

Steam Line Application



Fluid Control Solutions for World Class Industry





ABOUT US

KEYVALVE is a company specializing in research and development for steam and fluid control technology. Adhering to our advance knowledge and rich experiences, we provide technical advice and solutions for steam, liquid medium and fluid control applications.

KEYVALVE technical team has more than 30 years of experience in design and manufacturing of steam and fluid control products. Our products are TÜV approved for ISO 9001, PED 2014/68/EU Module H and TS approval. We strictly adhere to quality control in every production environment, ensuring product quality and performance reliability. Our vision is "Customers Value Added" and the core value is "Quality First", "Excellent Service", "Customer-Oriented Approach" and "Sustainable Development".

KEYVALVE's products have been sold to 20 countries. Customers are world-renowned companies in various industries including chemical, oil & gas, refining, power, food & pharmaceutical, paper, battery, textile and others.



KEYVALVE 's products sold to world-wide countries





KV-68 Butterfly Valve



KV-88 Butterfly Valve



KV-98 Butterfly Valve

Application

Industry: Chemical, Food & Beverage, Dyeing & Finishing, Palm Oil, Paper, Power, Water Treatment etc.

Fluid Medium: Water、Oil、Acid & Alkali.

Product Feature

- Slim design, minimum space required, easy for installation.
- One piece design with precise dimension and accurate position, large flowrate and low resistance.
- Mechanical polishing surface, provide smooth surface with great finishing, assure the disc closes tightly with zero leakage.
- PTFE or other coating material is available for disc.
- Dry bushings on both end of the shaft, self-lubricated, heavy duty, provides excellent support for shaft, maintenance free with long service life.
- KV-68 and KV-88 valve seat is PTFE lined with EPDM, excellent corrosion resistance and heat resistance.
- KV-98 valve seat is PTFE lined. It provides excellent corrosion resistance and heat resistantce. On behind of the PTFE lining which is silicone or fluorine rubber. The seat is replaceable and easy for maintenance.
- KV-98 bushing is spring loading on both end of the shaft which are tightly sealed. Triple sealing design, free leakage with long service life.

Technical Specification		
Nominal Size	DN40-500(KV-68) DN50-300(KV-88) DN40-500(KV-98)	
Nominal Pressure	PN10-16	
Body Material	GJS400-18、CF8、CF8M	
Operation Temperature	-40°C~150°C(KV-68、KV-88) -40°C~220°C(KV-98)	
Installation Standard	GB、DIN、ASME、JIS	
Connection	Wafer	
Actuating	Pneumatic、Electric、Lever、Handwheel	
Technical Standard		
Design Standard	ASME B16.34 GB/T12224	
Connection Standard	GB/T9113 、ASME B165、DIN2533	
Acceptance Standard	GB/T13927、API598	





KT-28 2-way Pneumatic Control Valve



KT-38 3-way Electric Control Valve



KT-18 2-way Pneumatic Control Valve

Application

Industry: Chemical、Food & Beverage、Dyeing & Finishing、Palm Oil、Paper、 Power、Water Treatment etc.

Fluid Medium: Steam, Water, Oil, Acid & Alkali.

Product Feature

- Body is high flowrate design, large passage provides high volume and reduce flow resistance.
- Parabolic plug, V-port plug, balance plug and special design types are available. Also, the multi-holes cage for noise reduction is option. The soft seat plug is designed for working condition that have high sealing requirements with zero leakage.
- The seat surface is welded with harden alloy. The harden metal surface reduces corrosion or cavitation damage. The leakage performance reaches ANSI FCI 70-2 standard class VI. It is reliable with long service life.
- The stem material is SS431 or SS316 with nitriding and grinding treatment, great mechanical properties with high strength, harden surface for long service life.
- The packing is available with choices of PTFE v-rings with spring loaded, pure graphite or metal bellows seal. Excellent performance for different working conditions.

Technical Specification

Nominal Size	DN15-250(KT-28) DN25-100(KT-38) DN15-150(KT-18)		
Nominal Pressure	PN10-100(KT-28)、PN10-16(KT-38、KT-18)		
Body Material	WCB、WC6、CF8、CF8M		
Operation Temperature	-29°C~250°C (PTFE V packing)		
	-29°C~600°C (pure graphite, bellows seal)		
Installation Standard	GB、DIN、ASME		
Connection	Flange		
Actuating	Pneumatic, Electric		

Technical Standard		
Design Standard	ASME B16.34 、GB/T12224	
Connection Standard	GB/T9113 、ASME B165、 DIN2533	
Acceptance Standard	GB/T13927 、API598	

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FT-14 Lever Float Steam Trap discharge capacity:0.6-1.2 t/h



FT-43 Lever Float Steam Trap discharge capacity:2.0-3.6 t/h



DFT-43 Lever Float Steam Trap discharge capacity: 6.0-20.0 t/h

Application

Industry: Chemical, Food & Beverage, Dyeing & Finishing, Palm Oil, Paper, Power, Water Treatment etc.

Fluid Medium: Steam.

Product Feature

- The body and cover are made of ductile iron or forged steel.
- Internal components are made of stainless steel. Components are durable design with long service life.
- Special passage design avoids water hammer.
- Main valve is rotary design which seals tightly when closed. Guarantee zero leakage with long service life.
- Thermostatic air vent is activated and discharges the air regularly.
- The independent strainer screens steam, keeps working chamber is clean.
- Condensate discharge chart is provided for different operating pressure.
- Back pressure rate is 95% or above.
- End plug is located on the bottom which allows drainage when operation stops, avoids frozen when temperature is below zero.

Technical Specification		
Nominal Size	DN15-100	
Nominal Pressure	PN16-64	
Body Material	GGG40、WCB、CF8	
Operation Temperature	≤250°C, double air vents for 250°C or above.	
Max Discharge Capacity	0.4-1.2t/h、2.0-3.6t/h、6.0-20t/h、22-40t/h	
Max Operating Different Pressure	4.5bar g/10bar g/14bar g/32bar g/45bar g	
Factory Test	>3 times/1.6MPa	
Air Pressure	2.0MPa	
Installation Position	Vertical、Horizontal	

Technical Standard		
Design Standard	GB/T22654《Steam Trap Technical Conditions》	
Connection Standard	GB/T12250《Steam Trap Structure Length》	
Acceptance Standard	GB/T12251《Steam Trap Test Method》	







Forged Steel Globe Valve



Stainless Steel Globe Valve

Application

Industry: Chemical、Food & Beverage、Dyeing & Finishing、Palm Oil、Paper、 Power、Water Treatment etc.

Fluid Medium: Steam, Water, Oil, Acid & Alkali.

Product Feature

- The body is made by resin coated sand casting. It has smooth surface and excellent mechanical properties. More than 98% of castings are without defects such as porosities, inclusions, or cracks. The forged body is an overall structure with tempering and nitriding treatment. The body has good corrosion resistance and wear resistance.
- Taper seat reduces impurities on the sealing surface. The conical sealing surface can amplify the axial force of the valve stem when it converts into sealing force, resulting in better sealing performance.
- The bellows seat is double sealing design. The metal bellows and packing material provides double safety, make the seal more reliable.
- The bellows seal is 100% factory fugacity emission test; valve is also done 100% grade A test which assures zero leakage.
- Various valve plug designs are available to provide according to the working conditions, such as parabolic type, ball type, or plug type etc.

Technical Specification		
Nominal Size	DN15-250	
Nominal Pressure	PN16-100	
Body Material	WCB、CF8、CF8M、A105	
Operation Temperature	-29°C~350°C	
Installation Standard	GB、DIN、ASME	
Connection	Flange、Butt Welding	
Actuating	Manual	
Technical Standard		
Design Standard	ASME B16.34、GB/T12224	
Connection Standard	GB/T9113 、ASME B165 、DIN2533	
Acceptance Standard	GB/T13927、API598	





Lift Type Cast Iron Check Valve



Swing Type Stainless Steel Check Valve



Y-Type Cast Iron Filter



Y-Type Forged Steel Filter

Application

Industry: Chemical, Food & Beverage, Dyeing & Finishing, Palm Oil, Paper, Power, Water Treatment etc.

Fluid Medium: Steam, Water, Oil, Acid & Alkali.

Product Feature

Check valve

- Simple and compact structure with great appearance. High flow passage with low resistance.
- The valve disc close quick, reduces water hammer, sensitive reaction, good sealing performance.
- The disc and seat surface are welded with Stellite or harden alloy which has great performance for wearing, high temperature, corrosion resistance.
 Filter
- Efficient and precise, avoids particles enter to the system.
- Screen is stainless steel, strong structure and anti-corrosion.
- Long service life ,can be cleaned without replacement.

Technical Specification		
Check valve		
Nominal Size	DN15-250	
Nominal Pressure	PN16-100	
Body Material	WCB、CF8、CF8M、A105	
Operation Temperature	-29°C~350°C	
Structure	Lift Type、Swing Type	
Connection	Flange	
	Filter	
Nominal Size	DN15-150	
Nominal Pressure	PN16-64	
Body Material	WCB、CF8、CF8M、A105	
Operation Temperature	≪350°C	
Structure	Ү Туре	
Connection	Flange	

Technical standard		
Design Standard	ASME B16.34 、GB/T12236	
Connection Standard	GB/T9113 、ASME B165 、DIN2533	
Acceptance Standard	GB/T13927、API598	





Application

Industry: Chemical、Food & Beverage、Dyeing & Finishing、Palm Oil、Paper、 Power、Water Treatment etc.

Fluid Medium: Steam.

Technical Specification



Vacuum Breaker





Nominal Size	DN15-32	
Nominal Pressure	PN16-64	
Material	304	
Operation Temp	≪400°C	
Connection	Wafer	

Flow Controller

Sitelicei		
Nominal Size	DN15-25	
Nominal Pressure	PN25	
Material	304	
Operation Temp	≪400°C	
Connection	RC、BSP、NPT	

Vacuum Breaker		
Model	VB21	
Nominal Pressure	PN25	
Material	304	
Operation Temp	≪425°C	
Connection	RC	

Mixer		
Model	IN40M	
Nominal Pressure	PN25	
Material	304	
Operation Temp	≪90°C	
Connection	Thread	

Technical Standard								
Design Standard	GB/T22654《Steam Trap Technical Conditions》							
	ASME B16.34 GB/T12224							
Connection Standard	GB/T12250《Steam Trap Structure Length》							
	GB/T9113 、ASME B165 、DIN2533							
Acceptance Standard	GB/T12251《Steam Trap Test Method》							
	GB/T13927、API598							





High Platform Flanged Ball Valve



Electric Ball Valve



Pneumatic PTFE Lined Ball Valve



Pneumatic Sanitary 3-way Ball Valve

Application

Industry: Chemical, Food & Beverage, Dyeing & Finishing, Palm Oil, Paper,

Power, Water Treatment etc.

Fluid Medium: Water, Oil, Acid & Alkali.

Product Feature

Soft Seat Valve -

- The seat design is option, SPE single piston effect seats (self relieving seats) and DPE double piston effect design.
- The fire-proof and anti-static. The seat, packing box, stem and shaft are equipped with graphite fire-proof gaskets. Anti-static springs are designed to achieve fire-proof and anti-static functions.
- Anti blow-out stem design.
- The valve seat and stem are designed for grease injection which provides emergency sealing.
- The structure design is self-lubricated. Low torque is required for open and closed.
- The stem with double sealing O-ring which is stable and reliable.

Metal Seat Valve

- The ball and seat surface is coated with harden material as nickel based alloy, carbide or nitride which reduces wearing, scratching and erosion.
- Loaded spring on the seat, it improves the sealing performance.
- The metal ball and seat are fire-proof.
- The packing material is low fugitive emissions (LFE) approved which is according to standard grade A or B.
- The stem is high strength and harden alloy, it reduces wearing and scratching. Assures the valve operating smooth and closed tight.

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Technical Specification									
Nominal Size	DN15-300								
Nominal Pressure	PN16-100								
Body Material	WCB、CF8、CF8M								
Operation Temperature	-46°C~180°C(soft seat) -46°C~600°C (hard seat)								
Installation Standard	GB、DIN、ASME、JIS								
Connection	Wafer、Flange								
Actuating	Pneumatic、Electric、Manual、Hydraulic								
	Technical Standard								
Design Standard	ASME B16.34 、GB/T12224								
Connection Standard	GB/T9113 、ASME B165、DIN2533								
Acceptance Standard	GB/T13927 \API598								





Plastic Pneumatic Welded Angle Seat Valve



Plastic Pneumatic Flanged Angle Seat Valve



Stainless Steel Pneumatic Screwed Angle Seat Valve



Angle Seat Valve

Application

Industry: Beer & Beverage, Food & Pharmaceutical, High-Temp Sterilization, Dyeing & Finishing, Chemical etc.

Fluid Medium: Water, Oil, Gas

Product Feature

Angle Seat Valve

- Optimized design for internal structure, high flowrate, less flow resistance, no water hammer, Y-shaped design, 30% extra volume, long service life.
- The seat is self-adjusted, self-lubricated, maintenance-free.
- Piston rotation 360°.
- Position display is available.

Technical Specification								
Nominal Size	DN15-80							
Nominal Pressure	PN16							
Body Material	CF8、CF8M							
Sealing Material	PTFE、RPTFE、PPL							
Piston Material	Polyamide、Stainless Steel、Aluminum Alloy							
Operation Temperature	-20°C~180°C							
Flow Direction	Over Valve Seat, Under Valve Seat							
Installation Standard	GB、DIN、ASME							
Connection	Thread、Welding、Flange、Quick Coupler							
Actuating	Pneumatic、Manual							

Technical Standard									
Design Standard	ASME B16.34 GB/T12224								
Connection Standard	GB/T9113 、ASME B165、DIN2533								
Acceptance Standard	GB/T13927 、API598								

Sanitary Diaphragm Valve





Manual Tri-Clamp Diaphragm Valve (Plastic Handwheel)



Industry: Beer & Beverage, Food & Pharmaceutical, High-Temp Sterilization, Dyeing & Finishing, Chemical etc. Fluid Medium: : Water, Oil, Gas.

Product Feature

- With hand wheel or control knob.
- With position indicator.
- Closed limit is adjustable.
- A fixed ring is in between the body and diaphragm.
- Suspension structure with elastic diaphragm.

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Stainless Steel Pneumatic Tri-Clamp Diaphragm Valve



Stainless Steel Manual 3-way T-port Diaphragm Valve



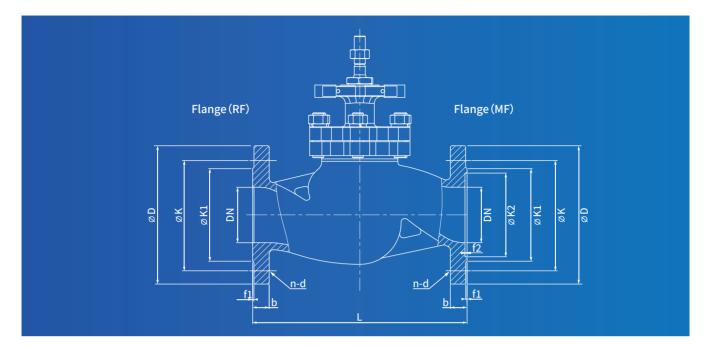
Stainless Steel Pneumatic Tank Bottom Diaphragm Valve

Technical Specification								
Nominal Size	DN15-80							
Nominal Pressure	PN10							
Body Material	CF3M							
Operation Temperature	-20°C~150°C							
Installation Standard	GB、DIN、ASME							
Connection	Wafer、Flange、Butt Welding							
Actuating	Pneumatic, Manual							

Technical Standard								
Design Standard	ASME B16.34 GB/T12224							
Connection Standard	GB/T9113 、ASME B165、DIN2533							
Acceptance Standard	GB/T13927 、API598							



GB/T9113、DIN2533 Flange Specification Table



DN		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150
PN10	D	95	105	115	140	150	165	185	200	220	250	285
	K	65	75	85	100	110	125	145	160	180	210	240
	K1	45	58	68	78	88	102	122	138	158	188	212
	n-d	4-14	4-14	4-14	4-18	4-18	4-18	4-18	8-18	8-18	8-18	8-22
	b	14	16	16	18	18	20	20	20	22	22	24
	f1	2	2	2	2	2	2	2	2	2	2	2
	L	130	150	160	180	200	230	290	310	350	400	480
	D	95	105	115	140	150	165	185	200	220	250	285
	K	65	75	85	100	110	125	145	160	180	210	240
	K1	45	58	68	78	88	102	122	138	158	188	212
PN16	n-d	4-14	4-14	4-14	4-18	4-18	4-18	4-18	8-18	8-18	8-18	8-22
	b	14	16	16	18	18	20	20	20	22	22	24
	f1	2	2	2	2	2	2	2	2	2	2	2
	L	130	150	160	180	200	230	290	310	350	400	480
	D	95	105	115	140	150	165	185	200	235	270	300
	K	65	75	85	100	110	125	145	160	190	220	250
	K1	45	58	68	78	88	102	122	138	162	188	218
PN25	n-d	4-14	4-14	4-14	4-18	4-18	4-18	8-18	8-18	8-22	8-26	8-26
	b	14	16	16	18	18	20	22	24	24	26	28
	f1	2	2	2	2	2	2	2	2	2	2	2
	L	130	150	160	180	200	230	290	310	350	400	480

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DN		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150
	D	95	105	115	140	150	165	185	200	235	270	300
	K	65	75	85	100	110	125	145	160	190	220	250
PN40	K1	45	58	68	78	88	102	122	138	162	188	218
	n-d	4-14	4-14	4-14	4-18	4-18	4-18	8-18	8-18	8-22	8-26	8-26
	b	16	18	18	18	18	20	22	24	24	26	28
	f1	2	2	2	2	2	2	2	2	2	2	2
	L	130	150	160	180	200	230	290	310	350	400	480
	D	105	130	140	155	170	180	205	215	250	295	345
	K	75	90	100	110	125	135	160	170	200	240	280
	K1	46	56	65	76	84	99	118	132	156	184	211
	K2	40	51	58	66	76	88	110	121	150	176	204
PN64	n-d	4-14	4-18	4-18	4-22	4-22	4-22	8-22	8-22	8-26	8-30	8-33
	b	20	20	24	24	26	26	26	28	30	34	36
	f1	4	4	4	4	4	4	4	4	4.5	4.5	4.5
	f2	3	3	3	3	3	3	3	3	3.5	3.5	3.5
	L	165	190	216	229	241	292	330	356	406	457	495
	D	105	130	140	155	170	195	220	230	265	315	355
	K	75	90	100	110	125	145	170	180	210	250	290
	K1	46	56	65	76	84	99	118	132	156	184	211
	K2	40	51	58	66	76	88	110	121	150	176	204
PN100	n-d	4-14	4-18	4-18	4-22	4-22	4-26	8-26	8-26	8-30	8-33	12-33
	b	20	20	24	24	26	28	30	32	36	40	44
	f1	4	4	4	4	4	4	4	4	4.5	4.5	4.5
	f2	3	3	3	3	3	3	3	3	3.5	3.5	3.5
	L	165	190	216	229	241	292	330	356	432	508	559
	D	105	130	140	155	170	195	220	230	265	315	355
	K	75	90	100	110	125	145	170	180	210	250	290
	K1	46	56	65	76	84	99	118	132	156	184	211
	K2	40	51	58	66	76	88	110	121	150	176	204
PN160	n-d	4-14	4-18	4-18	4-22	4-22	4-26	8-26	8-26	8-30	8-33	12-33
	b	26	30	32	34	36	38	42	46	52	56	62
	f1	4	4	4	4	4	4	4	4	4.5	4.5	4.5
	f2	3	3	3	3	3	3	3	3	3.5	3.5	3.5
	L	216	229	254	279	305	368	419	381	457	559	610

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