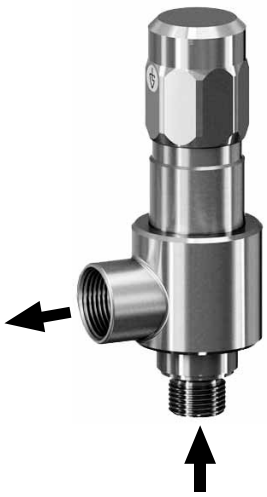
Safety valves

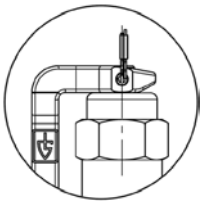
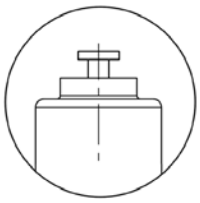
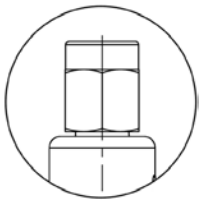
Safety valve automatically discharges a medium when the pressure exceeds a predetermined value (set pressure) thus securing a pressure tank or system from bursting out. Once the pressure is stabilized below its set value, the safety valve closes and the medium is not further released. According to Pressure Equipment Directive (PED) 2014/68/UE this type of safety valve is regarded as a protective device.
The safety valves offered by TUBES INTERNATIONAL® are suitable for inert and non-inert media, including air gases, steam, fluids (also cryogenic fluids).

Note!
The precise value of valve working pressure is set by the producer, then the valve is sealed. The set pressure value is imprinted as a marking on the valve body. Once the range of the valve working pressure is selected, the set pressure value must be determined. The diameter of a hose supplying the system equipped with the safety valve must not be smaller than the DN of the valve. Also, the pressure drop between the supplying hose and the valve must not exceed 3%. In order to check if the valve works properly, carry out a functional test either by turning a nut (twist-type mechanism) or by lifting either the lever or stem, depending on the lifting device. Any repairs can only be carried out by the manufacturer.

As the construction of discharge outlets varies, the safety valves are divided into the following types:

open construction (atmospheric discharge)	enclosed construction (angle)	enclosed construction - tight (angle) – gastight valves
When the valve opens, the medium is discharged directly to the atmosphere, vented through the discharge holes. 	The valve with a discharge connection allows releasing the medium from the outlet chamber into the discharge piping. 	Suitable for hazardous media and those harmful to the environment. The valves must be gastight so they do not have a test function. 

Functional test types:

twist-type mechanism (turning the nut)	lever (lifting the lever)	stem (lifting the stem)	no test function
			

Note! Remember to carry out the functional test only when the system is under pressure - working pressure.

Safety valves

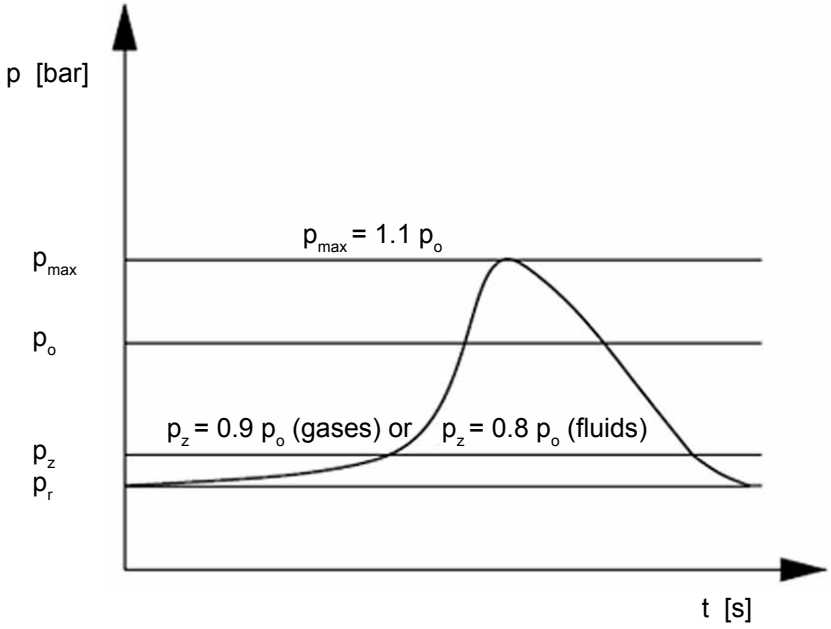
Marking of safety valves (example of GOETZE safety valve):

TÜV SV xx-xxx xx D xx x

- **x** – set pressure [bar]
- **xx** – coefficient of discharge or when used for H,SOL,W indicates kW
- **D** – application: **G** (for gases), **D** (for steam), **H** (boilers DIN 4751, DIN EN 12828), **D/G/H** (boilers DIN 4751, DIN EN 12828), **W** (water heaters DIN 4753), F (fluids), **F/K/S** (for air and inert gases in tanks for liquid, granular and powdery substances), **SOL** (for water and water mixtures in solar heating systems)
- **xx** – flow diameter (the smallest inlet diameter) [mm], when the letter **H** is used - no information, for **W** - connection size [mm]
- **xxx** – number of test type approval
- **xx** – year of type test approval
- **SV** – safety valve
- **TÜV** – notified body logo - TÜV (Technischer Überwachungsverein)

Example of EWO safety valve marking: **CE0685 SV 02 2 8 D/G 0.32 P** (CE0685 - DEKRA technical inspection, P - set pressure).

Valve operation - definitions:



p_r - working pressure of a system / safety device,
p_z - closing pressure - the pressure at which the valve closes tight - basically the valve is fully closed, when the pressure drops down to 10% below the set pressure for gases, and down to 20% for fluids,
p_o - set pressure - the pressure at which the safety valve commences to open (usually the tolerance value of up to ±3% is assumed at the start of opening),
p_{max} - max. opening pressure - the pressure at which the disc of the valve is fully lifted (discharge pres sure) - the valve achieves the maximum flow capacity.

Example of the valve with 12 bar set pressure:
- set pressure - the start of opening - 12 bar ± 3%,
- pressure at which the valve is fully opened (up to +10% of set pressure) - max. 13.2 bar,
- closing pressure (down to -10% in the case of gases and down to -20% for fluids) - max. 10.8 bar, (gas) or max. 9.6bar (fluid).

Note!
The working pressure of a system must be always lower than the valve closing pressure.

Safety valves

EWO DN 6 safety valve

Body material: Brass
Sealing: Viton
Connection: BSP male thread
Max. opening press.: Up to +10% of set press.
Closing press.: Down to -10% of set press.
Working temp.: From -10°C up to +150°C
Test function: Lifting the stem
Medium: Air, inert, non-toxic and non-flammable gases

code*	flow DN [mm]	thread size [inch]	length [mm]	spanner size [mm]	setting range [bar]
EW-46923-...	6	1/4	65	17	4.5÷7.0
EW-46924-...					7.0÷10.0
EW-46925-...					10.0÷13.0
EW-46926-...					13.0÷18.0
EW-46927-...					18.0÷24.0
EW-46933-...		3/8		19	4.5÷7.0
EW-46934-...					7.0÷10.0
EW-46935-...					10.0÷13.0
EW-46936-...					13.0÷18.0
EW-46937-...					18.0÷24.0

discharge capacity (when valve is opened or pressure rises by 10% above set press.)		
set pressure [bar]	capacity [m³/h]	capacity [l/min]
6	45.5	763
10	92	1540
11	100	1681
14	126	2104
16	143	2387
18	160	2696
20	177	2551
22	194	3234
24	211	3516

EWO DN 10 safety valve

Body material: Brass
Sealing: Viton
Connection: BSP male thread
Max. opening press.: Up to +10% of set press.
Closing press.: Down to -10% of set press. (below 3 bar ≤ 0.3 bar)
Working temp.: From -10°C up to +180°C
Test function: Twist - type
Medium: Air, inert, non-toxic and non-flammable gases

code*	flow DN [mm]	thread size [inch]	length [mm]	spanner size [mm]	setting range [bar]
EW-351261-...	10	1/2	120	27	2.0÷3.6
EW-351262-...					3.6÷5.0
EW-351263-...					5.0÷7.0
EW-351264-...					7.0÷8.5
EW-351265-...					8.5÷11.5
EW-351266-...					11.5÷16.0
EW-351267-...					16.0÷22.0
EW-351271-...		3/4		30	2.0÷3.6
EW-351272-...					3.6÷5.0
EW-351273-...					5.0÷7.0
EW-351274-...					7.0÷8.5
EW-351275-...					8.5÷11.5
EW-351276-...					11.5÷16.0
EW-351277-...					16.0÷22.0

discharge capacity (when valve is opened or pressure rises by 10% above set press.)		
set pressure [bar]	capacity [m³/h]	capacity [l/min]
2	74.5	1242
4	124	2068
6	174	2895
8	223	3722
10	273	4548
12	323	5377
14	372	6203
16	422	7032
18	471	7858
20	521	8685
22	571	9513

* - when ordering your chosen safety valve, please write down the set pressure on the dotted line of the code.

Safety valves

EWO DN 8 safety valve

Body material: Brass
Sealing: Viton
Connection: BSP male thread
Max. opening press.: Up to +10% of set press.
Closing press.: Down to -10% of set press. (below 3 bar ≤ 0.3 bar)
Working temp.: From -10°C up to +180°C
Test function: Twist - type
Medium: Air, inert, non-toxic and non-flammable gases

code*	flow DN [mm]	thread size [inch]	length [mm]	spanner size [mm]	setting range [bar]
EW-351221-...	8	1/4	85	20	1.0÷1.5
EW-351222-...					1.5÷2.0
EW-351223-...					2.0÷3.0
EW-351224-...					3.0÷5.0
EW-351225-...					5.0÷7.0
EW-351226-...					7.0÷9.0
EW-351227-...					9.0÷15
EW-351421-...			90		15.0÷20.0
EW-351422-...					20.0÷27.0
EW-351423-...					27.0÷40.0
EW-351241-...		3/8	85		1.0÷1.5
EW-351242-...					1.5÷2.0
EW-351243-...					2.0÷3.0
EW-351244-...					3.0÷5.0
EW-351245-...					5.0÷7.0
EW-351246-...					7.0÷9.0
EW-351247-...					9.0÷15.0
EW-351441-...			90		15.0÷20.0
EW-351442-...					20.0÷27.0
EW-351443-...					27.0÷40.0
EW-351251-...		1/2	87	24	1.0÷1.5
EW-351252-...					1.5÷2.0
EW-351253-...					2.0÷3.0
EW-351254-...					3.0÷5.0
EW-351255-...					5.0÷7.0
EW-351256-...					7.0÷9.0
EW-351257-...					9.0÷15.0
EW-351451-...			92		15.0÷20.0
EW-351452-...					20.0÷27.0
EW-351453-...					27.0÷40.0

discharge capacity (when valve is opened or pressure rises by 10% above set press.)		
set pressure [bar]	capacity [m^3/h]	capacity [l/min]
1	23.5	394
2	35.5	592
4	59	985
6	63	1380
8	106	1773
10	130	2168
12	154	2562
14	177	2957
16	201	3350
18	225	3745
20	248	4138
22	272	4533
25	307	5124
30	367	6110
35	426	7095
40	485	8080

* - when ordering your chosen safety valve, please write down the set pressure on the dotted line of the code.

Safety valves

810 series safety valve

Body material:	Brass and stainless steel
Sealing:	FKM (set press. 0.2 ÷ 25 bar), PTFE (set press. 25.1 ÷ 50 bar) PTFE (set press. 0.2 ÷ 25 bar) - option
Connection:	BSP male thread (BSPT - option)
Connection size:	1/4”, 3/8”, 1/2”, 3/4”, 1”
Diameter DN:	DN8, DN10, DN15, DN20, DN25
Setting range:	0.2 ÷ 50 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press.
Working temp.:	From -20°C up to +200°C (FKM) From -60°C up to +225°C (PTFE)
Test function:	Twist - type
Medium:	Air, inert, non-toxic and non-flammable gases

810 series atmospheric discharge safety valves allow releasing air and other inert gases directly into the atmosphere. They are chiefly used in compressors, pressure boosters, pneumatic control units, railway applications, auto paint shops.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2.

812 series safety valve

Body material:	Brass and stainless steel
Sealing:	NBR (FKM - option) PTFE (option - from 1 bar set press)
Connection:	BSP male thread (BSPT, NPT - option)
Connection size:	1/2”, 3/4”, 1”, 1.1/4”, 1.1/2”, 2”
Diameter DN:	DN15, DN20, DN25, DN32, DN40, DN50
Setting range:	0.2 ÷ 50 bar (DN15 ÷ DN40) 0.2 ÷ 30 bar (DN50)
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press.
Working temp.:	From -30°C up to +130°C (NBR) From -20°C up to +200°C (FKM) From -60°C up to +225°C (PTFE)
Test function:	Twist - type
Opcja:	Deflektor
Medium:	Air, inert, non-toxic and non-flammable gases

812 series atmospheric discharge safety valves are intended for air and other inert gases which can be released directly into the atmosphere. Mainly used in pneumatic control units, pressure boosters, railway applications, auto paint shops, pneumatic braking systems. The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2.

Safety valves

813 series safety valve

Body material:	Brass and stainless steel
Sealing:	FKM, PTFE (option - from 1 bar set press.)
Connection:	BSP male thread (BSPT, NPT - option)
Connection size:	1/2”, 3/4”, 1”, 1.1/4”, 1.1/2”, 2”
Diameter DN:	DN15, DN20, DN25, DN32, DN40, DN50
Setting range:	0.2 ÷ 6 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press.
Working temp.:	From -20°C up to +200°C (FKM) From -60°C up to +225°C (PTFE)
Test function:	Twist - type
Medium:	Air and inert gases in tanks containing liquid, granular and powdery substances (F/K/S).

813 series atmospheric discharge safety valve fitted with a diaphragm intended for air and other inert gases. Mounted mainly in silos, stationary pressure tanks intended for dry loose media. But they are also used by the producers of dry bulk road tankers and companies providing service for the tankers. Besides, they are applied in auto paint shops and compressed air installations working in dusty environment. The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2, TRB 801 No. 22 and No.23.

851 series safety valve

Body material:	Bronze, brass and stainless steel
Sealing:	NBR, EPDM, FKM, PTFE (set press. up to 25 bar) PTFE + carbon (set press. above 25 bar) metal - metal (option)
Connection:	BSP female thread BSP female/male thread - option BSP female / BSPT male thread - option
Connection size:	1/2”, 3/4”, 1”, 1.1/4”, 1.1/2”, 2”
Diameter DN:	DN15, DN20, DN25, DN32
Setting range:	0.5 ÷ 50 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press. for gases Down to -20% of set press. for fluids
Working temp.:	From -30°C up to +130°C (NBR) From -40°C up to +170°C (EPDM) From -20°C up to +200°C (FKM) From -60°C up to +225°C (PTFE, PTFE + carbon, metal - metal)
Test function:	Twist - type, lever
Medium:	Air, vapour, gases, steam and fluids depending on version

851 series safety valves are of enclosed construction (angle type). Four versions are available: non-gastight, with a bellow, gastight and gastight with a bellow. The valves secure pressure tanks and pressure systems for inert and non-inert vapours, gases and fluids, steam boilers, steam systems, stationary silos and road tanker trucks conveying fluids, dry bulk and powdery media (concerns version with a bellow). They are used in mechanical engineering, pumps, medical devices and medical technology (sterilizers, autoclaves), shipbuilding industry (ship building/repair), pressure boosters.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2, TRD 421, TRB 801 No. 22 and No. 23.

Safety valves

413 series safety valve

Body material:	Stainless steel
Sealing:	FKM, PTFE (option - from 1 bar set press.)
Connection:	BSP male thread (BSPT, NPT - option)
Connection size:	1/2”, 3/4”, 1”, 1.1/4”, 1.1/2”, 2”
Diameter DN:	DN15, DN20, DN25, DN32, DN40, DN50
Setting range:	0.2 ÷ 6 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press. for gases
Working temp.:	From -20°C up to +200°C (FKM) From -60°C up to +225°C (PTFE)
Test function:	Twist - type
Medium:	Air and inert gases in tanks containing liquid, granular and powdery substances (F/K/S).

413 series atmospheric discharge safety valve fitted with a diaphragm intended for air and other inert gases. Mounted mainly in silos, stationary pressure tanks intended for dry loose media. The safety valves are also used by the producers of dry bulk road tankers and companies providing service for the tankers. Besides, they are suitable for the food industry, pharmaceutical industry and cosmetics industry application.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2, TRB 801 No. 22 and No. 23.

460 series safety valve

Body material:	Stainless steel
Sealing:	NBR, EPDM, FKM, PTFE (set press. from 0.5 bar)
Connection:	BSP male / female thread BSPT male / BSP female thread (option) NPT male / BSP female thread (option)
Connection size:	3/8”, 1/2”, 3/4”, 1”
Diameter DN:	DN10, DN15, DN20, DN25
Setting range:	0.2 ÷ 25 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press. for gases Down to -20% of set press. for fluids
Working temp.:	From -30°C up to +130°C (NBR) From -50°C up to +150°C (EPDM) From -20°C up to +200°C (FKM) From -60°C up to +225°C (PTFE)
Test function:	Lever
Medium:	Air, vapour, gases, steam and fluids depending on version

460 series safety valves are of enclosed construction. Optionally available as a gastight version. They are suitable for the protection of pressure tanks and systems for inert and non-inert vapours, gases and fluids, steam boilers, steam systems. Suitable for the application in chemical plants, biogas plants, in shipbuilding industry, offshore, desalination systems. After checking with Technical Department of TUBES INTERNATIONAL® the valves can be used in the food industry, pharmaceutical industry and cosmetics industry.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2, TRD 421.

Safety valves

451 series safety valve

Body material:	Stainless steel
Sealing:	NBR, EPDM, FKM, PTFE (set press. up to 25 bar) PTFE + carbon (set press. above 25 bar) metal - metal (option)
Connection:	BSP female thread BSP male / female thread (option) BSPT male / BSP female thread (option)
Connection size:	1/2”, 3/4”, 1”, 1.1/4”, 1.1/2”, 2”
Diameter DN:	DN15, DN20, DN25, DN32
Setting range:	0.5 ÷ 70 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press. for gases Down to -20% of set press. for fluids
Working temp.:	From -30°C up to +130°C (NBR) From -40°C up to +170°C (EPDM) From -20°C up to +200°C (FKM) From -60°C up to +225°C (PTFE) From -60°C up to +400°C (metal - metal)
Test function:	Twist - type
Medium:	Air, vapour, gases, steam and fluids depending on version

451 series safety valves are of enclosed construction. Four versions are available: non-gastight, with a bellow, gastight and gastight with a bellow. The valves secure pressure tanks and pressure systems for inert and non-inert vapours, gases and fluids, steam boilers, steam systems, road tankers conveying fluids and dry bulk media (concerns version with a bellow). They are used in chemical plants, biogas plants, medical devices and medical technology (sterilizers, autoclaves), After checking with Technical Department of TUBES INTERNATIONAL® , the valves can be used in the food industry, pharmaceutical industry and cosmetics industry.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2, TRD 421, TRB 801 No. 22 and No. 23.

492 series safety valve

Body material:	Stainless steel and VDSiCr spring steel
Sealing:	Metal-metal / PA
Connection:	BSP male thread (standard - atmospheric discharge valves), BSP male/ female thread (gastight version - angle valve)
Connection size:	1/4”, 3/8”, 1/2”, 3/4” (inlet) 1/2”, 3/4”, 1” (outlet)
Diameter DN:	DN10, DN15
Setting range:	50 ÷ 630 bar (DN10), 50 ÷ 250 bar (DN15)
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press.
Working temp.:	From -60°C up to +180°C
Test function:	Twist - type (for standard version only)
Medium:	Air, inert gases, non-toxic and non-flammable (standard version), inert and non-inert gases (angle valves)

492 series safety valves are available in a standard version (atmospheric discharge) and as a gastight version (enclosed construction valves). The gastight version valves are not suitable for counter pressure and do not have a test function lifting device. Suitable for high pressure compressors, pressure tanks, pressure cylinders. Not intended for steam.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet.

Safety valves

2400 series safety valve

Body material:	Stainless steel
Sealing:	PTFE (FDA approval), PTFE + carbon
Connection:	BSP male / female thread BSP female thread (option) NPT male / BSP female thread (option)
Connection size:	1/4”, 3/8”, 1/2”, 3/4”, 1” (inlet) 3/8”, 1/2”, 3/4”, 1” (outlet)
Diameter DN:	DN10, DN15, DN20, DN25
Setting range:	0.2 ÷ 70 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press. for gases Down to -20% of set press. for fluids
Working temp.:	From -200°C up to +200°C
Test function:	Only for non-gastight version, twist-type or lever
Medium:	Cryogenic gases, vapours, fluids

2400 series safety valves are of enclosed construction. Available in a non-gastight version for inert media and in a gastight version for inert and non-inert gases. Intended for the protection of tanks and pipelines for the storage and transport of such liquefied gases as liquid oxygen (LOX), liquid nitrogen (LIN), liquid argon (LAR), liquid carbon dioxide (CO), LNG. Suitable for dry ice production equipment, nitrogen dosing, cryogenic machining, in cryogenic systems, in food products freezing processing lines.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2, DIN EN 13648-1.

400 series safety valve

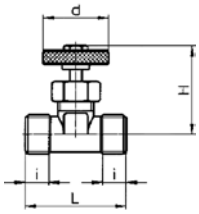
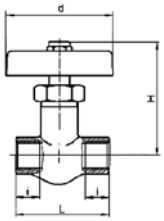
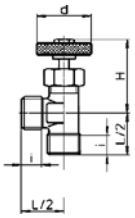
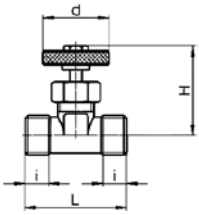
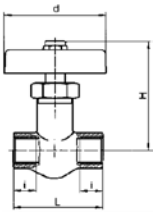
Body material:	Stainless steel and VDSiCr spring steel
Sealing:	FKM (FDA, USP 3-A, material free of components of animal origin), EPDM (FDA)
Connection:	Hygienic flanged connected by DIN11864-3 / DIN11853-3, DIN32676 (option) clamps Hygienic screwed with Rd thread DIN11864-1/DIN11853-1 (option), DIN 11851(option)
Connection size:	Dep. on version DN20, DN25, DN32 (inlet) Dep. on version DN25, DN32 (outlet)
Diameter DN:	DN20
Setting range:	0.4 ÷ 16 bar
Max. opening press.:	Up to +10% of set press.
Closing press.:	Down to -10% of set press. for gases Down to -20% of set press. for fluids
Working temp.:	From -20°C up to +200°C (FKM) From -40°C up to +170°C (EPDM)
Test function:	Twist - type
Medium:	Air, vapour, gases, fluids and depending on version - steam

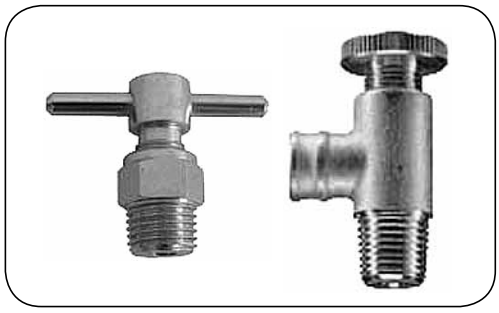
400 series safety valves are of enclosed construction. Optionally available with a bellow. Intended for the protection of processes, pressure systems, tanks used for inert and non-inert vapours, gases, fluids and steam in the food, pharmaceutical industry and cosmetics industry.
The safety valves meet the requirements of DIN EN ISO 4126-1, PED 2014/68/EU, AD 2000 data sheet A2, TRD 421.

EWO shut-off and regulating valve

Material: Brass
Working temp.: From -10°C up to +90°C
Working press.: 25 bar for DN 3.5 mm
40 bar for DN from 4 mm

Shut-off and regulating valves are used to control the flow rate of a medium in a system by changing the size of passage cross section in the valve until it is completely closed. Widely used for air applications. Suitable for non-flammable and non-toxic gases (nitrogen, carbon dioxide, helium, argon) as well.
The valve is manually closed by turning a knob which causes movement of a stainless steel ball until the passage is tight. NBR O-ring seals the spindle of the valve.
Regulating needle valve is equipped with a brass cone that controls the flow of a medium from a wide open position to closed position. Arrows on the body indicate flow direction.

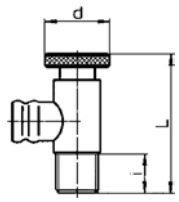
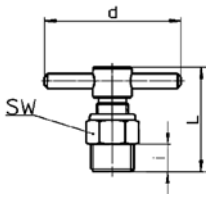
picture	code	thread size [inch]	DN [mm]	dimensions [mm]				description
				L	i	H	d	
	EW-29601	1/8	3.5	35	7	30	22	Straight shut-off valve with male thread.
	EW-29611	1/4	3.5	34	8	30	22	
	EW-55612	1/4	6	43	10	50	48	
	EW-55614	3/8	10	52	12	50	48	
	EW-55616	1/2	10	64	14	54	48	
	EW-55622	1/4	6	43	11	50	48	Straight shut-off valve with female thread.
	EW-55624	3/8	9	52	12	50	48	
	EW-55626	1/2	11	63	15	57	48	
	EW-29501	1/8	3.5	34	7	26	22	90º shut-off valve with male thread.
	EW-29511	1/4	3.5	34	8	26	22	
	EW-55812	1/4	4	42	11	52	50	Straight regulating needle valve with male thread.
	EW-55814	3/8	4	42	11	52	50	
	EW-55816	1/2	11	65	15	60	50	
	EW-55822	1/4	4	42	12	50	50	Straight regulating needle valve with female thread.
	EW-55824	3/8	4	51	13	50	50	
	EW-55826	1/2	11	64	15	50	50	



EWO drain valves

Material: Brass, nickel-plated brass
Working temp.: From 0°C up to +90°C
Working press.: 25 bar

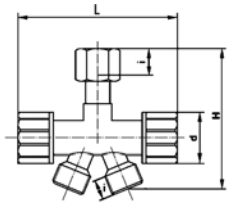
Drain valves are used for letting air out in order to balance the pressure in an installation. Also used to remove condensate. Compressed air can contain steam which upon condensation changes into a mixture of water and oil called condensate. If the condensate is not removed, the break-down of installation or compressed air units is possible.

picture	code	thread size [inch]	DN [mm]	dimensions [mm]				description
				L	i	d	SW	
	EW-16602	1/8	5	43	9	20	-	90º drain valve with soft seal made of NBR.
	EW-16612	1/4	5	43	12	20	-	
	EW-21201	1/8	5	35	7	40	12	Straight drain valve with metal-metal seal.
	EW-16811	1/4	5	35	10	42	14	

EWO air distributor

Material: Brass
Working temp.: From -10°C up to +90°C
Working press.: 40 bar

An air distributor allows to place two or three shut-off valves that can be closed individually whenever required. Equipped with two shut-off valves and two outlets either with two male threads or hose tails.

picture	code	thread size [inch]	DN [mm]	dimensions [mm]				description
				L	i	H	d	
	EW-559621	1/4	6	79	9	110	25	Air distributor with 6 mm hose tail.
	EW-559631	3/8	6	79	9	110	25	Air distributor with 9 mm hose tail.
	EW-559121	1/4	6	79	9	65	25	With male thread outlets
	EW-559131	3/8	6	79	9	65	25	