

CATALOGUE SERIES



**PRESSURE/VACUUM RELIEF VALVE
2014**

**YONGJIA NICE TRADE CO.,LTD.
HUANQIU VALVE GROUP**

COMPANY BREIF

Nice Trade is import & export company, built in 2013, belongs to HUANQIU VALVE GROUP. There are fourteen sub-branch factories in HUANQIU VALVE GROUP now, according to HUANQIU VALVE GROUP develop plan, Nice Trade is new face to show in front of clients for group export and import business, and collect possible products resource inside and outside group, help clients to find good and more competitive products resource.

Nice trade company focus in valves sales area,

Product scope is following:

- A. Special valves: High performance ball valve, Control valves, Reduce temperature & pressure control valve, Eccentric half ball valve, Special power station high pressure & temperature valves, Large size butterfly valves, PTFE lining ball & butterfly valve, Breath valve etc.
- B. Widely used valves: Gate valve, Globe valve, Check valve, Triple offsets butterfly valve, Double offsets butterfly valve, Floating ball valve, Trunnion ball valve.
- C. Other valves: Needle valves, Filter, etc

There are two special and professional teams to support us:

- HUANQIU VALVE GROUP Quality Control Team,
- HUANQIU VALVE GROUP Technology Control Team.

They have enough experience to develop and control products quality. This is our products control basis.

Valves resource: We have a lot!

Products quality: We can control it!

Delivery time: We will make it fast!



Product Contents 产品目录

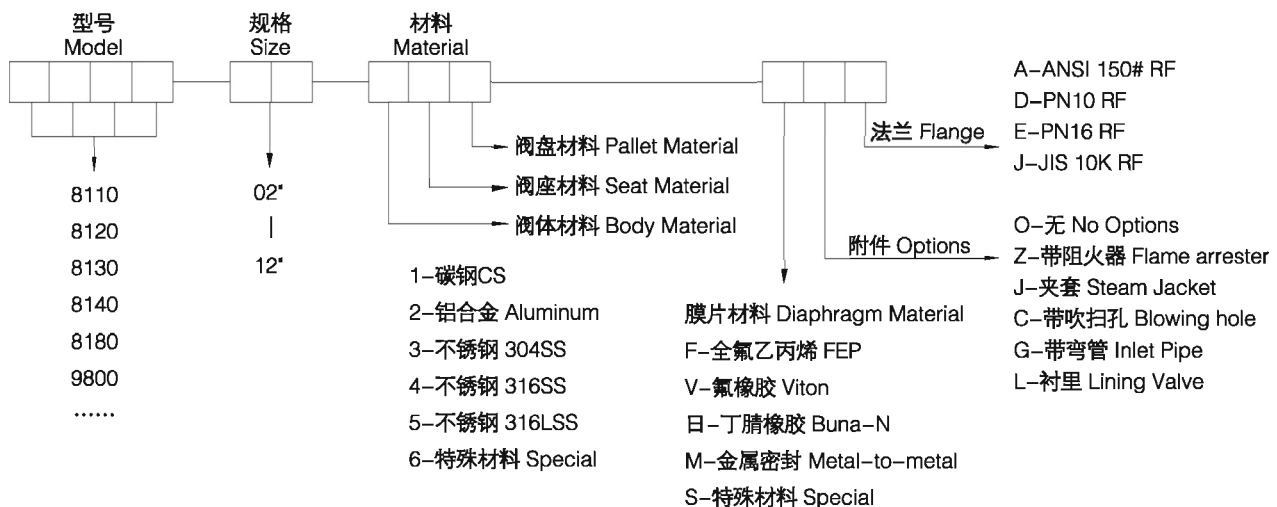
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呼吸阀订货参数 Pressure/Vacuum Ordering information

表二

型号 Type		
规格 Size	2" 、3" 、4" 、6" 、8" 、10" 、12"	
储罐参数 Tank Data	最大工作压力 Max. Operating pressure	
	工作温度 Operating temperature	
呼出操作条件 Pressure operating conditions	介质/状态/摩尔质量 Fluid/State/Mol.	
	密度/绝热指数 Density/Ratio of specific heats	
	泄放温度 Relieving Temperature	
	最大流量 Max.capacity	
	设定压力 Set pressure	
	允许超压 Allowable Overpressure	
吸入操作条件 Vacuum operating conditions	介质/状态/摩尔质量 Fluid/State/Mol.	
	密度/绝热指数 Density/Ratio of specific heats	
	泄放温度 Relieving Temperature	
	最大流量 Max.capacity	
	设定压力 Set pressure	
	允许超压 Allowable Overpressure	
材料及法兰 Material Flange	阀体材料 Body Material	碳钢 CS 不锈钢 SS
	密封材料 Seal Material	304SS 316SS 316LSS
	法兰连接型式 Flange	ANSI 150# RF PN10 RF PN16 RF
其它 Options	阻火器 Flame arrester	是 YES 否 NO
	带夹套 Jacket	是 YES 否 NO
	带吹扫孔 Blowing Hole	是 YES 否 NO
	特殊结构 Special	是 YES 否 NO

订货指南 How to Order

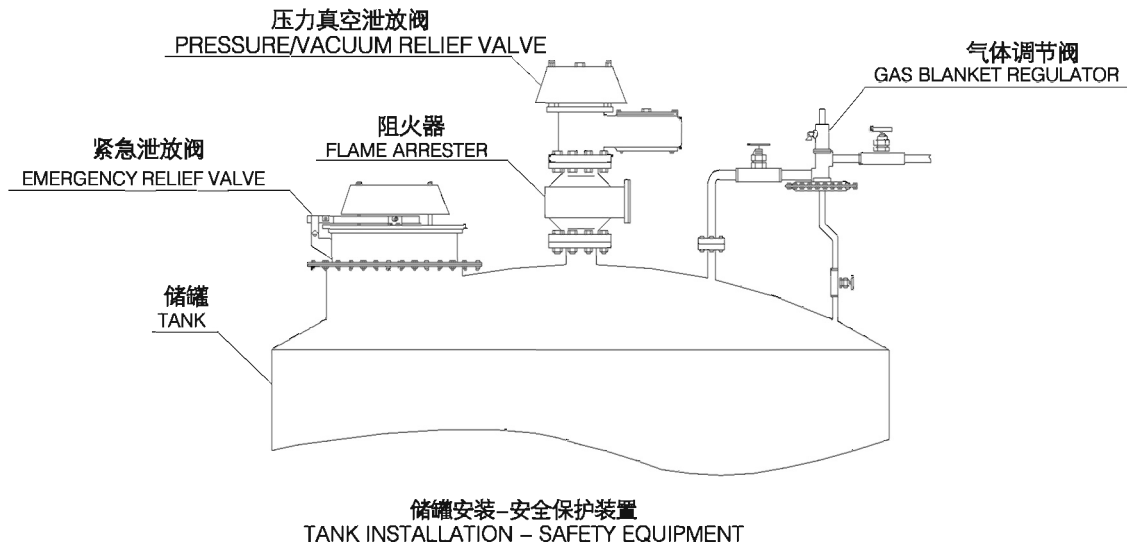


口径计算和选择 Sizing Calculation and selection

规格计算、选型依据API 2000 Sizing calculation and selection to 《Specifications for Constant and Low Pressure Breathing Storge Tanks》

$$\text{排量} Q = 12503 K P_1 C A \sqrt{\frac{K}{MTZ(K-1)} \left[\left(\frac{P_2}{P_1} \right)^{\frac{2}{K}} - \left(\frac{P_2}{P_1} \right)^{\frac{K+1}{K}} \right]}$$

呼吸阀简介 Introduction Of Pressure/Vacuum Relief Valve



上图是典型的储罐安全保护装置安装图。大多数储罐上均安装有呼吸阀、紧急泄放阀（或紧急泄放人孔）和气体调节阀等装置。

呼吸阀能够在泵注入/抽出介质或热交换的条件下，提供压力或真空泄放，从而防止储罐破裂或被抽瘪。紧急泄放阀具有两个功能：一是快速泄放由于罐周围有火情或超过设计流量的介质注入储罐造成的超压；二是在常规吸阀未正常开启的且压力恒定的情况下吸入空气进行卸压（针对带吸阀的紧急泄放阀而言）。气体调节阀是一种精确调节装置，它通过控制高压气体的流量使储罐保持较低的气体压力，并当储罐中的介质被抽出或罐内气体释放热量压力降低时保持罐内正压。

阻火器的功能是阻止火焰在气体管道系统内的传播以保护储存有易燃性介质的低压储罐。它可以通过阻止外部热量和火焰的传播来保护罐内低闪点的介质，从而提高罐的防火性能和安全性能。通常情况下，将出口通大气的呼吸阀安装于阻火器顶部。

Typical safety equipment installation on a tank is illustrated in above figure. Most tanks will have provision for a pressure/vacuum relief valve, an emergency relief valve(or emergency relief manhole) and a gas blanket regulator. The pressure/vacuum relief valve is designed to provide pressure/vacuum relief under normal pump in/out and thermal breathing conditions. So it protects the tank against rupturing or imploding. The emergency relief valve(emergency relief manhole) has two functions: one is to discharge rapidly the overpressure developed during the fire around the storage tank or the excessive fluid intake more than the capacity of pump designed, the other is to intake the air under the constant pressure for the irregular operation of normal vacuum relief valve during the unloading (aim at emergency relief valve with vacuum part).The gas blanketing regulator is a precision regulator that is capable of maintaining a very low gas pressure in the tank by controlling the flow of a high pressure blanketing gas. It maintains a positive tank pressure when fluid is pumped out or as fluid temperature decreases.A flame arrester is designed to inhibit flame propagation in gas piping systems and to protect low pressure tanks containing flammable liquids. They protect low flash point liquids from externally caused sources of heat and ignition, providing increased fire protection and safety. A majority of the time, a "vent to atmosphere" pressure/vacuum valve is installed on top of the flame arrester.

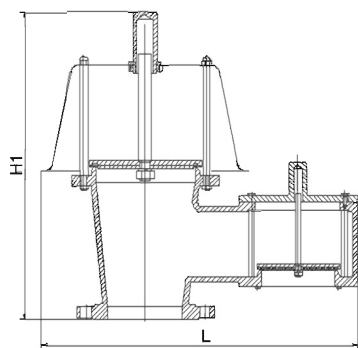
7110/8110系列大气排放呼吸阀 Pressure/Vacuum Relief Valve

7110/8110系列呼吸阀为大气排放的压力/真空泄放阀，可以避免储罐因超压或负压而受损，同时可以大幅减少储罐“呼吸”带来的蒸发损失。

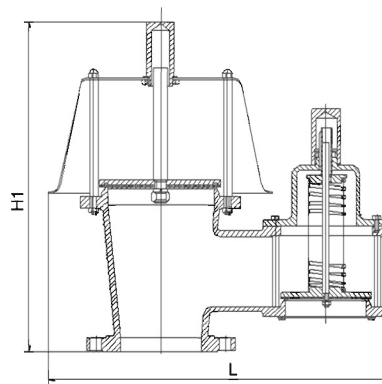
The 7110/8110 Pressure/Vacuum Relief Valve are designed for use on atmospheric and low pressure storage tanks, vents to atmosphere. The primary function is to protect tanks from damage deformation, and minimizes emissions to the environment, as well as loss of product due to evaporation.



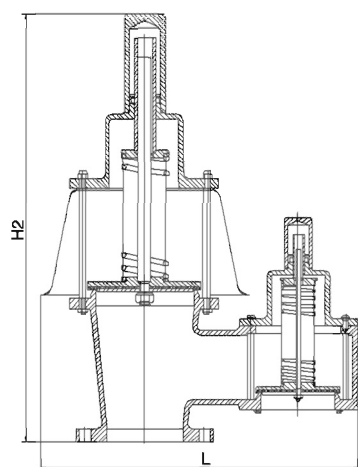
型号 Model



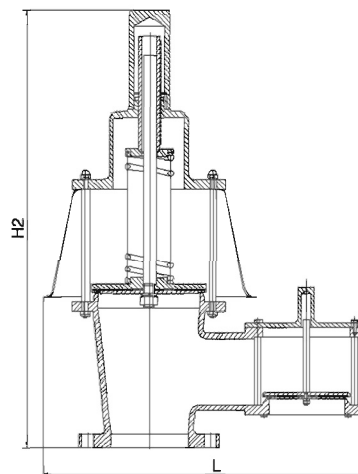
7110、8110重力加载式
Weight loaded



7112、8112负压弹簧加载式
Vacuum Spring loaded



7113、8113正压/负压弹簧加载式
Pressure/Vacuum Spring loaded



7115、8115正压弹簧加载式
Pressure Spring loaded

设计特点 Design Features

- ◆ 口径 2" ~12" (DN50~DN300);
- ◆ 7100系列呼吸阀排放口同进口，方便用户选择；
- ◆ 8100系列呼吸阀排放口比进口大，以增大排量；
- ◆ 大气排放；
- ◆ 防雨罩拆除方便，以便检查维护设备；
- ◆ 防护网可阻止外部杂物通过入口或出口进入设备；
- ◆ 根据用户需要，可增加阻火器、吸入弯管、夹套、吹扫孔、衬里、除湿等功能结构；
- ◆ 设计、检验按API 2000；
- ◆ 法兰标准按ANSI B16.5,根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准，
- ◆ 选用材料:铝合金、碳钢、不锈钢、其它特殊材料；

- ◆ Sizes available 2" ~12" (DN50~DN300);
- ◆ The 7110 series outlet ports is same to inlet;
- ◆ The 8110 series outlet ports is one pipe size larger than inlet flange to optimize flow capacity;
- ◆ Vent to atmosphere;
- ◆ The weather hood and cover are easily removed for inspection and maintenance;
- ◆ Protective screens are provided at pressure and vacuum ports to prevent entrance of foreign matter;
- ◆ The Flame Arrester、Inlet Pipe、Steam Jacket、Blowing Hole、Lining or Humidity Absorber are options to client;
- ◆ Designed and tested according to API 2000;
- ◆ The flanges are accordance with ANSI B16.5, or EN1092、JIS;
- ◆ Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials on Application;

设定压力 Setting Pressure/Vacuum

压力设定 Setting KPa	7110、8110	7112、8112	7113、8113	7115、8115
正压设定 Set pressure	0.2~6.9	0.2~6.9	6.9~103.4	6.9~103.4
负压设定 Set Vacuum	-0.2~-4.3	-4.3~-82	-0.2~-4.3	-4.3~-82

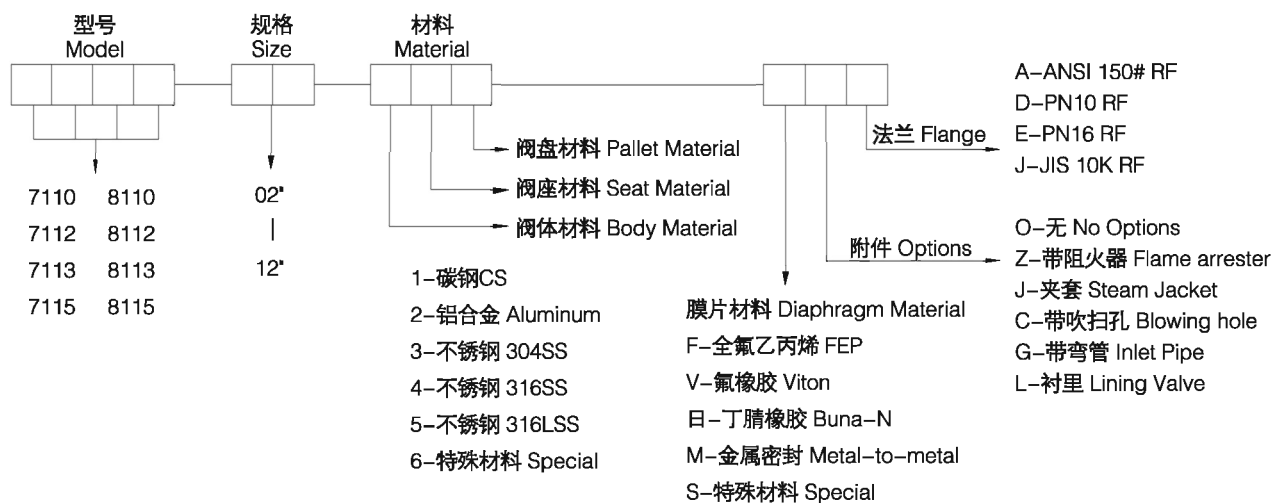
7110、7112、7113、7115系列结构尺寸 Dimensions, mm

公称通径 Nominal Size	2" [50]	3" [80]	4" [100]	6" [150]	8" [200]	10" [250]	12" [300]
L	301	368	416	525	675	824	967
W Width	160	200	248	290	390	488	584
H1	290	352	393	490	622	746	876
H2	394	422	505	636	870	1030	1230

8110、8112、8113、8115系列结构尺寸 Dimensions, mm

公称通径 Nominal Size	2" [50]	3" [80]	4" [100]	6" [150]	8" [200]	10" [250]	12" [300]
L	322	405	473	620	770	912	1075
W Width	200	248	290	390	488	584	680
H1	335	378	466	613	701	830	956
H2	403	490	615	860	985	1182	1225

订货指南 How to Order



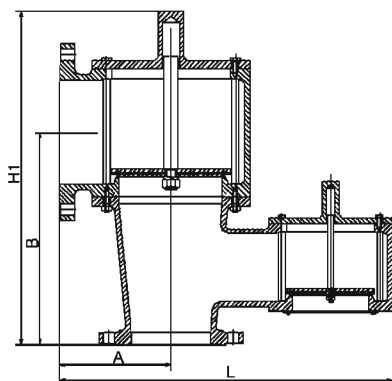
7120/8120系列管道排放呼吸阀 Pressure/Vacuum Relief Valve

7120/8120系列呼吸阀为排放出口接管道的压力/真空泄放阀，可以避免储罐因超压或负压而受损失，同时可以大幅减少储罐“呼吸”带来的蒸发损失。

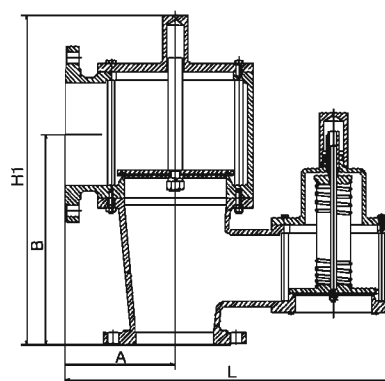
The 7120/8120 Pressure/Vacuum Relief Valve are designed for use on atmospheric and low pressure storage tanks, pipe away. The primary function is to protect tanks from damage deformation, and minimizes emissions to the environment, as well as loss of product due to evaporation.



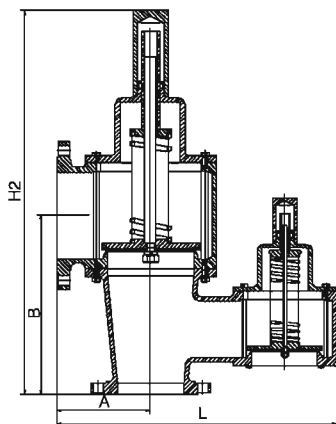
型号 Model



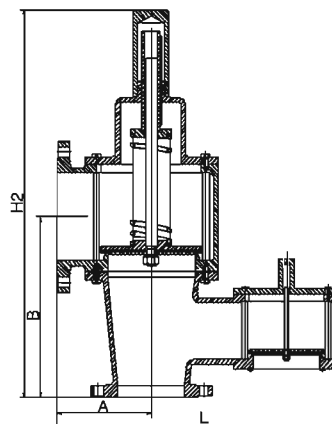
7120、8120重力加载式 Weight loaded



7122、8122负压弹簧加载式
Vacuum Spring loaded



7123、8123正压/负压弹簧加载
Pressure/Vacuum Spring loaded



7125、8125正压弹簧加载式
Pressure Spring loaded

设计特点 Design Features

- ◆ 口径 2" ~ 12" (DN50~DN300);
- ◆ 7120系列呼吸阀排放口同进口，方便用户选择；
- ◆ 8120系列呼吸阀排放口比进口大，以增大排量；
- ◆ 管道排放；
- ◆ 防护网可阻止外部杂物通过入口或出口进入设备；
- ◆ 根据用户需要，可增加阻火器、吸入弯管、夹套、吹扫孔、衬里、除湿等功能结构；
- ◆ 设计、检验按API 2000；
- ◆ 法兰标准按ANSI B16.5, 根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准，
- ◆ 选用材料: 铝合金、碳钢、不锈钢、其它特殊材料；

- ◆ Sizes available 2" ~12" (DN50~DN300);
- ◆ The 7120 series outlet ports is same to inlet;
- ◆ The 8120 series outlet ports is one pipe size larger than inlet flange to optimize flow capacity;
- ◆ Pipe away;
- ◆ Protective screens are provided at pressure and vacuum ports to prevent entrance of foreign matter;
- ◆ The Flame Arrester、Inlet Pipe、Steam Jacket、Blowing Hole、Lining or Humidity Absorber are options to client;
- ◆ Designed and tested according to API 2000;
- ◆ The flanges are accordance with ANSI B16.5, or EN1092、JIS;
- ◆ Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials on Application;

设定压力 Setting Pressure/Vacuum

压力设定 Setting KPa	7120、8120	7122、8122	7123、8123	7125、8125
正压设定 Set pressure	0.2~6.9	0.2~6.9	6.9~103.4	6.9~103.4
负压设定 Set Vacuum	-0.2~-4.3	-4.3~-82	-0.2~-4.3	-4.3~-82

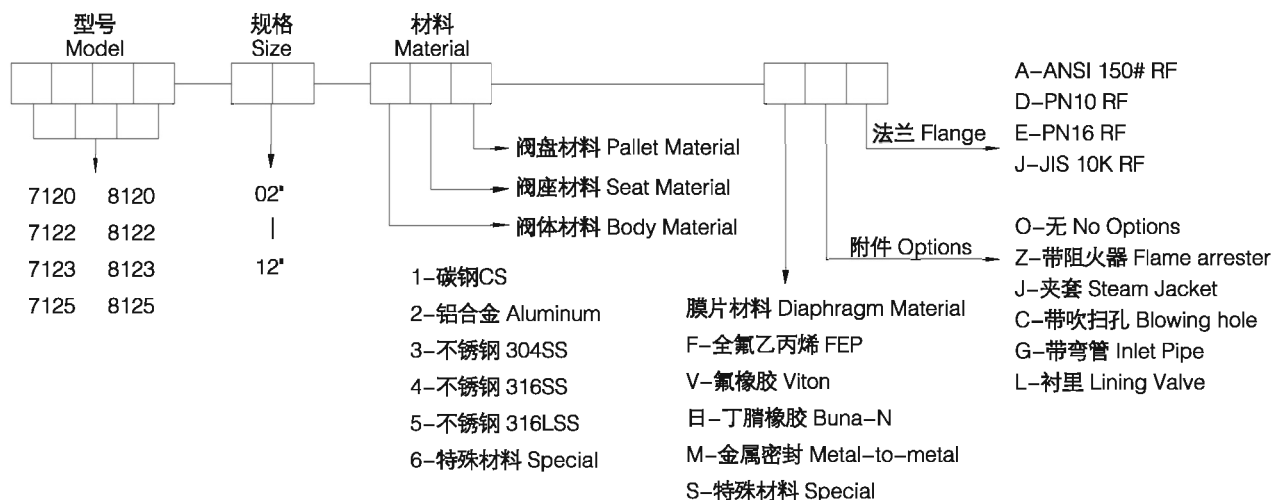
7120、7122、7123、7125系列结构尺寸 Dimensions, mm

公称通径 Nominal Size	2x2" [50x50]	3x3" [80x80]	4x4" [100x100]	6x6" [150x150]	8x8" [200x200]	10x10" [250x250]	12x12" [300x300]
L	345	406	445	546	696	853	995
W Width	200	200	230	280	345	406	485
H1	300	359	417	523	648	789	923
H2	412	441	525	660	893	1055	1257
A	123	138	153	166	216	273	320
B	200	245	280	350	420	515	590

8120、8122、8123、8125结构尺寸 Dimensions, mm

公称通径 Nominal Size	2x3" [50x80]	3x4" [80x100]	4x6" [100x150]	6x8" [150x200]	8x10" [200x250]	10x12" [250x300]	12x14" [300x350]
L	360	435	494	641	798	940	1116
W Width	200	230	280	345	406	485	533
H1	340	402	498	640	744	875	984
H2	422	510	636	884	1010	1209	1253
A	138	153	166	216	273	320	381
B	226	265	327	411	470	542	616

订货指南 How to Order



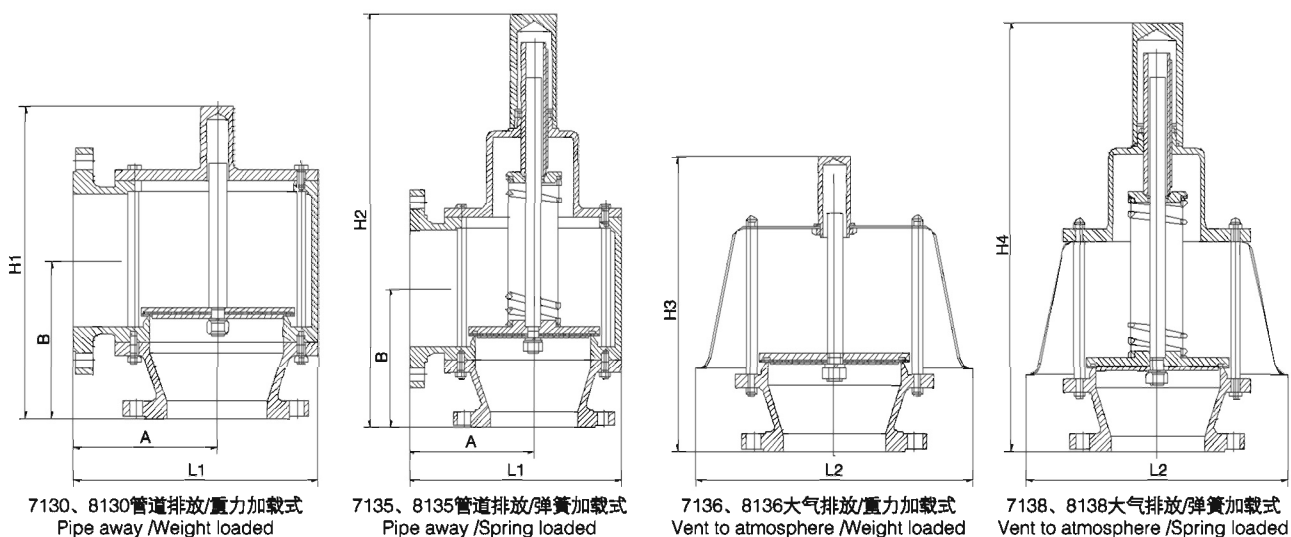
7130/8130系列单呼阀 Pressure Relief Valve

7130/8130系列呼吸阀为大气或管道排放的压力泄放阀，可以避免储罐因超压而受损失，同时可以大幅减少储罐“呼吸”带来的蒸发损失。

The 7130/8130 Pressure Relief Valve are designed for use on atmospheric and low pressure storage tanks, vents to atmosphere or pipe away. The primary function is to protect tanks from damager deformation, and minimizes emissions to the environment, as well as loss of product due to evaporation.



型号 Model



设计特点 Design Features

- ◆ 口径 2" ~12" (DN50~DN300);
- ◆ 7130系列呼吸阀排放口同进口，方便用户选择；
- ◆ 8130系列呼吸阀排放口比进口大，以增大排量；
- ◆ 大气/管道排放；
- ◆ 防雨罩、阀盖拆除方便，以便检查维护设备；
- ◆ 防护网可阻止外部杂物通过入口或出口进入设备；
- ◆ 根据用户需要，可增加阻火器、吸入弯管、夹套、吹扫孔、衬里、除湿等功能结构；
- ◆ 设计、检验按API 2000；
- ◆ 法兰标准按ANSI B16.5,根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准，
- ◆ 选用材料:铝合金、碳钢、不锈钢、其它特殊材料；
- ◆ Sizes available 2" ~12" (DN50~DN300);
- ◆ The 7120 series outlet ports is same to inlet;
- ◆ The 8120 series outlet ports is one pipe size larger than inlet flange to optimize flow capacity;
- ◆ Pipe away;
- ◆ Protective screens are provided at pressure and vacuum ports to prevent entrance of foreign matter;
- ◆ The Flame Arrester、Inlet Pipe、Steam Jacket、Blowing Hole、Lining or Humidity Absorber are options to client;
- ◆ Designed and tested according to API 2000;
- ◆ The flanges are accordance with ANSI B16.5,or EN1092、JIS;
- ◆ Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials on Application;

设定压力 Setting Pressure/Vacuum

压力设定 Setting KPa	7130、8130	7136、8136	7135、8135	7138、8138
正压设定 Set pressure	0.2~6.9	0.2~6.9	6.9~103.4	6.9~103.4

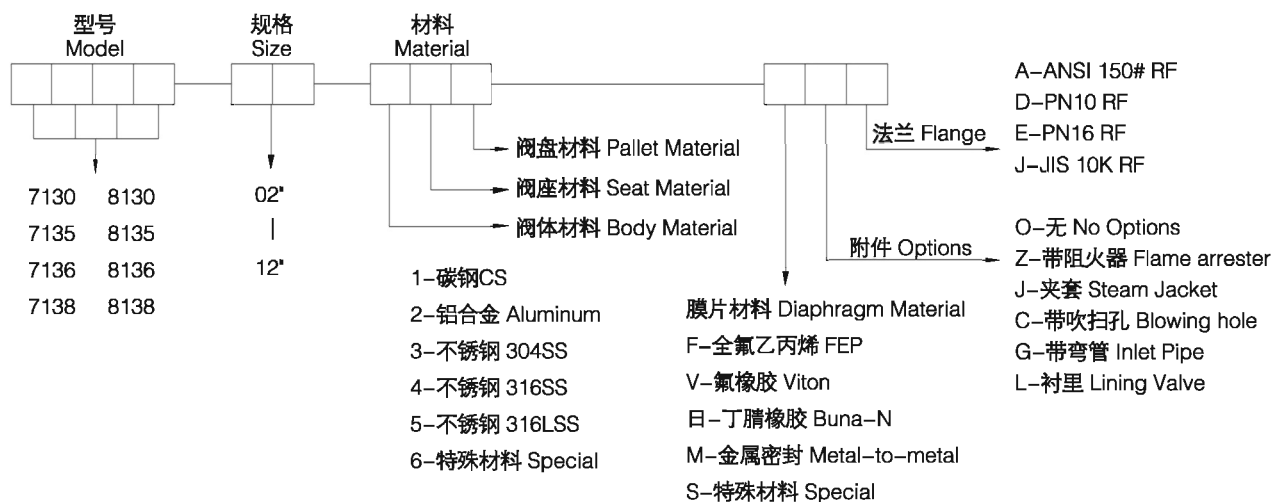
7130、7135、7136、7138结构尺寸 Dimensions, mm

公称通径 Nominal Size	L1	L2	H1	H2	H3	H4	A	B	W ₈₁₃₀	W ₈₁₃₆
2" (x2")	200	160	209	322	200	303	123	110	160	155
3" (x3")	215	200	303	322	230	303	138	126	200	200
4" (x4")	268	248	380	400	267	380	153	154	230	248
6" (x6")	306	290	483	504	332	483	166	195	285	290
8" (x8")	388	390	687	710	438	687	216	237	345	390
10" (x10")	476	488	795	820	511	795	273	280	406	488
12" (x12")	562	584	946	973	594	946	320	306	485	584

8130、8135、8136、8138结构尺寸 Dimensions, mm

公称通径 Nominal Size	L1	L2	H1	H2	H3	H4	A	B	W ₈₁₃₀	W ₈₁₃₆
2" (x3")	215	200	240	322	230	303	138	126	200	200
3" (x4")	240	248	291	400	267	380	153	154	230	248
4" (x6")	281	290	368	503	332	483	166	195	285	290
6" (x8")	366	390	464	710	438	687	216	237	345	390
8" (x10")	453	488	554	820	511	795	273	280	406	488
10" (x12")	525	584	639	973	594	946	320	306	485	584
12" (x14")	616	680	702	991	674	951	381	334	533	680

订货指南 How to Order



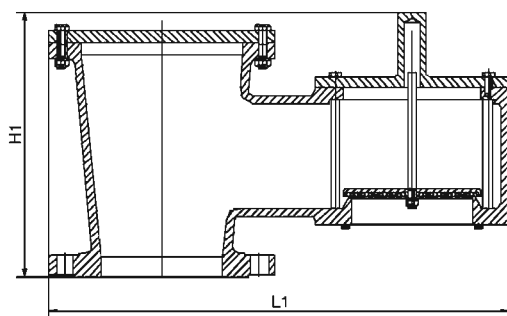
7140/8140系列单吸阀 Vacuum Relief Valve

7140/8140系列呼吸阀为真空泄放阀，可以避免储罐因负压而受损失，同时可以大幅减少储罐“呼吸”带来的蒸发损失。

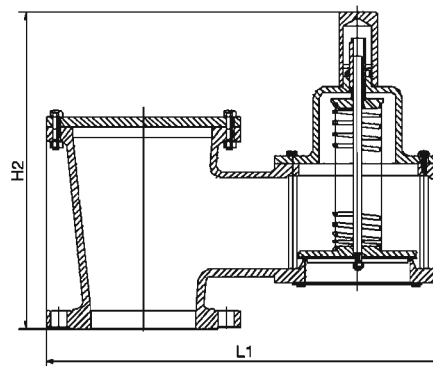
The 7140/8140 Vacuum Relief Valve are designed for use on atmospheric and low pressure storage tanks, vents to atmosphere or pipe away. The primary function is to protect tanks from damager deformation, and minimizes emissions to the environment, as well as loss of product due to evaporation.



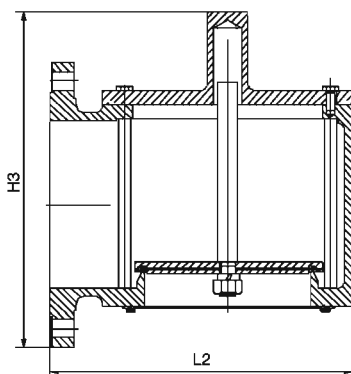
型号 Model



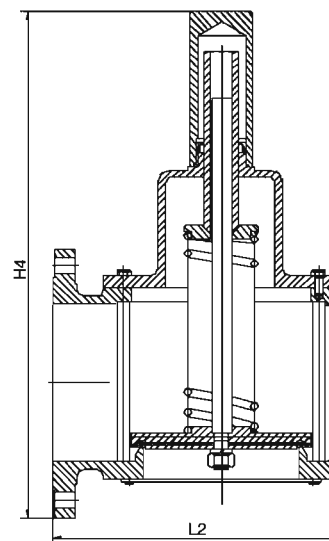
7140、8140垂直安装/重力加载式
Vertical installation/Weight loaded



7143、8143垂直安装/弹簧加载式
Vertical installation/Spring loaded



8145水平安装/重力加载式
Side installation/Weight loaded



8147水平安装/弹簧加载式
Side installation/Spring loaded

设计特点 Design Features

- ◆ 口径 2" ~ 14" (DN50~DN350);
- ◆ 垂直/水平安装;
- ◆ 防护网可阻止外部杂物通过入口进入设备;
- ◆ 根据用户需要,可增加阻火器、吸入弯管、夹套、吹扫孔、衬里、除湿等功能结构;
- ◆ 设计、检验按API 2000;
- ◆ 法兰标准按ANSI B16.5,根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准,
- ◆ 选用材料:铝合金、碳钢、不锈钢、其它特殊材料;

- ◆ Sizes available 2" ~14" (DN50~DN350);
- ◆ Vertical /Side installation;
- ◆ Protective screens are provided at pressure and vacuum ports to prevent entrance of foreign matter;
- ◆ Flame Arrester、Inlet Pipe、Steam Jacket、Blowing Hole、Lining or Humidity Absorber are options to client;
- ◆ Designed and tested according to API 2000;
- ◆ The flanges are accordance with ANSI B16.5, or EN1092、JIS;
- ◆ Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials on Application;

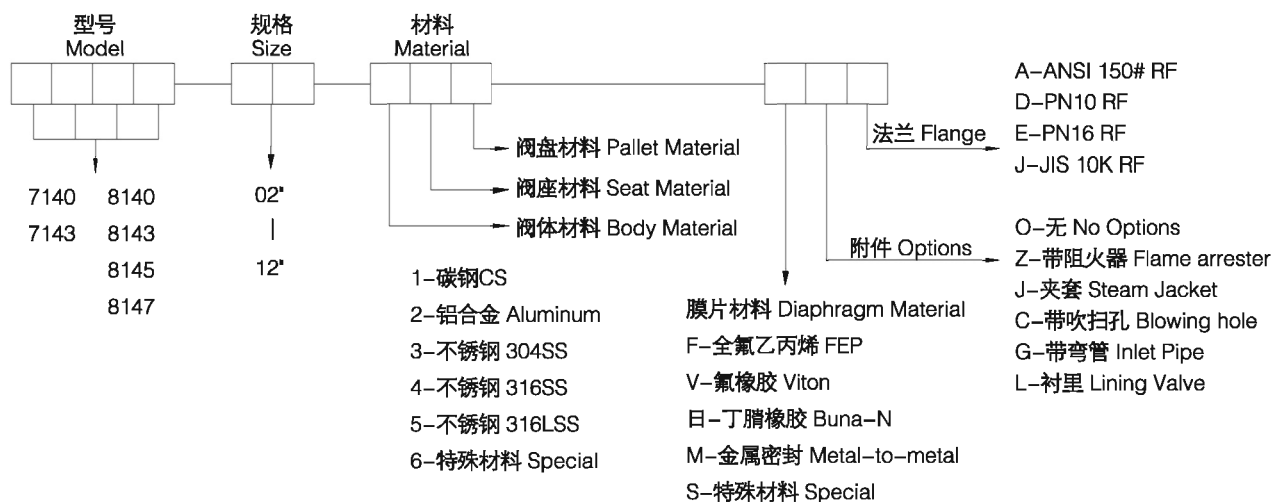
设定压力 Setting Pressure/Vacuum

压力设定 Setting KPa	7140、8140	7146、8146	7145、8145	7148、8148
正压设定 Set pressure	0.2~6.9	0.2~6.9	6.9~103.4	6.9~103.4

8140、8143、8145、8147结构尺寸 Dimensions, mm

公称通径 Nominal Size	L1	L2	H1	H2	H3	H4	W ₈₁₄₀	W ₈₁₄₆
2" (DN50)	300	186	180	292	175	288	155	155
3" (DN80)	378	215	217	300	214	296	200	200
4" (DN100)	443	241	253	361	252	361	235	230
6" (DN150)	575	281	311	448	289	448	300	280
8" (DN200)	705	366	370	615	350	645	360	345
10" (DN250)	825	453	439	705	440	742	410	406
12" (DN300)	970	525	519	853	520	909	470	483
14" (DN350)	—	616	—	—	535	910	—	533

订货指南 How to Order



9800系列先导式呼吸阀 Pilot Operated Pressure/Vacuum Relief Valve

相对于一般重力加载式和弹簧式呼吸阀而言，9800系列先导式呼吸阀有更高的密封性能，并且在超压低于10%的时候即可达到全排量。因此先导式呼吸阀的操作压力可以很接近储罐的最大设计压力，从而减少蒸发损失，提高经济性能。

The 9800 series pilot operated relief valve has two principal advantages over other types of relief valves: 1. It is bubble tight to set pressure. 2. It is fully open at less than 10% above set pressure. These characteristics permit an operating pressure nearer to the maximum allowable working pressure of the tank. High operating pressures reduce evaporation and total venting volume, thereby reducing product loss and cost of processing emissions.

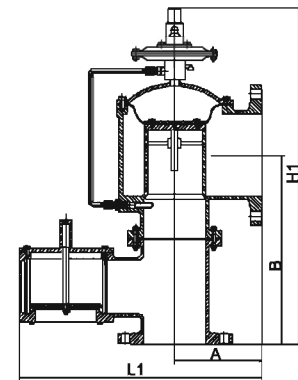
型号 Model

9800先导式呼吸阀 Pilot Operated Pressure/Vacuum Relief Valve

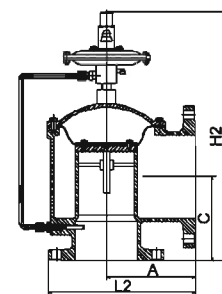
9805先导式呼吸阀 Pilot Operated Pressure Relief Valve

设计特点 Design Features

- ◆ 口径 2" ~12" (DN50~DN300);
- ◆ 超压低于10%的时候即可达到全排量
- ◆ 管道排放;
- ◆ 设计、检验按API 2000;
- ◆ 法兰标准按ANSI B16.5, 根据用户要求可选用EN1092、JIS、HG/T 20592~20615、
- ◆ GB/T 9113等标准,
- ◆ 选用材料: 铝合金、碳钢、不锈钢、其它特殊材料;
- ◆ Sizes available 2" ~12" (DN50~DN300);
- ◆ Fully open at less than 10% above set pressure
- ◆ Pipe away;
- ◆ Designed and tested according to API 2000;
- ◆ The flanges are accordance with ANSI B16.5, or EN1092、JIS;
- ◆ Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials
- ◆ on Application;



9800先导式呼吸阀



9805先导式呼吸阀

设定压力 Setting Pressure/Vacuum

压力设定 Setting KPa	9800	9805
正压设定 Set pressure	0.5~103.4	0.5~103.4
负压设定 Set Vacuum	-0.2~-4.3	/

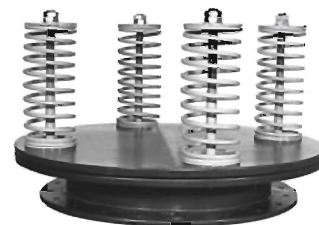
结构尺寸 Dimensions, mm

公称通径 Nominal Size	L1	L2	W Width	H1	H2	A	B	C
2" x3"	338	191	280	340	525	115	282	112
3" x4"	406	233	280	765	580	138	301	112
4" x6"	472	294	280	870	655	179	360	148
6" x8"	594	354	345	1025	755	214	460	202
8" x10"	720	412	405	1005	700	240	514	214
10" x12"	860	486	485	1080	745	283	614	246
12" x14"	998	562	535	1140	795	321	696	280

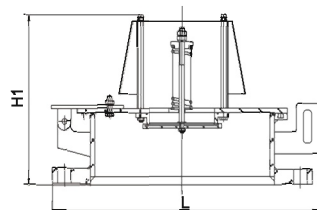
紧急泄放阀 Emergency Pressure/Vacuum Relief Valve

8160系列为紧急压力真空泄放阀，当储罐暴露在火灾或其它紧急工况时，普通呼吸阀不能满足储罐的排放量，为了防止储罐爆裂，使用紧急泄放阀。

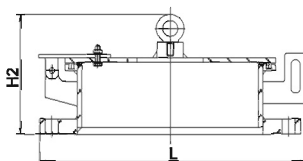
The 8160 Emergency Pressure Relief Valve are designed to provide emergency relief capacity beyond that furnished by the normal operating pressure relief valve on the tank. The valve protects the tank against rupture or explosion that could result from excessive internal pressure caused by fire.



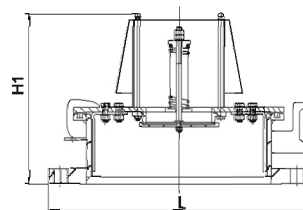
型号 Model



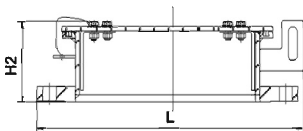
8160紧急压力/真空泄放
Emergency Pressure/Vacuum Relief Valve



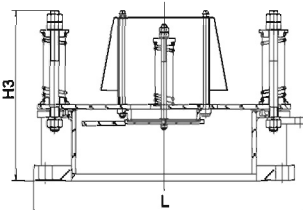
8168紧急压力泄放
Emergency Pressure Relief Valve



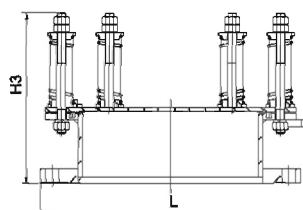
8170紧急压力/真空泄放
Emergency Pressure/Vacuum Relief Valve



8178紧急压力泄放
Emergency Pressure Relief Valve



8180紧急压力/真空泄放
Emergency Pressure/Vacuum Relief Valve



8188紧急压力泄放
Emergency Pressure Relief Valve

设计特点 Design Features

- ◆ 口径 16"、20"、24"；
- ◆ 设计、检验按API 2000；
- ◆ 法兰标准按ANSI B16.5,根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准；
- ◆ 选用材料:铝合金、碳钢、不锈钢、其它特殊材料；
- ◆ 8160、8168型紧急压力真空泄放阀开启止动块能够有效帮助阀瓣复位；
- ◆ 8170、8178型紧急压力真空泄放阀导向筋能够防止阀帽移位，并提供导向；
- ◆ 8180、8188型紧急压力真空泄放阀为弹簧加载，适用于设定压力比较高的储罐。
- ◆ Sizes available 16"、20"、24"；
- ◆ Designed and tested according to API 2000；
- ◆ The flanges are accordance with ANSI B16.5, or EN1092、JIS；
- ◆ Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials on Application；
- ◆ 8160、8168 valves are hinged with lift stop for positive reseating；
- ◆ 8170、8178 Designed with guide sleeves can provides removable stop and restrict the lift of the cover；
- ◆ 8180、8188 Are spring loaded ,which is supposed to set on the high pressure tanks.

设定压力 Setting Pressure/Vacuum

压力设定 Setting KPa	8160	8168	8170	8178	8180	8188
正压设定 Set pressure	0.6~3.4	0.6~3.4	0.6~6.9	0.6~6.9	6.9~103.4	6.9~103.4
负压设定 Set Vacuum	-0.2~-1.7	/	-0.2~-1.7	/	-0.2~-1.7	/

结构尺寸 Dimensions, mm

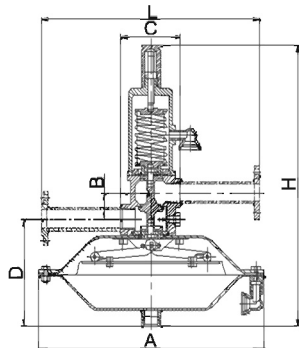
公称通径 Nominal Size	L1	H1	H2	H3
16" (DN400)	597	350	270	476
20" (DN500)	765	350	270	584
24" (DN600)	845	350	270	686

8800系列气体调节阀 Blanket Gas Regulator

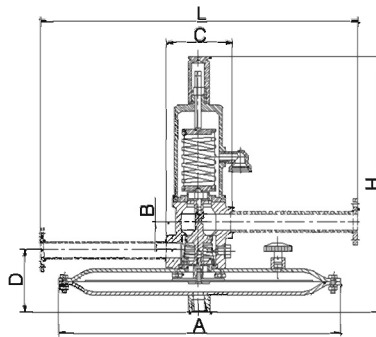
8800系列气体调节阀为储罐上配套使用的精确调节装置，它通过控制高压气体的流量使储罐保持在较低的气体压力，并当储罐中的介质被抽出或罐内气体释放热量压力较低时保持罐内正压。

The 8800 series gas blanket regulators provide a controlled gas environment in storage tanks. The tank is controlled at a defined pressure level for regulating the flux of the high pressure gas. And it can also keep the pressure of the tank from descending when the medium running out or heat venting.

型号 Model



TYPE8800 低压气体调节阀
Low-pressure Gas Regulator



TYPE8810 高压气体调节阀
High-pressure Gas Regulator

设计特点 Design Features

- ◆ 口径 1" 150# RF或FNPT1" ; Sizes available 1" 150# RF or FNPT1" ;
- ◆ 8800 适用于较低压气体调节; Type 8800 applies to regulate lower-pressure gas;
- ◆ 8810 适用于较高压气体调节; Type 8810 applies to regulate high-pressure gas;
- ◆ 密封可靠; Reliable seal;
- ◆ 弹簧、膜片加载, 控制精确; Spring and diaphragm loaded, regulated accurately;
- ◆ 全不锈钢结构: Available Materials: all stainless;

设定压力 Setting Pressure/Vacuum

压力设定 Setting KPa	8800	8810
正压设定 Set pressure	0.2~2.0 Kpa	2.0~60 Kpa

结构尺寸 Dimensions, mm

连接型式Connections	8800		8810	
	1" 150# RF	FNPT1"	1" 150# RF	FNPT1"
压力感应孔 Remote sense port	FNPT1/2"		FNPT1/2"	
A	356		340	
B	41		41	
C	/	96	/	96
D	170		97	
L	330	/	430	/
H	450		376	

主要零件材料 Material of Main Parts

阀体 Body	304SS、316SS
阀瓣 Disc	304SS、316SS
阀座 Seat	氟橡胶、丁腈橡胶、三元乙丙橡胶 Viton、Buna-N、DPDM
膜片 Diaphragm	氟橡胶、丁腈橡胶、三元乙丙橡胶 Viton、Buna-N、DPDM
弹簧 Spring	304SS

ZZYP系列气体调节阀(氮封阀) Blanket Gas Regulator

ZZYP系列气体调节阀为储罐上配套使用的精确调节装置，它通过控制高压气体的流量使储罐保持在较低的气体压力，并当储罐中的介质被抽出或罐内气体释放热量压力较低时保持罐内正压。

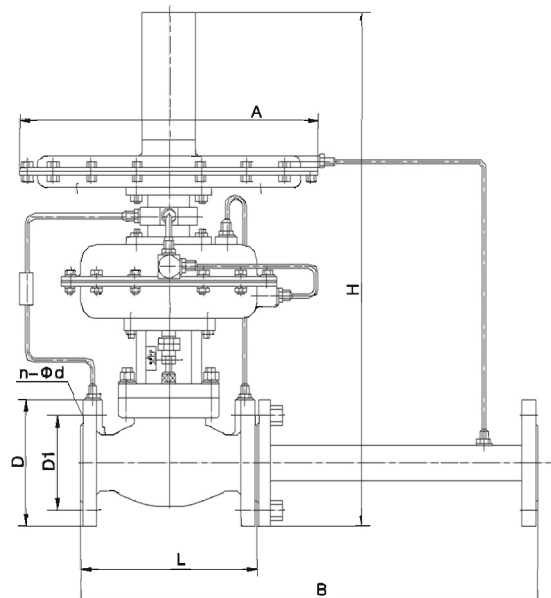
The ZZYP series gas blanket regulators provide a controlled gas environment in storage tanks. The tank is controlled at a defined pressure level for regulating the flux of the high pressure gas. And it can also keep the pressure of the tank from descending when the medium running out or heat venting.

型号 Model

ZZYP 低压气体调节阀 Low pressure Blanket Gas Regulator

设计特点 Design Features

- ◆ 口径 3/4" ~6" (DN20~DN150);
- ◆ 法兰标准按可选用ANSI B16.5、HG/T 20592~20615、
- ◆ GB/T 9113,
- ◆ 选用材料:碳钢、不锈钢、其它特殊材料
- ◆ Sizes available 3/4" ~6" (DN20~DN150);
- ◆ The flanges are accordance with ANSI B16.5,HG/T20592、
- ◆ GB/T9113、JIS;
- ◆ Available Materials: Carbon Steel、Stainless Steel、Special
- ◆ Materials on Application;



主要技术参数和性能指标

公称通径DN mm	20			25	32	40	50	65	80	100	125	150
结构长度 mm	150			160	180	200	230	290	310	350	400	480
高度 mm	715			715	735	755	755	795	795	825	995	1105
执行器外径 mm	308			308	308	395	395	395	395	395	500	500
阀座直径 mm	6	15	20	25	32	40	50	65	80	100	125	150
额定流量系数Kv	0.32	4	5	8	12.5	20	32	50	80	125	160	320
压力调节范围 KPa	0.5~100											
公称压力 PN	PN10、PN16、CL150											
工作温度 ℃	-40~80											
流量特性	快开											
调节误差 %	≤5											
允许压降 Mpa	1.6			1.6			1.1	0.4		0.6		
执行机构膜片有效面积 cm²	200			280				400				
允许泄泄漏量	硬阀芯：Ⅳ级（10-4xKv） 软阀芯：Ⅵ级（GB/T 4213）											

主要零件材料 Material of Main Parts

阀体 Body	WCB、CF8、CF8M、CF3M
阀瓣 Disc	304SS、316SS、316L
阀座 Seat	304SS、316SS、316L
膜片 Diaphragm	氟橡胶、丁腈橡胶、三元乙丙橡胶 Viton、Buna-N、DPDM
弹簧 Spring	304SS

液压安全阀 Hydraulic Safety Valve

液压安全阀安装在油罐顶部，与呼吸阀并列使用，是呼吸阀的备用设备，在呼吸阀出现故障而失灵或其它原因造成超压时，而普通呼吸阀不能满足储罐的排放量，为了防止储罐爆裂，用于紧急泄放。

The Hydraulic Safety Valve are designed to provide emergency relief capacity beyond that furnished by the normal operating pressure relief valve on the tank. The valve protects the tank against rupture or explosion that could result from excessive internal pressure caused by fire.



型号 Model

GYA型液压安全阀 Hydraulic Safety Valve

设计特点 Design Features

- ◆口径 3" ~10" (DN80~DN250);
- ◆防雨罩拆除方便，以便检查维护设备；
- ◆设计、检验按SY/T 0511.2；
- ◆法兰标准按ANSI B16.5 ,根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准，
- ◆选用材料:铝合金、碳钢、不锈钢、其它特殊材料；
- ◆Sizes available 3" ~10" (DN80~DN250);
- ◆The weather hood is easily removed for inspection and maintenance;
- ◆Designed and tested according to SY/T 0511.2;
- ◆The flanges are accordance with ANSI B16.5, or EN1092、JIS;
- ◆Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials on Application;

结构尺寸 Dimensions, mm

公称通径 Nominal Size	3" [80]	4" [100]	6" [150]	8" [200]	10" [250]
宽With L	376	500	650	900	1050
高High H	424	605	705	755	885

开启压力分级表 Set Pressure

等级 Pressure grade	开启压力 Setting Pa		等级代号 Grade code
	正压 Pressure	负压 Vacuum	
1	+550	-490	A
2	+860	-490	B
3	+1176	-490	C
4	+1570	-490	D
5	+1960	-490	E
开启压力误差 ± 49Pa			

呼吸阀特殊附件 **Special Accessory**

带阻火器呼吸阀 **Valve with flame arrester**

带阻火器呼吸阀具有呼吸阀及阻火器的双重功能。可以避免储罐因超压而受损，并且能防止外部火灾。

The Pressure/Vacuum Valve & Flame Arrester combination units are designed to protect your tank from damage created by over- pressure or excessive vacuum, at the same time that they provide protection from externally caused sources of heat and ignition. The result is increased fire protection and safety.

带夹套式呼吸阀 **Valve with steam jacket**

夹套式呼吸阀是为防止介质在工作温度下会产生结晶而设计，采用蒸汽伴热，防止阀门堵塞。夹套接头可采用法兰式或螺纹式。

Steam jacket valves are designed for use on tanks that containing liquids whose vapors may crystallize at the working temperature, and protection against clogging, prevents the medium freezing or building up.

带吹扫孔呼吸阀 **Valve with blowing hole**

阀盘吹扫呼吸阀主要用于PTA行业，独特的吹扫结构设计能有效防止介质颗粒在阀盘处的堆积。

Valve with blowing hole used in PTA industry .The blowing hole can prevent the medium granule accumulation at the disc effectively.

带吸入弯管呼吸阀 **Valve with inlet pipe**

呼吸阀吸入口可加吸入弯管结构，与其它管结法兰连接。以便吸入氮气或其它气体。

The pressure/vacuum relief valve with vacuum inlet pipe can connect with flanges of other pipes to inbreathe N2 or other gas.

衬里呼吸阀 **Lining valve**

衬里呼吸阀广泛用于化工、石油、冶金、医药等行业，适用于生产过程中酸、碱等强腐蚀性介质的储罐。

The lining valve used in aggressive medium of Oil, Chemical, and pharmaceutical industries, such as hydrochloric, vitriolic and alkali solutions.

吸入除湿呼吸阀 **Valve with humidity control**

安装在呼吸阀吸入端口的除湿装置，用来阻止外界潮湿空气中的水分进入储罐，一般用于浓硫酸等储罐。

Humidity absorber is especially designed to control the humidity, and minimize the humidity effect to the product. They are typically mounted to the inlet of the pressure/vacuum relief valve which connects the vapor space of a storage tank.



通气罩 Free Vents

7500/8500系列通气罩安装在重质油罐顶部或浮顶油罐顶部，罐壁透气孔安装在罐侧，直接排放大气起呼吸作用。入口采用法兰连接，也可以与阻火器配套使用。

The 7500/8500 Series free vents directly to atmosphere. The large opening and streamlined weather hood are designed to minimize back pressure. The 7500/8500 Series is designed to bolt directly to a standard flange on the tank top. It may also be mounted on a flame arrester.

型号 Model

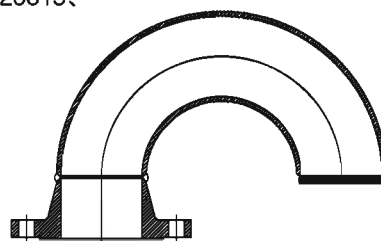
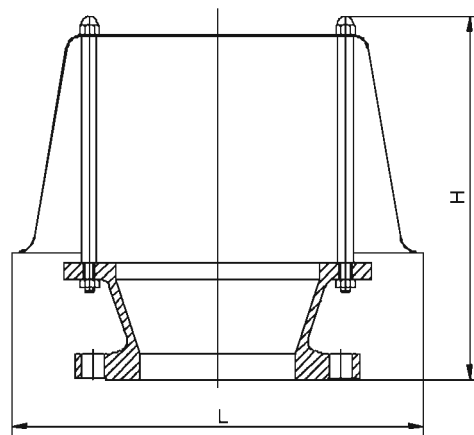
7500通气罩 Free Vent

8500通气罩 Free Vent

7510通气管 Free Vent Pipe

设计特点 Design Features

- ◆ 口径 2" ~12" (DN50~DN300);
- ◆ 7500系列通气罩排放口同进口，方便用户选择；
- ◆ 8500系列通气罩排放口比进口大，以增大排量；
- ◆ 7510系列通气罩管为弯管；
- ◆ 大气排放；
- ◆ 防雨罩拆除方便，以便检查维护设备；
- ◆ 防护网可阻止外部杂物通过入口或出口进入设备；
- ◆ 设计、检验按API 2000、SY/T 0511.8；
- ◆ 法兰标准按ANSI B16.5,根据用户要求可选用EN1092、JIS、HG/T20592~20615、GB/T 9113等标准，
- ◆ 选用材料:铝合金、碳钢、不锈钢、其它特殊材料；
- ◆ Sizes available 2" ~12" (DN50~DN300);
- ◆ The 7500 series outlet ports is same to inlet;
- ◆ The 8500 series outlet ports is one pipe size larger than inlet flange
- ◆ to optimize flow capacity;
- ◆ The 7500 series free vent pipe;
- ◆ Vent to atmosphere;
- ◆ The weather hood is easily removed for inspection and maintenance;
- ◆ Protective screens are provided at pressure and vacuum ports to prevent entrance of foreign matter;
- ◆ Designed and tested according to API 2000、SY/T 0511.8;
- ◆ The flanges are accordance with ANSI B16.5,or EN1092、JIS;
- ◆ Available Materials: Aluminum、Carbon Steel、Stainless Steel、Special Materials on Application;



7500 型结构尺寸 7500 Type Dimensions, mm

公称通径 Nominal Size	2" [50]	3" [80]	4" [100]	6" [150]	8" [200]	10" [250]	12" [300]
L		200	248	290	390	488	584
H		230	267	332	438	511	594

7500 型结构尺寸 7500 Type Dimensions, mm

公称通径 Nominal Size	2" [50]	3" [80]	4" [100]	6" [150]	8" [200]	10" [250]	12" [300]
L	200	248	290	390	488	584	680
H	170	210	278	346	420	470	520

储罐开孔附件 Tank Hole Attachments

罐顶人孔安装于固定油罐罐顶，罐壁人孔安装于固定油罐罐壁，主要由矩节、法兰、法兰盖、密封垫片及紧固件组成，用于人员进出通道口。出厂时不带补强圈。

透光孔用于检查和检修时采光和和通气，出厂时不带补强圈。

排污孔安装在轻质油罐底部，清扫油罐时从此孔排出污泥，平时可以从此放水管排出罐内的污水。

清扫孔安装在重质油罐底部，清扫油罐时从此孔排出污水并扫除内部污泥。

量油孔适用于各种油品的油罐上，装于罐顶部，用于测量罐内油品的标高和测试及取样等作用。

Roof manhole installed on fixed roof tank to tank manhole installed on a fixed oil jars of walls, mainly composed of rectangular section, flange, flange cover, sealing gaskets and fasteners, for people in and out of the access point. Factory without reinforcement ring.

Light hole used to examine and repair the lighting and ventilation, factory without reinforcement ring.

Drainage holes to install the light at the bottom of the tank, when cleaning the tank orifice discharge of sludge, can put the pipe discharge the sewage tank at ordinary times.

Cleaning Hole at the bottom of the hole is installed on heavy oil tank, oil tank in opening and cleaning internal sludge discharge of sewage.

Gauge Hatches are suitable for all kinds of oil tank, installed on the top, is used to measure the elevation of tank oil sampling and testing and etc.

型号 Model

GKR 罐壁人孔 Man Hole

GKL 量油孔 Gauge Hatches

GKQ 清扫孔 Cleaning Hole

GKG 透光孔 Lighting Hole

GKP 排污孔 Drain Hole

GKR 罐壁人孔 Tank Roof Man Hole Dimensions, mm



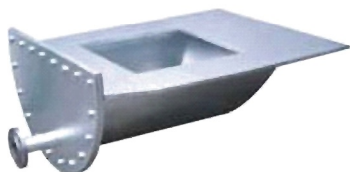
公称通径 Nominal Size	型号 Model	高度 Height	盖板外径 Dia
DN500	GKR-500	320	645
DN600	GKR-600	340	755
DN750	GKR-750	345	980

GKL 量油孔 Gauge Hatches



公称通径 Nominal Size	型号 Model	高度 Height	宽度 Width
DN100	GKL-100	95	205
DN150	GKL-150	220	380

GKP 排污孔 Drain Hole



公称通径 Nominal Size	型号 Model	高度 Height	宽度 Width
DN50	GKP-50	500	900
DN80	GKP-80	500	900
DN100	GKP-100	500	900
DN150	GKP-150	500	900

GKQ 清扫孔 Clean Hole



公称通径 Nominal Size	型号 Model	高度 Height	宽度 Width
DN50	GKQ-50	715	910
DN80	GKQ-80	715	910
DN100	GKQ-100	715	910
DN150	GKQ-150	715	910
	GKQ-00	不带放水管，其它尺寸同上	

PC型系列空气泡沫产生器 Air foam generator

泡沫产生器，又称空气泡沫产生器、泡沫发生器，是一种固定安装在油罐上，产生和喷射空气泡沫的灭火设备。当泡沫消防车固定消防泵供给的泡沫混合液流，经输送管道通过产生器时，形成空气泡沫，扑灭油类火灾。

A foam generator, also called air foam generator, is a kind of fixed installed on the tank, and jet air foam fire extinguishing equipment. When the foam fire truck fixed fire pump supplies the mixture flow, via pipelines through the generator, the formation of air bubbles, put out a fire of oils.

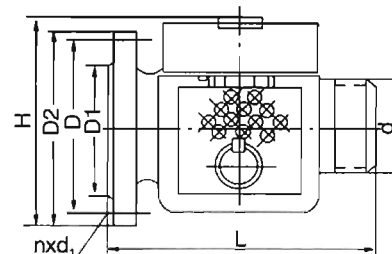
工作原理 Principle

泡沫产生器主要由壳体组、泡沫喷管组和导板组三个部份构成。当泡沫混合液流过产生器喷咀时，形成扩散的雾化射流，在其周围产生负压，从而吸入大量空气形成空气泡沫，空气泡沫通过泡沫喷管和导板输入贮罐内，沿罐壁淌下，平稳地覆盖在燃烧液面上。

The air foam generator is mainly composed of shell, foam nozzle group and guide set of three parts. When the mixture through the bubble generator nozzle atomizing jet diffusion, in its surroundings to produce negative pressure, and formation of large air inhaled air bubbles, air bubble through input within the tank foam nozzle and guide, running along the tank wall, covered the burning liquid surface smooth.



产品结构示意图



设计特点 Design Features

供货时其喷管组只包括法兰、垫片、紧固件等，而喷管、弯头由用户自购并自行加工配制成喷管组。产生器应水平安装在储罐壁上上部，不宜安装在储罐顶部。安装时罩板朝下，不宜侧装。用于外浮顶储罐时，应安装在储罐顶端的泡沫导流罩上。

安装产生器时在储罐壁的开口，应保证储罐上部要保留有足够的空间，储存液体的液面要低于产生器进口，应在储存液面线以下，以免影响泡沫质量及泡沫形成，并防止液体从产生器口流出。

Supply when the nozzle group consisted of flanges, gaskets, fasteners, etc., and the nozzle, bend since the merger and acquisition to processing mixture nozzle set by the user. The generator should be installed in the tank wall, should not be installed on the top of the tank. When installation plate down, unfavorable side. When used in external floating roof tank, shall be installed at the top of the tank foam on the dome.

Installing a generator in the tank wall of the hole, should guarantee the upper tank to keep enough space, storage of liquid level is lower than imported generator, the following should be stored in liquid level line, lest affect quality of foam and bubble formation, and prevent the liquid from the generator hole.

结构尺寸 Dimensions, mm

型号 Model	D2	D	D1	nxd1	D	L	H	混合液发 生量 L/S	重量 Kg
PC-4	160	130	110	4-14	R2"	216	170	25	16
PC-8	185	150	125	4-18	R2 1/2"	228	190	50	22
PC-16	235	200	175	8-18	R3"	230	210	100	32
PC-24	260	225	200	8-18	R4"	234	230	150	40

FP型氧气阻火器 Oxygen Flame Arrester

氧气管道阻火器和氧气管道阀前、阀后阻火器是采用特种铜合金和不锈钢焊接而成。可以有效地防止氧气管道阀门在突然开启时易形成的绝热压缩口局部温度骤升，成为着火能源；可以防止在阀门前后压差作用下，高速运动的物质微粒（如铁锈、粉尘、焊渣等）与阀后管道摩擦、撞击产生火花而成为着火能源。阻火器的使用可以迅速阻断火源，杜绝管道中燃爆事故的发生。系列产品广泛应用于冶金、化工等行业的氧气输送管道，客户可直接将本产品与输氧管道的适当部位焊接连通即可运行。

Oxygen pipe flame arrester is to use special copper alloy and stainless steel welded together. Can effectively prevent oxygen pipeline valve when suddenly open easily formed "compression", the temperature jumped, become the ignition energy; Can prevent the valve under the action of pressure difference before and after high speed movement of the particles (such as rust, dust, welding slag, etc.) and after the valve pipe friction, collision sparks as ignition energy. The use of the flame arrester can be quickly blocked fire, prevent the pipe explosion accidents. Series products are widely used in metallurgy, chemical and other industries of oxygen pipeline, customers can directly to the product with proper positions of the oxygen pipeline welding connected to run.

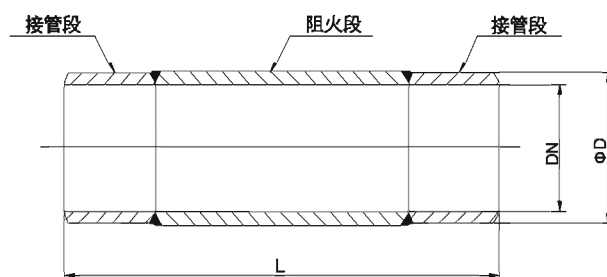
型号 Model

FP 氧气管道阻火器 Oxygen in-Line Flame Arrester

FPV 阀前、阀后阻火器 Oxygen In-Line before or after valve Flame Arrester

设计特点 Design Features

- ◆ 口径 1/2" ~24" (DN15~DN600);
- ◆ 独特的焊接工艺;
- ◆ 易清洗, 维护方便, 双向阻火;
- ◆ 适用于氧气管道;
- ◆ 可与相应规格的氧气阀配套使用; 可垂直或水平安装;
- ◆ 根据用户要求可选用法兰结构, 法兰标准可按ANSI B16.5、HG/T 20592~20615、GB/T 9113等标准;
- ◆ 选用材料: 接管段可选用304、20, 阻管段可选用T1、T2、TU1、TU2、B10其它特殊材料;
- ◆ Sizes available 1/2" ~24" (DN15~DN600);
- ◆ Unique welding process;
- ◆ Easy cleaning, Bi-directional flame arresting;
- ◆ Can be used with oxygen pipe;
- ◆ Can be used with oxygen valve; Vertical or horizontal installation;
- ◆ The flanges are accordance with ANSI B16.5, or HG/T 20592~20615、GB/T 9113;
- ◆ Available Materials: Connecting pipe on Carbon Steel、
- ◆ Stainless Steel; Flame pipe on T1、T2、TU1、TU2、B10 or Special Materials;



结构尺寸 Dimensions, mm

公称通径 Nominal Size	D	FP型 L	FPV型 L1	公称通径 Nominal Size	D	FP型 L	FPV型 L1
1/2" (DN15)	18	600	1600	6" (DN150)	159	800	1800
3/4" (DN20)	25			8" (DN200)	219		
1" (DN25)	32			10" (DN250)	273		
1 1/4" (DN32)	38			12" (DN300)	325		
1 1/2" (DN40)	48			14" (DN350)	377		
2" (DN50)	57	700	1700	16" (DN400)	426		2050
2 1/2" (DN65)	76			18" (DN450)	486		2300
3" (DN80)	89			20" (DN500)	540		2550
4" (DN100)	108			24" (DN600)	650		2800
5" (DN125)	133						2800

ZH型阻火器 Flame Arrester

ZH型阻火器为阻爆燃、阻爆轰型，安装于管端或靠近管端的管道中或储罐顶部，可阻止以亚音速传播和扩散的火焰。

ZH type Flame arrester is deflagration/detonation flame arrester, which can be installed at or bedside the end of pipeline or on the top of storage tanks to prevent the transmission and diffuseness of deflagration.

型号 Model

ZHI 垂直安装管端阻火器 Vertical End-of-Line Flame Arrester

ZHII 管道阻火器 In-Line Flame Arrester

ZH III 卧式安装管道阻火器 Horizontal Line Flame Arrester

ZHIV 阻爆轰型阻火器 Detonation Flame Arrester

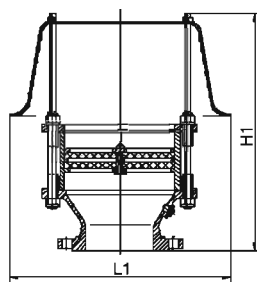
设计特点 Design Features

- ◆ 口径 2" ~ 12" (DN50~DN300);
- ◆ 独特的波纹型阻火芯件;
- ◆ 低流阻、双阻火芯件设置;
- ◆ 易清洗, 维护方便, 双向阻火;
- ◆ 适用于储存闪点低于28℃的甲类油品和闪点低于60℃的乙类油品, 如汽油、甲苯、煤油、原油等的立式储罐上;
- ◆ 可与相应规格的呼吸阀配套使用; 可垂直或水平安装;
- ◆ 根据用户需要, 可增加夹套、吹扫孔、检查孔等功能结构;
- ◆ 设计、检验按GB/T 13347《石油气体管道阻火器》的规定;
- ◆ 法兰标准按ANSI B16.5, 根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准;
- ◆ 选用材料: 铝合金、碳钢、不锈钢、其它特殊材料;
- ◆ Sizes available 2" ~ 12" (DN50~DN300);
- ◆ Proven spiral wound, crimped ribbon, flame element;
- ◆ Low pressure drop with multiple element sizes available for each flange size;
- ◆ Easy cleaning, Bi-directional flame arresting;
- ◆ Suitable for standing tanks containing first category oil whose flash point is lower than 28℃ or second category oil whose flash point is lower than 60℃, such as petroleum, toluene, Kerosene, coal oil and base oil;
- ◆ Can be used with Pressure/Vacuum Relief Valve; Vertical or horizontal installation;
- ◆ Steam Jacket, Blowing Hole, Test Hole Absorber are options to client;
- ◆ Designed and tested according to GB/T 13347, GB/T 5908;
- ◆ The flanges are accordance with ANSI B16.5, or EN1092, GB/T 9113, JIS;
- ◆ Available Materials: Aluminum, Carbon Steel, Stainless Steel, Special Materials on Application;

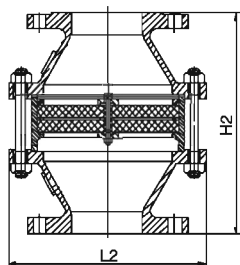


阻爆燃、阻爆轰试验用混合气体及浓度

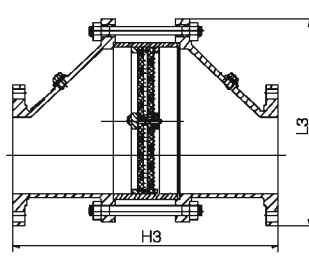
等级 Grade	MESG 值/mm	试验气体要求			
		气体Gas	气体浓度 (体积百分数) %	气体含量 (体积百分数) %	安全间隙/mm
II A	≥0.9	丙烷	≥95	4.2 ± 0.2	0.94 ± 0.02
II B1	≥0.85	乙烯	≥98	5.0 ± 0.1	0.83 ± 0.02
II B2	≥0.75			5.5 ± 0.1	0.73 ± 0.02
II B3	≥0.65			6.5 ± 0.5	0.67 ± 0.02
II B	≥0.5	氢气	≥99	45 ± 0.5	0.48 ± 0.02
II C	<0.5			28.5 ± 0.5	0.31 ± 0.02



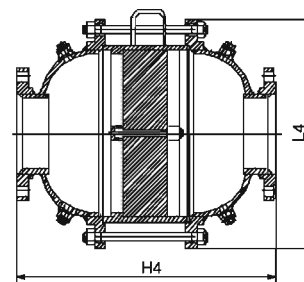
ZHI 垂直安装管端阻火器
Vertical End-of-Line
Flame Arrester



ZHII 管道阻火器
In-Line Flame Arrester



ZHIII 卧式安装管道阻火器
Horizontal Line Flame Arrester



ZHIV 阻爆轰型阻火器
Detonation Flame Arrester

结构尺寸 Dimensions, mm

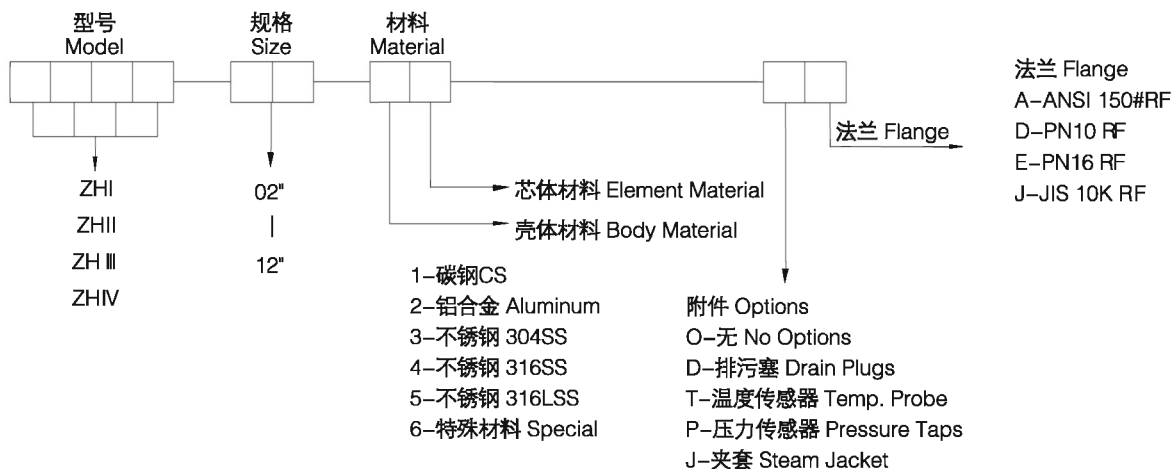
公称通径 Nominal Size	L1	H1	L2	H2	L3	H3	L4	H4
2" (DN50)	263	300	205	210	221	349	230	437
3" (DN80)	330	330	260	260	278	400	280	516
4" (DN100)	390	410	280	310	317	457	345	570
6" (DN150)	488	525	345	400	407	533	450	654
8" (DN200)	584	598	440	445	534	635	570	753
10" (DN250)	770	695	563	530	637	762	700	824
12" (DN300)	880	805	650	635	737	826	800	970

14" ~ 36" (DN350~DN900) 大口径阻火器需特殊订做, 尺寸请问厂家。
Larger sizes 14" ~ 36" (DN350~DN900) available on special application, Please consult factory.

阻火器订货参数 Ordering information

工程名称 Project	
设备编号 Tag	
安装位置 Position	
型号 Model	ZHI、ZHII、ZHIII、ZHIV
规格 Size	2"、3"、4"、6"、8"、10"、12"
数量 Qty	
阻火器类型 Type of flame arrester	管端 End-line 管道 In-line
壳体材料 Material	碳钢 CS 不锈钢 SS
连接型式 Flange	ANSI 150# RF PN10 RF PN16 RF
介质类别 Gas group	II A II B1 II B2 II B3 II B II C
介质流速 Flow rates	
最大允许压降 Maximum allowable pressure drop	

订货指南 How to Order



低压及真空泄放阀 Low pressure and Vacuum Relief Valve

真空负压安全阀 Vacuum Relief Valve

该阀用于负压系统，当负压容器系统内负压超过允许值时，该阀自动开启，吸进空气；当负压降低到规定值时，阀门自动关闭，从而保证设备的安全运行。

Used in vacuum equipment, when the vacuum in the system exceeds allowed value, the valve automatically opens, breathe in the air; When the negative pressure to reduce to the specified value, the valve automatically shut down, so as to ensure the safety of the equipment.

型号 Model

FA72 单法兰结构 Single Flanged

FA42 双法兰结构 Double Flanged

设计特点 Design Features

- ◆ 口径 1" ~8" (DN25~DN200);
- ◆ 法兰标准按可选用ANSI B16.5、HG/T 20592~20615、GB/T 9113,
- ◆ 选用材料:碳钢、不锈钢、其它特殊材料;
- ◆ Sizes available 1" ~8" (DN25~DN200);
- ◆ The flanges are accordance with ANSI B16.5,HG/T20592、GB/T9113、JIS;
- ◆ Available Materials: Carbon Steel、Stainless Steel、Special Materials on Application;



真空破坏阀 Vacuum Breaker Valve

该阀主要用于水处理系统，安装于管道或容器的最高点。当停泵或快速排水时，管道内将产生真空，此时阀外大气压力高于容器内压力，空气进入管道内部，以防止管道被压瘪。而当开泵时，管道内部的空气将通过微量排气阀排出管道，从而防止水锤的产生。保护管道及水泵的安全。

The vacuum breaker is designed to prevent vacuum conditions from occurring in pipes or tanks. After a power failure or rapid draining of the system, a vacuum condition often occurs in a pipe or tank. The pressure difference between the inside vacuum and outside air will cause a downward force on the disc. At vacuum pressures greater than -0.25 psig, the disc will compress the spring and move downward allowing free flow of outside air into the pipe or tank to eliminate the vacuum. When positive pressure is restored in the pipe or tank, the valve will automatically close and seal tightly. Optional valves can be piped to the vacuum breaker to vent trapped air in the pipeline if needed.

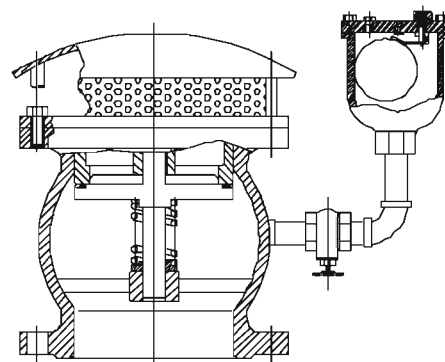
型号 Model

VB41 真空破坏阀 Vacuum Breaker Valve

VB42 带排气阀真空破坏阀 Vacuum Breaker with Air Release Valve

设计特点 Design Features

- 口径 2" ~42" (DN50~DN1050);
- 法兰标准按可选用 ANSI B16.5、HG/T 20592~20615、GB/T 9113等标准,
- 选用材料:铸铁、碳钢、不锈钢、其它特殊材料;
- Sizes available 2"~42"(DN50~DN1050);
- The flanges are accordance with ANSI B16.5,HG/T20592、GB/T9113、JIS;
- Available Materials: Cast Iron、Carbon Steel、Stainless Steel、Special Materials on Application;



大气泄放阀(水封安全阀) **Atmospheric Safety Relief Valve(Water seal)**

水封式大气泄放阀，或叫自动排汽阀，适用于蒸汽冷凝器及火电厂汽轮凝汽或空冷系统。软密封及大流量设计。水封可保证设备在真空工况下正常运行。

A soft sealed atmospheric safety valve with large flow capacity and soft seat tightness for steam condenser and turbine applications.

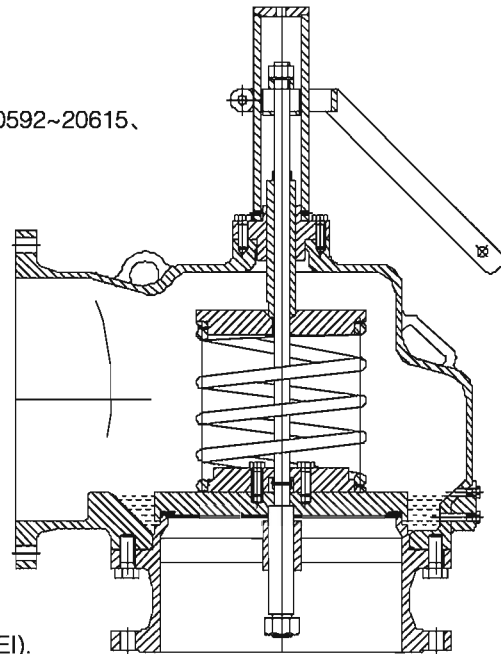
型号 **Model**

A48XSH 直通式大气泄放阀 Straight-through Atmospheric Safety Relief Valve(Water seal)

A48XSV 角式大气泄放阀 Angle-through Atmospheric Safety Relief Valve(Water seal)

设计特点 **Design Features**

- ◆ 口径 6" ~36" (DN150~DN900);
- ◆ 法兰标准按ANSI B16.5 ,根据用户要求可选用EN1092、JIS、HG/T 20592~20615、GB/T 9113等标准,
- ◆ 选用材料:碳钢、不锈钢、其它特殊材料;
- ◆ 按欧盟97/23/EC及HEI设计, 压力最大0.5巴。
- ◆ 有两种结构, 角式及水平直通式, 可满足现场的垂直及水平安装。
- ◆ 适用于冷凝器的真空超压保护。
- ◆ 不但用于冷凝器及汽轮机凝汽器, 也可用于其它汽态工况。
- ◆ Sizes available 6"~36"(DN150~DN900);
- ◆ The flanges are accordance with ANSI B16.5, or En1092、GB/T9113、JIS;
- ◆ Available Materials: Carbon Steel、Stainless Steel、Special Materials on Application;
- ◆ This limit is 0.5 barg according to the requirements of Pressure Equipment Directive 97/23/EC for European Community or 10 psig (0.69 barg) according to the Heat Exchanger Institute (HEI).
- ◆ There are two kinds of structure Vertical or horizontal installation;
- ◆ The A48X Series steam safety valve is used for the overpressure protection of condensers normally operating under vacuum.
- ◆ The valve has been specially designed to limit the pressure that can incidentally occur into the condenser at a level below the value at which the condenser is to be considered by local code or regulation as a steam pressure vessel.
- ◆ Although the A48X Series soft sealed atmospheric safety valve was intended for steam condenser and turbine applications, it can be used for various applications on gas and vapors, where its soft seat tightness performance and large flow capacity match the service requirements.





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