

多功能水力控制阀

Multi-function Hydraulic Control Valve

一、产品介绍 About the product

该系列阀的动作性能与水力控制阀相似。它主要是利用管路内的自身压力，通过上下腔控制室的压力差来控制主阀盘的运动，再通过旁通管路和各种不同构造的导阀起不同功能产生各系列阀，从而达到各种要求之目的。该阀分别为消声/消锤/缓开/缓闭止回阀、水位控制阀、减压阀、安全/泄压阀、电动遥控阀等用于各种不同的场合，自动保证管网的安全运行，广泛用于建筑、消防、水厂、暖通、钢铁、电力、石油、化工等系统管网。

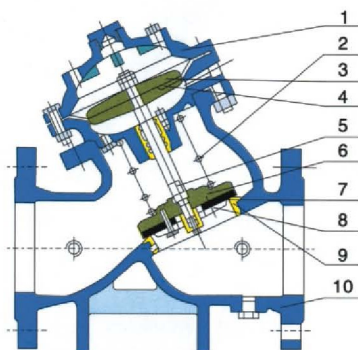
The motion performance of this valve is similar to that of the hydraulic control valve. It utilizes the self pressure inside of the pipeline and the pressure differential between the control rooms of upper and lower cavities to control the movement of the main disc and forms each series valve via the different function of the by-pass pipeline and the pilot valves of various different structures so as to get to the target of various requirements. Available with silencing/hammer removing/slow-open/slow-close check valves, water level control valve, pressure reducing valve, safety/relief valve, electric remote control valve etc. for various different occasions, automatically ensuring the safe operation of the pipe network and suitable for the pipe network of buildings, fire-fighting, water works, warming, steel and iron, electric power, petroleum, chemical industry etc.

二、产品特点 product features

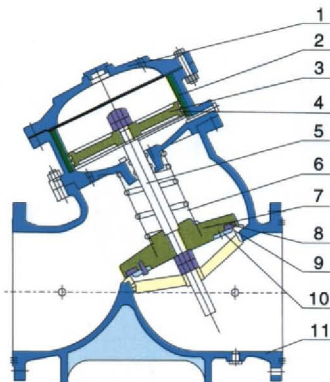
- 具有缓开功能，可解决传统的人关阀开泵；
- 具有缓闭功能，可人为调节关闭时间同，自动实现缓闭，消除水锤；
- 具有良好密封性能，关闭后可达到滴水不漏；
- 运作灵敏、安全可靠，不会出现失控现象；
- 无须人为操作，在管网运行的全过程均为自动工作；
- 阀内外及所有易腐蚀件均采用环氧树脂粉末涂装；
- 可拆卸阀座结构巧妙，维修更换方便（无须整台阀门拆除）；
- 在管路中可任意立式或卧式安装其可靠性不变。

- Of slow-open function, setting the conventional problem for people to close valve and open pump.
- Of slow-close function, capable of artificially adjusting the close time, automatically realizing slow-close and removing water hammer.
- Of a good sealing performance and no one drop of water leaks after being closed.
- Sensitive, safe and reliable, motion. Without any out-of-control condition.
- No need to artificially operate, all automatic work during the complete process for the pipe network to run.
- Both outside and inside of the valve and the all easily corroded parts are coated with epoxy resin powder.
- Removable seat ring of an exquisite structure, easy repair and re-placement (no need to remove whole valve).
- Vertically or horizontally mountable in the pipeline, with the reliability kept unchanged.

五、结构简图 Brief figure of structure



DN ≤ 600 隔膜式
DN ≤ 600 Diaphragm type



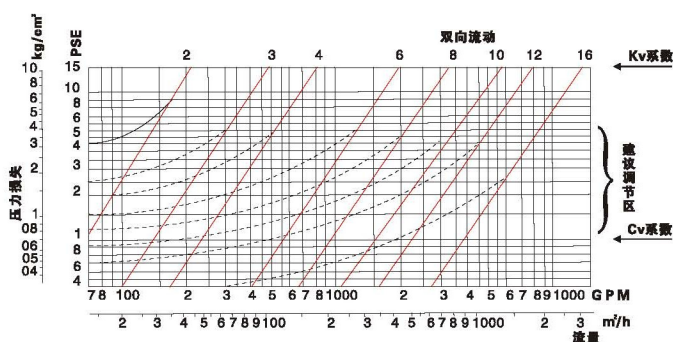
DN ≥ 600 活塞式
DN ≥ 600 Piston type

三、主要性能和规范 Performance standard

公称压力PN(MPa)	1.0	1.6	2.5
强度试验 Strength test(Mpa)	1.5	2.4	3.8
密封试验 Seal test(Mpa)	1.1	1.76	2.75
气密封实验 Air-tightness test(Bar)	6	0.6	0.6
工作温度 Working temperature	< 80℃		
适用介质 Suitable media	水及物理、化学性质类似于水的介质 Water and the media with physical and chemical similar to those of water		

四、主阀流量曲线图

Flow curve of main valve



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六、主要零件材料Materials of main parts

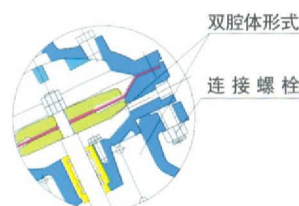
隔膜式Diaphragm type

序号 No	部件名称Part	选用材料Materials
1	阀盖Bonnet	灰铸铁、球墨铸铁、碳钢、不锈钢、铜 Gray cast iron, ductile iron, carbon steel, stainless steel, brass
2	弹簧Spring	弹簧钢、不锈钢 Spring steel, stainless
3	膜片压板 Pressboard of diaphragm	球墨铸铁、碳钢、不锈钢、铜 Ductile iron, carbon steel, stainless steel, brass
4	膜片Diaphragm	丁腈尼龙强化橡胶、三元乙丙尼龙强化橡胶 Acrylonitrile nylon reinforced rubber, ternary ethylene propylene copolymer reinforced rubber
5	阀杆Stem	不锈钢、不锈钢 Stainless iron, stainless
6	阀瓣Disc	灰铸铁、球墨铸铁、碳钢、不锈钢、铜 Gray cast iron, ductile iron, carbon steel, stainless steel, brass
7	密封垫Sealing pad	丁腈橡胶 NBR rubber
8	密封垫压板 pressboard of sealing pad	球墨铸铁、碳钢、不锈钢、铜 Ductile iron, carbon steel, stainless steel, brass
9	阀座Seating ring	本体、铜合金、不锈钢 Body, copper alloy, stainless steel
10	阀体Body	灰铸铁、球墨铸铁、碳钢、不锈钢、铜 Gray cast iron, ductile iron, carbon steel, stainless steel, brass

活塞式piston type

序号 No	部件名称Part	选用材料 Materials
1	阀盖Bonnet	灰铸铁、球墨铸铁、碳钢、不锈钢、铜 Gray cast iron, ductile iron, carbon steel, stainless steel, brass
2	缸套Cylindersleeve	不锈钢SS
3	活塞Piston	球墨铸铁Ductalloy
4	密封圈Seal ring	丁腈橡胶 NBR rubber
5	阀杆Stem	不锈钢、不锈钢 Stainless iron, stainless
6	弹簧Spring	弹簧钢、不锈钢 Spring steel, stainless
7	阀瓣Disc	灰铸铁、球墨铸铁、碳钢、不锈钢、铜 Gray cast iron, ductile iron, carbon steel, stainless steel, brass
8	密封垫Sealing pad	丁腈橡胶 NBR rubber
9	阀座Seating ring	本体、铜合金、不锈钢 Body, copper alloy, stainless steel
10	密封压板 Seal pressboard	球墨铸铁、碳钢、不锈钢、铜 Ductile iron, carbon steel, stainless steel, brass
11	阀体Body	灰铸铁、球墨铸铁、碳钢、不锈钢、铜 Gray cast iron, ductile iron, carbon steel, stainless steel, brass

七、结构说明Statement



双腔体形式 双腔体形式缓开 缓闭

采用不同用途可以将两个腔室彼此隔离或者相通，以实现缓开、缓闭或速闭等辅助功能，在一定程度上阻碍水锤的产生或缓解水锤的力度，保护阀后的其他设备不受损坏。除此之外，阀盖与上腔室连为一体，使得阀盖、上腔室、阀杆、阀盘成为整体，只要松开阀体与阀盖的连接螺栓，即可将其一并取出方便维修及更换易损件。

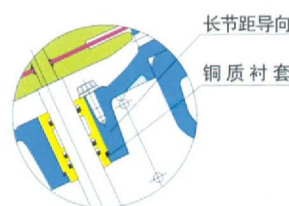
Use of different purposes can separate or make two cavities through so as to realize slow-open, slow-close or quick-close etc. auxiliary functions, prevent water hammer from being produced or reduce its strength to a certain extent and protect the other equipments after the valve from getting damaged. Besides, the integrated bonnet and upper cavity makes bonnet, upper cavity stem and disc an integrity, which can be wholly taken out for repair or replacement by loosening the joint bolt between body and bonnet body.



采用双道O形环

采用小活塞缸式，摩擦力小，运动灵活，活塞用双道O型密封环，阀门关闭时间可在3-60秒内任意调节。

Use of small piston cylinder features small frictional force and flexible motion, the piston uses dual O-seal rings and valve close time can be adjusted within.

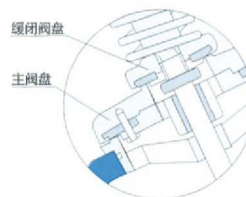


隔膜式Diaphragm type

中段长节距导向 铜质衬套

采用阀杆两头导向的结构，中段长节距导向，避免了阀盖与阀座上的导向孔因加工或安装不同心，导致阀杆运动受阻，易卡死现象，中段导向套上阀体整体绕铸，加工精度得到保证，同时在与阀杆的接触面间加一铜质衬套，保证阀杆表面不被磨损，擦毛，使阀杆运动自如，平稳灵活、可靠。

Used of the structure of two-ends guide of the stem and the long pitch guide in the middle section avoids the resisted movement and easy jamming with the stem due to the eccentric process or installation of the guide hole on both bonnet and seat ring the integral casting between the guide sleeve in the middle section and the upper body makes the process accuracy ensured and a copper bush placed between the contacting faces with the stem ensures the stem surface not to be worn out and scraped so as to have it feel stably flexibly and reliably move.



活塞式 Piston type

采用副密封结构，主密封阀盘随着介质的压力大小自动打开或关闭。副密封阀盘受到控制室介质的影响，随水锤峰值到达时间的长短自行关闭，从而消除水击现象。

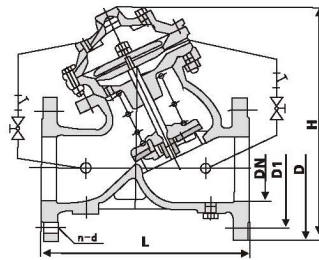
Used for a sludge treatment plant to drain out the sludge and waste water on the bottom of a water pool as well as the muddy sand and dirt deposited therein. The diaphragm made of nylon reinforced rubber and designed into an angular structure is helpful for the sludge to be successfully drained out.

JD745X多功能水泵控制阀

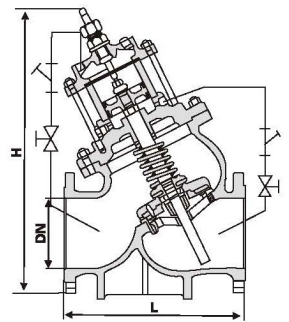
JD745X Multifunctional water Pump Control Valve



隔膜式



活塞式



一、用途Purpose

安装在高层建筑给水系统以及其它给水系统的水泵出口管道上，防止介质倒流，防止水锤反水击现象的产生。一阀兼具电动阀、止回阀和水锤消除器三种功能，可有效地提高供水系统的安全可靠性。

Mounted on the water pump's outlet pipeline of the high building's and other water supply systems to prevent the medium's back-flow and the from of water hammer and the from of water hammer and water shock.

二、特点Feature

- 1、消除水锤效果好。将缓开、速闭、缓闭消除水锤的技术原理一体化，防止开泵水锤和停泵水锤的产生。
- 2、操作方便。只需操作水泵电机启闭按钮，阀门即按照水泵操作规程实现自动开闭。
- 3、节能效果好。阀体采用了全通道流线型设计，压力损失小，流量大，且体积小，重量轻。

1. Good effect of water hammer removal. Integrating the technical principles of water hammer removal by means of slow-open, quick-close and slow-close so as prevent the water hammers at both pump starts and stop from being formed.

2. Easy operation. The valve will automatically open or close per the operation procedures of the pump once On-Off button of the pump's motor is operated.

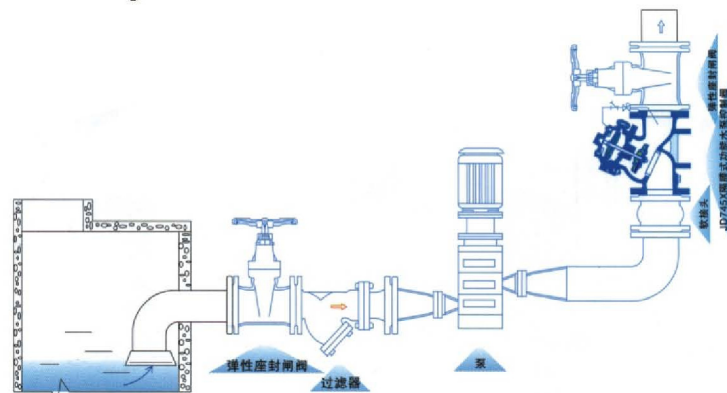
3. Good effect of energy saving. The valve body is so deigned as full-path straight-flow type, resulting in a small pressure loss, a big flow, a small volume and a light weight.

三、主要外形尺寸及连接尺寸

Main exeteral and connecting dimensions

DN	L	D			D ₁			n-d			H
		1.0MPa	1.6MPa	2.5MPa	1.0MPa	1.6MPa	2.5MPa	1.0MPa	1.6MPa	2.5MPa	
50	205	165	165	165	125	125	125	4-18	4-18	4-18	293
65	220	185	185	185	145	145	145	4-18	4-18	8-18	328
80	245	200	200	200	160	160	160	8-18	8-18	8-18	364
100	295	220	220	235	180	180	190	8-18	8-18	8-22	418
125	330	250	250	270	210	210	220	8-18	8-18	8-26	481
150	360	285	285	300	240	240	250	8-22	8-22	8-26	543
200	405	340	340	360	295	295	310	8-22	12-22	12-26	673
250	465	395	405	425	350	355	370	12-22	12-26	12-26	792
300	500	445	460	485	400	410	430	12-22	12-26	12-30	927
350	575	505	520	555	460	470	490	16-22	16-26	16-30	957
400	635	565	580	620	515	525	550	16-26	16-30	16-33	1188
450	680	615	640	670	565	585	600	20-26	16-30	16-36	1218
500	720	670	715	730	620	650	660	20-26	20-33	20-36	1256
600	825	780	840	845	725	770	770	20-30	20-36	20-39	1600
700	970	895	910	960	840	840	875	24-30	24-36	24-42	1750
800	1120	1015	1025	1085	950	950	990	24-33	24-39	24-48	1900
900	1220	1115	1125		1050	1050		28-33	28-39		2100
1000	1320	1230	1485		1160	1170		28-36	28-42		2400
1200	1620	1455			1380			32-39			2860
1400	2020	1675			1530			36-42			3200

四、安装示意图Schematic diagram of installation



注：安装示意图中弹性座封闸阀或蝶阀任选，建议≥DN350蝶阀

Note: Either elastic seat ring sealed gate valve or butterfly valve can be selected in the schematic diagram of installation. Recommended to select the butterfly valve in case of ≥ DN350