



EV-10

## AYVAZ SAFETY VALVE

### GENERAL FEATURES

Adjustable safety valves are automatically activated when the desired pressure is exceeded.

It is installed the system in order to prevent the damage to the installation, a different device or valve. It has a spring-operated mechanism that works with the counter-pressure principle. Different connection diameters are available depending on the boiler capacity and the amount of the water in the installation. In cases where the valve capacity is sufficient, several safety valves can be connected in series.

Safety valve is the name given to the valve mechanism that automatically releases gas when it reaches the limit temperature or pressure determined in pressure tank and other systems. It is important to use safety valves to ensure safety in boilers and tanks.

Safety valves are also used as auxiliary elements in heat exchangers and pressure tanks. The membrane inside the valve is manufactured as resistant to abrasion. The opening pressures are constant, and the set values can be supplied at the factory.

#### Installation:

- 1- Storage and transportation and installation should be done with care.
- 2- The valve should be protected from foreign substances and dust until the installation time.
- 3- The valve shaft should be mounted so that it is vertical.
- 4- No valve should be placed between safety valve and pressure vessel.
- 5- The safety valve must have an easily accessible area where installed.
- 6- Safety valve outlet pipe should be opened at the shortest path to the atmosphere.
- 7- The relief valve should be inclined in the direction of the outlet pipe.
- 8- If the safety valve is uplifted, then one of the options should be to design drainage,

pot (diameter of inner pipe), diameter enlargement in order to get water that may occur at the elbow part.

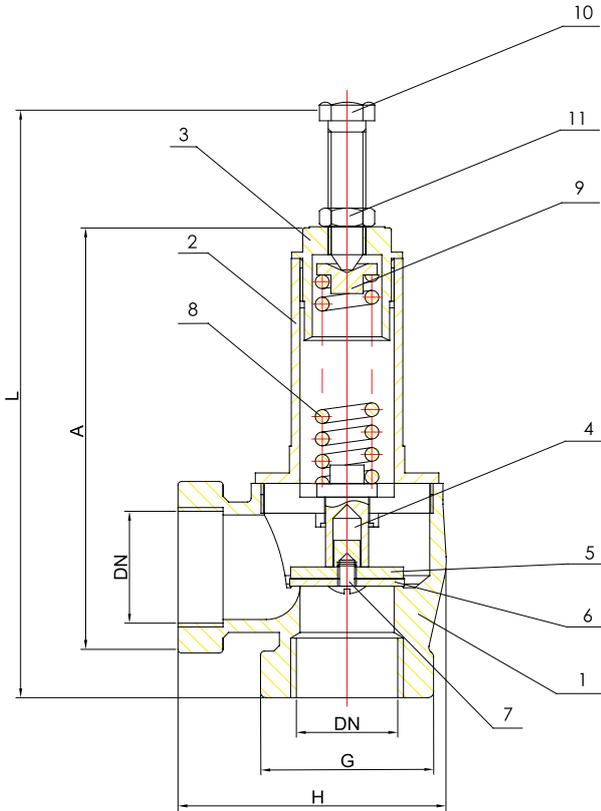
- 9- Separate outlet line for each safety valve. If it is going to enter the exhaust pipe; the distance between the safety valve output and the exhaust must be at least 4 meters.

Design Pressure	PN16
Working Pressure	Max.12 Bar
Working Temperature	+10, +200°C
Connection	Threaded
Fluids	Steam, Air, Hot and Cold Water

- ✓ Warning! Do not use the product other than the specified pressure.
- ✓ Warning! Never use other than the specified fluids (inflammable acidic solvent).

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## TECHNICAL DRAWING



PART LIST		
No	Part Name	Material
1	Lower (Main) Body	MS58 (CuZn40Pb2)
2	Upper Body	MS58 (CuZn40Pb2)
3	Stopper	MS58 (CuZn40Pb2)
4	Valve Pressure Pin	MS58 (CuZn40Pb2)
5	Valve	MS58 (CuZn40Pb2)
6	Gasket	Teflon
7	Gasket Fixing Screw	MS58 (CuZn40Pb2)
8	Spring	Stainless Steel AISI 302
9	Spring Pressure Washer	MS58 (CuZn40Pb2)
10	Pressure Adj. Bolt	MS58 (CuZn40Pb2)
11	Pressure Fixing Nut	MS58 (CuZn40Pb2)

R	DN	L	H	A	G	Weight (g)
1/2"	15	120	50	101	26,5	360
3/4"	20	150	55	119	31,2	510
1"	25	155	71	125	40	630
1 1/4"	32	175	75,7	145	47,7	995
1 1/2"	40	180	75,7	153	54	1150
2"	50	205	93	177	66,3	1800
2 1/2"	65	230	114	210	83	2700
3"	80	245	128	222	104	3300

### PRESSURE SETTING

The desired pressure is obtained by tightening the screw on the safety valve (to increase the pressure) or by loosening (to reduce the pressure). Pressure adjustment must be made by observing the manometer in appropriate conditions. After adjusting the desired pressure from the manometer, the nut on the screw is tightened and the pressure setting is fixed.

Note: Dimensions are in mm.

WATER DISCHARGE CAPACITY								
Dia. (")	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
P (bar)	m <sup>3</sup> /h							
1	1	2	3,7	5,4	8,2	13	26,1	33,9
2	1,2	2,5	4,6	6,7	10	15,9	32	41,6
3	1,4	2,9	5,3	7,7	11,5	18,4	37	48
4	1,5	3,2	5,9	8,6	12,9	20,6	41,3	53,7
5	1,7	3,5	6,5	9,4	14,1	22,6	45,3	58,8
6	1,8	3,8	7,0	10,2	15,3	24,4	48,9	63,5
7	1,9	4,1	7,5	10,9	16,3	26	52,3	67,9
8	2	4,3	7,9	11,5	17,3	27,6	55,4	72,0
9	2,1	4,6	8,3	12,1	18,2	29,1	58,4	75,9
10	2,2	4,8	8,8	12,7	19,1	30,5	61,3	79,6
11	2,3	5,0	9,1	13,3	20	31,9	64,0	83,2
12	2,4	5,2	9,5	13,8	20,8	33,2	66,6	86,6

STEAM DISCHARGE CAPACITY								
Dia. (")	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
P (bar)	Kg/h							
1	12	26	47	69	104	167	335	436
2	18	38	71	103	155	247	497	645
3	24	51	93	136	205	327	657	853
4	29	63	116	169	254	406	815	1059
5	35	75	139	202	304	485	973	1264
6	41	88	161	235	353	563	1131	1469
7	47	100	183	267	402	642	1288	1673
8	52	112	206	300	451	720	1445	1877
9	58	124	228	332	500	798	1601	2080
10	64	137	250	365	549	876	1757	2283
11	70	149	273	397	598	953	1914	2486
12	75	161	295	430	646	1031	2070	2688

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### HEAD OFFICE - FACTORY

Atatürk Sanayi Bölgesi Hadımköy Mahallesi Mustafa İnan Caddesi No: 44 Arnavutköy - İSTANBUL  
Tel: +90 212 771 01 45 (pbx) | Fax: +90 212 771 47 27  
info@ayvaz.com | www.ayvaz.com

#### **Cona Caserta/Italy**

Tel: +39 0823 187 3988  
rmolaro@ayvaz.com

#### **Ayvaz Germany Viernheim/Germany**

Tel: +49 62046014399  
germany@ayvaz.com

#### **Ayvaz Ukraine Kiev/Ukraine**

Tel: +380 44 390 57 57  
info@ayvaz.com.ua

#### **Tricorr Warsaw/Poland**

Tel: +48 530 030 810  
+48 533 603 335  
tricorr@tricorr.eu

#### **Ayvaz Azerbaijan Baku/Azerbaijan**

Tel: +99 (455) 579-84-32  
ahayatov@ayvaz.com

#### **Ayvaz Egypt Cairo/Egypt**

Tel: +20 122 819 78 29  
andrew.eid@ayvaz.com

#### **Ayvaz Gulf Dubai/U.A.E**

Tel: +971 563550822  
+971 501306871  
mideast@ayvaz.com

#### **Ayvaz China Ningbo/China**

Tel: +86 152 5830 7361  
msahin@ayvaz.com

#### **Ayvaz Kazakhstan LLP Almaty/Kazakhstan**

Tel: +7 (727) 327 97 57  
info\_kz@ayvaz.com

#### **Ayvaz N Ispirih/Bulgaria**

Tel: +359 8431 27 32  
office@ayvaz-n.eu

#### **Ayvaz Serbia Belgrade/Serbia**

Tel: +381 61 658 70 52  
yakbiyik@ayvaz.com

#### **Ayvaz Vietnam HCMC/Vietnam**

Tel: +84 89 8508345  
ggursoy@ayvaz.com

#### **Ayvaz Americas Rhode Island/USA**

Tel: +1 401 737 8380  
americas@ayvaz.com