

Membrane safety relief valves

Series 530-531-5320-5321-5327-5328



01048/25 EN

replaces 01048/19 EN



Function

Safety valves are generally used to control pressure in heat generators and storage water heaters.

When the response pressure is reached, the valve opens and, by releasing the pressure into the atmosphere, prevents the system pressure for the heat generator and the installed components from rising to dangerous levels.



Product overview

Series 530	Membrane safety relief valve, for heating	Size 3/4", 1", 1 1/4" female x female
Series 531	Membrane safety relief valve, for drinking water	Size 1/2", 3/4", 1", 1 1/4" female x female
Series 5320	Membrane safety relief valve, for heating	Size 1/2" female x female
Series 5321	Membrane safety relief valve, for heating, with pressure gauge	Size 1/2" female x female
Series 5322	Membrane safety relief valve, for heating, with pressure gauge connector	Size 1/2" female x female
Series 5327	Membrane safety relief valve, for heating	Size 1/2" male x female
Series 5328	Membrane safety relief valve, for heating, with pressure gauge connector	Size 1/2" male x female

Technical specifications

Materials:

Housing:	Brass EN 12165 CW617N
Top part	
(530 1" and 1 1/4", 531 1 1/4"):	Brass EN 12165 CW617N
Top part	
(530 3/4", 531 1/2"-1", 532. 1/2"):	PA6G30
Control spindle:	Brass EN 12164 CW614N
Spindle seal:	EPDM
Diaphragm:	EPDM
Spring:	Steel EN 12270-1
Knob:	ABS

Outputs:

Operating medium:	Water, approx. Glycol solutions (not for Series 531)
Rated pressure:	PN 10
Working temperature range:	
- Series 530, 5320, 5321, 5322, 5327, 5328:	5-120 °C
- Series 531	5-95 °C

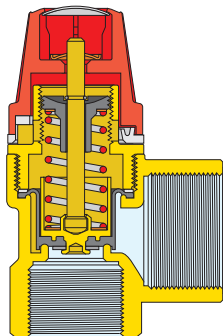
Factory settings:

Series 530	2,5-3 bar
Series 531	4-6-8-10 bar
Series 5320	2,5-3 bar
Series 5321 with pressure gauge	2,5-3 bar
Series 5322 with pressure gauge connector	2,5-3 bar
Series 5327	2,5-3 bar
Series 5328 with pressure gauge connector	2,5-3 bar

Dimensions

530			531			531 - 5320		5321		5327		5328	
5305..	5306..	5307..	5315..	5316..	5317..	5314..	53204..	53214..		53274..		53284..	
A 3/4"	A 1"	A 1 1/4"	A 3/4"	A 1"	A 1 1/4"	A 1/2"	A 1/2"	A 1/2"		A 1/2"		A 1/2"	
B 1"	B 1 1/4"	B 1 1/2"	B 1"	B 1 1/4"	B 1 1/2"	B 3/4"	B 3/4"	B 3/4"		B 3/4"		B 3/4"	
C 30	C 38	C 44	C 30	C 38	C 44	C 24	C 24	C 24		C 38		C 38	
D 92	D 144	D 185	D 92	D 144	D 185	D 72	D 72	D 78,5		D 86		D 86	
E 40,5	E 48	E 57,5	E 40,5	E 48	E 57,5	E 33,5	E 33,5	E 33,5		E 33,5		E 33,5	
								F 64				F 64	

Membrane safety relief valves 532 and 530



Component-tested according to TRD 721.

For closed heating systems according to EN 12828, using a membrane expansion vessel.

Flow temperatures up to max. 120 °C, and a response pressure of 2.5 bar and 3 bar.

532- Test numbers:

TÜV· SV· .. - 760· H· 50 p

530 test numbers:

TÜV· SV· .. - 557· H· 100 p 3/4"

TÜV· SV· .. - 557· H· 200 p 1"

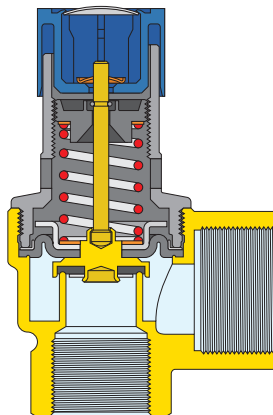
TÜV· SV· .. - 557· H· 350 p 1 1/4"

532 and 530 are not suitable for storage water heaters or boilers.

Output at 2.5 bar and 3 bar.

Inlet R	1/2"	3/4"	1"	1 1/4"
Outlet R	3/4"	1"	1 1/4"	1 1/2"
in kW	50	100	200	350
in kcal/h	45.000	90.000	175.000	300.000

Membrane safety relief valve 531



For closed water heating systems in accordance with DIN 4753 Part 1, component-tested in accordance with SR sheet 2.

Membrane safety relief valve 531 protects pressure-based liquid systems against excessive pressure build-up. It is used primarily to safeguard closed storage water heaters.

531 test numbers:

TÜV· SV· .. - 675· p 1/2" W.p.

TÜV· SV· .. - 675· p 3/4" W.p.

TÜV· SV· .. - 675· p 1" W.p.

TÜV· SV· .. - 675· p 1 1/4" W.p.

Output at 4-6-8-10 bar

Inlet R	1/2"	3/4"	1"	1 1/4"
Outlet R	3/4"	1"	1 1/4"	1 1/2"
in kW	75	150	250	350
Max. boiler content according to	200	1.000	5.000	Over 5.000

Installation:

The safety valve is preferably perpendicular with an inlet journal at the bottom, observing the direction of arrow for installation purposes. When used in conjunction with storage water heaters, assure compliance with DIN 1988. The safety valve must be installed at the cold water inlet of the storage water heater. Wherever possible, it should be installed above the highest point of the storage water heater to prevent the entire container having to be drained if cleaning work is required.

Please note: For safety reasons, during the heating process, water may escape from the blow-off line! Do not seal off!

The connecting line from the safety valve to the storage water heater and/or to the system to be backed up must not be disconnectable (i.e. no shut-off facility).

No dirt trap or other restrictions should be installed. The blow-off line must be designed to the same size as the safety valve outlet cross-section and must feature no more than 2 bends, nor be more than 2 metres in length. If for compelling reasons more bends or a greater length are required, an entire nominal width larger must be chosen for the entire blow-off line.

More than 3 bends and a length in excess of 4 metres are not permitted. The blow-off line must be routed with a downhill gradient. The aperture on this line must be clearly observable and routed in such a way that people cannot be placed at risk during the blow-off process. The outlet point of the blow-off line must terminate with a drainage channel or outlet hopper inside the building. If the blow-off line terminates in an outlet line with hopper, the outlet line must have at least double the cross section of the valve inlet.

Startup

Before startup, and then at least once a year, the correct function of the safety valve must be checked by a skilled person.

If the membrane safety valve drips constantly, this is usually due to dirt in the valve.

TECHNICAL DESCRIPTION

530 series

Membrane safety relief valve. CE-marked in accordance with pressure device regulation 97/23/CE, TÜV-certified. Connections 3/4" female x 1" female (3/4" x 1", 1" x 1 1/4", 1 1/4" x 1 1/2"). Brass housing. Membrane and seals made from EPDM. Handle made from ABS. Factory setting 2,5 bar (available factory settings 2,5 bar and 3 bar). Working temperature range 5–120 °C. Response pressure at a maximum stroke of 20 %. Closing deviation 20 %.

531 series

Membrane safety relief valve, for drinking water. CE-marked in accordance with pressure device regulation 97/23/CE, TÜV-certified. Connections 1/2" female x 3/4" female (1/2" x 3/4", 3/4" x 1", 1" x 1 1/4", 1 1/4" x 1 1/2"). Brass housing. Membrane and seals made from EPDM. Handle made from ABS. Factory setting 4 bar (available factory settings 4 - 6 - 8 - 10). Working temperature range 5–95 °C. Response pressure at a maximum stroke of 20 %. Closing deviation 20 %.

5320 - 5321 - 5322 - 5327 - 5328 series

Membrane safety relief valve. CE-marked in accordance with pressure device regulation 97/23/CE, TÜV-certified. Connections 1/2" female x 3/4" female (and 1/2" male x 3/4" female). Brass housing. With pressure gauge Series 5321, with pressure gauge connection Series 5322 and 5328. Membrane and seals made from EPDM. Handle made from ABS. Factory setting 2.5 bar (available factory settings 2,5 bar and 3 bar). Working temperature range 5–120 °C. Response pressure at a maximum stroke of 20 %. Closing deviation 20 %.

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