pneumatic actuated Knife Gate Valve



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產品優點 / Product Benefits:

- 温州恒隆阀门生产全系列控制阀产品包含了：闸阀、刀闸阀、球阀、截止阀、止回阀、蝶阀。其产品应用于造纸、制药、电力、环保、石化、化工、等工业领域。
- The whole range of control valve products of Wenzhou Henglong Valve includes: gate valves, knife gate valves, ball valves, stop valves, check valves, and butterfly valve. Its products are used in paper-making, pharmaceutical, power, environment protection, petrochemical, chemical industries and so on.

技術參數 / Technical Parameter:

| | |
|---------------------------|--|
| 公称通径/Size | DN25 - 1000 1" - 40" |
| 压力等级/Pressure Rating | PN10 - PN260 ANSI150 - 1500LB |
| 适用温度/Suitable Temperature | -40℃ ~ +1100℃ |
| 阀体材质/Body Material | 碳钢、不锈钢 / Carbon steel, Stainless Steel |



V型球阀 / V Type Ball Valve



止回阀 / Check Valve



截止阀 / Globe Valve



闸阀 / Gate Valve



O型球阀 / O Type Ball Valve



蝶阀 / Butterfly Valve



閥體 / Body

| | | |
|-----------------------|---------------|---------------|
| 铸铁 / Cast Iron | HT250 | GG25 |
| 球墨铸铁 / Ductile Iron | QT400-18 | GGG40 |
| 不锈钢 / Stainless Steel | 06Cr19Ni10 | AISI 304 |
| 不锈钢 / Stainless Steel | 06Cr25Ni20 | AISI 310 |
| 不锈钢 / Stainless Steel | 06Cr17Ni12Mo2 | AISI 316 |
| 铸钢 / Cast steel | WCB | ASTM A216 WCB |

閘板 / Gate

| | | |
|-----------------------|---------------|----------|
| 不锈钢 / Stainless Steel | 06Cr19Ni10 | AISI 304 |
| 不锈钢 / Stainless Steel | 06Cr25Ni20 | AISI 310 |
| 不锈钢 / Stainless Steel | 06Cr17Ni12Mo2 | AISI 316 |

閥座 / Seat and O-ring

| |
|-----------------------|
| 金属 / Metal |
| 丁腈 / Nitril |
| 乙丙胶 / EPDM |
| 硅胶 / Silicone |
| 白色硅胶 / White Silicone |
| 聚四氟乙烯 / PTFE |

填料壓塊 / Packing

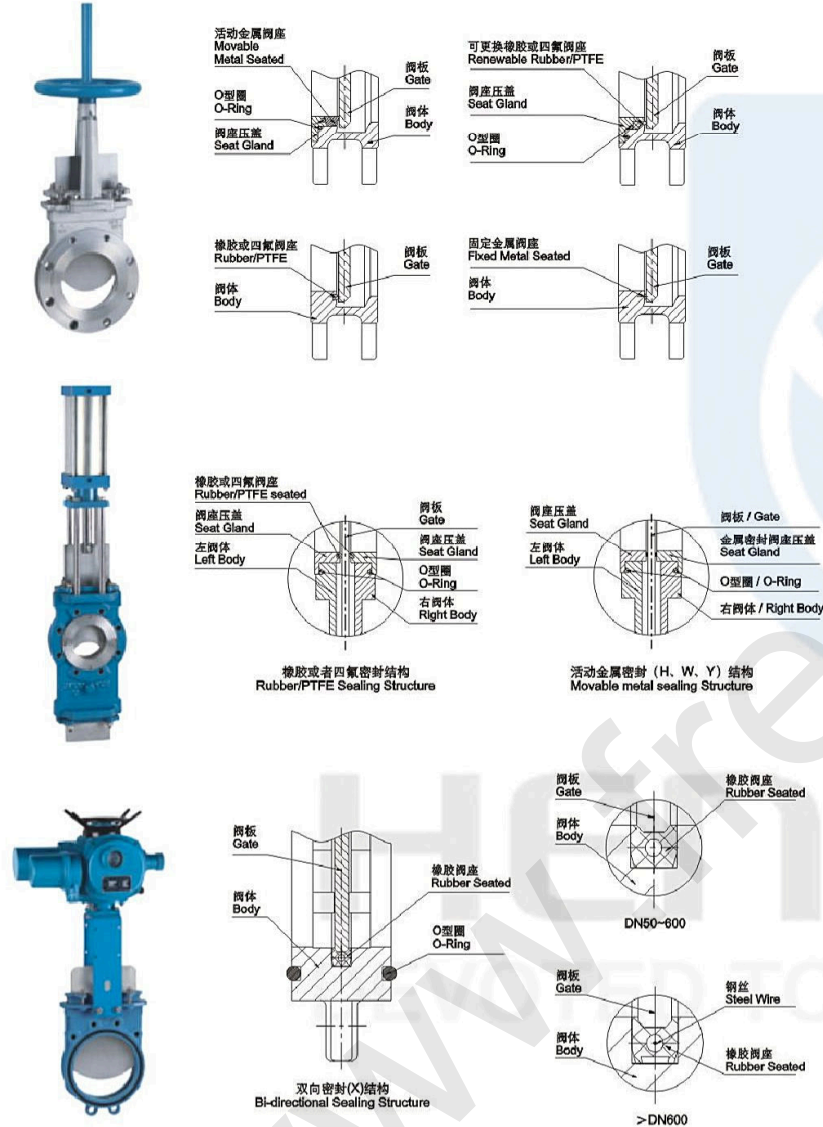
| |
|----------------------------|
| 棉浸动物油 / Tallowed cotton |
| 特氟隆丙烯酰胺 / Tefloned acrylic |
| 聚四氟乙烯 / PTFE |
| 石墨 / Graphite |
| 高温 / Very high temperature |

標準配置 / Standard construction

| | | |
|--------------|--|--|
| 阀体 / Body | 球墨铸铁 QT400-18 Ductile Iron QT400-18 | 不锈钢 06Cr17Ni12Mo2 Stainless Steel 06Cr17Ni12Mo2 |
| 閘板 / Gate | 不锈钢 06Cr19Ni10 Stainless Steel 06Cr19Ni10 | 不锈钢 06Cr17Ni12Mo2 Stainless Steel 06Cr17Ni12Mo2 |
| 閥座 / Seat | 丁腈 Nitril | 三元乙丙胶 / EPDM |
| 填料 / Packing | 棉浸动物油 Tallowed cotton | 棉浸动物油 Tallowed cotton |

阀座结构 / Seat Structure

- 可更换的阀座，阀门维修方便、可靠，能为客户获得经济性。
- 多品种材料的阀座，用于不同的流体、固体介质中。
- Renewable Seat, Easy maintenance and Reliability are economic acquisition for customers.
- Multi-Seat material can be used in different fluids and solid media.



刀闸阀法兰连接尺寸示意图

Knife Gate Valve Flange connection diameter chart



法兰尺寸/ Size Of Flange GB/T9113.1 0.6Mpa

| DN | L | 法兰连接 / Flange Connection | | | | | |
|------|---------|--------------------------|------|------|-------|----------|----|
| | | D | φD1 | φD2 | N × M | φd | |
| mm | Inch | mm | mm | mm | mm | mm | |
| 50 | 2" | 48 | 140 | 110 | 88 | 4 × M12 | 14 |
| 65 | 2(1/2)" | 48 | 160 | 130 | 108 | 4 × M12 | 14 |
| 80 | 3" | 51 | 190 | 150 | 124 | 4 × M16 | 18 |
| 100 | 4" | 51 | 210 | 170 | 144 | 4 × M16 | 18 |
| 125 | 5" | 57 | 240 | 200 | 174 | 8 × M16 | 18 |
| 150 | 6" | 57 | 265 | 225 | 199 | 8 × M16 | 18 |
| 200 | 8" | 70 | 320 | 280 | 254 | 8 × M16 | 18 |
| 250 | 10" | 70 | 375 | 335 | 309 | 12 × M16 | 18 |
| 300 | 12" | 76 | 440 | 395 | 363 | 12 × M20 | 22 |
| 350 | 14" | 76 | 490 | 445 | 413 | 12 × M20 | 22 |
| 400 | 16" | 89 | 540 | 495 | 463 | 16 × M20 | 22 |
| 450 | 18" | 89 | 595 | 550 | 518 | 16 × M20 | 22 |
| 500 | 20" | 114 | 645 | 600 | 568 | 20 × M20 | 22 |
| 600 | 24" | 114 | 775 | 705 | 667 | 20 × M24 | 26 |
| 700 | 28" | 165 | 860 | 810 | 772 | 24 × M24 | 26 |
| 800 | 32" | 165 | 975 | 920 | 878 | 24 × M27 | 30 |
| 900 | 36" | 203 | 1075 | 1020 | 978 | 24 × M27 | 30 |
| 1000 | 40" | 216 | 1175 | 1120 | 1078 | 28 × M27 | 30 |
| 1200 | 48" | 254 | 1405 | 1340 | 1295 | 32 × M30 | 33 |

法兰尺寸/ Size Of Flange GB/T9113.1 1.0Mpa

| DN | L | 法兰连接 / Flange Connection | | | | | |
|------|---------|--------------------------|------|------|-------|----------|----|
| | | D | φD1 | φD2 | N × M | φd | |
| mm | Inch | mm | mm | mm | mm | mm | mm |
| 50 | 2" | 48 | 165 | 125 | 99 | 4 × M16 | 18 |
| 65 | 2(1/2)" | 48 | 185 | 145 | 118 | 4 × M16 | 18 |
| 80 | 3" | 51 | 200 | 160 | 132 | 8 × M16 | 18 |
| 100 | 4" | 51 | 220 | 180 | 156 | 8 × M16 | 18 |
| 125 | 5" | 57 | 250 | 210 | 184 | 8 × M16 | 18 |
| 150 | 6" | 57 | 285 | 240 | 211 | 8 × M20 | 22 |
| 200 | 8" | 70 | 340 | 295 | 266 | 8 × M20 | 22 |
| 250 | 10" | 70 | 395 | 350 | 319 | 12 × M20 | 22 |
| 300 | 12" | 76 | 445 | 400 | 370 | 12 × M20 | 22 |
| 350 | 14" | 76 | 505 | 460 | 429 | 16 × M20 | 22 |
| 400 | 16" | 89 | 565 | 515 | 480 | 16 × M24 | 26 |
| 450 | 18" | 89 | 615 | 565 | 530 | 20 × M24 | 26 |
| 500 | 20" | 114 | 670 | 620 | 582 | 20 × M24 | 26 |
| 600 | 24" | 114 | 780 | 725 | 682 | 20 × M27 | 30 |
| 700 | 28" | 165 | 895 | 840 | 794 | 24 × M27 | 30 |
| 800 | 32" | 165 | 1015 | 960 | 901 | 24 × M30 | 33 |
| 900 | 36" | 203 | 1115 | 1050 | 1001 | 28 × M30 | 33 |
| 1000 | 40" | 216 | 1230 | 1160 | 1112 | 28 × M33 | 36 |
| 1200 | 48" | 254 | 1455 | 1380 | 1328 | 32 × M36 | 39 |

法兰尺寸/ Size Of Flange GB/T9113.1 1.6Mpa

| DN | L | 法兰连接 / Flange Connection | | | | | |
|------|---------|--------------------------|------|------|-------|----------|----|
| | | D | φD1 | φD2 | N × M | φd | |
| mm | Inch | mm | mm | mm | mm | mm | mm |
| 50 | 2" | 48 | 165 | 125 | 99 | 4 × M16 | 18 |
| 65 | 2(1/2)" | 48 | 185 | 145 | 118 | 4 × M16 | 18 |
| 80 | 3" | 51 | 200 | 160 | 132 | 8 × M16 | 18 |
| 100 | 4" | 51 | 220 | 180 | 156 | 8 × M16 | 18 |
| 125 | 5" | 57 | 250 | 210 | 184 | 8 × M16 | 18 |
| 150 | 6" | 57 | 285 | 240 | 211 | 8 × M20 | 22 |
| 200 | 8" | 70 | 340 | 295 | 266 | 12 × M20 | 22 |
| 250 | 10" | 70 | 405 | 355 | 319 | 12 × M24 | 26 |
| 300 | 12" | 76 | 460 | 410 | 370 | 12 × M24 | 26 |
| 350 | 14" | 76 | 520 | 470 | 429 | 16 × M24 | 26 |
| 400 | 16" | 89 | 580 | 525 | 480 | 16 × M27 | 30 |
| 450 | 18" | 89 | 640 | 585 | 548 | 20 × M27 | 30 |
| 500 | 20" | 114 | 715 | 650 | 609 | 20 × M30 | 33 |
| 600 | 24" | 114 | 840 | 770 | 720 | 20 × M33 | 36 |
| 700 | 28" | 165 | 910 | 840 | 794 | 24 × M33 | 36 |
| 800 | 32" | 165 | 1025 | 950 | 901 | 24 × M36 | 39 |
| 900 | 36" | 203 | 1125 | 1050 | 1001 | 28 × M36 | 39 |
| 1000 | 40" | 216 | 1255 | 1170 | 1112 | 28 × M39 | 42 |
| 1200 | 48" | 254 | 1485 | 1390 | 1328 | 32 × M45 | 48 |

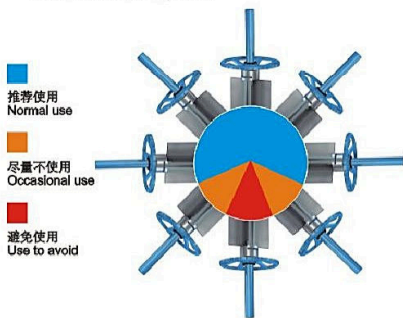
法兰尺寸/ Size Of Flange ASME CLASS 150

| DN | L | 法兰连接 / Flange Connection | | | |
|------|---------|--------------------------|------|-------|-----------------------|
| | | D | φD1 | φD2 | N × M |
| mm | Inch | mm | mm | mm | Inch |
| 50 | 2" | 48 | 152 | 120.5 | 92 4 × 5/8"-UNC |
| 65 | 2(1/2)" | 48 | 178 | 139.5 | 105 4 × 5/8"-UNC |
| 80 | 3" | 51 | 190 | 152.5 | 127 4 × 5/8"-UNC |
| 100 | 4" | 51 | 229 | 190.5 | 157 8 × 3/4"-UNC |
| 125 | 5" | 57 | 254 | 216 | 186 8 × 3/4"-UNC |
| 150 | 6" | 57 | 279 | 241.5 | 216 8 × 3/4"-UNC |
| 200 | 8" | 70 | 343 | 298.5 | 270 8 × 3/4"-UNC |
| 250 | 10" | 70 | 406 | 362 | 324 12 × 7/8"-UNC |
| 300 | 12" | 76 | 483 | 432 | 381 12 × 7/8"-UNC |
| 350 | 14" | 76 | 533 | 476 | 413 12 × 1"-UNC |
| 400 | 16" | 89 | 597 | 540 | 476 16 × 1"-UNC |
| 450 | 18" | 89 | 656 | 578 | 533 16 × 1(1/8)"-UNC |
| 500 | 20" | 114 | 698 | 635 | 584 20 × 1(1/8)"-UNC |
| 600 | 24" | 114 | 813 | 749.5 | 692 20 × 1(1/4)"-UNC |
| 700 | 28" | 165 | 927 | 863.6 | 800 28 × 1(1/4)"-UNC |
| 750 | 30" | 165 | 984 | 914 | 857 28 × 1(1/4)"-UNC |
| 800 | 32" | 165 | 1060 | 978 | 914 28 × 1(1/2)"-UNC |
| 900 | 36" | 203 | 1168 | 1086 | 1022 32 × 1(1/2)"-UNC |
| 1000 | 40" | 216 | 1289 | 1200 | 1124 36 × 1(1/2)"-UNC |

使用注意事项 / Precautionary Measures

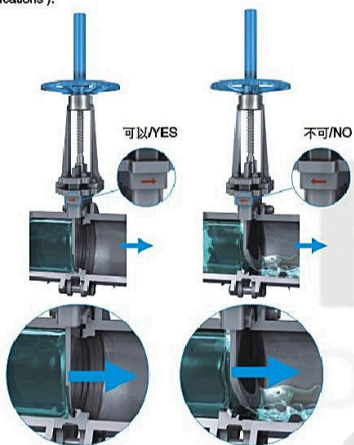
閥門位置 / Valve position:

- 閥門可安裝在不同方向，但我們建議用其中最好的幾種。
- The valve can be assembled in any position however, we recommend suitable position.



單向密封刀閘閥的安裝 Uni-directional knife gate valve assembling way.

- 閥門只能單向安裝。壓力在密封面上，請使用者務必按箭頭方向安裝。（液壓應用）
- The valve is uni-directional, it must be installed with the pressure which push the knife on the seal. The flow direction is user responsibility. Please assemble the valve following the arrow on the body (Hydraulics applications).



- 欲知气动输送和粉末产品的应用,请与我们联系。
- For applications of pneumatic transport or pulverized products, consult us.

安裝類型 / Assembling type

- 用双头螺丝+螺帽组合螺栓
- With screws+nuts and bolts set.



管端安裝 / Bottom line assembling

- 管端安裝時要用對夾連接。
- For bottom line assembling the valve must be installed between flanges.



預防措施 / precautionary measures

擰緊填料壓塊 / Tight the packing gland

- 出廠時，閥門的填料壓塊螺絲是鬆開的。
- 在使用前，將壓塊逐步地並適度的擰緊。
- The valves are always delivered with the loosened packing gland.
- Before any use, tighten the gland gradually and moderately.



閥門支架 / Valve support

- 如操作系統太重（气动头、电动头等），因橫向安裝或傾斜安裝要設置支架。
- When the valves are operated with heavy actuators (pneumatic actuator, electric actuator..) in horizontal or tilting position, the actuator must be supported by means of the retaining plate Supplied.



閥杆套管 / Greasing

- 在第一次安裝時，注意閥杆的保護套管的組件。閥杆上的油脂要保證預留在保護套里，提供定期的潤滑。
- Take care of the assembly of the protection tube of stem at the time of the first installation. The grease reserve of the stem is ensured in the protection tube, offering a regular greasing.



潤滑 / protection tube

- 假如儲存期延長或操作頻率較低，要定期潤滑閥門閥杆。
- In the event of prolonged storage or of weak frequency of operation, lubricate the valve stem regularly.

