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恒华阀门有限公司

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Safety Valve

安全阀 (国标/美标)



hhsv 恒华阀门

HENGHUA Valve



企业 简介 Company Introduction

HENGHUA VALVE

恒华阀门有限公司位于“中国泵阀之乡”之称，美丽的瓯江之滨，永嘉瓯北东瓯工业区，与温州市区一桥相连，地理优越，环境优美，交通便捷。公司创建于1998年，工厂占地面积9500m²，建筑面积15500m²。固定资产5000万。本公司拥有机械加工中心、数控车床、普通机床一百八十余台套。同时拥有金属材料理化实验、机械性能力学实验、超声波测厚、布洛维硬度测试、无损探伤、多元素合金分析仪等高精尖技术检测设备，配有国内最先进的等离子堆焊设备、金属热处理炉、安全阀冷态全性能测试中心、弹簧拉压检测、恒温处理设备，配有密封面、阀杆端头高频淬火等国内外最先进的热处理设备，以不断的技术创新和稳定的产品性能为特点，对产品质量高要求、严规范是本公司的重要准则。产品的每一道工序，严格按照国际质量体系标准规范执行，在恒华可以让您感受近在咫尺的世界尖端制造技术。

公司始终坚持以质量求生存、以科技谋发展，以完善的服务系统为您提供快速、高效、专业的服务，并聚集了专业技术精英力量组成具有国际先进水平的研发队伍，充分利用

新技术、新工艺、新材料持续开发优质新产品供应市场的需求。公司现已拥有自主知识产权实用新型发明专利20项，发明专利2项。全面实行标准化、规范化、程序化管理，具有健全、完善和运行有效的质量管理体系，并先后获取了ISO9001国际质量体系认证、ISO14001国际环境体系认证、ISO18001国际职业健康安全体系认证、TS特种设备制造许可证A1级认证，采用国际标准合格证和API等资格证书。是一家集研发、生产、销售于一体的安全阀专业制造公司，所生产的安全阀系列产品规格齐全。可按照最新的ANSI、API、DIN、JIS、GB等标准设计制造。所生产阀门的主体材料有WCB、LCB、WC6、WC9、ZGCr5Mo、ZG15Cr1Mo1V、CF8、CF8M、CF3、CF3M、F51、F53、12CrMoV、ZG1Cr18Ni9Ti、ZG1Cr17Ni10Mo2Ti、Hastl.C、Hastl.B、321、CK20、Monel合金等；公称通径从DN10~600及1/2"~24"，公称压力从0.6~42.0Mpa及150Lb~2500Lb；工作温度-196℃~570℃。产品广泛应用于电站、锅炉、石油、化工、城建、医药、化肥、冶金、采矿等行业，产品远销韩国、日本、俄罗斯、蒙古、美国、土耳其、伊朗、印度等中东地区和东南亚地区，部分产品可代替进口，应用于国家重点工程项目的关键设备上。

公司现有员工260多人，生产工人195人，销售人员30多人，高级工程师2名，阀门工程师18名，助理工程师15名，工程技术人员63名，拥有一支强大的研发队伍和两条操作训练有素、技术经验丰富、质量检测完善的生产线，具备年生产8000吨，月产万余台套安全阀的生产能力。公司全体同仁秉承“追求永恒，创中华品牌”的经营理念，不断应用新技术、新工艺、新材料、积极开发优质新产品，以严格的管理带给您质量的保证，以良好的信誉和优质的服务报答广大用户对恒华阀门的支持与厚爱，欢迎新老客户莅临我公司参观指导！

China Henghua Valve Co., Ltd. is located in Dong'ou Industrial Zone, Oubei, Yongjia – known as China Pump & Valve Hometown – on the bank of beautiful Oujian River, which is connected with Wenzhou Downtown by a bridge, so it enjoys a superior geographical location with a beautiful environment and being easily accessible. The company was founded in 1998 and its plant covers a floor area of 9,500m² and a building area of 15,500m². It has fixed assets amounting RMB50 million. Besides, it has more than 180 sets of equipment, like machining centers, NC lathes and general machine tools. Also it has sophisticated technologies and testing equipment, like physical and chemical experiments for metal materials, mechanical performance experiments, ultrasonic thickness measurement, Brinell Rockwell & Vickers hardness tests, nondestructive flaw detection and multi-element alloy analyzers, plus plasma surfacing equipment, metal heat treatment furnaces, safety valve cold state full performance test centers, spring tension and compression testing and constant temperature treatment equipment, which are the most advanced in China, and heat treatment equipment being the most advanced both at home and abroad, like sealing surface and valve stem end high-frequency hardening. Featuring continual technical innovation and stable product performance, the company adheres to these important rules: high standard and strict control of product quality. Every working procedure of products follows standards and specifications in international quality systems strictly, and at Henghua, you can feel world sophisticated manufacturing technologies closely.

The company has always been adhering to surviving by quality and developing by technology. It provides you with rapid, efficient and professional services by means of its perfect service system, and has gathered professional technical elites to make up an R&D team at the leading level in the world to make the most of new technologies, processes and materials for sustainable development of new and high-quality products to meet market needs. So far the company has had 20 patents of utility model with independent intellectual property rights and 2 patents of invention. It exercises standard, norm-

alized and routinized management, has a sound, perfect and effectively-operation quality management system, has successively gained ISO9001 and ISO14001 and ISO18001 and TS Al certificates, and adopts international standard certificates of conformity and such qualification certificates as API. It's a professional manufacturer of safety valves integrating R&D, production and sale, and it designs and produces a complete range of specifications of safety valves as per the latest standards, like ANSI, API, DIN, JIS and GB. Main parts of its valves are made of WCB, LCB, WC6, WC9, ZGCr5Mo, ZG15Cr1Mo1V, CF8, CF8M, CF3, CF3M, F51, F53, 12CrMoV, ZG1Cr18Ni9Ti, ZG1Cr17Ni10Mo2Ti, Hastl.C., Hastl.B, 321, CK20, Monel alloy, etc.; with a nominal diameter range within Dn10~600 and 1/2"~24", nominal pressure range within 0.6~42.0Mpa and 150Lb~2500Lb and working temperature range within -196℃~570℃. Its products are widely applied in such industries as power stations, boilers, petroleum, chemical engineering, urban construction, medicine, chemical fertilizers, metallurgy and mining. They are exported to Korea, Japan, Russia, Mongolia, the USA, Turkey, Iran, India and other places in the Middle East and Southeast Asia, and some products are applied for key equipment in key projects of China as substitutes of imported ones.

The company now has more than 260 employees, including 195 production workers, over 30 salespersons, 2 senior engineers, 18 valve engineers, 15 assistant engineers and 63 engineering technicians. It has a powerful R&D team and two production lines with well-trained operation, strong technology, extensive experience and perfect quality inspection, contributing to an annual production capacity of 8,000 tons and a monthly capacity of more than 10,000 sets of safety valves. The whole staff of the company upholds this operational concept: "pursue eternity and build a Chinese brand", to apply new technologies, processes and materials continually to develop new and high-quality products aggressively. It gives you a quality guarantee with strict management and returns support and favor of users for Henghua Valve with its good reputation and the best service. Both old and new customers are welcome to our company for visits or instructions.





恒华阀门
HENGHUA VALVE



生产装备 | Production Equipment

完美的品质，取源于制造手段的先进
Perfect quality relies on advanced manufacturing equipment

我们拥有世界先进的生产装备，运用崭新的管理概念及强大的专业技术力量，生产出符合国际标准的高品质终极产品。品质体现我们的尊严，出类拔萃的品质拒绝平庸，千锤百炼，一丝不苟，标准化的管理和系统化的品质保证体系，让恒华品质在世界的每一个角落都畅通无阻。

We will produce high quality ultimate products that are in accordance with international standards by adopting world advanced production equipment, brand new management conception and powerful technical strength. Quality represents our dignity. The outstanding quality refuses commonness. Being meticulous and thoroughly tempered. The standardized management system and systematic quality assurance have led the products of Henghua Valve to get the reliance of customers from all over the world for their excellent quality. Through effective efforts with cooperators.

Testing Equipment | 检测设备

一流检测设备确保一流品质
First class inspection equipment ensures excellent quality

高品质的产品要求精心设计，精心制造，恒华公司拥有高素质专业技术队伍、精良的加工装备和检测中心，为用户提供高品质产品。

High quality product requires elaborate design, elaborate manufacture, Henghua company has high-quality professional team, excellent processing equipment and testing center, to provide users with high-quality products.

HENGHUA VALVE

为客户提供最优质的产品,是恒华人孜孜以求的最终目标
Providing most high quality products for customers is the ultimate goal
that is assiduously sought by Henghua personnel!

为我们拥有世界先进的生产设备,运用崭新的工业概念及强大的技术力量,
生产出符合国际标准的优质产品。
We will produce high quality ultimate products that are in accordance with international
standards by adopting world advanced production equipment, brand new industrial conception
and powerful technical strength.





为客户提供最优质的产品,是恒华人孜孜以求的最终目标
Providing most high quality products for customers is the ultimate goal That is assiduously
sought by Henghua personnel!

为我们拥有世界先进的生产设备, 运用崭新的工业概念及强大的技术力量,
生产出符合国际标准的高品质终极产品。
We will produce high quality ultimate products that are in accordance with international
standards by adopting world advanced production equipment, brand new industrial conception
and powerful technical strength.



为您提供从工艺设计到设备安装调试
所需的一切

Providing you with everything you need from technological design to equipment installation and commissioning

我们希望通过完善的设计、制造和售后服务确保每一个安装工程在有效使用期内充分发挥各项性能指标；我们拥有世界先进的生产装备，运用崭新的工业概念及强大的技术力量，生产出符合国际标准的高品质终极产品。

We will make sure that all projects installed can exert their performance in effective service by our perfect design, manufacturing and after-sales services. We will produce high quality ultimate products that are in accordance with international standards by adopting world advanced production equipment, brand new industrial concept and powerful technical strength.

Many Honours



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HENGHUA VALVE

Safety Valve

美标系列

Product Samples
产品实样

Innovative
Professional
Eternal
创新 专业 永恒



恒華閥門 HENGHUA VALVE

美标安全阀

HF 磅级系列安全阀简介

HF Pound-Grade series safety valve's introduction

● 性能特点:

整定压力偏差: $\leq \pm 3\%$
超过压力: $\leq \pm 10\%$
启闭压差: $\leq \pm 15\%$
密封性能: 符合API527标准规定的密封要求

Performance features:

Set pressure tolerance: $\leq \pm 3\%$
Over-pressure: $\leq \pm 10\%$
Blowdown: $\leq \pm 15\%$
Sealing performance: accord the sealing request of API 527 standard

● 结构特点:

1. 结构紧凑, 造型美观, 铸件多数采用精密铸造, 表面光洁。
2. 阀座和阀体采用分体式, 阀座易于加工, 密封面易研磨成镜面, 保证密封, 且便于装拆维修。
3. 设计合理的反冲盘与调节圈相匹配, 调整方便, 使安全阀开启迅速, 回座及时, 可得到理想的启闭压差。
4. 阀座和阀瓣均堆焊钴基硬质合金, 耐磨, 耐冲蚀, 密封有保证, 延长了使用寿命。
5. 背压平衡式安全阀采用军品波纹管制作, 能有效地消除背压对起跳压力的影响, 还能对有腐蚀性介质起严密的隔离作用, 防止介质腐蚀阀门内件和污染环境。
6. 弹簧作为关键零件均作两次24小时恒温处理, 确保其在工作状态中刚度稳定, 起跳动作正确。
7. 对阀体、阀座等受压件都作严格的耐压试验, 确保了使用时的安全、可靠。

Structure features:

1. As foundry goods have been founded precisely, it has tight structure, graceful appearance, smooth and cleaning surface.
2. The seat and the body have been adopted the subsection design, the seat is easy to process, the sealing face is rubbed into mirror face, which ensures sealing, and is convenient to dismantle, install and maintain.
3. The reasonable design of disc holder with the adjusting ring so that safety valves can be turned on quickly in the respect of adjust and obtain a perfect blow down difference.
4. Both the seat and body that are made of welding stellite are wear-resistant and erosive-resistant so as to ensure sealing and to prolong the life of use.
5. The back pressure balance safety valve which is made of bellows is effective to eliminate the back pressure influence on set pressure, and have tightly segregant function for erosive and posion materials in order to prevent medium from eroding inner parts of valves and polluting environment.
6. The spring as a key part is treated for 24 hours under the constant temperature twice so as to ensure the stable firmness at work and the proper skip.
7. The parts of the seat and the body have been tested press-resistance so as to ensure the safety and reliability at work.

● 安全阀型号编制方法

Method of compiling the types safety valve

类别 Valve types	进口法兰磅级 Flange Class	阀体材料 Material of Body	内件材料 (注) Material of Trim	阀帽型式 Cap Types
HFO: 普通式安全阀 Conventional A42C Type A44C Type A48C Type HFB: 波纹管平衡式安全阀 Balanced Bellows WA42C Type WA44C Type	编号 No.: 01: 150Lb 03: 300Lb 03a: 300Lb 06: 600Lb 09: 900Lb 15: 1500Lb 25: 2500Lb	C: WCB P: CF8 R: CF8M R3: CF3M CL: LCB/LC2 C6/C9: WC6/WC9 M: Monel H: Hastelloy N: SPECIL Material 特殊材料	P: 304 R: 316 R3: 316L M: Monel H: Hastelloy	A: 螺柱式 Screwed B: 带螺塞的螺柱式 Screwed with plug C: 杠杆式 Lifting Leved D: 封闭杠杆式 Close Lifting Leved E: 带螺塞的封闭杠杆式 Close Lifting Leved With plug G: 带螺塞的杠杆式 Lifting Leved With plug

注: 阀体材料碳钢内件材料304, 阀体材料内件材料相同可以省略内件代号。

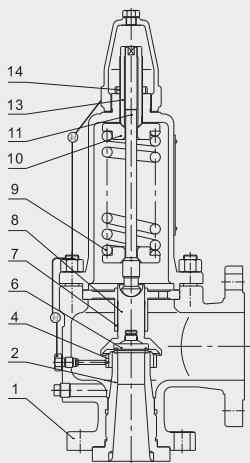
Remarks: Body material is WCB, internals material is 304, When the body material and the internals material is same, Code can be omitted.



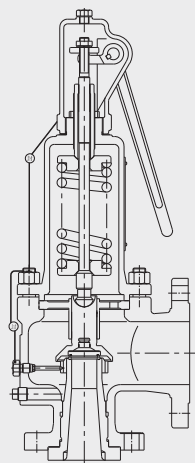
HF 磅级系列安全阀简介

HF Pound-Grade series safety valve's introduction

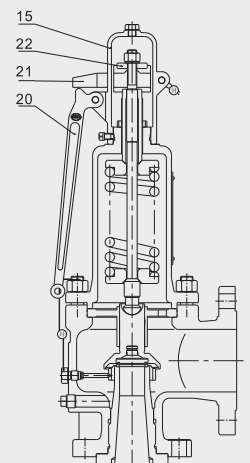
● 尺寸规格 Dimension & Specification



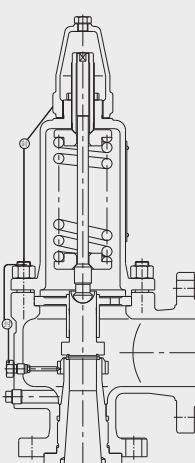
普通型 (TYPE)
HFO-XXXB (HFA42C)



普通型 (TYPE)
HFO-XXXE (HFA44C)



普通型 (TYPE)
HFO-XXXG (HFA48C)



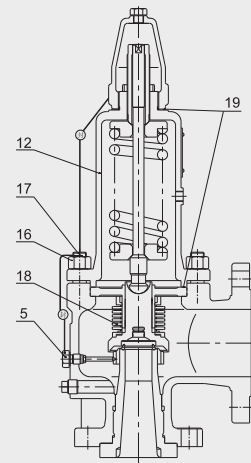
普通型 (TYPE)
HFL-XXXB (HFA41C)



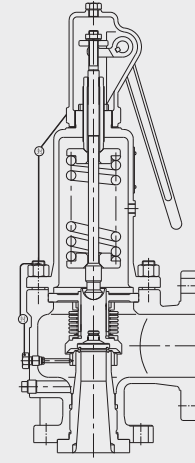
HF 磅级系列安全阀简介

HF Pound-Grade series safety valve's introduction

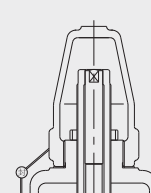
● 尺寸规格 Dimension & Specification



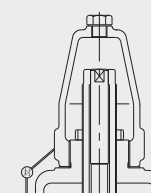
波纹管平衡型 (TYPE)
HFB-XXXB (HFWA42C)



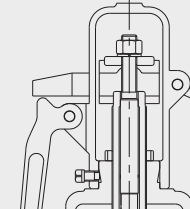
波纹管平衡型 (TYPE)
HFB-XXXE (HFWA44C)



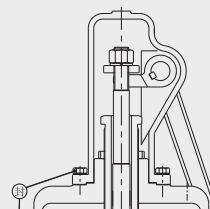
A: 螺纹式
Screwed Cap



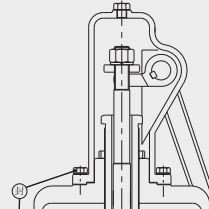
B: 带螺塞的螺纹式
Screwed Cap with Plug



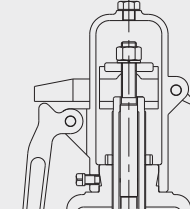
C: 杠杆式
Lifting Lever



D: 封闭杠杆式
Packed Lifting Lever



E: 带螺塞的封闭杠杆式
Packed Lifting Lever with Plug



G: 带螺塞的杠杆式
Lifting Lever with Plug



恒华阀门 HENGHUA VALVE

美标安全阀

HF 系列安全阀材料表

HF Series safety valve materials

序号 No.		阀门材料Valve Materials								
零件名称Part Name		C	P	R	R3	C6/C9	M	H		
1	阀体Body	WCB	CF8	CF8M	CF3M	WC6.WC9	Monel	Hastl.c		
2	阀座Nozzle	304	316	316	316L	316	Monel	Hastl.c		
3	阀塞Plug	碳钢C.St	420	420	420	420	420	420		
4	调节阀Nozzle Ring	CF8	CF8M	CF8M	CF3M	CF8	Monel	Hastl.c		
5	支头螺帽Set Screw	416	304	304	316	304	316L	316L		
6	阀瓣Disc	304	316	316	316L	17-4PH	Monel	Hastl.c		
7	导向套Guide	304	304	316	316L	304	Monel	Hastl.c		
8	反冲盘Disc Holder	304	304	316	316L	304	Monel	Hastl.c		
9	弹簧Spring	合金钢 Alloy.St	合金钢涂氟四 Alloy St Spread Teflon	合金钢涂氟四 Alloy St Spread Teflon	合金钢涂氟四 Alloy St Spread Teflon	合金钢 Alloy St	合金钢涂氟四 Alloy St Spread Teflon	合金钢涂氟四 Alloy St Spread Teflon		
10	弹簧座Spring Washer	碳钢C.St	420	420	420	420	420	420		
11	阀杆Stem	420	304	316	316	431	416	416		
12	阀盖Bonnet	WCB	CF8	CF8M	CF3M	WC6	CF8M	Hastl.c		
13	调整螺杆Adjusting Bolt	420	416	416	416	420	420	420		
14	铜套螺母Adj Bolt Nut	碳钢C.St	420	420	420	420	420	420		
15	保护罩Cap	碳钢C.St	CF8	CF8M	CF3M	碳钢C.St	CF8M	Hastl.c		
16	螺母Nut	钢Steel	304	304	304	钢Steel	304	304		
17	螺栓Bolt	钢Steel	304	304	304	钢Steel	304	304		
18	波纹管Bellows	304	316	316	316L	316L	316L	316L		
19	垫片Gaskets	石棉板Asbestos	氟四Teflon	氟四Teflon	氟四Teflon	V1500	V1500	V1500		
20	扳手Lifting Level	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St		
21	横杆Rail	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St		
22	提升螺母Upgrade Nut	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St	碳钢C.St		
材料对照Material Contrast										
304	316	316L	416	420	CF8	CF8M	CF3M	17-4PH		
0Cr19Ni9	0Cr17Ni12Mo2	00Cr17Ni14Mo2	Y1Cr13	2Cr13	ZG0Cr19Ni9	ZG0Cr17Ni12Mo2	ZG00Cr17Ni14Mo2	0Cr17Ni14Cu4		



恒华阀门 HENGHUA VALVE

美标安全阀

HF 系列安全阀标准参数

HF Series safety valves standard parameter

D

口径、压力——温度界限

Size、Pressure——Temperature Limits

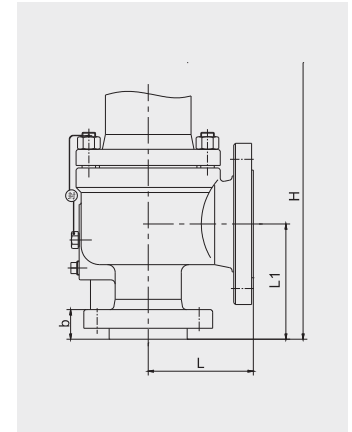
● 流通面积/喉径 Orifice Area/Diameter 0.710cm²/9.5mm

型号 Type	口径(英寸) Size(inch)	ANSI 法兰等级 Flange Class	最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃ (MPa)			材质Material	
			进口温度(℃) Inlet Temperature						阀体 Body	弹簧 Spring
			Inlet × Orifice × Outlet	进口 Inlet	出口 Outlet	-29℃ ~ 38℃	38℃ ~ 232℃	232℃ ~ 427℃		
HFO (HFA42C HFA44C HFA48C)	01 (150)	1D2	150	150		1.96	1.27	0.55	1.96	1.58
	03 (300)	1D2	300	150		1.96	1.96	1.96	1.96	1.58
	03a(300a)	1D2	300	150		5.10	4.24	2.82	1.96	1.58
HFB (HFWA42C HFWA44C)	06 (600)	1D2	600	150		10.20	8.51	5.68	1.96	1.58
	09 (900)	11/2D2	900	300		15.30	12.72	8.51	4.13	3.45
	15(1500)	11/2D2	1500	300		25.54	21.23	14.20	4.13	3.45
	25(2500)	11/2D3	2500	300		41.37	35.40	23.65	5.10	3.45

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
					L	L ₁	A	
HFO (HFA42C HFA44C HFA48C)	01(150)	115	105	40	350	380	380	15
	03(300)	115	105	40	350	380	380	15
	03a(300a)	115	105	40	350	380	380	16
	06(600)	115	105	40	350	380	380	16
HFB (HFWA42C HFWA44C)	09(900)	140	105	51	460	480	500	28
	15(1500)	140	105	51	460	480	500	30
	25(2500)	178	140	64	490	520	540	32





HF 系列安全阀标准参数

HF Series safety valves standard parameter

E 口径、压力——温度界限 Size、Pressure——Temperature Limits

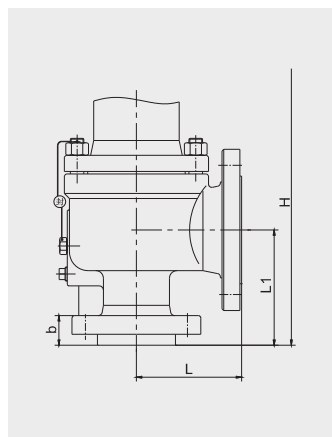
● 流通面积/喉径 Orifice Area/Diameter 1.265cm²/12.7mm

型号 Type	口径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit 38℃ (MPa)		材质 Material	
	进口 x 出口		进口 x 出口		进口温度(℃) Inlet Temperature			进口温度(℃) Inlet Temperature		阀体 Body	弹簧 Spring
	Inlet x Orifice	Outlet	Inlet	Outlet	-29℃ ~ 38℃	38℃ ~ 232℃	232℃ ~ 427℃	HFO (HFA42C)	HFB (HFWA42C)		
HFO (HFA42C HFA44C HFA48C)	01 (150)	1E2	150	150	1.96	1.27	0.55	1.96	1.58	碳钢 C.St	合金钢 Alloy St.
	03 (300)	1E2	300	150	1.96	1.96	1.96	1.96	1.58		
	03a(300a)	1E2	300	150	5.10	4.24	2.82	1.96	1.58		
	06 (600)	1E2	600	150	10.20	8.51	5.68	1.96	1.58		
HFB (HFWA42C HFWA44C)	09 (900)	11/2E2	900	300	15.30	12.72	8.51	4.13	3.45	不锈钢 St.St.	合金钢 涂四氟 Alloy St. Spread Teflon
	15(1500)	11/2E2	1500	300	25.54	21.23	14.20	4.13	3.45		
	25(2500)	11/2E3	2500	300	41.37	35.40	23.65	5.10	3.45		

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
					L	L ₁	b	
HFO (HFA42C HFA44C HFA48C)	01(150)	115	105	40	350	380	380	15
	03(300)	115	105	40	350	380	380	15
	03a(300a)	115	105	40	350	380	380	16
	06(600)	115	105	40	350	380	380	16
HFB (HFWA42C HFWA44C)	09(900)	140	105	51	460	480	500	28
	15(1500)	140	105	51	460	480	500	30
	25(2500)	178	140	64	490	520	540	32



HF 系列安全阀标准参数

HF Series safety valves standard parameter

F 口径、压力——温度界限 Size、Pressure——Temperature Limits

● 流通面积/喉径 Orifice Area/Diameter 1.981cm²/16mm

型号 Type	口径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit 38℃ (MPa)		材质 Material	
	进口 x 出口		进口 x 出口		进口温度(℃) Inlet Temperature			进口温度(℃) Inlet Temperature		阀体 Body	弹簧 Spring
	Inlet x Orifice	Outlet	Inlet	Outlet	-29℃ ~ 38℃	38℃ ~ 232℃	232℃ ~ 427℃	HFO (HFA42C)	HFB (HFWA42C)		
HFO (HFA42C HFA44C HFA48C)	01 (150)	1 1/2F2	150	150	1.96	1.27	0.55	1.96	1.58	碳钢 C.St	合金钢 Alloy St.
	03 (300)	1 1/2F2	300	150	1.96	1.96	1.96	1.96	1.58		
	03a(300a)	1 1/2F2	300	150	5.10	4.24	2.82	1.96	1.58		
	06 (600)	1 1/2F2	600	150	10.20	8.51	5.68	1.96	1.58		
HFB (HFWA42C HFWA44C)	09 (900)	1 1/2F3	900	300	15.30	12.72	8.51	5.10	3.45	不锈钢 St.St.	合金钢 涂四氟 Alloy St. Spread Teflon
	15(1500)	1 1/2F3	1500	300	25.54	21.23	14.20	5.10	3.45		
	25(2500)	1 1/2F3	2500	300	34.47	34.47	23.65	5.10	3.45		
	09*(900*)	11/2F2 1/2*	900	300	15.30	12.72	8.51	5.10	3.45		
	15*(1500*)	11/2F2 1/2*	1500	300	25.54	21.23	14.20	5.10	3.45		

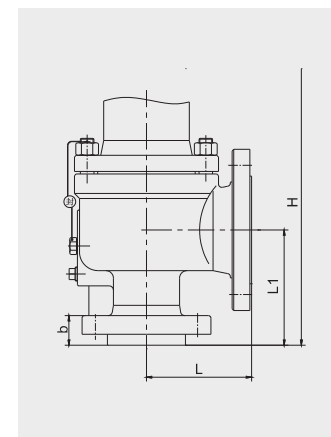
注：*是1995年6月API Std 526 第四版之前的规格

Note: * is specifications before API Standard 526 Fourth Edition, June 1995

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰 厚度 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
					L	L ₁	A	
HFO (HFA42C HFA44C HFA48C)	01(150)	121	124	44	350	380	380	22
	03(300)	121	124	44	350	380	380	22
	03a(300a)	152	124	44	350	380	380	24
	06(600)	152	124	44	350	380	380	28
HFB (HFWA42C HFWA44C)	09(900)	165	124	51	460	480	500	32
	15(1500)	165	124	51	460	480	500	34
	25(2500)	178	140	64	490	480	500	38
	09*(900*)	152	124	51	470	500	520	32
	15*(1500*)	152	124	51	420	500	520	34





HF 系列安全阀标准参数

HF Series safety valves standard parameter

G

口径、压力——温度界限 Size、Pressure——Temperature Limits

● 流通面积/喉径 Orifice Area/Diameter 3.245cm²/20.3mm

型号 Type	口径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃ (MPa)		材质Material	
	进口 × 流道代号 × 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
	Inlet × Orifice × Outlet	Inlet Inlet	出口 Outlet		-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)		
HFO (HFA42C HFA44C HFA48C)	01 (150)	11/2G3	150	150	1.96	1.27	0.55	1.96	1.58	碳钢 C.St	合金钢 Alloy St.
	03 (300)	11/2G3	300	150	1.96	1.96	1.96	1.96	1.58		
	03a(300a)	11/2G3	300	150	5.10	4.24	2.82	1.96	1.58		
	06 (600)	11/2G3	600	150	10.20	8.51	5.68	1.96	1.58		
	09 (900)	11/2G3	900	300	15.30	12.72	8.51	5.10	3.24		
HFB (HFWA42C HFWA44C)	15(1500)	2G3	1500	300	25.54	21.23	14.20	5.10	3.24	不锈钢 St.St.	合金钢 涂四氟 Alloy St. Spread Teflon
	25(2500)	2G3	2500	300	25.54	25.54	23.65	5.10	3.24		
	01*(150*)	11/2G21/2*	150	150	1.96	1.27	0.55	1.96	1.58		
	03*(300*)	11/2G21/2*	300	150	1.96	1.96	1.96	1.96	1.58		
	03a(300a*)	11/2G21/2*	300	150	5.10	4.24	2.82	1.96	1.58		
	06*(600*)	11/2G21/2*	600	150	10.20	8.51	5.68	1.96	1.58		
	09(900)	11/2G21/2*	900	300	15.30	12.72	8.51	5.10	3.24		

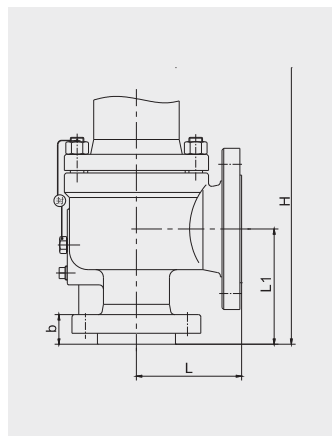
注：*是1995年6月API Std 526 第四版之前的规格

Note: * is specifications before API Standard 526 Fourth Edition, June 1995

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰 厚度 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
					L	L ₁	b	
HFO (HFA42C HFA44C HFA48C)	01(150)	121	124	44	460	480	500	24
	03(300)	121	124	44	460	480	500	24
	03a(300a)	152	124	44	460	480	500	30
	06(600)	152	124	44	460	480	500	30
	09(900)	165	124	51	460	480	500	34
HFB (HFWA42C HFWA44C)	15(1500)	171	156	70	710	740	755	58
	25(2500)	171	156	70	710	740	755	62
	01*(150*)	121	124	44	470	490	520	28
	03*(300*)	121	124	44	470	490	520	28
	03a*(300a*)	152	124	44	470	490	520	30
	06*(600*)	152	124	44	480	500	530	34
	09*(900*)	152	124	51	480	500	530	34



HF 系列安全阀标准参数

HF Series safety valves standard parameter

H

口径、压力——温度界限 Size、Pressure——Temperature Limits

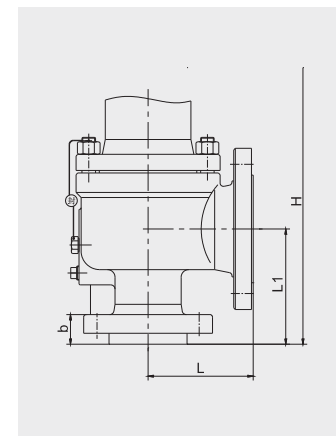
● 流通面积/喉径 Orifice Area/Diameter 5.065cm²/25.4mm

型号 Type	口径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃ (MPa)		材质Material	
	进口 × 流道代号 × 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
	Inlet × Orifice × Outlet	Inlet Inlet	出口 Outlet		-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)		
HFO (HFA42C HFA44C HFA48C)	01 (150)	1 1/2H3	150	150	1.96	1.27	0.55	1.96	1.58	碳钢 C.St	合金钢 Alloy St.
	03 (300)	1 1/2H3	300	150	1.96	1.96	1.96	1.96	1.58		
	03a(300a)	2H3	300	150	5.10	4.24	2.82	1.96	1.58		
HFB (HFWA42C HFWA44C)	06 (600)	2H3	600	150	10.20	8.51	5.68	1.96	1.58	不锈钢 St.St.	合金钢 涂四氟 Alloy St. Spread Teflon
	09 (900)	2H3	900	150	15.30	12.72	8.51	1.96	1.58		
	15(1500)	2H3	1500	300	18.96	18.96	14.20	5.10	2.86		

● 尺寸 Dimensions

mm

型号 Type	面心距 Center to Face			法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
	出口 Outlet	进口 Inlet	阀帽型式 Cap Type					
	L	L ₁	b	A	C	D		
	01(150)	124	130	43	420	430	450	25
HFO (HFA42C HFA44C HFA48C)	03(300)	124	130	43	420	430	450	25
	03a(300a)	124	130	46	510	520	580	30
HFB (HFWA42C HFWA44C)	06(600)	162	154	46	510	520	580	34
	09(900)	162	154	59	540	560	580	46
	15(1500)	162	154	59	540	560	580	50





恒华阀门 HENGHUA VALVE

美标安全阀

HF 系列安全阀标准参数

HF Series safety valves standard parameter

J 通径、压力——温度界限 Size、Pressure——Temperature Limits

● 流道面积/喉径 Orifice Area/Diameter 8.303cm²/32.5mm

型号 Type	通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃ (MPa)		材质Material	
	进口 x 流道代号 x 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
	Inlet x Orif- ice x Outlet	进口 Inlet	出口 Outlet	-29℃ ~ 38℃	38℃ ~ 232℃	232℃ ~ 427℃	HFO (HFA42C)	HFB (HFWA42C)			
HFO (HFA42C HFA44C HFA48C)	01 (150)	2J3	150	150	1.96	1.27	0.55	1.96	1.58	碳钢 C.St	合金钢 Alloy St.
	03 (300)	2J3	300	150	1.96	1.96	1.96	1.96	1.58		
	03a(300a)	3J4	300	150	5.10	4.24	2.82	1.96	1.58		
	06 (600)	3J4	600	150	10.20	8.51	5.68	1.96	1.58		
HFB (HFWA42C HFWA44C)	15(1500)	3J4	1500	300	18.61	18.61	14.20	4.13	1.58	不锈钢 St.St.	合金钢 涂四氟 Alloy St Spread Teflon
	03*(300*)	2 1/2J4*	300	150	5.10	4.24	2.82	1.96	1.58		
	06*(600*)	2 1/2J4*	600	150	10.20	8.51	5.68	1.96	1.58		

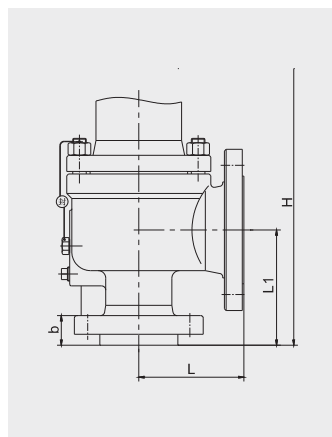
注：*是1995年6月API Std 526 第四版之前的规格

Note: * is specifications before API Standard 526 Fourth Edition, June 1995

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
					L	L ₁	b	
HFO (HFA42C HFA44C HFA48C)	01(150)	124	136	43	460	480	500	30
	03(300)	124	136	43	460	480	500	30
	03a(300a)	181	184	55	510	520	580	42
	06(600)	181	184	57	650	680	695	56
HFB (HFWA42C HFWA44C)	09(900)	181	184	68	650	680	695	68
	15(1500)	181	184	68	650	680	695	70
	03a*(300a*)	143	136	52	510	520	580	48
	06*(600*)	171	156	54	710	740	755	62



恒华阀门 HENGHUA VALVE

美标安全阀

HF 系列安全阀标准参数

HF Series safety valves standard parameter

K 通径、压力——温度界限 Size、Pressure——Temperature Limits

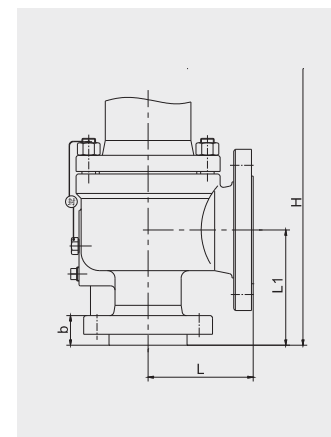
● 流道面积/喉径 Orifice Area/Diameter 11.858cm²/38.9mm

型号 Type		通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃ (MPa)		材质Material	
		进口 x 流道代号 x 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
		Inlet x Orif- ice x Outlet	进口 Inlet	出口 Outlet	-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)			
HFO (HFA42C HFA44C HFA48C)	01 (150)	3K4	150	150	1.96	1.27	0.55	1.96	1.03	碳钢 C.St	合金钢 Alloy St.	
	03 (300)	3K4	300	150	1.96	1.96	1.96	1.96	1.03			
	03a(300a)	3K4	300	150	5.10	4.24	2.82	1.96	1.03			
HFB (HFWA42C HFWA44C)	06 (600)	3K4	600	150	10.20	8.51	5.68	1.96	1.38	不锈钢 St.St.	合金钢 涂四氟 Alloy St. Spread Teflon	
	09 (900)	3K6	900	150	15.30	12.72	8.51	1.96	1.38			
	15(1500)	3K6	1500	300	15.30	15.30	14.20	4.13	1.38			

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
					L	L ₁	b	
HFO (HFA42C HFA44C HFA48C)	01(150)	162	156	54	510	520	580	42
	03(300)	162	156	54	510	520	580	42
	03a(300a)	162	156	54	510	520	580	42
HFB (HFWA42C HFWA44C)	06(600)	181	184	54	650	680	695	88
	09(900)	216	198	68	685	710	725	89
	15(1500)	216	197	68	685	710	725	90





HF 系列安全阀标准参数

HF Series safety valves standard parameter

L 口径、压力——温度界限 Size、Pressure——Temperature Limits

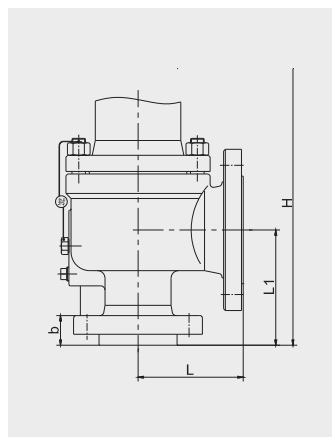
● 流通面积/喉径 Orifice Area/Diameter 18.406cm²/48.5mm

型号 Type		通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃(MPa)		材质Material	
		进口 x 流道代号 x 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
		Inlet x Orifice x Outlet	进口 Inlet	出口 Outlet	-29℃ ~ 38℃	38℃ ~ 232℃	232℃ ~ 427℃	HFO (HFA42C)	HFB (HFWA42C)			
HFO (HFA42C HFA44C HFA48C)	01 (150)	3L4	150	150	1.96	1.27	0.55	1.96	0.69	碳钢 C.St	合金钢 Alloy St	
	03 (300)	3L4	300	150	1.96	1.96	1.96	1.96	0.69			
	03a(300a)	4L6	300	150	5.10	4.24	2.82	1.96	1.17			
HFB (HFWA42C HFWA44C)	06 (600)	4L6	600	150	6.89	6.89	5.68	1.96	1.17	不锈钢 St.St.	合金钢 涂四氟 Alloy St Spread Teflon	
	09 (900)	4L6	900	150	10.34	10.34	8.51	1.96	1.17			
	15(1500)	4L6	1500	150	-	10.34	10.34	1.96	1.17			

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
					L	L ₁	b	
HFO (HFA42C HFA44C HFA48C)	01(150)	165	156	51	510	520	580	48
	03(300)	165	156	51	510	520	580	48
	03a(300a)	181	179	54	650	680	695	56
HFB (HFWA42C HFWA44C)	06(600)	203	179	60	650	680	695	110
	09(900)	222	197	75	670	700	715	124
	15(1500)	222	197	75	670	700	715	130



HF 系列安全阀标准参数

HF Series safety valves standard parameter

M 口径、压力——温度界限 Size、Pressure——Temperature Limits

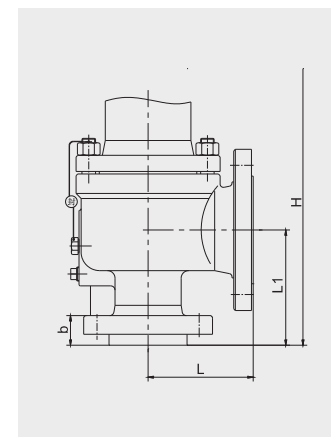
● 流通面积/喉径 Orifice Area/Diameter 23.22cm²/54.5mm

型号 Type		通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit 38℃ (MPa)		材质Material	
		进口 x 流道代号 x 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
		Inlet x Orif- ice x Outlet	进口 Inlet	出口 Outlet	-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)			
HFO (HFA42C HFA44C HFA48C)	01 (150)	4M6	150	150	1.96	1.27	0.55	1.96	0.55	碳钢 C.St	合金钢 Alloy St	
	03 (300)	4M6	300	150	1.96	1.96	1.96	1.96	0.55			
	03a(300a)	4M6	300	150	5.10	4.24	2.82	1.96	1.10		合金钢 涂四氟 Alloy St	
HFB (HFWA42C HFWA44C)	06 (600)	4M6	600	150	7.58	7.58	5.68	1.96	1.10	不锈钢 St.St.	Spread Teflon	
	09 (900)	4M6	900	150	--	7.58	7.58	1.96	1.10			

● 尺寸 Dimensions

mm

型号 Type	面心距 Center to Face			法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
	出口 Outlet		进口 Inlet		阀帽型式 Cap Type			
	L	L ₁		b	A	C	D	
	01(150)	184	178	54	755	790	805	90
HFO (HFA42C HFA44C HFA48C)	03(300)	184	178	54	755	790	805	92
	03a(300a)	184	178	54	755	790	805	106
HFB (HFWA42C HFWA44C)	06(600)	203	178	62	755	790	805	116
	09(900)	222	197	65	755	790	805	170





HF 系列安全阀标准参数

HF Series safety valves standard parameter

N

通畅、压力——温度界限

Size、Pressure——Temperature Limits

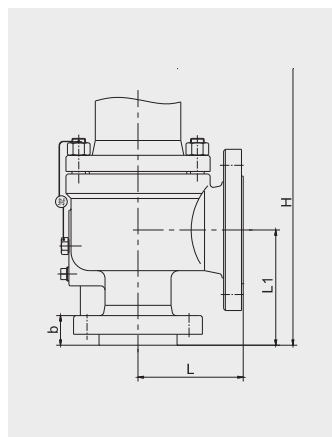
● 流通面积/喉径 Orifice Area/Diameter 28.00cm²/59.7mm

型号 Type		通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃ (MPa)		材质Material	
		进口 x 流道代号 x 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
		Inlet x Orifice x Outlet		进口 Inlet	出口 Outlet	-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)		
HFO (HFA42C HFA44C HFA48C)	01 (150)	4N6	150	150	1.96	1.27	0.55	1.96	0.55	碳钢 C.St	合金钢 Alloy St	
	03 (300)	4N6	300	150	1.96	1.96	1.96	1.96	0.55			
	03a(300a)	4N6	300	150	5.10	4.24	2.82	1.96	1.10			
HFB (HFWA42C HFWA44C)	06(600)	4N6	600	150	6.89	6.89	5.68	1.96	1.10	不锈钢 St.St.	合金钢 涂四氟 Alloy St Spread Teflon	
	09(900)	4N6	900	150	-	6.89	6.89	1.96	1.10			

● 尺寸 Dimensions

mm

型号 Type	面心距 Center to Face			法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
	出口 Outlet	进口 Inlet	阀帽型式 Cap Type					
	L	L ₁	b		A	C	D	
HFO (HFA42C HFA44C HFA48C)	01(150)	210	197	54	755	810	825	96
	03(300)	210	197	54	755	810	825	98
	03a(300a)	210	197	54	755	810	825	105
HFB (HFWA42C HFWA44C)	06(600)	222	197	60	755	810	825	140
	09(900)	222	197	60	755	810	825	180



HF 系列安全阀标准参数

HF Series safety valves standard parameter

P

通畅、压力——温度界限

Size、Pressure——Temperature Limits

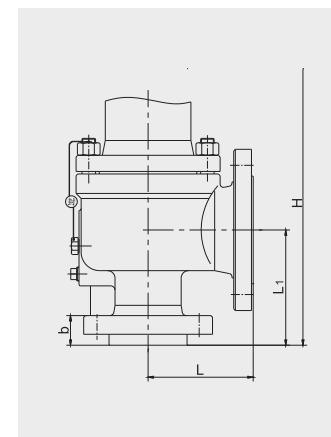
● 流通面积/喉径 Orifice Area/Diameter 41.161cm²/72.4mm

型号 Type		通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃(MPa)		材质Material	
		进口 x 流道代号 x 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
		Inlet x Orif- ice x Outlet		进口 Inlet	出口 Outlet	-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)		
HFO (HFA42C HFA44C HFA48C)	01 (150)	4P6	150	150	1.96	1.27	0.55	1.96	0.55	碳钢 C.St	合金钢 Alloy St.	
	03 (300)	4P6	300	150	1.96	1.96	1.96	1.96	0.55			
	03a(300a)	4P6	300	150	3.62	3.62	2.82	1.96	1.03		合金钢 涂四氟 Alloy St. Spread Teflon	
HFB (HFWA42C HFWA44C)	06 (600)	4P6	600	150	6.89	6.89	5.68	1.96	1.03	不锈钢 St.St.		
	09 (900)	4P6	900	150	-	6.89	6.89	1.96	1.03			

● 尺寸 Dimensions

mm

型号 Type	面心距 Center to Face			法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
	出口 Outlet 进口 Inlet		阀帽型式 Cap Type					
	L	L ₁	b		A	C	D	
HFO (HFA42C HFA44C HFA48C)	01(150)	229	181	54	800	835	850	115
	03(300)	229	181	54	800	835	850	115
	03a(300a)	254	225	54	825	915	935	140
HFB (HFWA42C HFWA44C)	06(600)	254	225	65	825	915	935	190
	09(900)	254	225	65	825	915	935	220





HF 系列安全阀标准参数

HF Series safety valves standard parameter

Q

口径、压力——温度界限 Size、Pressure——Temperature Limits

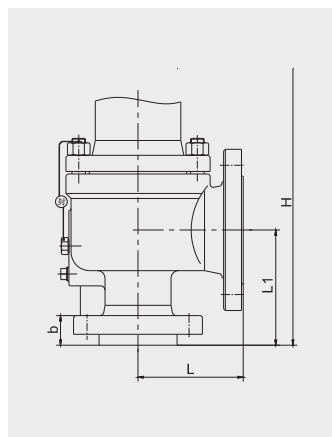
● 流通面积/喉径 Orifice Area/Diameter 71.290cm²/95.3mm

型号 Type	通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃(MPa)		材质Material	
	进口 x 流道代号 x 出口	进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring			
	Inlet x Orif- ice x Outlet	进口 Inlet	出口 Outlet	-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃			HFO (HFA42C)	HFB (HFWA42C)	
	01 (150)	6Q8	150	150	1.13	1.13	0.55	0.79	0.48	碳钢 C.St	合金钢 Alloy St.
HFO (HFA42C HFA44C HFA48C)	03 (300)	6Q8	300	150	1.13	1.13	1.13	0.79	0.48		合金钢 涂四氟 Alloy St. Spread Teflon
HFB (HFWA42C HFWA44C)	03a(300a)	6Q8	300	150	2.06	2.06	2.06	0.79	0.79	不锈钢 St.St.	
	06 (600)	6Q8	600	150	4.13	4.13	4.13	0.79	0.79		

● 尺寸 Dimensions

mm

型号 Type		面心距 Center to Face		法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
		L	L ₁		b	A	C	
HFO (HFA42C HFA44C HFA48C)	01(150)	241	240	59	980	1020	1035	180
	03(300)	241	240	59	980	1020	1035	185
HFB (HFWA42C HFWA44C)	03a(300a)	241	240	59	980	1020	1035	205
	06(600)	241	240	75	980	1020	1035	220



HF 系列安全阀标准参数

HF Series safety valves standard parameter

R

口径、压力——温度界限 Size、Pressure——Temperature Limits

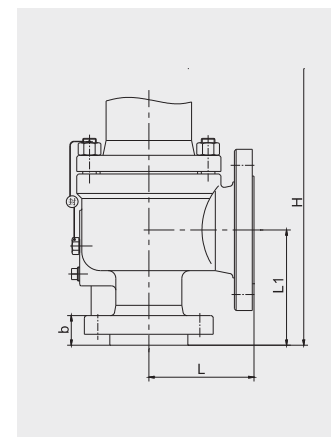
● 流通面积/喉径 Orifice Area/Diameter 103.22cm²/114.6mm

型号 Type		通径(英寸) Size(inch)		ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃ (MPa)		材质Material	
		进口 x 流道代号 x 出口				进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
		Inlet x Orifice x Outlet	进口 Inlet	出口 Outlet	-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)			
HFO (HFA42C HFA44C HFA48C)	01 (150)	6R8	150	150	0.68	0.68	0.55	0.41	0.41	碳钢 C.St	合金钢 Alloy St.	
	03 (300)	6R8	300	150	0.68	0.68	0.68	0.41	0.41		碳钢 C.St	
HFB (HFWA42C HFWA44C)	03a(300a)	6R10	300	150	1.58	1.58	1.58	0.68	0.68	不锈钢 St.St.	合金钢 涂四氟 Alloy St. Spread Teflon	
	06 (600)	6R10	600	150	2.06	2.06	2.06	0.68	0.68			

● 尺寸 Dimensions

mm

型号 Type	面心距 Center to Face			法兰 厚度 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
	出口 Outlet	进口 Inlet	阀帽型式 Cap Type					
	L	L ₁	A		C	D		
HFO (HFA42C HFA44C HFA48C)	01(150)	241	240	59	980	1020	1035	205
	03(300)	241	240	59	980	1020	1035	220
HFB (HFWA42C HFWA44C)	03a(300a)	267	240	59	1020	1060	1075	260
	06(600)	267	240	70	1020	1060	1075	300





HF 系列安全阀标准参数

HF Series safety valves standard parameter

T 口径、压力——温度界限 Size、Pressure——Temperature Limits

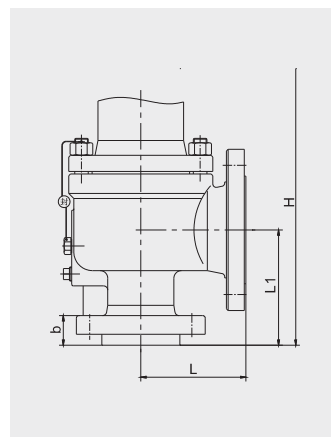
● 流通面积/喉径 Orifice Area/Diameter 167.742cm²/146mm

型号 Type		通径(英寸) Size(inch)	ANSI 法兰等级 Flange Class		最高整定压力(MPa) Maximum Set Pressure			38℃ 最高背压 Back pressure limit38℃(MPa)		材质Material	
		进口 x 流道代号 x 出口			进口温度(℃) Inlet Temperature					阀体 Body	弹簧 Spring
		Inlet x Orif- ice x Outlet	进口 Inlet	出口 Outlet	-29℃~ 38℃	38℃~ 232℃	232℃~ 427℃	HFO (HFA42C)	HFB (HFWA42C)		
HFO (HFA42C HFA44C HFA48C)	01(150)	8T10	150	150	0.44	0.44	0.44	0.20	0.20	碳钢 C.St	合金钢 Alloy St
	03(300)	8T10	300	150	0.44	0.44	0.44	0.20	0.20		合金钢 涂四氟 Alloy St Spread Teflon
HFB (HFWA42C HFWA44C)	03a(300a)	8T10	300	150	0.82	0.82	0.82	0.41	0.41	不锈钢 St.St.	
	03b(300b)	8T10	300	150	2.06	2.06	2.06	0.68	0.68		

● 尺寸 Dimensions

mm

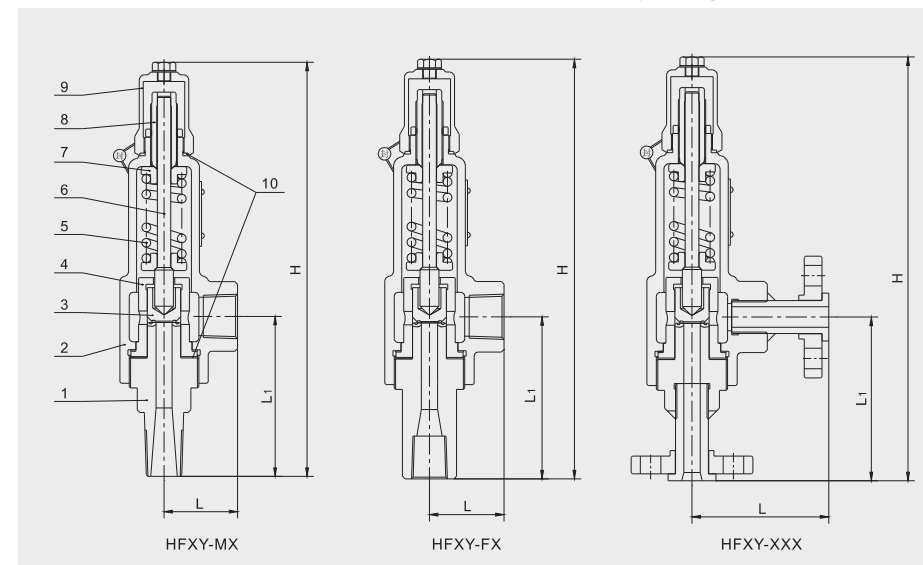
型号 Type		面心距 Center to Face		法兰 阀座总厚 Total Thickness of Flange and Nozzle	近似高度 Approximate Height H			近似重量 Approximate Weight Cap Type B (Kg)
		出口 Outlet	进口 Inlet		阀帽型式 Cap Type			
		L	L ₁		A	C	D	
HFO (HFA42C HFA44C HFA48C)	01(150)	279	276	65	1040	1080	1095	380
	03(300)	279	276	65	1040	1080	1095	400
HFB (HFWA42C HFWA44C)	03a(300a)	279	276	65	1040	1080	1095	460
	03b(300b)	279	276	65	1040	1080	1095	480



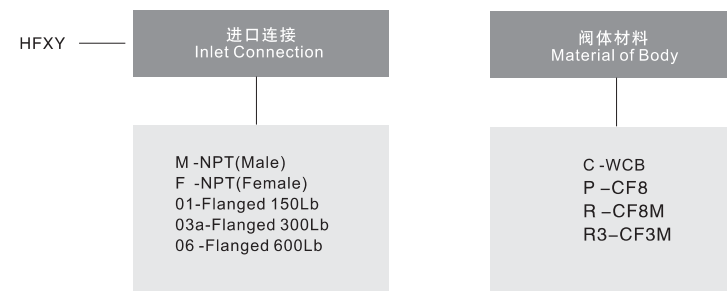
HFX系列螺纹、松套法兰式泄压阀

HFX Series screw, loose knot type flanged pressure relief valve

● HFX系列螺纹、松套法兰式泄压阀 HFX Series screw, loose knot type flanged pressure relief valve



● 型号编制方法 Method of compiling the types



注：进口连接为外螺纹，阀体材料为WCB的泄压阀，其型号代码为：HFX-MC
Example: A pressure relief valve, which the inlet connection is made screwed, the material of body is WCB, is named HFX-MC.



HFX系列螺纹、松套法兰式泄压阀

HFX Series screw, loose knot type flanged pressure relief valve

● 材料 Materials

序号 Ref.No	零件名称 Part Name	阀体材料 Valve Materials			
		C	P	R	R3
1	阀座 Nozzle	304	304	316	316L
2	阀体 Body	WCB	CF8	CF8M	CF3M
3	阀瓣 Disc	304	304	316	316L
4	导向套 Guide	304	304	316	316L
5	弹簧 Spring	304	304	316	316
6	阀杆 Stem	420	304	316	316L
7	弹簧座 Spring Washer	420	420	420	420
8	调整螺钉 Adjusting Bolt	420	420	420	420
9	阀帽 Cap	WCB	CF8	CF8M	CF8M
10	垫片 Gaskets	石棉板 Asbestors	PTFE	PTFE	PTFE

● 螺纹连接 Screwed Connections

流道面积 Orifice Area (cm ²)	型号 Type	口径(英寸) Size(inch) 进口 × 出口 Inlet × Outlet	连接 Connections (NPT)		最高整定压力 Maximum Set Pressure (MPa)		尺寸 Dimensions (mm)			近似重量 Approx. Weight (Kg)
			进口 Inlet	出口 Outlet	-29℃~ 232℃	232℃~ 427℃	L	L ₁	H	
0.28(B)	HFX-MX	1/4B1/4	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
	HFX-MX	1/2B1/2	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
0.50(C)	HFX-MX	1/2C1/2	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
	HFX-MX	3/4C3/4	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
	HFX-MX	1/2C1	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
	HFX-MX	3/4C1	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
	HFX-MX	1C1	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
	HFX-MX	3/4D3/4	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
0.71(D)	HFX-MX	3/4D1	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	
	HFX-MX	1D1	外螺纹	F(内螺纹)	8.51	5.68	55	80	280	4
	HFX-FX		内螺纹				55	70	270	

注：L和L₁可按用户要求定制。
Remark: L and L₁ may be made according to user's requests.



HFX系列螺纹、松套法兰式泄压阀

HFX Series screw, loose knot type flanged pressure relief valve

● 法兰连接 Flanged Connections

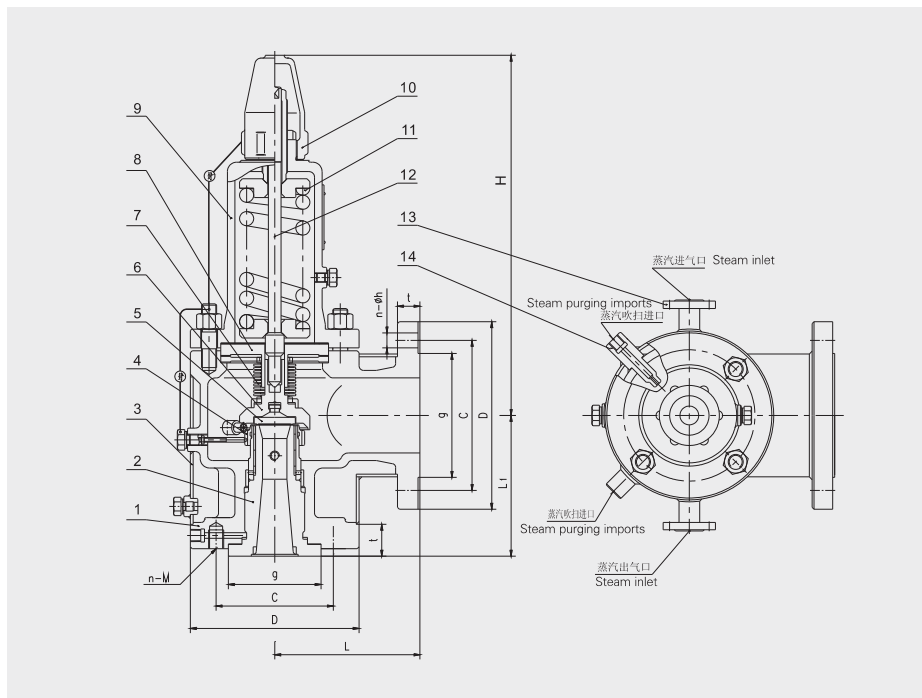
流道面积 Orifice Area (cm ²)	型号 Type	口径(英寸) Size(inch) 进口 × 出口 Inlet × Outlet	连接 Connections (NPT)		最高整定压力 Maximum Set Pressure (MPa)		尺寸 Dimensions (mm)			近似重量 Approx. Weight (Kg)
			进口 Inlet	出口 Outlet	-29℃~ 232℃	232℃~ 427℃	L	L ₁	H	
0.28(B)	HFX-01X	1/4B1/4	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	1/2B1/2	150Lb		1.27	0.55	100	118	300	6
0.50(C)	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	1/2C1/2	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	3/4C3/4	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	1/2C1	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	3/4C1	150Lb		1.27	0.55	100	118	300	6
0.71(D)	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	1C1	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	3/4D3/4	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	1/2D1	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				
	HFX-01X	3/4D1	150Lb		1.27	0.55	100	118	300	6
	HFX-03aX		300Lb	150Lb	4.24	2.82				
	HFX-06X		600Lb		8.51	5.68				

注：L和L₁可按用户要求定制。
Remark: L and L₁ may be made according to user's requests.



HFNJ系列保温夹套安全阀（相当于HFBWA42型）

HFNJ Series safety valve with jacket



● 用途及特点

- 1、用作聚酯、乙烯、沥青及尿素化肥等装置中介质需要保温的压力安全泄压阀。
- 2、对进、出口法兰在内的阀体均进行保温，因而保温效果好；特殊需要时可以增加蒸汽冲洗功能。
- 3、平衡波纹管式结构，变动背压力不影响安全阀的整定压力，且波纹管对弹簧等阀盖内的零件起到保护介质侵蚀作用。
- 4、内件（阀瓣、阀座）标准材料均为奥氏体不锈钢，密封面堆焊Stellite硬质合金。
- 5、特殊需要时内件可提供尿素级316L、双相不锈钢0Cr25Ni6Mo3CuN、00Cr25Ni6Mo2N及超级双相不锈钢F51（NUS S31803）、F53（UNS S32750）、F55（UNS S32760）。

Application &Features

1. It's serviced in the circumslancc where the heat preservation of fluid is needed, such as equipment of polyester, ethy-lene, pitch, urea, etc.
2. Body including inlet and outlet flanges is heat preserved, vo the effect is very well the function of vapor flushing be added, if needed.
3. Balanced bellows construction protects set pressure from being affected by variable back pressure, and the parts in bommet, such as spring, form being corroded.
4. Trim (nozzle and disc) is normally made with austenitic stainless steel, and faced with stellite alloy.
5. To meet special service, the material of trim can be 316LN, 0Cr25Ni6Mo3CuN, 00Cr25Ni6Mo2N, F51 (NUS S31803), F53 (UNS S32750), F55 (UNS S32760) .



HFNJ系列保温夹套安全阀（相当于HFBWA42型）

HFNJ Series safety valve with jacket

● 型号编制方法 Method of compiling the types

HFNJ	进口法兰磅级 Flange Class	阀体材料 Material of Body	阀帽型式 Cap Types
	01:150Lb 03:300Lb 03a:300Lb 06:600Lb 90:900LB 15:1500Lb 25:2500Lb	C:WCB P:CF8 R:CF8M R3:CF3M N:Specil Material 特殊材料	B:带螺塞的 螺纹式 Screwed cap with Plug E:带螺塞的 封闭杠杆式 Packed lifting Lever sith Plug

● 材料 Materials

序号 Ref.No	零件名称 Part Name	阀门材料 Valve Materials			
		C	P	R	R3
1	阀体 Body	WCB	CF8	CF8M	CF3M
2	阀座 Nozzle	304	316	316	316L
3	夹套 Jacket	304	304	316	316
4	调节圈 Adjusting ring	CF8	CF8	CF8M	CF3M
5	阀瓣 Disc	304	316	316	316L
6	反冲盘 Disc holder	304	304	316	316L
7	波纹管 Bellows	316	316	316L	316L
8	导向套 Guide	CF8	CF8	CF8M	CF3M
9	阀盖 Bonnet	WCB	CF8	CF8M	CF8M
10	阀帽 Cap	WCB	CF8	CF8M	CF8M
11	弹簧 Spring	Alloy st	Alloy st/Spread Teflon	Alloy st/Spread Teflon	Alloy st/Spread Teflon
12	阀杆 Stem	420	304	316	316L
13	法兰 Flange	304	304	304	304
14	吹气管 Huff pipe	304	304	316	316L



HFNJ系列保温夹套安全阀 (相当于HFBWA42型)

HFNJ Series safety valve with jacket

● 型号 (Type): HFNJ-03a

法兰等级 (ANSI Flange Class): 300Lb/150Lb (进口/出口 Inlet/Outlet)

口径(英寸) Size(inch)	最高整定压力 Max.Set Pressure(MPa)		法兰尺寸 Dimensions(mm)						面心距 Center to Face (mm)		近似高度 H H.App.Height	
进口/流道代号/出口(流道面积cm) Inlet/Orifice /Outlet (Orifice Area)	进口温度(℃) Inlet Temperature								L	L ₁	阀帽型式 Cap Types	
	-29℃~ 232℃	232℃~ 427℃	φD	φC	φg	f/t	n-M/n-φh	B			E	
1 D 2(2 1/2) (0.710)	4.24	2.82	进口Inlet	160	89	51	18	4-M16	134	125	470	530
			出口Outlet	178	139.5	105	22.4	4- φ19				
1 E2 (2 1/2) (1.264)	4.24	2.82	进口Inlet	160	89	51	18	4-M16	134	125	470	530
			出口Outlet	178	139.5	105	22.4	4- φ19				
1/2F2(2 1/2) (1.981)	4.24	2.82	进口Inlet	170	114.5	73	20	4-M20	140	139	485	550
			出口Outlet	178	139.5	105	22.4	4- φ19				
1 1/2G3(4) (3.245)	4.24	2.82	进口Inlet	190	114.5	73	20	4-M20	140	149	535	595
			出口Outlet	229	190.5	157	23.9	8- φ19				
2 H 3(4) (5.064)	4.24	2.82	进口Inlet	200	127	92	20	8-M16	155	150	555	615
			出口Outlet	229	190.5	157	23.9	8- φ19				
3 J 4(6) (8.303)	4.24	2.82	进口Inlet	250	168	127	22	8-M20	185	170	690	760
			出口Outlet	279	241.5	216	25.4	8- φ22				
3 K 4(6) (11.858)	4.24	2.82	进口Inlet	250	168	127	22	8-M20	185	170	690	760
			出口Outlet	279	241.5	216	25.4	8- φ22				
4 L 6(8) (18.406)	4.24	2.82	进口Inlet	320	200	157	22	8-M20	225	200	860	930
			出口Outlet	343	298.5	270	28.4	8- φ22				
4 M 6(8) (23.226)	4.24	2.82	进口Inlet	320	200	157	22	8-M20	225	200	860	930
			出口Outlet	343	298.5	270	28.4	8- φ22				
4 N 6(8) (28.000)	4.24	2.82	进口Inlet	320	200	157	22	8-M20	225	200	860	930
			出口Outlet	343	298.5	270	28.4	8- φ22				
4 P 6(8) (41.161)	3.62	2.82	进口Inlet	320	200	157	22	8-M20	225	200	860	930
			出口Outlet	343	298.5	270	28.4	8- φ22				
6 Q 8(10) (71.290)	2.06	2.06	进口Inlet	370	270	216	22	12-M20	256	239.5	1025	1130
			出口Outlet	406	362	324	30.2	12- φ26				
6 R 10(12) (103.226)	1.58	1.58	进口Inlet	420	270	216	22	12-M20	282	269	1070	1175
			出口Outlet	483	432	381	32	12- φ26				
8 T 10(12) (167.742)	0.82	0.82	进口Inlet	480	330	270	22	12-M24	310	280	1215	1320
			出口Outlet	483	432	381	32	12- φ26				



HF XD型磅级先导式安全泄压阀 (相当于HFA46型)

HF XD Type Pilot-operated pressure relief valve

HFA46C150、HFA46C300

HFA46C600、HFA46C900

HFA46C1500、HFA46C2500

型先导式安全泄压阀

Pilot-operated pressure relief valve

● 主要性能规范 Main property and specification

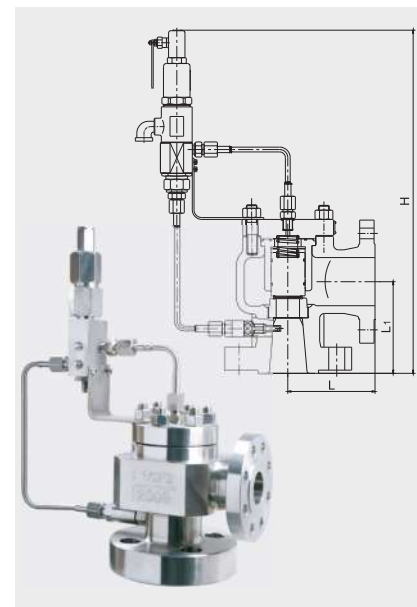
公称压力	Normal pressure	PN(Lb)	150	300	600	900	1500	2500
壳体强度	Body strength	Ps(MPa)	3.0	7.5	15	22.5	37.5	63
最高整定压力	Max Set pressure	Pk(MPa)	2	5.1	10.2	15.3	25.5	42.5
密封压力	Seal pressure	Pm	90% Pk					
回座压力	Reseating pressure	Ph	≥90%Pk					
排放压力	Rwlieving pressure	Pp	≤1.03Pk					
开启高度	lift	H(mm)	≥1/4do					
适用温度	Appropriat temperature	≤200℃						
适用介质	Appropriat Medium	气体、液体、水蒸气、原油、天然气等 Gas.Steam etc.Crude oil.Nature gas						

● 喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter mm	代号 Code	直径 Diameter mm
D	10	L	50
E	13	M	55
F	16	N	60
G	20.5	P	72
H	26	Q	96
J	33	R	115
K	40	T	146

● 主要尺寸 Main Dimension

口径 Size (in)	流道直径 Orifice	进口压力级 Inlet Lb	出口压力级 Outlet Lb	结构尺寸 Dimension mm	口径 Size	流道直径 Orifice	进口压力级 Inlet Lb	出口压力级 Outlet Lb	结构尺寸 Dimension mm
				L L ₁ H					L L ₁ H
1×2	D.E.F	150	150	115 105 406	11/2×2	D.E.F	150	150	121 124 432
		300	150	115 111 406			300	150	121 124 432
		600	150	115 111 406			600	150	121 124 432
		900	300	121 125 508			900	300	140 149 533
		1500	300	121 125 508			1500	300	140 149 533
		2500	300	121 125 508			2500	300	140 149 533
		150	150	124 130 457		2×3	150	150	124 137 457
		300	150	124 130 457			300	150	124 137 457
		600	150	124 130 457			600	150	124 137 457
		900	300	171 162 559			900	300	171 167 559
1 1/2×3	G.H	1500	300	171 162 559		G.H.J	1500	300	171 167 559
		2500	300	171 162 559			2500	300	171 178 584
		150	150	162 156 483		4×6	150	150	210 197 559
		300	150	162 156 483			300	150	210 197 559
		600	150	162 162 483			600	150	210 197 559
3×4	J.K.L	900	300	181 190 610		L.M.N.P	900	300	233 249 711
		1500	300	181 190 610			1500	300	233 249 711
							1500	300	233 249 711
							1500	600	264 249 711
							1500	600	264 249 711
6×8	Q.R	150	150	241 240 635	8×10	T	150	150	279 276 711
		300	150	241 240 635			300	150	279 276 711
		600	150	241 246 635			600	150	279 297 737



**HFA42C、HFWA42C 大口径安全阀**

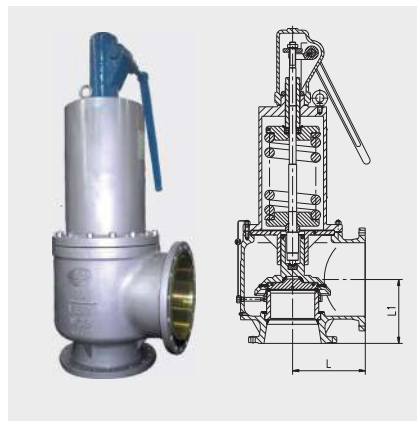
HFA42C、HFWA42C big calibers safety valve

● 用途及特点

1. 适用于炼油连续重整、三十万吨乙烯、尿素化肥、电厂汽轮机等场所，起安全泄压作用。
2. 根据用户介质、温度等特殊需要，分别可以采用不同材料、不同结构的安全阀。有适用于尿素化肥的双相不锈钢安全阀，适用于炼油用的波纹管平衡式安全阀，适用于电厂的合金钢高温安全阀。

Application & Features

1. Applicable to the environment of oil refining continuous reforming, there hundred thousand tons ethere, carbamide manure, power station steam turbine, take care for release pressure safety.
2. According to different medium, temperature and other special. We respective adopt in different material and structure safety valve. Such as ferritic stainless steel safety valve suitable for carbamide manure, balance bellows safety valve suitable for oil refining, alloy steel high temperature safety valve suitable for power station.



● 尺寸规格 Dimension & Specification

进口 × 出口 Inlet × Outlet	150Lb结构尺寸		300Lb结构尺寸		600Lb结构尺寸	
	L	L ₁	L	L ₁	L	L ₁
8T1 12(200×166×300)	350	340	350	320	350	320
10T1 12(250×166×300)	350	340	350	340	350	340
10V14(250×190×350)	400	320	360	350	360	350
12W16(300×225×400)	370	370	370	370	--	--
14X18(350×250×450)	375	435	375	435	--	--
14X20(350×250×500)	375	435	500	470	--	--
16Y18(400×280×450)	495	435	500	470	--	--
16Y20(400×280×500)	495	435	500	470	--	--

注：有特殊要求的可以协商定制。

Note: If there are special demands, the valve can be custom-made by consulting.

**HFGS系列高温蒸汽安全阀 (相当于HFA48SB型)**

HFGS Series high temperature safety valve for steam

● 用途 Application

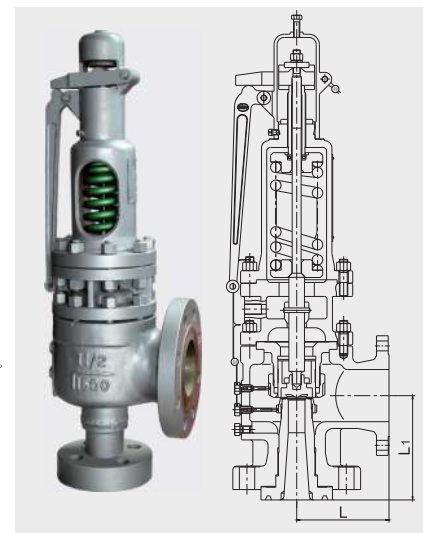
适用于动力锅炉、裂解炉、直流锅炉、再热器及其他设备管道作超压保护 (HFGS is serviced for overpres sure protection of power boiler, decomposition boiler, once-through boiler, reheater and other pressure vessel and pipe)。

● 性能 Performance

符合ASME《锅炉和压力容器规范》第Ⅰ卷动力锅炉要求。(HFSH meets the requirements of HFGS Boiler and pressure Vessel Code, Section I, power Boilers)。

● 特点 Features

采用背压套来调节回座压力，以达到极小的启闭压差。(Adjusting back Seat pressure with back pressure Jacket, to arrive minimum Blowdown)。
高性能高温材料作弹性阀瓣材料，以保证高温下的密封性 (High performance and temperature material are used for valve, to ensure its tightness in high temperature)。
密封付表面堆焊钴基硬质合金，以防止高温蒸汽的气蚀 (Tightness body is faced with stellite, to prevent from eroding of high temperature gas)。
一定的热态测试，使安全阀更接近工况条件 (Tested under hot position and make the safety valve approach to service condition)。



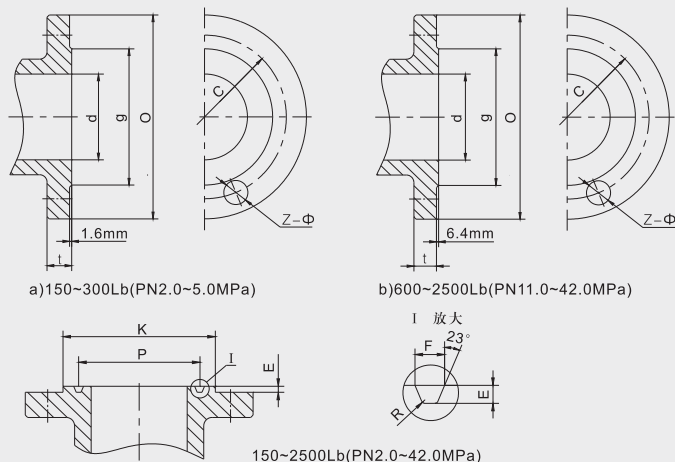
● 尺寸规格 Dimension & Specification

进口 × 出口 Inlet × Outlet	结构尺寸300Lb Construction dim		结构尺寸600Lb Construction dim		结构尺寸900Lb Construction dim		结构尺寸1500Lb Construction dim		结构尺寸2500Lb Construction dim	
	L	L ₁	L	L ₁	L	L ₁	L	L ₁	L	L ₁
1 × 11/2	--	--	--	--	--	--	146	170	--	--
11/2 × F × 2	152	124	--	--	--	--	--	--	--	--
11/2 × F × 21/2	--	--	140	130	--	--	--	--	--	--
11/2 × G × 21/2	152	124	--	--	--	--	--	--	--	--
11/2 × F × 3	--	--	--	--	155	140	155	150	155	190
11/2 × G × 3	--	--	155	130	155	140	155	150	200	220
11/2 × H × 3	152	130	155	140	155	140	155	150	--	--
11/2 × H × 4	--	--	--	--	--	--	--	--	200	220
2 × J × 3	152	137	--	--	--	--	--	--	--	--
2 × J × 4	--	--	180	150	180	150	180	160	220	220
2 × J × 6	--	--	--	--	--	--	--	--	220	220
21/2 × K × 4	152	165	180	185	180	185	--	--	--	--
21/2 × K × 6	--	--	180	185	180	185	240	195	240	270
3 × L × 6	165	178	220	195	220	195	250	210	--	--
3 × M × 6	--	--	220	195	220	195	260	230	260	280
4 × N × 6	--	--	220	215	250	230	265	240	--	--
4 × P × 6	254	225	265	235	265	250	265	260	--	--
4 × P × 8	--	--	265	235	265	250	265	260	--	--
6 × Q × 8	241	240	280	285	--	--	--	--	--	--

ASME/ANSI B16.5a法兰尺寸

ASME/ANSI B16.5a flange size

● ASME/ANSI B16.5a 法兰尺寸(Flange Size)



磅级 Class	(D)通径 Inch	Size mm	O	t	g	z	φ	C	K	P	E	F	R
150	1/2	15	89	11.2	35	4	16	60.5	--	--	--	--	--
	3/4	20	99	12.7	43	4	16	70	--	--	--	--	--
	1	25	108	14.2	51	4	16	79.5	63.5	47.63	6.35	8.74	0.8
	1 1/2	40	127	17.5	73	4	16	98.5	83	65.07	6.35	8.74	0.8
	2	50	152	19	92	4	16	120.5	102	82.55	6.35	8.74	0.8
	2 1/2	65	178	22.4	105	4	19	139.5	121	101.60	6.35	8.74	0.8
	3	80	190	23.9	127	4	19	152.5	133	114.30	6.35	8.74	0.8
	4	100	229	23.9	157	8	19	190.5	171.5	149.23	6.35	8.74	0.8
	6	150	279	25.4	216	8	22	241.5	219	193.68	6.35	8.74	0.8
	8	200	343	28.4	270	8	22	298.5	273	247.65	6.35	8.74	0.8
300	10	250	406	30.2	324	12	26	362	330	304.80	6.35	8.74	0.8
	1/2	15	95	14.2	35	4	16	66.5	51	34.14	5.56	7.14	0.8
	3/4	20	117	15.9	43	4	19	82.5	63.5	42.88	6.35	8.74	0.8
	1	25	124	17.5	51	4	19	89	70	50.80	6.35	8.74	0.8
	1 1/2	40	156	20.7	73	4	22	114.5	90.5	68.28	6.35	8.74	0.8
	2	50	165	22.3	92	8	19	127	108	82.55	7.92	11.91	0.8
	2 1/2	65	190	25.4	105	8	22	149	127	101.60	7.92	11.91	0.8
	3	80	210	28.4	127	8	22	168	146	123.83	7.92	11.91	0.8
	4	100	254	31.8	157	8	22	200	175	149.23	7.92	11.91	0.8
	6	150	318	36.6	216	12	22	270	241	211.12	7.92	11.91	0.8
300	8	200	381	41.3	270	12	26	330	302	269.88	7.92	11.91	0.8
	10	250	444	47.7	324	16	29	387.5	356	323.85	7.92	11.91	0.8

ASME/ANSI B16.5a 法兰尺寸

ASME/ANSI B16.5a flange size

● ASME/ANSI B16.5a 法兰尺寸(Flange Size)

磅级 Class	(D) 通径 Size		O	t	g	z	φ	C	K	P	E	F	R
	Inch	mm											
600	1/2	15	95	14.2	35	4	16	66.5	51	34.14	5.56	7.14	0.8
	3/4	20	117	15.7	43	4	19	82.5	63.5	42.88	6.35	8.74	0.8
	1	25	124	17.5	51	4	19	89	70	50.80	6.35	8.74	0.8
	1 1/2	40	156	22.4	73	4	22	114.5	90	68.28	6.35	8.74	0.8
	2	50	165	25.4	92	8	19	127	108	82.55	7.92	11.91	0.8
	2 1/2	65	190	28.4	105	8	22	149	127	101.60	7.92	11.91	0.8
	3	80	210	31.8	127	8	22	168	146	123.83	7.92	11.91	0.8
	4	100	273	38.1	157	8	26	216	175	149.23	7.92	11.91	0.8
	6	150	356	47.7	216	12	29	292	241	211.12	7.92	11.91	0.8
	8	200	419	55.6	270	12	32	349	302	269.88	7.92	11.91	0.8
900	10	250	508	63.5	324	16	35	432	356	323.85	7.92	11.91	0.8
	1/2	15	121	22.3	35	4	22	82.5	60.5	39.67	6.35	8.74	0.8
	3/4	20	130	25.4	43	4	22	89	66.5	44.45	6.35	8.74	0.8
	1	25	149	28.4	51	4	26	101.5	71	50.80	6.35	8.74	0.8
	1 1/2	40	178	31.8	73	4	29	124	92	68.28	6.35	8.74	0.8
	2	50	216	38.1	92	8	26	165	124	95.25	7.92	11.91	0.8
	2 1/2	65	244	41.3	105	8	29	190.5	137	107.95	7.92	11.91	0.8
	3	80	241	38.1	127	8	26	190.5	168	136.53	7.92	11.91	0.8
	4	100	292	44.5	157	8	32	235	193.5	161.93	7.92	11.91	0.8
	6	150	381	55.6	216	12	32	317.5	248	211.12	9.53	13.49	1.5
1500	8	200	470	63.5	270	12	39	394	317.5	269.88	11.13	16.66	1.5
	10	250	546	69.9	324	16	39	470	371	323.85	11.13	16.66	1.5
	1/2	15	121	22.3	35	4	22	82.5	60.5	39.67	6.35	8.74	0.8
	3/4	20	130	25.4	43	4	22	89	66.5	44.45	6.35	8.74	0.8
	1	25	149	28.4	51	4	26	101.5	71	50.80	6.35	8.74	0.8
	1 1/2	40	178	31.8	73	4	29	124	92	68.28	6.35	8.74	0.8
	2	50	216	38.1	92	8	26	165	124	95.25	7.92	11.91	0.8
	2 1/2	65	244	41.3	105	8	29	190.5	137	107.25	7.92	11.91	0.8
	3	80	267	47.7	127	8	32	203	168	136.53	7.92	11.91	0.8
	4	100	311	54	157	8	35	241.5	193.5	161.93	7.92	11.91	0.8
2500	6	150	394	82.4	216	12	39	317.5	248	211.12	9.53	13.49	1.5
	8	200	483	92.1	270	12	45	394	317.5	269.88	11.13	16.66	1.5
	10	250	584	108	324	12	51	483	371	323.85	11.13	16.66	1.5
	1/2	15	133	30.2	35	4	22	89	65	42.88	6.35	8.74	0.8
	3/4	20	140	32	43	4	22	95	73	50.80	6.35	8.74	0.8
	1	25	159	35	51	4	26	108	82.5	60.33	6.35	8.74	0.8
	1 1/2	40	203	44.5	73	4	32	146	114	82.55	7.92	11.91	0.8
	2	50	235	50.8	92	8	29	171.5	133.5	101.60	7.92	11.91	0.8
	2 1/2	65	267	57.2	105	8	32	197	149	111.13	9.53	13.49	1.5
	3	80	305	66.5	127	8	35	228.5	168	127	9.53	13.49	1.5
2500	4	100	356	76.2	157	8	42	273	203	157.18	11.13	16.66	1.5
	6	150	483	108	216	8	54	368.5	279	228.60	12.70	19.84	1.5
	8	200	553	127	270	12	54	438	340	279.40	14.27	23.01	1.5
	10	250	673	165.1	324	12	67	540	425.5	342.90	17.48	30.18	2.0



安全阀排量计算

Discharge Calculate

● 介质为气体 Gas medium

1、临界条件: Critical conditions: $\frac{P_0}{P_d} \leq \left(\frac{2}{K+1}\right)^{\frac{K}{K-1}}$

$$W_s = 7.6 \times 10^{-2} CKPdA \sqrt{\frac{M}{ZT}} \text{ Kg/h}$$

2 亚临界条件: Under critical conditions: $\frac{P_0}{P_d} > \left(\frac{2}{K+1}\right)^{\frac{K}{K-1}}$

$$W_s = 55.84 KPdA \sqrt{\frac{M}{ZT} \left[\frac{2}{K+1} \left(\left(\frac{P_0}{P_d} \right)^{\frac{2}{K}} - \left(\frac{P_0}{P_d} \right)^{\frac{K+1}{K}} \right) \right]} \text{ Kg/h}$$

式中 W_s --- 安全阀的排放能力, kg/h W_s --- Discharge capacity of the safety valve, kg/h

K --- 排放系数, 与安全阀结构有关, 由制造厂提供; 也可按下述规定选取;

K --- discharge coefficient, which is related with the structure and provided by the manufacturer; It can also be selected by one of the rules below:

全启式安全阀介质气态 Full lift safety valve of gaseousness $K=0.75 \sim 0.81$

全启式安全阀介质液态 Full lift safety valve of gaseousness $K=0.5 \sim 0.62$

微启式安全阀 Low lift safety valve $K=0.2 \sim 0.3$

P_d --- 安全阀的排放压力 (绝压) P_d --- Discharge pressure (Absolute pressure) $P_d = 1.1 P_s + 0.1, \text{MPa}$

P_s --- 安全阀的整定压力, MPa P_s --- set pressure, Mpa

P_0 --- 安全阀的出口侧压力 (绝压), MPa P_0 --- pressure of the outlet side, Mpa

A --- 安全阀最小排气截面积, mm^2 Minimum exhaust cross-sectional area, mm^2

全启式安全阀, Full lift safety valve 即 $h \geq \frac{1}{4} d_1$ 时, $A = \pi \frac{d_1^2}{4}$

微启式安全阀, Low lift safety valve 即 $h < \frac{1}{20} d_1$ 时, 平面密封, $A = \pi Dh$;

式中 h --- 安全阀的开启高度, mm; Type: H --- lift height, mm;

d_1 --- 安全阀最小流通直径 (阀座喉径), mm; d_1 --- minimum flow-through diameter (orifice area of the seat), mm

D --- 安全阀阀座口径, mm; D --- Diameter of the seat, mm;

C --- 气体特性系数, $C = 520 \sqrt{K \left(\frac{2}{K+1} \right)^{\frac{K+1}{K-1}}}$, 见附表1

Characteristic coefficient of the gas, $C = 520 \sqrt{K \left(\frac{2}{K+1} \right)^{\frac{K+1}{K-1}}}$ See the attached chart 1

K --- 气体绝热指数 K --- Adiabatic index of the gas $k = C_p/C_v$

M --- 气体摩尔质量, M --- Molar mass of the gas kg/kmol ;

T --- 气体的温度, T --- Temperature of the gas, K;

Z --- 气体在操作温度压力下的压缩系数。 Z --- Compressibility factor of the gas under operating temperature and pressure

● 介质为液体 liquid medium

$$W_s = 5.09 K K_p K_v A \sqrt{\rho \Delta P} \text{ kg/h}$$

式中 K_p --- 超压修正因数 Overpressure coefficient:

超压力25%时 $K_p = 1.0$ Overpressure $K_p = 1.0$ When 25%

超压力20%时 $K_p = 0.8$ Overpressure $K_p = 0.8$ When 20%

超压力10%时 $K_p = 0.6$ Overpressure $K_p = 0.6$ When 10%



安全阀排量计算

Discharge Calculate

K_v --- 粘度修正因素 Viscosity modification factors

$$K_v = \left[0.9935 + \frac{2.878}{R^{0.5}} + \frac{342.75}{R^{1.5}} \right]^{-1.5}$$

$$R = \frac{[WS / ((\rho / 1000) \times 60)] \times 18800 \times (\rho / 1000)}{U \sqrt{A}}$$

U --- 介质流动温度下的绝对粘度 (厘泊) The absolute viscosity of medium flow temperature.

ρ --- 阀门入口侧温度下的液体密度, Kg/m^3 The safety valve is the entry side under the temperature of the liquid density, kg/m^3

ΔP --- 阀门前后压力降, MPa The safety valve is pressuer drop before and after, MPa

$\Delta P = (1.25 P_s + 0.1) - (P_b + 0.1)$ P_s 整定压力 (表压), P_b 背压力 (表压) P_s Setting pressure, P_b Back pressure

● 介质为饱和蒸气 Saturated stean medium

饱和蒸气中含量不小于98%, 最大过热度为10°C

Content of the saturated steam $\geq 98\%$, maximum over heat temperature should be 10°C

1、当 $P_d \leq 10 \text{MPa}$ 时

$$W_s = 5.25 KAPd \text{ kg/h}$$

$$Pd = 1.03 P_s + 0.1 \text{ MPa};$$

2、当 $10 \text{MPa} < P_d \leq 22 \text{MPa}$ 时

$$W_s = 5.25 KAPd \left(\frac{190.6 Pd - 6895}{229.2 Pd - 7315} \right) \text{ kg/h}$$

$$Pd = 1.03 P_s + 0.1 \text{ Mpa}$$

● 不同K值气体特性系数C值 Different Characteristic Coefficient of The Gas (C) Under Different K

K	C	K	C	K	C	K	C
1.00	315	1.20	337	1.40	356	1.60	372
1.02	318	1.22	339	1.42	358	1.62	374
1.04	320	1.24	341	1.44	359	1.64	376
1.06	322	1.26	343	1.46	361	1.66	377
1.08	324	1.28	345	1.48	363	1.68	379
1.10	327	1.30	347	1.50	364	1.70	380
1.12	329	1.32	349	1.52	366	2.00	400
1.14	331	1.34	351	1.54	368	2.20	412
1.16	333	1.36	352	1.56	369		
1.18	335	1.38	354	1.58	371		

● API527标准规定的密封要求 API 1527 Standard of Containment Requirement

整定压力MPa (15.6℃) Setting Pressure MPa	最大允许泄漏 (泡/分) Maximum allowable leakage	
	喉径小于F Throat diameter less than F	喉径大于F Throat diameter greater than F
0.103~6.896	40	20
10.3	60	30
13.2	80	40
17.2	100	50
20.7	100	60
27.6	100	80
38.5	100	100
41.4	100	100



恒華閘門 HENGHUA VALVE

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