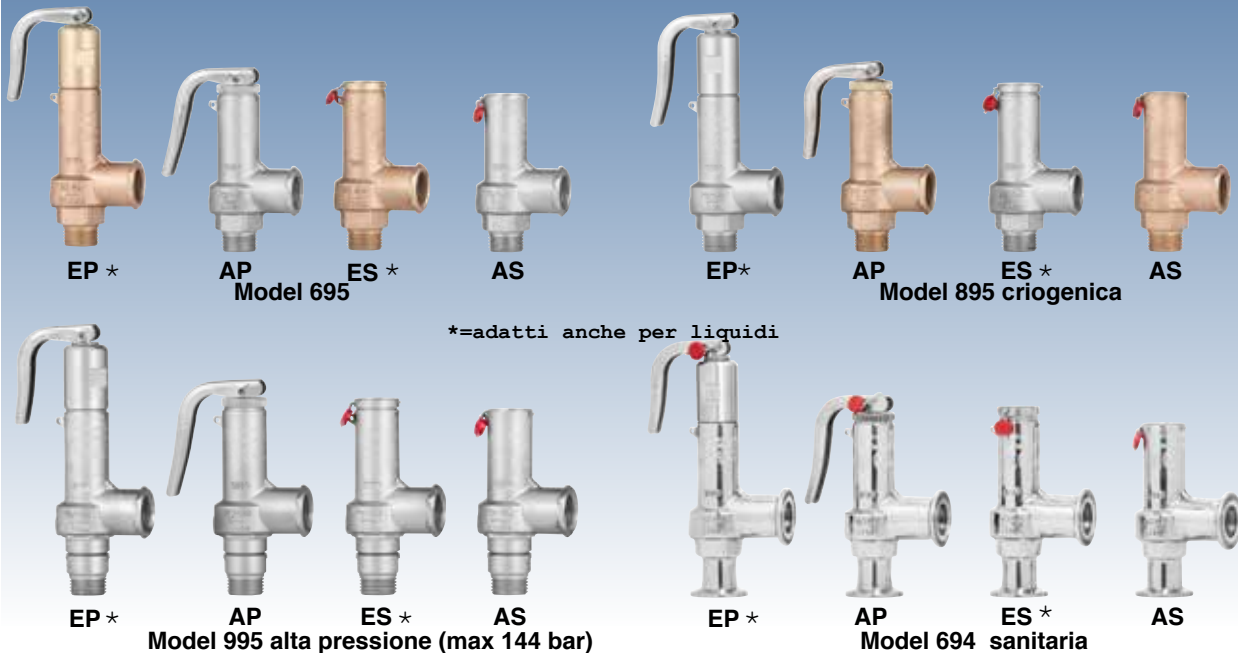


Full lift safety valve with spring loading. (AIT)



EN

Model 695 Model 895 Model 995 Model 694



The valve works as an automatic pressure releasing regulator activated by the static pressure existing at the entrance to the valve and is characterized by its ability to open instantly and totally.

Design in accordance with "International Standard ISO 4126-1:2004 Safety Valves".

In accordance with the requirements of directive 97/23/EC.

EC valve verification certified by: TÜV Internacional Grupo TÜV Rheinland, S.L. EC 0035.

Type (Module D) EC examination report n° 33530455 certified by: TÜV Internacional Grupo TÜV Rheinland, S.L.

In compliance with the ATEX 94/9/CE directive "Protective equipment and systems for use in potentially explosive atmospheres".

Other authorisations: ISCIR, ITI, NASTHOL,...etc.

Specifications

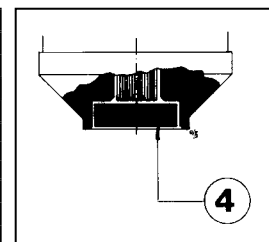
- 90° angular flow.
- Activated by direct action helicoid spring.
- Simplicity of construction ensuring minimum maintenance.
- Materials carefully selected for their resistance to corrosion.
- Internal body designed to offer favourable flow profile.
- Sealing surfaces balanced and making them extremely tightness, even exceeding EN 12266-1 requirements.
- Great discharge capacity. For liquids typically used with openings similar to proportional safety valves.
- Auto-centering plug.
- Totally precise open and close.
- All the valves are supplied sealed at the set pressure requested, simulating operational conditions, and are vigorously tested.
- All components are numbered, registered and checked. If requested in advance, material, casting, test and efficiency certificates will be enclosed with the valve, and the instruction manual, in accordance with P.E.D.97/23 EC.

IMPORTANT

Depending on demand:

- 1.- Fluorelastomer (Vitón) seals, Silicone's rubber, PTFE (Teflón)... etc., achieving leakage levels less than $0,3 \times 10^{-3} \text{ Pa cm}^3 \text{ seg.}$

| RANGE OF APPLICATION FOR THE SEALS | | | | | | | |
|------------------------------------|---|----------------------------|---------|---------|---------|--------------------|-----------|
| FLUID | | SET PRESSURE IN bar | | | | | |
| | | 0,2 | 1,8 | 4,8 | 5,0 | 20,0 | 30,0/60,0 |
| Saturated steam | | S | V | T | | | |
| Liquids and gases | | S | | V | | T | |
| SEALS | | TEMPERATURE IN °C | | | | | |
| | | ACCORDING TO MANUFACTURERS | | | | RECOMMENDED BY VYC | |
| | | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM |
| Silicone's rubber | S | -60 | +200 | -50 | +115 | | |
| Fluorelastomer (Vitón) | V | -40 | +250 | -30 | +150 | | |
| PTFE (Teflón) | T | -265 | +260 | -80 | +230 | | |



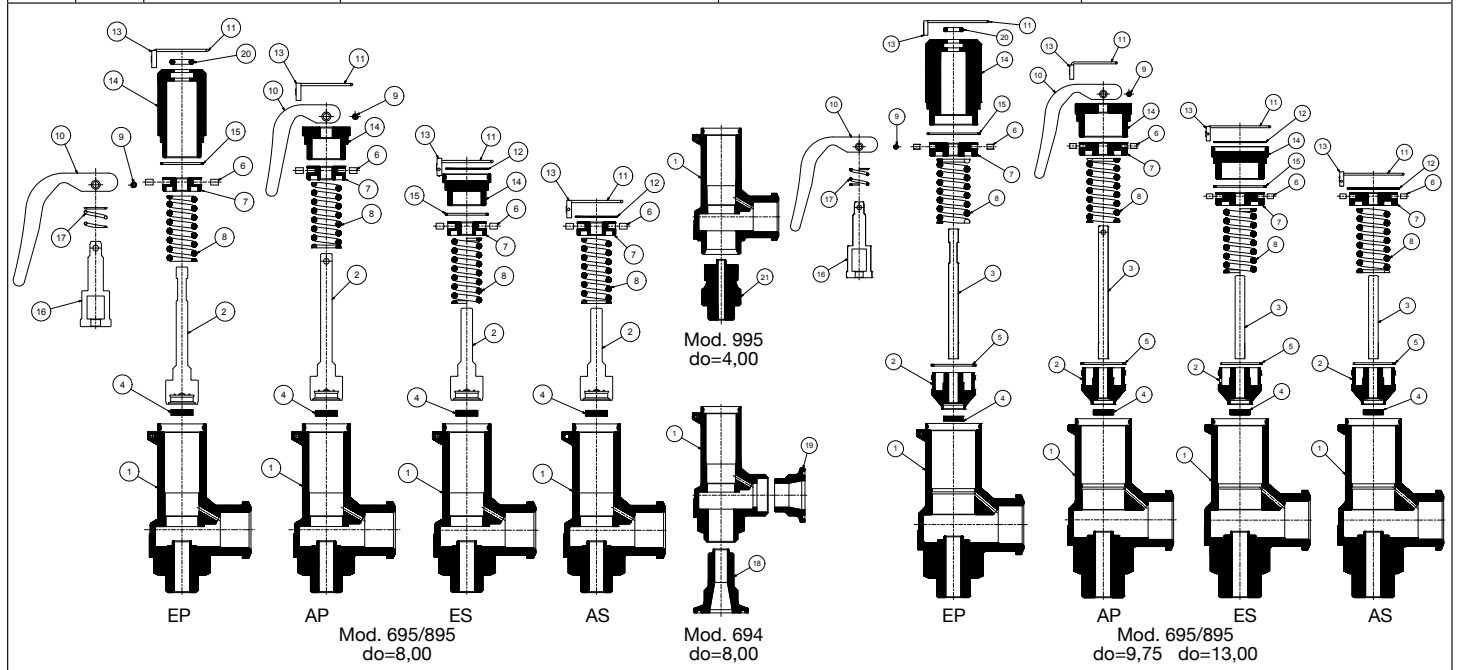
Depending on demand:

1. Buna-nitrils seals, Butyl, Natural rubber, E.P.D.M., Chlorosulphonate polyethylene (Hypalon), Neoprene, etc.
2. Possibility of manufacture in other types of material, for use in special working conditions (high temperatures, fluids, etc.).

| N.° PIECE | PIECE | MATERIAL | |
|-----------|----------------------|----------------------------|----------------------------|
| | | BRONZE | STAINLESS STEEL |
| 1 | Body | Bronze (EN-CC491K) | S. steel (EN-1.4408) |
| 2 | Plug | Brass (EN-CW617N) | S. steel (EN-1.4401) |
| 3 | Shaft | S. steel (EN-1.4305) | S. steel (EN-1.4305) |
| 4 | Seal | Silicone's rubber | Silicone's rubber |
| | | Fluorelastomer (Viton) | Fluorelastomer (Viton) |
| | | PTFE (Teflon) | PTFE (Teflon) |
| 5 | Limiter ring | S. steel (EN-1.4310) | S. steel (EN-1.4310) |
| 6 | End-stop | PTFE (Teflon) | PTFE (Teflon) |
| 7 | Spring press | Brass (EN-CW617N) | S. steel (EN-1.4305) |
| 8 | Spring | S. steel (EN-1.4310) | S. steel (EN-1.4310) |
| 9 | Clip | S. steel (EN-1.4310) | S. steel (EN-1.4310) |
| 10 | Lever | S. steel (EN-1.4301) | S. steel (EN-1.4301) |
| 11 | Sealing wire | Sealing wire | Sealing wire |
| 12 | Characteristic plate | Aluminium | Aluminium |
| 13 | Seal | Plastic | Plastic |
| 14 | Cap | Brass (EN-CW617N) | S. steel (EN-1.4305) |
| 15 | Hood coupling | PTFE (Teflon) | PTFE (Teflon) |
| 16 | Piston | Brass (EN-CW617N) | S. steel (EN-1.4305) |
| 17 | Piston Spring | S. steel (EN-1.4310) | S. steel (EN-1.4310) |
| 18 | Inlet clamp | - | S. steel (EN-1.4404) |
| 19 | Outlet clamp | - | S. steel (EN-1.4404) |
| 20 | O-ring | Fluorelastomer (Viton) (1) | Fluorelastomer (Viton) (1) |
| 21 | Seat | - | S. steel (EN-1.4401) |

| MODEL | | R ₁ xR ₂ | 3/8"x1/2" to 1"x1" | |
|-------|----------------------|----------------------------------|------------------------|------------|
| | | | PN | PMS 36 bar |
| 695 | OPERATING CONDITIONS | PN | PMS 36 bar | 40 |
| | | PRESSURE IN bar | 36 | 36 |
| | | MAX. TEMPERATURE IN °C | 200 | 250 |
| | | MIN. TEMPERATURE IN °C | -60 | -60 |
| | | R ₁ xR ₂ | 3/8"x1/2" to 1"x1" | |
| 895 | OPERATING CONDITIONS | PN | PMS 36 bar | 40 |
| | | PRESSURE IN bar | 36 | 36 |
| | | MAX. TEMPERATURE IN °C | 200 | 250 |
| | | MIN. TEMPERATURE IN °C | -196 | -196 |
| | | R ₁ xR ₂ | 3/8"x1/2" to 1"x1" | |
| 995 | OPERATING CONDITIONS | PN | - | 160 |
| | | PRESSURE IN bar | - | 144 |
| | | MAX. TEMPERATURE IN °C | - | 250 |
| | | MIN. TEMPERATURE IN °C | - | -60 |
| | | R ₁ xR ₂ | 3/8"x1/2" to 1/2"x1/2" | |
| 694 | OPERATING CONDITIONS | DN ₁ xDN ₂ | 10x15 to 25x25 | |
| | | PN | - | 16 |
| | | PRESSURE IN bar | - | 16 |
| | | MAX. TEMPERATURE IN °C | - | 250 |
| | | MIN. TEMPERATURE IN °C | - | -60 |

(1) Mod. 895; Perfluorelastomer (FFKM)



Full lift safety valve with spring loading (AIT) version EP.

1. Disassembly and assembly

1.1 Disassembly

To replace the spring (8) or clean any of the internal components of the valve, proceed in the following manner:

- A - Cut the seal thread (11) with pliers.
- B - Withdraw the fastener (9), using a punching tool, until the lever (10) comes free.
- C - Unscrew and extract the hood (14).
- D - Unscrew the piston (16) from the rod (3).
- E - Holding the rod (3), unscrew the spring press (7) until you note a releasing of the spring (8).
- F - Extract the spring (8).

1.2 Assembly

- A - Enter the spring (8) through the upper part of the rod (3).
- B - Screw the spring press (7) holding the rod (3).
- C - Adjust the set pressure with the spring press (7).
- D - Screw the piston (16) to the rod (3).
- E - Screw the hood (14).
- F - Place the lever (10) and fix it with the fastener (9).

2. Adjusting the firing pressure

- A - Proceed according to points 1.1.A, 1.1.B, 1.1.C, 1.1.D, 1.1.E.
- B - Proceed according to points 1.2.C, 1.2.D, 1.1.E, 1.1.F.

Full lift safety valve with spring loading (AIT) version AP.

1. Disassembly and assembly

1.1 Disassembly

To replace the spring (8) or clean any of the internal components of the valve, proceed in the following manner:

- A - Cut the seal thread (11) with pliers.
- B - Withdraw the clip (9), using a punching tool, until the lever (10) comes free.
- C - Unscrew and extract the hood (14).
- D - Holding the rod (3), unscrew the spring press (7) until you note a releasing of the spring (8).
- E - Extract the spring (8).

1.2 Assembly

- A - Enter the spring (8) through the upper part of the rod (3).
- B - Screw the spring press (7) holding the rod (3).
- C - Adjust the set pressure with the spring press (7).
- D - Screw the hood (14).
- E - Place the lever (10) and fix it with the fastener (9)

2. Adjusting the firing pressure

- A - Proceed according to points 1.1.A, 1.1.B, 1.1.C, 1.1.D.
- B - Proceed according to points 1.2.C, 1.2.D, 1.1.E.

Full lift safety valve with spring loading (AIT) version ES.

1. Disassembly and assembly

1.1 Disassembly

To replace the spring (8) or clean any of the internal components of the valve, proceed in the following manner:

- A - Cut the seal thread (11) with pliers and extract the characteristic plate (12).
- B - Unscrew and extract the hood (14).
- C - Holding the rod (3), unscrew the spring press (7) until you note a releasing of the spring (8).
- D - Extract the spring (8).

1.2 Assembly

- A - Enter the spring (8) through the upper part of the rod (3).
- B - Screw the spring press (7) holding the rod (3).
- C - Adjust the set pressure with the spring press (7).
- D - Screw the hood (14).

2. Adjusting the firing pressure

- A - Proceed according to points 1.1.A, 1.1.B, 1.1.C.
- B - Proceed according to points 1.2.C, 1.2.D.

Full lift safety valve with spring loading (AIT) version AS.

1. Disassembly and assembly

1.1 Disassembly

To replace the spring (8) or clean any of the internal components of the valve, proceed in the following manner:

- A - Cut the seal thread (11) with pliers and extract the characteristic plate (12).
- B - Holding the rod (3), unscrew the spring press (7) until you note a releasing of the spring (8).
- C - Extract the spring (8).

1.2 Assembly

- A - Enter the spring (8) through the upper part of the rod (3).
- B - Screw the spring press (7) holding the rod (3).
- C - Adjust the set pressure with the spring press (7).

2. Adjusting the firing pressure

- A - Proceed according to points 1.1.A, 1.1.B.
- B - Proceed according to points 1.2.C.

MODEL 695/895/995

| R ₁ x R ₂ | | 3/8"x1/2" | | | | 1/2"x 1/2" | | | | 1/2"x 3/4" | | |
|-----------------------------------|---------------------------------|---|-------|--------|--------|------------|-------|--------|--------|------------|-------|--------|
| CONNECTIONS | | Male thread x Female thread Whitworth gas-tight cylindrical ISO 228/1 | | | | | | | | | | |
| DN ₁ x DN ₂ | | 10x15 | | | | 15x15 | | | | 15x20 | | |
| CONNECTIONS | | CLAMP ISO 2852:1993 | | | | | | | | | | |
| d ₀ | 694/695/895 | | | | | 8,00 | | | | 9,75 | | |
| | 995 | | | | | 4,00 | | | | | | |
| $A_0 = \frac{\pi \cdot d_0^2}{4}$ | 694/695/895 | | | | | 50,26 | | | | 74,66 | | |
| | 995 | | | | | 12,57 | | | | | | |
| H | 695/895 | - | 88 | - | - | - | 91 | - | - | - | 109 | |
| | 995 | - | 99 | - | - | - | 102 | - | - | - | - | |
| | 694 | - | 101 | - | - | - | 101 | - | - | - | 121 | |
| H ¹ | 695/895 | 102 | - | 136 | 93 | 105 | - | 139 | 96 | 127 | - | |
| | 995 | 113 | - | 147 | - | 116 | - | 150 | 107 | - | - | |
| | 694 | 115 | - | 149 | 106 | 115 | - | 149 | 106 | 139 | - | |
| h ¹ | 695/895 | 119 | - | 148 | 109 | 122 | - | 151 | 112 | 142 | - | |
| | 995 | 130 | - | 159 | 120 | 133 | - | 162 | 123 | - | - | |
| | 694 | 132 | - | 161 | 122 | 132 | - | 161 | 122 | 154 | - | |
| A | 695/895/995 | 9 | | | | 12 | | | | 12 | | |
| | 694 | | | | | 22 | | | | 24 | | |
| L ₁ | 695/895/995 | | | | | 36 | | | | 44 | | |
| | 694 | | | | | 41,50 | | | | 52 | | |
| L ₂ | 695/895 | 32,50 | | | | 35,50 | | | | 45,50 | | |
| | 995 | 43,50 | | | | 46,50 | | | | | | |
| | 694 | 45,50 | | | | | | | | 57,50 | | |
| INTAKE FLANGE | PN-16 CLAMP ISO 2852:1993 | C ₆₁ | 14 | | | | 18,10 | | | | 18,10 | |
| | | C ₇₁ | | | | | 34 | | | | 34 | |
| | | C ₂₁ | | | | | 27,50 | | | | 27,50 | |
| | | L ₁₁ | | | | | 2,85 | | | | 2,85 | |
| ESCAPE FLANGE | PN-16 CLAMP ISO 2852:1993 | C ₆₂ | | | | | 18,10 | | | | 23,70 | |
| | | C ₇₂ | | | | | 34 | | | | 50,50 | |
| | | C ₂₂ | | | | | 27,50 | | | | 43,50 | |
| | | L ₁₂ | | | | | 2,85 | | | | 2,85 | |
| WEIGHT IN Kgs. | | EP | AP | ES | AS | EP | AP | ES | AS | EP | AP | |
| 695/895/995 | BRONZE | 0,47 | 0,38 | 0,36 | 0,34 | 0,47 | 0,38 | 0,36 | 0,34 | 0,97 | 0,74 | |
| | S. STEEL | 0,45 | 0,36 | 0,34 | 0,32 | 0,45 | 0,36 | 0,34 | 0,32 | 0,95 | 0,72 | |
| 694 | S. STEEL | 0,50 | 0,41 | 0,39 | 0,37 | 0,50 | 0,41 | 0,39 | 0,37 | 1,06 | 0,83 | |
| CODE | 695 | BRONZE 2002-695. | 83810 | 838110 | 838120 | 838130 | 80210 | 802110 | 802120 | 802130 | 80211 | 802111 |
| | | S. STEEL 2002-695. | 83820 | 838210 | 838220 | 838230 | 80220 | 802210 | 802220 | 802230 | 80221 | 802211 |
| | 895 | BRONZE 2002-895. | 83810 | 838110 | 838120 | 838130 | 80210 | 802110 | 802120 | 802130 | 80211 | 802111 |
| | | S. STEEL 2002-895. | 83820 | 838210 | 838220 | 838230 | 80220 | 802210 | 802220 | 802230 | 80221 | 802211 |
| | 995 | S. STEEL 2002-995. | 03820 | 038210 | 038220 | 038230 | 00220 | 00221 | 00222 | 00223 | 00221 | 002211 |
| | | S. STEEL 2002-694. | 83820 | 838210 | 838220 | 838230 | 80220 | 802210 | 802220 | 802230 | 80221 | 802211 |

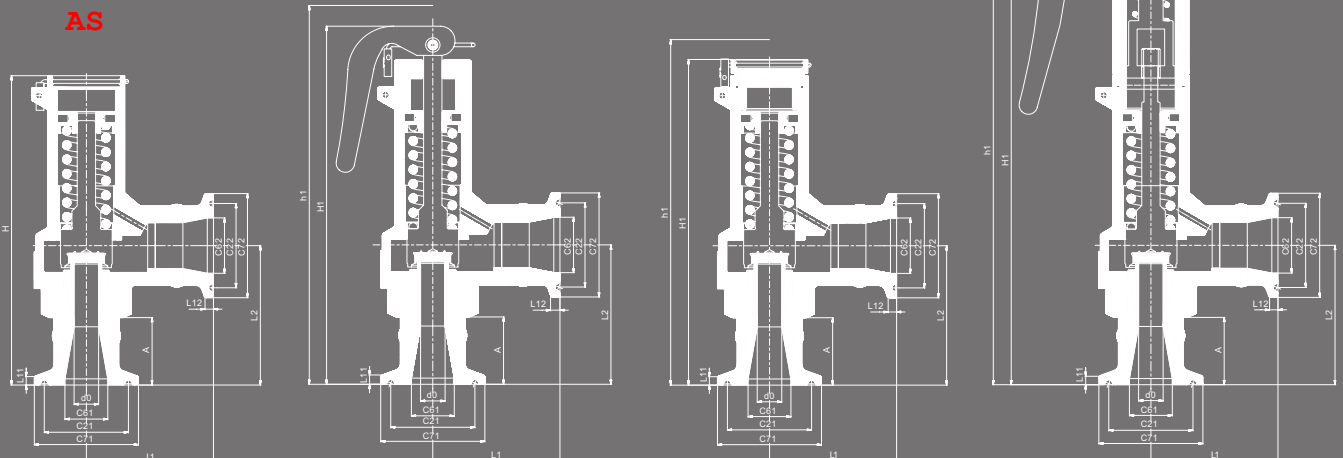
694

AP

ES

EP

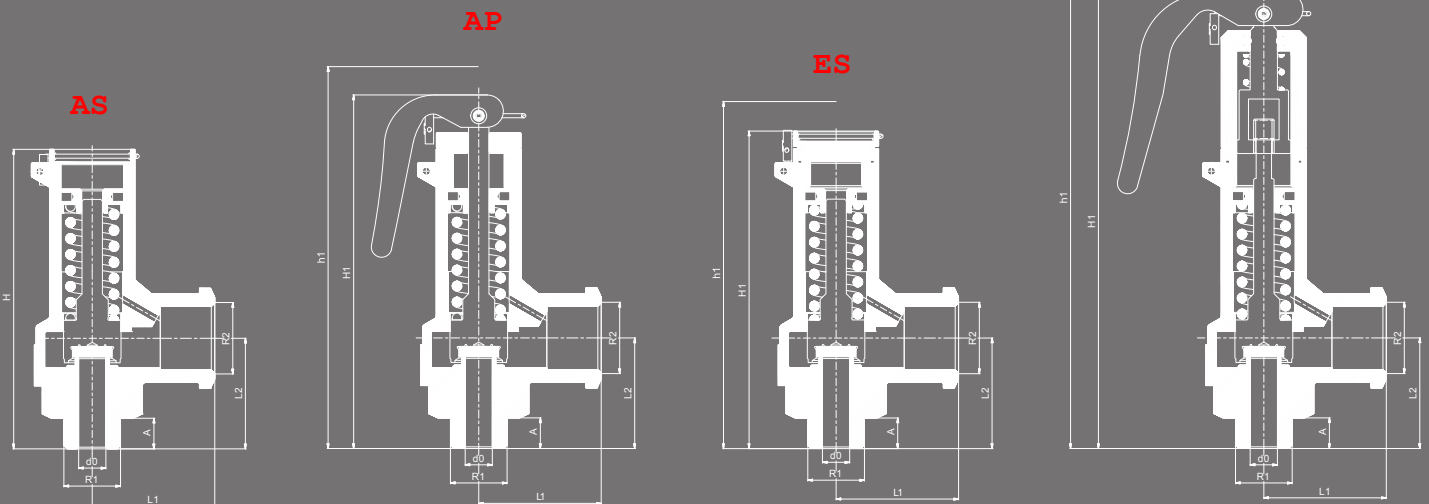
AS



MODEL 695/895/995

| 1/2"x 3/4" | | 3/4"x3/4" | | | | 3/4"x1" | | | | 1"x1" | | | | |
|------------|--------|-----------------------------|-------|--------|--------|---|-------|--------|--------|--------|-------|--------|--------|--------|
| | | Male thread x Female thread | | | | Whitworth gas-tight cylindrical ISO 228/1 | | | | | | | | |
| 15x20 | | 20x20 | | | | 20x25 | | | | 25x25 | | | | |
| | | CLAMP ISO 2852:1993 | | | | | | | | | | | | |
| | | 9,75 | | | | 13,00 | | | | | | | | |
| | | 74,66 | | | | 132,73 | | | | | | | | |
| - | - | - | 112 | - | - | - | 138 | - | - | - | 141 | - | - | |
| - | - | - | 121 | - | - | - | 148 | - | - | - | 148 | - | - | |
| 164 | 116 | 130 | - | 167 | 119 | 159 | - | 196 | 147 | 162 | - | 199 | 150 | |
| 176 | 128 | 139 | - | 176 | 128 | 169 | - | 206 | 157 | 169 | - | 206 | 157 | |
| 178 | 134 | 145 | - | 181 | 137 | 174 | - | 210 | 165 | 147 | - | 213 | 168 | |
| 190 | 146 | 154 | - | 190 | 146 | 184 | - | 220 | 175 | 154 | - | 220 | 175 | |
| 12 | | 15 | | | | 15 | | | | 18 | | | | |
| | | 24 | | | | 25 | | | | | | | | |
| | | 44 | | | | 60 | | | | | | | | |
| | | 52 | | | | 67 | | | | | | | | |
| 45,50 | | 48,50 | | | | 58,50 | | | | 61,50 | | | | |
| | | 57,50 | | | | 68,5 | | | | | | | | |
| 18,10 | | 23,70 | | | | 23,70 | | | | 29,70 | | | | |
| 34 | | 50,50 | | | | 50,50 | | | | | | | | |
| 27,50 | | 43,50 | | | | 43,50 | | | | | | | | |
| | | 2,85 | | | | 2,85 | | | | | | | | |
| | | 23,70 | | | | 29,70 | | | | | | | | |
| | | 50,50 | | | | 50,50 | | | | | | | | |
| | | 43,50 | | | | 43,50 | | | | | | | | |
| | | 2,85 | | | | 2,85 | | | | | | | | |
| ES | AS | EP | AP | ES | AS | EP | AP | ES | AS | EP | AP | ES | AS | |
| 0,72 | 0,70 | 0,97 | 0,74 | 0,72 | 0,70 | 1,67 | 1,35 | 1,33 | 1,31 | 1,67 | 1,35 | 1,33 | 1,31 | |
| 0,70 | 0,68 | 0,95 | 0,72 | 0,70 | 0,68 | 1,65 | 1,33 | 1,31 | 1,29 | 1,65 | 1,33 | 1,31 | 1,29 | |
| 0,81 | 0,79 | 1,10 | 0,87 | 0,85 | 0,83 | 1,74 | 1,52 | 1,50 | 1,48 | 1,02 | 1,80 | 1,78 | 1,76 | |
| 695 | 802121 | 802131 | 83410 | 834110 | 834120 | 834130 | 83411 | 834111 | 834121 | 834131 | 81010 | 810110 | 810120 | 810130 |
| 895 | 802221 | 802231 | 83420 | 834210 | 834220 | 834230 | 83421 | 834211 | 834221 | 834231 | 81020 | 810210 | 810220 | 810230 |
| 995 | 002221 | 002231 | 03420 | 034210 | 034220 | 034230 | 03421 | 034211 | 034221 | 034231 | 01020 | 010210 | 010220 | 010230 |
| 694 | 802221 | 802231 | 83420 | 834210 | 834220 | 834230 | 83421 | 834211 | 834221 | 834231 | 81020 | 810210 | 810220 | 810230 |

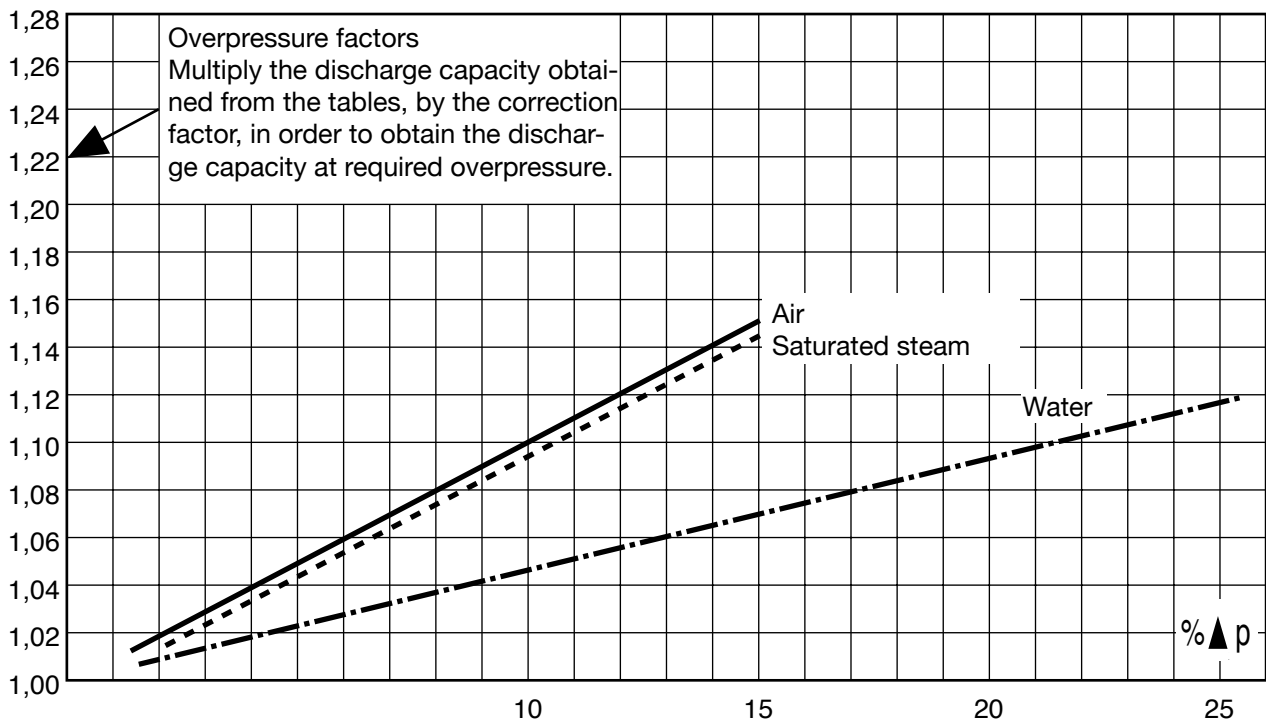
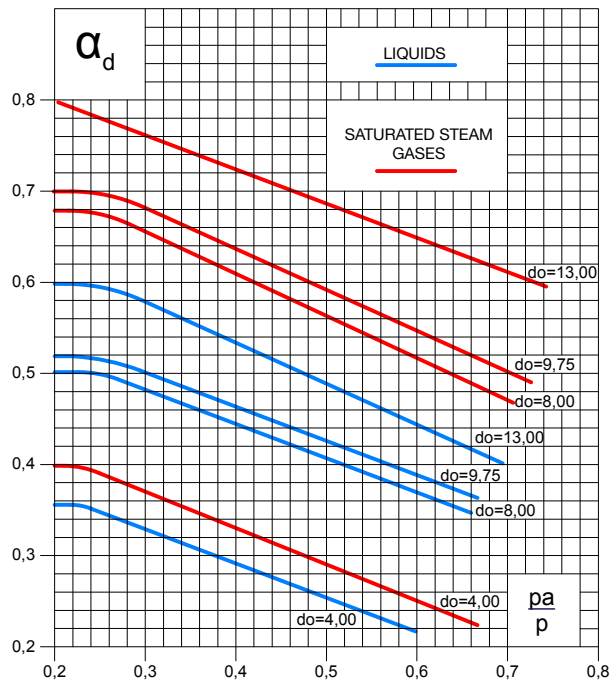
695/895/995



| SET PRESSURES AND REGULATING RANGES | | | | | | | | | |
|-------------------------------------|---------------|----------------|-----------------|-------------|------|-------|------|-------|----|
| MODEL | | | 695/895/995/694 | | | | | | |
| ENTRY CONNECTION | 695/895/995 | | R ₁ | 3/8" | 1/2" | 1/2" | 3/4" | 3/4" | 1" |
| | 694 | | DN ₁ | 10 | 15 | 15 | 20 | 20 | 25 |
| EXIT CONNECTION | 695/895/995 | | R ₂ | 1/2" | | 3/4" | | 1" | |
| | 694 | | DN ₂ | 15 | | 20 | | 25 | |
| d ₀ | 695/895/694 | | | 8,00 | | 9,75 | | 13,00 | |
| | 995 | | | 4,00 | | | | | |
| SET PRESSURE IN bar | MAXIMUM | 695/895 | PMS. 36 bar | 36 | | 36 | | 36 | |
| | | 695 | PN-40 | 36 | | 36 | | 36 | |
| | | 995 | PN-160 | 144 | | | | | |
| | | 694 | PN-16 | 16 | | 16 | | 16 | |
| | MINIMUM | 695/895 | PMS. 36 bar | 0,2 | | 0,2 | | 0,2 | |
| | | 695 | PN-40 | 0,2 | | 0,2 | | 0,2 | |
| | | 995 | PN-160 | 0,8 | | | | | |
| | | 694 | PN-16 | 0,2 | | 0,2 | | 0,2 | |
| SPRING REGULATING RANGE IN bar | 695/895/694 | 995 | | | | | | | |
| | 0,20 a 0,70 | 0,80 a 2,80 | CODE | 56160-56330 | | 56169 | | 56178 | |
| | 0,60 a 1,60 | 2,40 a 6,40 | CODE | 56161-56331 | | 56170 | | 56179 | |
| | 1,50 a 3,50 | 6,00 a 14,00 | CODE | 56162-56332 | | 56171 | | 56180 | |
| | 3,40 a 5,50 | 13,60 a 22,00 | CODE | 56163-56333 | | 56172 | | 56181 | |
| | 5,40 a 10,00 | 21,50 a 40,00 | CODE | 56164-56334 | | 56173 | | 56182 | |
| | 9,80 a 15,00 | 39,00 a 60,00 | CODE | 56165-56335 | | 56174 | | 56183 | |
| | 14,50 a 20,00 | 58,00 a 80,00 | CODE | 56166-56336 | | 56175 | | 56184 | |
| | 19,00 a 25,00 | 76,00 a 100,00 | CODE | 56167-56337 | | 56176 | | 56185 | |
| | 24,00 a 36,00 | 96,00 a 144,00 | CODE | 56168-56338 | | 56177 | | 56186 | |



| RECOMMENDED RANGES OF APPLICATION | | | | | | |
|---|-----------------|-----------------|------|----|----|---|
| MODEL | | 695/895/995/694 | | | | |
| | | AP | AS | EP | ES | |
| FLUID | SATURATED STEAM | | * | * | * | * |
| | GASES | INERT | * | * | * | * |
| | | NON INERT | | | * | * |
| LIQUIDS | | | | * | * | |
| OPENING PRESSURE IN % OF THE SET PRESSURE | | | +10% | | | |
| CLOSURE PRESSURE IN % OF THE SET PRESSURE | | | -10% | | | |



| DISCHARGE CAPACITY | | | | | | | | | | | | |
|-----------------------------------|--|-------|------|-------|------|--------|------|------|-------|-----|-----|------|
| MODEL | 695-895 | | | | | | | | | 995 | | |
| ENTRY CONNECTION | R1 | 3/8" | 1/2" | 1/2" | 3/4" | 3/4" | 1" | 3/8" | 1/2" | | | |
| EXIT CONNECTION | R2 | 1/2" | | 3/4" | | 1" | | | 1/2" | | | |
| MODEL | 694 | | | | | | | | | | | |
| ENTRY CONNECTION | DN1 | 10 | 15 | 15 | 20 | 20 | 25 | | | | | |
| EXIT CONNECTION | DN2 | 15 | | 20 | | 25 | | | | | | |
| do | | 8,00 | | 9,75 | | 13,00 | | | 4,00 | | | |
| $A_0 = \frac{\pi \cdot d_0^2}{4}$ | | 50,26 | | 74,66 | | 132,73 | | | 12,57 | | | |
| p [bar] | For other, not so dense liquids, other than water at 20°C apply: $V_L = \sqrt{\frac{\rho A}{\rho L}} \cdot V_A \quad V_L = V_i \cdot \sqrt{\frac{\rho A}{\rho L}}$ | | | | | | | | | | | |
| SET PRESSURE IN bar | I- Saturated steam in Kg/h. II- Air at 0°C and 1.013 bar in [Nm ³ /h]. III- Water at 20°C in l/h. V _i = Water flow according to table. V _L = Liquid flow. ρA = Water density at a 20° C. (ρA= 998 Kg/m ³) ρL = Liquid density. | | | | | | | | | | | |
| | I | II | III | I | II | III | I | II | III | I | II | III |
| 0,5 | 30 | 34 | 924 | 45 | 51 | 1399 | 91 | 103 | 2870 | 4 | 5 | 158 |
| 1,0 | 39 | 47 | 1306 | 59 | 71 | 1979 | 120 | 144 | 4059 | 6 | 7 | 224 |
| 1,5 | 49 | 59 | 1600 | 73 | 88 | 2423 | 149 | 180 | 4971 | 7 | 9 | 275 |
| 2,0 | 58 | 70 | 1848 | 87 | 106 | 2798 | 178 | 215 | 5740 | 9 | 10 | 317 |
| 2,5 | 67 | 82 | 2066 | 101 | 124 | 3128 | 206 | 251 | 6417 | 10 | 12 | 354 |
| 3,0 | 77 | 94 | 2263 | 115 | 141 | 3427 | 235 | 287 | 7030 | 11 | 14 | 388 |
| 3,5 | 86 | 105 | 2444 | 129 | 159 | 3702 | 263 | 323 | 7593 | 13 | 15 | 419 |
| 4,0 | 95 | 117 | 2613 | 143 | 176 | 3957 | 291 | 359 | 8117 | 14 | 17 | 448 |
| 4,5 | 104 | 129 | 2771 | 157 | 194 | 4197 | 320 | 395 | 8610 | 15 | 19 | 475 |
| 5,0 | 113 | 140 | 2921 | 171 | 212 | 4424 | 348 | 431 | 9076 | 17 | 21 | 501 |
| 6,0 | 132 | 164 | 3200 | 198 | 247 | 4847 | 404 | 503 | 9942 | 19 | 24 | 549 |
| 7,0 | 150 | 187 | 3457 | 226 | 282 | 5235 | 460 | 575 | 10738 | 22 | 28 | 593 |
| 8,0 | 168 | 211 | 3695 | 253 | 318 | 5596 | 515 | 646 | 11480 | 25 | 31 | 634 |
| 9,0 | 186 | 234 | 3919 | 281 | 353 | 5936 | 571 | 718 | 12176 | 27 | 34 | 672 |
| 10,0 | 204 | 258 | 4131 | 308 | 388 | 6257 | 627 | 790 | 12835 | 30 | 38 | 709 |
| 12,0 | 240 | 304 | 4526 | 362 | 459 | 6854 | 738 | 934 | 14060 | 35 | 45 | 776 |
| 14,0 | 277 | 351 | 4888 | 417 | 529 | 7403 | 849 | 1077 | 15186 | 41 | 52 | 839 |
| 16,0 | 313 | 398 | 5226 | 471 | 600 | 7915 | 960 | 1221 | 16235 | 46 | 59 | 897 |
| 18,0 | 349 | 445 | 5543 | 526 | 670 | 8395 | 1070 | 1365 | 17220 | 51 | 65 | 951 |
| 20,0 | 385 | 492 | 5843 | 580 | 741 | 8849 | 1182 | 1508 | 18151 | 57 | 72 | 1002 |
| 22,0 | 421 | 538 | 6128 | 635 | 812 | 9281 | 1293 | 1652 | 19037 | 62 | 79 | 1051 |
| 24,0 | 458 | 585 | 6400 | 690 | 882 | 9693 | 1404 | 1796 | 19884 | 67 | 86 | 1098 |
| 26,0 | 494 | 632 | 6662 | 745 | 953 | 10089 | 1516 | 1939 | 20696 | 73 | 93 | 1143 |
| 28,0 | 531 | 679 | 6913 | 800 | 1023 | 10470 | 1628 | 2083 | 21477 | 78 | 100 | 1186 |
| 30,0 | 567 | 726 | 7156 | 855 | 1094 | 10837 | 1740 | 2226 | 22231 | 83 | 107 | 1228 |
| 32,0 | 604 | 773 | 7391 | 910 | 1164 | 11193 | 1852 | 2370 | 22960 | 89 | 114 | 1268 |
| 34,0 | 641 | 819 | 7618 | 966 | 1235 | 11537 | 1965 | 2514 | 23666 | 94 | 121 | 1307 |
| 36,0 | 678 | 866 | 7839 | 1021 | 1306 | 11872 | 2079 | 2657 | 24352 | 100 | 127 | 1345 |
| 38,0 | | | | | | | | | | 102 | 134 | 1383 |
| 40,0 | | | | | | | | | | 105 | 141 | 1382 |
| 42,0 | | | | | | | | | | 107 | 148 | 1400 |
| 44,0 | | | | | | | | | | 110 | 155 | 1438 |
| 46,0 | | | | | | | | | | 112 | 162 | 1455 |
| 48,0 | | | | | | | | | | 115 | 169 | 1453 |
| 50,0 | | | | | | | | | | 117 | 176 | 1470 |
| 52,0 | | | | | | | | | | 119 | 182 | 1487 |
| 54,0 | | | | | | | | | | 121 | 189 | 1504 |
| 56,0 | | | | | | | | | | 124 | 196 | 1520 |
| 58,0 | | | | | | | | | | 126 | 203 | 1537 |
| 60,0 | | | | | | | | | | 128 | 210 | 1553 |
| 62,0 | | | | | | | | | | 130 | 217 | 1569 |
| 64,0 | | | | | | | | | | 132 | 224 | 1585 |
| 66,0 | | | | | | | | | | 134 | 231 | 1601 |
| 68,0 | | | | | | | | | | 136 | 238 | 1616 |
| 70,0 | | | | | | | | | | 138 | 244 | 1632 |
| 72,0 | | | | | | | | | | 140 | 251 | 1647 |
| 74,0 | | | | | | | | | | 142 | 258 | 1662 |
| 76,0 | | | | | | | | | | 144 | 265 | 1677 |
| 78,0 | | | | | | | | | | 146 | 272 | 1692 |
| 80,0 | | | | | | | | | | 147 | 279 | 1707 |
| 82,0 | | | | | | | | | | 149 | 286 | 1722 |
| 84,0 | | | | | | | | | | 151 | 293 | 1736 |
| 86,0 | | | | | | | | | | 153 | 300 | 1751 |
| 88,0 | | | | | | | | | | 155 | 306 | 1765 |
| 90,0 | | | | | | | | | | 156 | 313 | 1779 |
| 92,0 | | | | | | | | | | 158 | 320 | 1793 |
| 94,0 | | | | | | | | | | 160 | 327 | 1807 |
| 96,0 | | | | | | | | | | 161 | 334 | 1821 |
| 98,0 | | | | | | | | | | 163 | 341 | 1835 |
| 100,0 | | | | | | | | | | 165 | 348 | 1848 |
| 105,0 | | | | | | | | | | 169 | 365 | 1902 |
| 110,0 | | | | | | | | | | 173 | 382 | 1954 |
| 115,0 | | | | | | | | | | 176 | 399 | 2005 |
| 120,0 | | | | | | | | | | 180 | 417 | 2054 |
| 125,0 | | | | | | | | | | 184 | 434 | 2103 |
| 130,0 | | | | | | | | | | 187 | 451 | 2150 |
| 135,0 | | | | | | | | | | 191 | 468 | 2196 |
| 140,0 | | | | | | | | | | 195 | 485 | 2242 |
| 145,0 | | | | | | | | | | 198 | 503 | 2286 |

COEFFICIENT OF DISCHARGE

| MODEL | | 695/895/995/694 | | | | | | | | |
|---------------------------------|-----------------|-----------------|-----------------------|------|------|------|------|-------|------|--|
| ENTRY CONNECTION | R ₁ | 3/8" | 1/2" | 1/2" | 3/4" | 3/4" | 1" | | | |
| 694 | DN ₁ | 10 | 15 | 15 | 20 | 20 | 25 | | | |
| EXIT CONNECTION | R ₂ | 1/2" | | 3/4" | | 1" | | | | |
| 694 | DN ₂ | 15 | | 20 | | 25 | | | | |
| d ₀ | | 695/895/694 | | 8,00 | | 9,75 | | 13,00 | | |
| | | 995 | | 4,00 | | | | | | |
| h | | 695/895/694 | | 2,50 | | 4,00 | | 5,50 | | |
| | | 995 | | 0,31 | | 0,41 | | 0,42 | | |
| h/d ₀ | | 695/895/694 | | 0,31 | | 0,41 | | 0,42 | | |
| | | 995 | | 0,62 | | | | | | |
| COEFFICIENT OF DISCHARGE ad (1) | | 695/895/694 | SATURATED STEAM GASES | | 0,68 | | 0,69 | | 0,79 | |
| | | 995 | | | 0,40 | | | | | |
| | | 695/895/694 | LIQUIDS | | 0,51 | | 0,52 | | 0,60 | |
| | | 995 | | | 0,35 | | | | | |

(1) For set pressures less than 3 bar see graph of discharge coefficient.

pa = Backpressure permitted [bar] absolute.
 p = Set pressure [bar] absolute.
 ad = Coefficient of discharge.

Calculus according to ISO 4126-1:2014 "Safety valves".