

■ 型号规格 Model specifications

Categories	Model	Specifications	Nominal diameter													Page		
			15	20	25	32	40	50	65	80	100	125	150	200	250			
通用安全阀	A21H/F/Y-16/25/40/64/100(P、R)		✓	✓	✓	✓	✓	✓	✓	✓								3
	KA21Y-16C/16P		✓	✓	✓	✓	✓	✓										
	A21W-16P-160P		✓	✓	✓	✓	✓	✓	✓	✓								4
	A27Y/H-10P-40P/10R-40R		✓	✓	✓	✓	✓	✓	✓									
	A28H-10/16/16P		✓	✓	✓	✓	✓	✓	✓	✓								5
	A28Y-10R8/25R8/40R8		✓	✓	✓	✓	✓	✓	✓	✓								
	AY42H/TA802Y-160-600		✓	✓	✓	✓												6
	A38Y/H-16C/25/40		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	
	A43Y-16C/25/40		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	7
	A40Y/41H-16C/25/40/64/100(P、I)			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	KA41H-16C/16P/25P/40P				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9
	A41Y-160/320(P、R)		✓	✓	✓	✓	✓	✓	✓									
	A42Y-16C/25/40/64/100(P、R)				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11
	KA42Y/DA42Y-16-100(P、R)				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	A42Y-160C/320C(P、R)		✓	✓	✓	✓	✓	✓	✓									13
	AHN42F-P25					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	AH42F/A42F-16C/25/40				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15
	WA42Y-16C/25/40/64/100(P、R)					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	A47H-16C/25/40/64/100				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	17
	A48Y-16C-100(P、R)				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	A44Y-16C-100(P、R)				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	18
	AQ-20				✓	✓												
	空压机安全阀	AQ-20			✓	✓												19
	微启式安全阀	A61Y-160C/320/160P/320P		✓	✓	✓												
	真空负压安全阀	A72W-10P/10R		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	21
	风机安全阀	AF4QH-10C							✓	✓	✓	✓	✓	✓	✓	✓	✓	
内装式安全阀	ANA42F							✓		✓							23	
液压式安全阀	GYA-10/100/150/200/250									✓	✓	✓	✓	✓	✓	✓		
先导式安全阀	(K)A×46F(Y)-16/25/40/64/100					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	25	
	AF46Y-16C/25/40/64/100					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
杠杆式安全阀	GA42H/GA44H-16C/25/40/64/100							✓		✓							26	
	GA41H-16C/25/40									✓	✓	✓	✓	✓	✓	✓		
	A51H-16C/25/40									✓	✓	✓	✓	✓	✓	✓	27	
										✓	✓	✓	✓	✓	✓			

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Categories	Model	Specifications	Nominal diameter DN(mm)													Page	
			15	20	25	32	40	50	65	80	100	125	150	200	250		
电站、 锅炉安全阀	GA49Y/H-10				√									√	√	√	38
	A62Y-P54100V/P4545/P3326.5													√			40
	A42Y-P5526V/P55140V/P55170V													√	√		
	A48Y-16C/40/64/100/160/16I/100I				√	√	√	√	√	√	√	√	√	√	√	√	
	A48Y-16I/100I				√	√	√	√	√	√	√	√	√	√	√	√	
	A48sB-64/100/160/64I/160I				√	√	√	√	√	√	√	√	√	√	√	√	
	A48Y-16V/40V/64V/100V				√	√	√	√	√	√	√	√	√	√	√	√	
	A48sH-40/A48TH-100									√							
	A48sB-64V/100V/160V				√	√	√	√	√	√	√	√	√	√	√	√	
	A48Y-P543.82V/P545.29V/P5410V										√	√					
	A48Y-10/20										√	√					
	A68Y-10/20/25/32/P5410V										√	√			√	√	
	A49Y-Pw5414V/Pw543.2V				√	√								√		√	
	A49Y-10														√		
	A49Y-Pw5410V				√									√			
	A69Y-Pw5414V													√			
	A49Y-Pw542.55V				√	√	√	√	√	√	√	√	√	√	√	√	
	A49Y-10/Pw54255V/Pw5410V/Pw5414V				√	√											
	A69Y-P455.3V/P466.7V/P5410V/P5410.5V														√		
	GA49Y				√												
	磅级微启/全 启式安全阀	A41C-150/300/600/1500(P、R)		√	√	√	√	√	√	√	√	√					
		A42C-150/300/600/1500(P、R)		√	√	√	√	√	√	√	√	√					
磅级波纹管 安全阀	WA42C-150/300/600/1500(P、R)			√	√	√	√	√	√	√	√	√	√	√	√	√	
	WA44C-150/300/600/900(P、R)			√	√	√	√	√	√	√	√	√	√	√	√	√	
	WA41C-150/300/1500(P、R)				√	√	√	√	√	√	√	√	√				
磅级全启式 安全阀	A44C-150/300/600(P、R)			√	√	√	√	√	√	√	√	√	√	√	√	√	
	A48C-150/300/600			√	√	√	√	√	√	√	√	√	√	√	√	√	
	A48SC-1500-2500(I、V)				√	√	√	√	√	√	√	√	√	√	√	√	
炼油安全阀	TA、A型炼油专用安全阀系列				√	√	√	√	√	√	√	√	√				
	保温夹套安全阀				√	√	√	√	√	√	√	√	√	√	√		
磅级先导式 安全泄压阀	A46C-150/300/600/900/1500		√	√	√	√	√	√	√	√	√	√	√	√	√	√	
	安全解压阀									√	√	√	√	√	√	√	

注：“√”为常规产品，空格为定做产品。 Note：“√”conventional products, a space for customized products.

■ 高山牌系列安全阀简介

高山牌安全阀是承压设备、容器和管线上的最佳超压保护装置，当介质压力升高超过允许值时，安全阀自动开启，继而全量排放，防止压力继续升高，当压力降低至规定值时，安全阀及时自动关闭。

高山牌安全阀设计、制造、验收技术标准符合GB/T 12243-2005的要求。

封闭式安全阀的阀盖是封闭的，利于防止灰尘和杂物侵入，防止有毒和易燃介质溢出，开放式安全阀由于阀盖敞开，利于降低弹簧腔室的温度，主要用于蒸汽介质管道及容器，带散热器安全阀主要适用于介质温度超过350℃的工况。

带扳手弹簧式安全阀当介质压力达到开启压力的75%以上时，能利用扳手作手动开启。

全启式安全阀开启高度 $\geq 1/4$ 流道直径，排放量大，微启式安全阀开启高度为 $f/20-1/40$ 流道直径。

Introduction of tianhe Brand safety valve:

Gaoshan Brand safety valve, the best extra-pressure protection device takes care of press equipments, container and on-line pipe. When medium's pressure rises over the allowed pressure, safety valve will automatically open and fully discharge to protect the equipment from pressure going on rising and will automatically close when the pressure lowers to the setting pressure.

Gaoshan Brand safety valve design, manufacture, checking conform to GB/T12243-2005 technical standards.

The valve bonnet of sealed safety valve prevents dust and foreign matters from invading. Meanwhile protect toxic combustible media from overflowing. The valve bonnet of open safety valve can favor the spring seat in lowering temperature inside. It is mainly used for the pipeline and container with steam medium. The safety valve with a radiator is suitable for the medium with a temperature over 350℃.

The safety valve with a lever, it makes use of open manually, when the media pressure over 75% of setting pressure.

Full-lift safety valve opening height is more than one fourths times of the flow diameter. It has an advantage of discharging greatly. Low-lift safety valve opening height is between one twentieth to one fortieth times of the flow diameter.

■ 安全阀型号编制方法 Method of compiling the types of safety valve

阀门的型号参照机械部标准JB308-2004《阀门型号编制方法》编制，系由以下八个部分组成：

The types of valves are generally compiled in accordance with the standard of the ministry of machine-building industry, JB308-2004 "Method of Compiling the Types of Valves", which is composed of eight parts:

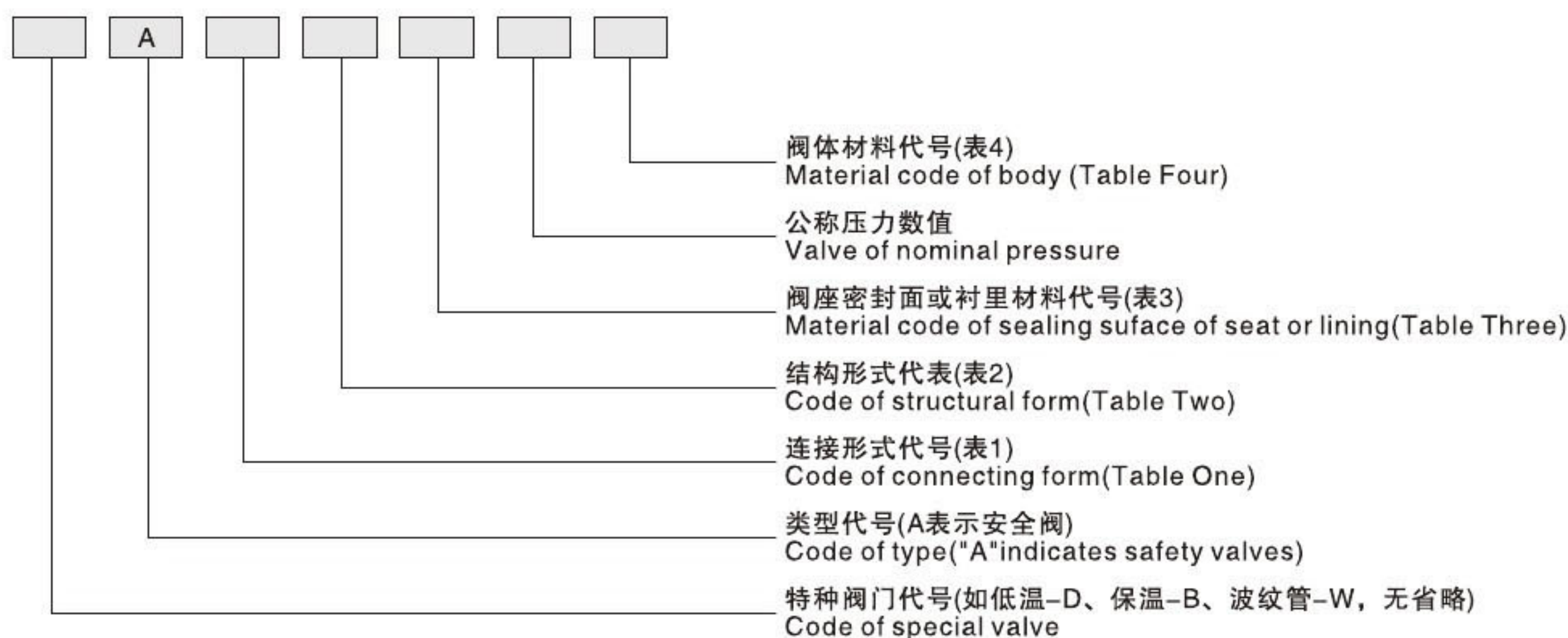


表1 Table One

连接形式 Connecting form	代号 Code
内螺纹 Internal thread	1
外螺纹 External thread	2
法兰 Flange	4
焊接 Welding	6

表2 Table Two

安全阀结构形式 Structural form of safety valve			代号 Code	
弹簧式 Spring loaded type	封闭 Closed	带散热片 With radiator	全启式 Full lift type	0
		微启式 Low lift type		1
		全启式 Full lift type		2
不封闭 Open	带扳手 With a lever	全启式 Full lift type		3
		双联弹簧微启式 Twin spring loaded low lift type		4
		微启式 Low lift type		5
	带控制机构 With controls	全启式 Full lift type		6
		微启式 Low lift type		7
		全启式 Full lift type		8
		脉冲式 Pulse type		9

阀座密封面或衬里材料代号用汉语拼音字母表示，如表3所列。

The material codes of sealing surface of seat or lining are indicated by Chinese phonetic letters as they are listed in table three.

表3 Table Three

阀座密封面或衬里材料 Material of sealing surface of seat or lining	代号 Code	阀座密封面或衬里材料 Material of sealing surface of seat or valve lining	代号 Code
铜合金 Copper alloy	T	合金钢 Alloy steel	H
橡胶 Rubber	X	渗氮钢 Nitriding steel	D
尼龙塑料 Nylon plastic	N	硬质合金 Stellite	Y
氟塑料 Fluoro plastics	F	衬胶 Lining rubber	J
锡基轴承合金(巴氏合金) Tin-base bearing alloy (Babbitt metal)	B	搪瓷 Enamel	C

注：由阀体直接加工的阀座密封面材料用“W”表示；当阀座和阀瓣密封面材料不同时，用低硬度材料代号表示。

阀体材料代号用汉语拼音字母表示，如表4所列。

Remarks: "W" indicates the material of sealing surface of seat which is processed directly together with the body. The material of sealing surface of seat is indicated by a code of low hardness material if it is different from the material of sealing surface of disc.

The body of materials codes can indicated by Chinese phonetic letters as they are listed in the table four.

表4 Table Four

阀体材料 Valve body material	代号Code	阀体材料 Valve body material	代号Code
HT250	Z	1Cr18Ni9Ti	P
WCB ZG230-450	C	1Cr18Ni12Mo2Ti	R
Cr5Mo	I	15CrMoV	V

注：PN≤1.6MPa的灰铸铁阀体和PN≥2.5MPa碳钢阀体，省略本代号。

型号示例：

A42Y-16C表示：弹簧封闭全启式安全阀，法兰连接，密封面材料硬质合金，公称压力1.6MPa阀体材料为碳钢。

Remarks: If the PN of cast-iron body is as much as or less than 1.6MPa and the PN of carbon steel body is as much as or more than 2.5MPa the present codes can omitted.

Examples:

A42Y-16C indicates: The safety valve of closed spring loaded full bore, connected with flange. The sealing surface material is stellite. The nominal pressure is PN1.6MPa and the body material is carbon steel.

安全阀整定压力分级 The conditioning pressure class of safety valve(MPa)

公称压力(MPa) Nominal pressure	整定压力分级 Set pressure grade								
1.6	0.06-0.1	0.1-0.16	0.16-0.25	0.25-0.4	0.4-0.6	0.6-0.8	0.8-1.0	1.0-1.3	1.3-1.6
2.5	>1.3-1.6	>1.6-2.0	>2.0-2.5						
4.0	>1.3-1.6	>1.6-2.0	>2.0-2.5	>2.5-3.2	>3.2-4.0				
6.4	>2.5-3.2	>3.2-4.0	>4.0-5.0	>5.0-6.4					
10.0	>4.0-5.0	>5.0-6.4	>6.4-8.0	>8.0-10					
16.0	>10-13	>13-16							
32.0	>16-19	>19-22	>22-25	>25-29	>29-32				

安全阀进出口法兰规定 Standards for safety valve inlet and outlet flange

法兰压力级按表5规定，进出口口径按表6规定。(MPa)

Standards for flange pressure class is table five, Standards for inlet and outlet diameter is table six.

表5 Table five

安全阀公称压力 PN Nominal pressure for safety valve	1.6	2.5	4.0	6.4	10.0	16.0	32.0
进口法兰压力级 Inlet flange pressure clas	1.6	2.5	4.0	6.4	10.0	16.0	32.0
出口法兰压力级 Outlet flange pressure class	1.6	1.6	1.6	4.0	4.0	1.0/16.0	16.0

表6 Table six

安全阀形式 Safety valve type	微启动 Low lift type	全启式 Full bore type
进口口径 DN Inlet diameter	同公称口径 Same as nominal diameter	
出口口径 DN'Outlet diameter	同公称口径 Same as the nominal diameter	比公称口径增大一级或一级以上 Bigger than the nominal diameter for one grade or more

弹簧微启式外螺纹安全阀 Spring loaded low lift thread type safety valve

系列 Series

A21F-16C
A21H-16C
A21H-40
A21H-64
A21Y-100
A21H-160

A21W-16P
A21W-40P
A21F-40P
A21W-64P
A21W-100P
A21W-160P

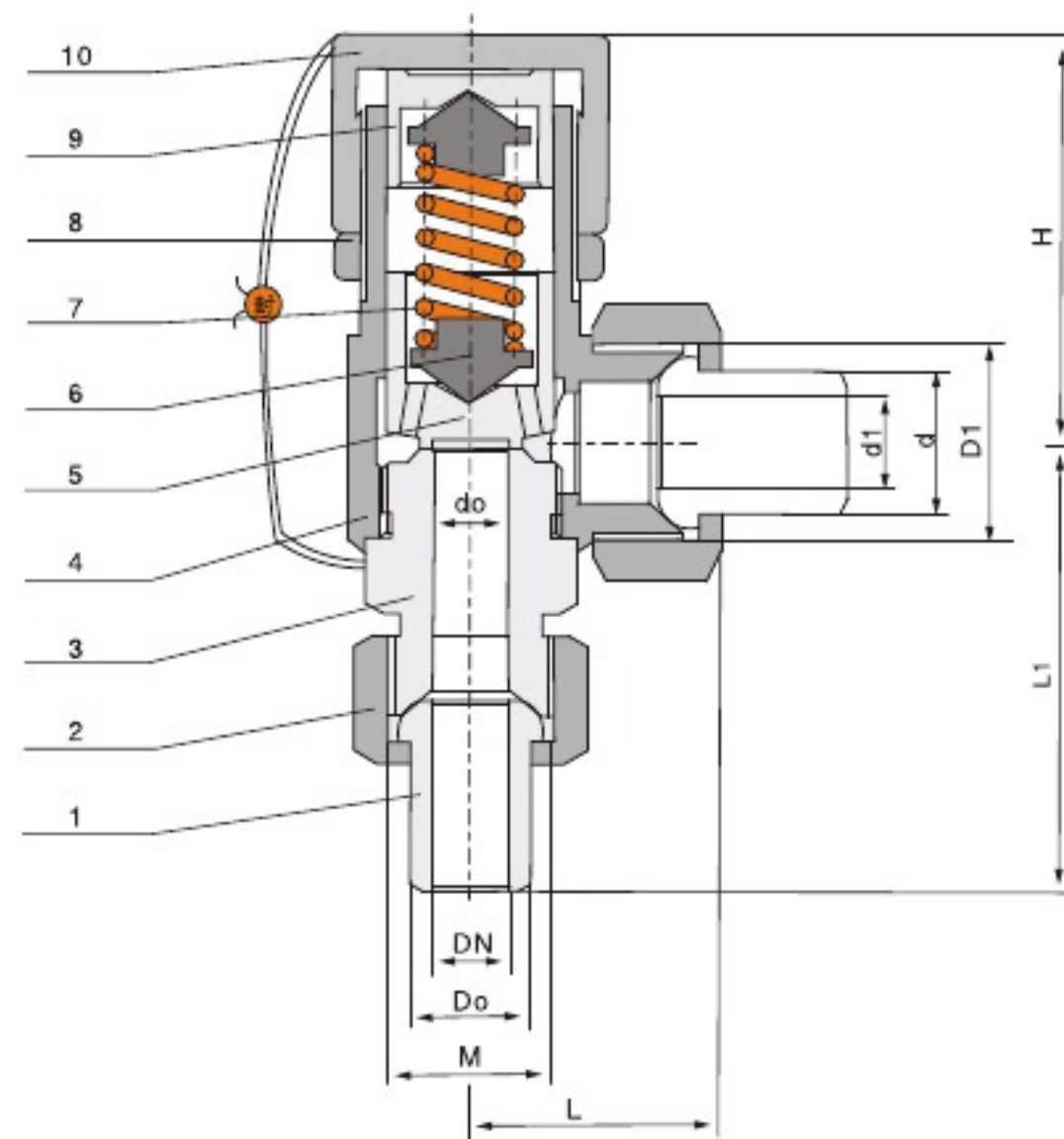
KA21Y-16C
KA21Y-16P

A21Y-16R
A21Y-40R
A21Y-64R
A21Y-100R
A21Y-160R

A21F、A21H-C型适用于工作温度 $\leq 200^{\circ}\text{C}$ 的空气、氨、石油气……等介质的设备或管路上。A21W-P、R型适用于温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性气体或液体的设备或管路上，作为超压保护装置。KA21Y型适用于温度 $\leq 100^{\circ}\text{C}$ 的液化石油气等。

A21F、A21H-C type are used for the equipment and pipeline of the air, ammonia, petroleum gas, etc. medium what the working temperature are less than 200°C . A21W-P, R type are used for the equipment and pipeline of the quality with corroed gas and liquid medium what the working temperature are less than 200°C . Take for extrapressure protection devices.

KA21Y type are used for liquefied petroleum gas what the working temperature are less than 100°C .



A21H
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A21H-C/A21F KA21Y-C 材料 Materials	A21W-P/A21F-P KA21Y-P 材料 Materials	A21Y-R材料 Materials
1	管接头 Union	20	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
2	管接头螺母 Union nut	35	2Cr13	1Cr18Ni9Ti
3	阀座 Nozzle	35	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
4	阀体 Body	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
5	阀瓣 Disc	2Cr13/2Cr13+PTFE	1Cr18Ni9Ti/1Cr18Ni9Ti+PTFE	1Cr18Ni12Mo2Ti
6	弹簧座 Spring washer	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
7	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
8	锁紧螺母 Locking nut	Q235-A	2Cr13	1Cr18Ni9Ti
9	弹簧导向垫 Spring guide	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
10	调节螺母 Adjusting nut	Q235-A	2Cr13	1Cr18Ni12Mo2Ti
密封面材料 Sealing surface of material		"H"型堆焊D507, "W"型为阀门本体 body, "Y"型堆焊Co基硬质合金 Depositing D507 Depositing stellite		

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称通径(DN) Nominal diameter	do	d	Do	M	d1	D1	L	L1	≈H
KA21Y-16C A21H-16C A21H-40 A21W-16P A21W-40P KA21Y-16P	15	12	15	20	M27×1.5	G1/2"	M27×1.5	65	76	66
	20	16	20	25	M33×1.5	G3/4"	M33×1.5	70	87	68
	25	18	25	31	M39×1.5	G1"	M39×1.5	80	100	105
A21Y-64 A21Y-64P A21Y-100 A21Y-100P	15	10	15	25	M39×1.5	G1"	M39×1.5	80	100	66
	20	10	20	31	M39×1.5	G1"	M39×1.5	80	100	68
	25	12	25	31	M39×1.5	G1"	M39×1.5	80	100	105
A21W-160 A21W-160P	15	8	20	/	M24×2	G1"	M24×2	80	100	261
	20	8	25	/	M33×2	G1"	M33×2	80	100	261
	25	8	28	/	M36×2	G1"	M36×2	80	100	285

弹簧微启式安全阀 Spring loaded low lift type safety valve

系列 Series

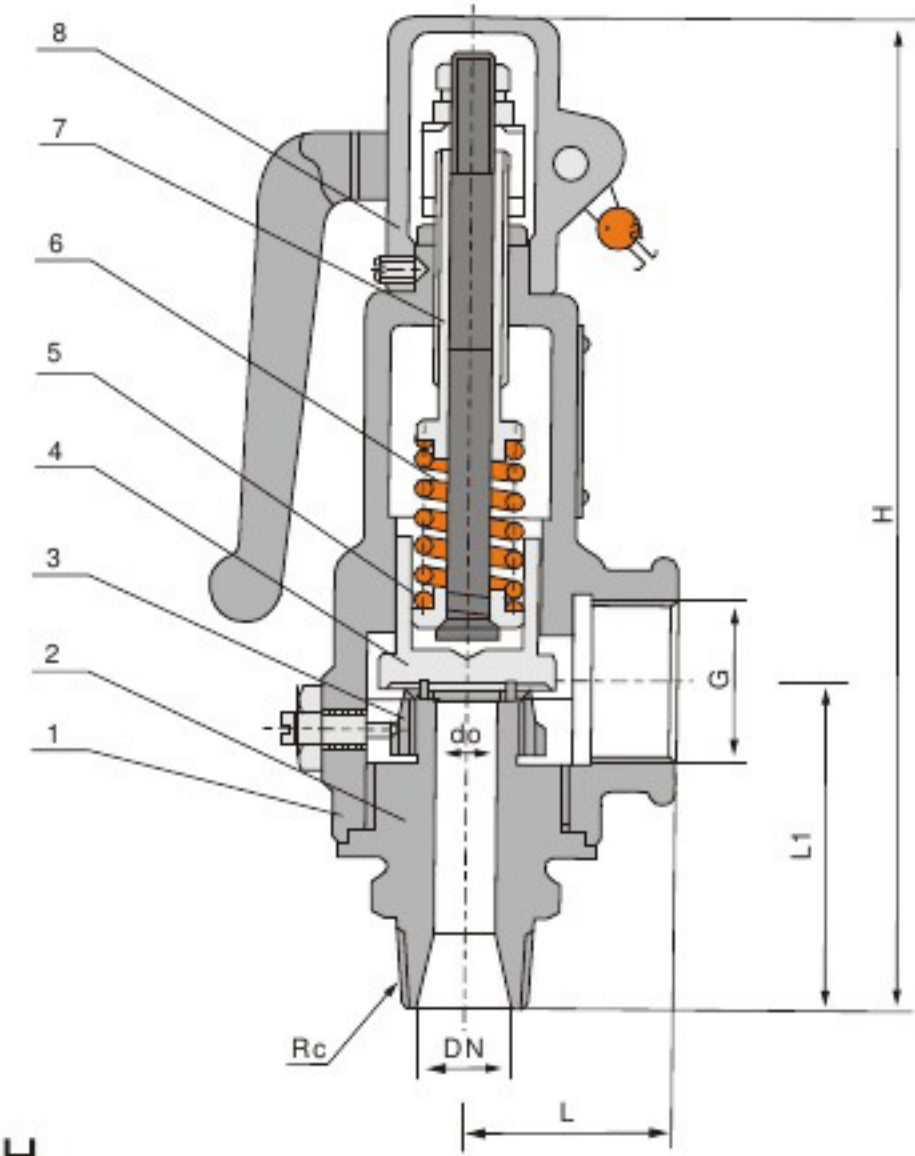
A27H-10
A27H-16
A27H-25
A27H-40

A27Y-10P
A27Y-16P
A27Y-25P
A27Y-40P

A27Y-10R
A27Y-16R
A27Y-25R
A27Y-40R

A27H型适用于工作温度 $\leq 200^{\circ}\text{C}$ 的水、空气、蒸气等介质的设备或管路上。A27Y适用于工作温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性介质的设备或管路上，作为超压保护装置。

A27H type are used for the equipment and pipeline of water, air, steam etc. medium what the working temperature are less than 200°C . A27Y type are used for the equipment and pipeline of the quality with corrode medium what the working temperature are less than 200°C . Take for extra pressure devices.



A27H
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A27H 材料 Materials	A27W-P 材料 Materials	A27W-R 材料 Materials
1	阀体 Body	HT350	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
2	阀座 Nozzle	35	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
3	调节圈 Adjusting ring	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
4	阀瓣 Disc	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
5	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
6	阀杆 Stem	2Cr13	2Cr13	1Cr18Ni9Ti
7	调整螺杆 Adjusting bolt	45	2Cr13	1Cr18Ni9Ti
8	保护罩 Cap	ZG200-400	ZG200-400	1Cr18Ni9Ti
	密封面材料 Sealing surface of material	"H"型堆焊D507 Depositing D507	"Y"型堆焊Co基硬质合金 Depositing stellite	

外形尺寸和连接尺寸 Dimensions(mm)

公称通径 Nominal diameter DN(mm)	尺寸 Dimensions(mm)					
	do	Rc	L	L ₁	G	H
15	10	1/2"	40	65	1/2"	135
20	15	3/4"	45	65	3/4"	140
25	20	1"	45	76	1"	155
32	25	1 1/4"	55	85	1 1/4"	170
40	32	1 1/2"	55	90	1 1/2"	310
50	40	2"	67	105	2"	322
65	50	2 1/2"	76	128	2 1/2"	344
80	65	3"	110	145	3"	395

带手柄弹簧全启式安全阀 Spring full bore type with lever safety valve

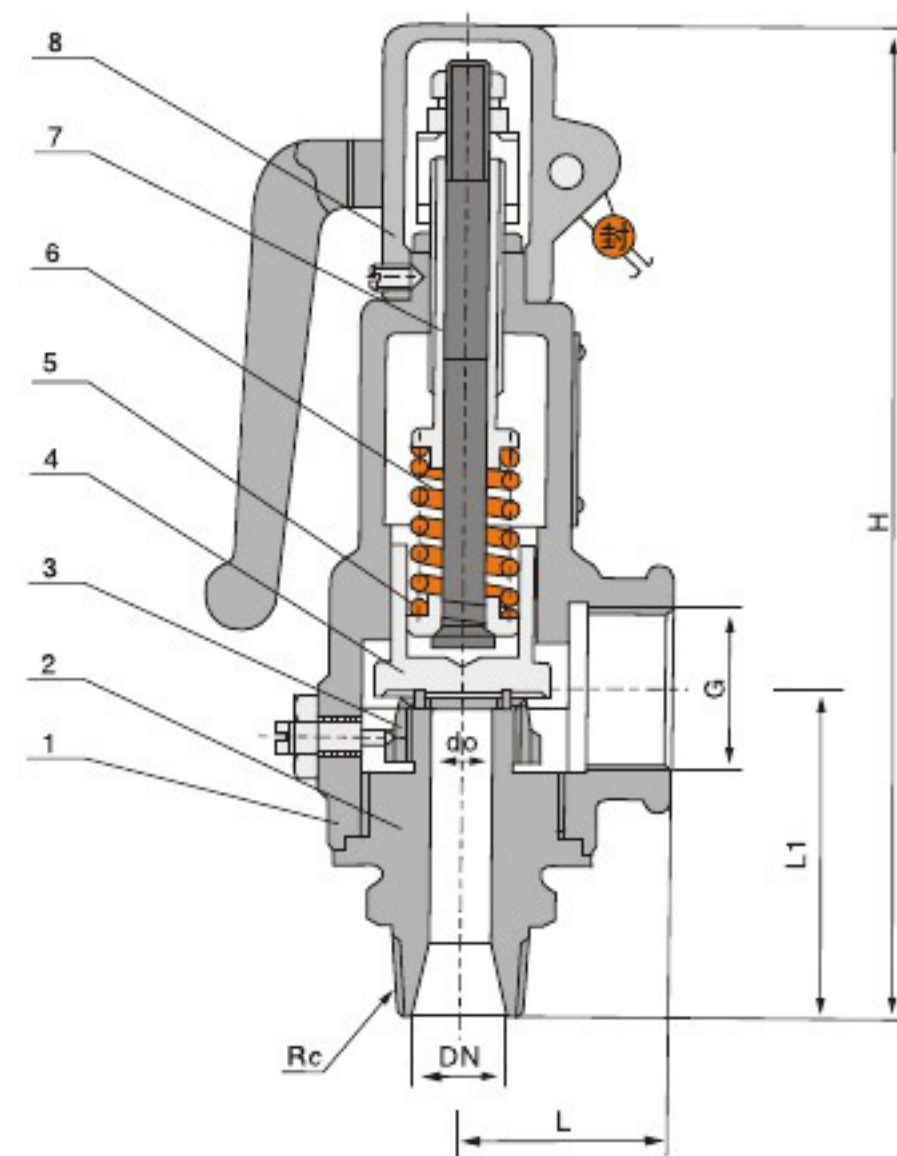
系列 Series

A28H-10C
A28Y-10P
A28Y-16P
A28Y-25P
A28Y-40P

A28Y-16C
A28Y-16R
A28Y-25R
A28Y-40R

A28H型适用于工作温度 $\leq 200^{\circ}\text{C}$ 的空气、蒸汽、水、氮氢混合气等介质的设备或管路上，A28Y-P/10R_s适用于工作温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性介质的设备或管路上，作为超压保护装置。

A28H type are used for the equipment and pipeline of the air, N₂, H₂ mixed gas vapour etc. medium what the working temperature are less than 200 $^{\circ}\text{C}$. A28Y-P/10R_s type are used for the equipment and pipeline of the quality with corrode medium what the working temperature are less than 200 $^{\circ}\text{C}$. Take for extra pressure protection devices.



A28H
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A28H 材料 Materials	A28Y-P 材料 Materials	A28Y-R _s 材料 Materials
1	阀体 Body	HT200	ZG1Cr18Ni9Ti	CF8M
2	阀座 Nozzle	35	ZG1Cr18Ni9Ti	CF8M
3	调节圈 Adjusting ring	2Cr13	1Cr18Ni9Ti	316
4	阀瓣 Disc	2Cr13	1Cr18Ni9Ti	316
5	弹簧 Spring	50CrVA	50CrVA 包覆氟塑料 Coated Teflon	50CrVA 包覆氟塑料 Coated Teflon
6	阀杆 Stem	2Cr13	2Cr13	316
7	调整螺杆 Adjusting bolt	45	2Cr13	316
8	保护罩 Cap	ZG200-400	ZG200-400	CF8M
	密封面材料 Sealing surface of material	堆焊D507 Depositing D507	"Y"堆焊Co基硬质合金 Depositing stellite	

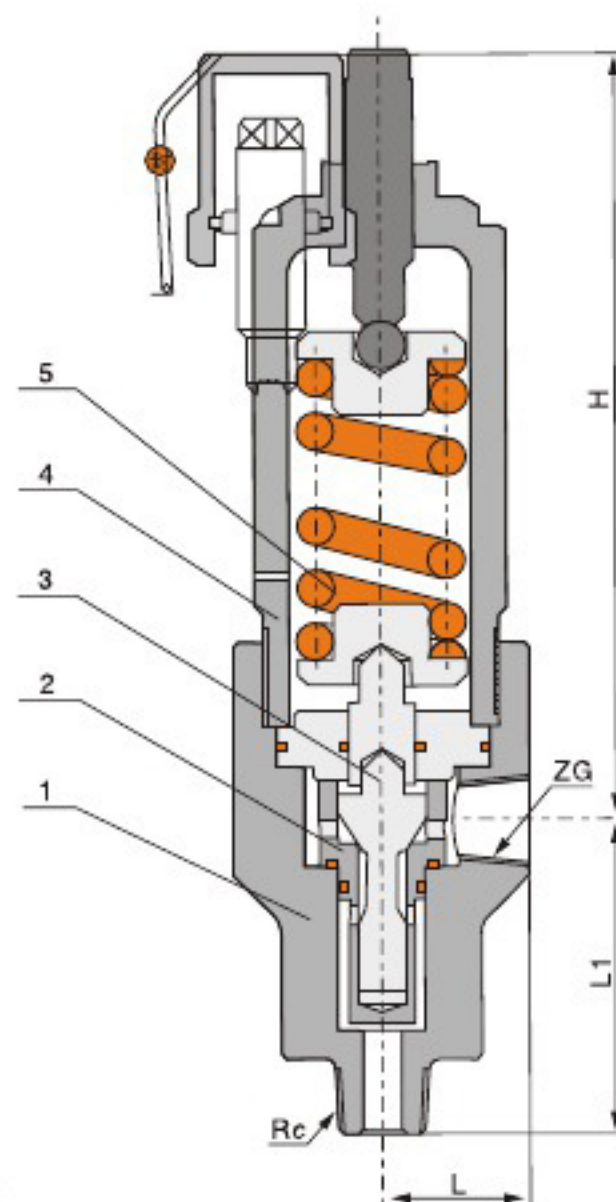
外形尺寸和连接尺寸 Dimensions(mm)

公称通径 Nominal diameter DN(mm)	尺寸 Dimensions(mm)					
	do	Rc	G	L	L ₁	H
15	10	1/2"	3/4"	37	65	196
20	12	3/4"	1"	40	70	215
25	15	1"	1 1/4"	45	78	234
32	20	1 1/4"	1 1/2"	55	90	302
40	25	1 1/2"	2"	67	105	326
50	32	2"	2 1/2"	76	115	348
65	40	2 1/2"	3"	110	145	370
80	50	3"	4"	110	145	410

系列
Series

AY42H-160
AY42H-250
AY42H-400
AY42H-600
TA802Y-160
TA802Y-250
TA802Y-400
TA802Y-600

AY42H、TA802Y型安全溢流阀可用于高压注水站的管路上，作为超压保护装置。
AY42H、TA802Y type safety overflow valves are to be applied to pipelines in high-pressure pump stations to provide over pressure protection.



AY42H
结构图 Structural drawing

主要零部件材料 Materials for main parts

型号 Type	公称通径 Nominal diameter DN(mm)	开启压力分级 Opening pressure	工作温度(°C) Working temperature	适用介质 Suitable medium
AY42H-160 TA802Y-160	16.0	6.3~16.0		水、油品等 Water, Oil etc.
AY42H-250 TA802Y-250	25.0	10.0~25.0	200	
AY42H-400 TA802Y-400 TA802Y-600	40.0~60.0	20.0~60.0		

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	材料 Materials
1	阀体 Body	碳钢 Carbon steel
2	阀座 Seat	不锈钢 Stainless steel
3	阀瓣 Disc	不锈钢 Stainless steel
4	阀盖 Bonnet	焊接件 Welding
5	弹簧 Spring	50CrVA

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称通径 Nominal diameter DN(mm)	尺寸 Dimension(mm)				
		Rc	ZG	L	L ₁	≈H
TA802Y-600	15	1/2"	1/2"	52	90	250
	25	1"	1"	52	113	275
	40	1 1/2"	1 1/2"	52	157	336

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称通径 Nominal diameter DN(mm)	尺寸 Dimension(mm)									
		D	D ₁	K	M	Z-Φd	b	L	L ₁	Rc	≈H
AY42H-160	15	135	95	25	M48×2	4-22	25	65	140	1"	329
AY42H-250	20	165	115	30	M52×2	6-26	28	80	150	1 1/2"	447
AY42H-400	25	200	145	38	M80×3	6-29	40	90	180	2"	485
	32	225	170	42	M100×3	6-33	50	100	200	2 1/2"	570

双联弹簧式安全阀 Twin spring type safety valve

系列 Series

A38Y-16C/25/40
A43H-16C/25/40
A37H-16C/25/40

本阀门适用于工作温度 $\leq 350^{\circ}\text{C}$ 的蒸汽、水等介质的设备和管路上。作为超压保护装置。
连接法兰标准按JB/T.....-94的系列1。

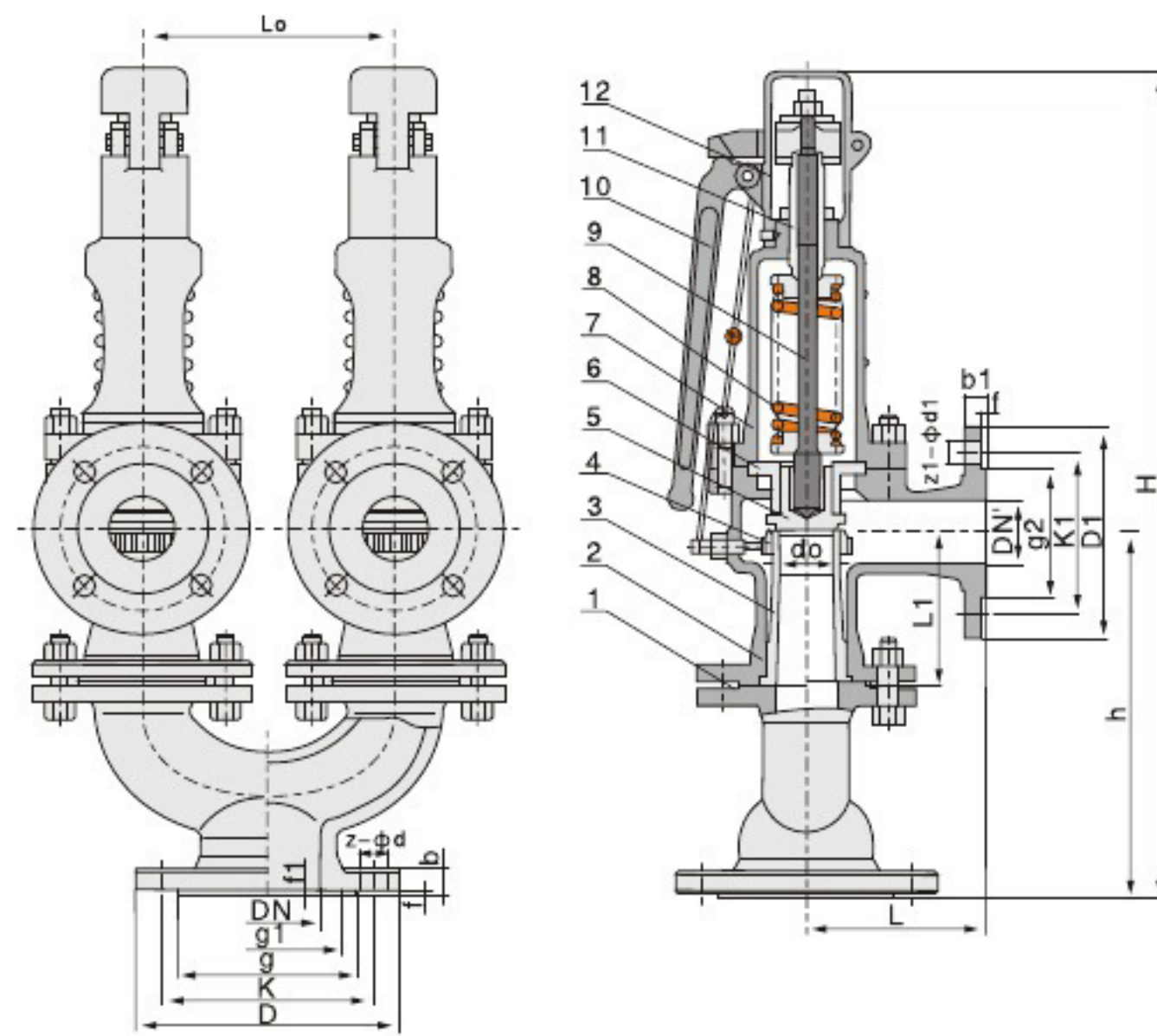
This safety valves are used for the equipment and pipeline of the steam, water etc. medium what the working temperature are less than 350°C . Take for extra pressure protection devices.

Flange connecting dimensions of comply with Standard series one of JB/T.....-94.

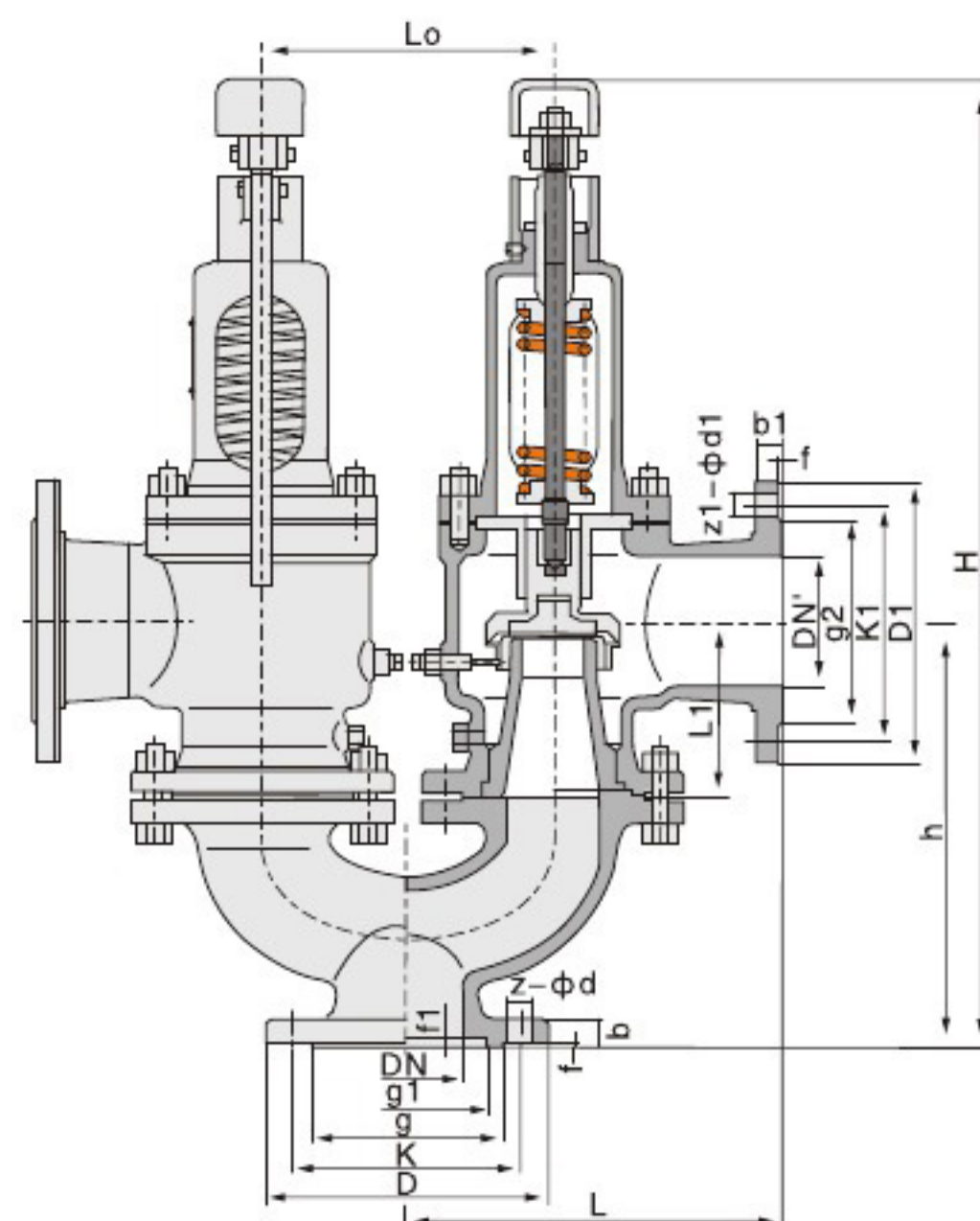
主要零部件材料 Explanation of materials for main parts

A38Y、A43H、A37H型安全阀除三通（材料为WCB）外，其余零件的材料均和A47H、A48Y型弹簧式安全阀相同。

A38Y, A43H, A37H safety valve, except the three-ways style (material WCB), the materials of other parts are the same as A47H, A48Y type spring loaded type safety valve.



A37H A43H
结构图 Structural drawing



A38Y
结构图 Structural drawing

双联弹簧式安全阀 Twin spring type safety valve

A38Y、A43H、A37H型双联安全阀是在Y型接头上装设两个同样规格的A48Y或A47H型安全阀而构成，其公称通径系列指Y型接头进口通径，其组合情况如下表：

A38Y, A43H, A37H type twin safety valve is composed of two A48Y or A47Y type safety valves with the same specifications. Which are fixed on a Y-shaped joint. The nominal diameter is the inlet diameter of the Y-shaped joint. Here is the table to show its combination.

A38Y型 A38Y Type (DN)	相应的A48Y型 Relevant A48Y Type (DN)	A43Y型 A43Y Type (DN)	相应的A47Y型 Relevant A47Y Type (DN)	A37Y型 A37Y Type (DN)	相应的A47Y型 Relevant A47Y Type (DN)
50	32×2	50	32×2	50	32×2
80	50×2	80	50×2	80	65×2
100	65×2	100	80×2	100	80×2
150	100×2	125	100×2	125	100×2
		150	125×2	150	125×2

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称通径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ²	b ₁	f'	Z ₁ -Φd ₁	L	L ₁	L ₀	h	≈H
A37H-16C A43H-16C A43Y-16P A43Y-16R A37Y-16P A37Y-16R	50	25	165	125	100		20	3		4-18	32	140	100	78	18	2	4-18	115	110	165	235	547
	80	40	200	160	135		20	3		8-18	50	165	125	100	16	3	4-18	135	120	190	285	795
	80	50	200	160	135		20	3		8-18	65	185	145	120	18	3	4-18	140	130	205	310	835
	100	65	220	180	155		22	3		8-18	80	200	160	135	20	3	8-18	160	135	255	355	890
	125	80	250	210	185		22	3		8-18	100	220	180	155	22	3	8-18	170	160	260	410	1170
150	100	285	240	210		24	3		8-23	125	250	210	185	22	3	8-18	190	190	275	430	1240	
A37H-25C A43H-25C A37Y-25P A37Y-25R A43Y-25P A43Y-25R	50	25	165	125	100		20	3		4-18	32	140	100	78	18	2	4-18	115	110	165	235	547
	80	40	200	160	135		22	3		8-18	50	165	125	100	16	3	4-18	135	120	190	285	795
	80	50	200	160	135		22	3		8-18	65	185	145	120	18	3	4-18	140	130	205	310	835
	100	65	230	190	160		24	3		8-23	80	200	160	135	20	3	8-18	160	135	255	355	890
	125	80	270	220	188		28	3		8-26	100	220	180	155	22	3	8-18	170	160	260	410	1170
150	100	300	250	218		30	3		8-26	125	250	210	185	22	3	8-18	190	190	275	430	1240	
A37H-40C A43H-40C A37Y-40P A37Y-40R A43Y-40P A43Y-40R	50	25	165	125	100	88	20	3	4	4-18	32	140	100	78	16	2	4-18	115	110	165	235	547
	80	40	200	160	135	121	22	3	4	8-18	50	165	125	100	16	3	4-18	135	120	190	285	795
	80	50	200	160	135	121	22	3	4	8-18	65	185	145	120	18	3	4-18	140	130	205	310	835
	100	65	235	190	160	150	24	3	4.5	8-23	80	200	160	135	20	3	8-18	160	135	255	355	890
	125	80	270	220	188	176	28	3	4.5	8-26	100	220	180	155	22	3	8-18	170	160	260	410	1170
150	100	300	250	218	204	30	3	4.5	8-26	125	250	210	185	22	3	8-18	190	190	275	430	1240	
A38Y-16C A38Y-10P A38Y-16R	50	20	165	125	100		20	3		4-18	40	150	110	85	16	3	4-18	198	100	165	225	636
	80	32	200	160	135		20	3		8-18	65	185	145	120	20	3	4-18	230	120	190	265	817
	100	40	220	180	155		22	3		8-18	80	200	160	135	20	3	8-18	293	140	265	265	921
	150	80	285	240	210		24	3		8-23	125	250	210	185	22	3	8-18	320	175	250	420	1097
A38Y-25C A38Y-25P A38Y-25R	50	20	165	125	100		20	3		4-18	40	150	110	85	16	3	4-18	198	100	165	225	636
	80	32	200	160	135		22	3		8-18	65	185	145	120	20	3	4-18	230	120	190	265	817
	100	40	230	190	160		24	3		8-23	80	200	160	135	20	3	8-18	293	140	265	265	921
	150	80	300	250	218		30	3		8-26	125	250	210	185	22	3	8-18	320	175	250	420	1097
A38Y-40C A38Y-40P A38Y-40R	50	20	165	125	100	88	20	3	4	4-18	40	150	110	85	16	3	4-18	198	100	165	225	636
	80	32	200	160	135	121	22	3	4	8-18	65	185	145	120	20	3	4-18	230	120	190	265	817
	100	40	235	190	160	150	24	3	4.5	8-23	80	200	160	135	20	3	8-18	293	140	265	265	921
	150	80	300	250	218	204	30	3	4.5	8-26	125	250	210	185	22	3	8-18	320	175	250	420	1097

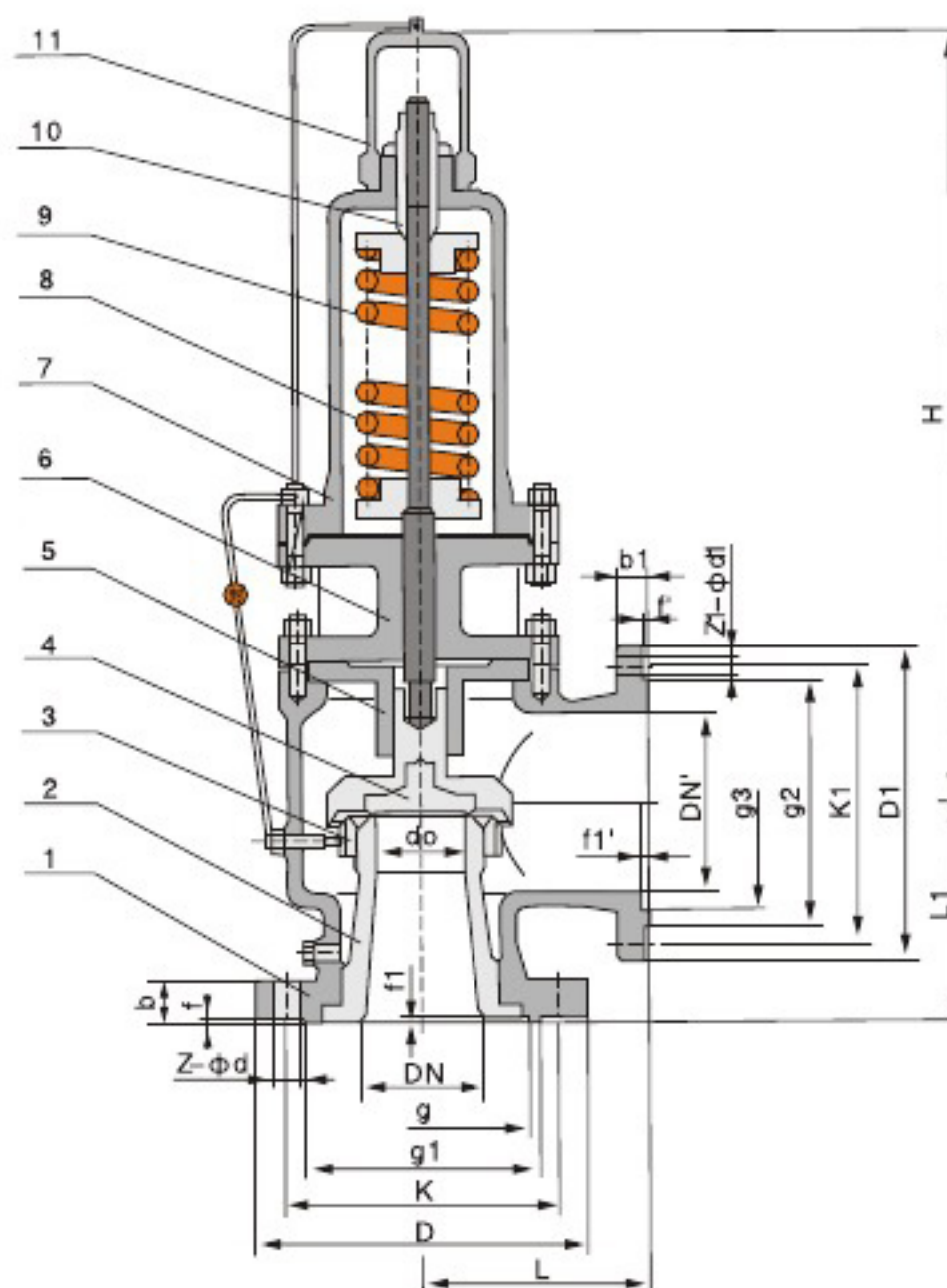
带散热器弹簧全启式安全阀 Spring full bore type safety valve with a radiator

系列 Series

A40Y-16C
A40Y-25
A40Y-40
A40Y-64
A40Y-100
A40Y-16
A40Y-25
A40Y-40P
A40Y-64P
A40Y-100P
A40Y-16
A40Y-25
A40Y-40I
A40Y-64
A40Y-100I

A40Y-C适用于工作温度 $\leq 400^{\circ}\text{C}$ 、A40Y-I $\leq 450^{\circ}\text{C}$ 的空气、水、氮氢混合气等介质的设备或管中上，A40Y-P适用于工作温度 $\leq 300^{\circ}\text{C}$ 有腐蚀性介质的设备或管路上，作为超压保护装置。

A40Y-C type are used for the equipment and pipeline of the air, N_2 , H_2 mixed gas etc. medium what the working temperature are less than 400°C . TA40Y-P type are used for the equipment and pipeline of the quality with corrode medium what the working temperature are less than 300°C . Take for extra pressure Protection devices.



A40Y
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A40Y-C 材料 Materials	A40Y-P 材料 Materials	A40Y-I 材料 Materials
1	阀体 Body	WCB	ZG1Cr18Ni9Ti	ZG1Cr5Mo
2	阀座 Nozzle	2Cr13	1Cr18Ni9Ti	1Cr18Ni9Ti
3	调节圈 Adjusting ring	2Cr13	1Cr18Ni9Ti	1Cr18Ni9Ti
4	阀瓣 Disc	2Cr13	1Cr18Ni9Ti	1Cr18Ni9Ti
5	导向套 Guide sleeve	2Cr13	1Cr18Ni9Ti	1Cr18Ni9Ti
6	散热器 Radiator	ZG230-450	ZG230-450	ZG230-450
7	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450
8	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
9	阀杆 Stem	2Cr13	1Cr18Ni9Ti	2Cr13
10	调整螺杆 Adjusting bolt	45	1Cr18Ni9Ti	2Cr13
11	阀帽 Cap	ZG200-400	ZG200-400	ZG200-400
密封面材料 Sealing surface of material		"Y"型堆焊Co基硬质合金 Depositing stellite		

带散热器弹簧全启式安全阀
Spring full bore type safety valve with a radiator

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 通径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN ¹	D ₁	K ₁	g ³	g ²	b ₁	f'	f ₁ '	Z-Φd ₁	L	L ₁	≈H
A40Y-16C A40Y-16P A40Y-16R A40Y-16I	20	15	105	75		55	16	2		4-14	25	115	85		65	16	2		4-14	110	95	518
	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	518
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	518
	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	110	579
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	639
	65	40	185	145		120	20	3		4-18	80	200	160		135	20	3		8-18	160	140	671
	80	50	200	160		135	20	3		8-18	100	220	180		155	22	3		8-18	170	135	676
	100	65	220	180		155	22	3		8-18	125	250	210		185	22	3		8-18	195	175	787
	125	80	250	210		185	22	3		8-18	150	285	240		210	24	3		8-23	210	190	977
	150	100	285	240		210	24	3		8-23	175	310	270		240	26	3		8-23	255	230	1035
200	125	340	295		265	26	3		12-23	250	405	355		320	30	3		12-26	300	260	1193	
A40Y-25C A40Y-25P A40Y-25R A40Y-25I	20	15	105	75		55	16	2		4-14	25	115	85		65	16	2		4-14	110	95	518
	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	518
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	518
	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	110	579
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	639
	65	40	185	145		120	22	3		8-18	80	200	160		135	20	3		8-18	160	140	671
	80	50	200	160		135	22	3		8-18	100	220	180		155	22	3		8-18	170	135	676
	100	65	230	190		160	24	3		8-23	125	250	210		185	22	3		8-18	195	175	787
	125	80	270	220		188	28	3		8-26	150	285	240		210	24	3		8-23	210	190	977
	150	100	300	250		218	30	3		8-26	175	310	270		240	26	3		8-23	255	230	1035
200	125	360	310		278	34	3		12-26	250	405	355		320	30	3		12-26	300	260	1193	
A40Y-40C A40Y-40P A40Y-40R A40Y-40I	20	15	105	75	51	55	16	2	4	4-14	25	115	85		65	16	2		4-14	110	95	518
	25	16	115	85	58	65	16	2	4	4-14	32	140	100		78	18	2		4-18	110	95	518
	32	20	140	100	66	78	18	2	4	4-18	40	150	110		85	18	3		4-18	115	100	518
	40	25	150	110	76	85	18	3	4	4-18	50	165	125		100	20	3		4-18	120	110	579
	50	32	165	125	88	100	20	3	4	4-18	65	185	145		120	20	3		4-18	135	120	639
	65	40	185	145	110	120	22	3	4	8-18	80	200	160		135	20	3		8-18	160	140	671
	80	50	200	160	121	135	22	3	4	8-18	100	220	180		155	22	3		8-18	170	135	676
	100	65	235	190	150	160	24	3	4.5	8-23	125	250	210		185	22	3		8-18	195	175	787
	125	80	270	220	176	188	28	3	4.5	8-26	150	285	240		210	24	3		8-23	210	190	977
	150	100	300	250	204	218	30	3	4.5	8-26	175	310	270		240	26	3		8-23	255	230	1035
A40Y-64C A40Y-64P A40Y-64R A40Y-64I	20	10	125	90	51	68	22	2	4	4-18	25	115	85	58	65	16	2	4	4-14	96	85	384
	25	16	140	100	58	78	22	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	384
	32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	396
	40	25	170	125	76	95	24	3	4	4-23	50	165	125	88	100	20	3	4	4-18	130	120	426
	50	32	180	135	88	105	26	3	4	4-23	65	185	145	110	120	22	3	4	8-18	135	130	504
	65	40	205	160	110	130	28	3	4	8-23	80	200	160	121	135	22	3	4	8-18	175	160	613
	80	50	215	170	121	140	30	3	4	8-23	100	235	190	150	160	24	3	4.5	8-23	175	160	603
	100	65	250	200	150	168	32	3	4.5	8-26	125	270	220	176	188	28	3	4.5	8-25	195	195	813
	150	100	345	280	204	240	38	3	4.5	8-34	200	375	320	260	282	38	3	4.5	12-30	280	265	1064
	A40Y-100C A40Y-100P A40Y-100R A40Y-100I	20	10	125	90	51	68	22	2	4	4-18	25	115	85	58	65	16	2	4	4-14	96	85
25		16	140	100	58	78	24	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	384
32		20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	396
40		25	170	125	76	95	26	3	4	4-23	50	165	125	88	100	20	3	4	4-18	130	120	426
50		32	195	145	88	112	28	3	4	4-26	65	185	145	110	120	22	3	4	8-18	135	130	504
65		40	220	170	110	138	32	3	4	8-26	80	200	160	121	135	22	3	4	8-18	175	160	613
80		50	230	180	121	148	34	3	4	8-26	100	235	190	150	160	24	3	4	8-23	175	160	603
100		65	265	210	150	172	38	3	4.5	8-30	125	270	220	176	188	28	3	4.5	8-25	195	195	813
150		100	355	290	204	250	46	3	4.5	12-34	200	375	320	260	282	38	3	4.5	12-30	280	265	1064

弹簧微启封闭式安全阀 Closed spring loaded low lift type safety valve

系列 Series

A41H-16C
A41H-25C
A41H-40C
A41Y-64C
A41Y-100C
KA41H-16P

A41Y-16P
A41Y-25P
A41Y-40P
A41Y-64P
A41Y-100P
KA41Y-25P

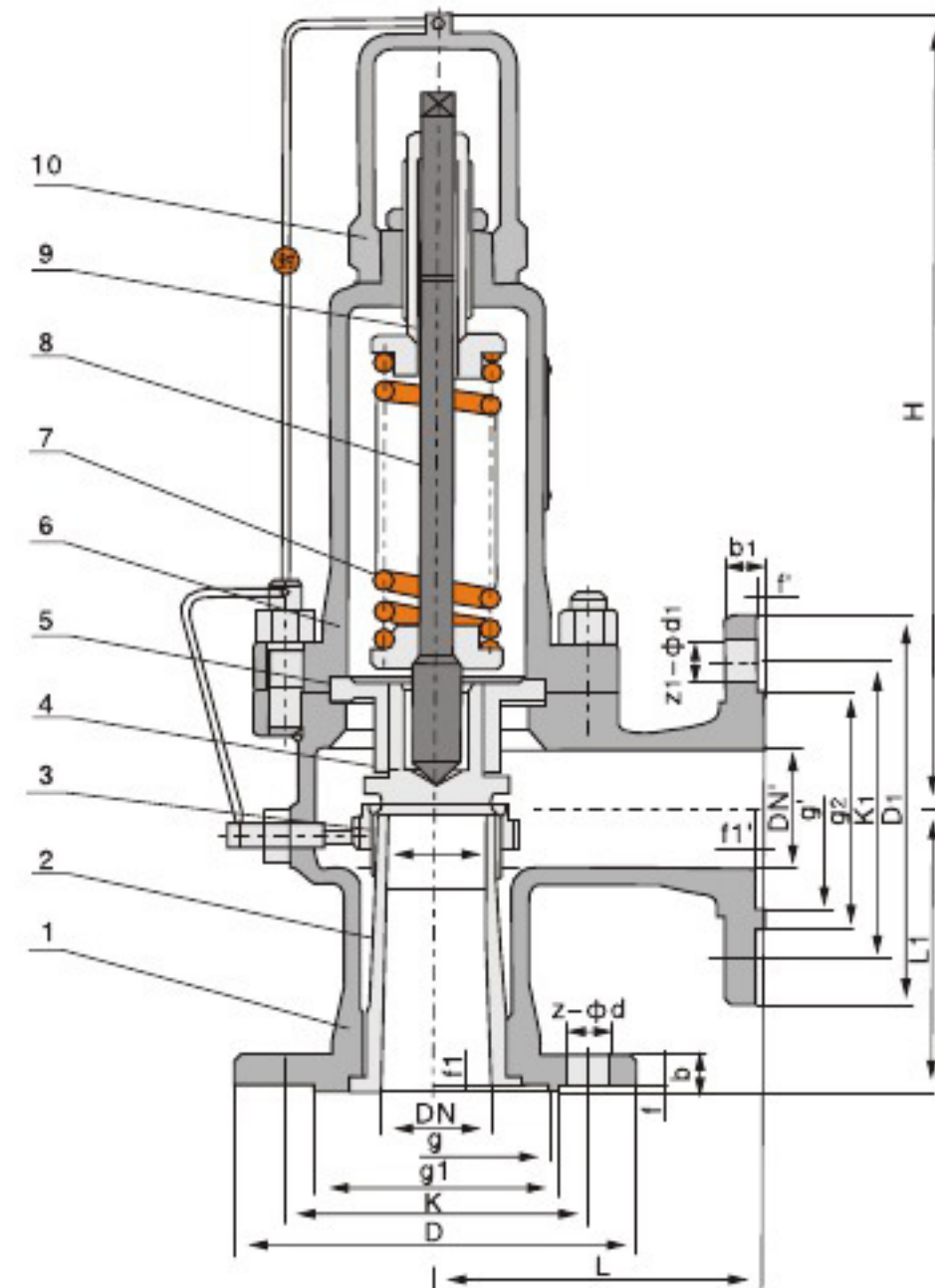
A41Y-16R
A41Y-25R
A41Y-40R
A41Y-64R
A41Y-100R
KA41Y-40R

A41H型适用于工作温度 $\leq 300^{\circ}\text{C}$ 的石油气、空气、水等介质的设备或管路上。A41Y-P/R型适用于工作温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性介质的设备或管路上，作为超压保护装置。

连接法兰标准按JB/T.....-94/系列1。

A41H type are used for the equipment and pipeline of the petroleum gas, air, water etc medium what the working temperature are less than 300°C . A41Y-P/R type are used for the equipment and pipeline of the quality with corode medium what the working temperature are less than 200°C . Take for extra pressure devices.

Flange connecting dimensions of comply with Standard series one of JB/T.....-94.



A41H
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A41H-C/KA41Y-C 材料 Materials	A41Y-P/KA41Y-P 材料 Materials	A41Y-R/KA41Y-R 材料 Materials
1	阀体 Body	WCB	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
2	阀座 Nozzle	ZG2Cr13/1Cr18Ni9Ti	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
3	调节圈 Adjusting ring	ZG2Cr13/1Cr18Ni9Ti	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
4	阀瓣 Disc	2Cr13/1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
5	导向套 Guide sleeve	ZG2Cr13/1Cr18Ni9Ti	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
6	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450
7	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
8	阀杆 Stem	2Cr13	1Cr18Ni12Mo2Ti	1Cr18Ni12Mo2Ti
9	调整螺杆 Adjusting bolt	45	2Cr13	2Cr13
10	保护罩 Cap	ZG200-400	ZG200-400	ZG200-400

密封面材料 Sealing surface of material "H"型堆焊D507 DepositingD507 "Y"型堆焊Co基硬质合金 Depositing stellite

弹簧微启封闭式安全阀
Closed spring loaded low lift type safety valve

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 通径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ²	g'	b ₁	f'	f ₁ '	Z ₁ -Φd ₁	L	L ₁	≈H
A41H-16C A41Y-16P A41Y-16R KA41Y-16C KA41Y-16P	20	15	105	75		55	16	2		4-14	20	105	75	55		16	2		4-14	100	85	276
	25	20	115	85		65	16	2		4-14	25	115	85	65		16	2		4-14	100	85	276
	30	25	140	100		78	18	2		4-18	32	140	100	78		18	2		4-18	115	100	285
	40	32	150	110		85	18	3		4-18	40	150	110	85		18	3		4-18	120	110	292
	50	40	165	125		100	20	3		4-18	50	165	125	100		20	3		4-18	135	120	370
	65	50	185	145		120	20	3		4-18	65	185	145	120		20	3		4-18	140	130	375
	80	65	200	160		135	20	3		8-18	80	200	160	135		20	3		8-18	160	135	373
	100	80	220	180		155	22	3		8-18	100	220	180	155		22	3		8-18	170	160	513
	125	100	250	210		185	22	3		8-18	125	250	210	185		22	3		8-18	190	190	560
	150	125	285	240		210	24	3		8-23	150	285	240	210		24	3		8-23	205	195	570
200	150	340	295		265	26	3		12-23	200	340	295	265		26	3		12-23	240	230	717	
250	200	405	355		320	30	3		12-26	250	405	355	320		30	3		12-26	350	320	940	
300	250	460	410		375	30	4		12-26	300	460	410	375		30	4		12-26	350	320	980	
A41H-25C A41Y-25P A41Y-25R KA41Y-25C KA41Y-25P	20	15	105	75		55	16	2		4-14	20	105	75	55		16	2		4-14	100	85	276
	25	20	115	85		65	16	2		4-14	25	115	85	65		16	2		4-14	100	85	276
	32	25	140	100		78	18	2		4-18	32	140	100	78		18	2		4-18	115	100	285
	40	32	150	110		85	18	3		4-18	40	150	110	85		18	3		4-18	120	110	292
	50	40	165	125		100	20	3		4-18	50	165	125	100		20	3		4-18	135	120	370
	65	50	185	145		120	22	3		8-18	65	185	145	120		20	3		4-18	140	130	375
	80	65	200	160		135	24	3		8-18	80	200	160	135		20	3		8-18	160	135	373
	100	80	230	190		160	24	3		8-23	100	220	180	155		20	3		8-18	170	160	513
	125	100	270	220		188	28	3		8-26	125	250	210	185		22	3		8-18	190	190	560
	150	125	300	250		218	30	3		8-26	150	285	240	210		24	3		8-23	205	195	570
200	150	360	310		278	34	3		12-26	200	340	295	265		26	3		12-23	240	230	717	
250	200	425	370		332	36	3		12-30	250	405	355	320		30	3		12-26	350	320	940	
300	250	485	430		390	40	4		16-30	300	460	410	375		30	4		12-26	350	320	980	
A41H-40C A41Y-40P A41Y-40R KA41Y-40C KA41Y-40P	20	15	105	75	51	55	16	2	4	4-14	20	105	75	55		16	2		4-14	100	85	276
	25	20	115	85	58	65	16	2	4	4-14	25	115	85	65		16	2		4-14	100	85	276
	32	25	140	100	66	78	18	2	4	4-18	32	140	100	78		18	2		4-18	115	100	285
	40	32	150	110	76	85	18	3	4	4-18	40	150	110	85		18	3		4-18	120	110	292
	50	40	165	125	88	100	20	3	4	4-18	50	165	125	100		20	3		4-18	135	120	370
	65	50	185	145	110	120	22	3	4	8-18	65	185	145	120		20	3		4-18	140	130	375
	80	65	200	160	121	135	22	3	4	8-18	80	200	160	135		20	3		8-18	160	135	373
	100	80	235	190	150	160	24	3	4.5	8-23	100	220	180	155		22	3		8-18	170	160	513
	125	100	270	220	176	188	28	3	4.5	8-26	125	250	210	185		22	3		8-18	190	190	560
	150	125	300	250	204	218	30	3	4.5	8-26	150	285	240	210		24	3		8-23	205	195	570
200	150	375	320	260	282	38	3	4.5	12-30	200	340	295	265		26	3		12-23	240	230	717	
250	200	450	385	313	345	42	3	4.5	12-34	250	405	355	320		30	3		12-26	350	320	940	
300	250	515	450	364	408	46	4	4.5	16-34	300	460	410	375		30	4		12-26	350	320	980	
A41H-64C A41Y-64C A41Y-64P A41Y-64R	20	15	130	90	51	68	20	2	4	4-18	20	105	75	55	51	16	2	4	4-14	100	95	268
	25	20	140	100	58	78	22	2	4	4-18	25	115	85	65	58	16	2	4	4-14	100	95	268
	32	25	155	110	66	82	24	2	4	4-23	32	140	100	78	66	18	2	4	4-18	115	105	279
	40	32	170	125	76	95	24	3	4	4-23	40	150	110	85	76	18	3	4	4-18	135	115	330
	50	40	180	135	88	105	26	3	4	4-23	50	165	125	100	88	20	3	4	4-18	160	125	360
	65	50	205	160	110	130	28	3	4	8-23	65	185	145	120	110	22	3	4	8-18	175	160	503
	80	65	215	170	121	140	30	3	4	8-23	80	200	160	135	121	22	3	4	8-18	175	160	498
100	80	250	200	150	168	32	3	4.5	8-26	100	235	190	160	150	24	3	4.5	8-23	190	180	530	
150	100	345	280	204	240	38	3	4.5	8-34	150	300	250	218	204	30	3	4.5	8-26	280	260	657	
A41H-100C A41Y-100C A41Y-100P A41Y-100R	20	15	130	90	51	68	22	2	4	4-18	20	105	75	55	51	16	2	4	4-14	100	95	268
	25	20	140	100	58	78	24	2	4	4-18	25	115	85	65	58	16	2	4	4-14	100	95	268
	32	25	155	110	66	82	24	2	4	4-23	32	140	100	78	66	18	2	4	4-18	115	105	279
	40	32	170	125	76	95	26	3	4	4-23	40	150	110	85	76	18	3	4	4-18	135	115	330
	50	40	195	145	88	112	28	3	4	4-26	50	165	125	100	88	20	3	4	4-18	160	125	360
	65	50	220	170	110	138	32	3	4	8-26	65	185	145	120	110	22	3	4	8-18	175	160	503
	80	65	230	180	121	148	34	3	4	8-26	80	200	160	165	121	22	3	4	8-18	175	160	498
100	80	265	210	150	172	38	3	4.5	8-30	100	235	190	160	150	24	3	4.5	8-23	190	180	530	
150	100	355	290	204	250	46	3	4.5	12-34	150	300	250	218	204	30	3	4.5	8-26	280	260	657	

弹簧微启封闭式高压安全阀 Closed spring loaded low lift type high pressure safety valve

系列 Series

A41Y-160
A41Y-320
A41Y-160P
A41Y-320P
A41Y-160R
A41Y-320R

A41Y-160、320型适用于工作温度 $\leq 200^{\circ}\text{C}$ 空气、氮氢混合气、水等介质的设备和管路上。A41Y-160P/320P、A41Y-160R/320R型适用于温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性的气体或液体介质设备和管路上，作为超压保护装置。

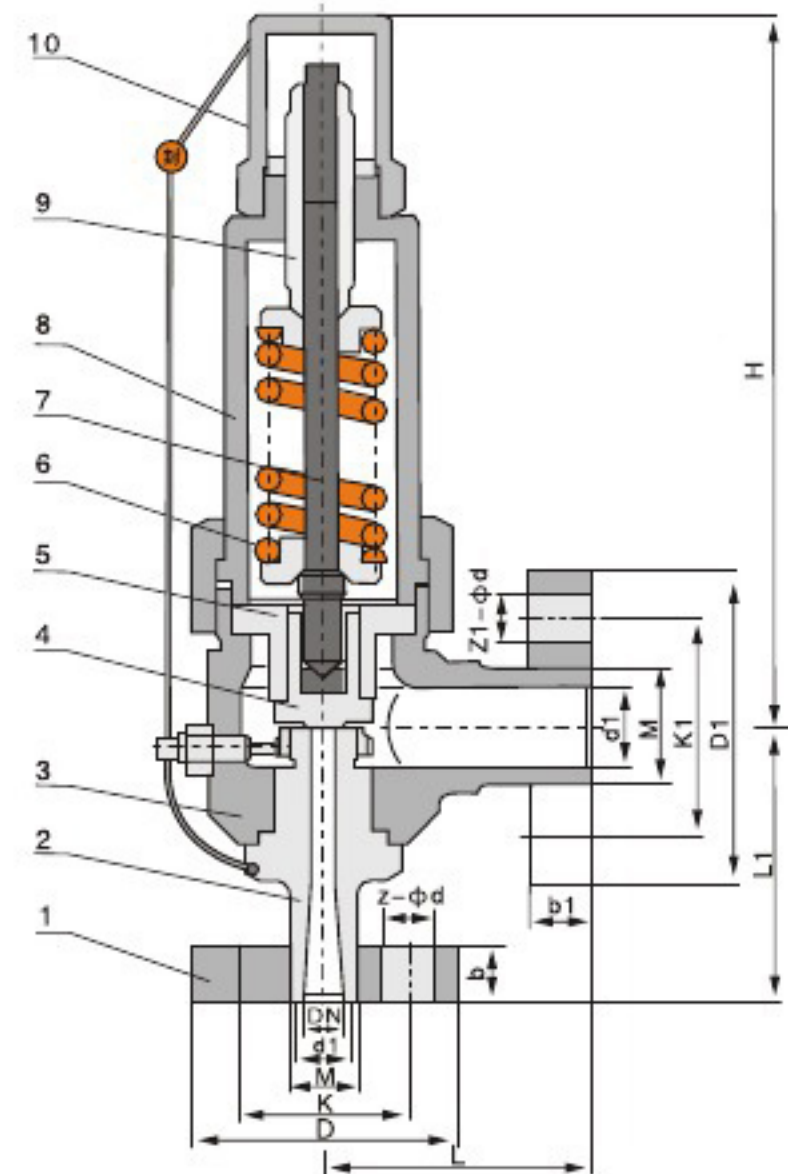
连接法兰按JB/T2769-92的标准。

A41Y-160/320 type are used for the equipment and pipeline of the air, N_2 , H_2 mixed gas, water etc. medium what the working temperature are less than 200°C . A41Y-160P/320P, A41Y-160R/320R type are used for the equipment and pipeline of the quality with corrode gas and liquid medium what the working temperature are less than 200°C . Take for extra pressure protection devices.

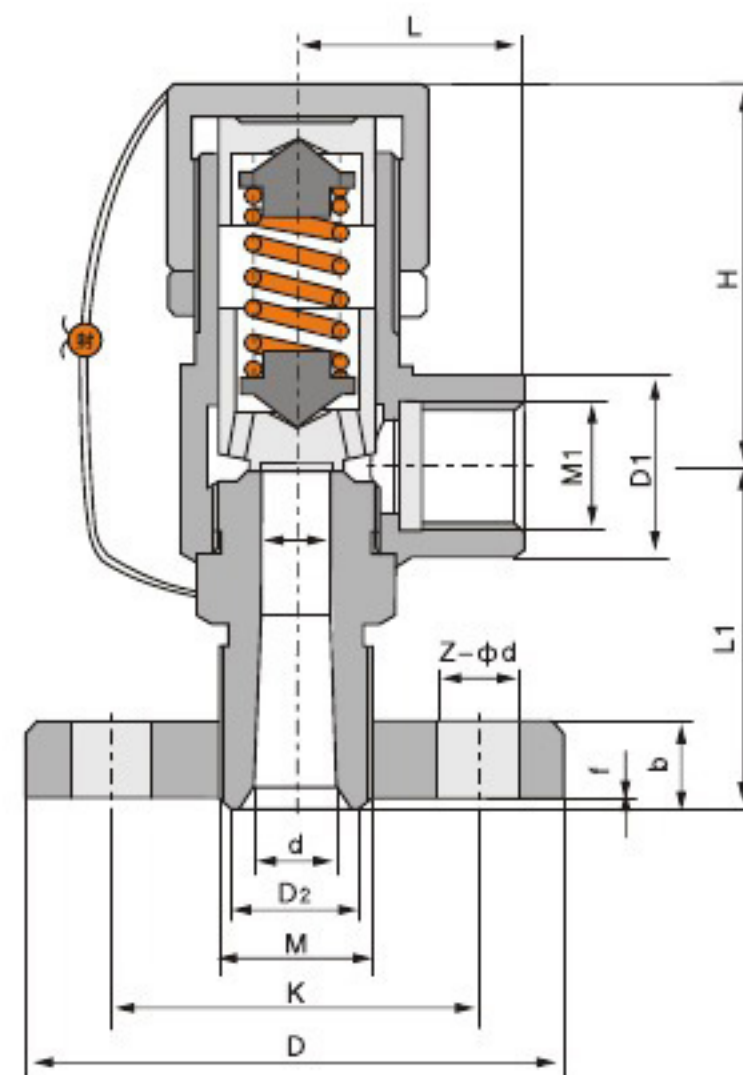
Flange connecting dimensions of compsy with Standard of JB/T2769-92.



A41H-320
结构图 Structural drawing



A41H-160(单法兰)
结构图 Structural drawing



■ 主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A41Y-160/320 材料 Materials	A41Y-160P/320P 材料 Materials	A41Y-160R/320R 材料 Materials
1	法 兰 Flange	35/35CrMoA	2Cr13	1Cr18Ni9Ti
2	阀 座 Nozzle	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
3	阀 体 Body	35/40	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
4	阀 瓣 Disc	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
5	导 向 套 Guide sleeve	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
6	弹 簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
7	阀 杆 Stem	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
8	阀 盖 Bonnet	ZG230-450	1Cr18Ni9Ti	1Cr18Ni9Ti
9	调整螺杆 Adjusting bolt	45	2Cr13	2Cr13
10	阀 帽 Cap	ZG200-400	1Cr18Ni9Ti	1Cr18Ni9Ti
	阀座、阀瓣密封面 Sealing surface of seat and disc	"H"堆焊Ni ₃ D507 Depositing D507	"Y"堆焊Co基硬质合金 Depositing stellite	

■ 外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 口径 (DN)	do	d	M	D	K	Z-Φd	b	d ₁	M ₁	D ₁	K ₁	Z ₁ -Φd ₁	b ₁	L	L ₁	≈H
A41Y-160 A44Y-16P A41Y-16R (单法兰)	15	8	20	M24×2	95	60	3-18	20	/	M33×2	36	/	/	/	50	80	85
	20	10	25	M27×2	95	60	3-18	20	/	M33×2	48	/	/	/	50	80	85
	25	12	28	M33×2	105	68	3-18	20	/	M33×2	48	/	/	/	50	80	85
A41Y-160C A41Y-160P A41Y-160R	10	8	18	M24×2	95	60	3-18	20	29	M42×2	115	80	4-18	22	95	100	261
	15	8	20	M24×2	95	60	3-18	20	29	M42×2	115	80	4-18	22	95	100	261
	20	10	27	M33×2	105	68	3-18	20	29	M42×2	115	80	4-18	22	95	100	261
	25	12	28	M33×2	105	68	3-18	20	50	M64×3	165	115	6-26	32	130	135	285
	32	12.14.16	37	M42×2	115	80	4-18	22	50	M64×3	165	115	6-26	32	130	135	285
	40	20	47	M52×2	165	115	6-26	28	65	M80×3	200	145	6-29	40	165	165	350
A41Y-320 A41Y-320P A41Y-320R	10	8	18	M24×2	95	60	3-18	20	29	M42×2	115	80	4-18	22	95	100	261
	15	8	27	M33×2	105	68	3-18	20	29	M42×2	115	80	4-18	22	95	100	261
	20	10	30	M36×2	110	75	3-18	20	29	M42×2	115	80	4-18	22	95	100	261
	25	12	35	M42×2	115	80	4-18	22	50	M64×3	165	115	6-26	32	130	135	285
	32	12.14.16	41	M48×2	135	95	4-22	25	50	M64×3	165	115	6-26	32	130	135	285
	40	20	58	M64×3	165	115	6-26	32	65	M80×3	200	145	6-29	40	165	115	350
	50	25	70	M80×3	200	145	6-29	40	80	M100×3	225	170	6-33	50	165	165	380

弹簧全启封闭式安全阀 Closed spring loaded full bore type safety valve

系列 Series

A42Y-16C
A42Y-16P
A42Y-16R
KA42Y-16
DA42Y-16P

A42Y-25C
A42Y-25P
A42Y-25R
KA42Y-25P
DA42Y-25P

A42Y-40C
A42Y-40P
A42Y-40R
KA42Y-40
DA42Y-40P

A42Y-64C
A42Y-64P
A42Y-64R
KA42Y-64
DA42Y-64P

A42Y-100C
A42Y-100P
A42Y-100R
KA42Y-100
DA42Y-100P

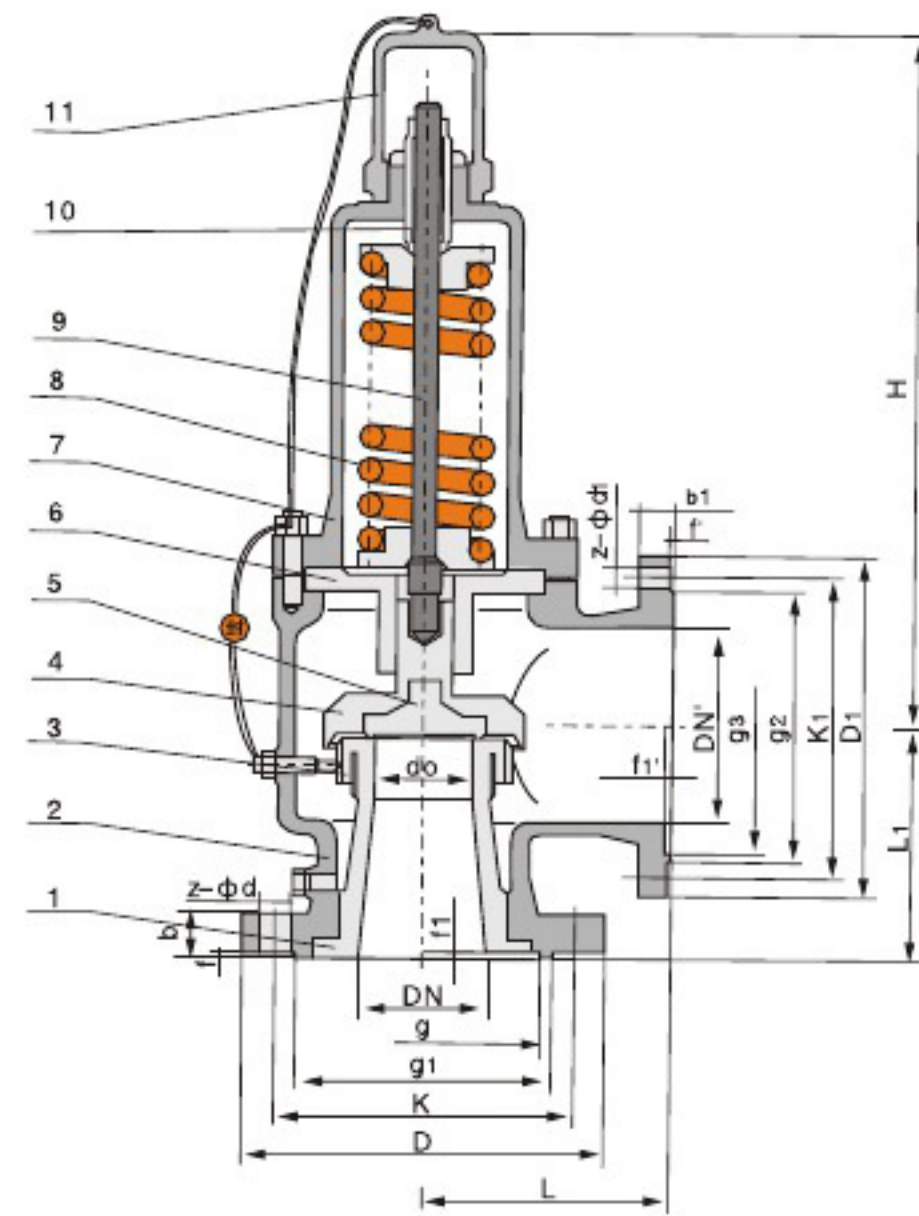
A42Y-C型适用于工作温度 $\leq 300^{\circ}\text{C}$ 空气、石油气、液体等介质的设备和管路上。A42Y-P型及A42Y-R型适用于工作温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性的介质的设备和管路上，作为超压保护装置。

连接法兰标准按JB/T.....-94系列1。 $\geq 6.4\text{MPa}$ 按JB/T.....-94系列2。

A42Y-C type are used for the equipment and pipeline of the air, petroleum gas, liquid etc medium what the working temperature are less than 300°C .

A42Y-P type and A42Y-R type are used for the equipment and pipeline of the quality with corrode medium what the working temperature are less than 200°C . Take for extra pressure protection devices.

Flange connecting dimensions of comply with Standard series one of JB/T.....-94, Comply with Standard series two of JB/T.....-94 when more than 6.4MPa.



A42Y
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A42Y-C/KA42Y-C 材料 Materials	A42Y-P/KA42Y-P 材料 Materials	A42Y-R 材料 Materials	DA42Y-P 材料 Materials
1	阀座 Nozzle	2Cr13/1Cr18Ni9Ti	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti	ZG1Cr18Ni9Ti
2	阀体 Body	WCB	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti	LCB/ZG1Cr18Ni9Ti
3	调节圈 Adjusting ring	2Cr13/1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti	1Cr18Ni9Ti
4	反冲盘 Disc holder	2Cr13/1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti	1Cr18Ni9Ti
5	阀瓣 Disc	2Cr13/1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti	1Cr18Ni9Ti
6	导向套 Guide sleeve	2Cr13/1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti	1Cr18Ni9Ti
7	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450	ZG1Cr18Ni9Ti
8	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon	50CrVA
9	阀杆 Stem	2Cr13	1Cr18Ni9Ti/1Cr18Ni12Mo2Ti	1Cr18Ni9Ti/1Cr18Ni12Mo2Ti	1Cr18Ni9Ti
10	调整螺杆 Adjusting bolt	45	2Cr13	2Cr13	2Cr13
	阀帽 Cap	ZG200-400	ZG200-400	ZG200-400	ZG230-450
	密封面材料 Sealing surface of material	"Y"堆焊Co基硬质合金 Depositing stellite			

弹簧全启封闭式安全阀
Closed spring loaded full bore type safety valve

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 口径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ³	g ²	b ₁	f'	f ₁ '	Z ₁ -Φd ₁	L	L ₁	≈H	
A42Y-16C A42Y-16P A42Y-16R KA42Y-16C DA42Y-16P	20	15	105	75		55	16	2		4-14	25	115	85		65	16	2		4-14	110	95	378	
	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	378	
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	378	
	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	110	406	
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	450	
	65	40	185	145		120	20	3		4-18	80	200	160		135	20	3		8-18	160	140	520	
	80	50	200	160		135	20	3		8-18	100	220	180		155	22	3		8-18	170	135	525	
	100	65	220	180		155	22	3		8-18	125	250	210		185	22	3		8-18	195	175	690	
	125	80	250	210		185	22	3		8-18	150	285	240		210	24	3		8-23	210	190	780	
	150	100	285	240		210	24	3		8-23	175	310	270		240	26	3		8-23	255	230	838	
	200	125	340	295		265	26	3		12-23	250	405	355		320	30	3		12-26	300	260	992	
	250	150	405	355		320	30	3		12-26	300	460	410		375	30	4		12-26	350	320	1266	
300	220	460	410		375	30	4		12-26	400	580	525		485	36	4		16-30	370	350	1283		
350	250	520	470		435	34	4		16-26	500	715	650		608	44	4		20-34	500	450	1520		
400	280	580	525		485	36	4		16-30	500	715	650		608	44	4		20-34	500	450	1530		
A42Y-25C A42Y-25P A42Y-25R KA42Y-25C DA42Y-25P	20	15	105	75		55	16	2		4-14	25	115	85		65	16	2		4-14	110	95	378	
	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	378	
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	378	
	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	110	406	
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	450	
	65	40	185	145		120	22	3		8-18	80	200	160		135	20	3		8-18	160	140	520	
	80	50	200	160		135	22	3		8-18	100	220	180		155	22	3		8-18	170	135	525	
	100	65	230	190		160	24	3		8-23	125	250	210		185	22	3		8-18	195	175	690	
	125	80	270	220		188	28	3		8-26	150	285	240		210	24	3		8-23	210	190	780	
	150	100	300	250		218	30	3		8-26	175	310	270		240	26	3		8-23	255	230	838	
	200	125	360	310		278	34	3		12-26	250	405	355		320	30	3		12-26	300	260	992	
	250	150	425	370		332	36	3		12-30	300	460	410		375	30	4		12-26	350	320	1266	
300	220	485	430		390	40	4		16-30	400	580	525		485	36	4		16-30	370	350	1283		
A42Y-40 A42Y-40P A42Y-40R KA42Y-40 DA42Y-40P	20	15	105	75	51	55	16	2	4	4-14	25	115	85		65	16	2		4-14	110	95	378	
	25	16	115	85	58	65	16	2	4	4-14	32	140	100		78	18	2		4-18	110	95	378	
	32	20	140	100	66	78	18	2	4	4-18	40	150	110		85	18	3		4-18	115	100	378	
	40	25	150	110	76	85	18	3	4	4-18	50	165	125		100	20	3		4-18	120	110	406	
	50	32	165	125	88	100	20	3	4	4-18	65	185	145		120	20	3		4-18	135	120	450	
	65	40	185	145	110	120	22	3	4	8-18	80	200	160		135	20	3		8-18	160	140	520	
	80	50	200	160	121	135	22	3	4	8-18	100	220	180		155	22	3		8-18	170	135	525	
	100	65	235	190	150	160	24	3	4.5	8-23	125	250	210		185	22	3		8-18	195	175	690	
	125	80	270	220	176	188	28	3	4.5	8-26	150	285	240		210	24	3		8-23	210	190	780	
	150	100	300	250	204	218	30	3	4.5	8-26	175	310	270		240	26	3		8-23	255	230	838	
	200	125	375	320	260	282	38	3	4.5	12-30	250	405	355		320	30	3		12-26	300	260	992	
	250	150	450	385	313	345	42	3	4.5	12-34	300	460	410		375	30	4		12-26	350	320	1266	
A42Y-64 A42Y-64P A42Y-64R DA42Y-64P	20	10	125	90	51	68	22	2	4	4-18	25	115	85	58	65	16	2	4	4-14	96	85	264	
	25	16	140	100	58	78	22	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	277	
	32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	289	
	40	25	170	125	76	95	24	3	4	4-23	50	165	125	88	100	20	3	4	4-18	130	120	319	
	50	32	180	135	88	105	26	3	4	4-23	65	185	145	110	120	22	3	4	8-18	135	130	389	
	65	40	205	160	110	130	28	3	4	8-23	80	200	160	121	135	22	3	4	8-18	175	160	493	
	80	50	215	170	121	140	30	3	4	8-23	100	235	190	150	160	24	3	4.5	8-23	175	160	483	
	100	65	250	200	150	168	32	3	4.5	8-26	125	270	220	176	188	28	3	4.5	8-25	195	195	613	
	150	100	345	280	204	240	38	3	4.5	8-34	200	375	320	260	282	38	3	4.5	12-30	280	265	894	
	A42Y-100 A42Y-100P A42Y-100R DA42Y-100P	20	10	125	90	51	68	22	2	4	4-18	25	115	85	58	65	16	2	4	4-14	96	85	264
		25	16	140	100	58	78	24	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	277
		32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	289
40		25	170	125	76	95	26	3	4	4-23	50	165	125	88	100	20	3	4	4-18	130	120	319	
50		32	195	145	88	112	28	3	4	4-26	65	185	145	110	120	22	3	4	8-18	135	130	389	
65		32	220	170	110	138	32	3	4	8-26	80	200	160	121	135	22	3	4	8-18	175	160	493	
80		40	230	180	121	148	34	3	4	8-26	100	235	190	150	160	24	3	4.5	8-23	175	160	483	
100		50	265	210	150	172	38	3	4.5	8-30	125	270	220	176	188	28	3	4.5	8-25	195	195	613	
150		80	355	290	204	250	46	3	4.5	12-34	200	375	320	260	282	38	3	4.5	12-30	280	265	894	

弹簧全启封闭式高压安全阀 Closed spring loaded full bore type high pressure safety valve

系列 Series

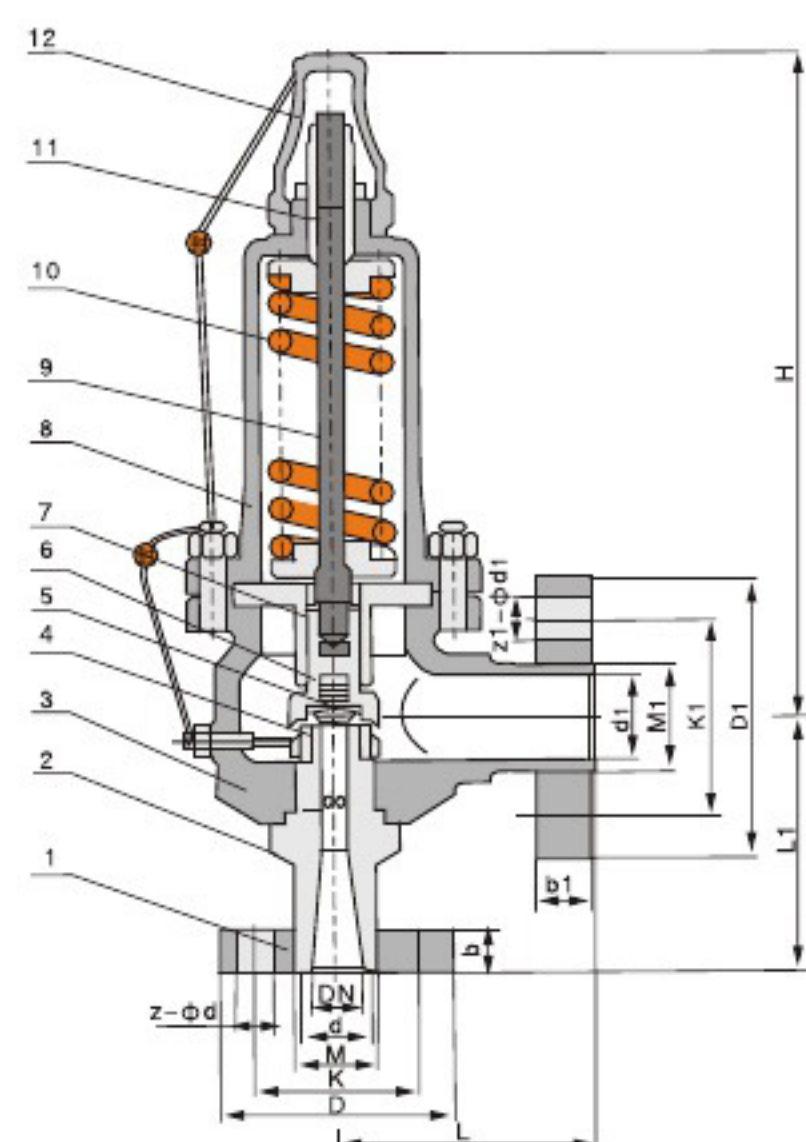
A42Y-160C
A42Y-320C
A42Y-160P
A42Y-320P
A42Y-160R
A42Y-320R

A42Y-160/320适用于工作温度 $\leq 200^{\circ}\text{C}$ 的空气、氮氢混合气等介质的设备或管路上。A42Y-160P/320P、A42Y-160R/320R适用于工作温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性介质的设备或管路上，作为超压保护装置。

连接法兰按JB/T2769-92的标准。

A42Y-160/320 are used for the equipment and pipeline of the air, N_2 , H_2 mixed gas, etc. medium what the working temperature are less than 200°C . A42Y-160P/320P, A42Y-160R/320R type are used for the equipment and pipeline of the quality with corrode medium what the working temperature are less than 200°C . Take for extra pressure protection devices.

Flange connecting dimensions of comply with Standard of JB/T2769-92.



A42Y

结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A42Y-160/320 材料 Materials	A42Y-160P/320P 材料 Materials	A42Y-160R/320R 材料 Materials
1	法兰 Flange	35/35CrMoA	2Cr13	1Cr18Ni12Mo2Ti
2	阀座 Nozzle	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
3	阀体 Body	40	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
4	调节圈 Adjusting ring	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
5	阀瓣 Disc	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
6	反冲盘 Disc holder	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
7	导向套 Guide sleeve	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
8	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450
9	阀杆 Stem	2Cr13	1Cr18Ni9Ti	1Cr18Ni9Ti
10	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
11	调整螺杆 Adjusting bolt	45	2Cr13	2Cr13
12	阀帽 Cap	ZG200-400	ZG200-400	ZG200-400
密封面材料 Sealing surface of material		"Y"堆焊Co基硬质合金 Depositing stellite		

外形尺寸和连接尺寸 Dimensions(mm)

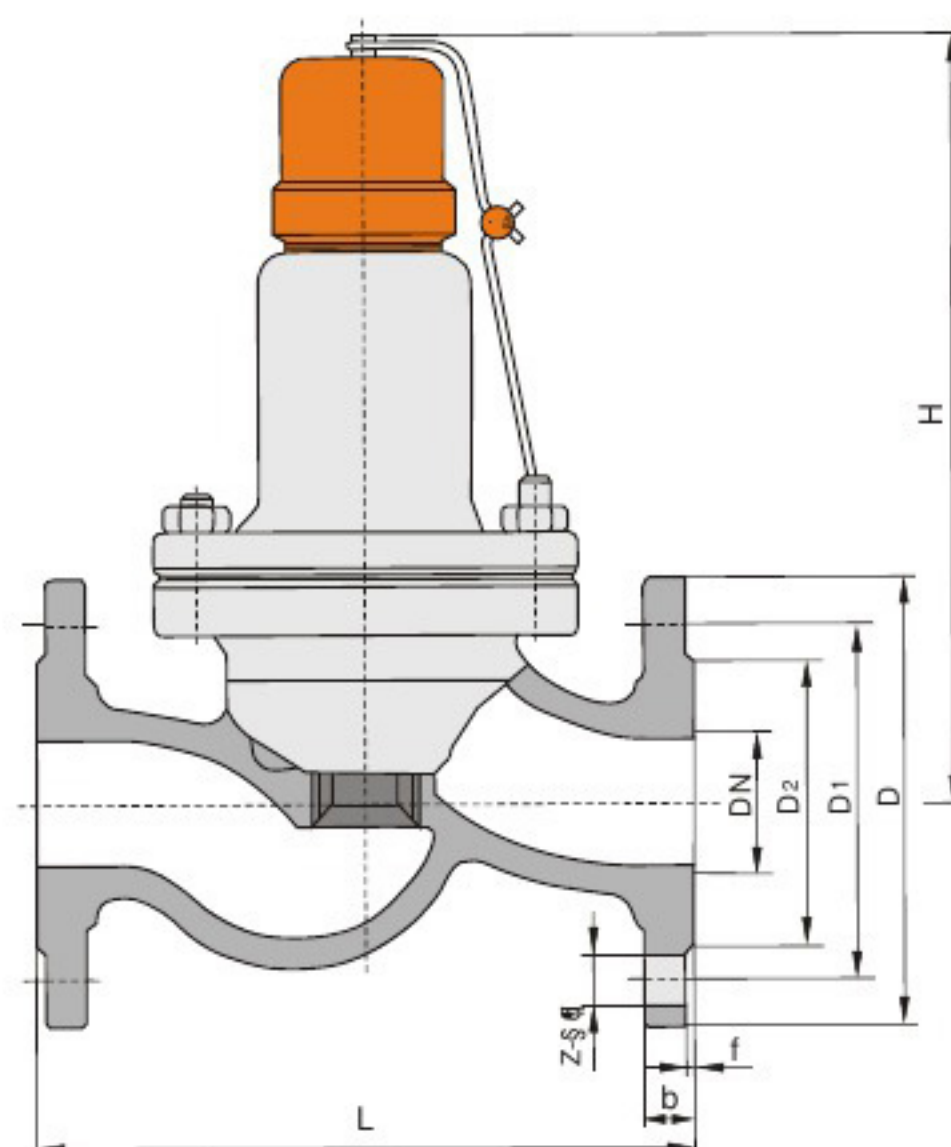
型号 Type	公称通径 (DN)	do	d	M	K	D	Z-Φd	b	d1	M1	K1	D1	Z1-Φd1	b1	L	L1	≈H
A42Y-160C A42Y-160P A42Y-160R	15	8	20	M24×2	60	95	3-18	20	29	M42×2	80	115	4-18	22	95	100	220
	20	8	27	M33×2	68	105	3-18	20	29	M42×2	80	115	4-18	22	95	100	220
	25	14	28	M33×2	68	105	3-18	20	50	M64×3	115	165	6-26	32	150	150	280
	32	15	37	M42×2	80	115	4-18	22	50	M64×3	115	165	6-26	32	150	150	390
	40	20	47	M52×2	115	165	6-26	28	65	M80×3	145	200	6-29	40	180	180	495
A42Y-320C A42Y-320P A42Y-320R	50	25	59	M64×3	115	165	6-26	32	80	M100×3	170	225	6-33	50	165	165	400
	15	8	27	M33×2	68	105	3-18	20	29	M42×2	80	115	4-18	22	95	100	220
	20	8	30	M33×2	75	110	3-18	22	29	M42×2	80	115	4-18	22	95	100	220
	25	14	35	M42×2	80	115	4-18	22	50	M64×3	115	165	6-26	32	150	150	280
	32	15	41	M48×2	95	135	4-22	25	50	M64×3	115	165	6-26	32	150	150	390
A42Y-400	40	20	58	M64×3	115	165	6-26	32	65	M80×3	145	200	6-29	40	180	180	495
	50	25	70	M80×3	145	200	6-29	40	80	M100×3	170	225	6-33	50	165	165	400

■ 系列
Series

AHN42F-P25C
AHN42F-P18C

本阀门安装于液化石油气站罐泵出口的液相回流管道上，当泵前压力超过规定值时，阀门自动开启并起安全回流作用，保证设备和管路的安全运行。

This valve is mounted on the liquid reflux pipeline of the pan pump's outlet of the liquefied petroleum gas station, when front pump pressure exceeds the stipulated valve, the valve will open automatically and lead to safe return of the liquid so that ensures the safe operation of equipments and pipelineds.



AHN42F
结构图 Structural drawing

■ 外形尺寸和连接尺寸 Dimensions(mm)

公称通径 Nominal diameter DN(mm)	尺寸 Dimensions(mm)						
	D	D ₁	D ₂	b	Z-Φd	L	H
25	115	85	65	16	4-14	160	325
32	140	100	78	16	4-18	180	335
40	150	110	85	16	4-18	200	236
50	165	125	100	16	4-18	230	266
65	185	145	120	20	4-18	290	430
80	200	160	135	20	8-18	310	490
100	215	180	155	22	8-18	350	548
150	280	240	210	24	8-23	480	706

液化石油气安全阀、安全回流阀 Liquefied petroleum gas, Back-flow safety valve

系列 Series

AH42F-16C
AH42F-25C
AH42F-40C

A42F-16C
A42F-25C
A42F-40C

AH42F-16P
AH42F-25P
AH42F-40P

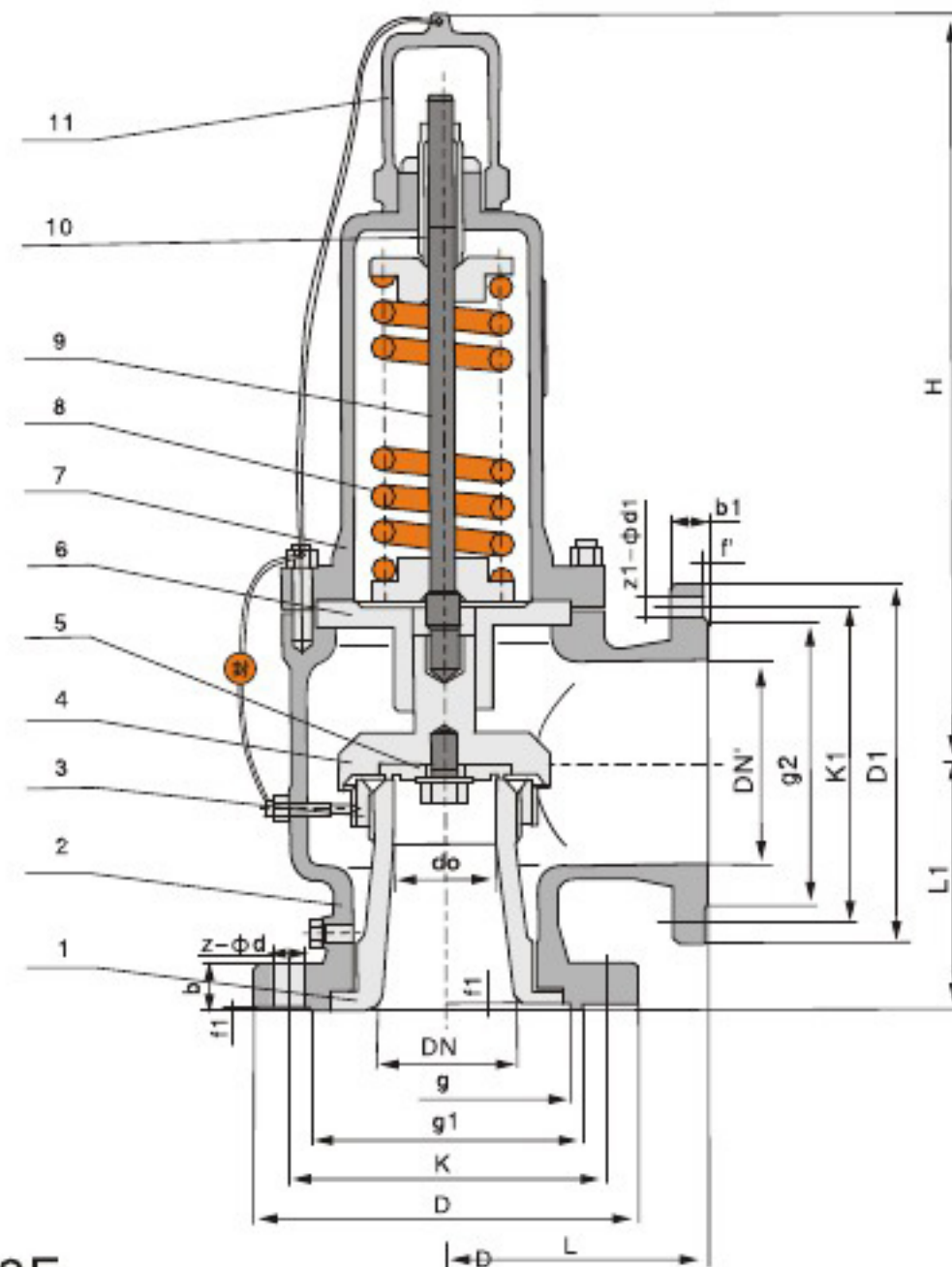
A42F-16P
A42F-25P
A42F-40P

AH42F-16R
AH42F-25R
AH42F-40R

A42F-16R
A42F-25R
A42F-40R

AH42F、A42F适用于工作温度在-40~80℃的液化石油气的液相出口管上，当进出口压差大于0.5MPa时液化石油气能自动回流入罐。

AH42F、A42F type are applicable in liqued phase outlet pipes with operation temperature range of -40~80℃. when the inlet and outlet differential pressure is larger than 0.5MPa, the liquefied gas will return to the gas rank automatically.



AH42F A42F
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	AH42F-C A42F-C 材料 Materials	AH42F-P A42F-P 材料 Materials	AH42F-R A42F-R 材料 Materials
1	阀座 Nozzle	2Cr13	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
2	阀体 Body	WCB	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
3	调节圈 Adjusting ring	2Cr13	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
4	反冲盘 Disc holder	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
5	阀瓣 Disc	2Cr13+PTFE	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
6	导向套 Guide sleeve	2Cr13	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti
7	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450
8	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
9	阀杆 Stem	2Cr13	1Cr18Ni12Mo2Ti	1Cr18Ni12Mo2Ti
10	调整螺杆 Adjusting bolt	45	2Cr13	2Cr13
11	阀帽 Cap	ZG200-400	ZG200-400	ZG200-400

■ 外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 通径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ²	b ₁	f'	Z ₁ -Φd ₁	L	L ₁	≈H
AH42F-16C A42F-16C AH42F-16P A42F-16P AH42F-16R A42F-16R	20	15	105	75		55	16	2		4-14	25	115	85	65	16	2	4-14	110	95	378
	25	16	115	85		65	16	2		4-14	32	140	100	78	18	2	4-18	110	95	378
	32	20	140	100		78	18	2		4-18	40	150	110	85	18	3	4-18	115	100	378
	40	25	150	110		85	18	3		4-18	50	165	125	100	20	3	4-18	120	110	406
	50	32	165	125		100	20	3		4-18	65	185	145	120	20	3	4-18	135	120	450
	65	40	185	145		120	20	3		4-18	80	200	160	135	20	3	8-18	160	140	520
	80	50	200	160		135	20	3		8-18	100	220	180	155	22	3	8-18	170	135	525
	100	65	220	180		155	22	3		8-18	125	250	210	185	22	3	8-18	195	175	690
	125	80	250	210		185	22	3		8-18	150	285	240	210	24	3	8-23	210	190	780
	150	100	285	240		210	24	3		8-23	175	310	270	240	26	3	8-23	255	230	838
	200	125	340	295		265	26	3		12-23	250	405	355	320	30	3	12-26	300	260	992
	250	150	405	355		320	30	3		12-26	300	460	410	375	30	4	12-26	350	320	1266
	300	220	460	410		375	30	4		12-26	400	580	525	485	36	4	16-30	370	350	1283
	350	250	520	470		435	34	4		16-26	500	715	650	608	44	4	20-34	500	450	1520
400	280	580	525		485	36	4		16-30	500	715	650	608	44	4	20-34	500	450	1530	
AH42F-25C A42F-25C AH42F-25P A42F-25P AH42F-25R A42F-25R	20	15	105	75		55	16	2		4-14	25	115	85	65	16	2	4-14	110	95	378
	25	16	115	85		65	16	2		4-14	32	140	100	78	18	2	4-18	110	95	378
	32	20	140	100		78	18	2		4-18	40	150	110	85	18	3	4-18	115	100	378
	40	25	150	110		85	18	3		4-18	50	165	125	100	20	3	4-18	120	110	406
	50	32	165	125		100	20	3		4-18	65	185	145	120	20	3	4-18	135	120	450
	65	40	185	145		120	22	3		8-18	80	200	160	135	20	3	8-18	160	140	520
	80	50	200	160		135	22	3		8-18	100	220	180	155	22	3	8-18	170	135	525
	100	65	230	190		160	24	3		8-23	125	250	210	185	22	3	8-18	195	175	690
	125	80	270	220		188	28	3		8-26	150	285	240	210	24	3	8-23	210	190	780
	150	100	300	250		218	30	3		8-26	175	310	270	240	26	3	8-23	255	230	838
200	125	360	310		278	34	3		12-26	250	405	355	320	30	3	12-26	300	260	992	
250	150	425	370		332	36	3		12-30	300	460	410	375	30	4	12-26	350	320	1266	
300	220	485	430		390	40	4		16-30	400	580	525	485	36	4	16-30	370	350	1283	
AH42F-40C A42F-40C AH42F-40P A42F-40P AH42F-40R A42F-40R	20	15	105	25	51	55	16	2	4	4-14	25	115	85	65	16	2	4-14	110	95	378
	25	16	115	85	58	65	16	2	4	4-14	32	140	100	78	18	2	4-18	110	95	378
	32	20	140	100	66	78	18	2	4	4-18	40	150	110	85	18	3	4-18	115	100	378
	40	25	150	110	76	85	18	3	4	4-18	50	165	125	100	20	3	4-18	120	110	406
	50	32	165	125	88	100	20	3	4	4-18	65	185	145	120	20	3	4-18	135	120	450
	65	40	185	145	110	120	22	3	4	8-18	80	200	160	135	20	3	8-18	160	140	520
	80	50	200	160	121	135	22	3	4	8-18	100	220	180	155	22	3	8-18	170	135	525
	100	65	235	190	150	160	24	3	4.5	8-23	125	250	210	185	22	3	8-18	195	175	690
	125	80	270	220	176	188	28	3	4.5	8-26	150	285	240	210	24	3	8-23	210	190	780
	150	100	300	250	204	218	30	3	4.5	8-26	175	310	270	240	26	3	8-23	255	230	838
200	125	375	320	260	282	38	3	4.5	12-30	250	405	355	320	30	3	12-26	300	260	992	
250	150	450	385	313	345	42	3	4.5	12-34	300	460	410	375	30	4	12-26	350	320	1266	

■ 系列
Series

WA42Y-16C
WA42Y-25C
WA42Y-40C
WA42Y-64C
WA42Y-100C

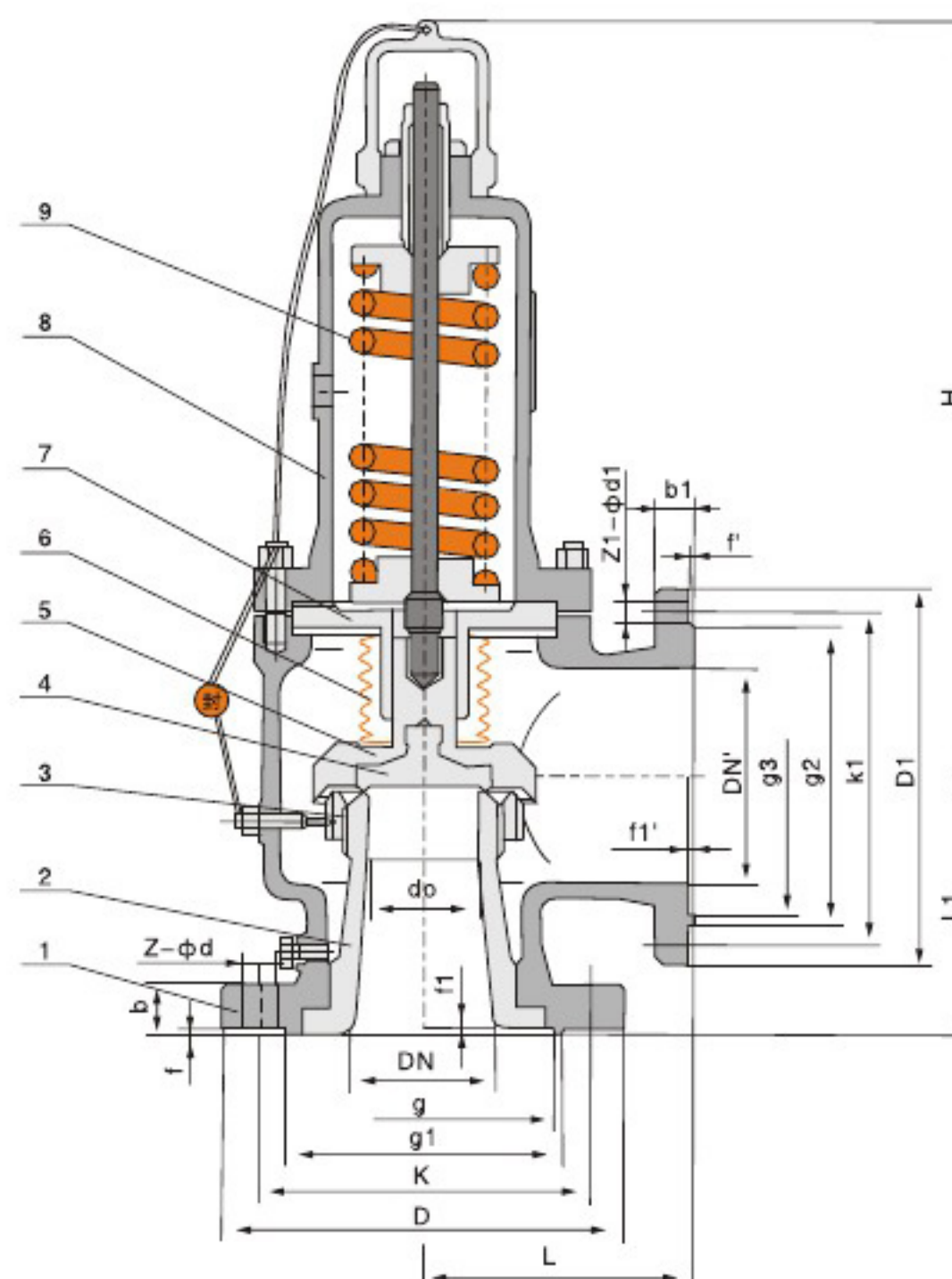
WA42Y-16P
WA42Y-25P
WA42Y-40P
WA42Y-64P
WA42Y-100P

WA42Y-16R
WA42Y-25R
WA42Y-40R
WA42Y-64R
WA42Y-100R

本阀门适用于工作温度 $\leq 200^{\circ}\text{C}$ 存在不稳定背压或有毒、腐蚀性介质的设备或管路上，作为超压保护装置。
连接法兰标准 $\leq 4\text{MPa}$ 采用JB/T.....-94系列1。 $>4\text{MPa}$ 按JB/T.....-94系列2标准。

These safety valves are used for the equipment and pipeline of the poisonous gas, quality with corrode medium what the working temperature are less than 200°C . Take for extra pressure protection devives.

Flange connecting dimensions of comply with Standard series first of JB/T.....-94 when less than 4MPa , comply with Standard series two of JB/T.....-94 when more than 4MPa .



WA42Y
结构图 Structural drawing

■ 主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	WA42Y-C型材料 Materials	WA42Y-P型材料 Materials	WA42Y-R型材料 Materials
1	阀体 Body	WCB	ZG1Cr18Ni9Ti, 304	CF8M
2	阀座 Nozzle	2Cr13	1Cr18Ni9Ti	316
3	调节圈 Adjusting ring	2Cr13	1Cr18Ni9Ti	0Cr18Ni12Mo2Ti
4	阀瓣 Disc	2Cr13	1Cr18Ni9Ti	316
5	反冲盘 Disc holder	2Cr13	1Cr18Ni9Ti	316
6	波纹管 Bellows	304	304	316
7	导向套 Guide sleeve	2Cr13	1Cr18Ni9Ti	0Cr18Ni12Mo2Ti
8	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450
9	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
	密封面材料 Sealing surface of material		"Y"堆焊Co基硬质合金 Depositing stellite	

■ 外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 通径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ³	g ²	b ₁	f'	f ₁ '	Z ₁ -Φd ₁	L	L ₁	≈H	
WA42Y-16C WA42Y-16P WA42Y-16R	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	378	
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	378	
	40	25	150	110		85	18	3		4-18	50	165	125		100	18	3		4-18	120	110	406	
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	450	
	65	40	185	145		120	20	3		4-18	80	200	160		135	20	3		8-18	160	140	520	
	80	50	200	160		135	20	3		8-18	100	220	180		155	22	3		8-18	170	135	525	
	100	65	220	180		155	22	3		8-18	125	250	210		185	22	3		8-18	195	175	690	
	125	80	250	210		185	22	3		8-18	150	285	240		210	24	3		8-23	210	190	857	
	150	100	285	240		210	24	3		8-23	175	310	270		240	26	3		8-23	255	230	838	
	200	125	340	295		265	26	3		12-23	250	405	355		320	30	3		12-26	300	260	992	
WA42Y-25C WA42Y-25P WA42Y-25R	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	378	
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	378	
	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	110	406	
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	450	
	65	40	185	145		120	22	3		8-18	80	200	160		135	20	3		8-18	160	140	520	
	80	50	200	160		135	22	3		8-18	100	220	180		155	22	3		8-18	170	135	525	
	100	65	230	190		160	24	3		8-23	125	250	210		185	22	3		8-18	195	175	690	
	125	80	270	220		188	28	3		8-26	150	285	240		210	24	3		8-23	210	190	780	
	150	100	300	250		218	30	3		8-26	175	310	270		240	26	3		8-23	255	230	838	
	200	125	360	310		278	34	3		12-26	250	405	355		320	30	3		12-26	300	260	992	
WA42Y-40C WA42Y-40P WA42Y-40R	25	16	115	85	58	65	16	2	4	4-14	32	140	100		78	18	2		4-18	110	95	378	
	32	20	140	100	66	78	18	2	4	4-18	40	150	110		85	18	3		4-18	115	100	378	
	40	25	150	110	76	85	18	3	4	4-18	50	165	125		100	20	3		4-18	120	110	406	
	50	32	165	125	88	100	20	3	4	4-18	65	185	145		120	20	3		4-18	135	120	450	
	65	40	185	145	110	120	22	3	4	8-18	80	200	160		135	20	3		8-18	160	140	520	
	80	50	200	160	121	135	24	3	4	8-18	100	220	180		155	22	3		8-18	170	135	525	
	100	65	235	190	150	160	24	3	4.5	8-23	125	250	210		185	22	3		8-18	195	175	690	
	125	80	270	220	188	176	28	3	4.5	8-26	150	285	240		210	24	3		8-23	210	190	857	
	150	100	300	250	204	218	30	3	4.5	8-26	175	310	270		240	26	3		8-23	255	230	838	
	200	125	375	320	260	282	38	3	4.5	12-30	250	405	355		320	30	3		12-26	300	260	992	
WA42Y-64C WA42Y-64P WA42Y-64R	25	16	140	100	58	78	22	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	277	
	32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	289	
	40	25	170	125	76	95	24	3	4	4-23	50	165	125	88	100	20	3	4	4-18	130	120	319	
	50	32	180	135	88	105	26	3	4	4-23	65	185	145	110	120	22	3	4	8-18	135	130	389	
	65	40	205	160	110	130	28	3	4	8-23	80	200	160	121	135	22	3	4	8-18	175	160	483	
	80	50	215	170	121	140	30	3	4	8-23	100	235	190	150	160	24	3	4.5	8-23	175	160	493	
	100	65	250	200	150	168	32	3	4.5	8-26	125	270	220	176	188	28	3	4.5	8-25	195	195	613	
	150	100	345	280	204	240	38	3	4.5	8-34	200	375	320	260	282	38	3	4.5	12-30	280	265	894	
	WA42Y-100C WA42Y-100P WA42Y-100R	25	16	140	100	58	78	24	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	277
		32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	289
40		25	170	125	76	95	26	3	4	4-23	50	165	125	88	100	20	3	4	4-18	130	120	319	
50		32	195	145	88	112	28	3	4	4-26	65	185	145	110	120	22	3	4	8-18	135	130	389	
65		32	220	170	110	138	32	3	4	8-26	80	200	160	121	135	22	3	4	8-18	175	160	483	
80		40	230	180	121	148	34	3	4	8-26	100	235	190	150	160	24	3	4.5	8-23	175	160	493	
100		50	265	210	150	172	38	3	4.5	8-30	125	270	220	176	188	28	3	4.5	8-25	195	195	613	
150		80	355	290	204	250	46	3	4.5	12-34	200	375	320	260	282	38	3	4.5	12-30	280	265	894	

带扳手弹簧微启式安全阀 Spring loaded low lift type with lever safety valve

系列 Series

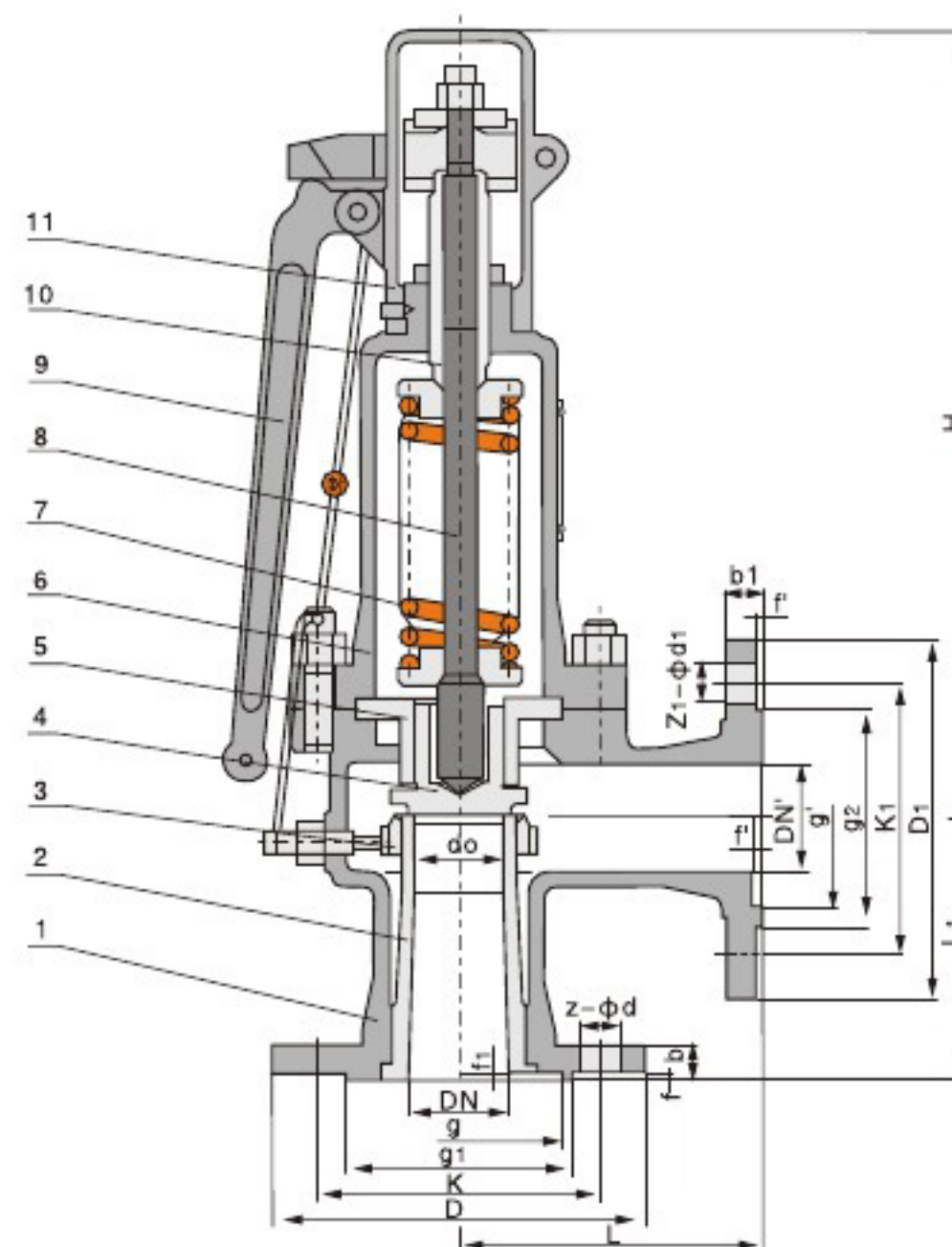
A47H-16C
A47H-25C
A47H-40C

A47Y-64C
A47H-64C

A47Y-100C
A47H-100C

本阀门适用于工作温度 $\leq 350^{\circ}\text{C}$ 的蒸汽、空气等介质的设备或管路上。作为超压保护装置。连接法兰标准按JB/T-94的系列1。

This safety valve are used for the equipment and pipeline of the steam, air etc medium what the working temperature are less than 350°C . Take for extra pressure protection devices. Flange connecting dimensions of comply with Standard series one of JB/T-94.



A47H
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	材料 Materials
1	阀 体 Body	WCB
2	阀 座 Nozzle	ZG2Cr13
3	调 节 圈 Adjusting ring	ZG2Cr13
4	阀 瓣 Disc	2Cr13
5	导 向 套 Guide sleeve	2Cr13
6	阀 盖 Bonnet	ZG230-450
7	弹 簧 Spring	50CrVA
8	阀 杆 Stem	2Cr13
9	扳 手 Lever	ZG200-400
10	调整螺杆 Adjusting bolt	45
11	保 护 罩 Cap	ZG200-400
密封面材料 Sealing surface of material		"H"型堆焊D507, "Y"堆焊Co基硬质合金 "H" type Depositing D507, "Y" type Depositing stellite

带扳手弹簧微启式安全阀
Spring loaded low lift type with lever safety valve

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 通径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ²	g'	b ₁	f'	f ₁ '	Z ₁ -Φd ₁	L	L ₁	≈H
A47H-16C	20	15	105	75		55	16	2		4-14	20	105	75	55		16	2		4-14	100	85	270
	25	20	115	85		65	16	2		4-14	25	115	85	65		16	2		4-14	100	85	270
	32	25	140	100		78	18	2		4-18	32	140	100	78		18	2		4-18	115	100	312
	40	32	150	110		85	18	3		4-18	40	150	110	85		18	3		4-18	120	110	320
	50	40	165	125		100	20	3		4-18	50	165	125	100		20	3		4-18	135	120	390
	65	50	185	145		120	20	3		4-18	65	185	145	120		20	3		4-18	140	130	395
	80	65	200	160		135	20	3		8-18	80	200	160	135		20	3		8-18	160	135	400
	100	80	220	180		155	22	3		8-18	100	220	180	155		22	3		8-18	170	160	600
	125	100	250	210		185	22	3		8-18	125	250	210	185		22	3		8-18	190	190	620
	150	125	285	240		210	24	3		8-23	150	285	240	210		24	3		8-23	205	195	625
	200	150	340	295		265	26	3		12-23	200	340	295	265		26	3		12-23	240	230	798
	250	200	405	355		320	30	3		12-26	250	405	355	320		30	3		12-26	350	320	981
300	250	460	410		375	30	4		12-26	300	460	410	375		30	4		12-26	350	320	1005	
A47H-25C	20	15	105	75		55	16	2		4-14	20	105	75	55		16	2		4-14	100	85	270
	25	20	115	85		65	16	2		4-14	25	115	85	65		16	2		4-14	100	85	270
	32	25	140	100		78	18	2		4-18	32	140	100	78		18	2		4-18	115	100	312
	40	32	150	110		85	18	3		4-18	40	150	110	85		18	3		4-18	120	110	320
	50	40	165	125		100	20	3		4-18	50	165	125	100		20	3		4-18	135	120	390
	65	50	185	145		120	22	3		8-18	65	185	145	120		20	3		4-18	140	130	395
	80	65	200	160		135	24	3		8-18	80	200	160	135		20	3		8-18	160	135	400
	100	80	230	190		160	24	3		8-23	100	220	180	155		20	3		8-18	170	160	600
	125	100	270	220		188	28	3		8-26	125	250	210	185		22	3		8-18	190	190	620
	150	125	300	250		218	30	3		8-26	150	285	240	210		24	3		8-23	205	195	625
	200	150	360	310		278	34	3		12-26	200	340	295	265		26	3		12-23	240	230	798
	250	200	425	370		332	36	3		12-30	250	405	355	320		30	3		12-26	350	320	981
300	250	485	420		390	40	4		16-30	300	460	410	375		30	4		12-26	350	320	1005	
A47H-40C	20	15	105	75	51	55	16	2	4	4-14	20	105	75	55		16	2		4-14	100	85	270
	25	20	115	85	58	65	16	2	4	4-14	25	115	85	65		16	2		4-14	100	85	270
	32	25	140	100	66	78	18	2	4	4-18	32	140	100	78		18	2		4-18	115	100	312
	40	32	150	110	76	85	18	3	4	4-18	40	150	110	85		18	3		4-18	120	110	320
	50	40	165	125	88	100	20	3	4	4-18	50	165	125	100		20	3		4-18	135	120	390
	65	50	185	145	110	120	22	3	4	8-18	65	185	145	120		20	3		4-18	140	130	395
	80	65	200	160	121	135	22	3	4	8-18	80	200	160	135		20	3		8-18	160	135	400
	100	80	235	190	150	160	24	3	4.5	8-23	100	220	180	155		22	3		8-18	170	160	600
	125	100	270	220	176	188	28	3	4.5	8-26	125	250	210	185		22	3		8-18	190	190	620
	150	125	300	250	204	218	30	3	4.5	8-26	150	285	240	210		24	3		8-23	205	195	625
	200	150	375	320	260	282	38	3	4.5	12-30	200	340	295	265		26	3		12-23	240	230	798
	250	200	450	385	313	345	42	3	4.5	12-34	250	405	355	320		30	3		12-26	350	320	981
300	250	515	450	364	408	46	4	4.5	16-34	300	460	410	375		30	4		12-26	350	320	1005	
A47H-64C A47Y-64C	20	15	130	90	51	68	20	2	4	4-18	20	105	75	55	51	16	2	4	4-14	100	95	301
	25	20	140	100	58	78	22	2	4	4-18	25	115	85	65	58	16	2	4	4-14	100	95	301
	32	25	155	110	66	82	24	2	4	4-23	32	140	100	78	66	18	2	4	4-18	115	105	312
	40	32	170	125	76	95	24	3	4	4-23	40	150	110	85	76	18	3	4	4-18	135	115	366
	50	40	180	135	88	105	26	3	4	4-23	50	165	125	100	88	20	3	4	4-18	160	125	396
	65	50	205	160	110	130	28	3	4	8-23	65	185	145	120	110	22	3	4	8-18	175	160	570
	80	65	215	170	121	140	30	3	4	8-23	80	200	160	135	121	22	3	4	8-18	175	160	565
A47H-100C A47Y-100C	100	80	250	200	150	168	32	3	4.5	8-26	100	235	190	160	150	24	3	4.5	8-23	190	180	597
	150	100	345	280	204	240	38	3	4.5	8-34	150	300	250	218	204	30	3	4.5	8-26	280	260	738
	20	15	130	90	51	68	22	2	4	4-18	20	105	75	55	51	16	2	4	4-14	100	95	301
	25	20	140	100	58	78	24	2	4	4-18	25	115	85	65	58	16	2	4	4-14	100	95	301
	32	25	155	110	66	82	24	2	4	4-23	32	140	100	78	66	18	2	4	4-18	115	105	312
	40	32	170	125	76	95	26	3	4	4-23	40	150	110	85	76	18	3	4	4-18	135	115	366
	50	40	195	145	88	112	28	3	4	4-26	50	165	125	100	88	20	3	4	4-18	160	125	396
65	50	220	170	110	138	32	3	4	8-26	65	185	145	120	110	22	3	4	8-18	175	160	570	
80	65	230	180	121	148	34	3	4	8-26	80	200	160	135	121	22	3	4	8-18	175	160	565	
100	80	265	210	150	172	38	3	4.5	8-30	100	235	190	160	150	24	3	4.5	8-23	190	180	597	
150	100	355	290	204	250	46	3	4.5	12-34	150	300	250	218	204	30	3	4.5	8-26	280	260	738	

带扳手弹簧全启式安全阀 Spring loaded full bore type with lever safety valve

系列 Series

A48Y-16C
A48Y-25C
A48Y-40C
A48Y-64C
A48Y-100

A44Y-16C
A44Y-25C
A44Y-40C
A44Y-64C
A44Y-100

A44Y-16P
A44Y-25P
A44Y-40P
A44Y-64P
A44Y-100P

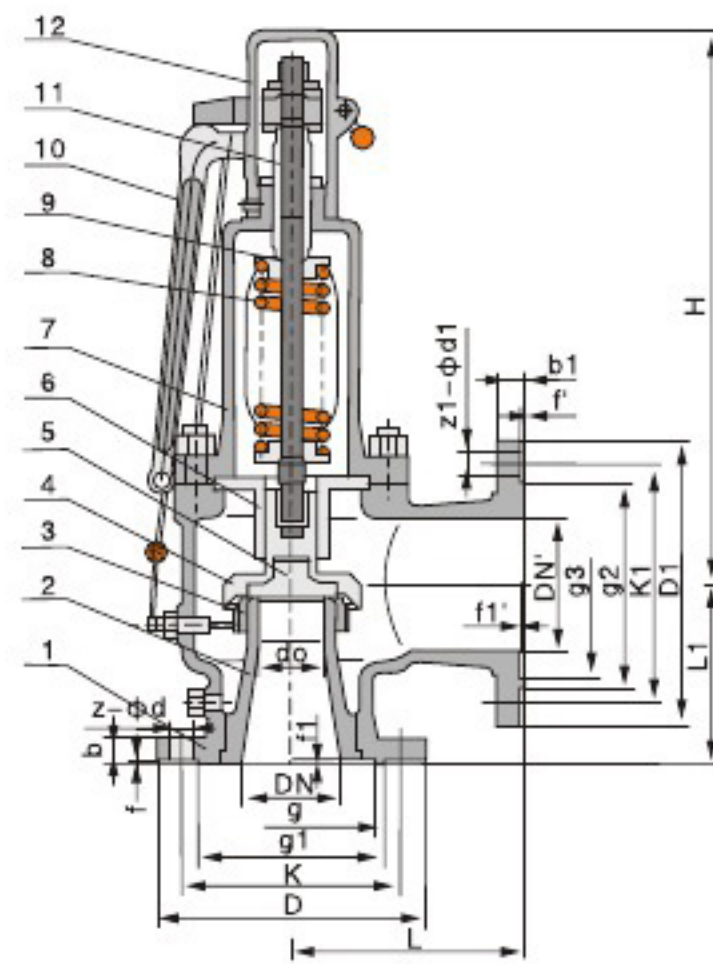
A44Y-16R
A44Y-25R
A44Y-40R
A44Y-64R
A44Y-100R

A48Y型适用于工作温度 $\leq 350^{\circ}\text{C}$ 的蒸汽、空气等介质的设备和管路上。A44Y适用于工作温度 $\leq 300^{\circ}\text{C}$ 的空气、石油等介质的设备或管路上，作为超压保护装置。

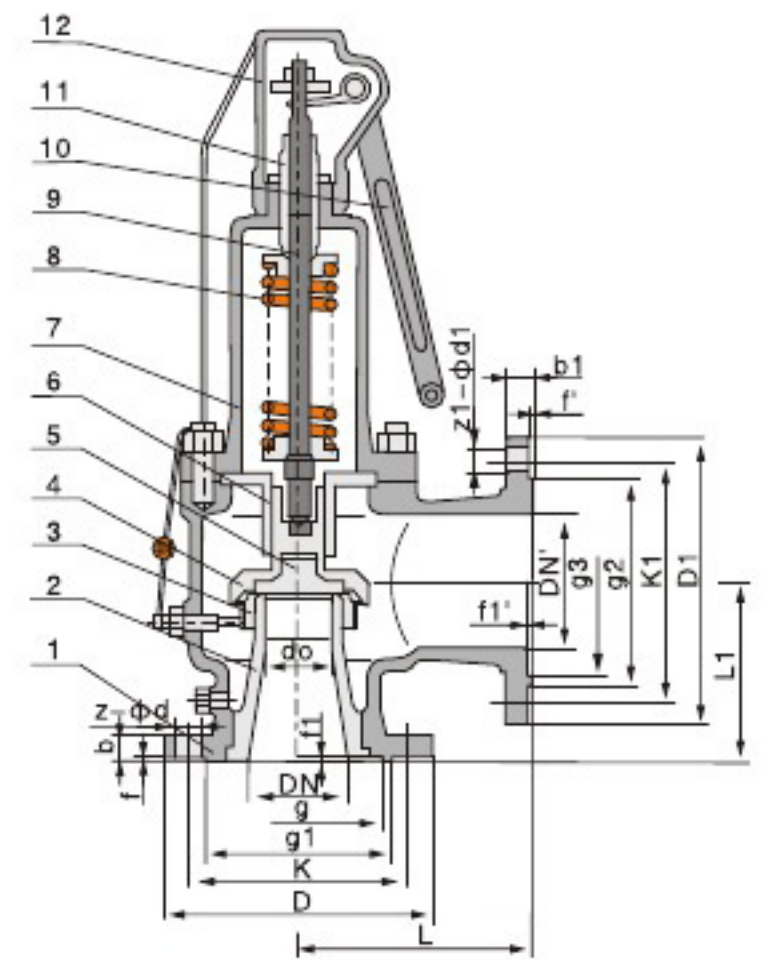
连接法兰标准PN $< 6.4\text{MPa}$ 按JB/T-94系列1。PN $\geq 6.4\text{MPa}$ 按JB/T-94系列2标准。

A48Y type are used for the equipment and pipeline of the with steam and air etc medium what the working temperature are less than 350°C . A44Y type are used for the equipment and pipeline of the with air and petroleum gas medium what the working temperature are less than 300°C . Take for extra pressure protection devices.

Flange connecting dimensions of comply with Standard series first of JB/T-94 when the pressure less than 6.4MPa, comply with Standard series two of JB/T-94 when more than 6.4MPa.



A48Y
结构图 Structural drawing



A44Y
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A48Y-C/A44Y-C 材料 Materials	A44Y-P 材料 Materials	A44Y-R 材料 Materials
1	阀体 Body	WCB	ZG1Cr18Ni9Ti	CF8M
2	阀座 Nozzle	2Cr13	1Cr18Ni9Ti	316
3	调节圈 Adjusting ring	ZG2Cr13	ZG1Cr18Ni9Ti	0Cr18Ni12Mo2Ti
4	反冲盘 Disc holder	ZG2Cr13	ZG1Cr18Ni9Ti	316
5	阀瓣 Disc	2Cr13	1Cr18Ni9Ti	316
6	导向套 Guide sleeve	2Cr13	1Cr18Ni9Ti	0Cr18Ni12Mo2Ti
7	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450
8	弹簧 Spring	50CrVA	50CrVA包覆氟塑料 Coated Teflon	50CrVA包覆氟塑料 Coated Teflon
9	阀杆 Stem	2Cr13	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti
10	扳手 Lever	ZG200-400	ZG200-400	ZG200-400
11	调整螺杆 Adjusting bolt	45	2Cr13	2Cr13
12	保护罩 Cap	ZG200-400	ZG200-400	316
	密封面材料 Sealing surface of material		"Y"堆焊Co基硬质合金 Depositing stellite	

带扳手弹簧全启式安全阀
Spring loaded full bore type with lever safety valve

外形尺寸和连接尺寸 Dimensions(mm)

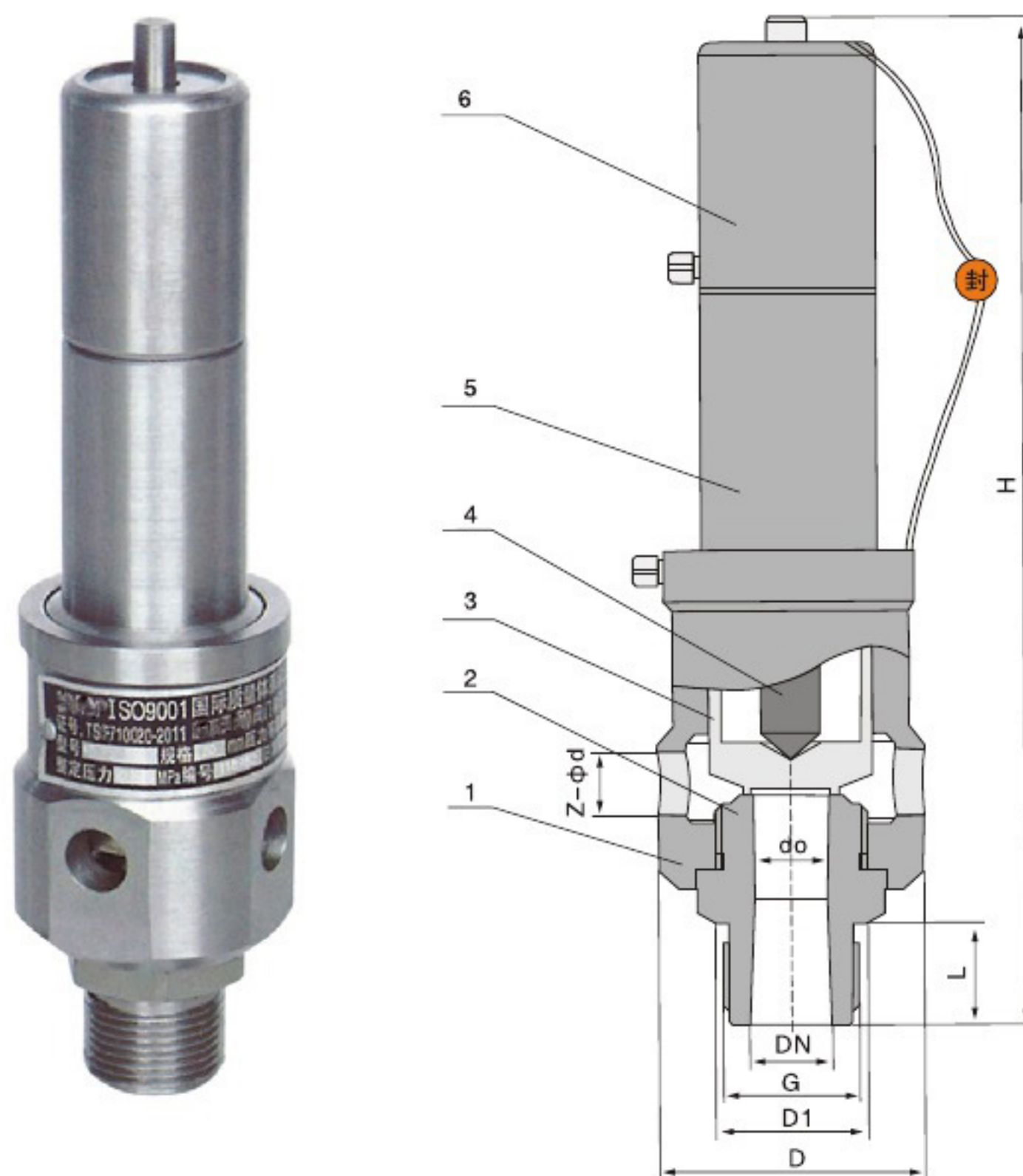
型号 Type	公称 口径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ³	g ²	b ₁	f'	f ₁ '	Z ₁ -Φd ₁	L	L ₁	≈H
A48Y-16C A44Y-16C A44Y-16P A44Y-16R	20	15	105	75		55	16	2		4-14	25	115	85		65	16	2		4-14	110	95	411
	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	411
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	411
	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	110	472
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	532
	65	40	185	145		120	20	3		4-18	80	200	160		135	20	3		8-18	160	140	556
	80	50	200	160		135	20	3		8-18	100	220	180		155	22	3		8-18	170	135	561
	100	65	220	180		155	20	3		8-18	125	250	210		185	22	3		8-18	195	175	667
	125	80	250	210		185	22	3		8-18	150	285	240		210	24	3		8-23	210	190	857
	150	100	285	240		210	24	3		8-23	175	310	270		240	26	3		8-23	255	230	915
	200	125	340	295		265	26	3		12-23	250	405	355		320	30	3		12-26	300	260	1073
	250	150	405	355		320	30	3		12-26	300	460	410		375	30	4		12-26	350	320	1307
	300	220	460	410		375	30	4		12-26	400	580	525		485	36	4		16-30	370	350	1233
350	250	520	470		435	34	4		16-26	500	715	650		608	44	4		20-34	500	450	1711	
400	280	580	525		485	36	4		16-30	500	715	650		608	44	4		20-34	500	450	1780	
A48Y-25C A44Y-25C A44Y-25P A44Y-25R	20	15	105	75		55	16	2		4-14	25	115	85		65	16	2		4-14	110	95	411
	25	16	115	85		65	16	2		4-14	32	140	100		78	18	2		4-18	110	95	411
	32	20	140	100		78	18	2		4-18	40	150	110		85	18	3		4-18	115	100	411
	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	110	472
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	532
	65	40	185	145		120	22	3		8-18	80	200	160		135	20	3		8-18	160	140	556
	80	50	200	160		135	22	3		8-18	100	220	180		155	22	3		8-18	170	135	561
	100	65	230	190		160	24	3		8-23	125	250	210		185	22	3		8-18	195	175	667
	125	80	270	220		188	28	3		8-26	150	285	240		210	24	3		8-23	210	190	857
	150	100	300	250		218	30	3		8-26	175	310	270		240	26	3		8-23	255	230	915
	200	125	360	310		278	34	3		12-26	250	405	355		320	30	3		12-26	300	260	1073
	250	150	425	370		332	36	3		12-30	300	460	410		375	30	4		12-26	350	320	1307
	300	220	485	430		390	40	4		16-30	400	580	525		485	36	4		16-30	370	350	1233
350	250	555	490		448	44	4		16-34	500	715	650		608	44	4		20-34	500	450	1711	
400	280	620	550		505	48	4		16-36	500	715	650		608	44	4		20-34	500	450	1780	
A48Y-40C A44Y-40C A44Y-40P A44Y-40R	20	15	105	75	51	55	16	2	4	4-14	25	115	85		65	16	2		4-14	110	95	411
	25	16	115	85	68	65	16	2	4	4-14	32	140	100		78	18	2		4-18	110	95	411
	32	20	140	100	66	78	18	2	4	4-18	40	150	110		85	18	3		4-18	115	100	411
	40	25	150	110	76	85	18	3	4	4-18	50	165	125		100	20	3		4-18	120	110	472
	50	32	165	125	88	100	20	3	4	4-18	65	185	145		120	20	3		4-18	135	120	532
	65	40	185	145	110	120	22	3	4	8-18	80	200	160		135	20	3		8-18	160	140	556
	80	50	200	160	121	135	22	3	4	8-18	100	220	180		155	22	3		8-18	170	135	561
	100	65	235	190	150	160	24	3	4.5	8-23	125	250	210		185	22	3		8-18	195	175	697
	125	80	270	220	176	188	28	3	4.5	8-26	150	285	240		210	24	3		8-23	210	190	857
	150	100	300	250	204	218	30	3	4.5	8-26	175	310	270		240	26	3		8-23	255	230	915
	200	125	375	320	260	282	38	3	4.5	12-30	250	405	355		320	30	3		12-26	300	260	1073
	250	150	450	385	313	345	42	3	4.5	12-34	300	460	410		375	30	4		12-26	350	320	1307
	300	220	515	450	364	408	46	4	4.5	16-34	400	580	525		485	36	4		16-30	370	350	1233
350	250	580	510	422	465	52	4	5	16-36	500	715	650		608	44	4		20-34	500	450	1711	
400	280	660	585	474	535	58	4	5	16-41	500	715	650		608	44	4		20-34	500	450	1711	
A48Y-64C A44Y-64C A44Y-64P A44Y-64R	20	10	125	90	51	68	22	2	4	4-18	25	115	85	58	65	16	2	4	4-14	96	85	297
	25	16	140	100	58	78	22	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	310
	32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	322
	40	25	170	125	76	95	24	3	4	4-23	50	165	125	88	100	20	3	4	4-18	135	120	352
	50	32	180	135	88	105	26	3	4	4-23	65	185	145	110	120	22	3	4	8-18	155	135	425
	65	40	205	160	110	130	28	3	4	8-23	80	200	160	121	135	22	3	4	8-18	175	160	570
	80	50	215	170	121	140	30	3	4	8-23	100	235	190	150	160	24	3	4.5	8-23	175	160	560
A48Y-100C A44Y-100C A44Y-100P A44Y-100R	100	65	250	200	150	168	32	3	4.5	8-26	125	270	220	176	188	28	3	4.5	8-25	195	195	690
	150	80	345	280	204	240	38	3	4.5	8-34	200	375	320	260	282	38	3	4.5	12-30	280	265	935
	20	10	125	90	51	68	22	2	4	4-18	25	115	85	58	65	16	2	4	4-14	96	85	297
	25	16	140	100	58	78	24	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	310
	32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	322
	40	25	170	125	76	95	26	3	4	4-23	50	165	125	88	100	20	3	4	4-18	135	120	352
	50	32	195	145	88	112	28	3	4	4-26	65	185	145	110	120	22	3	4	8-18	155	135	425
65	32	220	170	110	138	32	3	4	8-26	80	200	160	121	135	22	3	4	8-18	175	160	570	
80	40	230	180	121	148	34	3	4	8-26	100	235	190	150	160	24	3	4.5	8-23	175	160	560	
100	50	265	210	150	172	38	3	4.5	8-30	125	270	220	176	188	28	3	4.5	8-25	195	195	690	
150	80	355	290	204	250	46	3	4.5	12-34	200	375	320	260	282	38	3	4.5	12-30	280	265	935	

■ 系列
Series

AQ-20

本阀门适用于工作温度 $\leq 200^{\circ}\text{C}$ 的空气，系空压机专用安全阀，当设备内压力超过允许值时，阀门自动开启，继而全量排放，当压力降低到规定值时，阀门自动关闭，保证设备安全运行。

The valve of the air what the working temperature are less than 200°C , is air compressor specificity safety valve when the pressure of equipment exceeding the allowed value, the valve will turn on automatically and discharge the pressure entirely. When the pressure decrease to the stated value. the valve will quickly turn off automatically, in order to make the equipment run effectively.



AQ-20
结构图 Structural drawing

■ 主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	AQ-20 材料 Materials
1	阀 体 Body	2Cr13
2	阀 座 Nozzle	2Cr13
3	阀 瓣 Disc	2Cr13
4	阀 杆 Stem	2Cr13
5	阀 盖 Bonnet	ZG230-450
6	阀 帽 Cap	ZG230-450

■ 外形尺寸和连接尺寸 Dimensions(mm)

公称通径 Nominal diameter DN(mm)	尺寸 Dimension(mm)						
	do	G	D	D ₁	Z-φd	L	H
20	17	G1"	62	44	4-17	25	220
25	20	M36×2	70	50	4-20	28	226

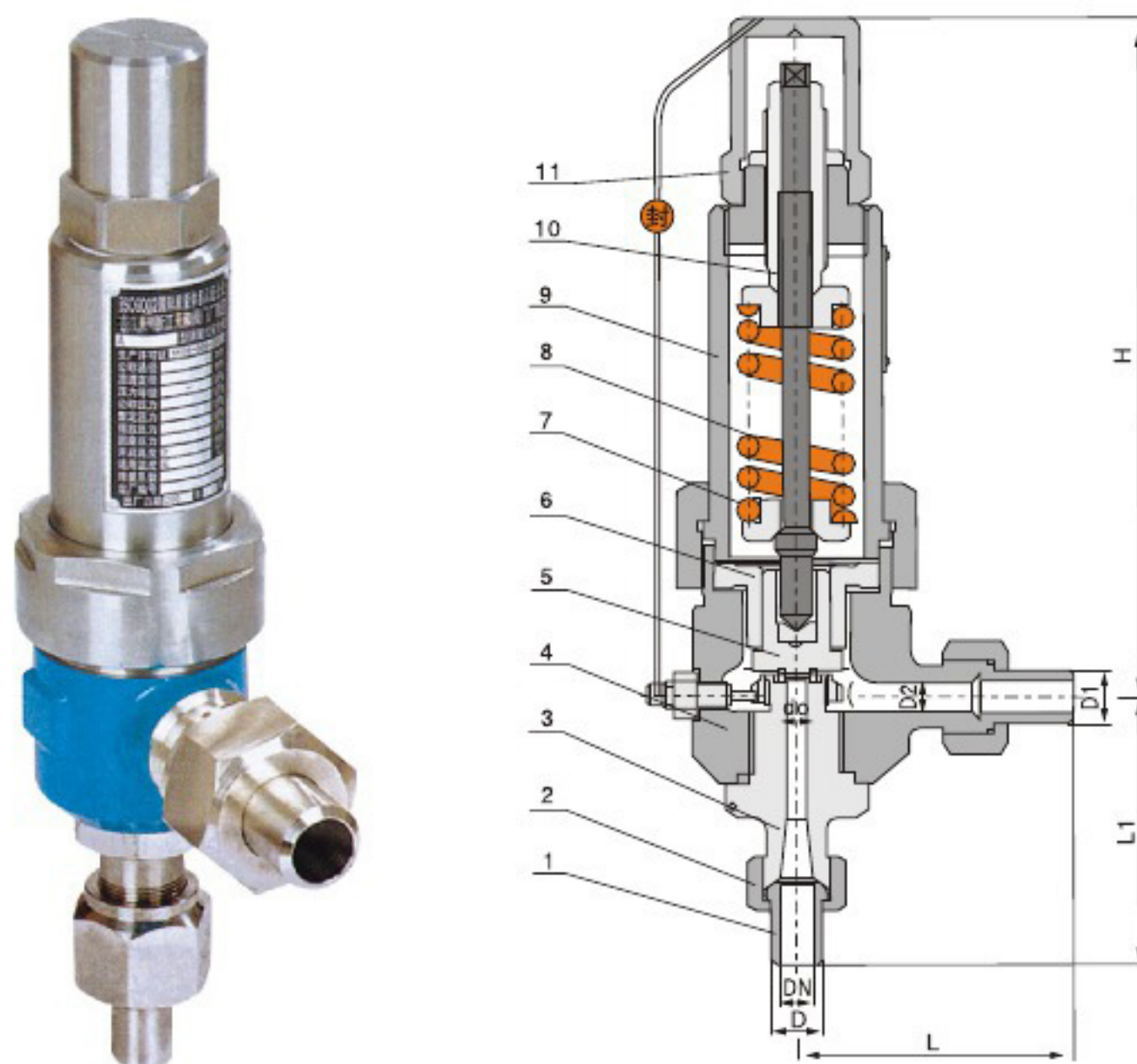
系列
Series

A61H-160C
A61Y-320C

A61Y-160P
A61Y-320P

A61H/Y-160, A61H/Y-320适用于工作温度 $\leq 200^{\circ}\text{C}$ 的空气、氨、石油气等介质的设备和管路上, A61Y-160P, A61Y-320P型适用于温度 $\leq 200^{\circ}\text{C}$ 有腐蚀性气体或液体的设备和管路上, 作为超压保护装置。

A61H/Y-160, A61H/Y-320 type are used for the equipment and pipeline of the air, ammonia, petroleum gas etc. medium what the working temperature are less than 200°C , A61Y-160P, A61Y-320P type are used for the equipment and pipeline of the quality with corode gas and liquid medium what the working temperature are less than 200°C . Take for extra pressure protection Devices.



A61Y
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A61H-C	A61Y-C	材料 Materials	A61Y-P	材料 Materials
1	接头 Union		20			1Cr18Ni9Ti
2	接头螺母 Union nut		35			1Cr18Ni9Ti
3	阀座 Nozzle		2Cr13			1Cr18Ni9Ti
4	阀体 Body		35/35CrMoA			1Cr18Ni9Ti
5	阀瓣 Disc		2Cr13			1Cr18Ni9Ti
6	导向套 Guide		2Cr13			1Cr18Ni9Ti
7	弹簧 Spring		50CrVA			50CrVA 包覆氟塑料 Coated Teflon
8	阀杆 Stem		2Cr13			2Cr13
9	阀盖 Bonnet		ZG230-450			1Cr18Ni9Ti
10	调整螺杆 Adjusting bolt		45			2Cr13
11	阀帽 Cap		ZG200-400			1Cr18Ni9Ti
	密封面材料 Sealing surface of material	"H"型堆焊D507 Depositing D507, "Y"型堆焊Co基硬质合金 Depositing stellite				

主要外形及连接尺寸 Main external and connecting dimensions

公称压力 Nominal pressure PN(MPa)	公称通径 Nominal diameter DN(mm)	尺寸 Dimensions(mm)							
		do	D	D ₁	D ₂	L	L ₁	H	
16	10	6	22	33	24	145	150	262	
	15	8	25	33	24	145	150	262	
	20	10	25	33	24	145	150	262	
	25	12	35	33	24	145	150	262	
32	10	6	22	33	24	145	150	262	
	15	8	25	33	24	145	150	262	
	20	10	25	33	24	145	150	262	
	25	12	38	33	24	145	150	262	

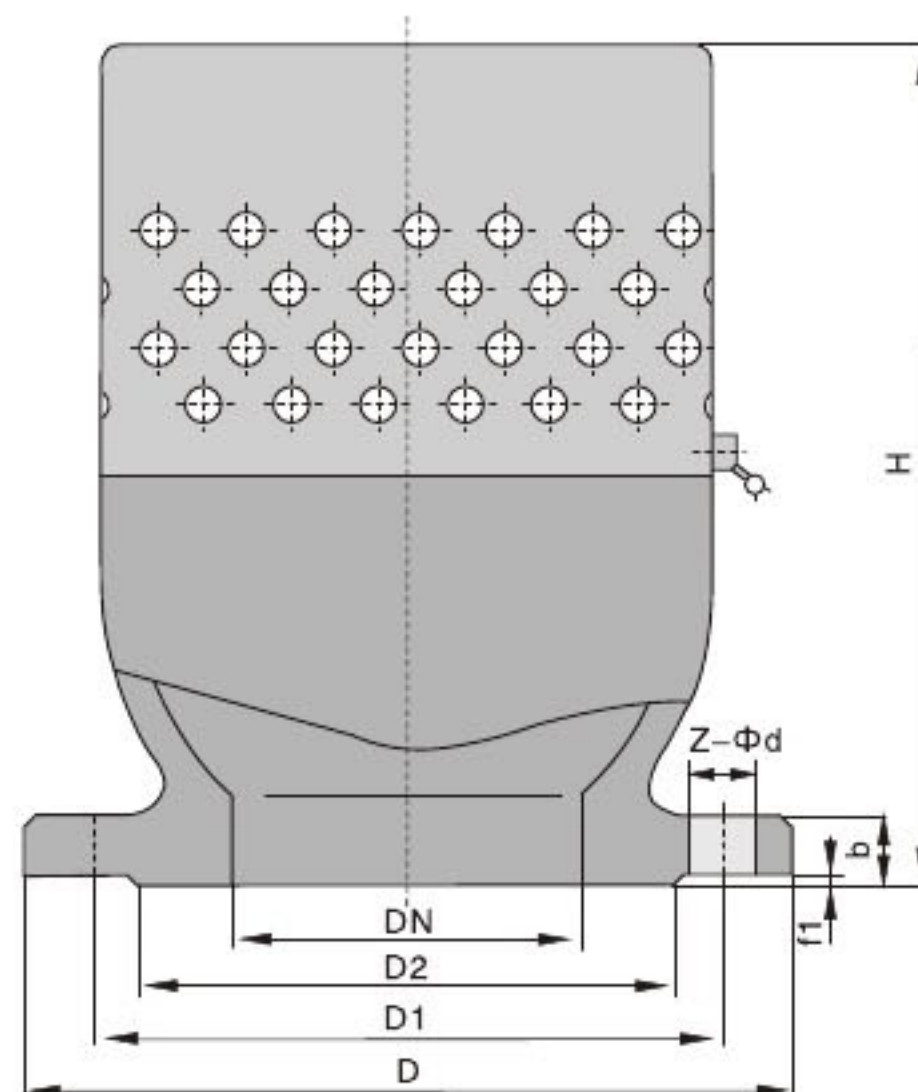
真空负压安全阀 Vacuum negative-pressure safety valve

系列 Series

A72W-10P
A72W-10R

A72W适用于温度 $\leq 200^{\circ}\text{C}$ 的负压系统，当容器内负压超过允许值时，该阀自动开启，吸入空气；当容器内负压达到允许值时，该阀自动关闭，从而保护设备及系统。安装在正常非负压系统，当容器和系统的放散阀未打开，产生负压时，此阀自动开启。

A72W is applicable in negative pressure system with temperature $\leq 200^{\circ}\text{C}$. When the negative pressure in the container exceeds the allowed value, the valve will open automatically and absorbs air. When the negative pressure in the container reaches the allowed value, the valve will close automatically so as to protect the equipment and the system. It is to be installed in normal non-negative pressure systems. When the discharge valve of the container and system has not opened, which produces the negative pressure, this valve will open automatically.



A72W
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	A72W-P 材料 Materials	A72W-R 材料 Materials	工作温度 Working temperature	$\leq 200^{\circ}\text{C}$
1	阀体 Body	ZG1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti	适用介质 Suitable medium	A72W-10P 适用于硝酸类介质 Nitric acid etc. Medium A72W-10R 适用于醋酸类介质 Acetic acid etc. Medium
2	阀座 Seat	1Cr18Ni9Ti	ZG1Cr18Ni12Mo2Ti		
3	调节圈 Adjusting ring	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti		
4	阀盖 Bonnet	ZG1Cr18Ni9Ti	1Cr18Ni9Ti		
5	阀杆 Stem	1Cr18Ni9Ti	1Cr18Ni12Mo2Ti		
6	弹簧 Spring	50CrVA	50CrVA 包覆氟塑料 Coated Teflon		

主要外形及连接尺寸 Main external and connecting dimensions

公称通径 Nominal diameter DN(mm)	尺寸 Dimensions(mm)						
	D	D ₁	D ₂	Z-φd	b	f ₁	H
15	95	65	45	4-14	14	2	110
20	105	75	55	4-14	16	2	130
25	115	85	65	4-14	16	2	150
32	140	100	78	4-18	18	2	180
40	150	110	85	4-18	18	3	200
50	165	125	100	4-18	20	3	221
80	200	160	135	4-18	22	3	245
100	220	180	155	8-18	22	3	253
125	250	210	185	8-18	24	3	280
150	285	240	210	8-23	24	3	329
200	340	295	265	8-23	26	3	377
250	395	350	320	12-23	28	3	440

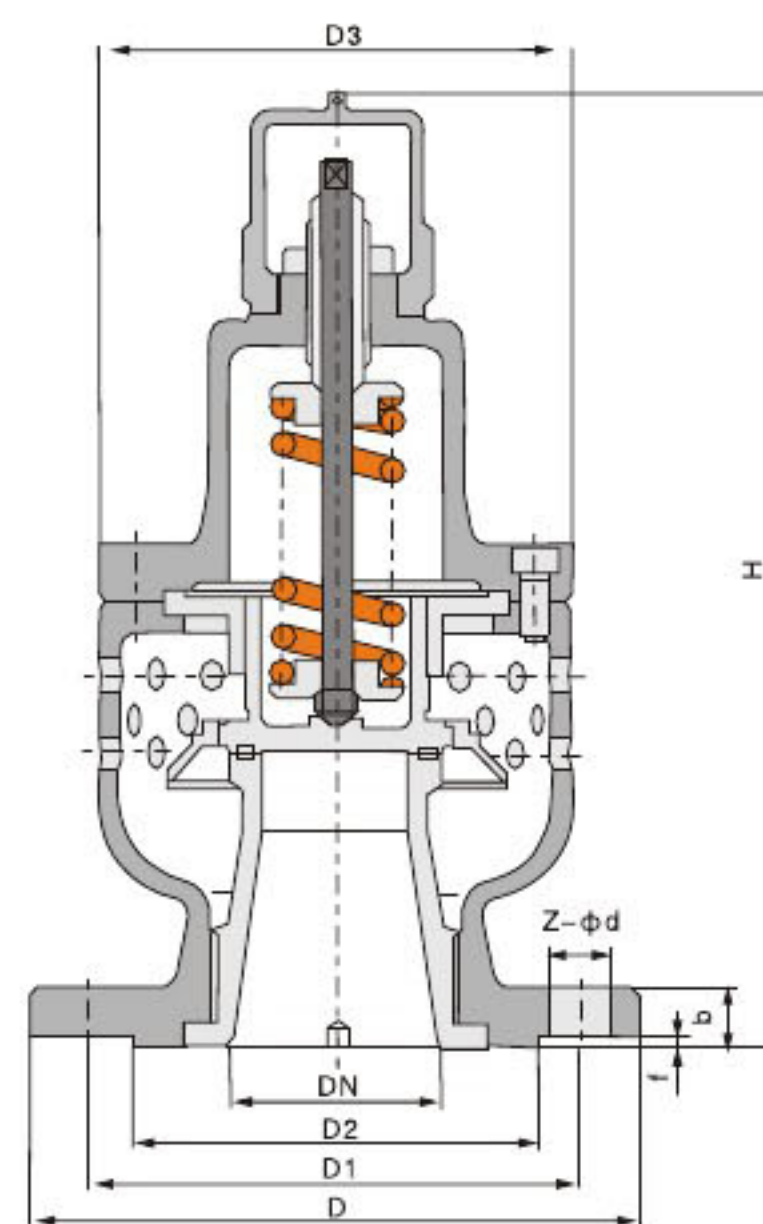
■ 系列 Series

AF4QH-10C

AF4QH型安全阀用于风机系统，作为超压保护装置。
AF4QH type safety valve is be applied to fan system to provide over pressure protection.

■ 主要零部件材料 Materials for main parts

零件名称 Name of parts	阀体、阀盖 Body, Bonnet	阀座、阀瓣等内件 Nozzle, disc	弹簧 Spring
材料 Materials	WCB	2Cr13	50CrVA



AF4QH
结构图 Structural drawing

■ 外形尺寸和连接尺寸 Dimensions(mm)

公称压力 Nominal pressure PN	公称通径 Nominal diameter DN(mm)	尺寸 Dimension(mm)							
		D	D ₁	D ₂	b	f	Z-φdo	D ₃	H
PN1.0MPa (PN10bar)	40	145	110	85	16	3	4-18	100	250
	50	160	125	100	16/18	3	4-18	115	272
	65	180	145	120	18	3	4-18	140	285
	80	195	160	135	20	3	4-18	172	296
	100	215	180	155	20	3	8-18	212	425
	125	245	210	185	22	3	8-18	254	450
	150	280	240	210	22	3	8-23	280	480

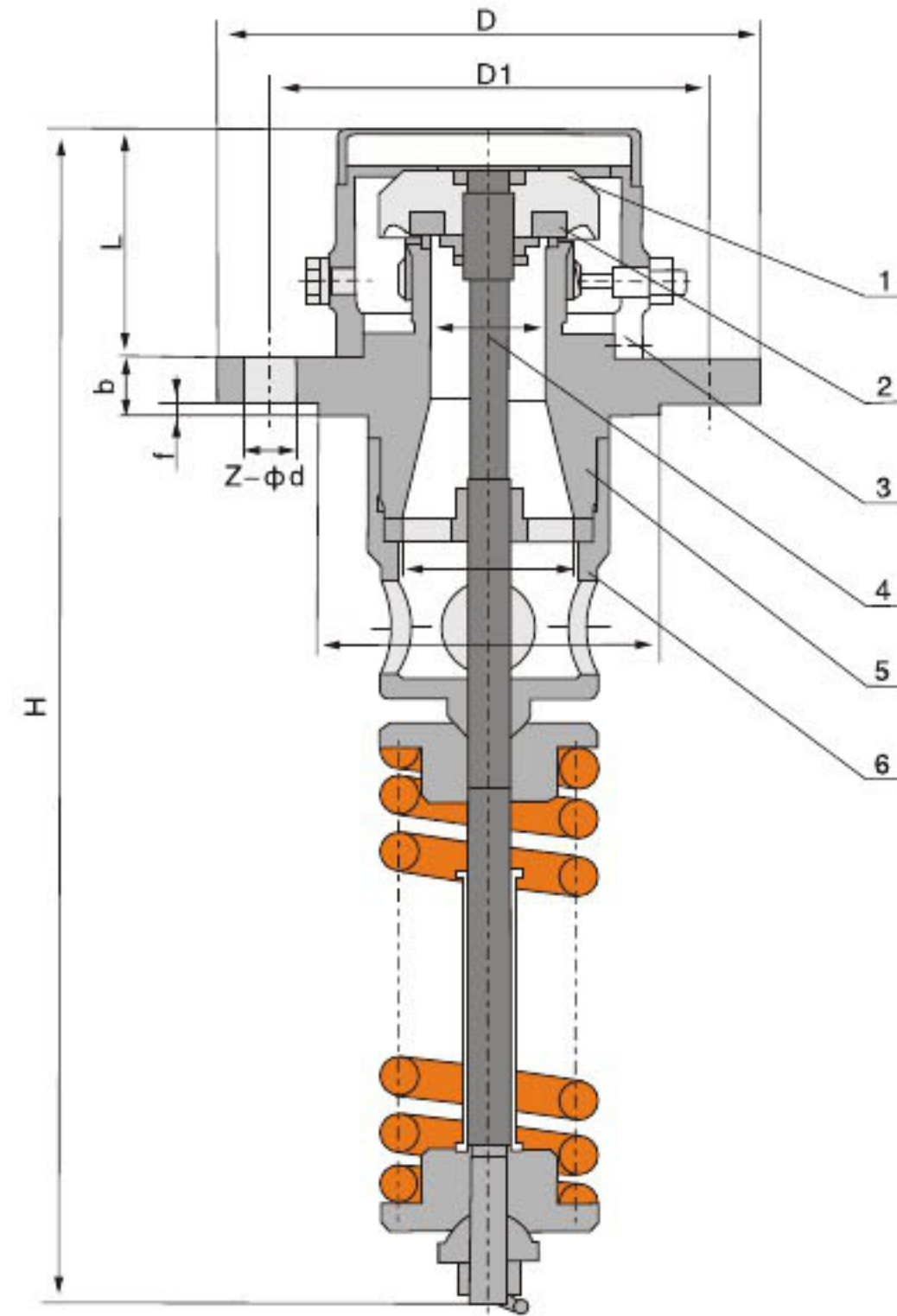
■ AF4QH-10C型安全阀排量 Discharge capacity of AF4QH-10C type safety valve

开启压力 Set pressure P _k ,MPa																			
公称通径 DN (mm)	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
	排放压力 Relieving pressure P _d Mpa																		
	0.021	0.032	0.042	0.053	0.063	0.074	0.084	0.095	0.105	0.116	0.126	0.137	0.147	0.158	0.168	0.179	0.189	0.200	0.210
排 量 Discharge capacity Q _d ,m ³ /min																			
40	5.5	6.8	7.6	8.6	9.4	10	11	12	12	13	13	14	15	15	16	16	17	18	18
50	9	11	12	14	15	16	18	19	20	21	22	23	24	25	26	27	28	29	30
80	22	27	30	34	37	40	43	46	48	51	53	55	58	60	63	65	68	70	72
100	37	45	51	58	63	68	73	77	81	85	89	93	94	102	106	110	114	118	122
125	56	68	77	88	95	103	110	116	122	128	134	140	142	154	160	166	172	178	184
150	88	108	120	136	150	160	172	183	192	202	211	222	231	241	250	261	270	280	290
200	137	169	188	213	234	275	269	285	300	316	331	347	361	377	391	407	422	438	453

■ 系列
Series

ANA42F

ANA42F内装式安全阀主要用于铁路和汽车石油液化气槽车或地面液化气储缺罐上，起超压安全保护作用。
ANA42F inner assemble safety valve is to be applied to liquefied gas tank lorry in railroad and automobile or ground liquefied gas tank, to provide over pressure protection.



ANA42F
结构图 Structural drawing

■ 主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	材料 Materials
1	阀 瓣 Disc	碳钢 Carbon Steel
2	密 封 垫 Sealing	聚四氟乙烯 PTFE
3	阀 体 Body	碳钢 Carbon Steel
4	阀 杆 Stem	1Cr18Ni9Ti
5	阀 座 Nozzle	碳钢 Carbon Steel
6	支 架 Yoke	碳钢 Carbon Steel

■ 外形尺寸和连接尺寸 Dimensions(mm)

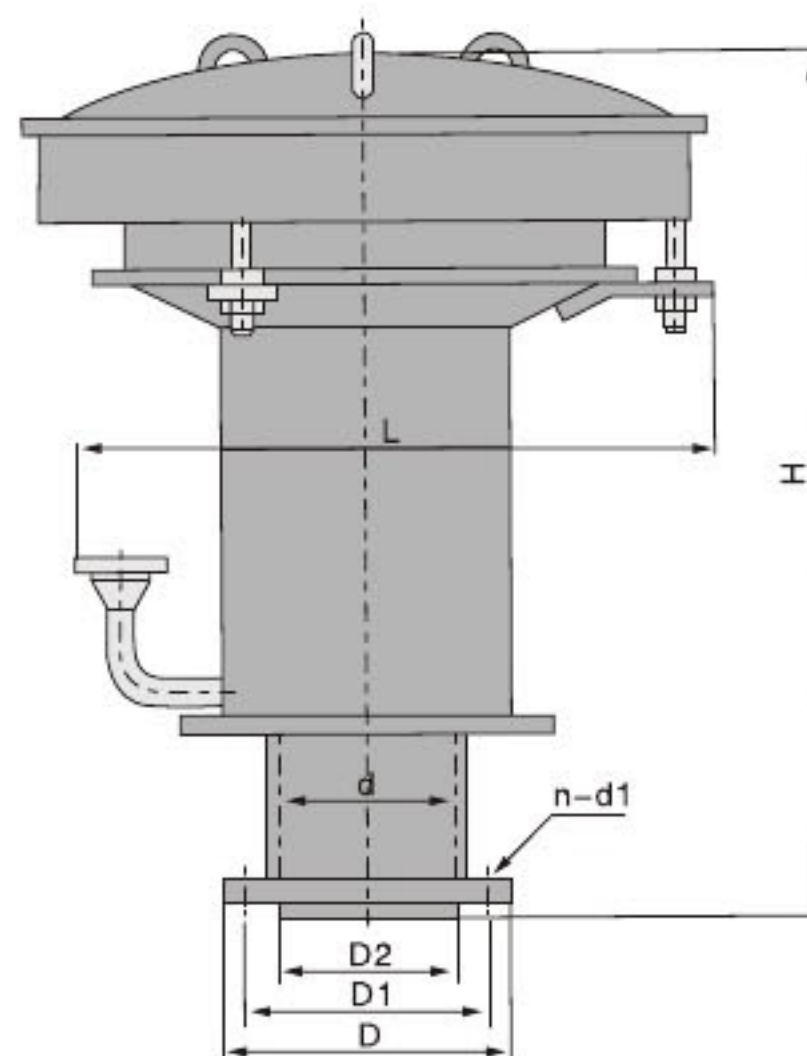
公称通径 Nominal diameter DN(mm)	尺寸 Dimension(mm)								
	L	D	D ₁	D ₂	do	b	f	z-d	H≈
50	95	160	125	100	34	20	3	4-18	376
80	99	235	190	149	52	25	4.5	8-22	512

系列
Series

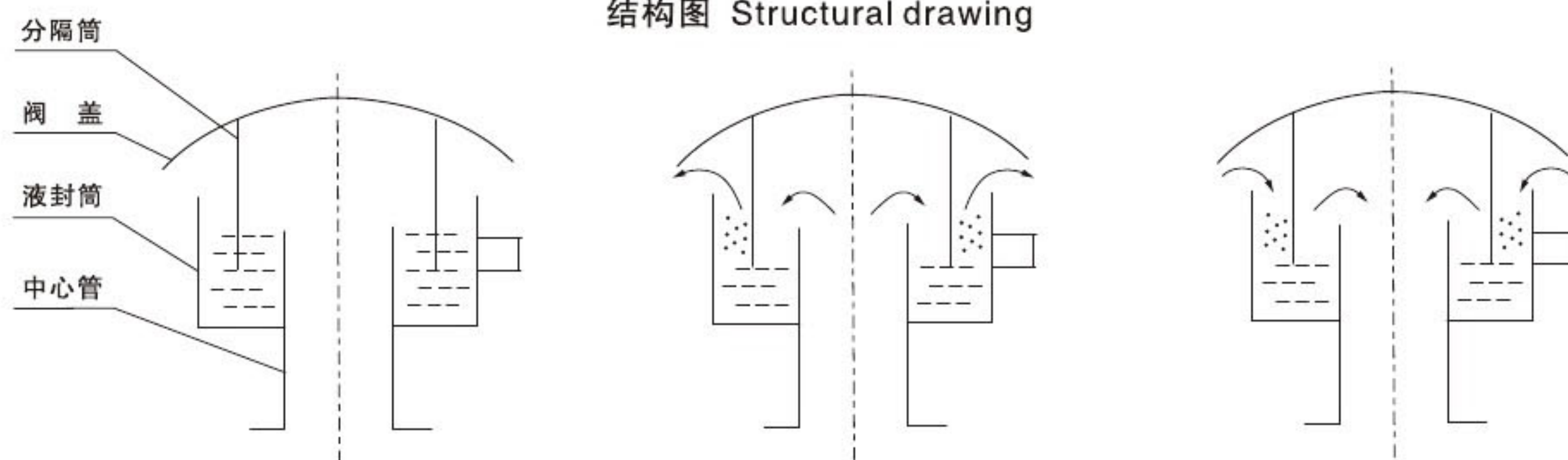
GYA-10C

- 1、液压式安全阀是（活瓣式）呼吸阀的安全备用设备，它的吸气和呼气的动作压力略高于（活瓣式）呼吸阀，在呼吸阀一旦失灵或在冬季活瓣冻结时，液压安全阀的液封即被破坏从而保护油罐免遭破坏。
- 2、液压安全阀装于油罐顶部与呼吸阀配合使用。
- 3、控制压力：+56毫米水柱至-50毫米水柱。

- 1.Liquid-pressure style safety valve is a assistant equipments of the breathing valve(moving disc style),the active pressure of aspiration and expiration is higher than breathing valve(moving disc style),as upon once the breathing valve does not work in winter,the moving disc will be frozen,the liquid seal of the liquid-pressure style safety valve can be broken for protecting the oil tank.
- 2.Liquid-pressure safety valve will be installed in top of oil tank and assorted used with breathing valve.
- 3.The control pressure:+56mm water column to -50mm water column.



GAY
结构图 Structural drawing



外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	规格 Specification	安装尺寸 Dimension(mm)							重量 Weight (kg)
		d	D	D ₁	D ₂	n-d ₁	L	H	
GYA-80	80	Φ85	Φ185	Φ150	Φ125	4-Φ18	376	424	38
GYA-100	100	Φ105	Φ205	Φ170	Φ145	4-Φ18	500	605	42
GYA-150	150	Φ148	Φ260	Φ225	Φ200	8-Φ18	650	705	66
GYA-200	200	Φ210	Φ315	Φ280	Φ255	8-Φ18	900	755	97
GYA-250	250	Φ264	Φ370	Φ335	Φ310	12-Φ18	1050	885	140

注：法兰标准JB/T78。 Note:Flange standard JB/T78.

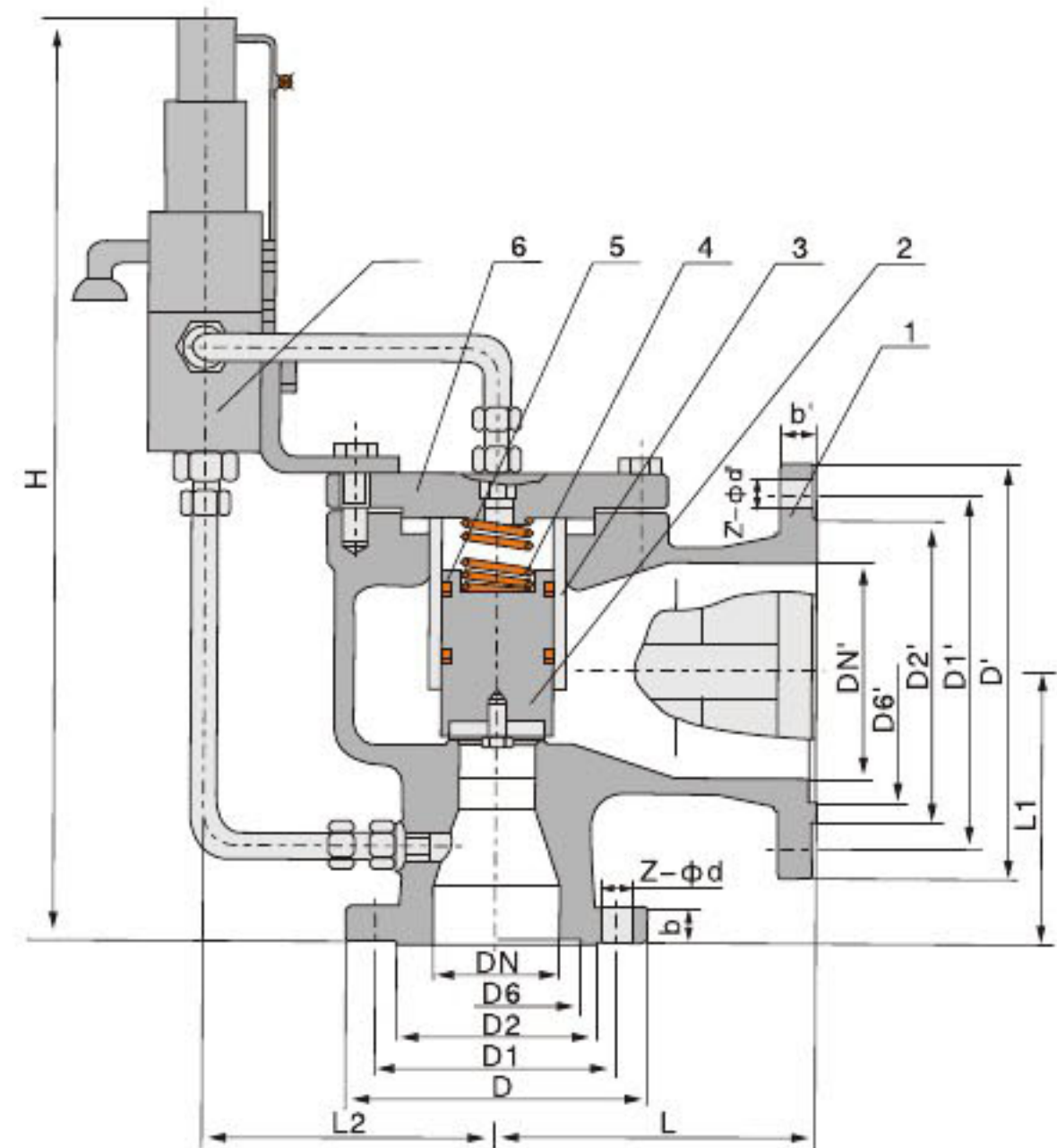
■ 系列
Series

(K)Ax46F(Y)-16C
(K)Ax46F(Y)-25C
(K)Ax46F(Y)-40C
(K)Ax46F(Y)-64C
(K)Ax46F(Y)-100C

AF46Y-16C
AF46Y-25C
AF46Y-40C
AF46Y-64C
AF46Y-100C

先导式安全泄压阀是一种新颖结构的安全阀。主要用于石油天然气、化工、电力、冶金和城市燃气等领域，是受压设备、容器或管路上的最佳超压保护装置。其主要优点是变弹簧直接作用为导阀间接作用，提高了动作的灵敏度，而且主阀采用套筒活塞式，双重密封阀座结构，动作精度高、重复性好、回座快、不泄漏、能带高背压排放、工作寿命长、工作稳定可靠，它还可在在线调校，反复启跳排放后，仍然能自动回座，关闭严密，操作维护方便。

Pilot operated safety valve, newly-structured, is mainly applied to such trades as petroleum & natural gas, Chemistry, electric, metallurgy & burning gas. It is the best super-pressure protecting equipment on press equipment, container, or pipeline. It is mainly characterized by shifting direct function of spring to indirect function of guide valve. What's more, main valve, applying for sleeve piston & double sealed seat, is characterized by high precision of action, good recycling function, fast turning back to seat, ability to high-pressure leaking, long working time & security, together with read-justment on line, automatic turning back to seat after leaking again and again, tight closure, operating and maintaining convenience.



(K)Ax46F(Y)
结构图 Structural drawing

■ 主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	Ax46Y/F AF46Y/F 材料 Materials	KAx46Y/F 材料 Materials
1	阀体 Body	WCB	WCB
2	阀瓣 Disc	2Cr13/2Cr13+PTFE	1Cr18Ni9Ti/1Cr18Ni9Ti+PTFE
3	导向套 Guide	1Cr18Ni9Ti	1Cr18Ni9Ti
4	弹簧 Spring	50CrVA	50CrVA
5	O型圈 O type ring	氟橡胶 Viton	氟橡胶 Viton
6	阀盖 Bonnet	25	25
7	导阀 Pilot valve	部件 Part	

■ 外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 通径 (DN)	do	L	L ₁	L ₂	H	DN'	D	D ₁	D ₂	D ₆	b	Z-Φd	D'	D ₁ '	D ₂ '	D ₆ '	b'	Z'-Φd'
(K)Ax46 ^F _Y -16 AF46Y-16	25	15	110	95	150	365	32	115	85	65		16	4-14	140	100	78		18	4-18
	32	20	115	100	150	375	40	140	100	78		18	4-18	150	110	85		18	4-18
	40	25	120	110	160	390	50	150	110	85		18	4-18	165	125	100		20	4-18
	50	32	135	120	160	410	65	165	125	100		20	4-18	185	145	120		20	4-18
	65	40	160	140	175	435	80	185	145	120		20	4-18	200	160	135		20	8-18
	80	50	170	135	175	451	100	200	160	135		20	8-18	220	180	155		22	8-18
	100	65	195	175	195	500	125	220	180	155		22	8-18	250	210	185		24	8-18
	125	80	210	190	220	526	150	250	210	185		22	8-18	285	240	210		24	8-23
	150	100	255	230	265	623	175	285	240	210		24	8-23	315	270	240		26	8-23
	200	125	300	260	300	690	250	340	295	265		26	12-23	405	355	320		30	12-26
(K)Ax46 ^F _Y -25 AF46Y-25	25	15	110	95	150	365	32	115	85	65		16	4-14	140	100	78		18	4-18
	32	20	115	100	150	375	40	140	100	78		18	4-18	150	110	85		18	4-18
	40	25	120	110	160	390	50	150	110	85		18	4-18	165	125	100		20	4-18
	50	32	135	120	160	410	65	165	125	100		20	4-18	185	145	120		20	4-18
	65	40	160	140	175	435	80	185	145	120		22	8-18	200	160	135		20	8-18
	80	50	170	135	175	451	100	200	160	135		22	8-18	220	180	155		22	8-18
	100	65	195	175	195	500	125	230	190	160		24	8-23	250	210	185		22	8-18
	125	80	210	190	220	526	150	270	220	188		28	8-26	285	240	210		24	8-23
	150	100	255	230	265	623	175	300	250	218		30	8-26	310	270	240		26	8-23
	200	125	300	260	300	690	250	360	310	278		34	12-26	405	355	320		30	12-26
(K)Ax46 ^F _Y -40 AF46Y-40	25	15	110	95	150	365	32	115	85	65	58	16	4-14	140	100	78		18	4-18
	32	20	115	100	150	375	40	140	100	78	66	18	4-18	150	110	85		18	4-18
	40	25	120	110	160	390	50	150	110	85	76	18	4-18	165	125	100		20	4-18
	50	32	135	120	160	410	65	165	125	100	88	20	4-18	185	145	120		20	4-18
	65	40	160	140	175	435	80	185	145	120	110	22	8-18	200	160	135		20	8-18
	80	50	170	135	175	451	100	200	160	135	121	22	8-18	220	180	155		22	8-18
	100	65	195	175	195	500	125	235	190	160	150	24	8-23	250	210	185		22	8-18
	125	80	210	190	220	526	150	270	220	188	176	28	8-26	285	240	210		24	8-23
	150	100	255	230	265	623	175	300	250	218	204	30	8-26	310	270	240		26	8-23
	200	125	300	260	300	690	250	375	320	282	260	38	12-30	405	355	320		30	12-26
(K)Ax46 ^F _Y -64 AF46Y-64	25	15	110	100	160	365	32	140	100	78	58	22	4-18	140	100	78	66	18	4-18
	32	20	130	110	160	375	40	155	110	82	66	24	4-23	150	110	85	76	18	4-18
	40	25	130	120	170	445	50	170	125	95	76	24	4-23	165	125	100	88	20	4-18
	50	32	135	130	195	460	65	180	135	105	88	26	4-23	185	145	120	110	22	8-18
	65	40	175	160	225	495	80	205	160	130	110	28	8-23	200	160	135	121	22	8-18
	80	50	175	160	225	525	100	215	170	140	121	30	8-23	235	190	160	150	24	8-23
	100	65	195	195	245	565	125	250	200	168	150	32	8-26	270	220	188	176	28	8-25
	150	100	280	265	265	640	200	345	280	240	204	38	8-34	375	320	282	260	38	12-30
	200	125	300	295	300	680	250	405	345	300	260	44	12-34	450	385	345	313	42	12-34
	(K)Ax46 ^F _Y -100 AF46Y-100	25	15	110	100	160	365	32	140	100	78	58	24	4-18	140	100	78	66	18
32		20	130	110	160	375	40	155	110	82	66	24	4-23	150	110	85	76	18	4-18
40		25	130	120	170	445	50	170	125	95	76	26	4-23	165	125	100	88	20	4-18
50		32	135	130	195	460	65	195	145	112	88	28	4-26	185	145	120	110	22	8-18
65		40	175	160	225	495	80	220	170	138	110	32	8-26	200	160	135	121	22	8-18
80		50	175	160	225	525	100	230	180	148	121	34	8-26	235	190	160	150	24	8-23
100		65	195	195	245	565	125	265	210	172	150	38	8-30	270	220	188	176	28	8-25
150		100	280	265	265	610	200	355	290	250	204	46	12-34	375	320	282	260	38	12-30
200	125	300	295	300	680	250	430	360	312	260	54	12-41	450	385	345	313	42	12-34	

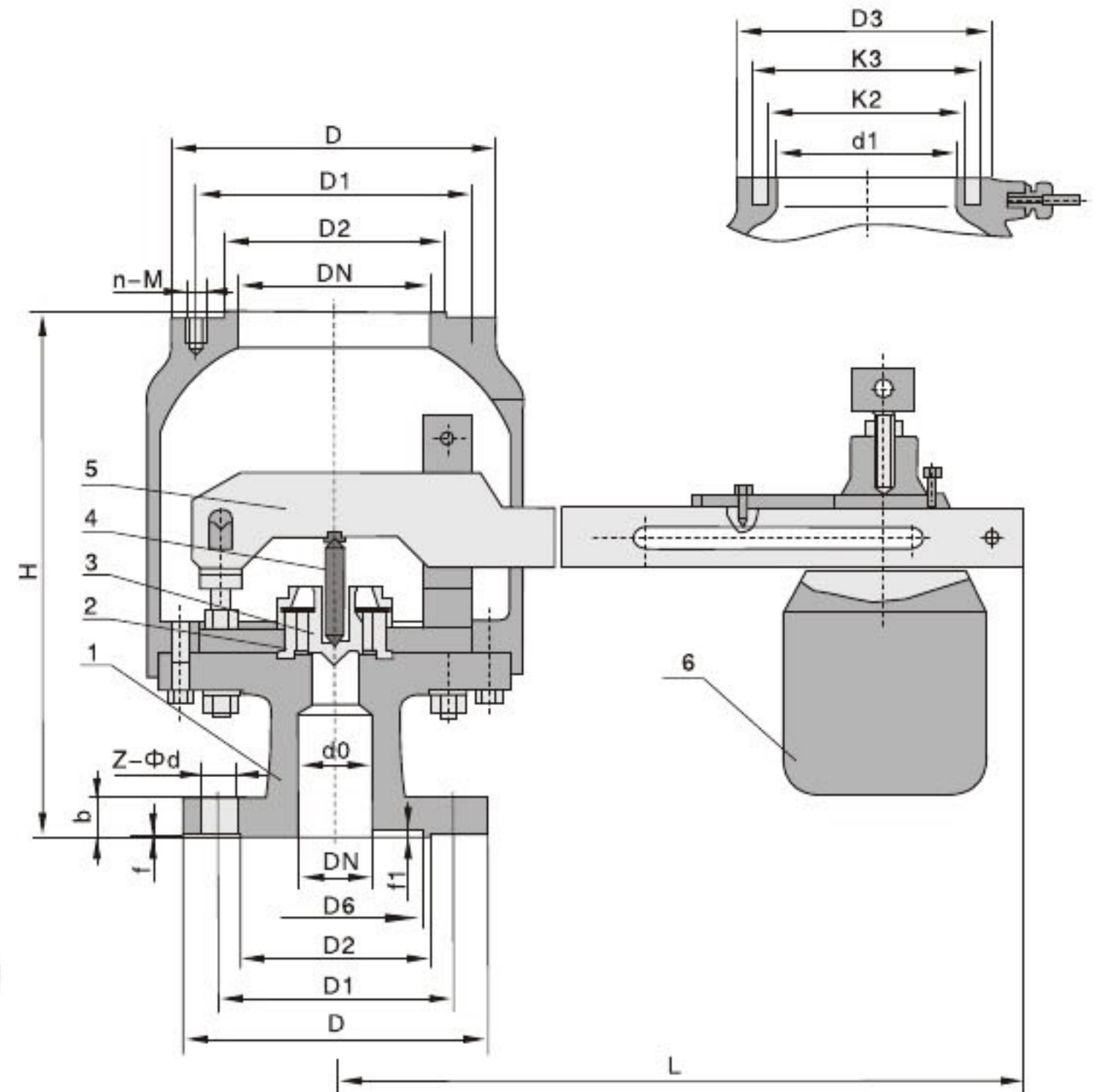
系列
Series

GA42H型安全阀适用于温度 $\leq 450^{\circ}\text{C}$ 的电站锅炉和压力容器上，防止压力超过允许最高值，介质可为蒸汽、空气。
GA42H type safety valve is applicable to the power-station boiler and pressure container(The working temperature is 150°C or less.)which will avoid the pressure rate beyond the allowed upper limit.The medium can be steam or air.

GA42H-16C
GA42H-25C
GA42H-40C
GA42H-100C



GA42Y
结构图 Structural drawing



主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	材料 Materials
1	阀体 Body	碳钢 Carbon Steel
2	导向套 Guide sleeve	不锈钢 Stainless steel
3	阀瓣 Disc	2Cr13
4	阀杆 Stem	2Cr13
5	杠杆 lever	碳钢 Carbon Steel
6	重锤 Hammer	铸铁 Cast iron

主要外形及连接尺寸 Main external and connecting dimensions

型号 Type	公称通径 Nominal diameter DN(mm)	尺寸 Dimensions																			
		do-z	D	D ₁	D ₂	D ₆	f	f ₁	b	Z-φd	H	L	出口法兰式				出口承插式				
												DN'	D ₂ '	D ₁ '	D'	n-M	d ₁	K ₂	K ₃	D ₃	
GA42H-16	50	40×1	165	125	100	/	3	/	16	4-18	412	840	125	175	200	235	8-M16	120	145	162	190
GA42H-25	50	40×1	165	125	100	/	3	/	20	4-18	412	840	125	175	200	235	8-M16	120	145	162	190
GA42H-40	50	40×1	165	125	100	88	3	4	20	4-18	412	840	125	175	200	235	8-M16	120	145	162	190
GA42H-64	50	40×1	175	135	105	88	3	4	26	4-23	420	840	125	175	200	235	8-M16	120	145	162	190
GA42H-100	50	40×1	195	145	112	88	3	4	28	4-25	420	840	125	175	200	235	8-M16	120	145	162	190

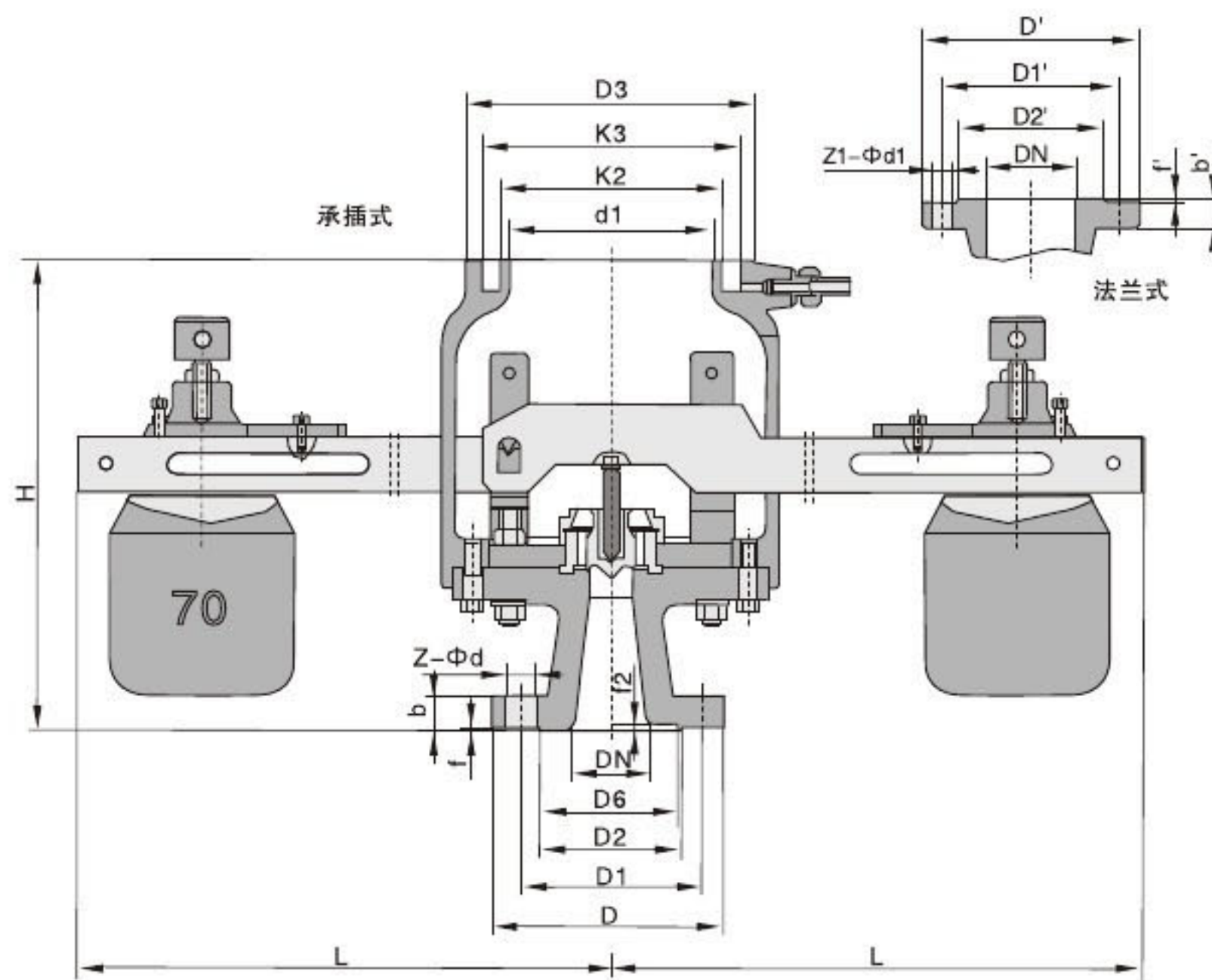
■ 系列
Series

GA44H-16C
GA44H-25C
GA44H-40C
GA44H-64C

GA44H型安全阀适用于温度 $\leq 450^{\circ}\text{C}$ 的电站锅炉和压力容器上,防止压力超过允许最高值,介质可为蒸汽、空气。
GA44H type safety valve is applicable to the power-station boiler and pressure container(The working temperature is 450°C or less.)which will avoid the pressure rate beyond the allowed upper limit.The medium can be steam or air.

■ 主要零部件材料说明 Explanation of the materials for main parts

GA44H型安全阀的主要零件材料和GA42H-16C/25/40安全阀的相同。
For the materials of main parts GA44H lever safety valve are just same as GA42H-16C/25/40 lever safety valve.



GA44H-64
结构图 Structural drawing

■ 主要外形及连接尺寸 Main external and connecting dimensions

型号 Type	公称通径 Nominal diameter DN(mm)	尺寸 Dimensions																					
		do-z	D	D ₁	D ₂	D ₆	f	f ₂	b	Z-φd	H	L	承插式				法兰式						
													d ₁	K ₂	K ₃	D ₃	DN'	D ₂ '	D ₁ '	D'	b'	f'	z ₁ -φd ₁
GA44H-1.6	80	50×2	200	160	135	/	3	/	20	8-18	410	840	120	145	162	190	150	210	240	280	24	3	8-23
GA44H-2.5	80	50×2	200	160	135	/	3	/	22	8-18	410	840	120	145	162	190	150	210	240	280	24	3	8-23
GA44H-4.0	80	50×2	200	160	135	121	3	4	22	8-18	410	840	120	145	162	190	150	210	240	280	24	3	8-23
GA44H-6.4	80	40×2	210	170	140	121	3	4	30	8-23	480	840	200	218	253	285	200	255	280	315	22	3	8-18

■ 系列
Series

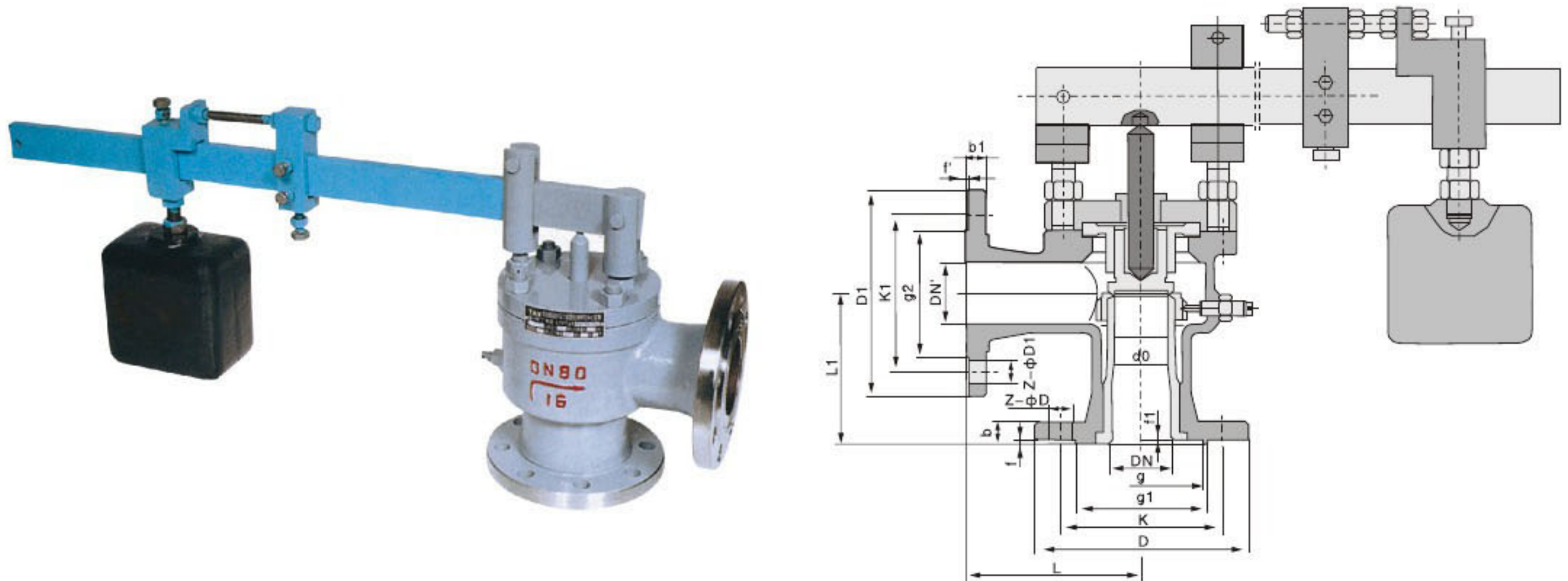
GA41H、A51H型安全阀适用于温度 $\leq 450^{\circ}\text{C}$ 的锅炉和压力容器上，防止压力超过允许最高值，介质可为蒸汽、空气。
GA41H,A51H type safety valve is applicable to the boiler and pressure container(The working temperature is 450°C or less.),which will avoid the pressure rate beyond the allowed upper limit.The medium can be steam or air.

GA41H-16C
GA41H-25C
GA41H-40C

■ 主要零部件材料说明 Explanation of the materials for main parts

A51H-16C
A51H-25C
A51H-40C

GA41H、A51H型安全阀除杠杆（材料为碳钢），重锤（材料为铸铁），其余材料均和A41H-16C型弹簧式安全阀相同。
GA41H,A51H type safety valve,except the lever(material is carbon steel),hammer(material is cast iron),the materials of other parts is the same as A41H-16C spring load type safety valve.



GA41H、A51H
结构图 Structural drawing

■ 主要外形及连接尺寸 Dimensions (mm)

公称通径 Nominal diameter DN(mm)	尺寸 Dimensions(mm)															
	d_0	L	L_1	D	K	g_1	f	b	Z- ϕd_0	DN'	D_1	K_1	g_2	b_1	f	Z- ϕd_1
25	20	100	85	115	85	65	2	16	4-14	25	115	85	65	16	2	4-14
32	25	115	100	140	100	78	2	18	4-18	32	140	100	78	18	2	4-18
40	32	120	110	150	110	85	3	18	4-18	40	150	110	85	18	3	4-18
50	40	135	120	165	125	100	3	20	4-18	50	165	125	100	20	3	4-18
80	65	160	135	200	160	135	3	20	8-18	80	200	160	135	20	3	8-18
100	80	170	160	220	180	155	3	22	8-18	100	220	180	155	22	3	8-18
150	125	205	195	285	240	210	3	24	8-23	150	285	240	210	24	3	8-23
200	150	240	230	340	295	265	3	26	12-23	200	340	295	265	26	3	12-23

注：PN2.5、PN4.0MPa尺寸参照A41H-25/40型尺寸表。

■ 系列
Series
GA49Y-4

■ 说明

主要用于电站锅炉、压力容器、减温减压装置等设备，防止压力超过允许最高压力值，保证设备安全运行。

Instruction

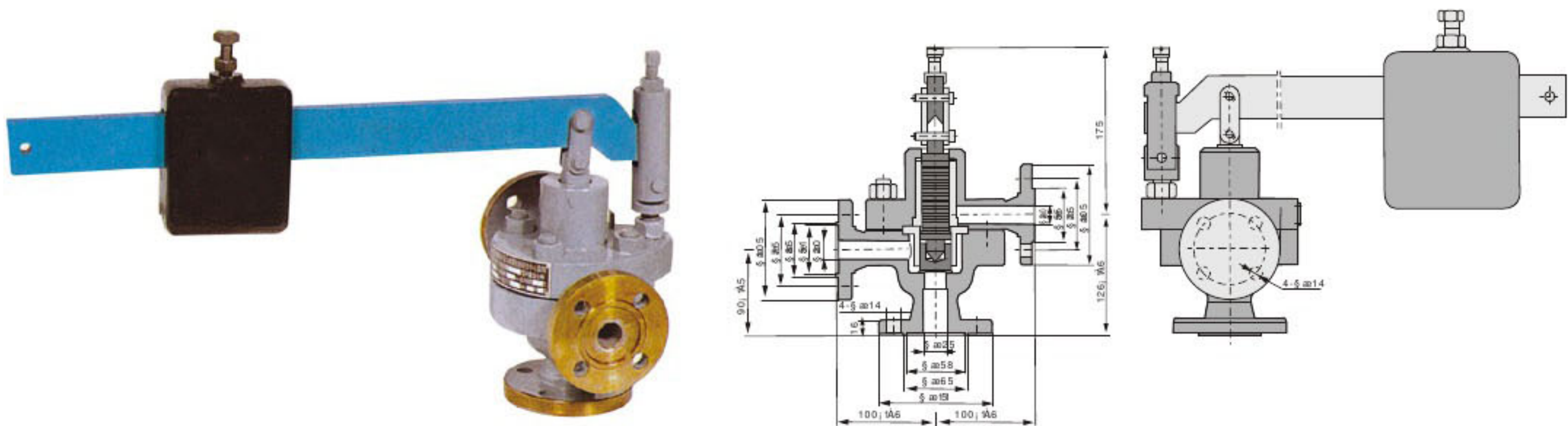
This valve is used for power plant boilers, pressure containers, pressure and temperature reducing device and other facilities. It serves to prevent the pressure exceeding the highest allowed pressure value and ensure the safety of the device when working.

Structure briefing

- The pressure of the disc is balanced through the lever and heavy hammer and the valve is ensured seal by moving the position of heavy hammer and changing the weight of heavy hammer to reach the required set pressure.
- The sealed surface is made of Fe base stainless steel by over-layering welding. Through thermal treatment, the wear resistance and antierosion of disc is improved.
- At the top of valve is equipped an electromagnet to open and another to close the valve. The actions of the mechanism and the electric appliance are separate and will not affect each other.

Installation instruction

- This valve shall be used with main safety valve A49HY-40 together.
- Impulse safety valve shall be installed vertically and the lever shall be kept level. The clearance from the lever to both sides of guide fork shall be even.
- The pipeline shall be washed clean before installing impulse safety valve.
- A long distance between the leading pipe of the impulse safety valve and the inlet pipe of the main safety valve shall be no less than 5 times of the diameter of the inlet pipe, for fear that the validity of the meter and the impulse safety valve may be affected by the steam releasing process of the main safety valve.



GA49Y
结构图 Structural drawing

■ 系列
Series
GA49H-4

■ 说明 Instruction

主要用于电站锅炉、压力容器、减温减压装置上使用，防止压力超过允许最高压力值，保证设备安全运行。

This valve is used for power plant boilers, pressure containers, pressure and temperature reducing device and other facilities. It serves to prevent the pressure exceeding the highest allowed pressure value and ensure the safety of the device when working.

■ 结构简述 Struture briefing

1、当介质压力升高到整定压力时，冲量安全阀打开，介质从脉冲管进入主安全阀的活塞室，推动活塞下降，使阀门自动打开，当冲量阀关闭时，阀瓣又自动关闭。

2、密封面用钴基铬镍不锈钢堆焊而成，阀瓣经热处理，提高了耐磨性和抗冲蚀性。

1、When the medium pressure rises to the set pressure, the impulse safety valve opens, and the medium in the impulse pipe enters into the piston chamber of the main safety valve from impulse pipe, forcing the piston to descend, and then the valve automatically opens; when the impulse safety valve closes, the disc will also automatically close.

2、The sealed surface is made of Fe base stainless steel by overlying welding. Through thermal treatment, the wear resistance and anti-erosion of disc is improved.

■ 安装说明 Installation instruction

1、阀门必须垂直安装在设备的最高位置。

2、主安全阀紧固在支座上，支座承受主安全阀排汽时产生的反座力。

3、排汽管应有专门吊架，排汽管重量不得加在主安全阀上，主安全阀与排汽管之间的连接法兰应消除任何的附加预应力。

4、排汽管的最低点应考虑疏水，以免排汽时产生水击。

1、The main safety valve shall be installed vertically at the highest position of the device.

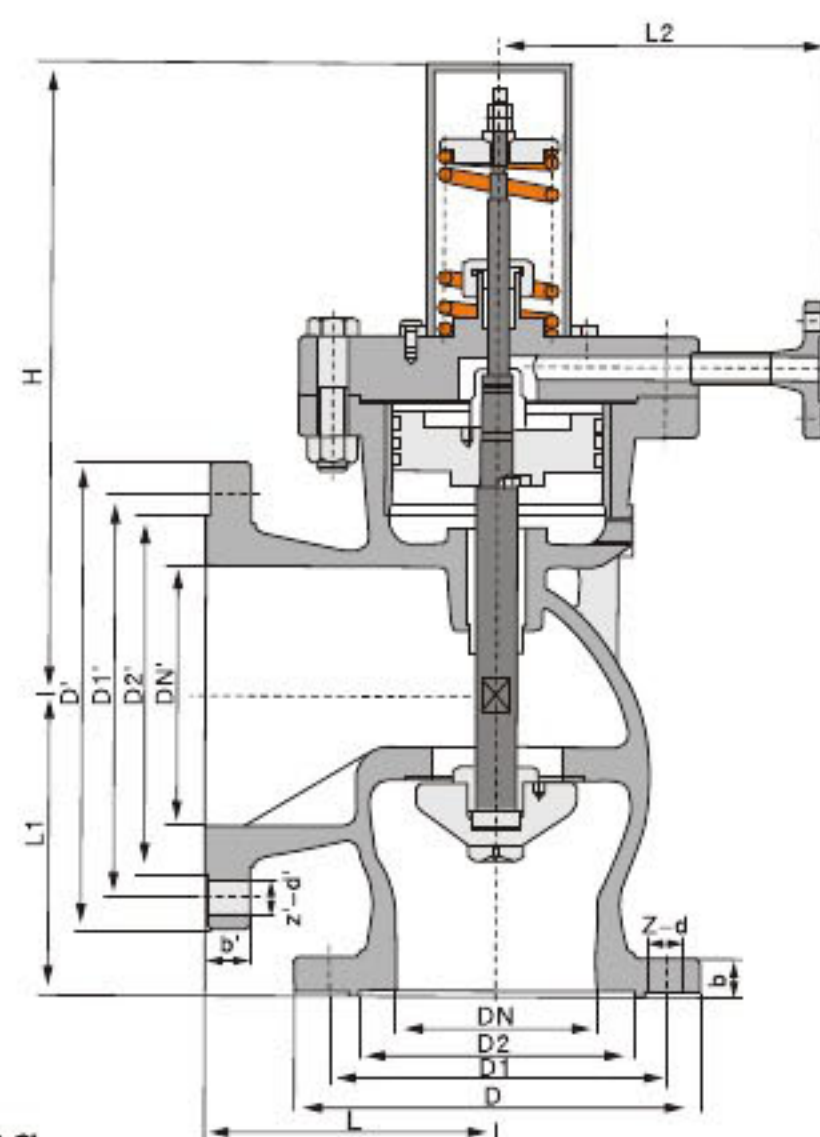
2、The main safety valve shall be fastened upon the gallow, which sustains the back-seat force produced in the steam discharging process of the main safety valve.

3、The exhaust pipe shall contain a special gallow to prevent the force of its weight directly applying on the main safety valve. The connecting lange between the main safety valve and exhaust pipe shall eliminate any extra stress.

4、At the lowest point of the exhaust pipe, water drainage shall be taken into consideration to avoid producing water hammer whil discharging steam.



A49H
结构图 Structural drawing



■ 外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称通径DN Nominal diameter	尺寸 Dimension(mm)														
		L	L ₁	L ₂	H	D	D ₁	D ₂	b	z-d	DN'	D'	D ₁ '	D ₂ '	b'	z'-d'
A49H-4	150	220	230	240	486	300	250	204	30	8-25	200	360	310	278	34	12-25
A49H-4	200	270	295	330	615	375	320	260	38	12-30	300	485	430	390	40	16-30
A49H-4	250	300	350	370	646	445	385	313	42	12-34	350	550	490	450	44	16-34

蝶形弹簧式安全阀 Butterfly spring type safety valve

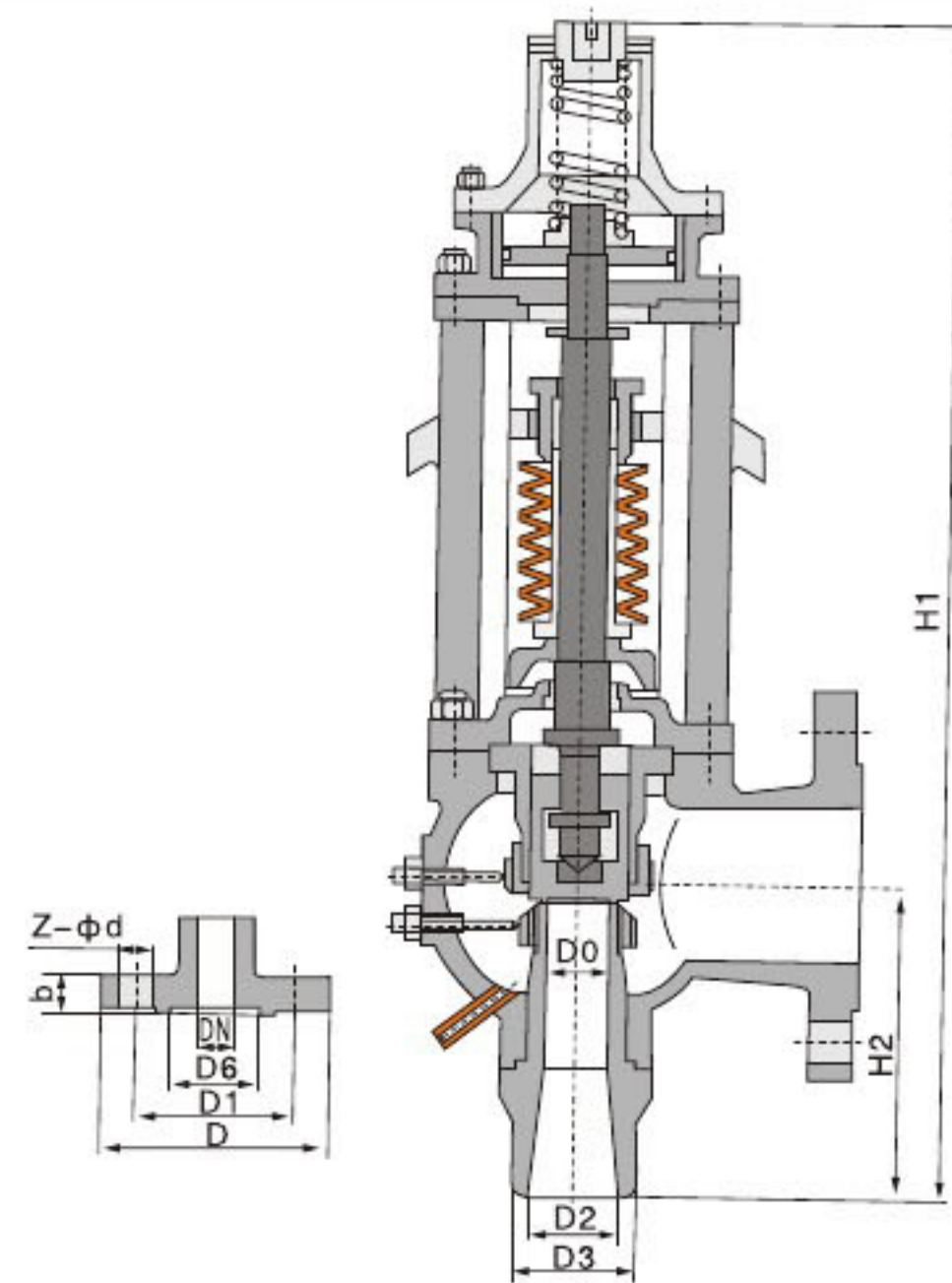
系列 Series

A62Y-P₅₄100V
A62Y-P₃₁112
A62Y-P₅₅140V
A62Y-P₅₅170V

A42Y-P₅₅26V
A42Y-P₄₅45
A42Y-P₃₃26.5

该阀门适用于火力发电厂(站)蒸汽介质设备和管路上,作为超压保护装置。当设备和管路内压力超过允许值时,阀门自动开启,全量排放;当压力降到规定值时,阀门自动快速关闭,保证设备和管路安全、有效运行。

The valve is applied for the steam medium equipment and pipeline of Firepower power plant, as the equipment of protecting super-pressure. When the pressure of equipment and pipeline exceeding the allowed value, the valve will turn on automatically and discharge the pressure entirely. When the pressure decrease to the stated value, the valve will quickly turn off automatically so that the equipment and pipeline run safely and effectively.



A42Y、A62Y
结构图 Structural drawing

主要性能规范 Chief property and specification

型号 Type	公称压力 Nominal pressure PN(MPa)	试验压力 Test pressure Ps(MPa)		工作压力 Working pressure P(MPa)	工作温度 Working temperature (°C)	试验温度 Test temperature
		密封 Seal	强度 Strength			
A62Y-P ₅₄ 100V	10	11	15	10	540	
A62Y-P ₃₁ 112	11.2	12.4	16.8	11.2	318	
A62Y-P ₅₅ 140V	14	15.4	21	14	555	
A62Y-P ₅₅ 170V	17	18.7	25.5	17	555	常温
A42Y-P ₅₅ 26V	2.6	2.9	3.9	2.6	555	
A42Y-P ₄₅ 45	4.5	5	6.8	4.5	450	
A42Y-P ₃₃ 26.5	2.7	3	4.1	2.7	330	

主要零部件材料 Materials for main parts

零件名称 Name of part	阀体 Body	阀盖 Bonnet	阀杆 Stem	蝶形弹簧 Butterfly spring
A62Y-P ₅₄ 100	ZG15Cr1Mo1V		38CrMoA1A	
A62Y-P ₃₁ 112V	ZG25I			60Si2MnA
A62Y-P ₅₅ 140V, A62Y-P ₅₅ 170V, A42Y-P ₅₅ 26V	ZG15Cr1Mo1V	ZG25I	20Cr1Mo1V1	
A42Y-P ₄₅ 45, A42Y-P ₃₃ 26.5	ZG25I			

外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	通径 Diameter DN(mm)	尺寸 Dimension(mm)									
		D ₀	D	D ₁	D ₂	D ₃	D ₆	b	Z-φd ₀	H ₁	H ₂
A62Y-P ₅₄ 100V	70/80	70	-	-	88	150	-	-	-	1575	347
A62Y-P ₃₁ 112	70/80	70	-	-	88	150	-	-	-	1575	347
A62Y-P ₅₅ 140V	70/80	70	-	-	89	170	-	-	-	1644	375
A62Y-P ₅₅ 170V	75/100	75	-	-	100	190	-	-	-	1705	380
A42Y-P ₅₅ 26V	110/150	110	350	290	-	-	204	46	12-34	2067	480
A42Y-P ₄₅ 45	110/150	110	350	290	-	-	204	46	12-34	2070	480
A42Y-P ₃₃ 26.5	110/150	110	350	290	-	-	204	46	12-34	2067	480

高温高压安全阀 High temperature and high pressure safety valve

系列 Series

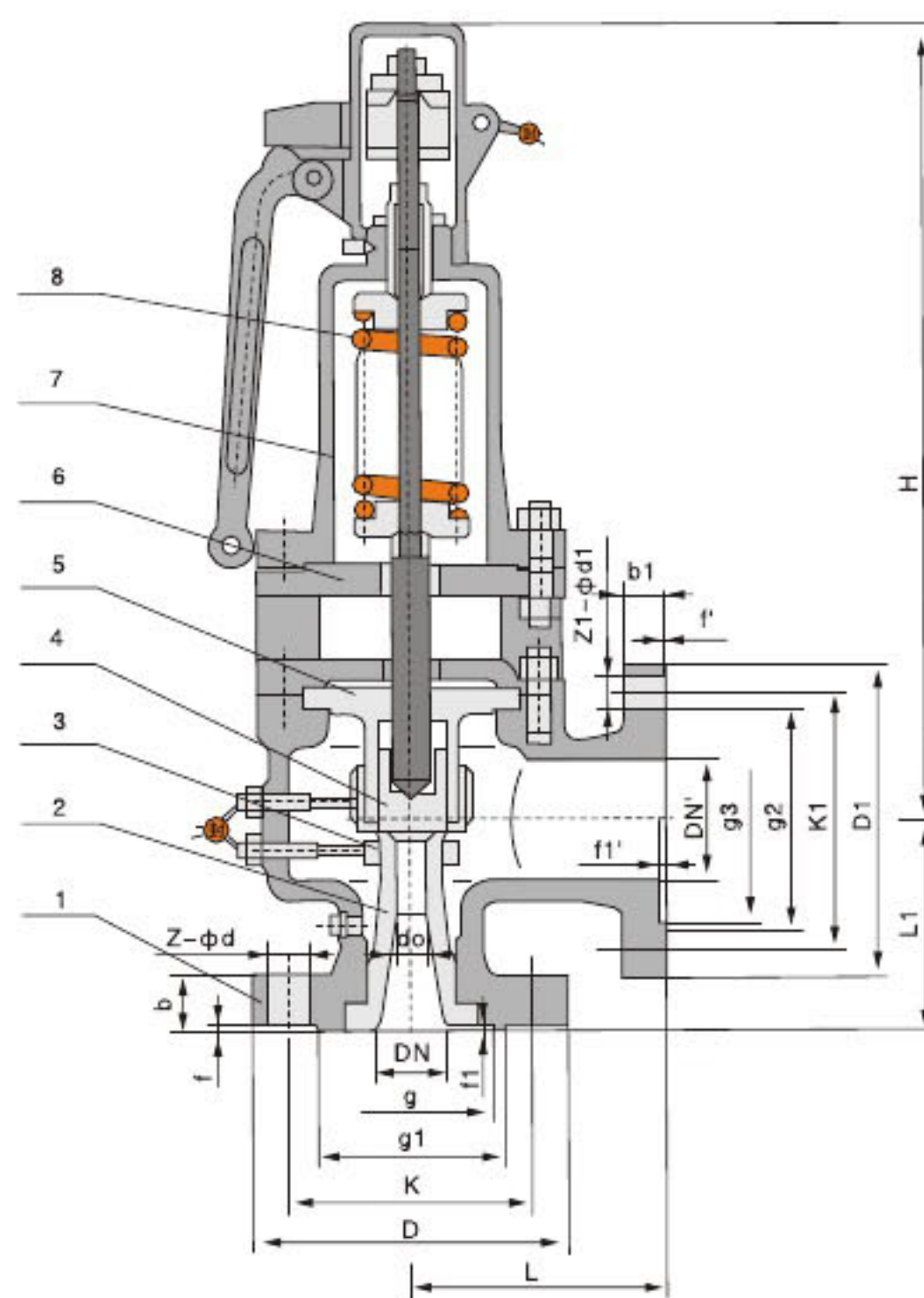
A48Y-16C
A48Y-40
A48Y-64
A48sB-64
A48Y-100
A48sB-100
A48Y-160
A48sB-160

A48Y-16I
A48Y-40I
A48Y-64I
A48sB-64
A48Y-100I
A48sB-100I
A48sB-160I

A48Y-16V
A48Y-40V
A48SH-40
A48Y-64V
A48sB-64V
A48Y-100V
A48sB-100V
A48TH-100
A48sB-160V

本阀门适用于工作温度“C型” $\leq 425^{\circ}\text{C}$ ；“I型” $\leq 500^{\circ}\text{C}$ ；“V型” $\leq 550^{\circ}\text{C}$ 的蒸汽等介质设备或管路上，作为超压保护装置。连接法兰标准按JB/T……94系列1、系列2。

These safety valve are used for the equipment and pipeline of the steam, etc. medium what the working temperature with C Type are less than 425°C and I type are less than 500°C and V Type are less than 550°C . Take for extra pressure protection devices, Flange connecting dimensions of comply with Standard series one and two of JB/T……94.



A48SH
结构图 Structural drawing

主要零部件材料 Materials for main parts

NO.	零件名称 Name of part	C型材料 Materials	I型材料 Materials	V型材料 Materials
1	阀体 Body	WCB	ZG1Cr5Mo	ZG15Cr1Mo1V
2	阀座 Nozzle	2Cr13	1Cr18Ni9Ti	12Cr1MoVA
3	调节圈 Adjusting ring	2Cr13	1Cr18Ni9Ti	1Cr18Ni9Ti
4	阀瓣 Disc	2Cr13	17-4PH	17-7PH
5	导向套 Guide sleeve	2Cr13	1Cr18Ni9Ti	1Cr18Ni9Ti
6	散热器 Radiator	ZG230-450	ZG230-450	ZG230-450
7	阀盖 Bonnet	ZG230-450	ZG230-450	ZG230-450
8	弹簧 Spring	50CrVA	50CrVA	50CrVA

高温高压安全阀 High temperature and high pressure safety valve

■ 外形尺寸和连接尺寸 Dimensions(mm)

型号 Type	公称 通径 (DN)	do	D	K	g	g ¹	b	f	f ₁	Z-Φd	DN'	D ₁	K ₁	g ³	g ²	b ₁	f'	f ₁ '	Z-Φd ₁	L	L ₁	≈H
A48Y-16 A48Y-16I A48Y-16V	40	25	150	110		85	18	3		4-18	50	165	125		100	20	3		4-18	120	115	540
	50	32	165	125		100	20	3		4-18	65	185	145		120	20	3		4-18	135	120	618
	65	40	185	145		120	20	3		4-18	80	200	160		135	20	3		8-18	160	140	710
	80	50	200	160		135	20	3		8-18	100	220	180		155	22	3		8-18	160	150	730
	100	65	220	180		155	20	3		8-18	150	285	240		210	24	3		8-23	225	175	892
	150	100	285	240		210	24	3		8-23	200	340	295		265	26	3		12-23	240	235	1135
A48Y-40 A48Y-40I A48Y-40V	25	16	115	85	58	65	16	2	4	4-14	32	140	100		78	18	2		4-18	110	95	429
	32	20	140	100	66	78	18	2	4	4-18	40	150	110		85	18	3		4-18	115	100	421
	40	25	150	110	76	85	18	3	4	4-18	50	165	125		100	20	3		4-18	120	115	540
	50	32	165	125	88	100	20	3	4	4-18	65	185	145		120	20	3		4-18	135	120	618
	65	40	185	145	110	120	22	3	4	8-18	80	200	160		135	20	3		8-18	160	140	710
	80	50	200	160	121	135	22	3	4	8-18	100	220	180		155	22	3		8-18	160	150	730
	100	65	235	190	150	160	24	3	4.5	8-23	150	285	240		210	24	3		8-23	225	175	892
	150	100	300	250	204	218	30	3	4.5	8-26	200	340	295		265	26	3		12-23	240	235	1135
200	125	375	320	260	282	38	3	4.5	12-30	250	405	355		320	30	3		12-26	290	310	1135	
A48Y-64 A48sB-64I A48Y-64I A48sB-64I A48Y-64V A48sB-64V	25	16	140	100	58	78	22	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	429
	32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	421
	40	25	170	125	76	95	24	3	4	4-23	50	165	125	88	100	20	3	4	4-18	135	120	540
	50	32	180	135	88	105	26	3	4	4-23	65	185	145	110	120	22	3	4	8-18	160	130	618
	50	32	180	135	88	105	26	3	4	4-23	80	200	160	121	135	22	3	4	8-18	160	145	710
	65	40	205	160	110	130	28	3	4	8-23	80	200	160	121	135	22	3	4	8-18	175	160	710
	80	50	215	170	121	140	30	3	4	8-23	100	235	190	150	160	24	3	4.5	8-23	175	160	730
	100	65	250	200	150	168	32	3	4.5	8-26	125	270	220	176	188	28	3	4.5	8-25	220	200	800
	100	65	250	200	150	168	32	3	4.5	8-26	150	300	250	204	218	30	3	4.5	8-26	220	200	892
	150	100	345	280	204	240	38	3	4.5	8-34	200	375	320	260	282	38	3	4.5	12-30	280	280	1135
200	125	405	345	260	300	44	3	4.5	12-36	250	450	385	313	345	42	3	4.5	12-34	300	295	1135	
A48Y-100 A48sB-100 A48Y-100I A48sH-100I A48Y-100V A48sB-100V	25	16	140	100	58	78	24	2	4	4-18	32	140	100	66	78	18	2	4	4-18	110	100	429
	32	20	155	110	66	82	24	2	4	4-23	40	150	110	76	85	18	3	4	4-18	130	110	421
	40	25	170	125	76	95	26	3	4	4-23	50	165	125	88	100	20	3	4	4-18	135	120	540
	50	32	195	145	88	112	28	3	4	4-26	65	185	145	110	120	22	3	4	8-18	160	130	618
	50	32	195	145	88	112	28	3	4	4-26	80	200	160	121	135	22	3	4	8-18	160	145	710
	65	40	220	170	110	138	32	3	4	8-26	80	200	160	121	135	22	3	4	8-18	175	160	710
	80	50	230	180	121	148	34	3	4	8-26	100	235	190	150	160	24	3	4.5	8-23	175	160	730
	100	65	265	210	150	172	38	3	4.5	8-30	125	270	220	176	188	28	3	4.5	8-25	220	200	800
100	65	265	210	150	172	38	3	4.5	8-30	150	300	250	204	218	30	3	4.5	8-26	220	200	892	
150	100	355	290	204	250	46	3	4.5	12-34	200	375	320	260	282	38	3	4.5	12-30	280	280	1135	
200	125	430	360	260	312	54	3	4.5	12-36	250	450	385	313	345	42	3	4.5	12-34	300	295	1135	
A48SH-40	50	32	160	125	88	105	38	3	4	4-18	80	195	160	/	135	20	3	/	8-18	124	137	525
A48TH-100	50	32	195	145	88	112	50	3	4	4-26	80	200	160	121	135	22	3	4.5	8-18	160	145	580
A48sB-160	80	40	260	205	121	168	65	15	4	8-30	150	300	250	204	218	30	3	4.5	8-25	215	210	1175

注：A48TH-100 Dn50 不带散热器 with no radiation

■ 系列
Series
A48Y-P543.8V

■ 说明
主要用于电站锅炉、压力容器、减温减压装置上。

■ Instruction
This valve is used for power plant boilers, pressure containers, pressure and temperature reducing devices and other facilities.

■ 结构简述

- 1、弹簧全启式安全阀具有结构简单、密封性能好、开启压力准确、排放能力大、回座压差小、调整方便等特点。
- 2、喷嘴型阀座：阀座为位伐尔喷嘴型阀座，蒸汽流经阀座出口处时达到音速，排放系数大，阀座密封面堆焊钴铬钨硬质合金，耐磨抗冲蚀，寿命长。
- 3、热弹性阀瓣：阀瓣设计为热弹性结构，利用其在介质压力下微小的变形，提高密封能力，克服安全阀在介质压力下临近整定压力时的前泄现象。阀瓣密封面采用先进的激光淬火技术，提高了硬度、耐磨性、抗冲抗性。
- 4、调节螺母：通过调整调节螺母，调整弹簧压缩量，使阀门能够很方便、很迅速地获得准确的整定压力。
- 5、背压调整套：调整阀瓣背压的辅助机构，通过背压调整套调整，可获得合适的回座压差。上调时，使阀门背压降低。下调时，使阀门背压提高。

■ Structure briefing

- 1、Tianhe Brand safety valve is noted for elegant design, no leakage, setting pressure precision, greatly discharge and easily adjusted.
- 2、Nozzle seat: It is the Loware nozzle type seat. The steam reaches the velocity of sound when passing the exit way of the seat. The sealing surface is welded by cobalt hard alloy, Large displacement coefficient, anti-friction, corrosion resistance and long durability are recognized.
- 3、Thermo elastic disc: the disc is of thermo elastic structure. Taking the advantage of its minor out-of-shape feature when under the medium pressure, the seal ability has been raised, and the problem that pre-discharge phenomenon of the main safety happens when the medium pressure approaching the set pressure has been overcome. The sealed surface of the disc has adopted the advanced technology of heat hardening to increase the hardness and the ability of anti-friction and corrosion resistance.
- 4、Adjusting nut: adjust the compression amount of spring by suing pet nut so that the valve can acquire appropriate set pressure rapidly and easily.
- 5、Back pressure adjusting seeve: it is an auxiliary apparatus that serves to adjust the back pressure of the disc to acquire appropriate dif-ferential pressure for seat returning. If adjust upward, the back pressure of valve reduces. If adjust downward, the back pressure rises.

■ 安装说明

- 1、安全阀必须垂直安装，并最好直接安装在容器或管道的接头上。接头内径应不小于安全阀的进口通径。
- 2、安全阀的出口必须装设适当的膨胀节，以防止排放管的热膨胀给安全阀带来不应有的热应力。排放管内径应比阀站出口直径大，长度尽可能短、避免拐弯。排放管及膨胀节重量不应作用在安全阀上，应固定在建筑上。排放管的中心线与阀体的中心线间距尽可能的短。对每台安全阀都应单独装设排放管。
- 3、消声器的出口处要有足够的面积，防止产生背压影响阀门的排放能力。

■ Installation instruction

- 1、The safety valve shall be installed wercically and it would be better to install the valve directly upon the adaptor of the contcuner or the pipe. The inside diameter of the adapfor shall be no less than that of the inlet pipe of the softy valve.
- 2、To avoid the thermal stress that is caused by the thermal expansion of the discharge pipe, the exit way of the safaty valve shall be expansion with appropriate expansion joint. The inside diameter of the discharge pipe should larger than the diameter of the exit way of the valve. Its length shall be as short as possible and no bent is allowed. Theweight of both the discharge pipe and the expansion joint shall not be applied to the safety valve, and they shall be fastened upon the con-struction. The distance between both centerlines of the discharge pipe and the bldy shall be as short as possible. A water drainage pipe shall be installed separately for each safety valve.
- 3、The exit way of the muffler shall have enough area, in order to avoid producing back pressure that would affect the discharge capability of the valve.

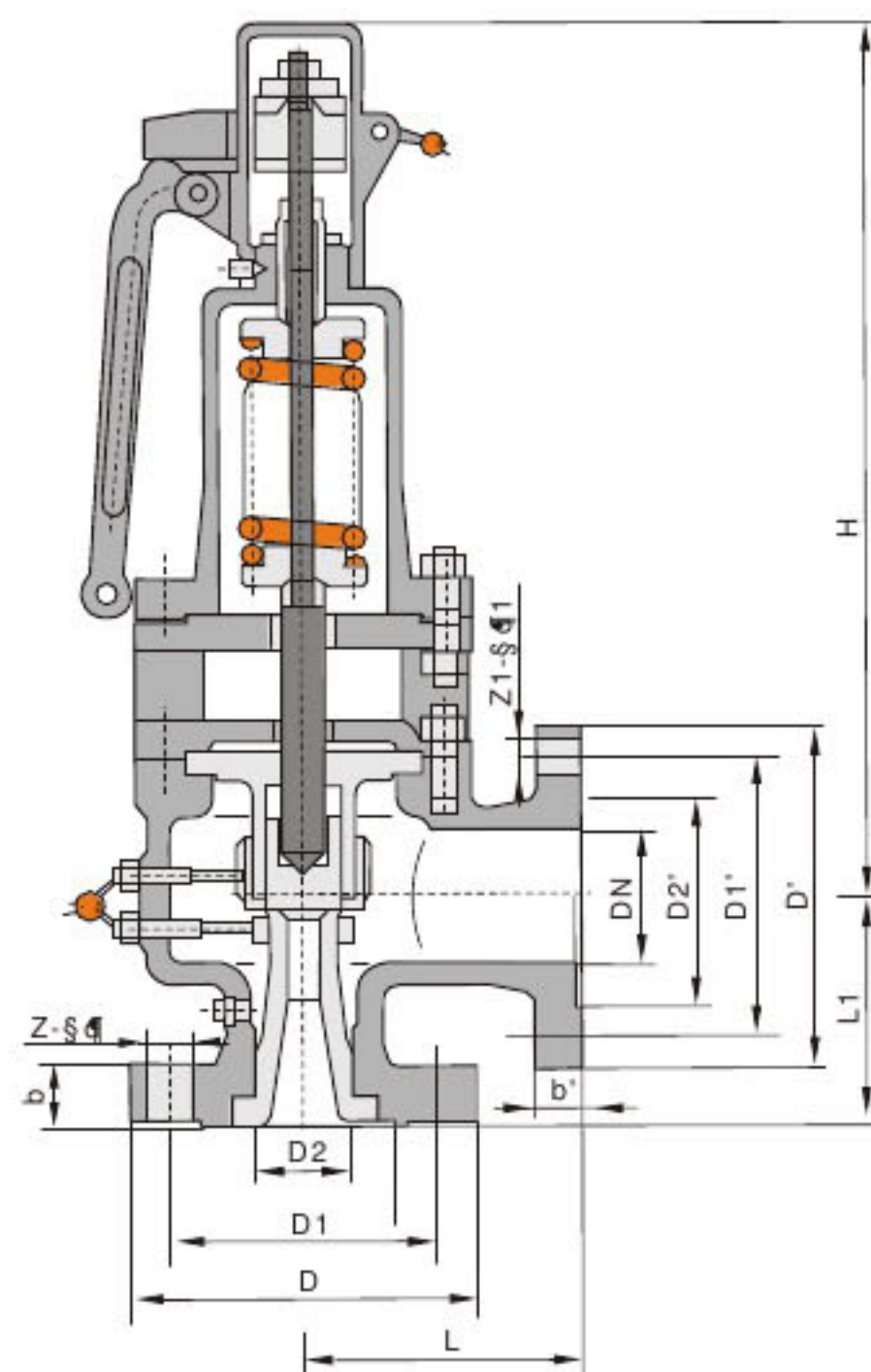
弹簧全启式安全阀(W系列) Spring full bore type safety valve (W series)

系列 Series

A48Y-P₅₄3.82V
A48Y-10
A48Y-10
A48Y-P₅₄3.82V
A48Y-20
A48Y-P₅₄5.29V
A48Y-20
A48Y-P₅₄5.29V
A48Y-20
A48Y-P₅₄10V
A48Y-20
A48Y-P₅₄10V

A48Y-C型适用于温度≤425℃；A48Y-V型适用于温度≤550℃的电站锅炉、压力容器、减温减压装置上，作为超压保护装置。

A48Y-C type applicable temperature are less than 425℃; A48Y-V type is suitable for the exceeding pressure protective equipment, their working temperature is 550℃ or less. Such as the boiler used in powerstation, pressure container, pressure reducing and temperature reducing machine.



A48Y
结构图 Structural drawing

主要外形及连接尺寸 Main external and connecting dimensions

型号 Type	公称通径 DN Nominal diameter	连接尺寸 Connecting dimensions(mm)													
		L	L ₁	H	D	D ₁	D ₂	b	Z-Φd	DN ₁	D'	D ₁ '	D ₂ '	b'	Z ₁ -Φd ₁
A48Y-P ₅₄ 3.82V	65	190	190	853	220	170	110	50	8-25	150	300	250	204	30	8-25
A48Y-10	80	190	190	853	230	180	121	50	8-25	150	300	250	204	30	8-25
A48Y-10	65	190	190	853	220	170	110	50	8-25	150	300	250	204	30	8-25
A48Y-P ₅₄ 3.82V	80	190	190	853	230	180	121	50	8-25	150	300	250	204	30	8-25
A48Y-20	65	210	210	933	260	203	97	55	8-30	150	300	250	204	30	8-25
A48Y-P ₅₄ 5.29V	65	210	210	933	260	203	97	55	8-30	150	300	250	204	30	8-25
A48Y-20	80	210	210	933	260	203	116	60	8-34	150	300	250	204	30	8-25
A48Y-P ₅₄ 5.29V	80	210	210	933	290	230	116	60	8-34	150	300	250	204	30	8-25
A48Y-20	80	210	210	933	290	230	116	60	8-34	150	300	250	204	30	8-25
A48Y-P ₅₄ 10V	80	210	210	933	290	230	116	60	8-34	150	300	250	204	30	8-25
A48Y-20	65	210	210	933	290	230	116	60	8-34	150	300	250	204	30	8-25
A48Y-P ₅₄ 10V	65	210	210	933	290	230	116	60	8-34	150	300	250	204	30	8-25

■ 系列
Series
A68Y-20

■ 说明

主要用于电站锅炉、压力容器、减温减压装置上，保证设备安全运行。

■ Instruction

This valve is used for power plant boilers, pressure containers, pressure and temperature reducing devices and other facilities. It serves to ensure the safety of the device during working.

■ 结构简述

1、弹簧全启式安全阀具有结构简单、密封性能好、开启压力准确、排放能力大、回座压差小、调整方便等特点。

2、喷嘴型阀座：阀座为拉伐尔喷嘴型阀座，蒸汽流经阀座出口处时达到音速，排放系数大，阀座密封面堆焊钴铬钨硬质合金，耐磨抗冲蚀，寿命长。

3、热弹性阀瓣：阀瓣设计为热弹性结构，利用其在介质压力下微小的变形，提高密封能力，克服安全阀在介质压力下临近整定压力时的前泄现象。阀瓣密封面采用先进的淬火技术，提高了硬度、耐磨性、抗冲抗性。

4、上调节圈：通过调整上调节圈，改变由阀座排放出的介质流动方向，使阀门获得合适的回座压力。

5、下调节圈：通过下调节圈，使阀门在启跳时迅速达到全开。

6、背压调整套：调整阀瓣背压的辅助机构，通过背压调整套调整，可获得合适的回座压差。

■ Structure briefing

1、The main characteristics of the spring fully bore type safety valve are; simple structure, good seal performance, accurate opening pressure, large discharge capability, low differential reseating pressure and convenient adjustment, etc.

2、Nozzle type seat: It is the Laval nozzle type seat. The speed of the steam reaches the velocity of sound when passing the exit way of the seat. The sealed surface of the seat is made of hard alloy of cobalt by overlaying welding. Large discharge coefficient, fine abilities of anti-friction and corrosion resistance and long durability are recognized.

3、Thermo elastic disc: the disc is of thermo elastic structure. Taking the advantage of its minor out-of shape feature when under the medium pressure, the seal ability has been raised, and the problem that pre-discharge phenomenon of the safety valve happens when the medium pressure approaching the set pressure has been overcome. The sealed surface of the disc has adopted the advanced technology of laser heat hardening to increase the hardness and the ability of anti-friction and corrosion resistance.

4、Upper adjusting ring: the valve can acquire appropriate reseating pressure by adjusting the upper adjusting ring to change the flow direction of the medium discharged from the seat.

5、Lower adjusting ring: the valve can rapidly reach full bore in the discharging process by adjusting the adjusting ring.

6、Back pressure adjusting sleeve; it is an auxiliary apparatus that serves to adjust the back pressure of the disc to acquire appropriate Differential reseating pressure.

■ 安装说明

1、安全阀必须垂直安装，并最好直接安装在容器或管道的接头上。接头内径应不小于安全阀的进口通径。

2、安全阀的出口必须装设适当的膨胀节，以防止排放管的热膨胀给安全阀带来不应有的热应力。排放管内径应比阀门出口直径大，长度尽可能短，避免拐弯。排放管及膨胀节重量不应作用在安全阀上，应固定在建筑上。排放管的中心线与阀体的中心线间距离尽可能的短。

3、消声器的出口处要有足够的面积，防止产生背压影响阀门的排放能力。

4、排汽管底端、阀体底端应装有疏水管；背压调整套出口一定要装设短弯管。

■ Structure briefing

1、The safety valve shall be installed vertically and it would be better install the valve directly upon the adaptor of the container or the pipe. The inside diameter of the adaptor shall be no less than that of the inlet pipe of the safety valve.

2、To avoid the thermal stress that is caused by the thermal expansion of the discharge pipe, the exit way of the safety valve shall be equipped with appropriate expansion joint. The inside diameter of the discharge pipe should larger than the diameter of the exit way of the valve. Its length shall be as short as possible and no bent is allowed. The weight of both the discharge pipe and the expansion joint shall not be applied to the safety valve, and they shall be fastened upon the construction. The distance between both centerlines of the discharge pipe and the valve body shall be as short as possible.

3、The exit way of the muffler shall have enough area, in order to avoid producing back pressure that would affect the discharge capability of the valve.

4、Water drainage pipes shall be installed at the ends of both the exhaust pipe and the body; the exit of the back pressure adjusting sleeve shall be equipped with short bend.

弹簧全启式安全阀(W系列)
Spring full bore type safety valve (W series)

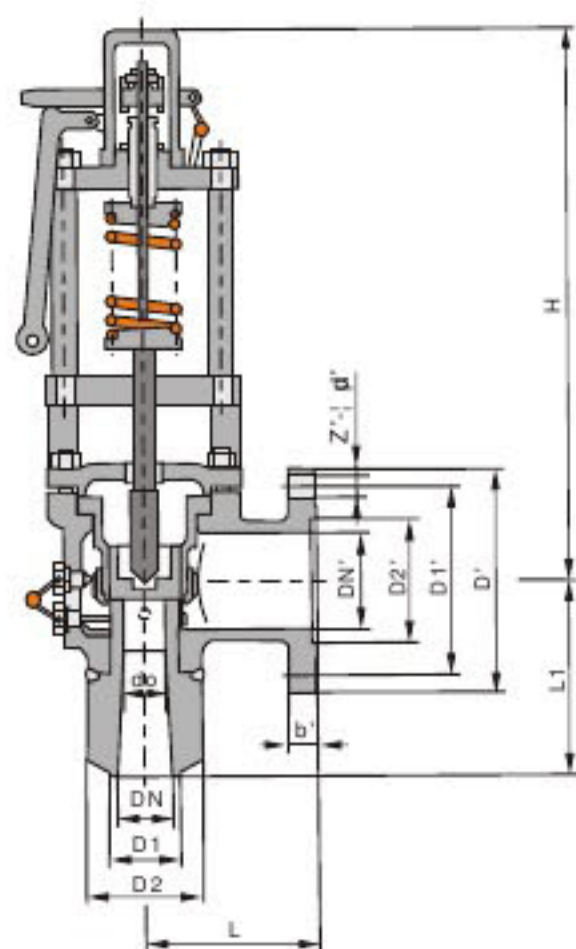
主要外形及连接尺寸 Main external and connecting dimensions

型号 Type	公称通径 DN Nominal diameter	尺寸 Dimensions(mm)									
		L	L ₁	D _o	H	DN'	D	D ₁ '	D ₂ '	B'	Z'-d'
A68Y-20	65	210	290	48	923	150	300	250	204	30	8-25
A68Y-P ₅₄ 10V	65	210	290	48	923	150	300	250	204	30	8-25
A68Y-20	80	210	290	52	923	150	300	250	204	30	8-25
A68Y-P ₅₄ 10V	80	210	290	52	923	150	300	250	204	30	8-25
A68Y-25	65	210	290	48	923	150	300	250	204	30	8-25
A68Y-P ₅₄ 14V	65	210	290	48	923	150	300	250	204	30	8-25
A68Y-25	80	210	290	52	1003	150	300	250	204	30	8-25
A68Y-P ₅₄ 14V	80	210	290	52	1003	150	300	250	204	30	8-25
A68Y-32	65	210	290	48	1083	150	300	250	204	30	8-25
A68Y-P ₅₄ 20V	65	210	290	48	1083	150	300	250	204	30	8-25
A68Y-32	80	210	290	52	1083	150	300	250	204	30	8-25
A68Y-P ₅₄ 20V	80	210	290	52	1083	150	300	250	204	30	8-25
A68Y-10	150	310	525	100	1158	300	485	430	390	36	16-30
A68Y-P ₅₄ 3.82V	150	310	525	100	1158	300	485	430	390	36	16-30
A68Y-10	200	310	525	125	1158	300	485	430	390	36	16-30
A68Y-P ₅₄ 2.5V	200	310	525	125	1158	300	485	430	390	36	16-30

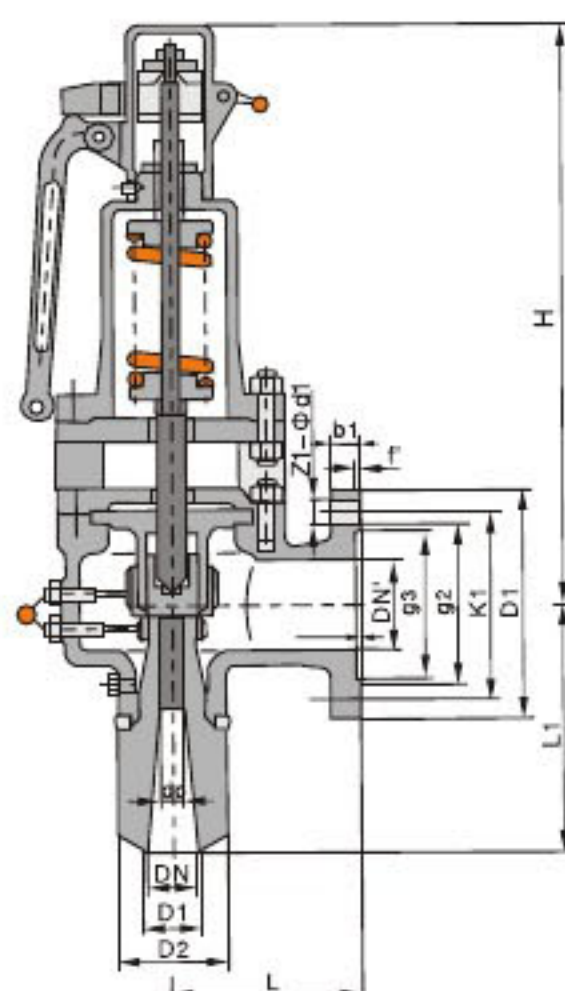
A68型安全阀主要外形及连接尺寸 Main external and connecting dimensions

型号 Type	公称通径 DN Nominal diameter	尺寸 Dimensions(mm)									
		L	L ₁	D _o	DN'	D	D ₁ '	D ₂ '	B'	Z'-d'	
A68E210/550V ₁	65	240	280	46	100	265	210	150	38	8-30	
A68SB160/440C ₁	65	260	280	52	150	320	250	204	30	8-25	
A68E210/400C ₁	80	190	305	58	150	340	280	204	38	8-34	
A68E210/550V ₁	80	190	305	58	150	340	280	204	38	8-34	
A68E210/550V ₂	80	190	305	60	150	300	250	204	30	8-25	
A68E160/550V ₁	100	320	340	70	250	445	385	313	42	12-34	
A68SB100V ₁	100	260	325	80	150	300	250	204	30	8-25	
A68SB100V ₂	100	260	325	85	150	300	250	204	30	8-25	
A68SB100C ₁	150	305	385	115	250	445	385	313	42	12-34	
A68SB100C ₂	150	305	385	110	250	445	385	313	42	12-34	
A68SB100C ₃	150	305	385	120	250	445	385	313	42	12-34	
A68SB100V ₁	150	305	385	115	250	445	385	313	42	12-34	
A68SB100V ₂	150	305	385	100	250	445	385	313	42	12-34	
A68SC2500C ₂	1 1/2"(40)	155	165	18						出口"3×300Lb	
A68SC1500I ₁	2"(50)	216	280	33						出口"6×300Lb	
A68C1500C ₁	2 1/2"(65)	216	280	40						出口"6×300Lb	
A68C1500C ₂	2 1/2"(65)	216	305	46						出口"6×300Lb	

注：D₁、D₂尺寸可根据用户配管尺寸确定。



W型
结构图 Structural drawing



A68型
结构图 Structural drawing

■ 系列
Series
A49Y-Pw5414V

■ 说明

本装置供蒸汽工作压力为 $P=13.72\text{MPa}$; $t=540^{\circ}\text{C}$ 的电站锅炉上使用,防止锅炉内介质压力超过允许值,以保证锅炉安全运行。

■ Instruction:

This device is used for power plant boilers with steam working conditions as: $P=13.72\text{MPa}$; $t=540^{\circ}\text{C}$ Its main function is to avoid the medium pressure inside the boiler exceeding the allowed value to ensure that the boiler run safely.

■ 特点

冲量式安全装置为主、辅阀配套使用,具有排放能力大,调整方便,机构与电器双重保护,安装维护简便,

■ Specialties:

The impulse safety is installed with the main safety valve. This device has large discharge ability with convenient adjustment.

■ 工作原理

当锅炉内介质压力超过允许值时,冲量安全阀首先开启,蒸汽进入主安全阀活塞室,使主安全阀打开,对外排汽,待锅炉内余压排除后,冲量安全阀关闭,切断进入主安全阀活塞室的蒸汽,主安全阀在弹簧和介质作用下自行关闭。

■ Operation principle:

When the medium pressure inside the boiler surpasses the allowed value, the impulse safety valve opens firstly; the steam enters into the piston chamber of the main safety valve, forcing the main safety valve to open; the boiler begins discharging steam; after the excess pressure has been released, the impulse safety valve closed, stopping the steam entering into the piston chamber of the main safety valve; the main safety valve automatically closes at the reactions of the springs and medium.

■ 结构简述

1、冲量安全装置如图所示,主要由冲量安全阀、主安全阀、截止阀、节流阀等所组成。冲量安全阀为弹簧安全阀,它主要由阀体、阀盖、弹簧、阀瓣等零件组成。通过调节弹簧来调节冲量安全阀开启压力。冲量安全阀还分别带有用来开启或关闭用的电磁铁,机械和电器动作互不干扰。

2、主安全阀结构如图所示,为双排汽结构,它主要由阀体、缓冲阀、活塞阀、阀瓣等零件组成。阀门采用压力自紧式密封结构,介质压力越高,密封性能越好,缓冲阀在主安全阀动作过程中起缓冲作用,避免密封面或阀瓣损坏。

3、冲量安全阀阀座和阀瓣密封面均由钴基硬质合金堆焊而成,主安全阀阀座、阀瓣密封面均钴基硬质合金等离子喷焊而成。

4、冲量安全阀上部带有开启和关闭电磁铁,关闭用电磁铁平时可以不通电,但当阀门密封面泄漏时,可长期通电使阀门密封,或当机械调整回座压力过低时,接通电源促使阀瓣回座,以获得较高的回座压力。

5、冲量安全阀出厂前经密封试验、灵敏性试验。

■ Structure briefing:

1、The impulse safety device is as shown in the figure, mainly consisted of impulse safety valve, main safety valve, stop valve and throttle valve. Impulse safety valve is a kind of spring safety valve. It is mainly consisted of body, bonnet, spring, disc and other parts. The impulse safety valve can be adjusted by using the spring to regulate the pressure.

The impulse safety valve contains an electromagnet to open and another to close the valve. The actions of the mechanism and the electric appliance are separate and will not affect each other.

2、The main safety valve is as shown in the figure. With a structure of double exhaust, it is mainly consisted of body, cushion valve, piston chamber, disc and other parts. The valve adopts the self-tightening and sealed structure.

The higher the pressure of the medium is, the better the seal performance becomes. The cushion valve serves as buffer in the working process of the master relief valve to avoid the damage of the sealed surface and the disc.

3、Both the seat and the sealed surface of the disc of the impulse safety valve are made of hard alloy of cobalt by overlaying welding. Both the seat and the sealed surface of the disc of the main safety valve are made of hard alloy of cobalt by plasma spray welding.

4、The upper part of the impulse safety valve contains an electromagnet to open and another to close off. At ordinary times, the close-off electromagnet may not be electrified, but when the sealed surface of the valve leaks, it can be electrified over a long period of time to make the valve sealed. Or when the mechanical adjusting reseating pressure is excessively low, it can be electrified to help the disc return and procure a higher reseating pressure.

5、The impulse safety valve only leaves the factory after it has passed the seal and sensitivity tests.

■ 安装说明

1、主安全阀A49Y-P_{W54}14V DN100应与冲量安全阀A49Y-P_{W54}14V Dn20配套安装。冲量安全阀引出管与主安全阀的入口管之间应保持一段较长的距离，电接点压力表和主安全阀入口管之间的距离不得小于5倍主安全阀入口径，以免主安全阀动作时，因排汽影响电接点压力表和冲量安全阀工作正确性。

2、冲量安全阀安装前，必须将管路冲洗干净。

3、主安全阀与冲量安全阀必须垂直安装，主安全阀在安装焊接后，要进行局部热处理。

4、主安全阀应紧固在构架上，该构架应能承受主安全阀排汽时产生的反作用力，主安全阀的排汽管应有专门的吊架，避免排汽管的质量（重量）与其它作用力作用在主安全阀上及主安全阀与排汽管之间的连接法兰上，在排汽管的最低点，应考虑疏水，以免主安全阀排汽时产生水击。主安全阀活塞室上部的三圈填料必须压紧要压缩到填料压盖下平面与活塞上平面接触为止，然后用细铁丝固定好压紧螺栓，以免泄露而造成主阀拒跳。

5、冲量安全阀与电磁铁一起装在一个专门的支架上，阀门上杠杆与电磁铁连接要灵活，不得有卡涩现象。冲量阀应装在便于维修和调试，灰尘少、空气干燥、无振动的地方，其环境温度不应高于70℃，相对湿度不应超过80%。

6、为了保证冲量安全阀动作自如，冲量安全阀的回座杠杆头部的圆弧部分与冲量安全阀压杆端部的距离应调到：冲量安全阀实际行程+1mm（用护罩顶部M10紧固螺钉调之）。

■ Installation instruction:

1、The main safety valve,A49Y-P_{W54}14V, DN100,and the impulse safety valve,A49Y-P_{W54}14V, DN20,should be installed together. The distance between the outlet pipe of the impulse safety valve and the inlet pipe of the main safety valve should be maintained as relatively long and the distance between the electric contact pressure meter and the inlet pipe of the main safety valve should be no less than 5 times of the diameter of the inlet pipe,for fear that the precision of the meter and the impulse safety valve may be affected by the steam discharging process of the main safety valve.

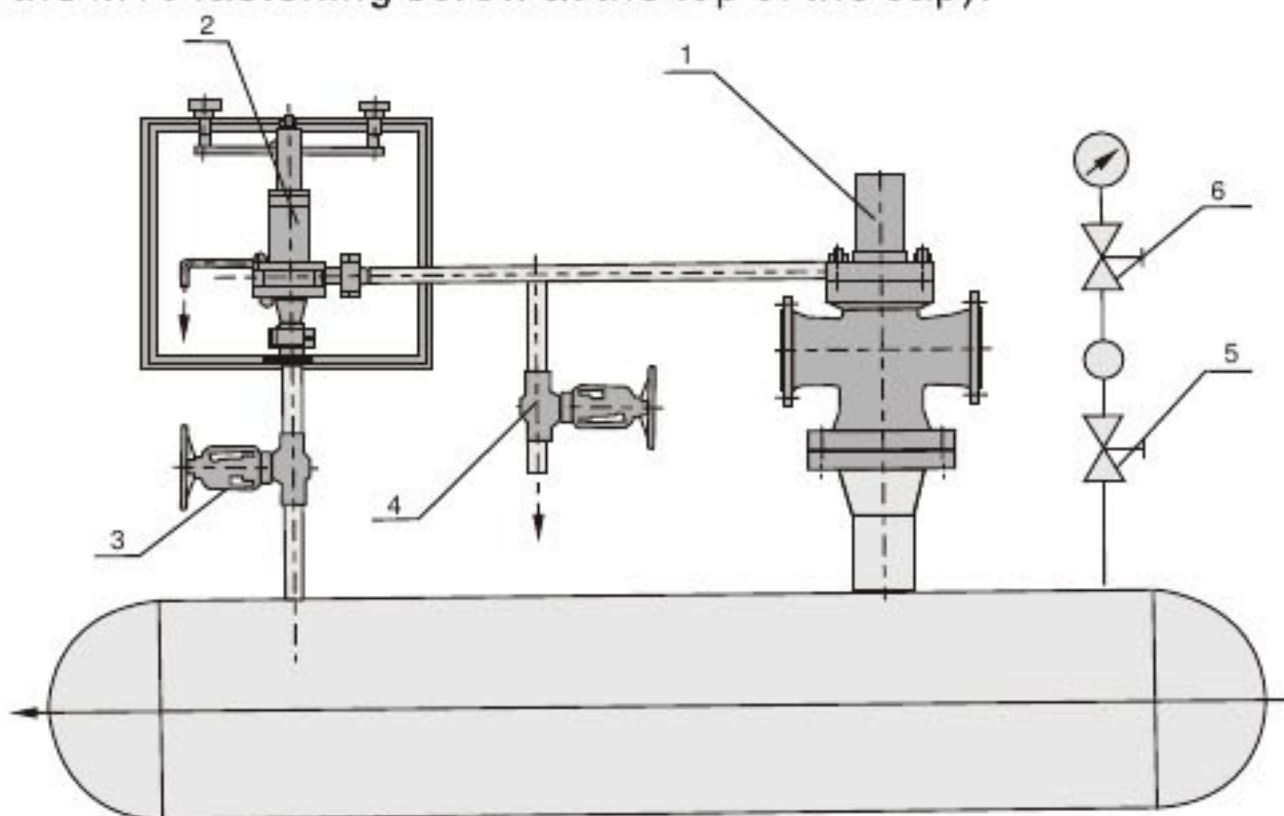
2、Before the installation of the impulse safety valve, the pipeline shall be cleaned first.

3、The main safety valve and the impulse safety valve must be positioned vertically.After the installation and the welding of the main safety valve,it shall be under partial heat treatment.

4、The main safety valve shall be fastened upon the framework,which sustains the counter-reaction force produced in the steam discharging process of the main safety valve.The exhaust pipe of the main safety valve shall be supported with a special gallow lest the force of its weight and action would be directly apply to both the main safety valve and the flange that is connecting them.At the lowest point of the exhaust pipe,water drainage shall be taken into consideration to avoid producing water hammer when the main safety valve is discharging steam.The three loops of filing shall be deeply comperssed until the lower surface of the filing gland touches the upper surface of the piston,and a fine wire shall be used to fasten the pressure bolt to avoid leakage and refusing release of the main safety valve.

5、The impulse safety valve and the electromagnets shall be placed together on a special gallow.The juncture of the upper lever of the valve and the electromagnets shall be flexible,with no phenomenon of seizure.The impulse safety valve shall be installed in a place with little dust,dry air and convenient maintenance and debugging,and where no vibration occurs.Its ambient temperature shall not higher than70℃,and its relative humidity not more than80%.

6、To ensure the agile working of the impulse safety valve.the distance between the circular arc part of the head of the seat returning lever and the end of the pressure bar of the valve shall be adjusted to the length of the actual travel of the valve adding 1 mm (adjusted by the M10 fastening screw at the top of the cap).



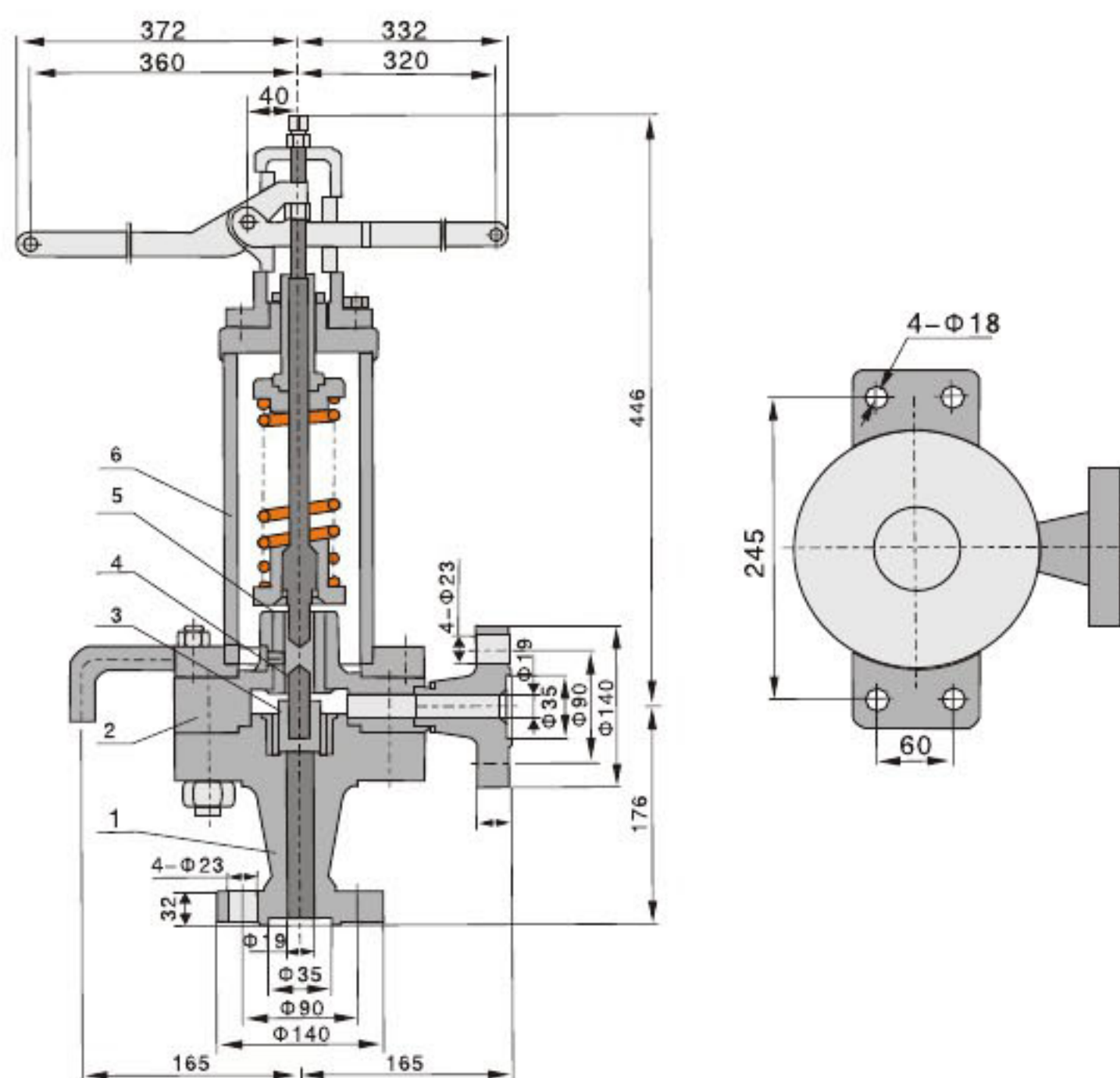
- | | |
|--------------------------------|----------------------------|
| 1、主安全阀 Main safety valve | DN100;P _{W54} 14V |
| 2、冲量安全阀 Impulse sesafety valve | DN20;P _{W54} 14V |
| 3、截止阀 Globe valve | DN20;P _{W54} 17V |
| 4、节流阀 Throttle valve | DN10;PN32 |
| 5、截止阀 Globe valve | DN10;P _{W54} 17V |
| 6、三通阀 Triple valve | DN4;PW32 |

冲量安全装置图
Figure of impulse safety device

■ 主要零件材料 Main part material

1. 冲量安全阀 Impulse safety valve

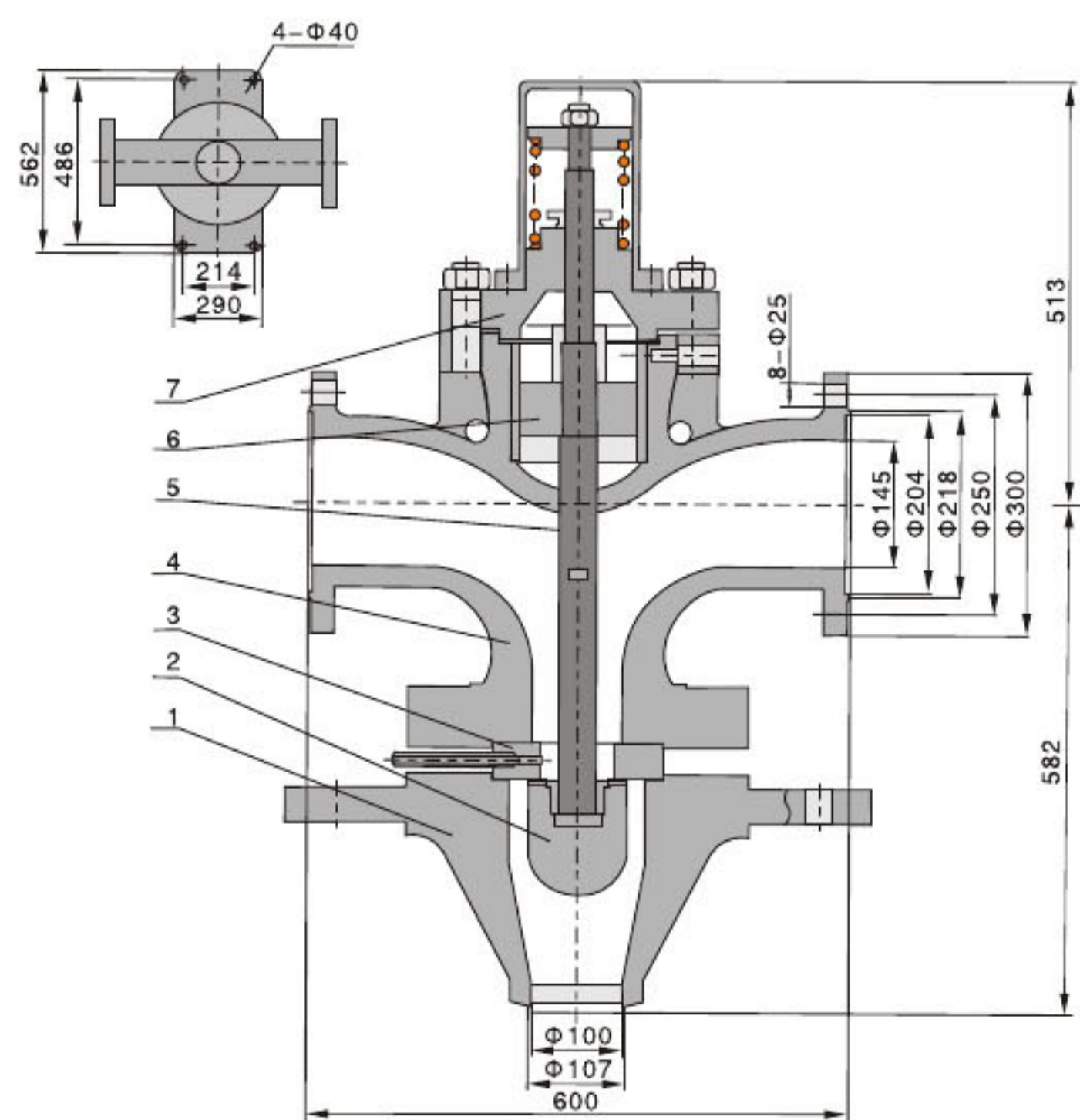
件号 Part number	零件名称 Name of part	材料 Material
1	阀体 Body	铬钼钒钢 CrMoV steel
2	阀盖 Bonnet	铬钼钒钢 CrMoV steel
3	阀瓣 Disc	铬钼钒钢 CrMoV steel
4	阀杆 Stem	不锈钢 Stainless steel
5	导向套 Guide sleeve	不锈钢 Stainless steel
重量(kg) Weight		113



A49Y-P_{w5414V}型
结构图 Structural drawing

2. 主安全阀 Main safety valve

件号 Part number	零件名称 Name of part	材料 Material
1	下阀体 Nether body	铬钼钒钢 CrMoV steel
2	阀瓣 Disc	铬钼钒钢 CrMoV steel
3	阀座 Seat	铬钼钒钢 CrMoV steel
4	上阀杆 Upper stem	铬钼钒钢 CrMoV steel
5	阀杆 Stem	铬钼钒钢 CrMoV steel
6	活塞 Piston	不锈钢 Stainless steel
7	阀盖 Bonnet	铬钼钒钢 CrMoV steel
重量(kg) Weight		403



A49Y-P_{w5414V}型
结构图 Structural drawing

■ 系列
Series
A49Y-Pw543.2V

■ 说明

本装置供再热器入口及出口管道上使用，防止介质压力超过允许值，以保证再热器的安全运行。

Instruction:

This device is used for inlet and outlet pipe of reheater to avoid medium pressure exceeding the allowed value to ensure the reheater shall run safely.

Specialties:

The impulse safety device is the main safety valve, with auxiliary valve support contained. This device has characteristics as large discharge ability, convenient adjustment, dual mechanical and electric protection and few workload in installation and maintenance.

Operation principle:

When the medium pressure inside the reheater exceeding the allowed value, the impulse safety valve opens firstly; the steam enters into the piston chamber of the main safety valve, forcing the main safety valve to open; the reheater begins discharging steam; after the excess pressure has been released, the impulse safety valve closes, stopping the steam entering into the piston chamber of the main safety valve; the main safety valve automatically closes at the reactions of the spring and medium.

Structure briefing:

1、冲量安全装置如图所示，主要由冲量安全阀、主安全阀、截止阀、节流阀等所组成。冲量安全阀为弹簧安全阀，它主要由阀体、阀盖、阀瓣等零件组成。通过调节弹簧来调节冲量安全阀开启压力。

冲量安全阀还分别带有用来开启或关闭用的电磁铁，机械和电器动作互不干扰。

2、主安全阀如图所示，为单排汽，两端为法兰连接结构，主要由阀体、阀盖、活塞室、阀瓣、阀杆等零件组成。

3、冲量安全阀阀瓣、阀座均由钴基硬质合金堆焊而成，主安全阀阀座、阀瓣均由钴基硬质合金等离子喷焊而成。

4、冲量安全阀上部带有开启和关闭电磁铁，关闭用电磁铁平时可以不通电，但当阀门密封面泄漏时，或当机械调整回座压力过低时，关闭电磁铁通电以使阀门密封或促使阀瓣回座以获得较高的回座压力。

5、冲量安全阀出厂前经密封试验、灵敏性试验，合格后出厂。

Structure briefing:

1、The impulse safety device is as shown in the figure, mainly consisted of impulse safety valve, the main safety valve, stop valve and throttle valve. Impulse safety valve is a kind of spring safety valve. It is mainly consisted of body, bonnet, disc and other parts. The impulse safety valve can be adjusted by using the spring to regulate the pressure.

The impulse safety valve contains an electromagnet to open and another to close the valve. The actions of the mechanism and the electric appliance are separate and will not affect each other.

2、The main safety valve is as shown in the figure. With a structure of single exhaust and both ends of flange connection, it is mainly consisted of body, bonnet, piston chamber, disc, stem and other parts.

3、Both the sealed surfaces of disc and seat of the impulse safety valve are made of hard alloy of cobalt by overlaying welding. Both the seat and the disc of the main safety valve are made of hard alloy of cobalt by plasma spray welding.

4、The upper part of the impulse safety valve contains an electromagnet to open and another to close off. At ordinary times, the close-off electromagnet may not be electrified, but when the sealed surface of the valve leaks or when the mechanical addition adjusting reseating pressure is excessively low, it can be electrified by closing electromagnet to make valve sealed or help the valve clack return and procure a higher seat reseating pressure.

5、The impulse safety valve only leaves the factory after it has passed the seal and sensitivity tests, proved to be qualified.

■ 安装说明

1、主安全阀A49Y-P_{W543.2V} DN200应与冲量安全阀A49Y-P_{W543.2V} DN25配套安装。冲量安全阀引出管与主安全阀的入口管之间应保持一段较长的距离，电接点压力表和主安全阀入口管之间的距离不得小于5倍主安全阀入口径，以免主安全阀动作时，因排汽影响电接点压力表和冲量安全阀工作正确性。

2、冲量安全阀安装前，必须将管路冲洗干净。

3、主安全阀与冲量安全阀必须垂直安装。

4、主安全阀应紧固在构架上，该构架应能承受主安全阀排汽时产生的反作用力，主安全阀的排汽管应有专门的吊架，避免排汽管的质量（重量）与其它作用力作用在主安全阀上及主安全阀与排汽管之间的连接法兰上，在排汽管的最低点，应考虑疏水，以免主安全阀排汽时产生水击。

5、冲量安全阀与电磁铁一起装在一个专门的支架上，阀门上杠杆与电磁铁连接要灵活，不得有卡涩现象。冲量阀应装在便于维修和调试，灰尘少、空气干燥、无振动的地方，其环境温度不应高于70℃，相对湿度不应超过80%。

6、为了保证冲量安全阀动作自如，冲量安全阀的回座杠杆头部的圆弧部分与冲量安全阀压杆端部的距离应调到：冲量安全阀实际行程+1mm（用护罩顶部M10紧固螺钉调之）。

■ Installation instruction:

1、The main safety valve, A49Y-P_{W543.2V}, DN200, and the impulse safety valve, A49Y-P_{W543.2V}, DN25, should be installed together. The distance between the outlet pipe of the impulse safety valve and the inlet pipe of the main safety valve should be maintained as relatively long and the distance between the electric contact pressure meter and the inlet pipe of the main safety valve should be no less than 5 times of the diameter of the inlet pipe, for fear that the precision of the meter and the impulse safety valve may be affected by the steam discharging process of the main safety valve.

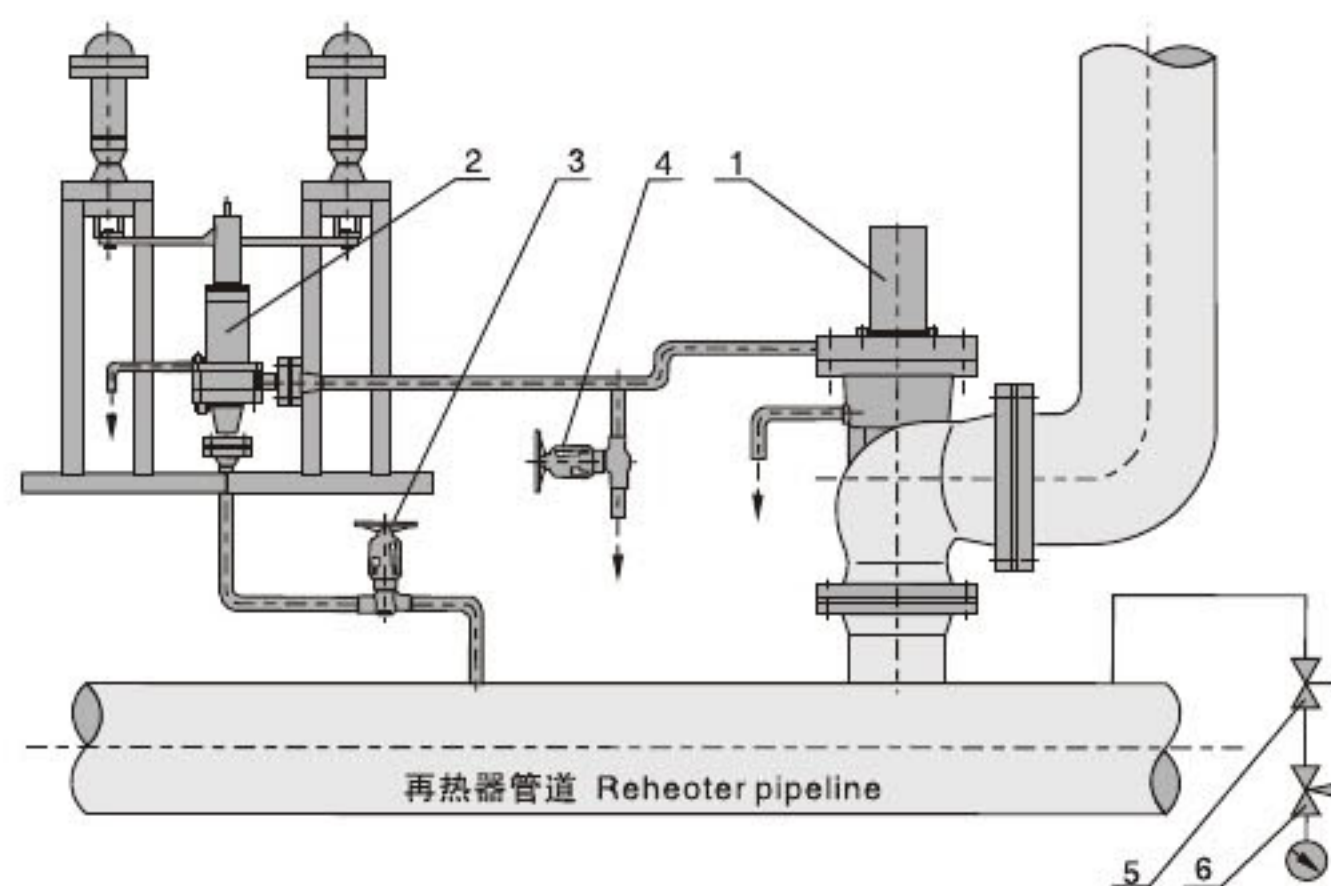
2、Before the installation of the impulse safety valve, the pipeline shall be cleaned first.

3、The main safety valve and the impulse safety valve must be positioned vertically.

4、The main safety valve shall be fastened upon the framework, which sustains the counter-reaction force produced in the steam discharging process of the main safety valve. The exhaust pipe of the main safety valve shall be supported with a special gallow lest the force of its weight and action would be directly apply to both the main safety valve and the flange that is connecting them. At the lowest point of the exhaust pipe, water drainage shall be taken into consideration to avoid producing water hammer when the main safety valve is discharging steam.

5、The impulse safety valve and the electromagnets shall be placed together on a special gallow. The juncture of the upper lever of the valve and the electromagnets shall be flexible, with no phenomenon of seizure. The impulse safety valve shall be installed in a place with little dust, dry air and convenient maintenance and debugging, and where no vibration occurs. Its ambient temperature shall not higher than 70℃, and its relative humidity not more than 80%.

6、To ensure the agile working of the impulse safety valve, the distance between the circular arc part of the head of the seat returning lever and the end of the pressure bar of the valve shall be adjusted to the length of the actual travel of the valve adding 1 mm (adjusted by the M10 fastening screw at the top of the cap).



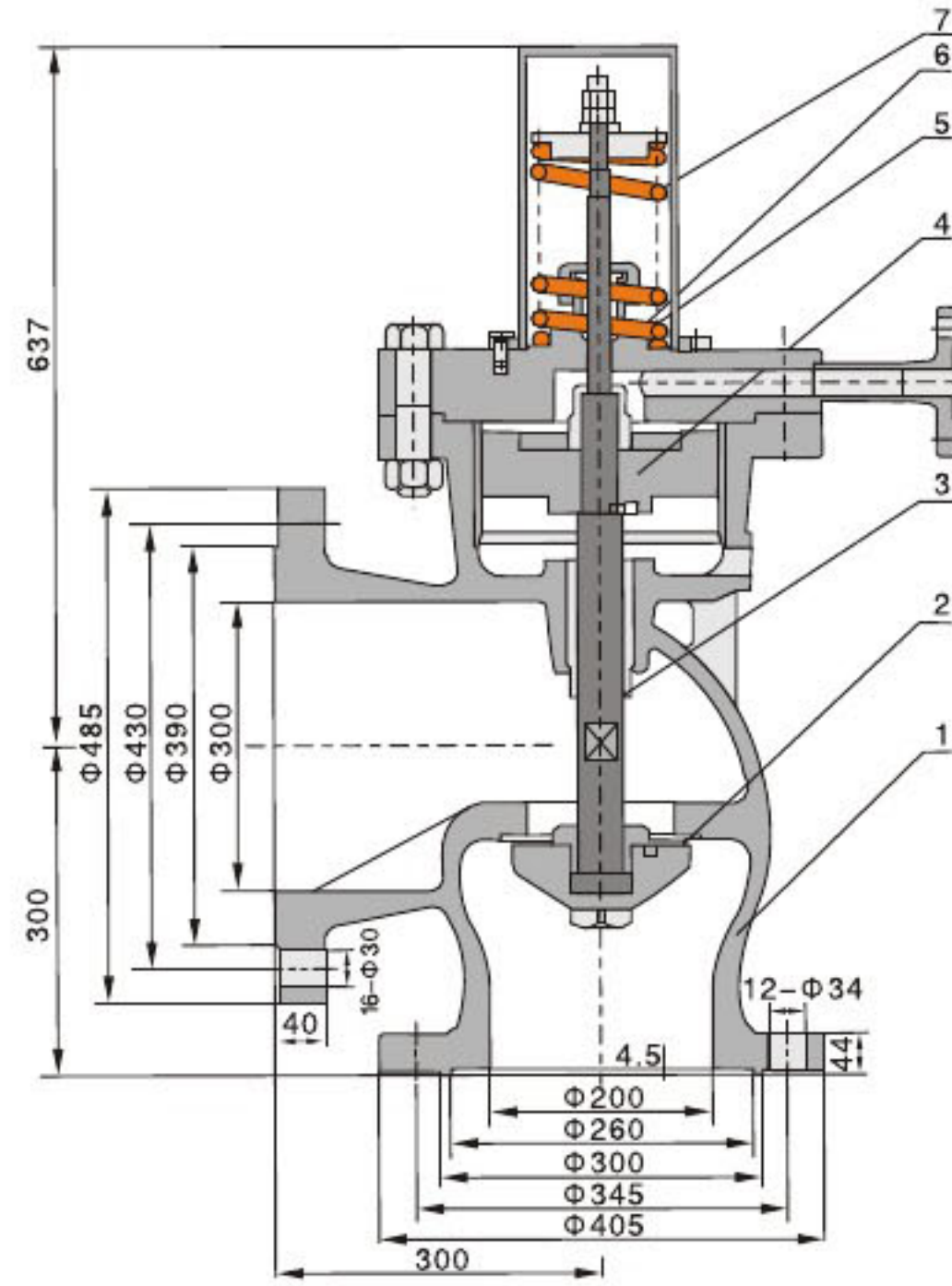
冲量安全装置图
Figure of impulse safety device

- | | |
|------------------------------|----------------------------|
| 1、主安全阀 Main safety valve | DN200;P _{W543.2V} |
| 2、冲量安全阀 Impulse safety valve | DN25;P _{W543.2V} |
| 3、截止阀 Globe valve | DN25;PN32 |
| 4、节流阀 Throttle valve | DN10;PN32 |
| 5、截止阀 Globe valve | DN10;PN32 |
| 6、三通阀 Triple valve | DN4;PN32 |

■ 主要零件材料 Main part material

1.主安全阀 Main safety valve

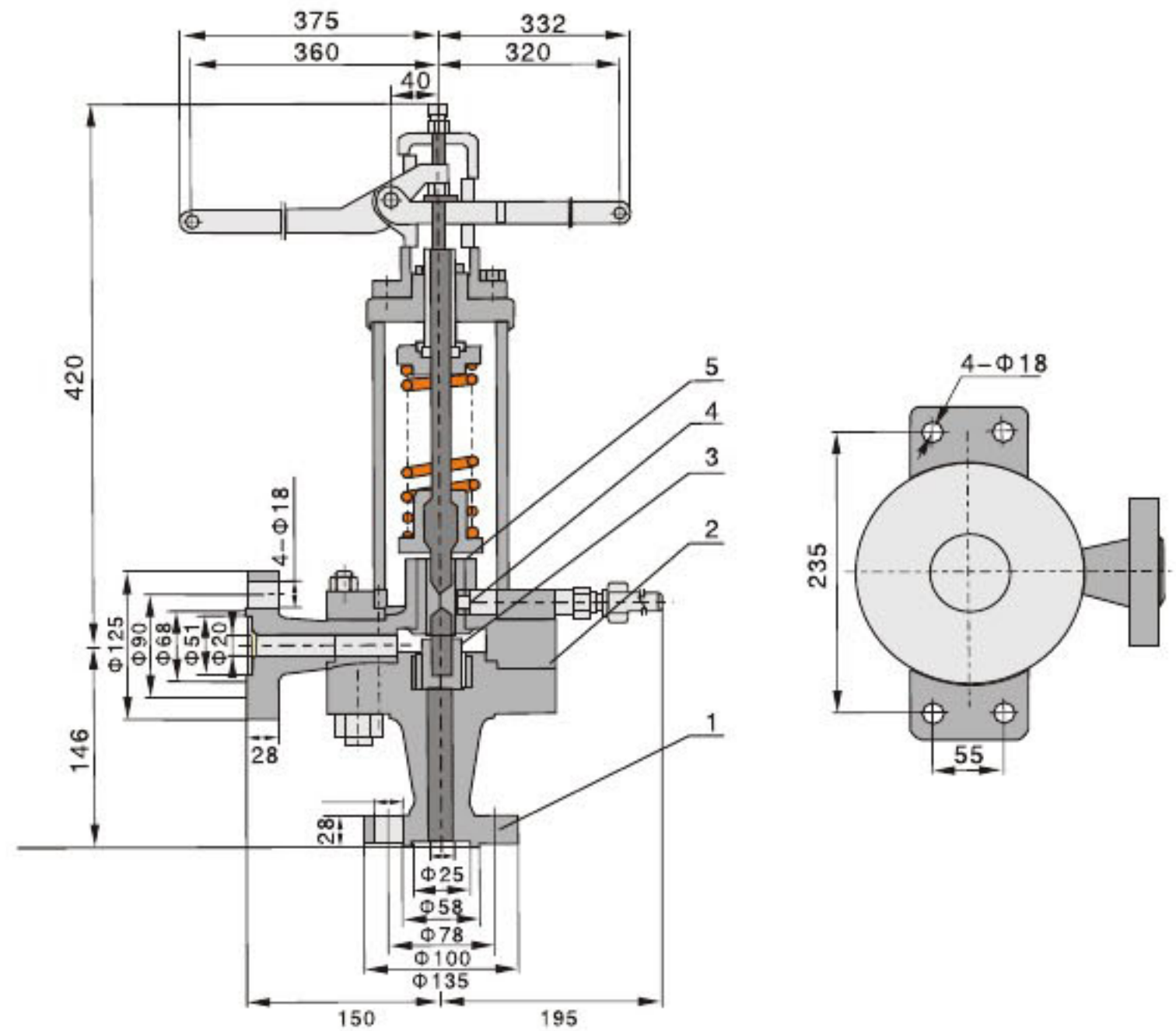
件号 Part number	零件名称 Name of part	材料 Material
1	阀体 Body	铬钼钒钢 CrMoV steel
2	阀瓣 Disc	铬钼钢 CrMo steel
3	下阀杆 Nether stem	渗氮钢 Nitriding steel
4	活塞 Piston	不锈钢 Stainless steel
5	上阀杆 Upper stem	渗氮钢 Nitriding steel
6	阀盖 Bonnet	铬钼钢 CrMo steel
7	弹簧 Spring	弹簧钢 Spring steel
重量(kg) Weight		226.2



A49Y-P_w543.2V型
结构图 Structural drawing

2.冲量安全阀 Impulse safety valve

件号 Part number	零件名称 Name of part	材料 Material
1	阀体 Body	铬钼钒钢 CrMoV steel
2	阀盖 Bonnet	铬钼钒钢 CrMoV steel
3	阀瓣 Disc	铬钼钒钢 CrMoV steel
4	阀杆 Stem	不锈钢 Stainless steel
5	导向套 Guide sleeve	不锈钢 Stainless steel
重量(kg) Weight		75.7



A49Y-P_w543.2V型
结构图 Structural drawing

■ 系列
Series
A49Y-10

■ 说明

本装置供蒸汽压力为 $P=3.92\text{MPa}$; $t\leq 450^\circ\text{C}$ 的电站锅炉上使用,防止锅炉内介质压力超过允许值,以保证锅炉安全运行。

■ Instruction:

This device is used for power plant boilers with steam working conditions as: $P=3.92\text{MPa}$; $t\leq 450^\circ\text{C}$.Its main function is to avoid the pressure of medium inside the boiler exceeding the allowed value to ensure that the boiler run safely.

■ 特点

冲量式安全装置为主、辅阀配套使用,具有排放能力大,调整方便,机械与电器双重保护,安装维护工作量小等特点。

■ Specialties:

The impulse safety device is the main safety valve,with auxiliary valve support contained.This device has such characteristics as large discharge ability,convenient adjustment,dual mechanical electric protection and few workload in installation and maintenance.

■ 工作原理

当锅炉内介质压力超过允许值时,冲量安全阀首先开启,蒸汽进入主安全阀活塞室,使主安全阀打开,对外排汽,待锅炉内余压排除后,冲量安全阀关闭,切断进入主安全阀活塞室的蒸汽,主安全阀在弹簧和介质作用下自行关闭。

■ Operation principle:

When the medium pressure inside the boiler exceeding the allowed value,the impulse safety valve opens firstly;the steam enters into the piston chamber of the main safety valve,forcing the main safety valve to open;the boiler begins discharging steam;after the excess pressure has been released,the impulse safety valve closes,stopping the steam entering into the piston chamber of the main safety valve;the main safety valve automatically closes at the reactions of the springs and medium.

■ 结构简述

1、冲量安全装置如图所示,主要由冲量安全阀、主安全阀、截止阀、节流阀等所组成。冲量安全阀为弹簧安全阀,它主要由阀体、阀盖、阀瓣等零件组件。通过调节弹簧来调节冲量安全阀开启压力,冲量安全阀还分别带有用来开启或关闭用的电磁铁,机械和电器动作互不干扰。

2、主安全阀如图所示,主要由阀体、阀瓣、活塞室等零件组成。

3、冲量安全阀阀座密封面采用钴基硬质合金堆焊而成,阀瓣为不锈钢经过热处理。主安全阀的阀座和阀瓣密封面均由钴基硬质合金喷焊面成。

4、冲量安全上部带有开启和关闭电磁铁,关闭用电磁铁平时可以不通电,但当阀门密封面泄漏时,可长期通电使阀门密封,或当机械调整回座压力过低时,接通电源促使阀瓣回座,以获得较高的回座压力。

5、冲量安全阀出厂前密封试验、灵敏性试验。

■ Sturcture briefing:

1、The impulse safety device is as shown in the figure,mainly consisted of impulse safety valve,the main safety valve,stop valve and throttle valve.Impulse safety valve is a kind of spring safety valve.It is mainly consisted of body,bonnet,disc and other parts.The impulse safety valve can be adjusted by using the spring to regulate the pressure.The impulse safety valve contains an electromagnet to open and another to close the valve.The actions of the machanism and the electric appliance are separate and will not affect each other.

2、The main safety valve is as shown in the figure.It is mainly consisted of body,disc,piston chamber and other parts.

3、The sealed seat surface of the impulse safety valve is made of hard alloy of cobalt by overlaying welding.The disc is made of stainless steel under thermal treatment.Both the sealed surface of seat and disc of the main safety valve are made of hard alloy of cobalt by spray welding.

4、The upper part of the impulse safety valve contains an electromagnet to open and another to close off.At ordinary times ,the close-off electromagnet may not be electrified,but when the sealed surface of the valve leaks,it can be electrified over a long period of time to make the valve sealed,Or when the mechanical adjusting reseating pressure is excessively low,it can be electrified to help The valve clack return and procure a higher reseating pressre.

5、The impulse safety valve only leaves the factory after it has passed the seal and sensitivity tests.

■ 安装说明

1、主安全阀A49Y-10V DN150应与冲量安全阀A49Y-10V DN25配套安装。冲量安全阀引出管与主安全阀的入口管之间应保持一段较长的距离，电接点压力表和主安全阀入口管之间的距离不得小于5倍主安全阀入口径，以免主安全阀动作时，因排汽影响电接点压力表和冲量安全阀工作正确性。

2、冲量安全阀安装前，必须将管路冲洗干净。

3、主安全阀与冲量安全阀必须垂直安装。

4、主安全阀应紧固在构架上，该构架应能承受主安全阀排汽时产生的反作用力，主安全阀的排汽管应有专门的吊架，避免排汽管的质量（重量）与其它作用力作用在主安全阀上及主安全阀与排汽管之间的连接法兰上，在排汽管的最低点，应考虑疏水，以免主安全阀排汽时产生水击。

5、冲量安全阀与电磁铁一起装在一个专门的支架上，阀门上杠杆与电磁铁连接要灵活，不得有卡涩现象。冲量阀应装在便于维修和调试，灰尘少、空气干燥、无振动的地方，其环境温度不应高于70℃，相对湿度不应超过80%。

6、为了保证冲量安全阀动作自如，冲量安全阀的回座杠杆头部的圆弧部分与冲量安全阀压杆端部的距离应调到：冲量安全阀实际行程+1mm（用护罩顶部M10紧固螺钉调之）。

■ Installation instruction:

1、The main safety valve,A49Y-10V, DN150,and the impulse safety valve,A49Y-10V, DN25,should be installed together,The distance between the outlet pipe of the impulse safety valve and the inlet pipe of the main safety valve should be maintained as relatively long and the distance between the electric contact pressure meter and the inlet pipe of the main safety valve should be no less than 5 times of the diameter of the inlet pipe,for fear that the precision of the meter and the impulse safety valve may be affected by the steam discharging process of the main safety valve.

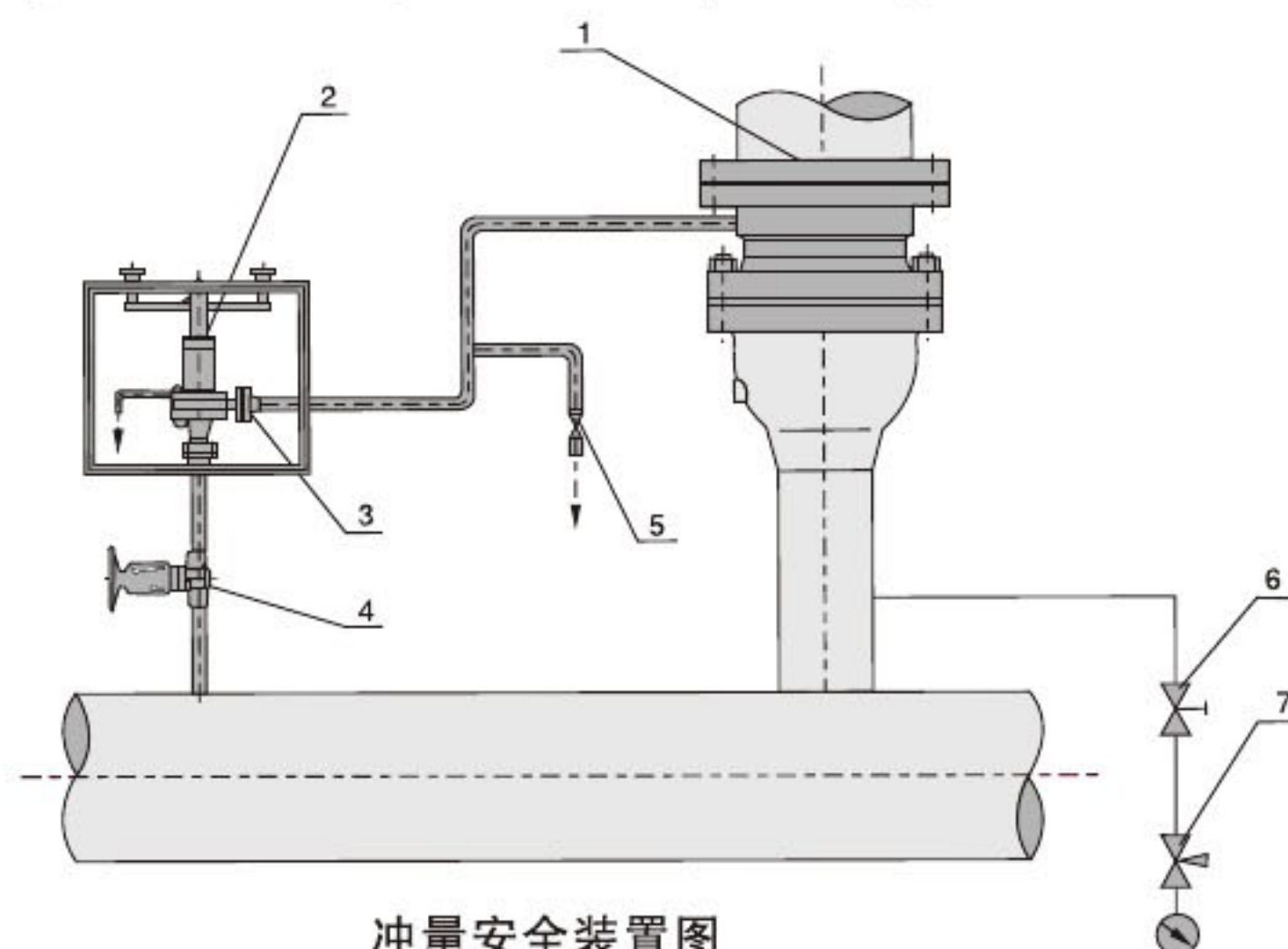
2、Before the installation of the impulse safety valve, the pipeline shall be cleaned first.

3、The main safety valve and the impulse safety valve must be positioned vertically.

4、The main safety valve shall be fastened upon the framework,which sustains the counter-reaction force produced in the steam discharging process of the main safety valve.The exhaust pipe of the main safety valve shall be supported with a special gallow lest the force of its weight and action would be directly apply to both the main safety valve and the flange that is connecting them.At the lowest point of the exhaust pipe,water drainage shall be taken into consideration to avoid producing water hammer when the main safety valve is discharging steam.

5、The impulse safety valve and the electromagnets shall be placed together on a special gallow.The juncture of the upper lever of the valve and the electromagnets shall be flexible,with no phenomenon of seizure.The impulse safety valve shall be installed in a place with little dust,dry air and convenient maintenance and debugging,and where no vibration occurs.Its ambient temperature Shall not higher than70℃,and its relative humidity not more than80%.

6、To ensure the slide working of the impulse safety valve.the distance between the circular arc part of the head of the seat returning lever and the end of the pressure bar of the valve shall be adjusted to the length of the actual travel of the valve adding 1 mm (adjusted by the M10 fastening screw at the top of the cap).



冲量安全装置图
Figure of impulse safety device

- | | |
|--------------------------------|------------|
| 1、主安全阀 Main safety valve | DN150;PN10 |
| 2、冲量安全阀 Impulse sesafety valve | DN25;PN10 |
| 3、法兰，螺栓，螺母 flange,bolt,nut | |
| 4、节流阀 Throttle valve | |
| 5、截止阀 Globe valve | DN10;PN32 |
| 6、截止阀 Globe valve | DN32;PN32 |
| 7、三通阀 Triple valve | DN10;PN32 |
| | DN4;PN32 |

中温中压冲量安全装置(H系列)
Middle temperature and pressure impulse safety device (H series)

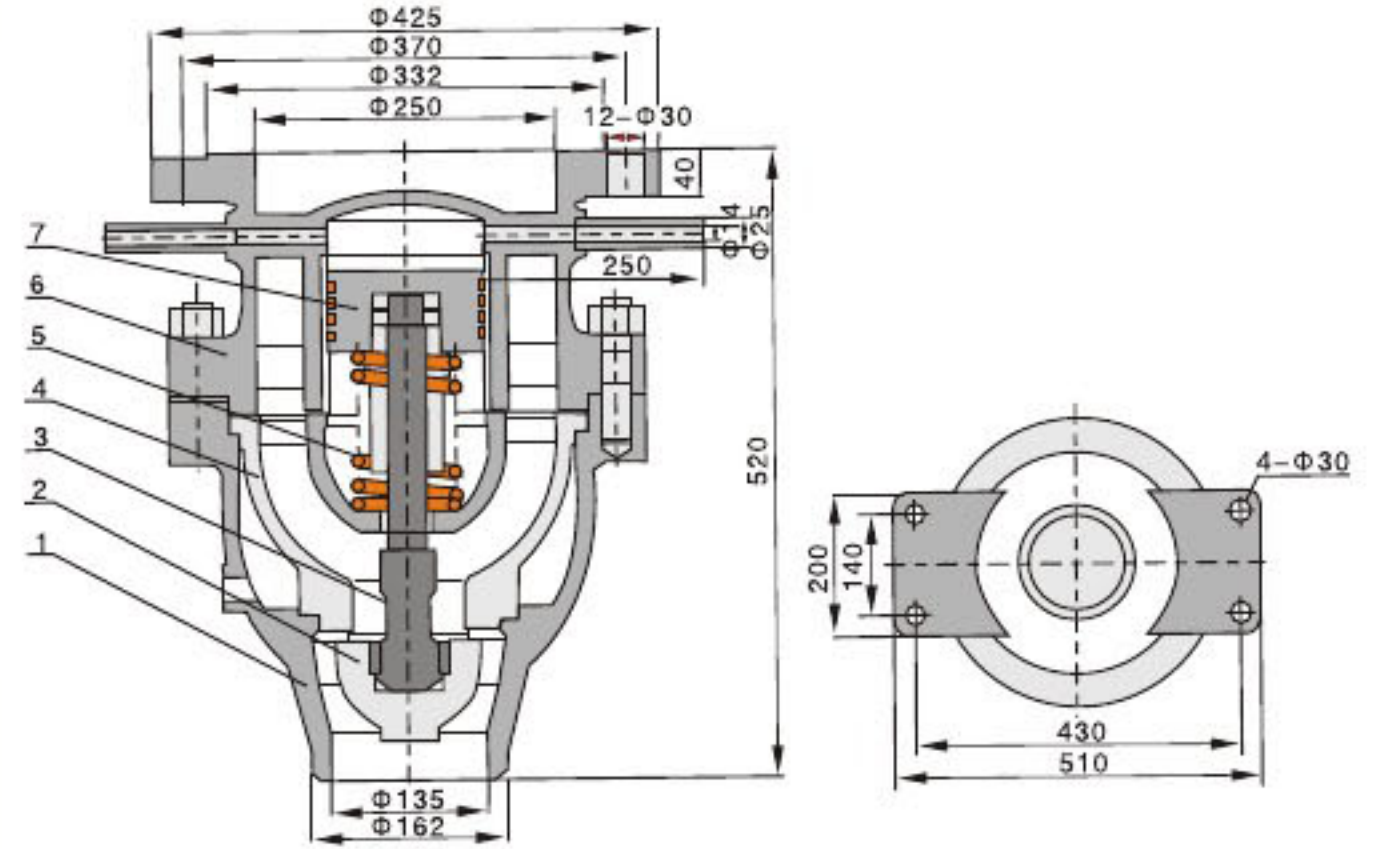
性能规范 Performance criterion

公称压力 Nominal pressure (Mpa)	公称通径 Nominal diameter (mm)	试验压力(MPa) Test pressure		最大 工作压力 Max. Working pressure (Mpa)	最大 工作温度 Max. Working temperature (°C)	重量 Weight (kg)
		强度 Strength	密封 Seal			
10.0	150	15.0	4.0	4.0	≤450 ≤540	202

主要零件材料 Main part material

1.主安全阀 Main safety valve

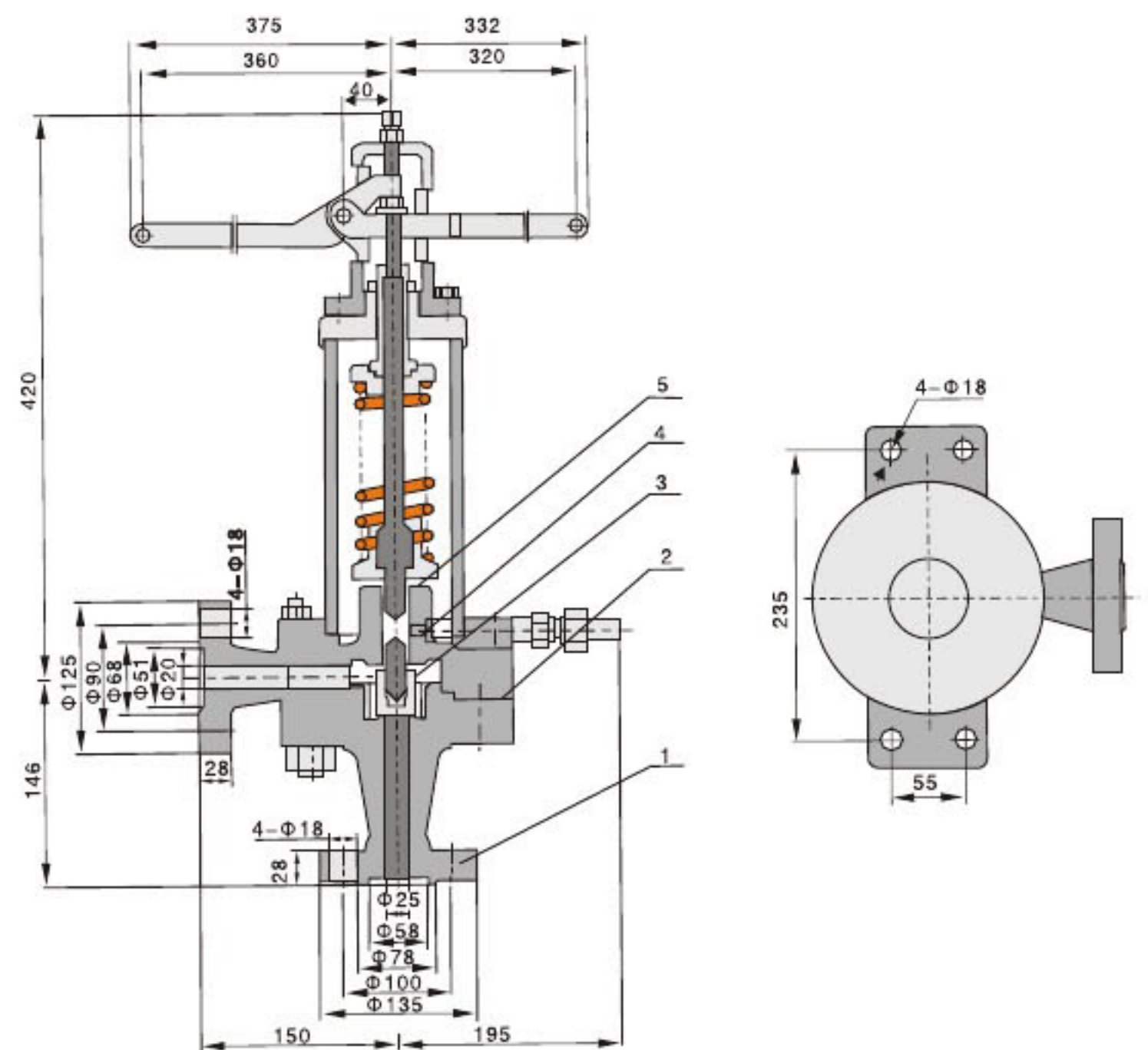
零件名称 Name of part	1	2	3	4	5	6	7
材料 Material	阀体 Body	阀瓣 Disc	阀杆 Stem	阀座 Seat	弹簧 Spring	阀盖 Bonnet	活塞 Piston
A49Y-10	碳钢 Carbon steel	碳钢 Carbon steel	渗氮钢 Nitriding steel	碳钢 Carbon steel	弹簧钢 Spring steel	碳钢 Carbon steel	不锈钢 Stainless steel
A49Y-10V	铬钼钒钢 CrMoV steel	铬钼钒钢 CrMoV steel	渗氮钢 Nitriding steel	铬钼钒钢 CrMoV steel	弹簧钢 Spring steel	铬钼钒钢 CrMoV steel	不锈钢 Stainless steel



A49Y-10、A49Y-10V型
结构图 Structural drawing

2.冲量安全阀 Impulse safety valve

件号 Part number	零件名称 Name of part	材料 Material	
		A49-10	A49Y-10V
1	阀体 Body	碳钢 Carbon steel	铬钼钒钢 CrMoV steel
2	阀盖 Bonnet	碳钢 Carbon steel	铬钼钒钢 CrMoV steel
3	阀瓣 Disc	不锈钢 Stainless steel	铬钼钒钢 CrMoV steel
4	阀杆 Stem	不锈钢 Stainless steel	不锈钢 Stainless steel
5	导向套 Guide sleeve	不锈钢 Stainless steel	不锈钢 Stainless steel
重量(kg) Weight		73.6	



A49Y-10、A49Y-10V型
结构图 Structural drawing

■ 系列
Series
A49Y-Pw5410V

■ 说明

本装置供蒸汽工作压力为P=9.81MPa; 温度t=540℃的电站锅炉上使用, 防止锅炉内介质压力超过允许值, 以保证锅炉安全运行。

Instruction:

This device is used for powerplant boilers with steam working conditions as:P=9.81MPa;t=540℃. Its main function is to avoid the medium pressure inside the boiler exceeding the allowed value to ensure that the boiler runs safely.

Specialties:

The impulse safety device is the main safety valve, with auxiliary valve support contained. This device has such characteristics as large discharge ability, convenient adjustment, dual mechanical and electric protection and few workload in installation and maintenance.

Operation principle:

When the medium pressure inside the boiler surpasses the allowed value, the impulse safety valve opens firstly; the steam enters into the piston chamber of the main safety valve, forcing the main safety valve to open; the boiler begins discharging steam; after the excess pressure has been released, the impulse safety valve closed, stopping the steam entering into the piston chamber of the main safety valve; the main safety valve automatically closes at the reactions of the springs and medium.

■ Sturcture briefing:

- 1、The impulse safety device is as shown in the figure, mainly consisted of impulse safety valve, main safety valve, stop valve and Throttle valve. Impulse safety valve is a kind of spring safety valve. It is mainly consisted of body, bonnet, spring, disc and other parts. The impulse safety valve can be adjusted by using the spring to regulate the pressure. The impulse safety valve contains an electromagnet to open and another to close the valve. The actions of the mechanism and the electric appliance are separate and will not affect each other.
- 2、The main safety valve is as shown in the figure. With a structure of double exhaust and both ends of flange connection, it is mainly consisted of body, bonnet, cushion valve, piston chamber, disc, stem and other parts. The cushion valve is designed with a check valve to change the buffer time and serve as a buffer in the working process of the main safety valve to avoid the damage of the sealed surface and the valve clack.
- 3、Both the valve seat and the sealed surface of the disc of the impulse safety valve are made of hard alloy of cobalt by overlaying welding. Both the seat and the sealed surface of the disc of the main safety valve are made of hard alloy of cobalt by plasma spray welding.
- 4、The upper part of the impulse safety valve contains an electromagnet to open and another to close off. At ordinary times, the close-off electromagnet may not be electrified, but when the sealed surface of the valve leaks, it can be electrified over a long period of time to make the valve sealed. Or when the mechanical adjusting reseating pressure is excessively low, it can be electrified to help the disc return and procure a higher reseating pressure.
- 5、The impulse safety valve only leaves the factory after it has Passed the seal and sensitivity tests.

■ 安装说明

1、主安全阀A49Y-P_{W54}10V DN125应与冲量安全阀A49Y-P_{W54}10V DN20配套安装。冲量安全阀引出管与主安全阀的入口管之间应保持一段较长的距离，电接点压力表和主安全阀入口管之间的距离不得小于5倍主安全阀入口径，以免主安全阀动作时，因排汽影响电接点压力表和冲量安全阀工作稳定性。

2、冲量安全阀安装前，必须将管路冲洗干净。

3、主安全阀与冲量安全阀必须垂直安装，主安全阀在安装焊接后，要进行局部热处理。

4、主安全阀应紧固在构架上，该构架应能承受主安全阀排汽时产生的反作用力，主安全阀的排汽管应有专门的吊架，避免排汽管的质量（重量）与其它作用力作用在主安全阀上及主安全阀与排汽管之间的连接法兰上，在排汽管的最低点，应考虑疏水，以免主安全阀排汽时产生水击。

5、冲量安全阀与电磁铁一起装在一个专门的支架上，阀门上杠杆与电磁铁连接要灵活，不得有卡涩现象。冲量阀应装在便于维修和调试，灰尘少、空气干燥、无振动的地方，其环境温度不应高于70℃，相对湿度不应超过80%。

6、为了保证冲量安全阀动作自如，冲量安全阀的回座杠杆头部的圆弧部分与冲量安全阀压杆端部的距离应调到：冲量安全阀实际行程+1mm（用护罩顶部M10×40紧固螺钉调之）。

■ Installation instruction:

1、The main safety valve,A49Y-P_{W54}10V, DN125,and the impulse safety valve,A49Y-P_{W54}10V, DN20,should be installed together, The distance between the outlet pipe of the impulse safety valve and the inlet pipe of the main safety valve should be maintained as relatively long and the distance between the electric contact pressure meter and the inlet pipe of the main safety valve should be no less than 5 times of the diameter of the inlet pipe,for fear that the precision of the meter and the impulse safety valve may be affected by the steam discharging process of the main safety valve.

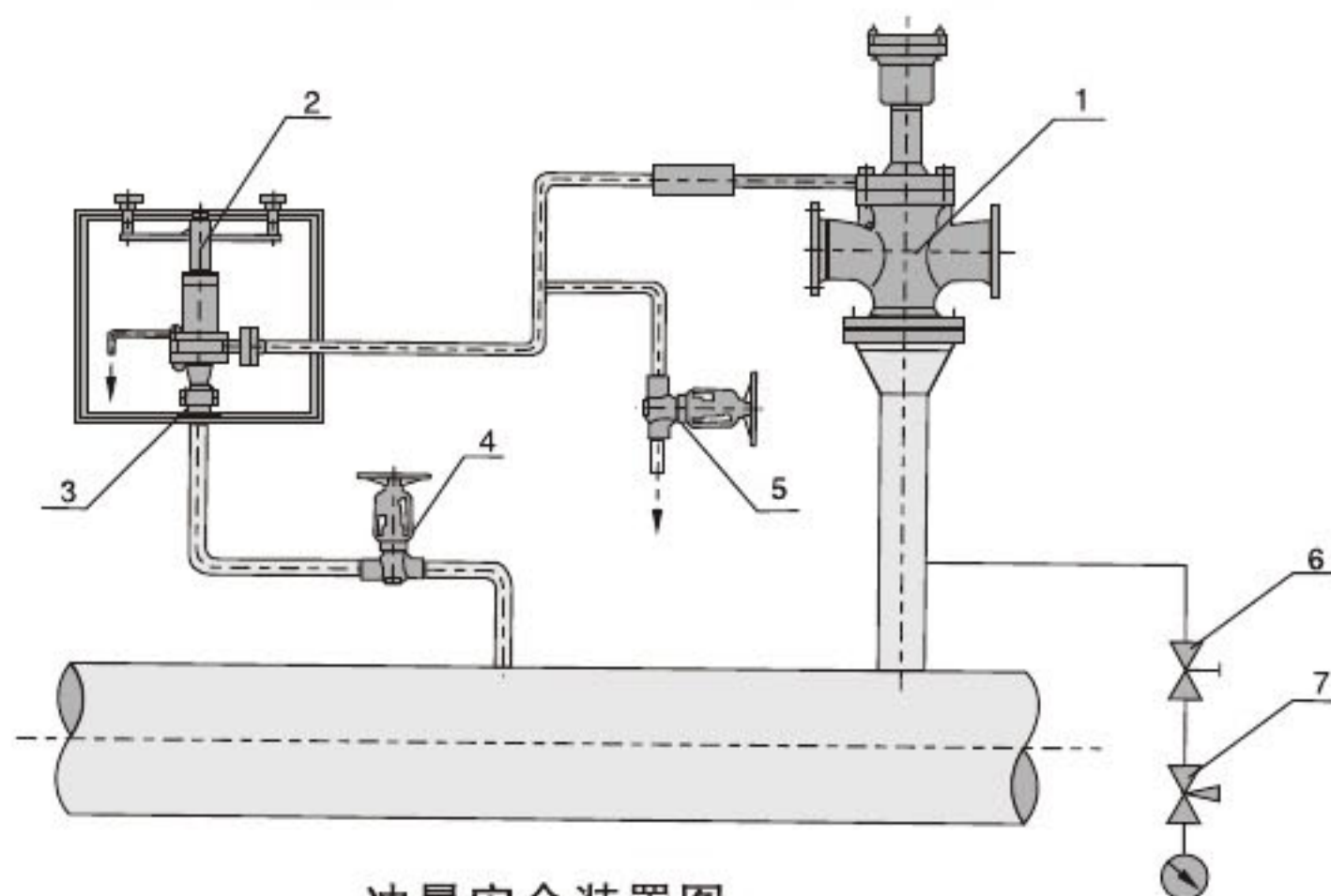
2、Before the installation of the impulse safety valve, the pipeline shall be cleaned first.

3、The main safety valve and the impulse safety valve must be positioned vertically.After the installation and the welding of the main safety valve,it shall be under partial heat treatment.

4、The main safety valve shall be fastened upon the framework,which sustains the counter-reaction force produced in the steam discharging process of the main safety valve.The exhaust pipe of the main safety valve shall be supported with a special gallow lest the force of its weight and action would be directly apply to both the main safety valve and the flange that is connecting them.At the lowest point of the exhaust pipe,water drainage shall be taken into consideration to avoid producing water hammer when the main safety valve is discharging steam.The three loops of filing shall be deeply compressed until the lower surface of the filing gland touches the upper surface of the piston,and a fine wire shall be used to fasten the pressure bolt to avoid leakage and refusing release of the main safetyvalve.

5、The impulse safety valve and the electromagnets shall be placed together on a special gallow.The juncture of the upper lever of the valve and the electromagnets shall be flexible,with no phenomenon of seizure.The impulse safety valve shall be installed in a place with little dust,dry air and convenient maintenance and debugging,and where no vibration occurs.Its ambient temperature Shall not higher than70℃,and its relative humidity not more than80℃.

6、To ensure the adile working of the impulse safety valve.the distance between the circular arc part of the head of the seat rerurning lever and the end of the pressure bar of the valve shall be adjusted to the length of the actual travel of the valve adding 1 mm (adjusted by the M10×40 fastening screw at the top of the cap).



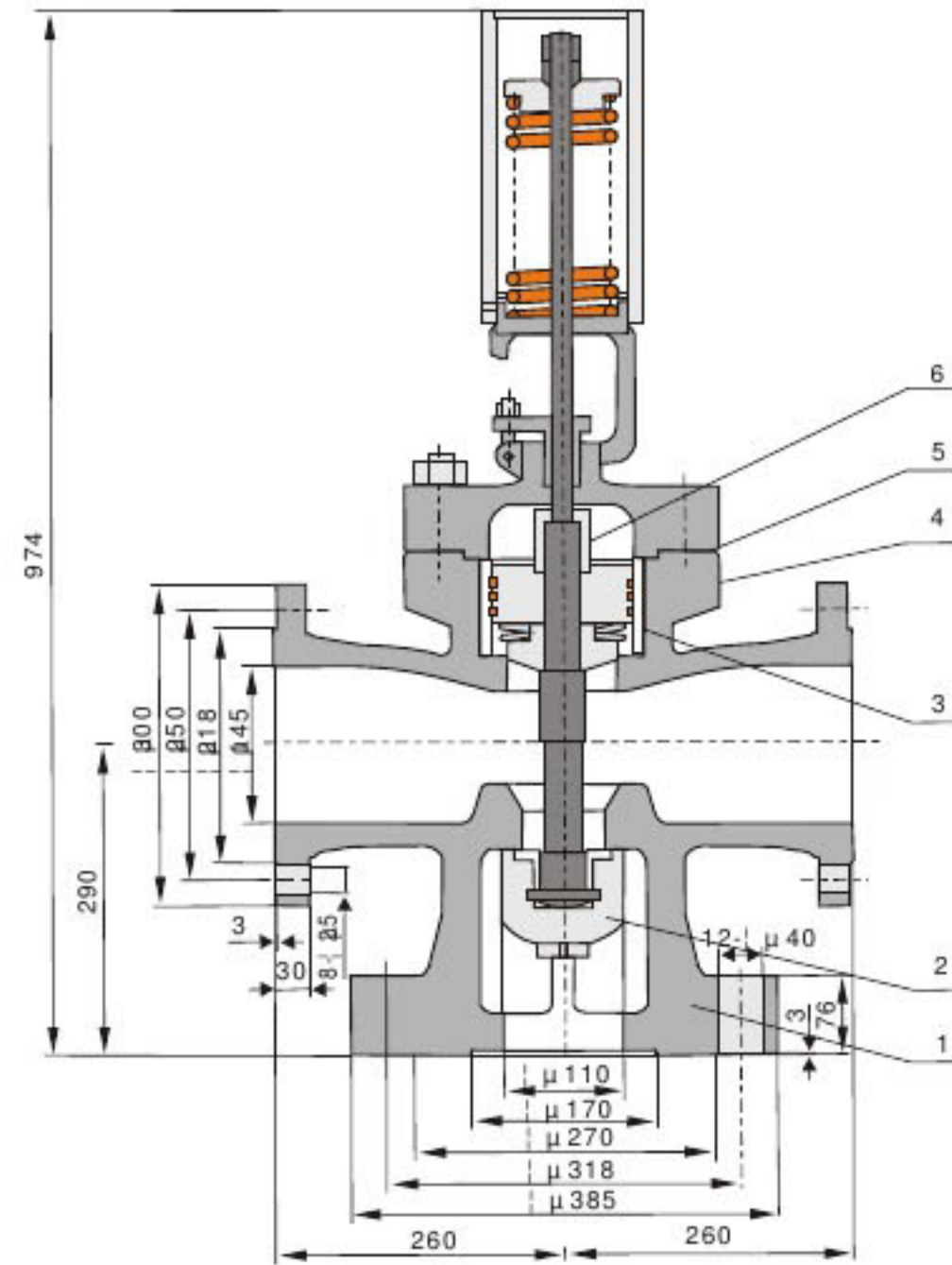
- | | |
|------------------------------|---------------------------|
| 1、主安全阀 Main safety valve | DN25;P _{W54} 10V |
| 2、冲量安全阀 Impulse safety valve | DN20;P _{W54} 10V |
| 3、法兰,螺栓,螺母 Flange,bolt,nut | |
| 4、节流阀 Throttle valve | DN20;PN32 |
| 5、截止阀 Stop valve | DN10;PN32 |
| 6、截止阀 Stop valve | DN10;P _{W54} 17V |
| 7、三通阀 Triple valve | DN4;PW32 |

冲量安全装置图
Figure of impulse safety device

■ 主要零件材料 Main part material

1. 主安全阀 Main safety valve

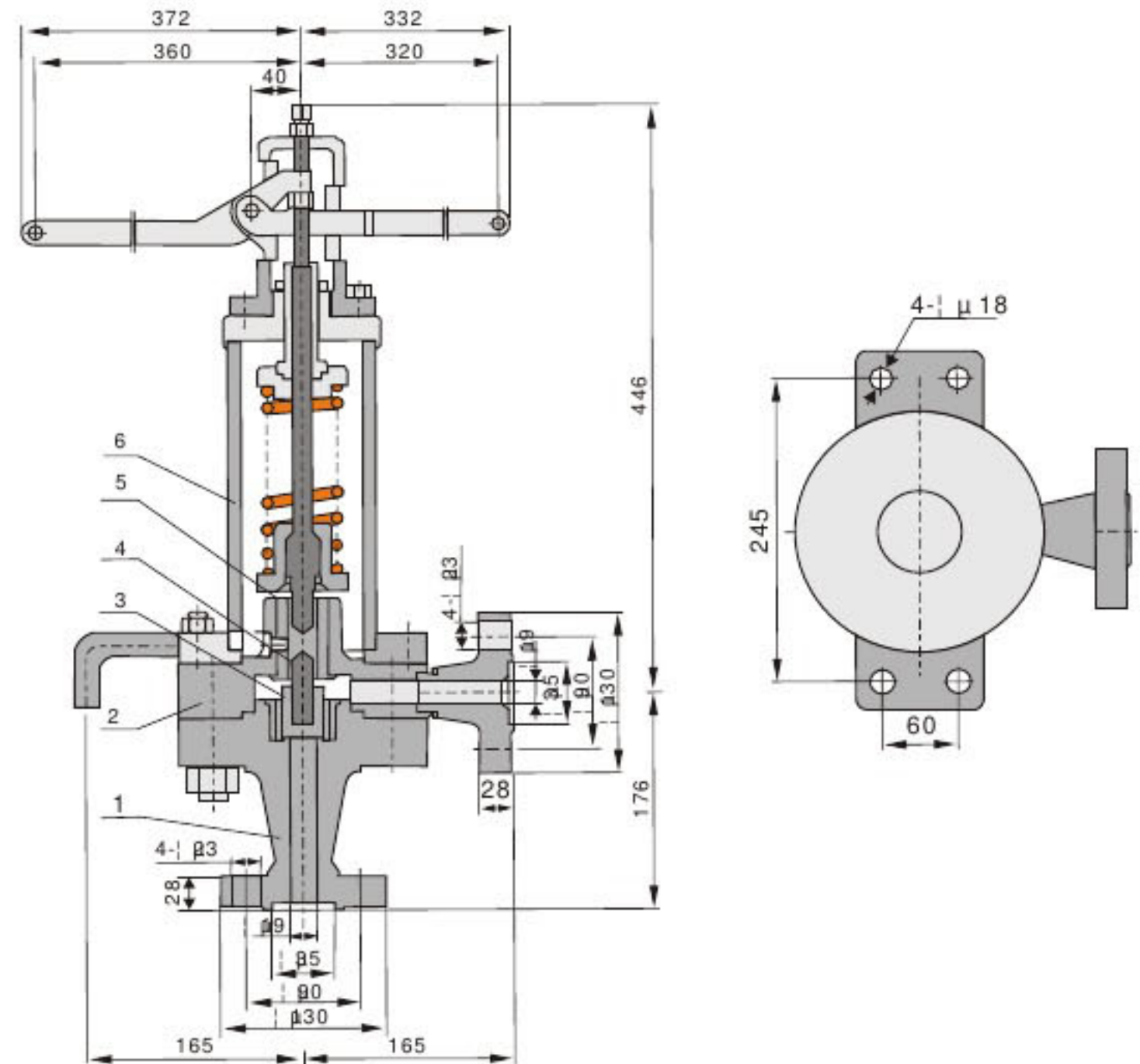
件号 Part number	零件名称 Name of part	材料 Material
1	阀体 Nether body	铬钼钒钢 CrMoV steel
2	阀瓣 Disc	铬钼钒钢 CrMoV steel
3	活塞 Piston	不锈钢 Stainless steel
4	活塞套 Piston sleeve	不锈钢 Stainless steel
5	活塞环 Piston ring	不锈钢 Stainless steel
6	阀杆 Stem	渗氮钢 Nitriding steel
重量(kg) Weight		382



A49Y-Pw5410V型
结构图 Structural drawing

2. 冲量安全阀 Impulse safety valve

件号 Part number	零件名称 Name of part	材料 Material
1	阀座 Seat	铬钼钒钢 CrMoV steel
2	阀体 Body	铬钼钒钢 CrMoV steel
3	阀瓣 Disc	不锈钢 Stainless steel
4	阀杆 Stem	不锈钢 Stainless steel
5	导向套 Guide sleeve	不锈钢 Stainless steel
6	阀盖 Bonnet	铬钼钒钢 CrMoV steel
重量(kg) Weight		111



A49Y-Pw5410V型
结构图 Structural drawing

■ 系列
Series
A69-Pw5414V

■ 用途 Usage

主要用于电站锅炉、压力容器、减温减压装置等设备，防止压力超过允许最高压力值，保证设备安全运行。

This valve is used for power plant boilers, pressure containers, pressure and temperature reducing devices and other facilities. It serves to prevent the pressure from exceeding max. Allowed value and ensure the safety of the device during working.

■ 结构简述 Struture briefing

1、阀门为双排汽、两端为法兰连接结构。主要由阀体、阀盖、缓冲容器、活塞室、阀瓣、阀杆等零件组成。

2、当介质压力升高至整定压力时，冲量安全阀打开，介质从脉冲管进入主安全阀的活塞室，推动活塞下降，使阀门自动打开，当冲量阀关闭时，阀瓣又自动关闭。

3、密封面用钴基硬质合金堆焊而成，阀瓣经热处理，提高了硬度。

1.The structure of the valve of double exhaust and both of its ends are connected with flange .It is mainly consisted of boby,bonnet, cushion container,piston chamber,disc,stem and other parts.

2.When the medium pressure rises to the set pressure,the impulse safety valve opens,and the medium in the impulse pipe enters into the piston chamber of the main safety valve from impulse pipe,forcing the piston descend,and then the valve automatically opens; when the impulse safety valve closes,the disc will also automatically close.

3.The sealed surface is made of hard alloy of cobalt by overlaying welding.Through thermal treatment.the hardness of disc is improved.

■ 安装说明 Installation instruction

1、主安全阀门必须垂直安装在设备的最高位置。

2、主安全阀紧固在支座上，支座承受主安全阀排汽时产生的反作用力。

3、排汽管应有专门吊架，排汽管重量不许加在主安全阀上，主安全阀与排汽管之间的连接法兰应消除任何的附加预应力。

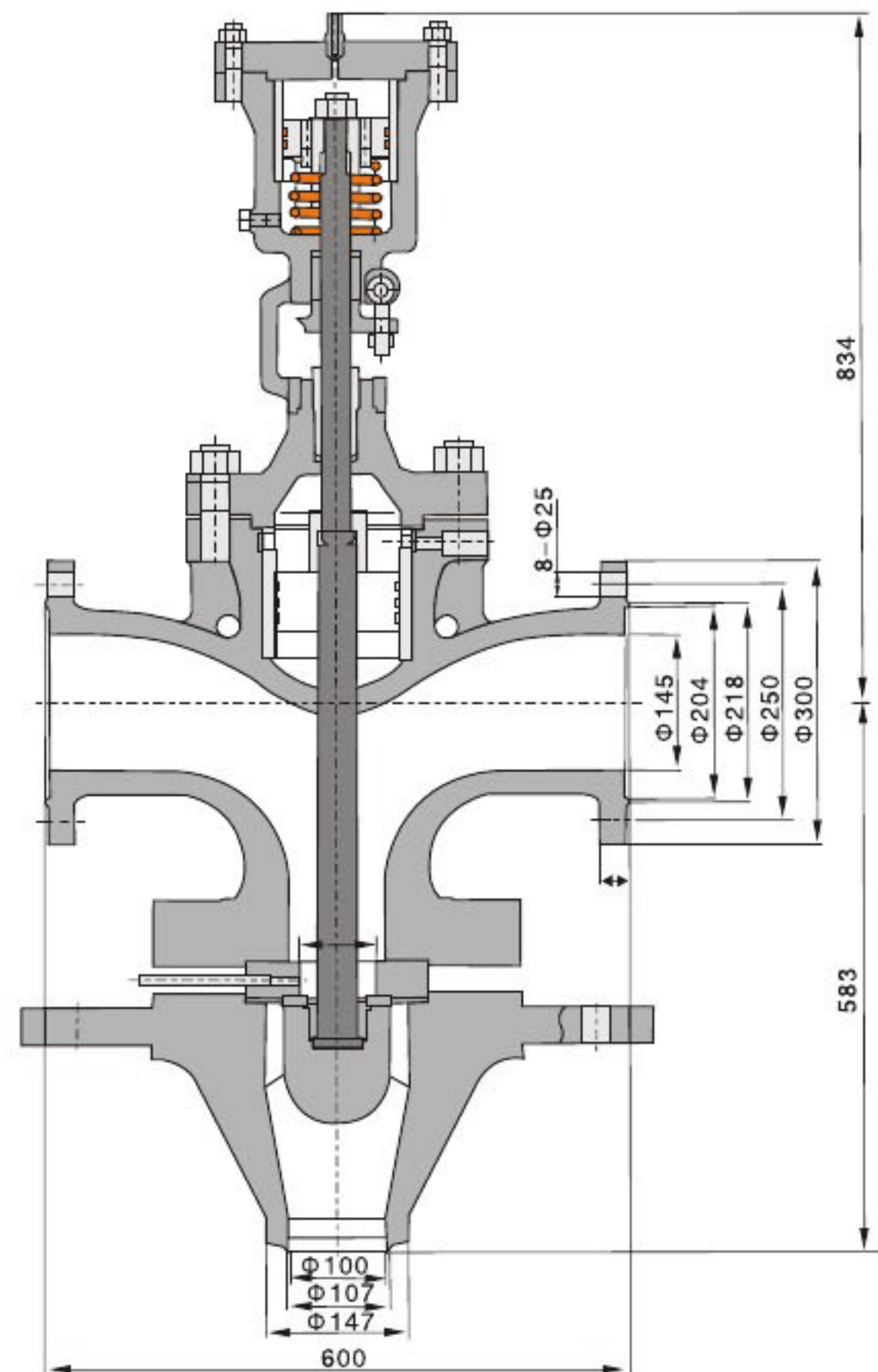
4、排汽管的最低点应考虑疏水，以免排汽时产生水击。

1.The main safety valve shall be installed vertically at the highest position of the deivce.

2.The main safety valve shall be fastened upon the gallow, Which sustains the counterforce produced in the steam discharging process of the main safety valve.

3.The exhaust pipe shall contain a special gallow to prevent the force of its weight directly applying on the main safety valve. The connecting flange between the main safety valve and exhaust pipe shall eliminate anyextra stress.

4.At the lowest point of the exhaust pipe,water drainage shall be taken into consideration to avoid producing water hammer while discharging steam.



A69-Pw5414V型
结构图 Structural drawing

■ 系列
Series
A49Y-Pw542.55V

■ 用途 Usage

主要用于电站锅炉、压力容器、减温减压装置等设备，防止压力超过允许最高压力值，保证设备安全运行。

This valve is used for power plant boilers, pressure containers, pressure and temperature reducing devices and other facilities. It serves to prevent the pressure from exceeding max. allowed value and ensure the safety of the device during working.

■ 结构简述 Struture briefing

1、该阀门为单排汽、两端为法兰连接结构。主要由阀体、阀盖、活塞室、阀瓣、阀杆等零件组成。

2、阀座、阀瓣密封面均由铁基铬镍不锈钢焊条堆焊而成，提高了耐磨性和抗冲蚀性。

1.The structure of the valve is of single exhaust and both of its ends are connected with flange. It is mainly consisted of body, bonnet, cushion container, piston chamber, disc valve stem and other parts.

2.Both sealed surfaces of the seat and disc are overlaying welded with Fe base stainless steel welding rod so as to improve wear resistance and erosion resistance.

■ 安装说明 Installation instruction

1、主安全阀门应垂直安装在设备的最高位置。

2、主安全阀紧固在支座上，支座承受主安全阀排汽时产生的反作用力。

3、排汽管应有专门吊架，排汽管重量不许加在主安全阀上。

4、主安全阀与排汽管之间的连接法兰应消除任何的附加预应力。

5、排汽管的最低点应考虑疏水，以免排汽时产生水击。

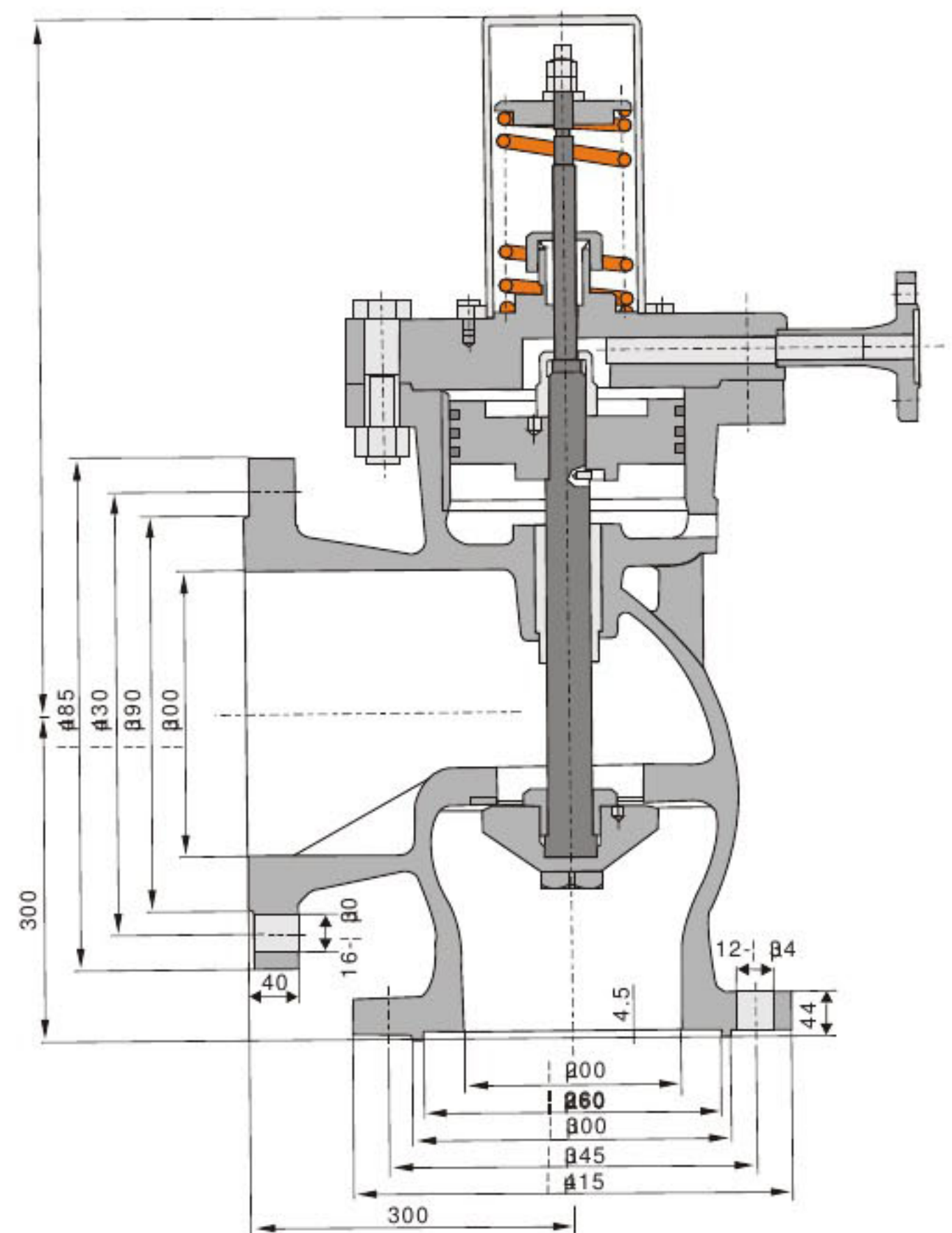
1.The main safety valve shall be installed vertically at the highest position of the device.

2.The main safety valve shall be fastened upon the gallow, Which sustains the counterforce produced in the steam discharging process of the main safety valve.

3.The exhaust pipe shall contain a special gallow to prevent the force of its weight directly applying on the main safety valve.

4.The connecting flang between the main safety valve and exhaust pipe shall eliminate any extra stress.

5.At the lowest point of the exhaust pipe, water drainage shall be taken into consideration to avoid producing water hammer while discharging steam.



A49Y-Pw542.55V型
结构图 Structural drawing

■ 系列
Series
A49H-Pw542.55V

■ 用途 Usage

主要用于电站锅炉、压力容器、减温减压装置等设备，防止压力超过允许最高压力值，保证设备安全运行。

This valve is used for power plant boilers, pressure containers, pressure and temperature reducing devices and other facilities. It serves to prevent the pressure from exceeding max. allowed value and ensure the safety of the device during working.

■ 结构简述 Struture briefing

1、该阀主要有阀体、阀盖、阀瓣等零件组成，通过调节弹簧来调节冲量安全阀开启压力。

2、该阀带有用来开启或关闭的电磁铁，机械和电器动作互不干扰。

3、阀座、阀瓣密封面均由铁基铬镍不锈钢堆焊而成。

1. This device is mainly consisted of body, bonnet, disc and other parts. It is through the adjustment of the spring to adjust the set pressure of the impulse safety valve.

2. The valve contains an electromagnet to open the valve and another to close the valve. The actions of machinery and the electric appliance are separate and will not affect each other.

3. Both sealed surfaces of seat and disc are made of Fe base stainless steel through overlaying weld.

■ 安装说明 Installation instruction

1、脉冲安全阀A49H-Pw5414V DN20应与A69Y-Pw5414V DN100、脉冲安全阀A49H-Pw542.55V DN25与A49Y-Pw542.55V DN200型主安全阀配套使用。

2、脉冲安全阀安装时应严格垂直，阀杆向上，应将管路冲洗干净。

3、脉冲安全阀引出管与主安全阀的入口管之间的距离，电接点压力表和主安全阀入口管之间的距离，不得小于5倍主安全阀入口管径，以免主安全阀动作时，因排汽影响电接点压力表和脉冲安全工作的正确性。

4、该阀与电磁铁一起装在一个专门的支架上，阀门与电磁铁连接要灵活，不得有卡涩现象。

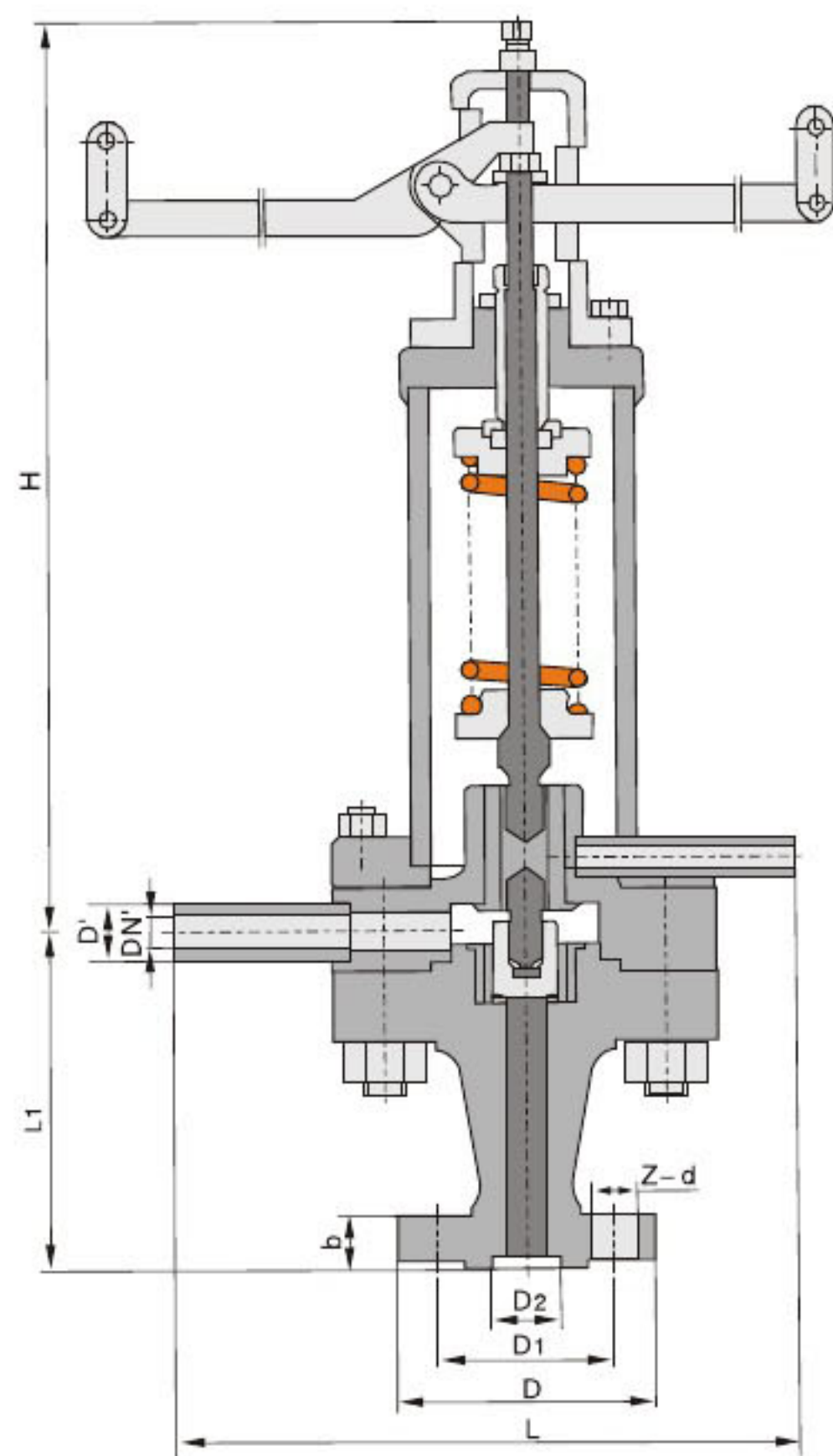
1. Impulse safety valve A49H-Pw5414V DN20 shall be used with A69Y-Pw5414V DN100, impulse safety valve A49H-Pw542.55V DN25 and main safety valve A49Y-Pw542.55V DN200 together.

2. Impulse safety valve shall be installed vertically and valve stem shall be upward. The pipeline shall be washed cleanly.

3. The distance between the leading pipe of the impulse safety valve and the inlet pipe of the main safety valve and the distance between the electric contact pressure meter and the inlet pipe of the main safety valve shall be no less than 5 times of the diameter of the inlet pipe, for fear that the validity of the meter and the impulse relief valve may be affected by the steam releasing process of the main safety valve.

4. The valve and the electromagnets shall be placed together on a special gallow. The juncture of the valve and the electromagnets shall be flexible, with no phenomenon of seizure.

■ 主要外形及连接尺寸 Main external and connecting dimensions



A49YH-Pw542.55V
结构图 Structural drawing

型号 Type	公称通径 DN Nominal diameter	连接尺寸 Connecting dimensions									
		L	L ₁	H	D	D ₁	D ₂	b	z-d	DN	D
A49Y-10	20	320	154	488	125	90	51	28	4-18	20	28
A49H-Pw542.55V	25	256	154	443	135	100	43	24	4-18	20	28
A49HPw5410V	20	320	154	488	130	90	35	28	4-23	20	28
A49HPw5414V	20	320	166	480	140	95	35	32	4-25	20	28

■ 系列
Series
A69Y-P455.3V

■ 说明 Insturction

本装置供蒸汽压力 $P=10\text{Mpa}$ ，温度为 $t=540^\circ\text{C}$ 的电站锅炉上使用，防止锅炉介质压力超过允许值，以保证锅炉安全运行。

This device is used for power plant boilers with steam conditions as: $P=10\text{MPa};t=540^\circ\text{C}$.Ist main function is to avoid the medium pressure inside the boiler exceeding the allowed value to ensure that the boiler run safely.

■ 结构简述 Struture briefing

1、阀门为双排汽、两端为法兰连接结构。主要由阀体、连接管、缓冲容器、活塞室、阀瓣、阀杆等零件组成。

2、当介质压力升高至整定压力时，冲量安全阀打开，介质从脉冲管进入安全阀的活塞室，推动活塞下降，使阀门自动打开，当冲量阀关闭时，阀瓣又自动关闭。

3、密封面用钴基硬质合金堆焊而成，阀瓣经热处理，提高了硬度。

1.The structure of the valve is double exhaust and both of its are ends connected with flange.It is mainly consisted of body, connecting pipe,cushion cushion container,piston chamber,disc,valve stem and other parts.

2.When the medium pressure rises to the set pressure,the impulse safety valve opens,and the medium in the impulse pipe enters into the piston chamber of the main safety valve from impulse pipe,forcing the piston to descend,and then the valve automatically opens;when the impulse safety valve closes,the disc will also automatically close.

3.The sealed surface is made of hard alloy of cobalt by overlaying welding.Through thermal treatment,he hardness of disc is improved.

■ 安装说明 Installation instruction

1、主安全阀门必须垂直安装在设备的最高位置。

2、主安全阀紧固在支座上，支座承受主安全阀排汽时产生的反作用力。

3、排汽管应有专门吊架，排汽管重量不得加在主安全阀上，主安全阀与排汽管之间的连接法兰应消除任何的附加预应力。

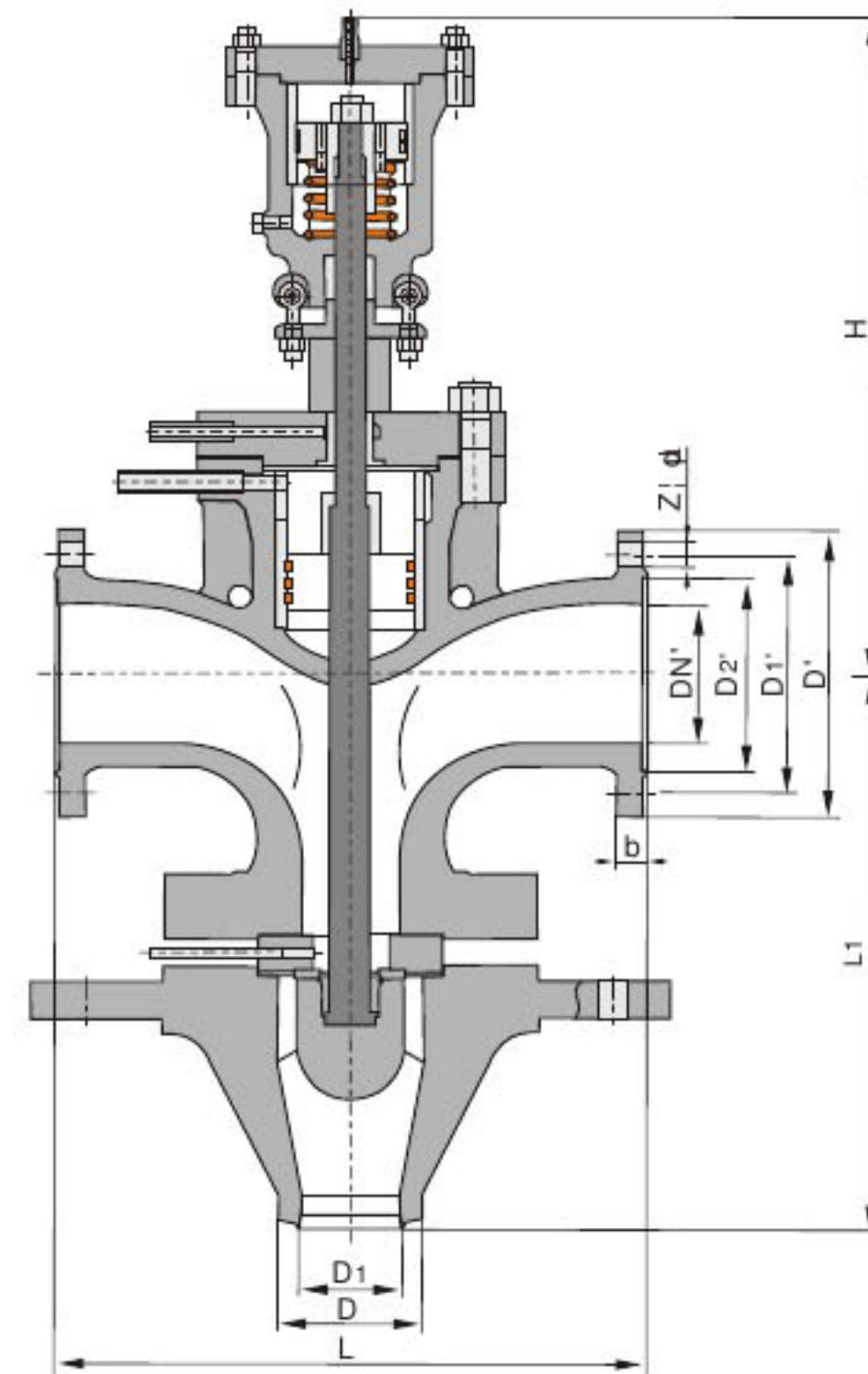
4、排汽管的最低点应考虑疏水，以免排汽时产生水击。

1.The main safety valve shall be installed vertically at the highest position of the deivce.

2.The main safety valve shall be fastened upon the gallow, Which sustains the counterforce produced in the steam discharging process of the main safety valve.

3.The exhaust pipe shall contain a special gallow to prevent the force of its weight directly applying on the main safety valve.The connecting flange between the main safety valve and exhaust pipe shall eliminate any extra stress.

4.At the lowest point of the exhaust pipe,water drainage shall be taken into consideration to avoid producing water hammer while discharging steam.



A69Y-P455.3V
结构图 Structural drawing

■ 主要外形及连接尺寸 Main external and connecting dimensions

型号 Type	公称通径 DN Nominal diameter	连接尺寸 Connecting dimensions										
		L	L ₁	H	D	D ₁	D _{n'}	D'	D _{1'}	D _{2'}	b'	Z-Φd
A69Y-P455.3V	150	560	638	698	220	165	150	300	250	204	30	8-25
A69H-P466.7V	150	560	638	698	220	165	150	300	250	204	30	8-25
A69H-P5410V	150	560	638	698	220	165	150	300	250	204	30	8-25
A49H-P5410.5V	150	560	638	698	220	165	150	300	250	204	30	8-25

■ 系列
Series
GA49H-P_{W46}6.7V

■ 说明 Insturction

主要用于电站锅炉、压力容器、减温减压装置等设备，防止压力超过允许最高压力值，保证设备安全运行。

This valve is used for power plant boilers, pressure containers, pressure and temperature reducing devices and other facilities. It serves to prevent the pressure from exceeding max. allowed value and ensure the safety of the device during working.

■ 结构简述 Struture briefing

- 1、通过杆杠和重锤来平衡阀瓣的压力，使阀门保证密封，移动重锤的位置和改变重锤的重量来达到要求的起跳压力。
- 2、密封面用铁基铬镍不锈钢堆焊而成，阀瓣经热处理，提高了耐磨性和冲蚀性。
- 3、阀门上部带有开启和关闭的电磁铁，机械和电器动作互不干扰。

1.The pressure of disc is balanced through the lever and heavy hammer and the valve is ensured seal by moving the position of heavy hammer and changing the weight of heavy hammer to reach the required set pressure.

2.The sealed surface is made of Fe base stainless steel by overlaying welding. Through thermal treatment, the hardness of disc is improved.

3.At the top of valve is equipped with an electromagnet to open and another to close the valve. The actions of the mechanism and the electric appliance are separate and will not affect each other.

■ 安装说明 Installation instruction

1、本阀门应与A69Y-P_{W54}10V型，DN150主安全阀等配套使用。

2、脉冲安全阀安装时应严格垂直，杠杆应保持水平，应将管路冲洗干净。

3、脉冲安全阀引出管与主安全阀的入口管之间应保持一段较长的距离，电接点压力表和主安全阀入口管之间的距离，不得小于5倍主安全阀入口管径，以免主安全阀动作时，因排汽影响电接点压力表和脉冲安全阀工作的正确性。

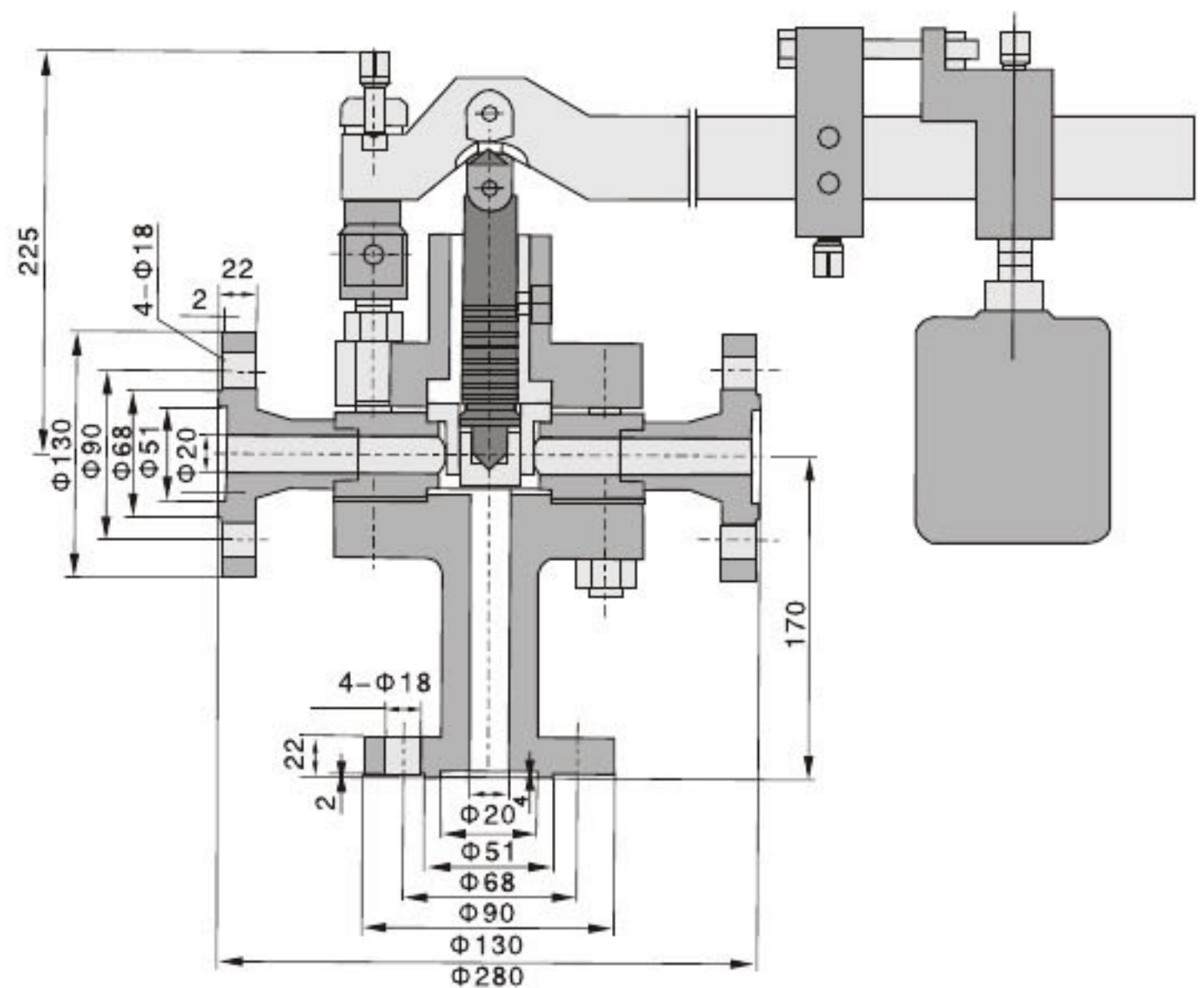
4、该阀与电磁铁一起装在一个专门的支架上，阀门上杠杆与电磁铁连接要灵活，不得有卡涩现象。

1.This valve shall be used with main safety valve A69Y-P_{W54}10V, DN150 together.

2.Impulse safety valve shall be installed vertically and the lever shall be level. The pipeline shall be washed cleanly.

3.A long distance between the leading pipe of the impulse safety valve and the inlet pipe of the main safety valve shall be kept. And the distance between the electric contact pressure meter and the inlet pipe of the main safety valve shall be no less than 5 times of the diameter of the inlet pipe, for feat that the validity of the meter and the impulse safety valve may be affected by the steam releasing process of the main safety valve.

4.The valve and the electromagnets shall be placed together on a special gallow. The juncture of the valve and the electromagnets shall be flexible, with no phenomenon of seizure.



GA49H-P_{W46}6.7V
结构图 Structural drawing

■ 主要外形及连接尺寸 Main external and connecting dimensions

型号 Type	公称通径 DN Nominal diameter	连接尺寸 Connecting dimensions										
		L	L1	H	D	D1	D2	b	z-d	DN'	D'	
GA49H-P _{W46} 6.7V	20	280	170	255	130	90	35	28	4-23	20	28	
GA49H-P _{W54} 10V	20	280	170	255	130	90	35	28	4-23	20	28	
GA49H-P _{W54} 10.5V	20	280	170	255	130	90	35	28	4-43	20	28	

■ 磅级系列安全阀简介 Pound-Grade series safety valve's introduction

■ 一、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:

Performance features: $\leq \pm 3\%$
 Over-pressure: $\leq \pm 10\%$
 Blowdown: $\leq \pm 15\%$
 Sealing performance: meet the sealing request of API527 standard

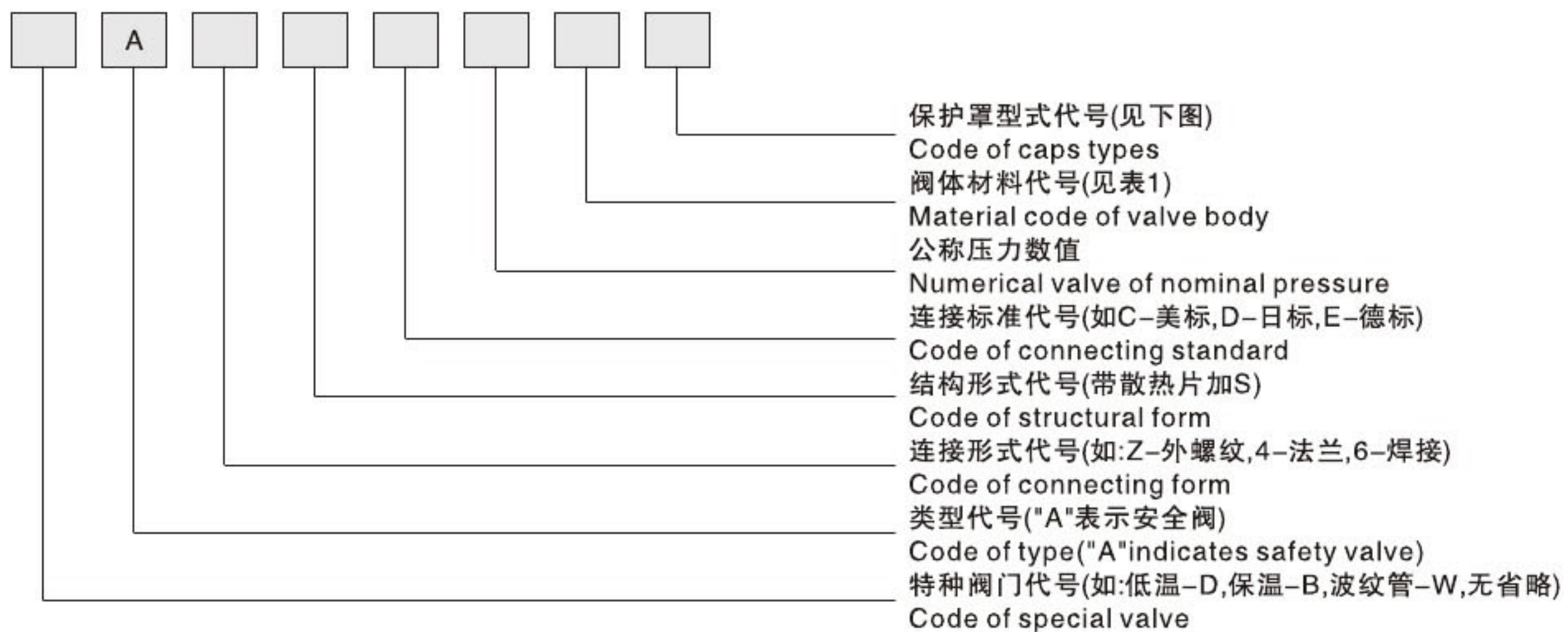
■ 二、结构特点

- 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子相匹配，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，还能对有蚀有毒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,确保其在工作状况中刚度稳定，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, smooth and clean 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 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 poison 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



A41C磅级弹簧微启式安全阀
A41C Type Pound-grade low lift spring loaded safety valve

■ 系列
Series

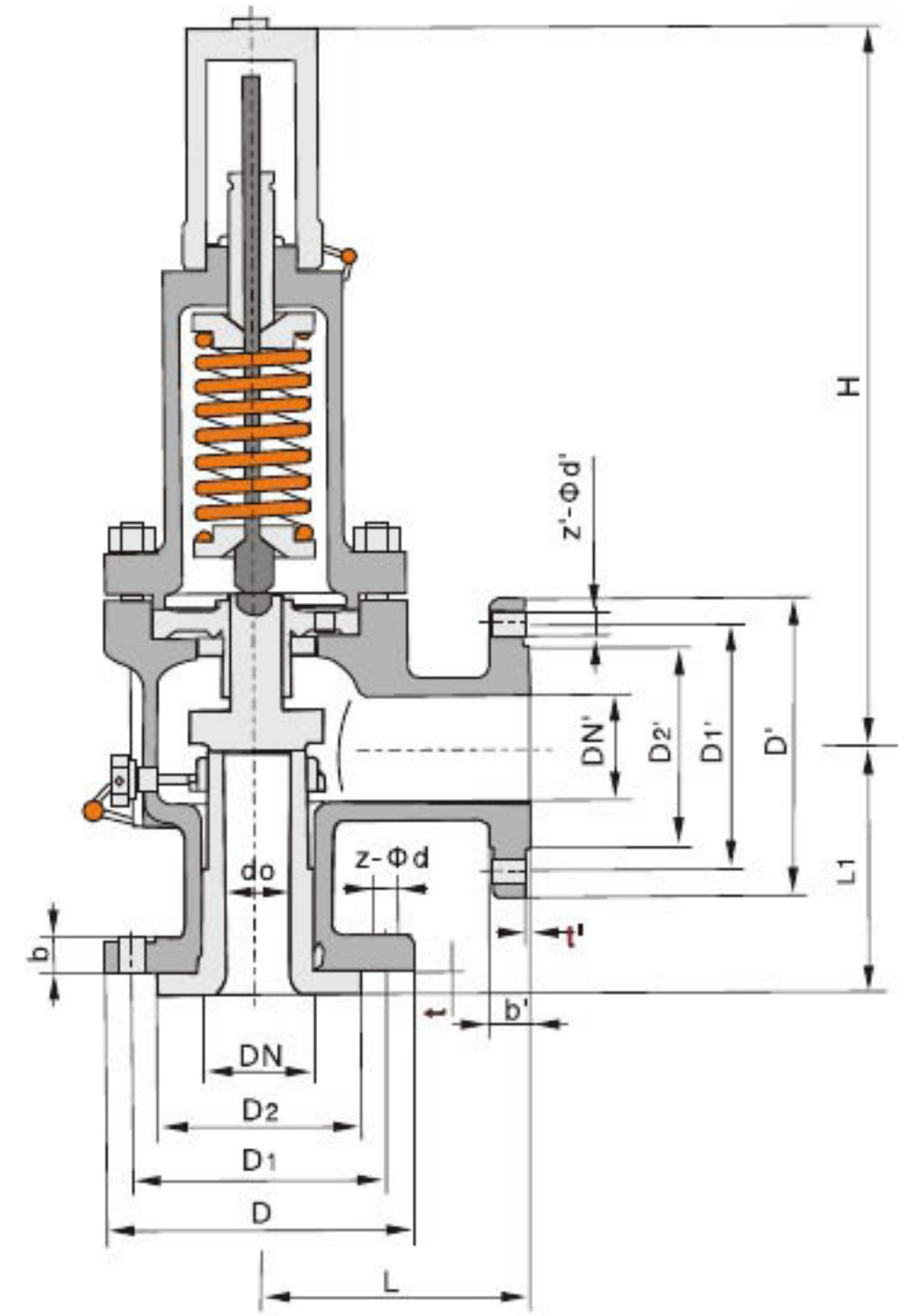
A41C150P/R
A41C300P/R
A41C600P/R
A41C1500P/R

■ 主要性能规范 Main property and specification

公称压力 Normal Pressure	PN	150	300	600	900	1500
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15	22.5	38
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10	8-15	10-25
密封压力 Seal pressure	Pm(MPa)			90% Pk		
回座压力 Reseat pressure	Ph(MPa)			≥90% Pk		
排放压力 Relieving pressure	Pp(MPa)			≤1.1 Pk		
开启高度 Lift height	H(mm)			≥1/20d0		
适用温度 Appropriate temperature	C			≤300℃		
	P、R			≤200℃		
适用介质 Appropriate medium	空气、水、油品、蒸气、腐蚀性介质 Air, oil, Steam, Water, Corrosive medium					

■ 喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
D	10	L	20
E	13	M	55
F	16	N	60
G	20.5	P	72
H	26	Q	96
J	33	R	115
K	40	T	148



■ 主要尺寸 Main Dimension

A41C150、A41C150P、A41C150R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
1/2"×1/2"	D	89	60.5	35	12	5	4-15	15	89	60.5	35	12	1.6	4-15	90	90	260
3/4"×1"	D	98	70	43	14	5	4-15	25	108	79.5	51	15	1.6	4-15	96	92	280
1"×1"	D	108	79.5	51	15	5	4-15	25	108	79.5	51	15	1.6	4-15	100	100	290
1"×2"	E	108	79.5	51	15	5	4-15	50	152	120.5	92	18	1.6	4-19	115	105	290
1 1/2"×1 1/2"	G	127	98.5	73	18	5	4-15	40	127	98.5	73	18	1.6	4-15	121	124	330
1 1/2"×2"	G	127	98.5	73	18	5	4-15	50	152	120.5	92	18	1.6	4-19	121	124	330
2"×3"	J	152	120.5	92	18	5	4-19	80	190	152.5	127	22	1.6	4-19	124	136	350

A41C300、A41C300P、A41C300R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1/2"×1/2"	D	95	66.5	35	15	5	4-15	15	89	60.5	35	12	1.6	4-15	90	90	260
3/4"×1"	D	117	82.5	43	16	5	4-19	25	108	79.5	51	15	1.6	4-15	100	100	280
1"×1"	D	124	89	51	18	5	4-19	25	108	79.5	51	15	1.6	4-15	100	100	290
1"×2"	E	124	89	51	18	5	4-19	50	152	120.5	92	18	1.6	4-19	115	105	290
1 1/2"×1 1/2"	G	156	114.5	73	20	5	4-22	40	127	98.5	73	18	1.6	4-15	121	124	330
1 1/2"×2"	G	156	114.5	73	20	5	4-22	50	152	120.5	92	18	1.6	4-19	121	124	330
2"×3"	J	165	127	92	23	5	8-19	80	190	152.5	127	22	1.6	4-19	130	136	350

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A41C600、A41C600P、A41C600R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
3/4"×1"	D	118	82.5	43	16	7	4-15	25	108	79.5	51	15	1.6	4-15	105	110	280
1"×2"	D	124	89	51	20	7	4-19	50	152	120.5	92	18	1.6	4-19	115	105	290
1 1/2"×1 1/2"	F	156	114.5	73	22	7	4-22	40	127	98.5	73	18	1.6	4-15	147	162	330
1 1/2"×2"	F	156	114.5	73	22	7	4-22	50	152	120.5	92	18	1.6	4-19	147	162	330

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A41C900、A41C900P、A41C900R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1"×1 1/2"	D	150	101.6	51	28	7	4-25	40	156	114.5	73	20	1.6	4-22	125	125	320
1 1/2"×1 1/2"	F	178	123.8	73	32	7	4-29	40	156	114.5	73	20	1.6	4-22	150	194	350
1 1/2"×2"	F	178	123.8	73	32	7	4-29	50	165	127	92	22	1.6	8-19	140	105	350

注：出口法兰为300Lb。 Remark:300Lb for outlet flange.

A42C型磅级弹簧全启式安全阀 A42C Type Pound-grade Full lift spring loaded safety valve

系列 Series

A42C150P/R
A42C300P/R
A42C600P/R
A42C900P/R
A42C1500P/R

主要性能规范 Main property and specification

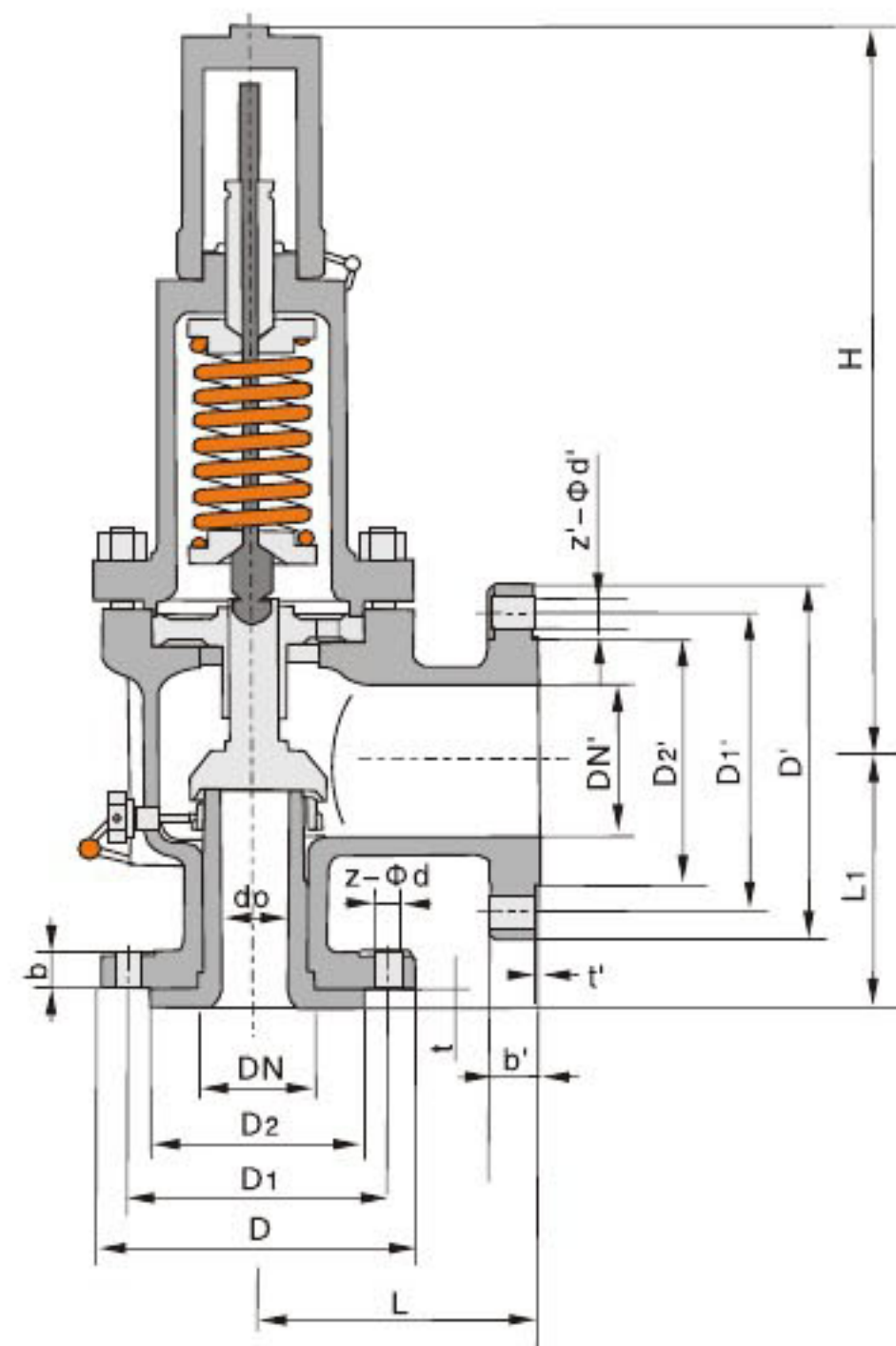
公称压力 Normal Pressure	PN	150	300	600	900	1500
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15	22.5	38
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10	8-15	10-25
密封压力 Seal pressure	Pm(MPa)	90% Pk				
回座压力 Reseat pressure	Ph(MPa)	≥90% Pk				
排放压力 Relieving pressure	Pp(MPa)	≤1.1 Pk				
开启高度 Lift height	H(mm)	≥ $\frac{1}{4}d_0$				
适用温度 Appropriate temperature	C	≤300°C				
	P、R	≤200°C				
适用介质 Appropriate medium	空气、水、油品、蒸气、腐蚀性介质 Air, oil, Steam, Water, Corrosive medium					

主要喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
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	148

主要尺寸 Main Dimension

A42C150、A42C150P、A42C150R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1/2" x 3/4"	D	89	60.5	35	12	5	4-15	20	98	70	43	14	1.6	4-15	90	90	260
3/4" x 1"	D	98	70	43	14	5	4-15	25	108	79.5	51	15	1.6	4-15	96	92	280
1" x 1 1/2"	D	108	79.5	51	15	5	4-15	40	127	98.5	73	18	1.6	4-15	115	105	290
1" x 2"	D	108	79.5	51	15	5	4-15	50	152	120.5	92	18	1.6	4-19	115	105	290
1 1/2" x 2"	G	127	98.5	73	18	5	4-15	50	152	120.5	92	18	1.6	4-19	121	124	320
1 1/2" x 2 1/2"	G	127	98.5	73	18	5	4-15	65	178	139.5	105	20	1.6	4-19	121	124	340
1 1/2" x 3"	G	127	98.5	73	18	5	4-15	80	190	152.5	127	22	1.6	4-19	124	130	340
2" x 2 1/2"	J	152	120.5	92	18	5	4-19	65	178	139.5	105	20	1.6	4-19	124	130	360
2" x 3"	J	152	120.5	92	18	5	4-19	80	190	152.5	127	22	1.6	4-19	124	130	360
2 1/2" x 4"	J	178	139.5	105	20	5	4-19	100	229	190.5	157	24	1.6	8-19	143	137	360
3" x 4"	L	190	152.5	127	22	5	4-19	100	229	190.5	157	24	1.6	8-19	162	156	450
4" x 6"	N	229	190.5	157	24	10	8-19	150	279	241.5	216	26	1.6	8-22	210	197	510
6" x 8"	P	279	241.5	216	26	10	8-22	200	343	298.5	270	29	1.6	8-22	241	240	740
8" x 10"	R	343	298.5	270	29	10	8-22	250	406	362	324	31	1.6	12-25	279	276	810
12" x 14"	T	483	432	381	32	10	12-25	350	533	476	413	35	1.6	12-29	360	360	860



A42C型磅级弹簧全启式安全阀
A42C Type Pound-grade Full lift spring loaded safety valve

A42C300、A42C300P、A42C300R																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1/2"×3/4"	D	95	66.5	35	15	5	4-15	20	98	70	43	14	1.6	4-15	90	90	260
3/4"×1"	D	117	82.5	43	16	5	4-19	25	108	79.5	51	15	1.6	4-15	96	92	280
1"×1/2"	D	124	89	51	18	5	4-19	40	127	98.5	73	18	1.6	4-15	115	105	290
1"×2"	D	124	89	51	18	5	4-19	50	152	120.5	92	18	1.6	4-19	115	105	290
1 1/2"×2"	G	156	114.5	73	20	5	4-22	50	152	120.5	92	18	1.6	4-19	121	124	320
1 1/2"×2 1/2"	G	156	114.5	73	20	5	4-22	65	178	139.5	105	20	1.6	4-19	121	124	340
1 1/2"×3"	G	156	114.5	73	20	5	4-22	80	190	152.5	127	22	1.6	4-19	124	130	340
2"×2 1/2"	H	165	127	92	22	5	8-19	65	178	139.5	105	20	1.6	4-19	124	130	360
2"×3"	J	165	127	92	22	5	8-19	80	190	152.5	127	22	1.6	4-19	124	130	360
2 1/2"×4"	J	190	149	105	24	5	8-22	100	229	190.5	157	24	1.6	8-19	143	137	360
3"×4"	L	210	168.5	127	28	5	8-22	100	229	190.5	157	24	1.6	8-19	162	156	450
4"×6"	N	254	200	157	32	10	8-22	150	279	241.5	216	26	1.6	8-22	210	197	510
6"×8"	P	318	270	216	38	10	12-22	200	343	298.5	270	29	1.6	8-22	241	240	740
8"×10"	Q	381	330	270	42	10	12-25	250	406	362	324	31	1.6	12-25	279	276	810

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A42C600、A42C600P、A42C600R																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
3/4"×1"	D	118	82.5	43	16	7	4-19	25	108	79.5	51	15	1.6	4-15	96	92	290
1"×2"	D	124	89	51	19	7	4-19	50	152	120.5	92	18	1.6	4-19	115	105	290
1 1/2"×2"	D	156	114.5	73	22	7	4-22	50	152	120.5	92	18	1.6	4-19	152	124	340
1 1/2"×2 1/2"	D	156	114.5	73	22	7	4-22	65	178	139.5	105	20	1.6	4-19	152	124	350
1 1/2"×3"	F	156	114.5	73	22	7	4-22	80	190	152.5	127	22	1.6	4-19	152	124	350
2"×2 1/2"	F	165	127	92	26	7	8-19	65	178	139.5	105	20	1.6	4-19	162	154	380
2"×3"	F	165	127	92	26	7	8-19	80	190	152.5	127	22	1.6	4-19	162	154	380
2 1/2"×4"	H	190	149	100	29	7	8-22	100	229	190.5	157	24	1.6	8-19	143	165	380
3"×4"	L	210	168	127	32	10	8-22	100	229	190.5	157	24	1.6	8-19	162	155	460
4"×6"	N	273	216	157	38	10	8-25	150	279	241.5	216	26	1.6	8-22	210	200	520
6"×8"	P	356	292	216	46	10	12-29	200	343	298.5	270	29	1.6	8-22	241	240	750

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A42C900、A42C900P、A42C900R																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1 1/2"×2"	F	178	123.8	73	32	10	4-29	50	152	120.5	92	18	1.6	4-19	115	124	360
2"×3"	H	216	165.1	92	38	10	8-25	80	190	152.5	127	22	1.6	4-19	162	154	390
3"×4"	J	241	190.5	127	38	10	8-25	100	229	190.5	157	24	1.6	8-19	181	184	480
4"×6"	K	292	234.9	157	44	12	8-32	150	279	241.5	216	26	1.6	8-22	222	197	540

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A42C1500、A42C1500P、A42C1500R																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
3/4"×1"	D	130	88.9	43	20	10	4-22	25	124	89	51	18	1.6	4-19	120	136	310
1 1/2"×2"		178	123.8	73	26	12	4-28	50	165	127	92	22	1.6	8-19	140	105	360
1 1/2"×2 1/2"	F	178	123.8	73	26	12	4-28	65	190	149	105	24	1.6	8-22	152	124	360
2"×3"		216	165.1	92	32	15	8-25	80	210	168.5	127	28	1.6	8-22	162	154	380
3"×4"	J	267	203.2	127	42	14	8-32	100	254	200	157	32	1.6	8-22	181	184	490

注：出口法兰为300Lb。 Remark:300Lb for outlet flange.

WA42型磅级波纹管平衡式弹簧安全阀 WA42 Type Pound-grade balance bellows spring loaded safety valve

系列 Series

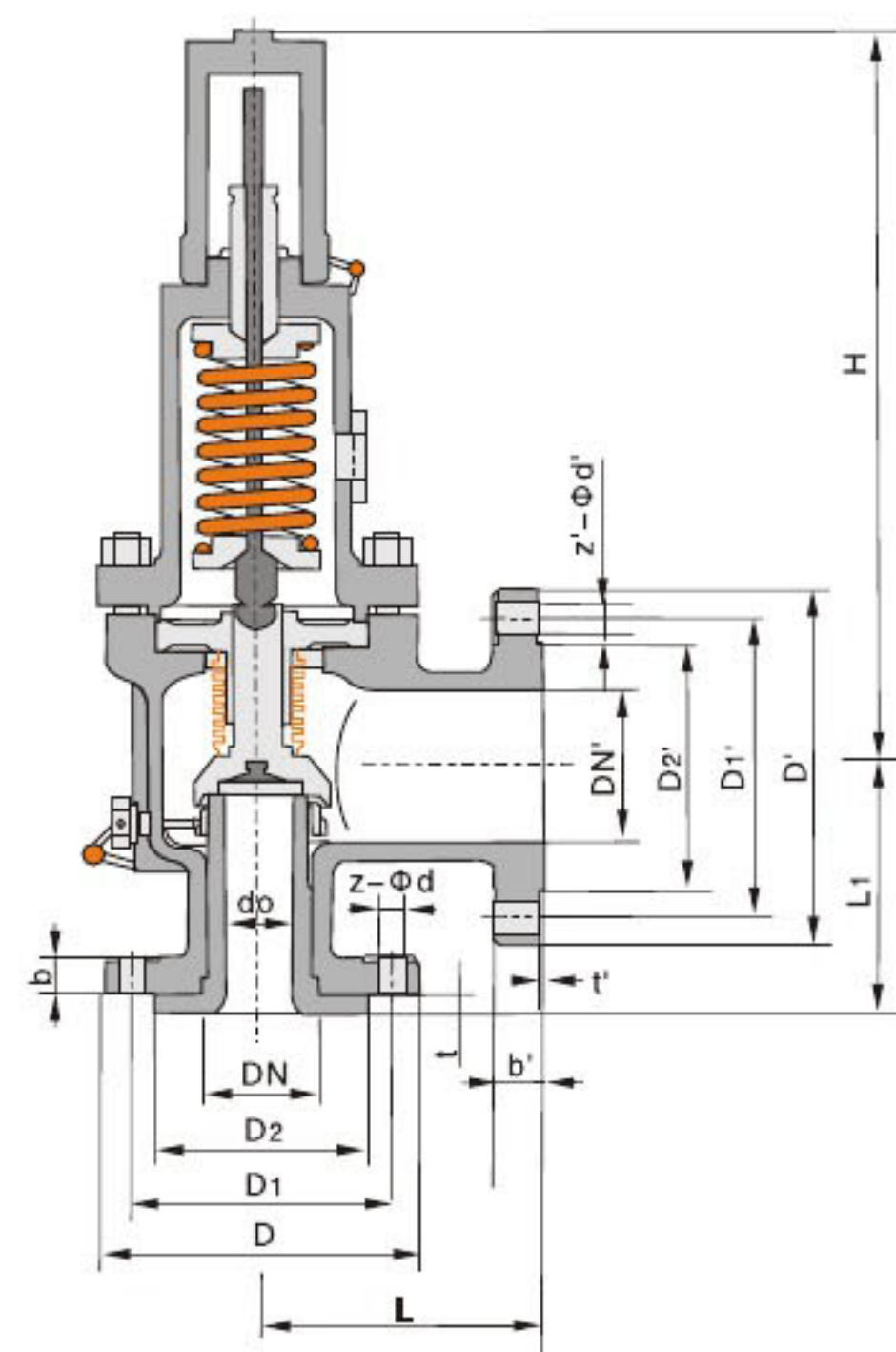
WA42C150P/R
WA42C300P/R
WA42C600P/R

主要性能规范 Main property and specification

	PN	150	300	600	900
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15	37.5
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10	10-25
密封压力 Seal pressure	Pm(MPa)	90% Pk			
回座压力 Reseat pressure	Ph(MPa)	≥90% Pk			
排放压力 Relieving pressure	Pp(MPa)	≤1.1 Pk			
开启高度 Lift height	H(mm)	≥ $\frac{1}{4}d_0$			
适用温度 Appropriate temperature	C	≤300°C			
	P、R	≤200°C			
适用介质 Appropriate medium	C	气体、液体 Gas, Liquid			
	P、R	硝酸、醋酸类、气体、液体 Nitric Acetic Acid, Gas, Liquid			

主喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
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	148



主要尺寸 Main Dimension

WA42C150、WA42C150P、WA42C150R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
$\frac{1}{2} \times \frac{3}{4}$ "	D	89	60.5	35	12	5	4-15	20	98	70	43	14	1.6	4-15	90	90	320
$\frac{3}{4} \times 1$ "	D	98	70	43	14	5	4-15	25	108	79.5	51	15	1.6	4-15	96	92	330
$1 \times 1\frac{1}{2}$ "	D	108	79.5	51	15	5	4-15	40	127	98.5	73	18	1.6	4-15	115	105	340
1×2 "	D	108	79.5	51	15	5	4-15	50	152	120.5	92	18	1.6	4-19	115	105	340
$1\frac{1}{2} \times 2$ "	G	127	98.5	73	18	5	4-15	50	152	120.5	92	18	1.6	4-19	121	124	360
$1\frac{1}{2} \times 2\frac{1}{2}$ "	G	127	98.5	73	18	5	4-15	65	178	139.5	105	20	1.6	4-19	121	124	380
$1\frac{1}{2} \times 3$ "	G	127	98.5	73	18	5	4-15	80	190	152.5	127	22	1.6	4-19	124	130	380
$2 \times 2\frac{1}{2}$ "	H	152	120.5	92	18	5	4-19	65	178	139.5	105	20	1.6	4-19	124	130	390
2×3 "	J	152	120.5	92	18	5	4-19	80	190	152.5	127	22	1.6	4-19	124	130	390
$2\frac{1}{2} \times 4$ "	J	178	139.5	105	20	5	4-19	100	229	190.5	157	24	1.6	8-19	143	137	390
3×4 "	L	190	152.5	127	22	5	4-19	100	229	190.5	157	24	1.6	8-19	162	156	460
4×6 "	N	229	190.5	157	24	10	8-19	150	279	241.5	216	26	1.6	8-22	210	197	540
6×8 "	P	279	241.5	216	26	10	8-22	200	343	298.5	270	29	1.6	8-22	241	240	780
8×10 "	R	343	298.5	270	29	10	8-22	250	406	362	324	31	1.6	12-25	279	276	820
12×14 "	T	483	432	381	32	10	12-25	350	533	476	413	35	1.6	12-29	370	360	890

WA42D 1/2" 1/4" 2" 1" 1.5" 2" 2.5" 3" 4" 6" 8" 10" 12"
 WA42 Type Pound -grade balance bellows spring loaded safety valve

WA42C300、WA42C300P、WA42C300R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1/2" x 3/4"	D	95	66.5	35	15	5	4-15	20	98	70	43	14	1.6	4-15	90	90	320
3/4" x 1"	D	117	82.5	43	16	5	4-19	25	108	79.5	51	15	1.6	4-15	96	92	330
1" x 1/2"	D	124	89	51	18	5	4-19	40	127	98.5	73	18	1.6	4-15	115	105	340
1" x 2"	D	124	89	51	18	5	4-19	50	152	120.5	92	18	1.6	4-19	115	105	340
1 1/2" x 2"	F	156	114.5	73	20	5	4-22	50	152	120.5	92	18	1.6	4-19	121	124	360
1 1/2" x 2 1/2"	F	156	114.5	73	20	5	4-22	65	178	139.5	105	20	1.6	4-19	121	124	380
1 1/2" x 3"	F	156	114.5	73	20	5	4-22	80	190	152.5	127	22	1.6	4-19	124	130	380
2" x 2 1/2"	H	165	127	92	22	5	8-19	65	178	139.5	105	20	1.6	4-19	124	130	390
2" x 3"	H	165	127	92	22	5	8-19	80	190	152.5	127	22	1.6	4-19	124	130	390
2 1/2" x 4"	J	190	149	105	24	5	8-22	100	229	190.5	157	24	1.6	8-19	143	137	390
3" x 4"	L	210	168.5	127	28	5	8-22	100	229	190.5	157	24	1.6	8-19	162	156	460
4" x 6"	N	254	200	157	32	10	8-22	150	279	241.5	216	26	1.6	8-22	210	197	540
6" x 8"	P	318	270	216	38	10	12-22	200	343	298.5	270	29	1.6	8-22	241	240	780
8" x 10"	R	381	330	270	42	10	12-25	250	406	362	324	31	1.6	12-25	279	276	820
10" x 12"	T	445	387.5	324	46	10	16-29	350	533	476	413	35	1.6	12-28	350	330	890

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

WA42C600、WA42C600P、WA42C600R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
3/4" x 1"	D	117	82.5	43	16	7	4-19	25	108	79.5	51	15	1.6	4-15	96	92	330
1" x 2"	D	124	89	51	19	7	4-19	50	152	120.5	92	18	1.6	4-19	115	105	340
1 1/2" x 2"	F	156	114.5	73	22	7	4-22	50	152	120.5	92	18	1.6	4-19	152	124	360
1 1/2" x 2 1/2"	F	156	114.5	73	22	7	4-22	65	178	139.5	105	20	1.6	4-19	152	124	380
1 1/2" x 3"	F	156	114.5	73	22	7	4-22	80	190	152.5	127	22	1.6	4-19	152	124	380
2" x 2 1/2"	H	165	127	92	26	7	8-19	65	178	139.5	105	20	1.6	4-19	162	154	390
2" x 3"	H	165	127	92	26	7	8-19	80	190	152.5	127	22	1.6	4-19	162	154	390
2 1/2" x 4"	K	190	149	100	29	7	8-22	100	229	190.5	157	24	1.6	8-19	143	165	390
3" x 4"	K	210	168	127	32	10	8-22	100	229	190.5	157	24	1.6	8-19	162	155	460
4" x 6"	N	273	216	157	38	10	8-25	150	279	241.5	216	26	1.6	8-22	210	200	540
6" x 8"	P	356	292	216	46	10	12-29	200	343	298.5	270	29	1.6	8-22	241	240	780

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A44C型磅级弹簧全启式安全阀
A44 Type Pound-grade Full lift spring loaded safety valve

■ 系列
Series

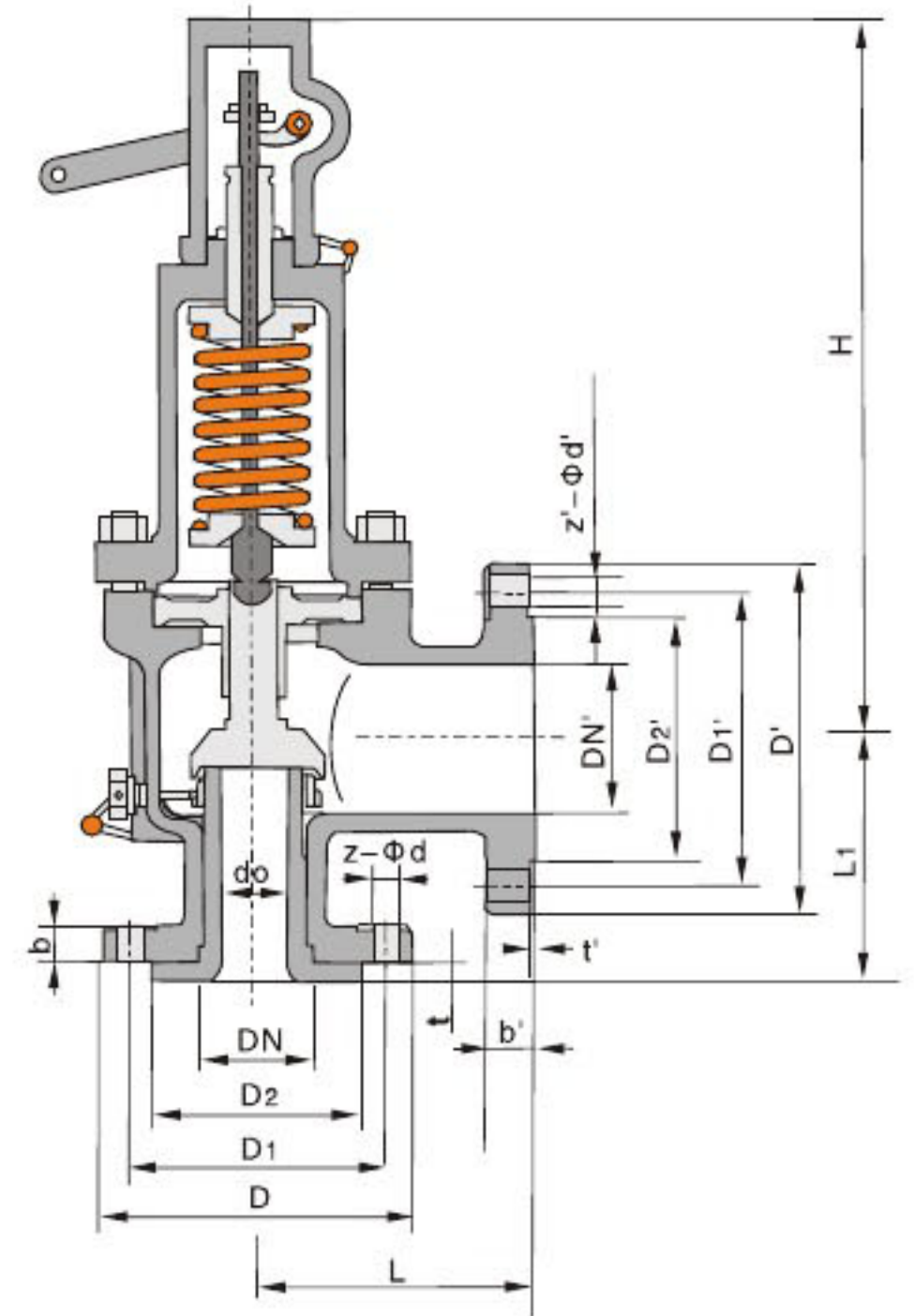
A44C150P/R
A44C300P/R
A44C600P/R

■ 主要性能规范 Main property and specification

公称压力 Normal Pressure	PN	150	300	600
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10
密封压力 Seal pressure	Pm(MPa)		90% Pk	
回座压力 Reseat pressure	Ph(MPa)		≥90% Pk	
排放压力 Relieving pressure	Pp(MPa)		≤1.1 Pk	
开启高度 Lift height	H(mm)		≥ $\frac{1}{4}d_0$	
适用温度 Appropriate temperature	C	≤300℃		
	P、R	≤200℃		
适用介质 Appropriate medium	C	气体、液体 Gas, Liquid		
	P、R	甲铵 Nedymium		

■ 主要喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
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	148



■ 主要尺寸 Main Dimension

A44C150																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
1/2" x 3/4"	D	89	60.5	35	12	5	4-15	20	98	70	43	14	1.6	4-15	90	90	260
3/4" x 1"	D	98	70	43	14	5	4-15	25	108	79.5	51	15	1.6	4-15	96	92	260
1" x 1 1/2"	D	108	79.5	51	15	5	4-15	40	127	98.5	73	18	1.6	4-15	115	105	280
1" x 2"	D	108	79.5	51	15	5	4-15	50	152	120.5	92	18	1.6	4-19	115	105	280
1 1/2" x 2"	G	127	98.5	73	18	5	4-15	50	152	120.5	92	18	1.6	4-19	121	124	310
1 1/2" x 2 1/2"	G	127	98.5	73	18	5	4-15	65	178	139.5	105	20	1.6	4-19	121	124	310
1 1/2" x 3"	G	127	98.5	73	18	5	4-15	80	190	152.5	127	22	1.6	4-19	124	130	310
2" x 2 1/2"	H	152	120.5	92	18	5	4-19	65	178	139.5	105	20	1.6	4-19	124	130	350
2" x 3"	J	152	120.5	92	18	5	4-19	80	190	152.5	127	22	1.6	4-19	124	130	350
2 1/2" x 4"	J	178	139.5	105	20	5	4-19	100	229	190.5	157	24	1.6	8-19	143	137	430
3" x 4"	L	190	152.5	127	22	5	4-19	100	229	190.5	157	24	1.6	8-19	162	156	490
4" x 6"	N	229	190.5	157	24	10	8-19	150	279	241.5	216	26	1.6	8-22	210	197	610
6" x 8"	P	279	241.5	216	26	10	8-22	200	343	298.5	270	29	1.6	8-22	241	240	840
8" x 10"	R	343	298.5	270	29	10	8-22	250	406	362	324	31	1.6	12-25	279	276	990
12" x 14"	T	483	432	381	32	10	12-25	350	533	476	413	35	1.6	12-29	370	360	1040

A44C型磅级弹簧全启式安全阀
A44 Type Pound-grade Full lift spring loaded safety valve

A44C300、A44C300R																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1/2"×3/4"	D	95	66.5	35	15	5	4-15	20	98	70	43	14	1.6	4-15	90	90	260
3/4"×1"	D	117	82.5	43	16	5	4-19	25	108	79.5	51	15	1.6	4-15	96	92	260
1"×1/2"	D	124	89	51	18	5	4-19	40	127	98.5	73	18	1.6	4-15	115	105	280
1"×2"	D	124	89	51	18	5	4-19	50	152	120.5	92	18	1.6	4-19	115	105	295
1 1/2"×2"	F	156	114.5	73	20	5	4-22	50	152	120.5	92	18	1.6	4-19	121	124	310
1 1/2"×2 1/2"	F	156	114.5	73	20	5	4-22	65	178	139.5	105	20	1.6	4-19	121	124	310
1 1/2"×3"	F	156	114.5	73	20	5	4-22	80	190	152.5	127	22	1.6	4-19	124	130	310
2"×2 1/2"	H	165	127	92	22	5	8-19	65	178	139.5	105	20	1.6	4-19	124	130	350
2"×3"	H	165	127	92	22	5	8-19	80	190	152.5	127	22	1.6	4-19	124	130	350
2 1/2"×4"	J	190	149	105	24	5	8-22	100	229	190.5	157	24	1.6	8-19	143	137	430
3"×4"	L	210	168.5	127	28	5	8-22	100	229	190.5	157	24	1.6	8-19	162	156	490
4"×6"	N	254	200	157	32	10	8-22	150	279	241.5	216	26	1.6	8-22	210	197	610
6"×8"	P	318	270	216	38	10	12-22	200	343	298.5	270	29	1.6	8-22	241	240	840
8"×10"	R	381	330	270	42	10	12-25	250	406	362	324	31	1.6	12-25	279	276	990
10"×12"	T	445	387.5	324	46	10	16-28	350	533	476	413	35	1.6	12-28	350	330	1040

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A44C600																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
3/4"×1"	D	118	82.5	43	16	7	4-19	25	108	79.5	51	15	1.6	4-15	96	92	280
1"×2"	D	124	89	51	19	7	4-19	50	152	120.5	92	18	1.6	4-19	115	105	300
1 1/2"×2"	F	156	114.5	73	22	7	4-22	50	152	120.5	92	18	1.6	4-19	152	124	300
1 1/2"×2 1/2"	F	156	114.5	73	22	7	4-22	65	178	139.5	105	20	1.6	4-19	152	124	330
1 1/2"×3"	F	156	114.5	73	22	7	4-22	80	190	152.5	127	22	1.6	4-19	152	124	330
2"×2 1/2"	H	165	127	92	26	7	8-19	65	178	139.5	105	20	1.6	4-19	162	154	330
2"×3"	H	165	127	92	26	7	8-19	80	190	152.5	127	22	1.6	4-19	162	154	360
2 1/2"×4"	K	190	149	100	29	7	8-22	100	229	190.5	157	24	1.6	8-19	143	165	360
3"×4"	K	210	168	127	32	10	8-22	100	229	190.5	157	24	1.6	8-19	162	155	440
4"×6"	N	273	216	157	38	10	8-25	150	279	241.5	216	26	1.6	8-22	210	200	610
6"×8"	P	292	292	216	46	10	12-29	200	343	298.5	270	29	1.6	8-22	241	240	625

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

WA44C型磅级波纹管平衡式弹簧安全阀

WA44C Type Pound-grade balance bellows spring loaded safety valve

系列 Series

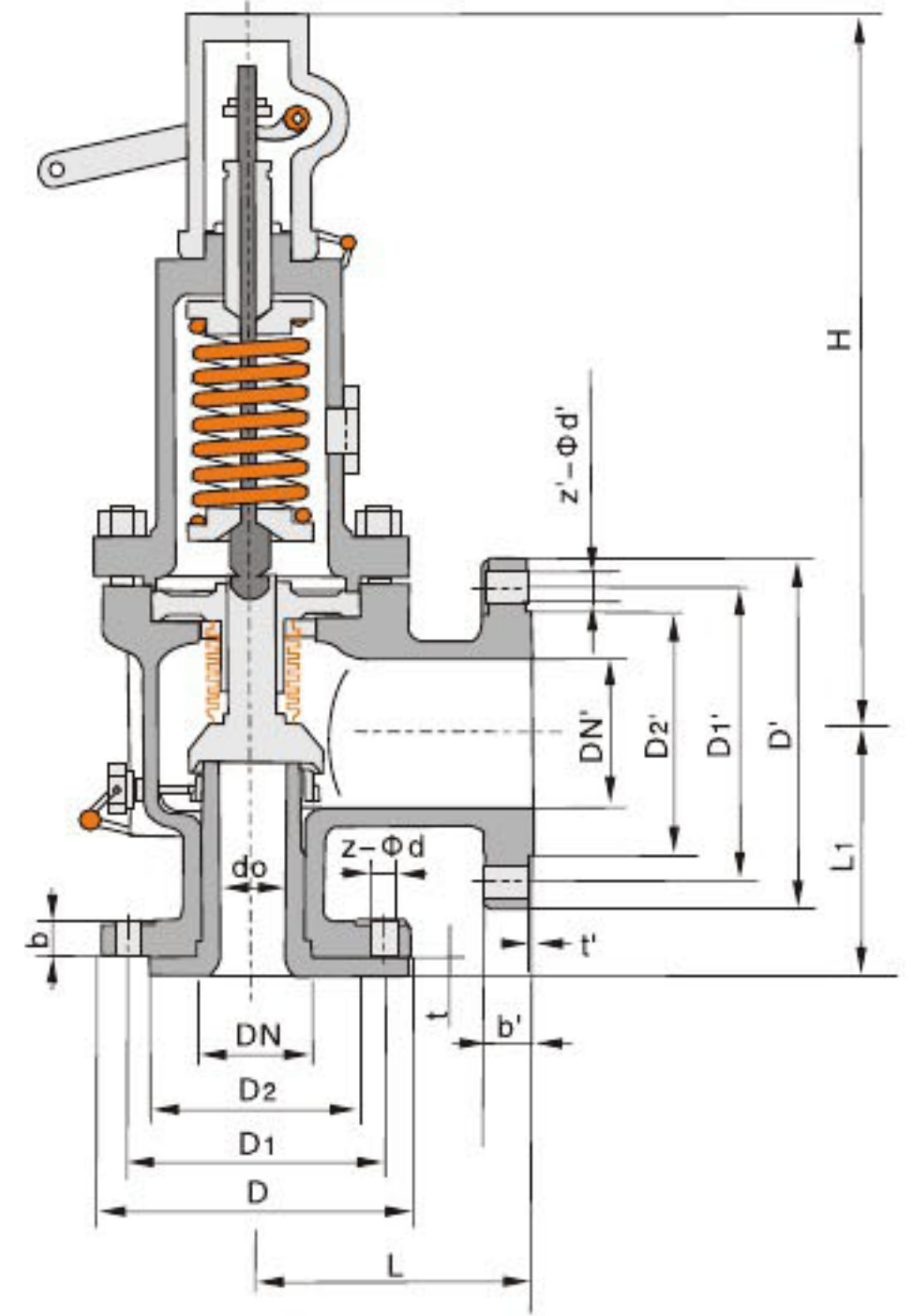
WA44C150P/R
WA44C300P/R
WA44C600P/R
WA44C900P/R

主要性能规范 Main property and specification

公称压力 Normal Pressure	PN	150	300	600	900
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15	22.5
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10	8-15
密封压力 Seal pressure	Pm(MPa)	90% Pk			
回座压力 Reseat pressure	Ph(MPa)	≥90% Pk			
排放压力 Relieving pressure	Pp(MPa)	≤1.1 Pk			
开启高度 Lift height	H(mm)	≥ $\frac{1}{4}d_0$			
适用温度 Appropriate temperature	C	≤300°C			
	P、R	≤200°C			
适用介质 Appropriate medium	C	气体、液体 Gas, Liquid			
	P、R	硝酸、醋酸类、气体、液体 Nitric Acetic Acid, Gas, Liquid			

主要喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
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	148



主要尺寸 Main Dimension

WA44C150、WA44C150P、WA44C150R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
1/2" × 3/4"	D	89	60.5	35	12	5	4-15	20	98	70	43	14	1.6	4-15	90	90	340
3/4" × 1"	D	98	70	43	14	5	4-15	25	108	79.5	51	15	1.6	4-15	96	92	350
1" × 1 1/2"	D	108	79.5	51	15	5	4-15	40	127	98.5	73	18	1.6	4-15	115	105	360
1" × 2"	D	108	79.5	51	15	5	4-15	50	152	120.5	92	18	1.6	4-19	115	105	360
1 1/2" × 2"	G	127	98.5	73	18	5	4-15	50	152	120.5	92	18	1.6	4-19	121	124	380
1 1/2" × 2 1/2"	G	127	98.5	73	18	5	4-15	65	178	139.5	105	20	1.6	4-19	121	124	390
1 1/2" × 3"	G	127	98.5	73	18	5	4-15	80	190	152.5	127	22	1.6	4-19	124	130	390
2" × 2 1/2"	H	152	120.5	92	18	5	4-19	65	178	139.5	105	20	1.6	4-19	124	130	410
2" × 3"	J	152	120.5	92	18	5	4-19	80	190	152.5	127	22	1.6	4-19	124	130	410
2 1/2" × 4"	J	178	139.5	105	20	5	4-19	100	229	190.5	157	24	1.6	8-19	143	137	410
3" × 4"	L	190	152.5	127	22	5	4-19	100	229	190.5	157	24	1.6	8-19	162	156	480
4" × 6"	N	229	190.5	157	24	10	8-19	150	279	241.5	216	26	1.6	8-22	210	181	560
6" × 8"	P	279	241.5	216	26	10	8-22	200	343	298.5	270	29	1.6	8-22	241	240	790
8" × 10"	R	343	298.5	270	29	10	8-22	250	406	362	324	31	1.6	12-25	279	276	840
12" × 14"	T	483	432	381	32	10	12-25	350	533	476	413	35	1.6	12-28	370	360	920

WA44C型磅级波纹管平衡式弹簧安全阀
WA44C Type Pound-grade balance bellows spring loaded safety valve

WA44C300、WA44C300P、WA44C300R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1/2" x 3/4"	D	95	66.5	35	15	5	4-15	20	98	70	43	14	1.6	4-15	90	90	340
3/4" x 1"	D	117	82.5	43	16	5	4-19	25	108	79.5	51	15	1.6	4-15	96	92	350
1" x 1/2"	D	124	89	51	18	5	4-19	40	127	98.5	73	18	1.6	4-15	115	105	360
1" x 2"	D	124	89	51	18	5	4-19	50	152	120.5	92	18	1.6	4-19	115	105	360
1 1/2" x 2"	F	156	114.5	73	20	5	4-22	50	152	120.5	92	18	1.6	4-19	121	124	380
1 1/2" x 2 1/2"	F	156	114.5	73	20	5	4-22	65	178	139.5	105	20	1.6	4-19	121	124	390
1 1/2" x 3"	F	156	114.5	73	20	5	4-22	80	190	152.5	127	22	1.6	4-19	124	130	390
2" x 2 1/2"	H	165	127	92	22	5	8-19	65	178	139.5	105	20	1.6	4-19	124	130	410
2" x 3"	H	165	127	92	22	5	8-19	80	190	152.5	127	22	1.6	4-19	124	130	410
2 1/2" x 4"	J	190	149.5	105	24	5	8-22	100	229	190.5	157	24	1.6	8-19	143	137	420
3" x 4"	L	210	168	127	28	5	8-22	100	229	190.5	157	24	1.6	8-19	162	156	480
4" x 6"	N	254	200	157	32	10	8-22	150	279	241.5	216	26	1.6	8-22	210	197	560
6" x 8"	P	318	270	216	38	10	12-22	200	343	298.5	270	29	1.6	8-22	241	240	790
8" x 10"	R	381	330	270	42	10	12-25	250	406	362	324	31	1.6	12-25	279	276	840

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

WA44C600、WA44C600P、WA44C600R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
3/4" x 1"	D	118	82.5	43	16	7	4-19	25	108	79.5	51	15	1.6	4-15	96	92	360
1" x 2"	D	124	89	51	19	7	4-19	50	152	120.5	92	18	1.6	4-19	115	105	370
1 1/2" x 2"	F	156	114.5	73	22	7	4-22	50	152	120.5	92	18	1.6	4-19	152	124	370
1 1/2" x 2 1/2"	F	156	114.5	73	22	7	4-22	65	178	139.5	105	20	1.6	4-19	152	124	390
1 1/2" x 3"	F	156	114.5	73	22	7	4-22	80	190	152.5	127	22	1.6	4-19	152	124	400
2" x 2 1/2"	H	165	127	92	26	7	8-19	65	178	139.5	105	20	1.6	4-19	162	154	400
2" x 3"	H	165	127	92	26	7	8-19	80	190	152.5	127	22	1.6	4-19	162	154	420
2 1/2" x 4"	K	190	149	100	29	7	8-22	100	229	190.5	157	24	1.6	8-19	143	165	420
3" x 4"	K	210	168	127	32	10	8-22	100	229	190.5	157	24	1.6	8-19	162	155	480
4" x 6"	N	273	216	157	38	10	8-25	150	279	241.5	216	26	1.6	8-22	210	200	560
6" x 8"	P	356	292	216	46	10	12-29	200	343	298.5	270	29	1.6	8-22	241	240	790

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

WA44C900、WA44C900P、WA44C900R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1 1/2" x 2"	F	178	123.8	73	32	10	4-29	50	152	120.5	92	18	1.6	4-19	165	124	380
2" x 3"	H	216	165.1	92	38	10	8-26	80	190	152.5	129	22	1.6	4-19	162	154	420
3" x 4"	J	241	190.5	127	38	10	8-26	100	229	190.5	157	24	1.6	8-19	181	184	480
4" x 6"	K	292	234.9	157	44	12	8-32	150	279	241.5	216	26	1.6	8-22	222	197	560

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A48C型磅级弹簧全启式安全阀 A48C Type Pound-grade low lift spring loaded safety valve

系列 Series

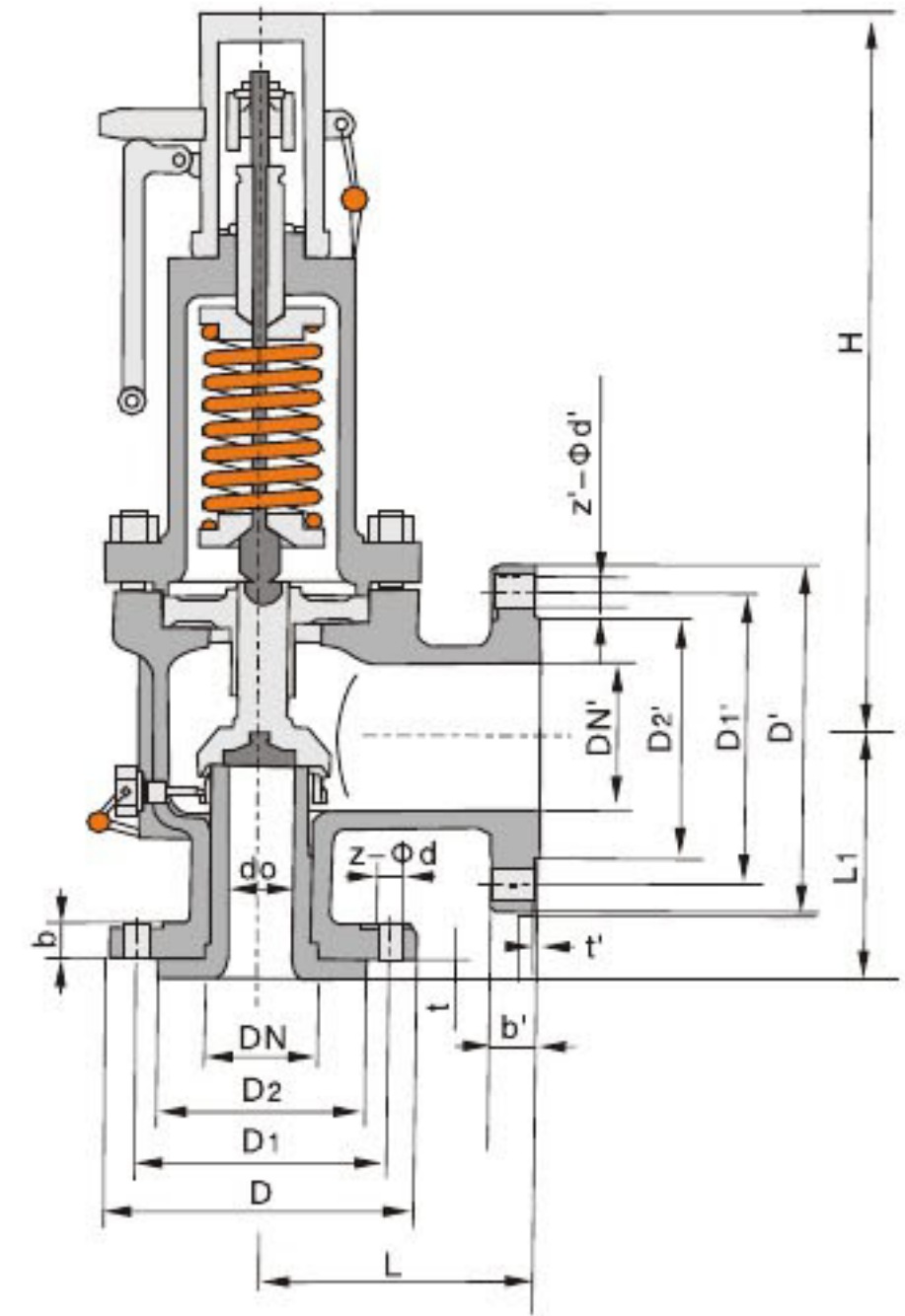
A48C150P/R
A48C300P/R
A48C600P/R

主要性能规范 Main property and specification

公称压力 Normal Pressure	PN	150	300	600
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10
密封压力 Seal pressure	Pm(MPa)		90% Pk	
回座压力 Reseat pressure	Ph(MPa)		≥90% Pk	
排放压力 Relieving pressure	Pp(MPa)		≤1.03 Pk	
开启高度 Lift height	H(mm)		≥ $\frac{1}{4}d_0$	
适用温度 Appropriate temperature			≤350℃	
适用介质 Appropriate medium			蒸汽 Steam	

主要喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
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	148



主要尺寸 Main Dimension

A48C150																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
1/2" x 3/4"	D	89	60.5	35	12	5	4-15	20	98	70	43	14	1.6	4-15	90	90	290
3/4" x 1"	D	98	70	43	14	5	4-15	25	108	79.5	51	15	1.6	4-15	96	92	310
1" x 1 1/2"	D	108	79.5	51	15	5	4-15	40	127	98.5	73	18	1.6	4-15	115	105	320
1" x 2"	D	108	79.5	51	15	5	4-15	50	152	120.5	92	18	1.6	4-19	115	105	320
1 1/2" x 2"	G	127	98.5	73	18	5	4-15	50	152	120.5	92	18	1.6	4-19	121	124	350
1 1/2" x 2 1/2"	G	127	98.5	73	18	5	4-15	65	178	139.5	105	20	1.6	4-19	121	124	360
1 1/2" x 3"	G	127	98.5	73	18	5	4-15	80	190	152.5	127	22	1.6	4-19	124	130	360
2" x 2 1/2"	H	152	120.5	92	18	5	4-19	65	178	139.5	105	20	1.6	4-19	124	130	380
2" x 3"	J	152	120.5	92	18	5	4-19	80	190	152.5	127	22	1.6	4-19	124	130	380
2 1/2" x 4"	J	178	139.5	105	20	5	4-19	100	229	190.5	157	24	1.6	8-19	143	137	380
3" x 4"	L	190	152.5	127	22	5	4-19	100	229	190.5	157	24	1.6	8-19	162	156	480
4" x 6"	N	229	190.5	157	24	10	8-19	150	279	241.5	216	26	1.6	8-22	210	197	540
6" x 8"	P	279	241.5	216	26	10	8-22	200	343	298.5	270	29	1.6	8-22	241	240	760
8" x 10"	R	343	298.5	270	29	10	8-22	250	406	362	324	31	1.6	12-25	279	276	830
12" x 14"	T	483	432	381	32	10	12-25	350	533	476	413	35	1.6	12-29	370	360	890

A48C型磅级弹簧全启式安全阀
A48C Type Pound-grade low lift spring loaded safety valve

A48C300																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
1/2"×3/4"	D	95	66.5	35	15	5	4-15	20	98	70	43	14	1.6	4-15	90	90	290
3/4"×1"	D	117	82.5	43	16	5	4-19	25	108	79.5	51	15	1.6	4-15	96	92	310
1"×1/2"	D	124	89	51	18	5	4-19	40	127	98.5	73	18	1.6	4-15	115	105	320
1"×2"	D	124	89	51	18	5	4-19	50	152	120.5	92	18	1.6	4-19	115	105	320
1 1/2"×2"	F	156	114.5	73	20	5	4-22	50	152	120.5	92	18	1.6	4-19	121	124	350
1 1/2"×2 1/2"	F	156	114.5	73	20	5	4-22	65	178	139.5	105	20	1.6	4-19	121	124	360
1 1/2"×3"	F	156	114.5	73	20	5	4-22	80	190	152.5	127	22	1.6	4-19	124	130	360
2"×2 1/2"	H	165	127	92	22	5	8-19	65	178	139.5	105	20	1.6	4-19	124	130	380
2"×3"	H	165	127	92	22	5	8-19	80	190	152.5	127	22	1.6	4-19	124	130	380
2 1/2"×4"	J	190	149.5	105	24	5	8-22	100	229	190.5	157	24	1.6	8-19	143	137	380
3"×4"	L	210	168	127	28	5	8-22	100	229	190.5	157	24	1.6	8-19	162	156	480
4"×6"	N	254	200	157	32	10	8-22	150	279	241.5	216	26	1.6	8-22	210	197	540
6"×8"	P	318	270	216	38	10	12-22	200	343	298.5	270	29	1.6	8-22	241	240	760
8"×10"	R	381	330	270	42	10	12-25	250	406	362	324	31	1.6	12-25	279	276	830

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A48C600																	
公称压力 Nominal Diameter DN(in)	尺 寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-Φd	DN'	D'	D1'	D2'	b'	t'	Z-Φd'	L	L1	H
3/4"×1"	D	117	82.5	43	16	7	4-19	25	108	79.5	51	15	1.6	4-15	96	92	230
1"×2"	D	124	89	51	19	7	4-19	50	152	120.5	92	18	1.6	4-19	115	105	320
1 1/2"×2"	F	156	114.5	73	22	7	4-22	50	152	120.5	92	18	1.6	4-19	152	124	360
1 1/2"×2 1/2"	F	156	114.5	73	22	7	4-22	65	178	139.5	105	20	1.6	4-19	152	124	380
1 1/2"×3"	F	156	114.5	73	22	7	4-22	80	190	152.5	127	22	1.6	4-19	152	124	380
2"×2 1/2"	H	165	127	92	26	7	8-19	65	178	139.5	105	20	1.6	4-19	162	154	410
2"×3"	H	165	127	92	26	7	8-19	80	190	152.5	127	22	1.6	4-19	162	154	410
2 1/2"×4"	K	190	149	100	29	7	8-22	100	229	190.5	157	24	1.6	8-19	143	165	410
3"×4"	K	210	168	127	32	10	8-22	100	229	190.5	157	24	1.6	8-19	162	155	480
4"×6"	N	273	216	157	38	10	8-25	150	279	241.5	216	26	1.6	8-22	210	200	540
6"×8"	P	356	292	216	46	10	12-29	200	343	298.5	270	29	1.6	8-22	241	240	760

注：出口法兰为150Lb。 Remark:150Lb for outlet flange.

A48SC型磅级弹簧全启式安全阀 A48SC Type Pound-grade low lift spring loaded safety valve

系列 Series

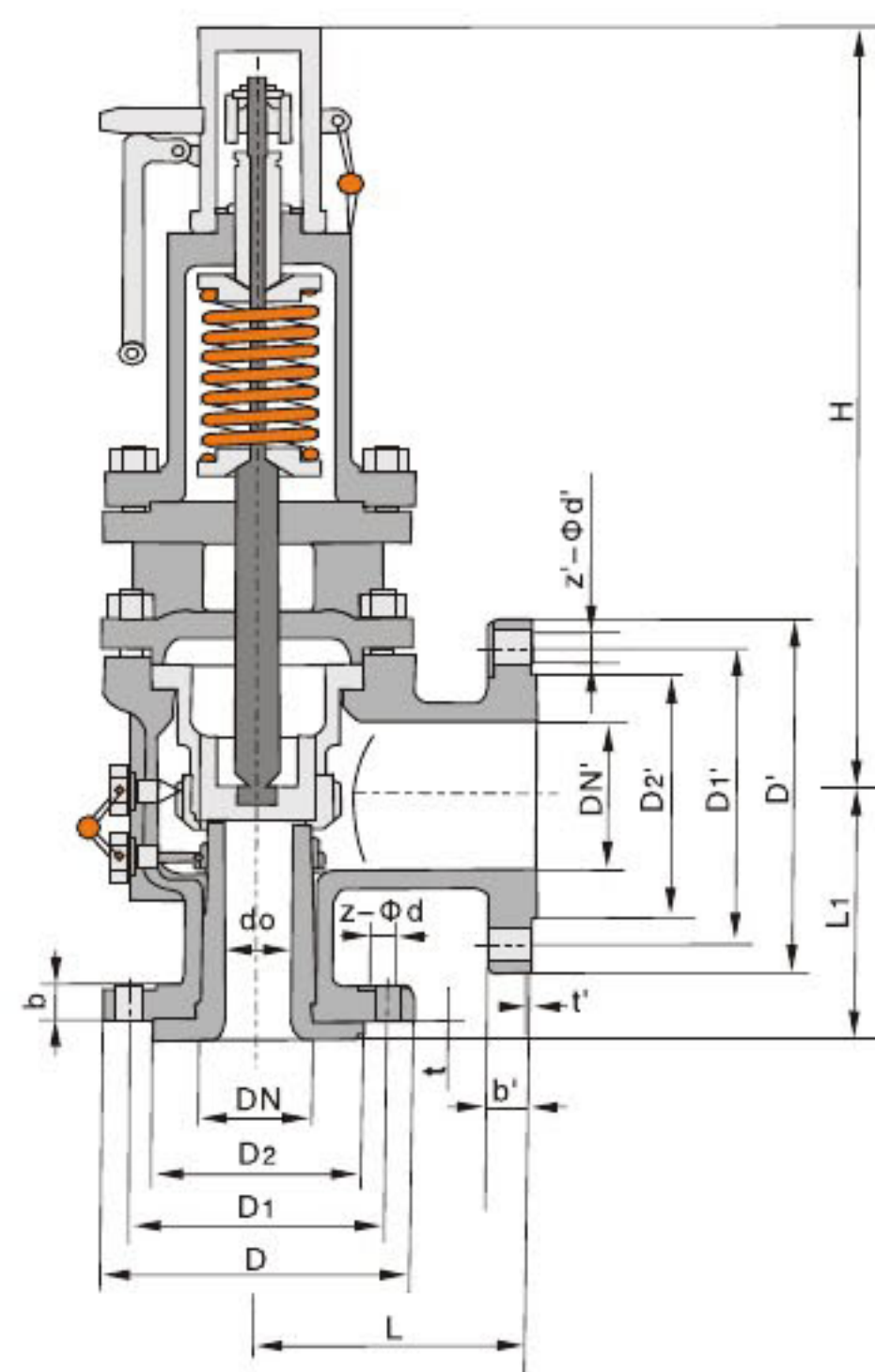
A48SC150 I/V A48SC300 I/V
A48SC600 I/V A48SC900 I/V
A48SC1500 I/V A48SC2500 I/V

主要性能规范 Main property and specification

公称压力 Normal Pressure	PN	150	300	600	900	1500	2500
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15	22.5	38	63
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10	8-15	10-25	16-40
密封压力 Seal pressure	Pm	90% Pk					
回座压力 Reseat pressure	Ph	≥90% Pk					
排放压力 Relieving pressure	Pp	≤1.03 Pk					
开启高度 Lift height	H(mm)	≥ $\frac{1}{4}d_0$					
适用温度 Appropriate temperature	C	≤420℃					
	I	≤500℃					
	V	≤540℃					
适用介质 Appropriate medium	蒸汽 Steam						

主要喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
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	148



主要尺寸 Main Dimension

A48SC150, A48SC150I, A48SC150V																		
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																	
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H	
$\frac{1}{2} \times \frac{3}{4}$ "	D	89	60.5	35	12	5	4-15	20	98	70	43	14	1.6	4-15	90	90	380	
$\frac{3}{4} \times 1$ "	D	98	70	43	14	5	4-15	25	108	79.5	51	15	1.6	4-15	96	92	390	
$1 \times 1\frac{1}{2}$ "	D	108	79.5	51	15	5	4-15	40	127	98.5	73	18	1.6	4-15	115	105	395	
1×2 "	D	108	79.5	51	15	5	4-15	50	152	120.5	92	18	1.6	4-19	115	105	395	
$1\frac{1}{2} \times 2$ "	G	127	98.5	73	18	5	4-15	50	152	120.5	92	18	1.6	4-19	121	124	420	
$1\frac{1}{2} \times 2\frac{1}{2}$ "	G	127	98.5	73	18	5	4-15	65	178	139.5	105	20	1.6	4-19	121	124	420	
$1\frac{1}{2} \times 3$ "	G	127	98.5	73	18	5	4-15	80	190	152.5	127	22	1.6	4-19	124	130	430	
$2 \times 2\frac{1}{2}$ "	H	152	120.5	92	18	5	4-19	65	178	139.5	105	20	1.6	4-19	124	130	460	
2×3 "	J	152	120.5	92	18	5	4-19	80	190	152.5	127	22	1.6	4-19	124	130	460	
$2\frac{1}{2} \times 4$ "	J	178	139.5	105	20	5	4-19	100	229	190.5	157	24	1.6	8-19	143	137	480	
3×4 "	L	190	152.5	127	22	5	4-19	100	229	190.5	157	24	1.6	8-19	162	156	430	
4×6 "	N	229	190.5	157	24	10	8-19	150	279	241.5	216	26	1.6	8-22	210	197	610	
6×8 "	P	279	241.5	216	26	10	8-22	200	343	298.5	270	29	1.6	8-22	241	240	780	
8×10 "	R	343	298.5	270	29	10	8-22	250	406	362	324	31	1.6	12-25	279	276	840	
12×14 "	T	483	432	381	32	10	12-25	350	533	476	413	35	1.6	12-28	370	360	980	

磅级波纹管平衡式弹簧安全阀
Pound-grade balance bellows spring loaded safety valve

系列
Series

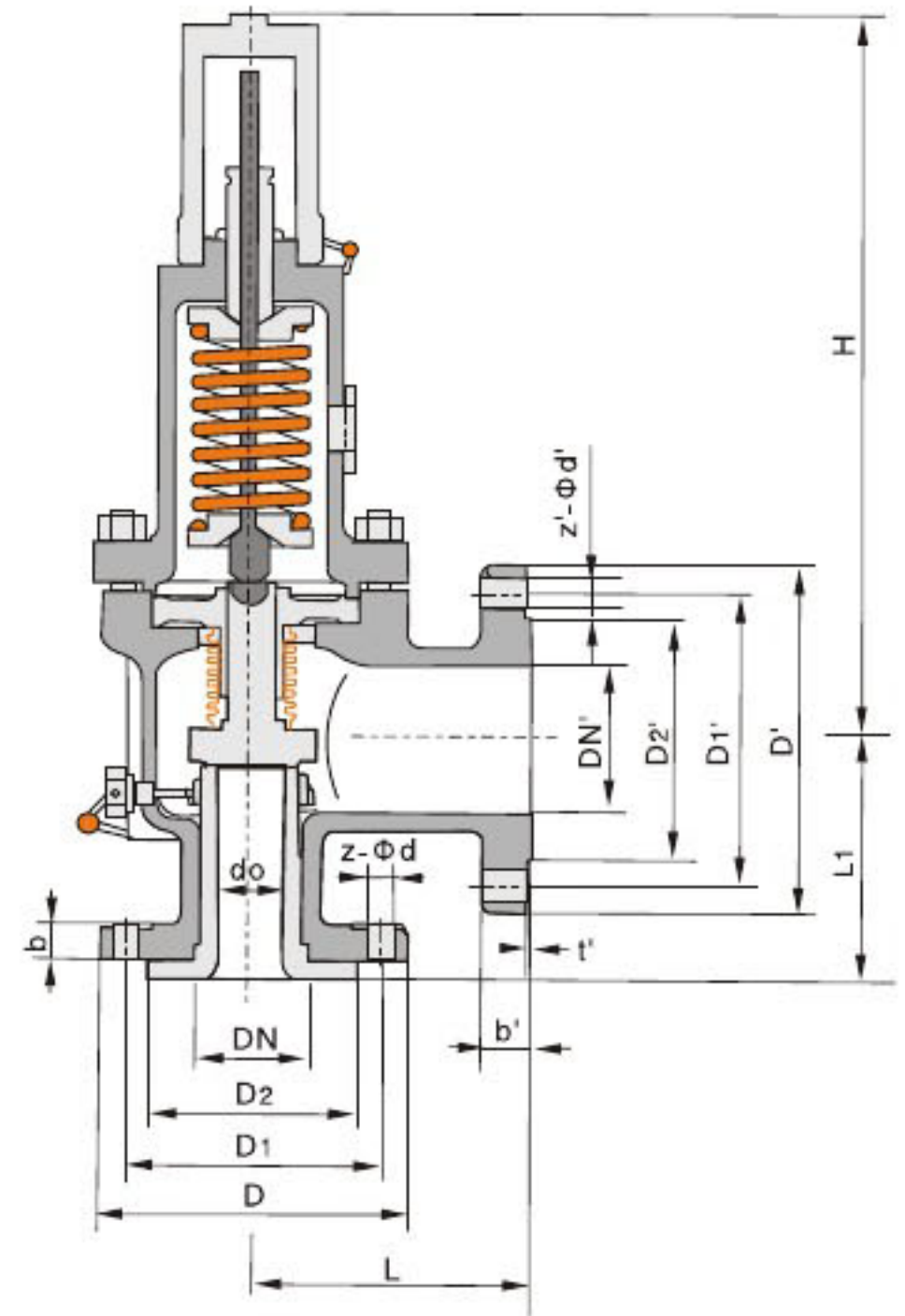
WA41C150P/R
WA41C300P/R
WA41C1500P/R

主要性能规范 Main property and specification

公称压力 Normal Pressure	PN	150	300	1500
壳体强度 Body strength	Ps(MPa)	3.0	7.5	37.5
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	10-25
密封压力 Seal pressure	Pm(MPa)		90% Pk	
回座压力 Reseat pressure	Ph(MPa)		≥90% Pk	
排放压力 Relieving pressure	Pp(MPa)		≤1.1 Pk	
开启高度 Lift height	H(mm)		≥1/20d0	
适用温度 Appropriate temperature		C	≤300℃	
		P、R	≤200℃	
适用介质 Appropriate medium		C	气体、液体 Gas, Liquid	
		P、R	硝酸、醋酸类、气体、液体 Nitric Acetic Acid, Gas, Liquid	

主要喉部直径代号 Code of throat diameter

代号 Code	直径 Diameter	代号 Code	直径 Diameter
D	10	L	48
E	13	M	55
F	16	N	60
G	20.5	P	72
H	26	Q	96
J	33	R	115
K	40	T	148



主要尺寸 Main Dimension

WA41C150、WA41C150P、WA41C150R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
1/2" x 1/2"	D	89	60.5	35	12	5	4-15	15	89	60.5	35	1.6	12	4-15	90	90	260
3/4" x 1"	D	98	70	43	14	5	4-15	25	108	79.5	51	1.6	15	4-15	96	92	280
1" x 1"	D	108	79.5	51	15	5	4-15	25	108	79.5	51	1.6	15	4-15	100	100	290
1" x 2"	E	108	79.5	51	15	5	4-15	50	152	120.5	92	1.6	18	4-19	115	105	290
1 1/2" x 1 1/2"	G	127	98.5	73	18	5	4-15	40	127	98.5	73	1.6	18	4-15	121	124	330
1 1/2" x 2"	G	127	98.5	73	18	5	4-15	50	152	120.5	92	1.6	18	4-19	121	124	330
2" x 3"	J	152	120.5	92	18	5	4-19	80	190	152.5	127	1.6	22	4-19	124	130	350

WA41C300、WA41C300P、WA41C300R																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
1/2" x 1/2"	D	95	66.5	35	15	6	4-15	15	89	60.5	35	1.6	12	4-15	90	90	320
3/4" x 1"	D	117	82.5	43	16	10	4-19	25	108	79.5	51	1.6	15	4-15	96	92	330
1" x 1"	D	124	89	51	18	6	4-19	25	108	79.5	51	1.6	15	4-15	100	100	350
1" x 2"	E	124	89	51	18	6	4-19	50	152	120.5	92	1.6	18	4-19	115	105	350
1 1/2" x 1 1/2"	G	156	114.5	73	20	9	4-22	40	127	98.5	73	1.6	18	4-15	121	124	370
1 1/2" x 2"	G	156	114.5	73	20	9	4-22	50	152	120.5	92	1.6	18	4-15	121	124	370
2" x 3"	J	165	127	92	22	8	8-19	80	190	152.5	127	1.6	22	4-19	124	130	390

WA41C1500																	
公称压力 Nominal Diameter DN(in)	尺寸 Dimension (mm)																
	do	D	D1	D2	b	t	Z-φd	DN'	D'	D1'	D2'	b'	t'	Z-φd'	L	L1	H
1" x 1"	D	150	101.6	51	29	10	4-26	25	124	89	51	1.6	1.8	4-19	125	125	360

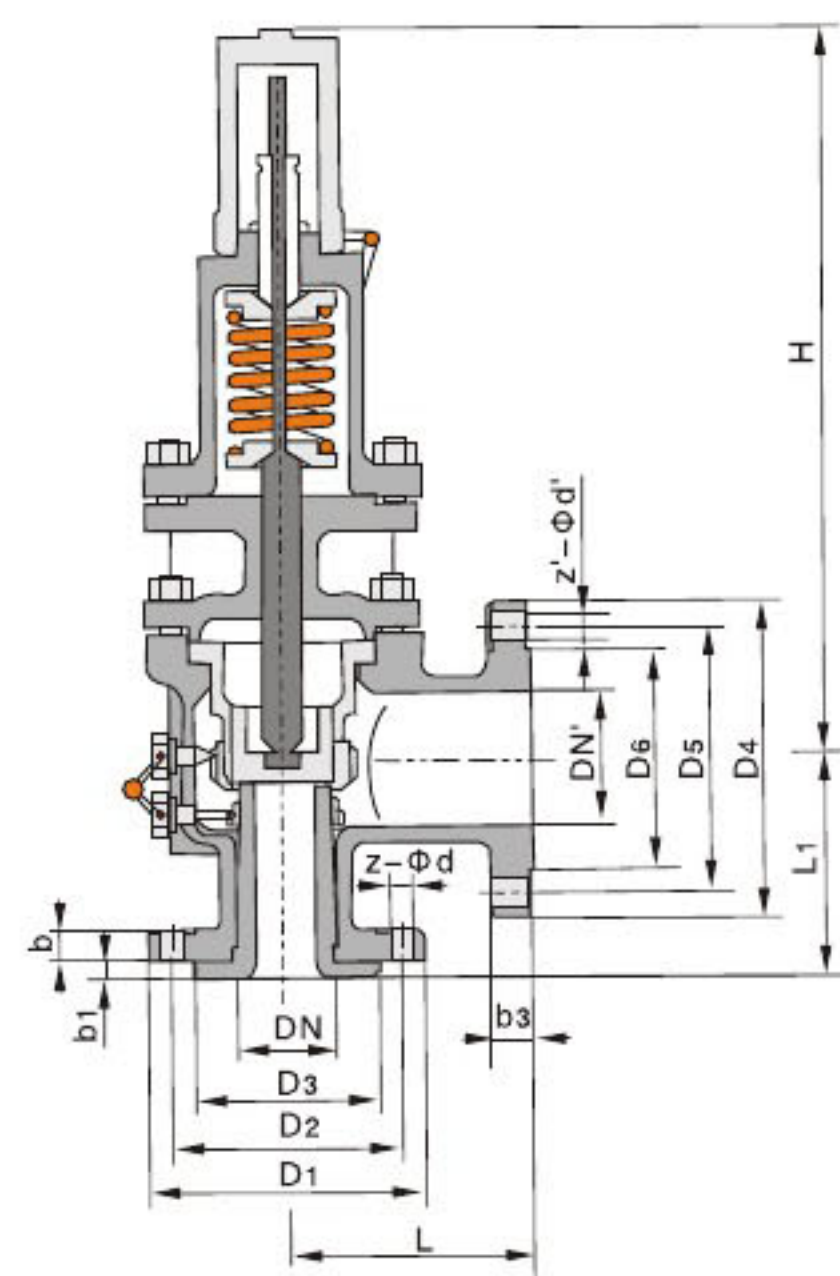
注：出口法兰为300Lb。 Remark: 300Lb for outlet flange.

系列
Series

TA、A

炼油专用安全阀系列 Special safety valve series for oil refining

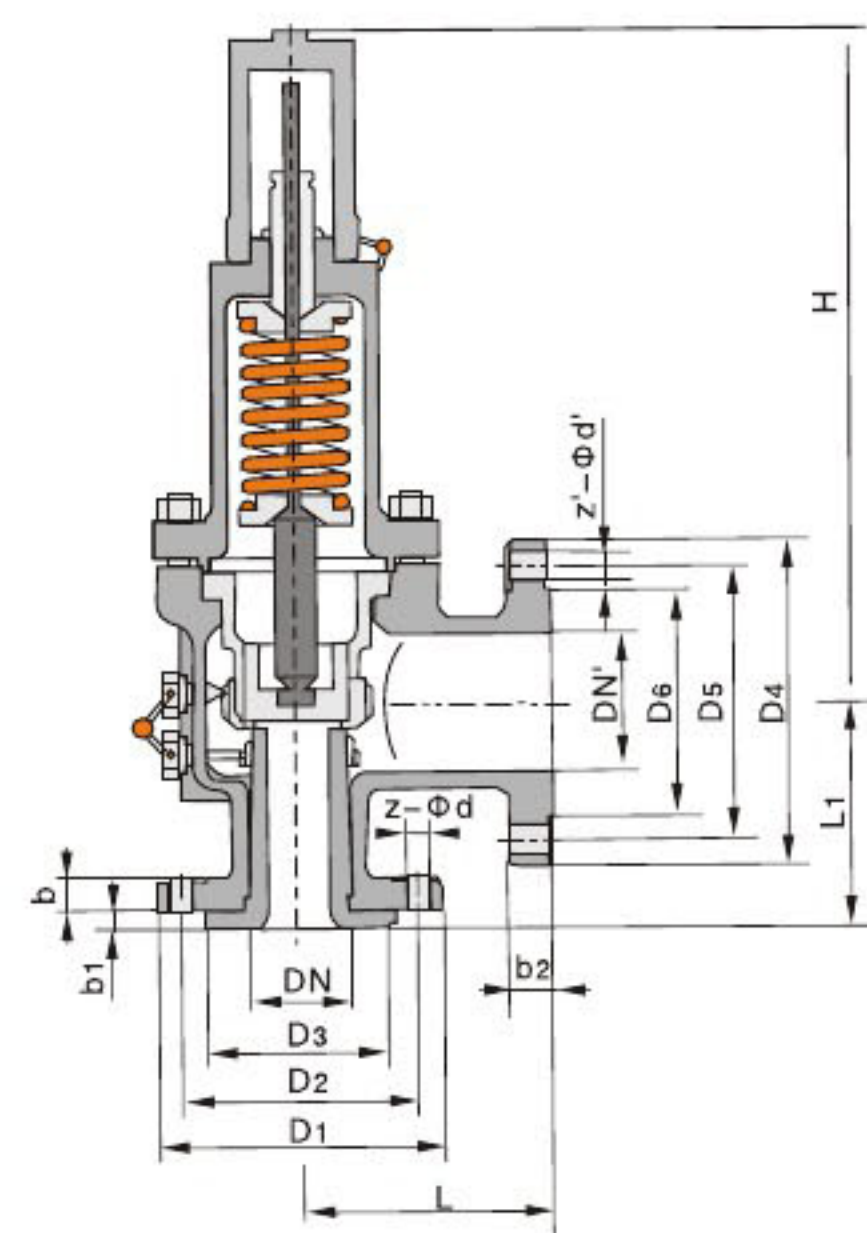
系列 Series	型号 Type	进口法兰 Inlet Flange		定压范围 Range of Constant pressure	配置喷嘴 Arrangement Of Nozzle		使用温度 Operating Temperature	
		公称通径 Normal Diameter	公称压力 Normal Pressure		代号 Letter	喉径 Throat Diameter		喉部面积 Throat Area
		mm	MPa			mm		cm ²
A型 Type	A1D40	25	4.0	0.03-4.2	D	10	0.78	-25~300
	A15F40	40	4.0	0.03-4.2	F	16	2.0	-25~300
	A2J16	50	1.6	0.03-<1.6	J	34	9.1	-25~300
	A2H40	50	4.0	1.6-4.2	H	26	5.3	-25~300
	A3L16	80	1.6	0.03-<1.6	L	50	19.6	-25~300
	A3K40	80	4.0	1.6-4.2	K	40	12.6	-25~300
	A4P16	100	1.6	0.03-<1.6	P	72	40.7	-25~300
	A4N40	100	4.0	1.6 < 4.2	N	60	28.3	-25~300
	A6R5.5	150	1.6	0.03-<0.55	R	115	104	-25~300
A6Q16	150	1.6	0.55-1.1	Q	95	71	-25~300	
A型 Type	TA1D40	25	4.0	0.03-4.2	D	10	0.78	> 300~550
	TA15F40	40	4.0	0.03-4.2	F	16	2.0	> 300~550
	TA2J16	50	1.6	0.03-<1.6	J	34	9.1	> 300~550
	TA2H40	50	4.0	1.6-4.2	H	26	5.3	> 300~550
	TA3L16	80	1.6	0.03-<1.6	L	50	19.6	> 300~550
	TA3K40	80	4.0	1.6-4.2	K	40	12.6	> 300~550
	TA4P16	100	1.6	0.03-<1.6	P	72	40.7	> 300~550
	TA4N40	100	4.0	1.6 < 4.2	N	60	28.3	> 300~550
	TA6R5.5	150	1.6	0.03-<0.55	R	115	104	> 300~550
TA6Q16	150	1.6	0.55-1.1	Q	95	71	> 300~550	



TA型弹簧安全阀

安全阀结构尺寸 Construction Dimension of valves

型号 Type	L	L1	D1	D2	D3	D4	D5	b1	b2	b3	z-φd	z'-φd'	H
mm													
A1D40	100	99	115	85	57	160	125	9	19	16	4-φ14	4-φ18	327
A1D40													424.5
A1.5F40	120	107	145	110	75	160	125	13	20	16	4-φ18	4-φ18	336
TA1.5F40													443.5
A2J16	150	139	160	125	92	195	160	14	22	20	4-φ18	8-φ18	409
TA2J16													539.5
A2H40	150	139	160	125	87	195	160	14	22	20	4-φ18	8-φ18	409
TA2H40													539.5
A3L16	160	147	195	160	133	215	180	12	22	20	8-φ18	8-φ18	487
TA3L16													652
A3K40	160	149	195	160	120	215	180	16	24	20	8-φ18	8-φ18	489
TA3K40													654
A4P16	200	176	215	180	153	280	240	13	22	24	8-φ18	8-φ23	596
TA4P16													789
A4N40	200	182.5	230	190	149	280	240	17.5	26	24	8-φ23	8-φ23	639.5
TA4N40													832.5
A6R5.5	230	228	280	240	195	335	295	18	24	26	8-φ23	8-φ23	757
TA6R5.5													976
A6Q16	230	228	280	240	189	335	295	18	24	26	8-φ23	8-φ23	775
TA6Q16													986



A型弹簧安全阀

■ 用途及特点Performance & Features:

1、适用于聚酯、乙烯、炼重油、尿素化肥等装置中，介质需保温的场合，起安全泄压作用。

2、对进口法兰及阀体都进行保温，保温效果好。

3、波纹管平衡结构，消除背压对安全阀开启压力的影响，并使弹簧等零件不易受到介质的侵蚀。

4、用材严格按用启介质、温度等情况选用。

1.Serviced for equipment of Polyester,Ethylene,refining asphalt oil and urea which need heat preservation and safety in pressure relief.

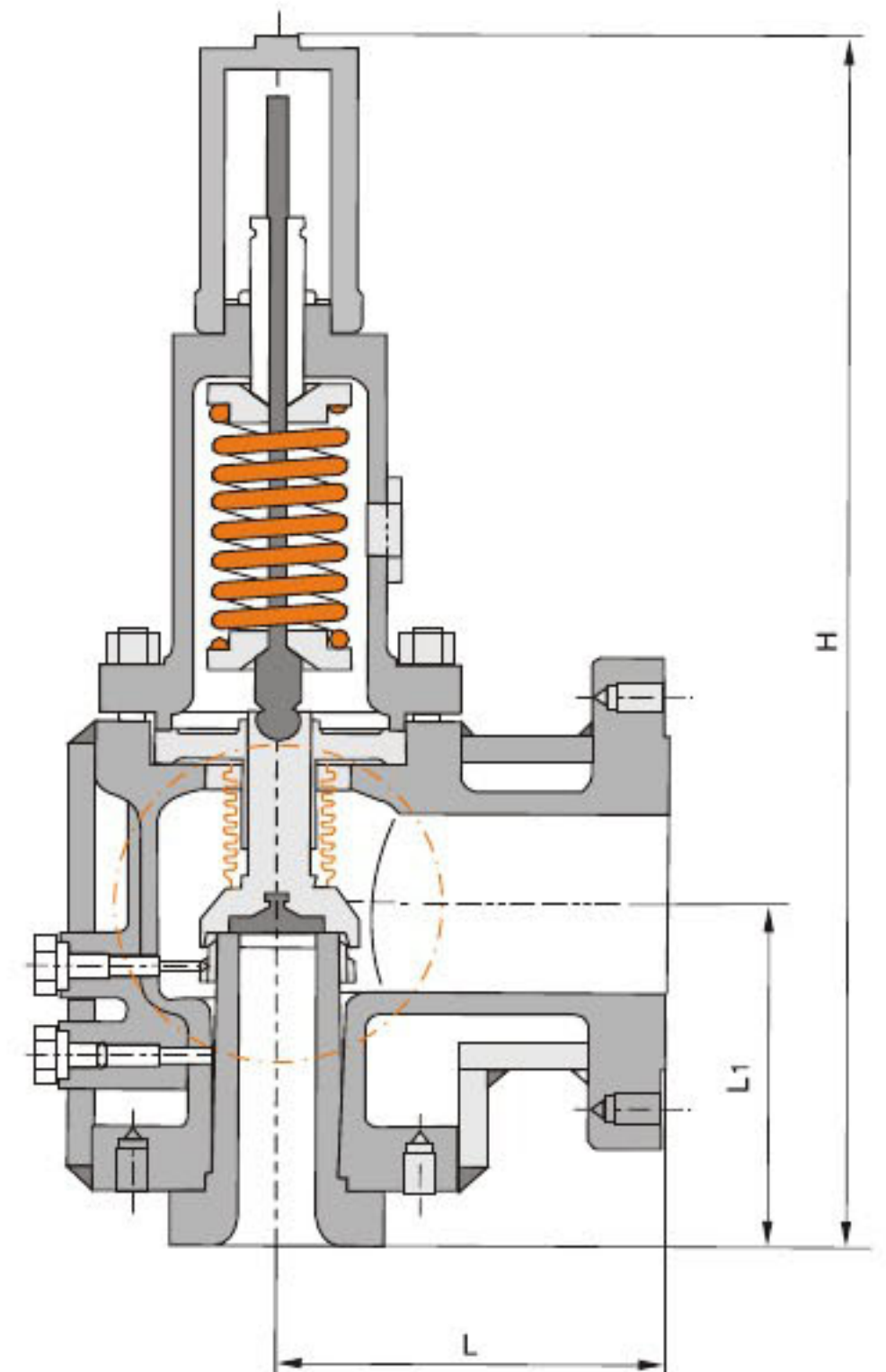
2.Heat preservation is for inlet and outlet flange and body and the effect is very well.

3.Balanced Bellows construction dispels influence of back pressure,prevent Spring and Parts from eroding.

4.Materials are strictly chosen as medium and temperature supplied by consumers.

■ 尺寸规格Dimension & Specification

进口X出口 InletXOutlet	结构尺寸 Construction dimension		
	L	L1	H
3/4" x 1 1/2"	130	124	420
1" x 2"(2 1/2")	134	125	440
1 1/2" x 2 1/2"(3")	150	140	560
2" x 3"	155	150	590
3" x 4"	185	170	740
4" x 6"	225	200	890
6" x 8"	256	240	1080
6" x 10"	282	269	1130
8" x 10"	310	280	1280



A46C型磅级先导式安全泄压阀 A46C type Pilot-operated pressure relief valve

系列 Series

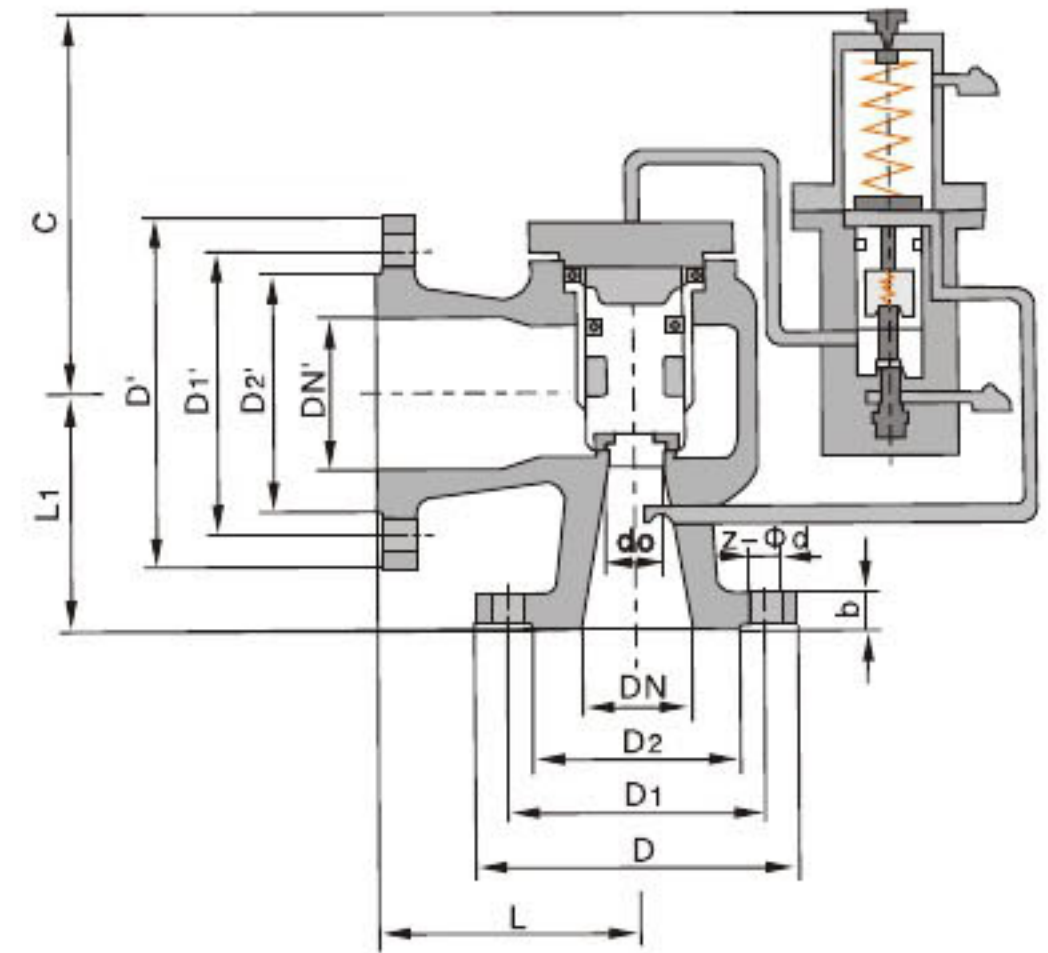
A46C150 A46C300
A46C600 A46C900
A46C1500

主要性能规范Main property and specification

公称压力 Normal Pressure	PN	150	300	600	900	1500
壳体强度 Body strength	Ps(MPa)	3.0	7.5	15	22.5	37.5
整定压力 Set pressure	Pk(MPa)	0.1-2	1.6-5	3.2-10	8-15	10-25
密封压力 Seal pressure	Pm	90% Pk				
回座压力 Reseat pressure	Ph	≥90% Pk				
排放压力 Relieving pressure	Pp	≤1.1 Pk				
开启高度 Lift height	H(mm)	≥ $\frac{1}{4}d_0$				
适用温度 Appropriate temperature		≤250°C				
适用介质 Appropriate medium		空气、水、油品、蒸气、腐蚀性介质 Air, oil, Steam, Water, Corrosive medium				

主喉部直径代号Code of throat diameter

代号Code	直径Diameter	代号Code	直径Diameter
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	148



主要尺寸Main Dimension

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			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		
				L	L1	C					L	L1	C
1×2	D.E.F	150	150	115	105	106	2×3	G.H.J	150	150	124	130	457
		300	150	115	105	106			300	150	124	130	457
		600	150	115	105	106			600	150	124	130	457
		900	300	121	125	508			900	300	171	167	559
		1500	300	121	125	508			1500	300	171	167	559
		2500	300	121	125	508			2500	300	171	178	584
1½×2	D.E.F	150	150	121	124	432	3×4	J.K.L	150	150	162	156	483
		300	150	121	124	432			300	150	162	156	483
		600	150	121	124	432			600	150	162	162	483
		900	300	140	149	533			900	300	181	190	610
		1500	300	140	149	533			1500	300	181	190	610
		2500	300	140	149	533							
1½×3	G.H	150	130	124	130	457	4×6	L.M.N.P	150	150	229	181	559
		300	130	124	130	457			300	150	229	181	559
		600	130	124	130	457			600	150	229	181	559
		900	162	171	162	559			900	300	233	249	711
		1500	162	171	162	559			1500	300	233	249	711
		2500	162	171	162	559			2500	600	264	249	711
6×8	Q.R	150	150	240	240	635	8×10	T	150	150	279	276	711
		300	150	240	240	635			300	150	279	276	711
		600	150	240	240	635			600	150	279	297	737

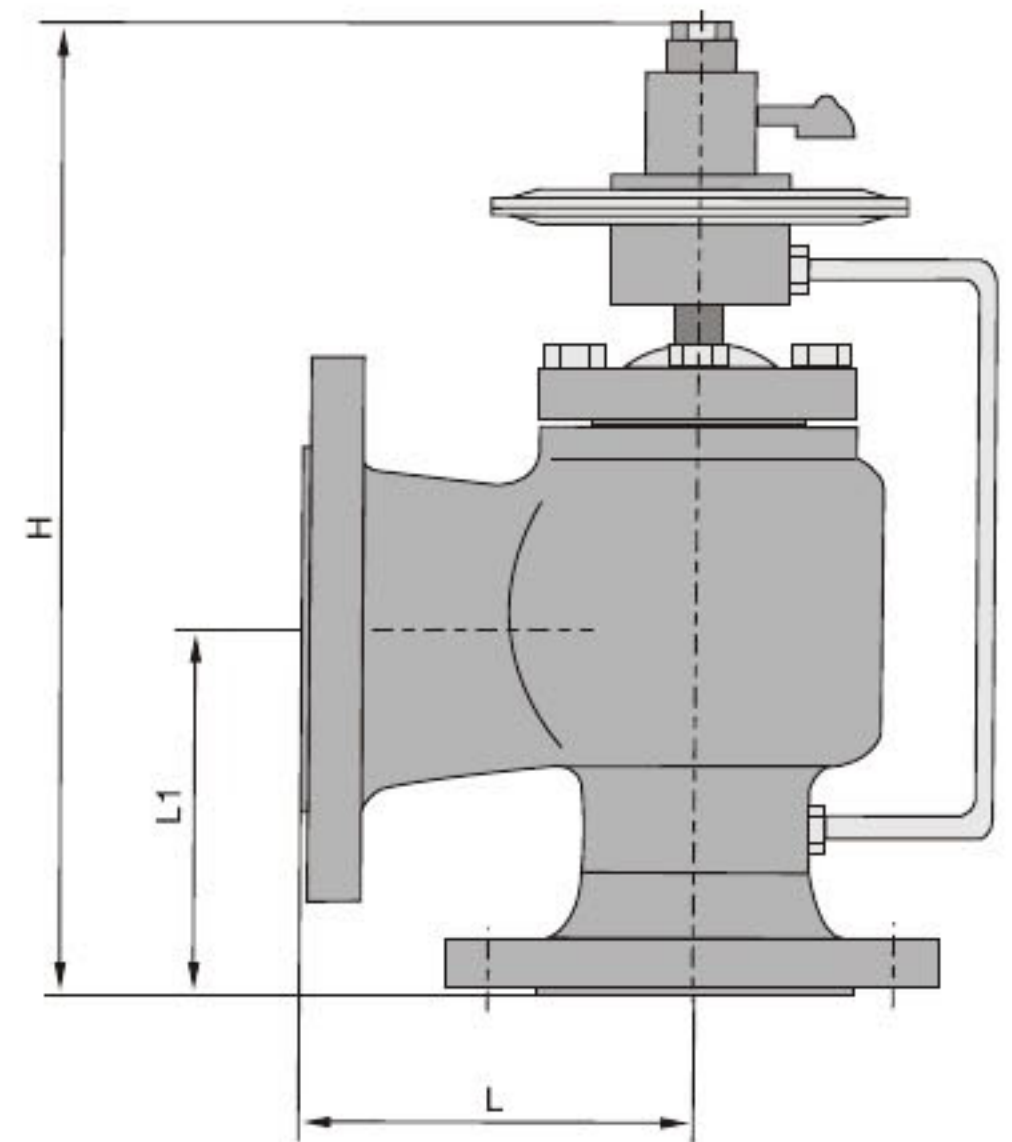
■ 用途及特点 Performance & Features:

- 1、能提供最准确的低压和真空防护。
- 2、软密封的主阀瓣能在95%以上的开启压力范围内获得高密封度。
- 3、导阀可在主阀以外单独调定开启压力和关闭压力。
- 4、排放量是相同进口通径安全阀的1.25倍。

1. Supply most exact fence of low-pressure and vacuum.
2. Soft airproof main valve can obtain high airproof in the scope of over 95% lift pressure.
3. Pilot valve can adjust lift and close pressure solely out if main valve.
4. Capacity is 1.25 times as the same inlet safety valve.

■ 尺寸规格 Dimension & Specification

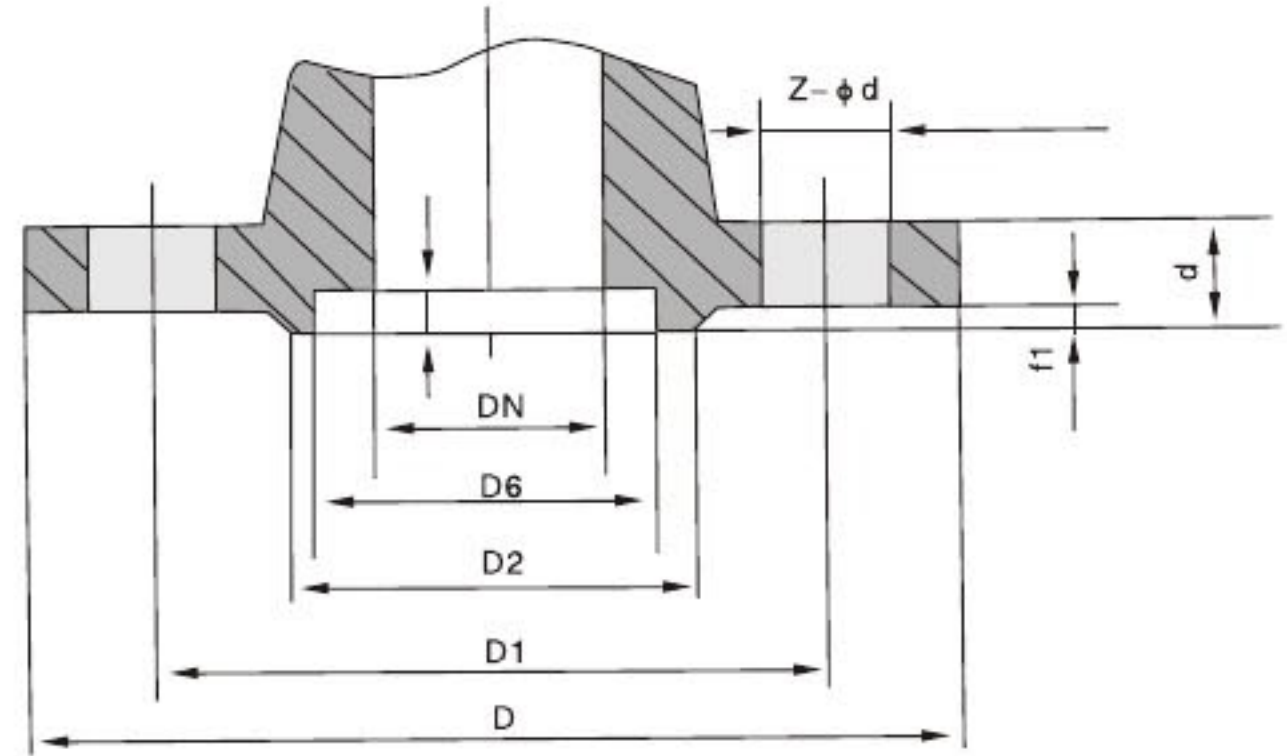
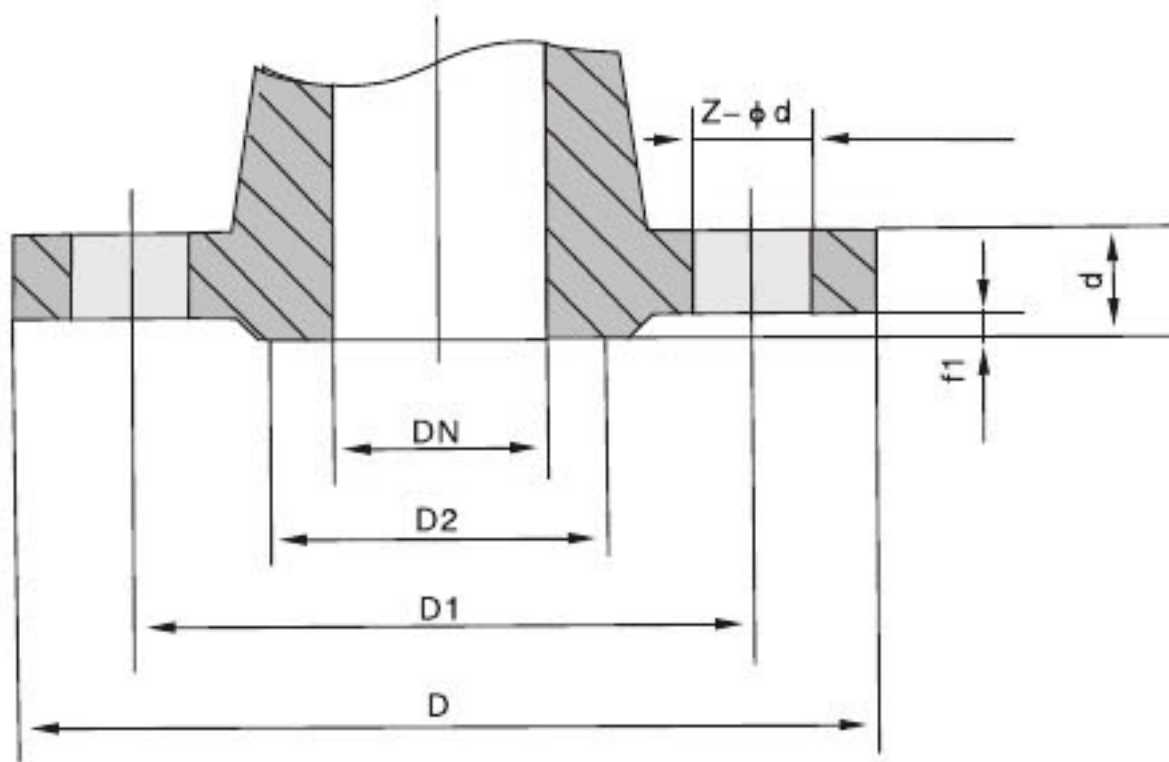
进口X出口 InletXOutlet 150Lb RF(面)	结构尺寸 Construction dimension		
	L	L1	H
2" x 3"	127	95	425
3" x 4"	146	114	460
4" x 6"	178	140	515
6" x 8"	236	171	585
8" x 10"	279	203	635
10" x 12"	317	241	675
12" x 16"	362	298	815



■ 主要阀体材料 Main valve Body material

WCB、CF8或按用户要求。

法兰连接尺寸表汇总表
Summary table of flanges' joint dimensions



公称压力 PN(MPa) Nominal pressure	尺寸 Dimension (mm)						
	DN	D	D1	D2	f1	b	z-φd
1.6	15	95	65	46	2	14	4-14
	20	105	75	56	2	16	4-14
	25	115	85	65	2	16	4-14
	32	140	100	78	2	16	4-18
	40	150	110	85	3	16	4-18
	50	165	125	100	3	16	4-18
	65	185	145	120	3	18	4-18
	80	200	160	135	3	20	8-18
	100	220	180	155	3	20	8-18
	125	250	210	185	3	22	8-18
	150	285	240	210	3	24	8-23
	175	310	270	240	3	26	8-23
	200	340	295	265	3	26	12-23
	250	405	355	320	3	30	12-25
	300	460	410	375	4	30	12-25
	350	520	470	435	4	34	16-25
400	580	525	485	4	36	16-30	
2.5	15	95	65	46	2	14	4-14
	20	105	75	56	2	16	4-14
	25	115	85	65	2	16	4-14
	32	140	100	78	2	18	4-18
	40	150	110	85	3	18	4-18
	50	165	125	100	3	20	4-18
	65	185	145	120	3	22	8-18
	80	200	160	135	3	22	8-18
	100	235	190	160	3	24	8-22
	125	270	220	188	3	28	8-26
	150	300	250	218	3	30	8-26
	175	330	280	248	3	32	12-25
	200	360	310	278	3	34	12-26
	250	425	370	332	3	36	12-30
	300	485	430	390	4	40	16-30
	350	555	490	448	4	44	16-33
400	620	550	505	4	48	16-36	

公称压力 PN(MPa) Nominal pressure	尺寸 Dimension (mm)									
	DN	D	D1	D2	D6	f1	f2	b	z-φd	
4.0	15	95	65	46	40	4	3	16	4-14	
	20	105	75	56	51	4	3	16	4-14	
	25	115	85	65	58	2	4	16	4-14	
	32	140	100	78	66	2	4	18	4-18	
	40	150	110	85	76	3	4	18	4-18	
	50	165	125	100	88	3	4	20	4-18	
	65	185	145	120	110	3	4	22	8-18	
	80	200	160	135	121	3	4	22	8-18	
	100	235	190	160	150	3	4.5	24	8-23	
	125	270	220	188	176	3	4.5	28	8-25	
	150	300	250	218	204	3	4.5	30	8-25	
	175	350	295	258	234	3	4.5	34	12-30	
	200	375	320	282	260	3	4.5	38	12-30	
	250	450	385	345	313	3	4.5	42	12-34	
	300	515	450	408	364	4	4.5	46	16-34	
	350	580	510	465	422	4	5	52	16-34	
400	660	585	535	474	4	5	58	16-41		
6.4	15	105	75	55	40	4	3	20	4-14	
	20	130	90	68	51	4	3	20	4-18	
	25	140	100	78	58	2	4	22	4-18	
	32	155	110	82	66	2	4	24	4-23	
	40	170	125	95	76	3	4	24	4-23	
	50	180	135	105	88	3	4	26	4-23	
	65	205	160	130	110	3	4	28	8-23	
	80	215	170	140	121	3	4	30	8-23	
	100	250	200	168	150	3	4.5	32	8-25	
	125	295	240	184	176	4	3	34	8-30	
	150	345	280	240	204	3	4.5	38	8-34	
	175	370	310	270	234	3	4.5	42	12-34	
	200	415	345	300	260	3	4.5	44	12-34	
	10.0	15	105	75	55	40	4	3	20	4-14
		20	130	90	68	51	4	3	20	4-18
		25	140	100	78	58	2	4	24	4-18
32		155	110	82	66	2	4	24	4-23	
40		170	125	95	76	3	4	26	4-23	
50		195	145	112	88	3	4	28	4-25	
65		220	170	138	110	3	4	32	8-25	
80		230	180	148	121	3	4	34	8-25	
100		265	210	172	150	3	4.5	38	8-30	
150		355	290	250	204	3	4.5	46	12-34	
200		430	360	312	260	3	4.5	54	12-41	

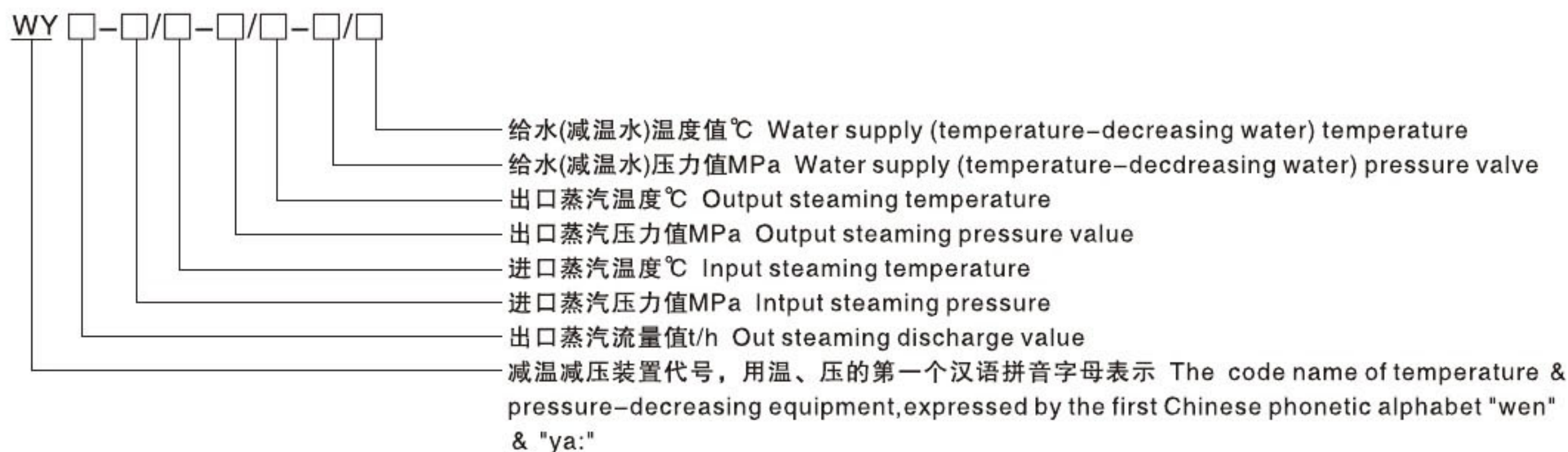
■ 减温减压装置用途及分类

我公司生产的各种系列的减温减压装置配上相应的工业自动化仪表盘(即热控柜),可对电站或工业锅炉以及热电厂等处输送来的一次(新)蒸汽压力 P_1 ,温度 T_1 ,进行减温减压,使其二次蒸汽压力 P_2 ,温度 T_2 达到生产工艺所需的要求。减温减压装置广泛用于电站、轻纺、石化等行业。

减温减压装置根据一次(新)蒸汽压力 P_1 、温度 T_1 可分为高温高压减温减压装置、次高压减温减压装置、中温中压减温减压装置;减温减压装置根据使用情况又分为减温装置、减压装置、减温减压装置,我公司生产的减温减压装置根据结构不同又可分为第一代(老系列)、第二代、第三代、第四代减温减压装置等不同系列。

■ 型号编制 Type classification

装置的型号编制方法如下: The classifying method of equipment is as follows



例: WY80-3.82/450-0.98/260-8.0/104表示出口蒸汽流量为80t/h;进口蒸汽压力3.82MPa,温度 450°C ;出口蒸汽压力为0.98MPa,温度 260°C ;减温给水压力为8.0MPa,给水温度为 104°C 的减温减压装置。

For example, WY80-3.82/450-0.98/260-8.0/104 is a kind of temperature & pressure-decreasing equipment with 80t/h output steaming discharge, 3.82MPa input steaming pressure, 450°C temperature, 0.98MPa output steaming pressure, 260°C temperature, 8.0MPa temperature-decreasing & pressure of water supply, 104°C temperature of water supply.

■ 订货须知

订合同时请提供:

- 1、出口蒸汽流量 Q ;
- 2、进口一次新蒸汽压力 P_1 、温度 t_1 ;
- 3、出口一次蒸汽压力 P_2 、温度 t_2 ;
- 4、减温给水压力 P_d 、温度 t_d ;
- 5、注明双减器为第几代产品(第一代是老系列、第二代为新系列、第三、第四、第五代直行程电动式和气动薄膜式两种);
- 6、注量控制信号(Ⅱ、Ⅲ或其它);
- 7、若提供过草图的需注明原草图系列图号,如WY01-011MX,若用户要求提供气动薄膜式调节阀系列双减器时,须提供:
 - 1)作用形式:气开式或气闭式;
 - 2)气源压力;
 - 3)提供电气阀门定位器电信号Ⅱ或Ⅲ型;
 - 4)其它附件说明。

注:出口蒸汽压力 P_2 应不低于饱和温度所对应的压力值 P_s ,或出口蒸汽温度 t_2 应不低于 P_2 所对应的饱和温度 t_s 。

■ Usage and category of temperature & pressure-decreasing equipment

Different types of temperature & pressure-decreasing equipment, produced in our factory, equipped with corresponding automatic industrial instrument panel, (i.e heat control cabinet) absorb in primary steaming pressure P_1 and temperature T_1 coming from power station industry boiler and heat and power plant to make the demand of producing technology. Temperature & pressure-decreasing equipment is widely applied to such trades as power station, light textile & petrochemistry.

Temperature & pressure-decreasing equipment can be classified into: temperature & pressure-decreasing equipment three types according to primary steaming pressure P_1 & temperature T_1 for high temperature & high pressure, temperature & pressure-decreasing equipment for sub-high pressure, temperature & pressure-decreasing equipment for middle temperature-decreasing, temperature & pressure-decreasing equipment. What's more, temperature & pressure-decreasing equipments in our factory are classified into the first generation, (old type) the second generation, the third generation and the fourth generation according to different structure.

■ Order notice

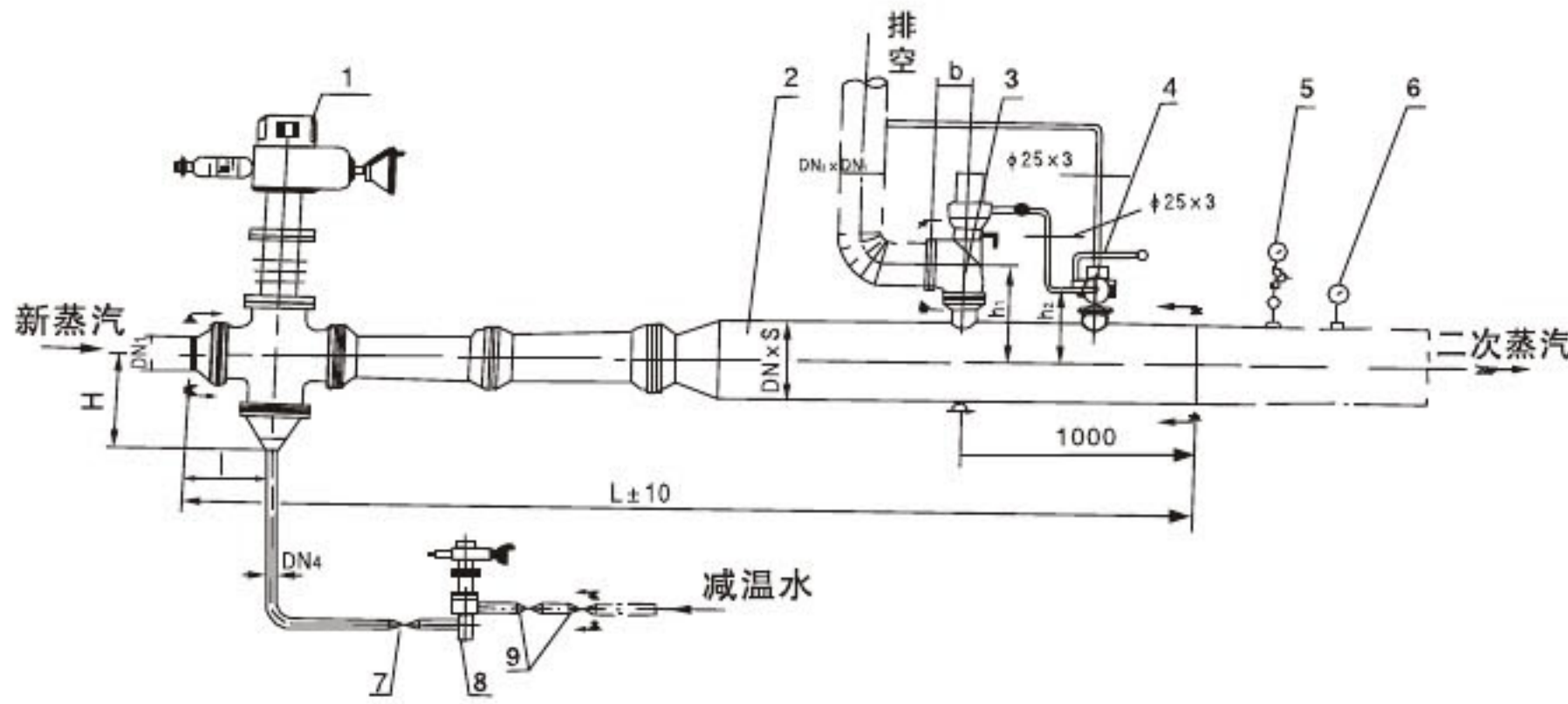
When contracting, please provide:

1. Output steaming discharge Q ;
2. Input primary new steaming pressure P_1 & temperature T_1 ;
3. Output secondary steaming pressure P_2 & temperature T_2 ;
4. Temperature-decreasing & pressure of water supply P_d & temperature T_d ;
5. Indicate that which generation double-decreasing equipment belongs to (The first generation is old type, the second one is new, the third, the fourth & the fifth generation are direct-routed motor type & gas-operated film type);
6. Indicate controlling signal (Ⅱ, Ⅲ or else);
7. With draft, indicate the number, e.g. with WY01-01MX, if customers require for gas-operated film regulating valve type double-decreasing equipment, the following should be provided:
 - 1) Form of function: gas opening or gas switching;
 - 2) Power supply pressure;
 - 3) Electrical signal Ⅱ or Ⅲ for localizer of electrical valve;
 - 4) Explain other accessories.

Note: the output steaming pressure P_2 should not be lower than the corresponding pressure value P_s of saturation temperature or output steaming temperature t_2 should not be lower than the corresponding saturation temperature t_s of P_2 .

WY-01型直行程减温减压装置系列图(一套冲量安全阀)

List of direct-routed temperature & pressure-decreasing equipment WY-01 (one set of impulse safely valve)

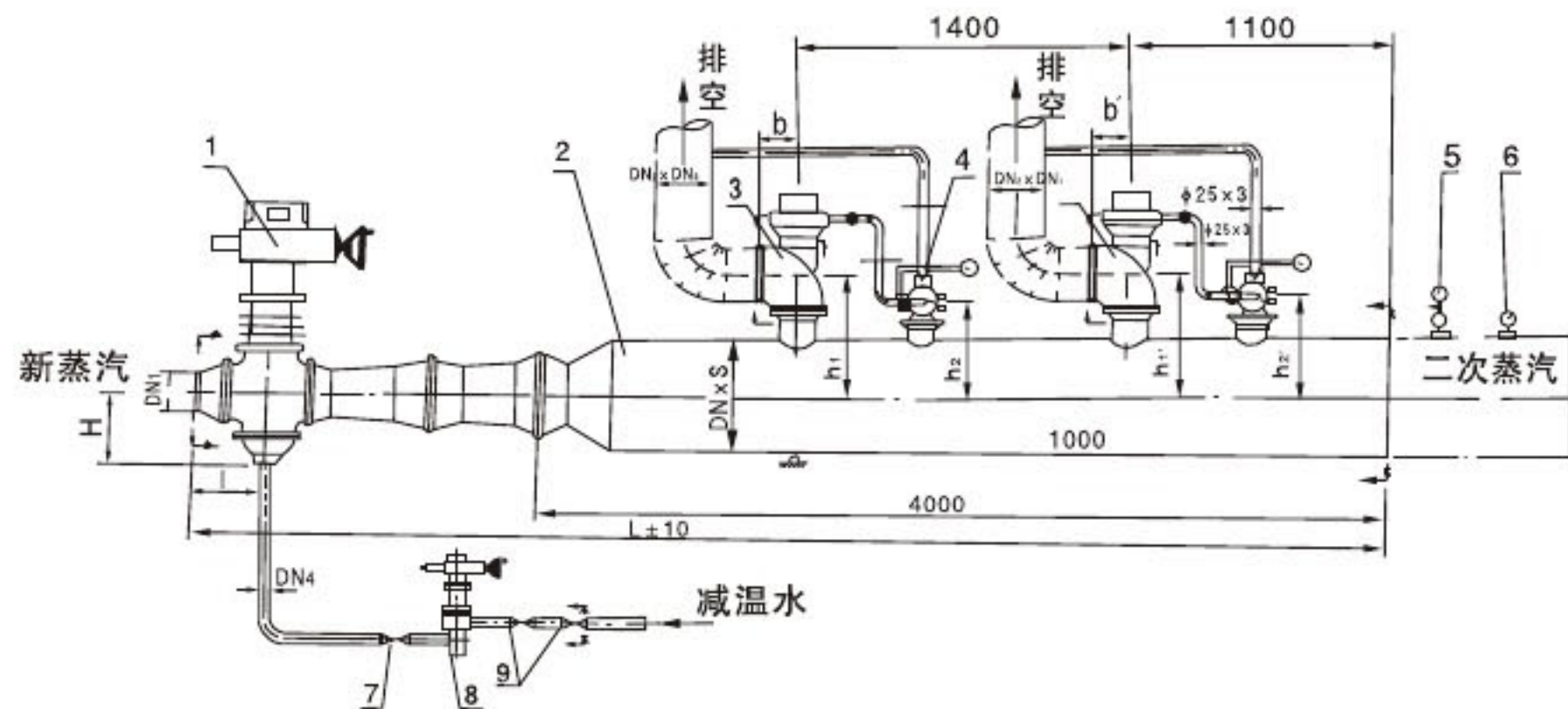


(图一)

序号NO.	名称 Name
1	直行程减温减压阀 Direct-routed temperature & pressure-decreasing valve
2	蒸汽管道 Steaming pipeline
3	主安全阀 Main safety valve
4	冲量安全阀 Impulse safety valve
5	压力表 Manometer
6	双金属温度计 Double metal thermograph
7	止回阀 Check valve
8	直行程给水调节阀 Direct-routed regulating valve on water
9	节流阀、截止阀 Throttle valve, stop valve

WY-02型直行程减温减压装置系列图(二套冲量安全阀)

List of direct-routed temperature & pressure-decreasing equipment WY-02 (two set of impulse safely valve)

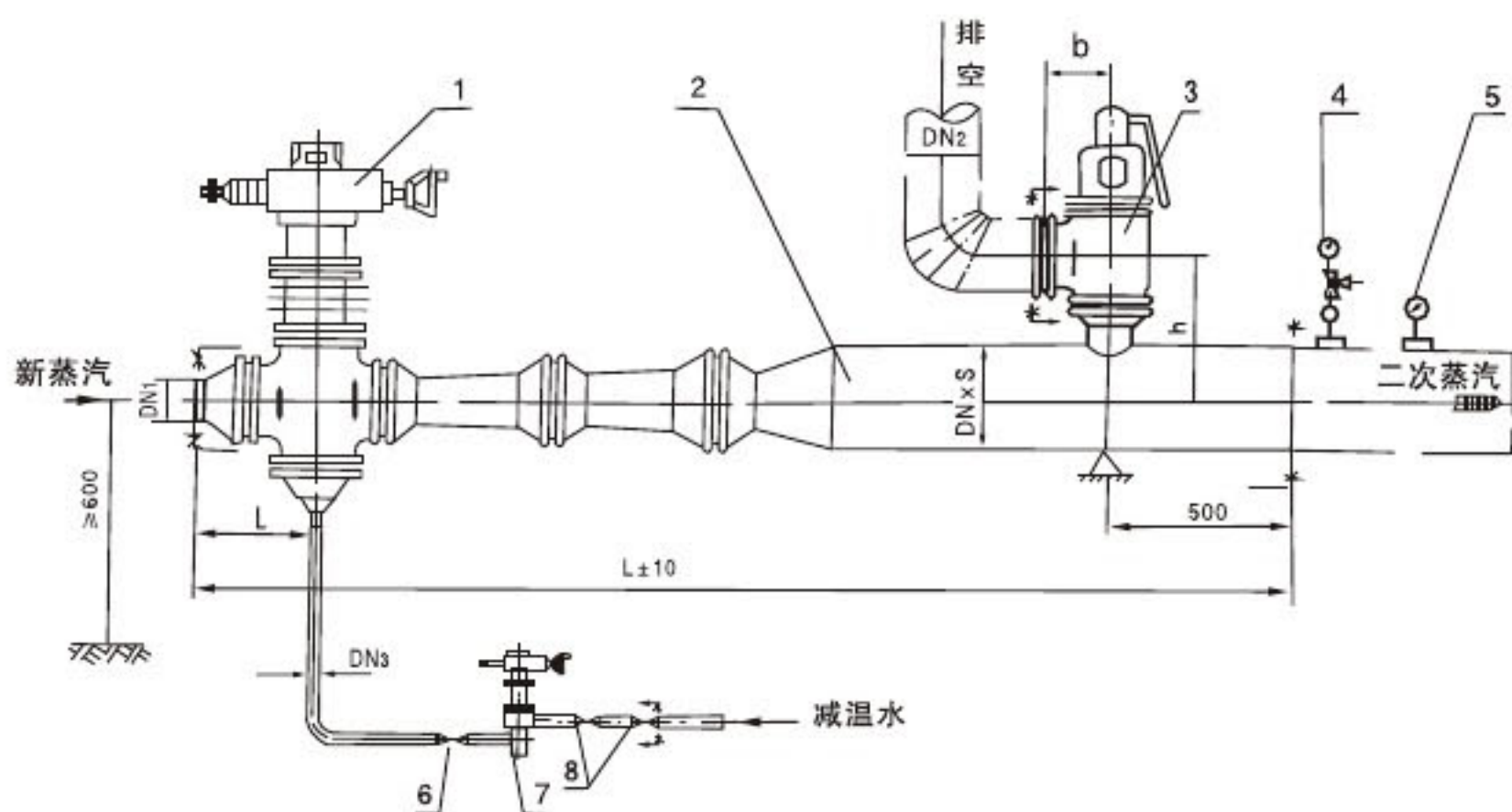


(图二)

序号NO.	名称 Name
1	直行程减温减压阀 Direct-routed temperature & pressure-decreasing valve
2	蒸汽管道 Steaming pipeline
3	主安全阀 Main safety valve
4	冲量安全阀 Impulse safety valve
5	压力表 Manometer
6	双金属温度计 Double metal thermograph
7	止回阀 Check valve
8	直行程给水调节阀 Direct-routed regulating valve on water
9	节流阀、截止阀 Throttle valve, stop valve

WY-05/06型直行程减温减压装置系列图(一只弹簧安全阀PN1.6、PN4.0)

List of direct-routed temperature & pressure-decreasing equipment WY-05/06 (One spring safety valve PN1.6, PN4.0)



(图三)

序号NO.	名称 Name
1	直行程减温减压阀 Direct-routed temperature & pressure-decreasing valve
2	蒸汽管道 Steaming pipeline
3	弹簧安全阀 Spring safety valve
4	压力表 Manometer
5	双金属温度计 Double metal thermograph
6	止回阀 Check valve
7	直行程给水调节阀 Direct-routed regulating valve on water
8	节流阀、截止阀 Throttle valve, stop valve

■ 安全阀性能规范(依据GB/T12243-2005标准) Safety valve performance standards (in accordance with GB/T12243-2005)

性能规范 Performance standards 适用介质 Applicable medium	壳体试验压力 Shell test pressure P(MPa)	密封试验压力 Seal test pressure PM(MPa)	启闭压差 Blow down ΔP (MPa)	排放压力 Relieving pressure Pp(MPa)	开启高度 Lift H(mm)
蒸汽 Steam	1.5PN	90Ps或回座压力最小值, 取二者较小值 90%Ps or the minimum value of return pressure, take the smaller one of the above two values	Ps≤0.4时为≤0.04; Ps>0.4时为≤10%Ps When Ps≤0.4, it is PK≤0.04; When Ps>0.4, it is 10%Ps	≤1.03Ps	全启式 Full bore type $\geq \frac{1}{4} do$ 微启式 Low bore type $\geq \frac{1}{20} do$
空气或其他气体 Air and other gas		Ps<0.3时为PK-0.03; Ps≥0.3时为90%PK When Ps<0.3, it is PK-0.03; When Ps≥0.3, it is 90%PK	Ps≤0.2时为≤0.03; Ps>0.2时为≤15%Ps When Ps≤0.2, it is PK≤0.03; When Ps>0.2, it is 15%Ps	≤1.1Ps	全启式 Full bore type $\geq \frac{1}{4} do$ 微启式 Low bore type $\geq \frac{1}{20} do$
水或其他液体 Water and other liquid		Ps≤0.3时为≤0.06; Ps>0.3时为≤20%Ps When Ps≤0.3, it is PK≤0.06; When Ps>0.3, it is 20%Ps	Ps≤0.3时为≤0.06; Ps>0.3时为≤20%Ps When Ps≤0.3, it is PK≤0.06; When Ps>0.3, it is 20%Ps	≤1.2Ps	全启式 Full bore type $\geq \frac{1}{4} do$ 微启式 Low bore type $\geq \frac{1}{20} do$

注: Ps为整定压力, do为喉径。Note:Ps is set pressure, do is throat diameter.

■ 密封性要求(依据GB/T12243-2005标准) Airproof requirements (in accordance with GB/T12243-2005)

安全阀类型 Safety valve type	流道直径 Flow diameter (mm)	最大允许泄漏率, 气泡数/min Maximum allowable leakage rate, number of air bubble/min (试验介质: 空气或其它气体) (Test medium: Air or other gas)	
		公称压力PN(MPa) Nominal pressure < 10	≥ 10
一般安全阀 Normal safety valve	< 20	40	60
	≥ 20	20	30
背压平衡安全阀 Safety valve of backpressure balance	< 20	50	75
	≥ 20	30	45

注: 1. 进行蒸气安全阀密封试验时, 用目视或听音的方法检查阀的出口端, 如未发现泄漏现象, 则认为密封性合格。

2. 进行水或其它液体用安全阀密封试验时, 在规定的试验持续时间2分钟内, 其密封面处不应有流淌的水珠。

Note: 1. When the airproof test for safety valve is carried out, the outlet port of valve can be examined by eye or ear. If no leakage is found, the valve passes the airproof test.

2. When airproof test for safety valve of water of other liquid is carried out, on flowing bead should be found in the sealed surface within continuous 2 minutes in the test.

■ 安全额定排量计算 Calculating the rated discharge amount of safety valve

一、介质为液体(参照GB/T12241-2005标准) Liquid as medium (in reference to GB/T12241-2005)

$$Wt = \sqrt{\rho \Delta P} / 0.1964$$

式中 Wt----安全阀的理论排量, Kg/h Theoretical discharge amount of the safety valve

ρ ----介质密度, Kg/m³(如水 $\rho=1000\text{Kg/m}^3$) Medium density

ΔP ----阀门前后压差, $\Delta P=Pp-Pb$, MPa) Differential pressure of front and back valve

Pp----排放压力, MPa(绝对压力) Discharge pressure, Mpa (absolute pressure)

Pb----阀门出口侧压力, MPa(对空排放时Pb为0) Pressure of valve outlet, MPa (for empty discharge, Pb=0)

二、介质为气体(参照GB/T12241-2005标准) Gas as medium (in reference to GB/T12241-2005)

$$Wt = 25.8 K P d A \sqrt{\frac{M}{ZT}}$$

式中 K----排气系数, 对微启式安全阀C=0.2, 全启式安全阀C=0.7 Discharge parameter, for slightly open safety valve, C=0.2, and for fully open safety valve, C=0.7

M----气体分子量(如空气M=29, 甲烷M=16) Molecular weight of gas (for example, the molecular weight of air is M=29, and for methane, M=16)

Z----气体在操作温度下的压缩系数, (如空气在常温, 压力为1.6MPa下Z=0.99, 压力为10MPa下Z=0.95) Gas compression parameter in operation temperature, (in normal temperature, when the pressure is 1.6MPa, the gas compression parameter of air is Z=0.99, and when the pressure is 10MPa, Z=0.95)

T----气体的温度, K(T=273+摄氏度) Gas temperature, K(T=273+Celsius degree)

A----流道面积, mm² Flow area

三、介质为蒸汽(参照《蒸汽锅炉安全技术监察规程》) Steam as medium (in reference to <safety technical supervision guide for steam boiler>)

$$Wt = C A A (10.2P + 1) K$$

式中 C----排气系数, 对微启式安全阀C=0.085, 全启式安全阀C=0.235 Discharge parameter, for low lift safety valve, C=0.085, and for full bore safety valve, C=0.235

P----安全阀入口处压力, MPa Inlet pressure of safety valve

K----蒸汽比容修正系数, 一般取K=1 Revised parameter of steam specific heat, it is K=1

A----流道面积, mm² Flow area