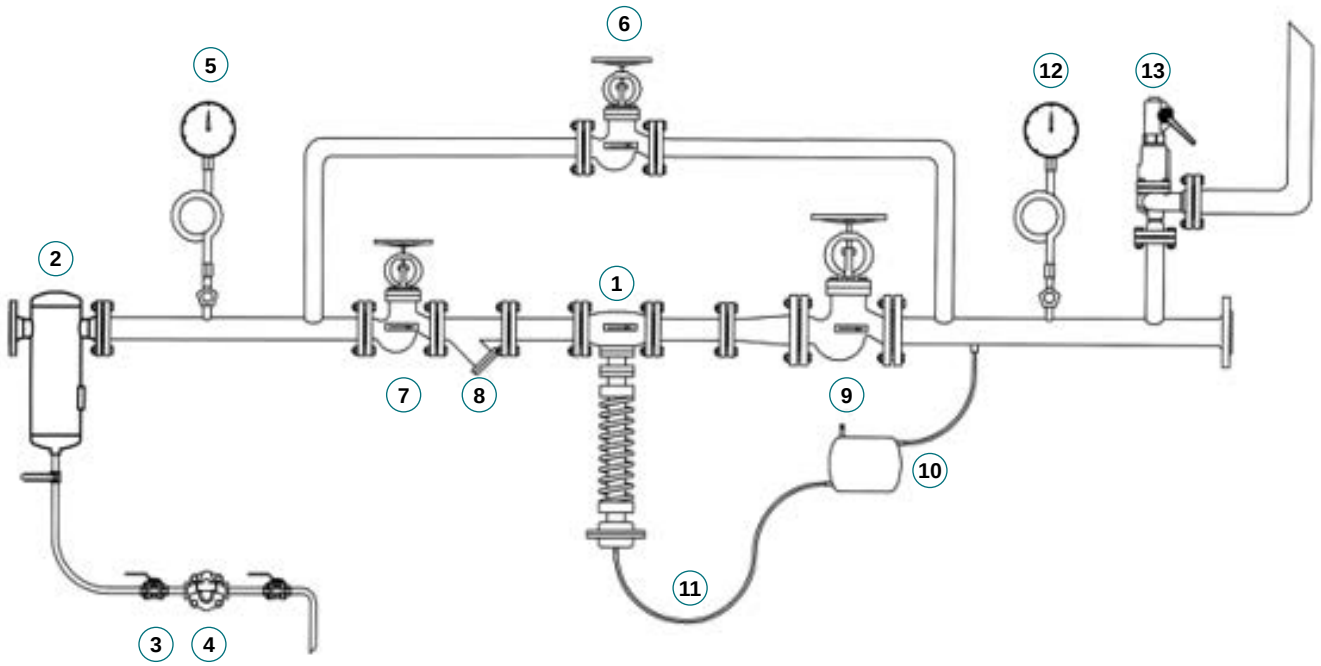
Brochure **Steam Equipment**

SODECO valves

STEAM PRESSURE REDUCING UNIT



1. PRV
2. Water separator
3. Steam trap isolation valve
4. Steam trap
5. Upstream pressure gauge
6. Bypass valve
7. Upstream isolation valve
8. Strainer
9. Downstream isolation valve
10. Condensing pot
11. Copper tube
12. Downstream pressure gauge
13. Safety valve

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GLOBE VALVES

5416X

- Body in cast iron GG-25
- Flanged PN 16
- DN 15 ~ DN 300

5240X

- Body in steel GS-C25
- Flanged PN 40
- DN 15 ~ DN 200

825EC

- Body in stainless steel CF8M
- Flanged PN 40
- DN 15 ~ DN 150

BFE-W23A5

- Body in A105N
- SW ends
- Trim 5 (HF/HF)
- 1/2" ~ 2"

BELLOW SEAL GLOBE VALVES - PN16/25

5616X

- Body in cast iron GG-25
- Flanged PN 16
- DN 15 ~ DN 250

5716X

- Body in ductile iron GGG-40.3
- Flanged PN 16
- DN 15 ~ DN 200

5725X

- Body in ductile iron GGG-40.3
- Flanged PN 25
- DN 15 ~ DN 200

BELLOW SEAL GLOBE VALVES - PN40

5640XV

- Body in steel GS-C25
- Flanged PN 40
- Bellow in stainless steel 316L
- DN 15 ~ DN 300

5640X

- Body in steel GS-C25
- Flanged PN 40
- Double wall bellow in stainless steel AISI 321
- DN 15 ~ DN 150

PISTON VALVES

YVN3

- Body in cast iron GJL 250
- Flanged PN 16
- DN 15 ~ DN 50

YVNB2

- Body in cast iron GJL 250
- Flanged PN 16
- DN 65 ~ DN 200

YVMN3

- Body in cast iron GJL 250
- BSP threaded PN 16
- 1/2" ~ 2”

YVN8

- Body in cast steel 1.0619
- Flanged PN 40
- DN 15 ~ DN 50

YVNB8

- Body in cast steel 1.0619
- Flanged PN 40
- DN 65 ~ DN 200

YVMN8

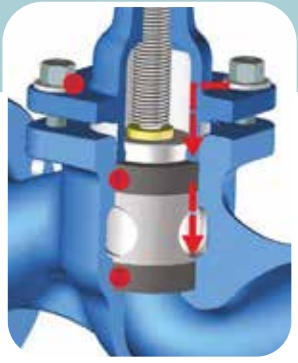
- Body in cast steel 1.0619
- BSP threaded
- PN 63, 1/2" ~ 1”
- PN 40, 1 1/4” ~ 2”

YVN8150

- Body in cast steel 1.0619
- Flanged ANSI 150 Lbs
- DN 15 ~ DN 50

OPTIONS

- Other materials on request (ductile iron or stainless steel)
- Socket weld on request



MANUAL BALL VALVES

JC

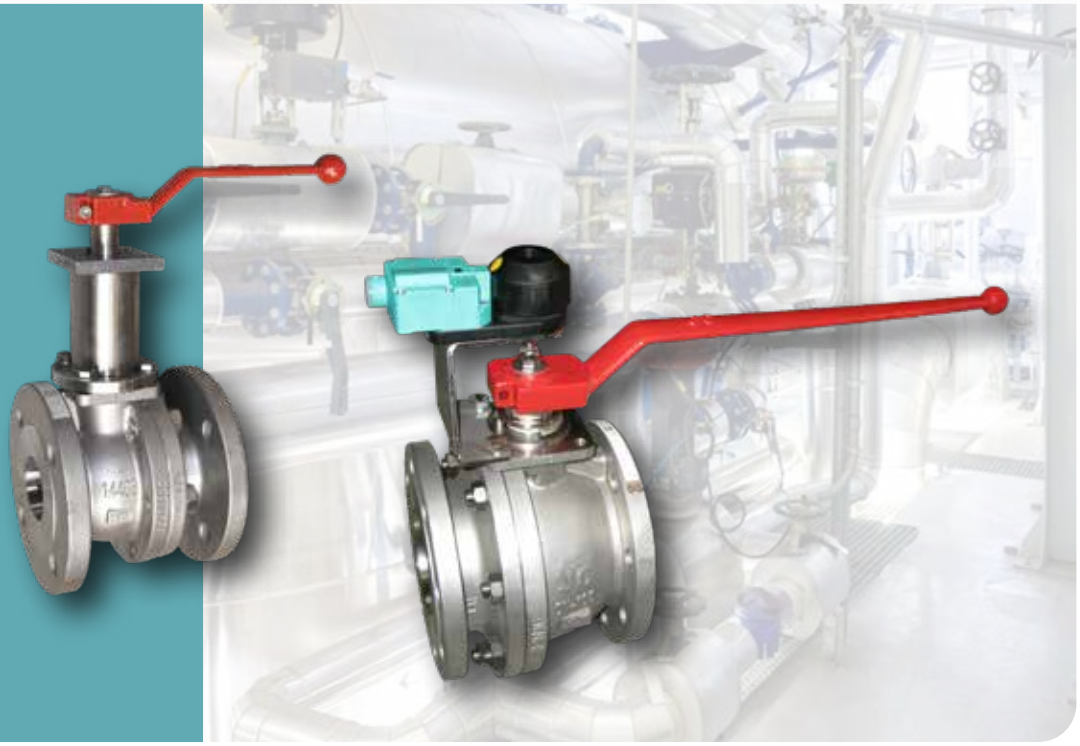
SEAT OPTIONS

- PTFE + CG
- PEEK
- Stansit
- Metal seated

MARS VALVE

OPTIONS

- Stem extensions
- Limit switches
- Locking device



AUTOMATED BALL VALVES

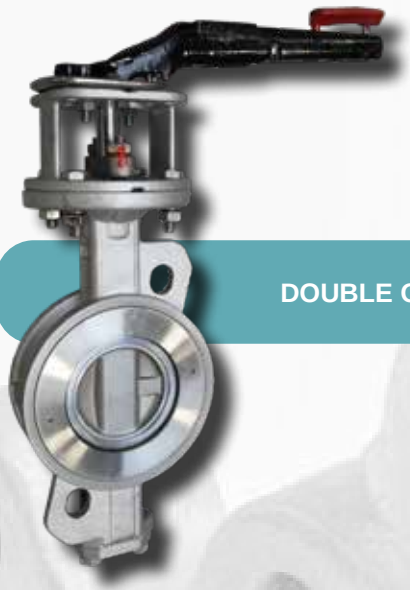



OPTIONS

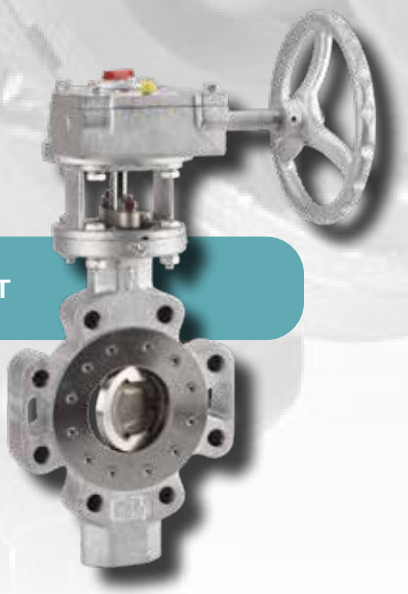
- Limit switches
- Solenoid valves
- Stem extensions
- Positioners
- High temperature actuators
- Speed control plates

BUTTERFLY VALVES

CONCENTRIC



DOUBLE OFFSET



TRIPLE OFFSET

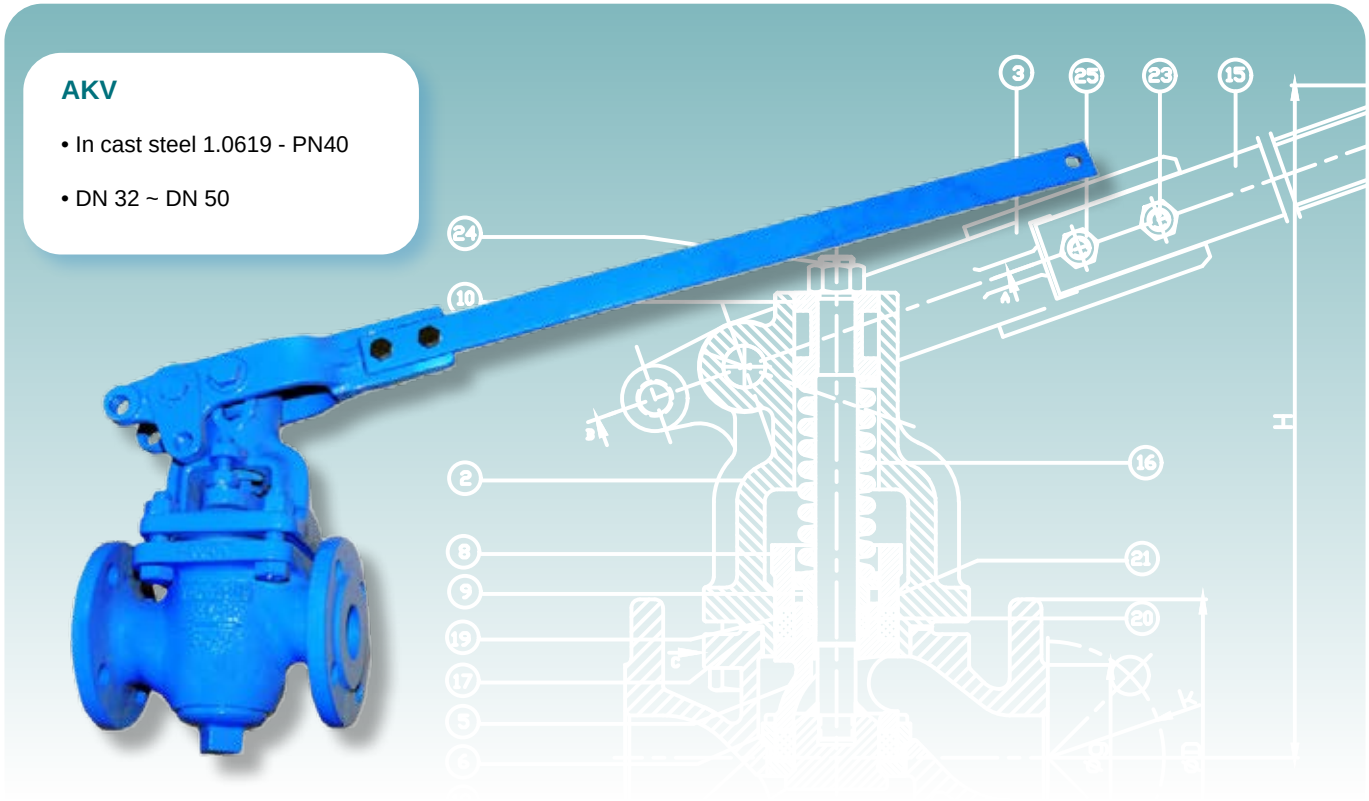
CONTROL VALVES

- with pneumatic actuator or electric actuator
- 2-way and 3-way
- DN 15 - 400
- PN 16 - 160
- ANSI 150 - 300
- other configurations on request

BOILER BLOWDOWN VALVES

AKV

- In cast steel 1.0619 - PN40
- DN 32 ~ DN 50



AUTOMATED BLOWDOWN VALVES

- PN 40
- DN 20 ~ DN 65

FLANGED BALL VALVES

- With actuator
- Special execution for steam

3-PIECE BALL VALVES

- With actuator
- Special execution for steam

Y-STRAINERS

20HX

- Body in cast iron EN-GJL-250
- Screen in stainless steel AISI 304
- Flanged PN 16
- DN 15 ~ DN 400

20HGGG

- Body in ductile iron GGG-40
- Screen in stainless steel AISI 304
- Flanged PN 40
- DN 15 ~ DN 250

20A40X

- Body in steel 1.0619
- Screen in stainless steel AISI 304
- Flanged PN 40
- DN 15 ~ DN 250

20IXD

- Body in stainless steel 1.4408
- Screen in stainless steel AISI 316
- Flanged PN 16
- DN 15 ~ DN 200

1001A

- Body in steel A105N
- Screen in stainless steel AISI 304
- SW ends
- 3/8" ~ 2"

1003A

- Body in steel A105N
- Screen in stainless steel AISI 316
- Female threaded NPT
- 3/8" ~ 2"

21I

- Body in stainless steel A351 Gr. CF8M
- Screen in stainless steel AISI 316
- Female threaded BSP - PN 40
- 1/4" ~ 3"

1003I

- Body in stainless steel AISI 316
- Screen in stainless steel AISI 316
- Female threaded NPT
- 3/8" ~ 2"

Also available:

basket strainers
for large flow rates

OPTIONS

- Other materials on request
- Other mesh sizes on request
- Drain valve

CHECK VALVES

6116X

- Body in cast iron EN-GJL-250
- Spring loaded
- Disc in stainless steel 1.4021
- Seat in stainless steel 1.4006
- Flanged PN 16
- DN 15 ~ DN 300

6240X

- Body in steel 1.0619
- Spring loaded
- Metal seated
- Flanged PN 40
- DN 15 ~ DN 500

D6666

- Body and disc in stainless steel 316
- Metal seated, with spring
- Max. working pressure: 52 bar
- For mounting between flanges DIN PN6, PN10, PN16, PN25, PN40, ANSI 150 & 300
- DN 15 ~ DN 100

D6666T

- Body in stainless steel 1.4408
- Disc in stainless steel AISI 316
- Metal seated
- BSP threaded, PN 63
- 1/4" ~ 2"

D6666BW

- Body in stainless steel 1.4408
- Disc in stainless steel AISI 316
- Metal seated
- BW ends, PN 63
- 1/4" ~ 2"

D6666NPT

- Body in stainless steel 1.4408
- Disc in stainless steel AISI 316
- Metal seated
- NPT threaded, PN 63
- 1/4" ~ 2"

BFE-W24A5

- Piston Check Valve - Class 800#
- Body in A105N
- Bolted bonnet - reduced bore
- Trim 5 (HF/HF)
- SW ends
- NACE MR-0175 & ATEX
- 1/2" ~ 2"

OPTIONS

- Other materials on request
- Seat alternatives: EPDM, Viton, PTFE

SIGHT GLASSES

CONNECTION

- BSP threaded ends
- Buttweld ends
- Socketweld ends
- NPT threaded ends
- flanged DIN PN 10/16/25/40
- flanged ANSI 150/300/600
- ...

MATERIALS

- bronze
- cast iron
- steel
- stainless steel
- soda lime glass
- borosilicate glass

SPECIAL EXECUTIONS

- flow indicator / paddle wheel
- with light fitting
- with steam jacket
- with screen wiper
- angle execution
- 3-way execution
- sanitary execution

FLOAT STEAM TRAPS

ST1510

- Body in ductile iron, PN 16
- BSP ends
- 1/2" ~ 1"

ST1510F

- Body in ductile iron
- Flanged PN 16
- DN 15 ~ DN 25

ST1518

- Body in ductile iron
- Flanged PN 16
- DN 15 ~ DN 25

ST1514

- Body in steel 1.0619, PN 25
- BSP ends
- 1/2" ~ 1"

ST1514F

- Body in steel 1.0619
- Flanged PN 25
- 1/2" ~ 1"

ST1513

- Body in stainless steel CF8M, PN25
- BSP ends
- 1/2" ~ 1"

ST1513F

- Body in stainless steel CF8M, PN25
- BSP ends
- DN 15 ~ DN 25

ST1502

- Free floating ball type PN 16
- Body in ductile iron
- BSP ends
- 1/2" ~ 2"

ST1502F

- Free floating ball type
- Body in ductile iron
- Flanged PN 16
- DN 15 ~ DN 25

ST1505

- Inverted bucket type PN 16
- Body in cast iron
- BSP ends
- 1/2" ~ 2"

For other sizes up to DN 100 (4"),
please contact our Sales Dept.

THERMOSTATIC STEAM TRAPS

ST1516

- Body in steel A105, PN 40
- Y-strainer incorporated
- BSP ends
- 1/2" ~ 1"

ST1516F

- Body in steel A105
- Y-strainer incorporated
- Flanged PN 40
- 1/2" ~ 1"

ST1519

- Same as ST1516 but without Y-strainer, PN 40
- BSP ends
- 1/2"

ST1522

- Body in stainless steel, PN 40
- Y-strainer incorporated
- BSP ends
- 1/4" ~ 1"

ST1525

- Straight model
- Body in brass, PN 16
- Y-strainer incorporated
- BSP ends
- 1/2"

ST1525A

- Angled model
- Body in brass, PN 16
- Y-strainer incorporated
- BSP ends
- 1/2"

ST1536

- Body in steel A105
- Check valve & Y-strainer incorporated, PN32
- BSP ends
- 1/2" ~ 1"

ST1536F

- Body in steel A105
- Check valve & Y-strainer incorporated
- Flanged PN 40
- DN 15 ~ DN 25

THERMODYNAMIC STEAM TRAPS

ST1530

- Body in steel A105, PN 40
- Strainer incorporated
- BSP ends
- 1/2" ~ 1"

ST1530F

- Body in steel A105
- Strainer incorporated
- Flanged PN 40
- 1/2" ~ 1"

ST1533

- Body in stainless steel, PN 63
- Strainer incorporated
- BSP ends
- 1/2" ~ 1"

VACUUM BREAKERS

VB9814

- Body in brass, PN 16
- BSP ends
- 1/2"

VB9814I

- Body in stainless steel, PN25
- BSP ends
- 1/2"

WATER SEPARATORS

WS1560

- Body in carbon steel, PN 25
- BSP ends
- 1/2" ~ 1"

WS1560I

- Body in stainless steel 304, PN 25
- BSP ends
- 1/2" ~ 1"

WS1560F

- Body in carbon steel
- Flanged PN 40
- DN 15 ~ DN 100

AIR ELIMINATORS

AE1545

- Body in brass, PN 16
- For vertical installation
- BSP ends
- Inlet 3/4" x outlet 3/8" female

AE1548

- Body in ductile iron, PN 16
- For vertical installation
- BSP ends
- Inlet 3/4" x outlet 1/2" female

AE15481

- Body in stainless steel CF8M, PN 25
- For vertical installation
- BSP ends
- Inlet 3/4" x outlet 1/2" female

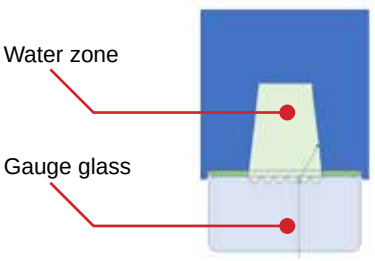
AE1546

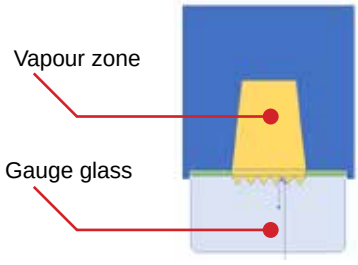
- Body in ductile iron, PN 16
- For horizontal installation
- BSP ends
- 1/2" ~ 3/4"

LEVEL GAUGES

REFLEX GAUGES AND TRANSPARENT GAUGES

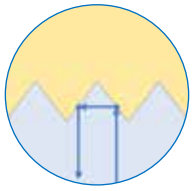
MAGNETIC LEVEL GAUGES



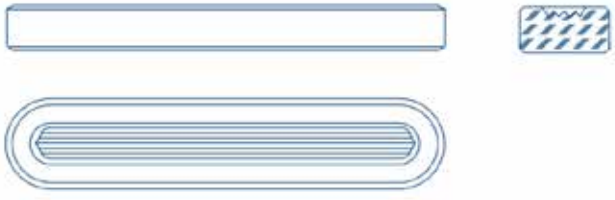


TRANSPARENT GAUGE

Gauge body



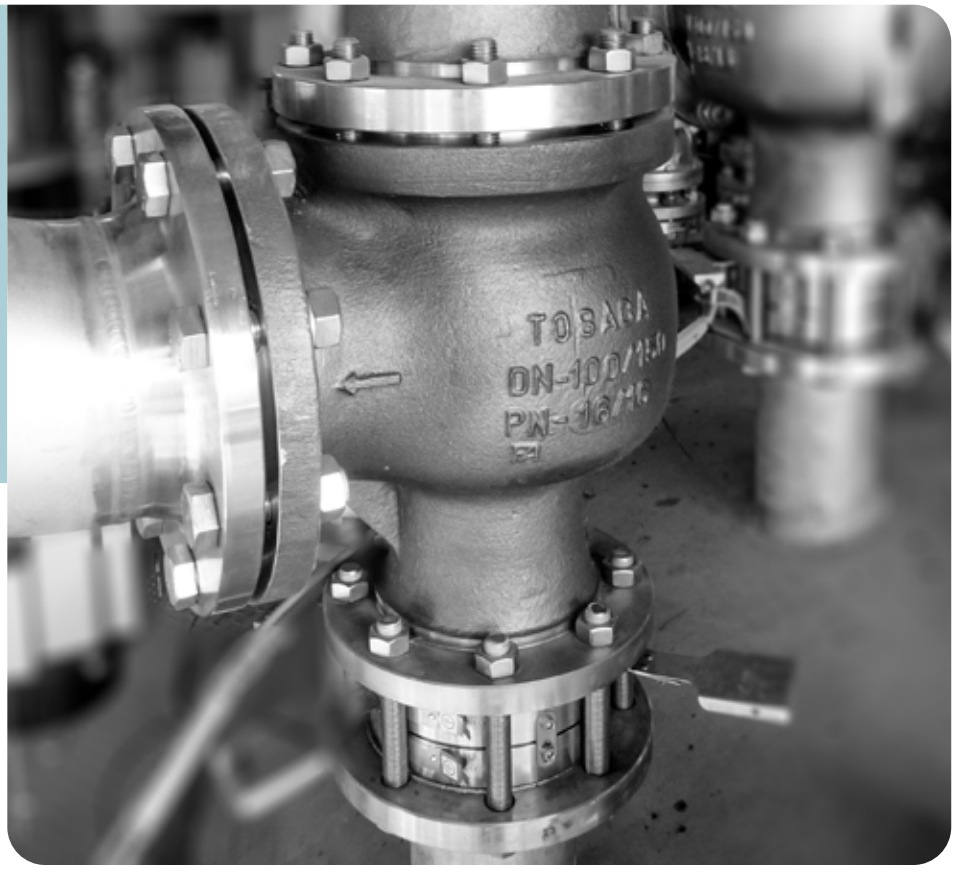
REFLEX GAUGE



SAFETY & RELIEF VALVES

The safety of your staff and installation is our absolute priority!

It's important that the right type of valve is chosen for your application and that the safety valve is sized correctly.



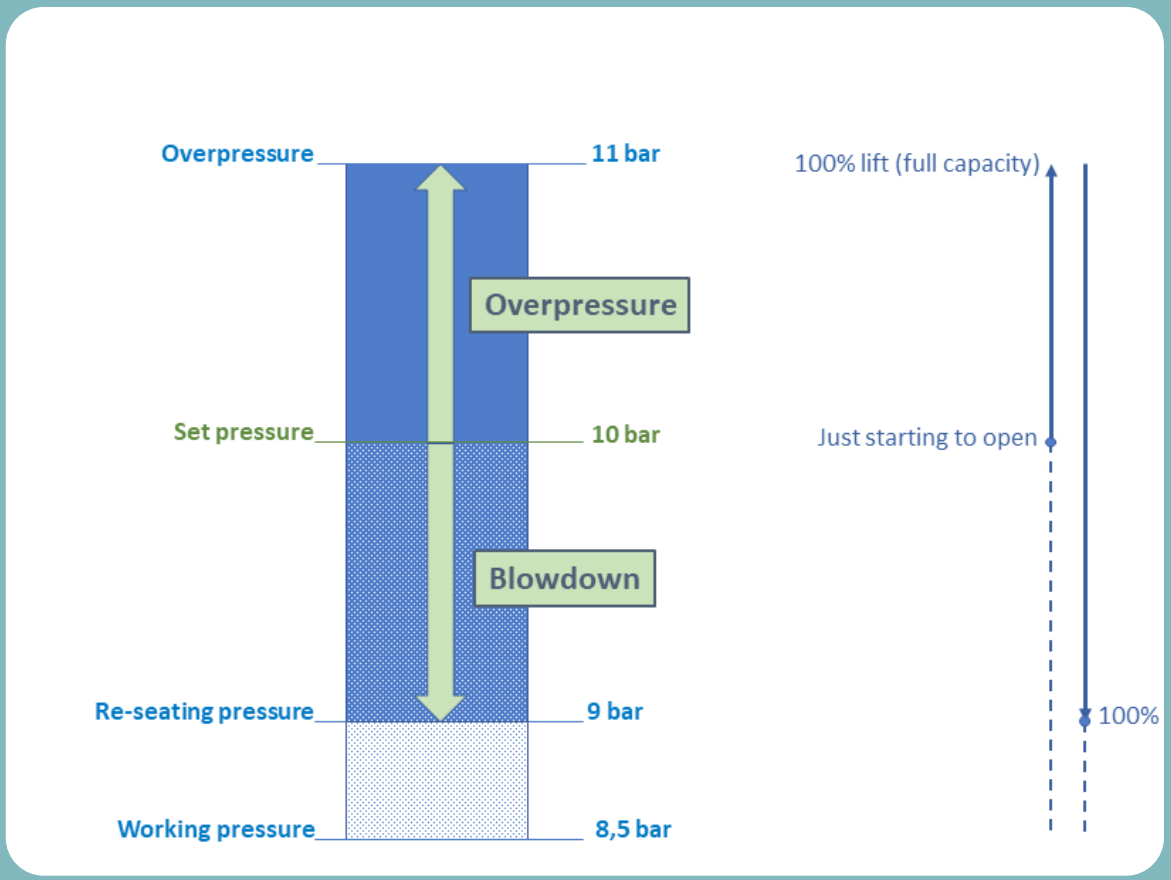
SAFETY & RELIEF VALVES

Let's look at the following example.

An application has a normal working pressure of 8,5 bar and is protected by a safety valve with a set pressure of 10 bar.

If, due to a problem in the process, pressure starts to rise above normal working pressure, the safety valve will remain closed until the rising pressure reaches the set pressure of 10 bar. At that point, the safety valve will just start to open - meaning the valve will be lifted a fraction off its seat. As pressure continues to rise, the valve will lifted further, increasing the discharge flow rate as it goes, until it has attained its maximum position (full lift) and therefore its maximum discharge capacity. The extra pressure needed to reach its maximum lift is called the overpressure.

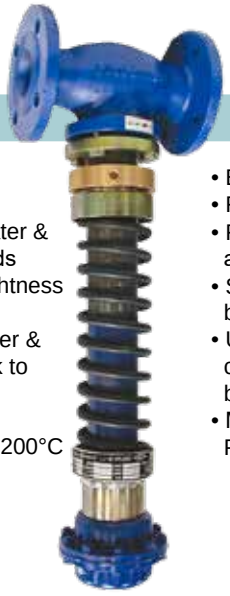
Once the overpressure has been relieved, the pressure will drop down again. However, when the decreasing pressure reaches again the original set pressure, the valve is not yet 100% closed. It needs an extra pressure decrease to reach the pressure where the valve is again 100% reseated/closed/tight. This is called the blow-down pressure.



PRESSURE REGULATORS

Pressure reducing valves are essential components for steam installations. Sodeco can offer a myriad of options, varying from the simplest direct action reducing valve to the more sophisticated pilot operated reducing valve, in different types of construction. Our flexibility allows us to offer not only a wide range of standard products, but also to provide custom-made solutions for your application.

- direct acting
- pilot operated
- cast steel
- stainless steel
- high capacity
- clean steam

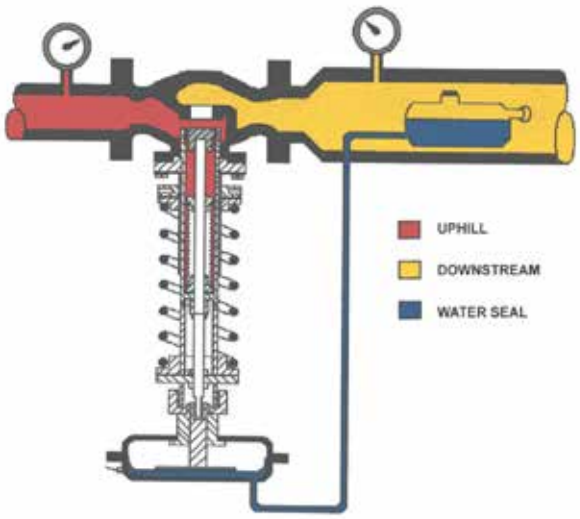


D23P

- Body in GGG40.3
- Flanged PN16
- For steam, air, water & all compatible fluids
- Stainless steel tightness below
- Upstream y-strainer & condensation tank to be added
- Max. ΔP: 10 bar
  PS: 13 bar - TS: +200°C

D25P

- Body in A216WCB
- Flanged PN40
- For steam, air, water & all compatible fluids
- Stainless steel tightness below
- Upstream y-strainer & condensation tank to be added
- Max. ΔP: 10 bar
  PS: 20 bar - TS: +215°C



PRESSURE GAUGES & ACCESSORIES

- Pressure gauge
- Chemical industry - class 1,0
- Case and mechanism in stainless steel
- Case diam.: 100 mm
- Bottom connection in stainless steel: 1/2"
- Range: 0 ... 0,6 bar
  0 ... 1,6 bar
  0 ... 2,5 bar
  ...
  ...
  0 ... 1000 bar

60A

- Pressure gauge valve, PN 400
- Body in steel 1.0460
- Disc in stainless steel 1.4104
- Max. working pressure: 400 bar
- Max. temperature: 120°C
- Connection: 1 x gland nut, 1 x male threaded end
- Handwheel in plastic
- 1/2"

60I

- Pressure gauge valve, PN 400
- Body in stainless steel AISI 316
- Disc in stainless steel AISI 316
- Max. working pressure: 400 bar
- Max. temperature: 200°C
- Connection: 1 x gland nut, 1 x male threaded end
- Handwheel in plastic
- 1/2"

95A

- Siphon pipe, curled type
- Body in steel, PN 25
- 2x threaded BSP (M)
- 1/4" ~ 1/2"

95I

- Siphon pipe, curled type
- Body in stainless steel 1.4571, PN 25
- 2x threaded BSP (M)
- 1/4" ~ 1/2"

STEAM TABLE

DATA SATURATED STEAM						
Pressure	Temperature	Specific volume	Specific weight	Warmth content		
				Water	Evaporation heat	Steam
Bar abs	°C	m³/kg	kg/m³	kJ/kg	kJ/kg	kJ/kg
0,1	45,83	14,67	0,068	191,83	2392,9	2584,7
0,2	60,09	7,65	0,131	251,45	2358,4	2609,9
0,3	69,12	5,229	0,191	289,30	2336,1	2625,4
0,4	75,89	3,993	0,250	317,65	2319,2	2636,9
0,5	81,35	3,240	0,309	340,56	2305,4	2646,0
0,6	85,95	2,732	0,366	359,93	2293,6	2653,6
0,7	89,96	2,365	0,423	376,77	2283,3	2660,1
0,8	93,51	2,087	0,479	391,72	2274	2665,7
0,9	96,71	1,869	0,535	405,21	2265,6	2670,8
1	99,63	1,694	0,590	417,51	2257,9	2675,4
1,2	104,81	1,428	0,700	439,36	2244,1	2683,5
1,4	109,32	1,236	0,809	458,42	2231,9	2690,3
1,6	113,32	1,091	0,917	475,38	2220,9	2696,3
1,8	116,93	0,977	1,023	490,70	2210,8	2701,5
2	120,23	0,885	1,129	504,70	2201,6	2706,3
2,5	127,43	0,718	1,392	535,34	2181	2716,4
3	133,54	0,606	1,651	561,43	2163,2	2724,6
3,5	138,86	0,524	1,908	584,27	2147,4	2731,7
4	143,62	0,462	2,163	604,67	2133	2737,6
4,5	147,90	0,414	2,417	623,16	2119,7	2742,9
5	151,84	0,375	2,669	640,12	2107,4	2747,5
5,5	155,47	0,845	2,92	655,27	2096,2	2751,5
6	158,84	0,316	3,17	670,42	2085	2755,4
6,5	161,99	0,294	3,468	683,74	2075	2758,7
7	164,96	0,273	3,766	697,06	2064,9	2762,0
7,5	167,76	0,257	3,964	709,00	2055,7	2764,7
8	170,41	0,240	4,162	720,94	2046,5	2767,5
8,5	172,94	0,228	4,408	731,79	2038	2769,8
9	175,36	0,215	4,655	742,64	2029,5	2772,1
9,5	177,67	0,205	4,901	752,62	2021,6	2774,2
10	179,88	0,194	5,147	762,61	2013,6	2776,2
11	184,07	0,177	5,637	781,13	1998,5	2779,6
12	187,96	0,163	6,127	798,43	1984,3	2782,7
13	191,61	0,151	6,617	814,70	1970,7	2785,4
14	195,04	0,141	7,106	830,08	1957,7	2787,8
15	198,29	0,132	7,596	844,67	1945,2	2789,9

STEAM TABLE

DATA SATURATED STEAM						
Pressure	Temperature	Specific volume	Specific weight	Warmth content		
				Water	Evaporation heat	Steam
Bar abs	°C	m³/kg	kg/m³	kJ/kg	kJ/kg	kJ/kg
16	201,37	0,124	8,085	858,56	1933,2	2791,8
17	204,31	0,117	8,575	871,84	1921,5	2793,3
18	207,11	0,110	9,065	884,58	1910,3	2794,8
19	209,80	0,105	9,555	869,81	1899,3	2796,1
20	212,37	0,100	10,05	908,59	1888,6	2797,2
21	214,85	0,095	10,54	919,96	1878,2	2798,2
22	217,24	0,091	11,03	930,95	1868,1	2799,1
23	219,55	0,087	11,52	941,60	1858,2	2799,8
24	221,78	0,083	12,02	951,93	1848,5	2800,4
25	223,94	0,080	12,51	961,96	1839	2800,9
26	226,04	0,077	13,01	971,72	1829,6	2801,3
27	228,07	0,074	13,51	981,22	1820,5	2801,7
28	230,05	0,071	14,01	990,48	1811,5	2802,0
29	231,97	0,069	15,51	999,53	1802,6	2802,2
30	233,84	0,067	15,01	1008,4	1793,9	2802,3
31	235,67	0,065	15,51	1017,0	1785,4	2802,3
32	237,45	0,062	16,02	1025,4	1776,9	2802,3
33	239,18	0,061	16,52	1033,7	1768,6	2802,3
34	240,88	0,059	17,03	1041,8	1760,3	2802,1
35	242,54	0,057	17,54	1049,8	1752,2	2802,0
36	244,16	0,055	18,05	1057,6	1744,2	2801,8
37	245,75	0,054	18,56	1065,2	1736,2	2801,4
38	247,31	0,052	19,07	1072,7	1728,4	2801,1
39	248,84	0,051	19,58	1080,1	1720,6	2800,7
40	250,33	0,050	20,1	1087,4	1712,9	2800,3
41	251,80	0,049	20,62	1094,6	1705,3	2799,9
42	253,24	0,047	21,14	1101,6	1697,8	2799,4
43	254,66	0,046	21,66	1108,5	1690,3	2798,8
44	256,05	0,045	22,18	1115,4	1682,9	2798,3
45	257,41	0,044	22,71	1122,1	1675,6	2797,7
46	258,75	0,043	23,24	1128,8	1668,3	2797,1
47	260,07	0,042	23,76	1135,3	1661,1	2796,4
48	261,37	0,041	24,29	1141,8	1653,9	2795,7
49	262,65	0,040	24,83	1148,2	1646,8	2795,0
50	263,91	0,039	25,36	1154,5	1639,7	2794,2

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