# Safety Valves Type 50051.0011

# Safety Valves, angle type, brass, type tested TÜV-SV.1009. D/G

Standard safety valve with EPDM valve seal for vapours and gases open bonnet, with lifting device Outlet: female thread M15x1 with installed hose nozzle Inlet: male thread type G (BSPP) acc. to ISO 228/1

### Part No. 50051.0011.0000

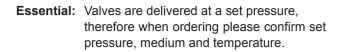
Available options - on request only:

- · hose nozzle acc. to customer specification
- · body material CW509L

### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels, especially for coffee machines. Approved for non-toxic gases and vapours. Working temperature: -10°C / +14°F (263K) up to +160°C / +320°F (433K) For saturated steam use only up to 4 bar and +150°C / +302°F (423K)

Materials		DIN EN	ASTM
1	Body	CW614N	B 249 UNS C38500
2	Disc	CW614N	B 249 UNS C38500
3	Valve seal	EPDM	
4	Stem	CW614N	B 249 UNS C38500
5	Bonnet	CW614N	B 249 UNS C38500
6	Spring	1.4571	A 313 Grade 316Ti
7	Lifting device	CW614N	B 249 UNS C38500
8	Closing cap	CC507L	B 36 UNS C26800
9	Hose nozzle	CW614N	B 249 UNS C38500



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).

Type 50051.0011	Technical data	
Nominal size	GW	3/8
Orifice	d <sub>0</sub>	7
Set pressure range	bar	1.5-5.0
Hose nozzle-Ø	Μ	14.5
Height	Н	64
Length	L <sub>1</sub>	28.5
Length	L <sub>2</sub>	13
Length	A <sub>1</sub>	12
Wrench size across flats	S <sub>1</sub>	27
Wrench size across flats	S <sub>2</sub>	17
Weight	ca. kg	0.16
Coeff. of discharge from 2.0 bar	α <sub>w</sub>	0.42

Dimensions in mm.



CE





## **Discharge capacities**

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium: Air in m<sup>3</sup>/h at 0°C and 1013.25 mbar Saturated steam in kg/h

# The capacity indicated below is for a fully opened valve.

 $d_0$  - orifice  $A_0$  - flow area

Set pressure in bar (g) GW 3/8 3/8   d <sub>0</sub> (mm) 7.0 7.0   A <sub>0</sub> (mm <sup>2</sup> ) 38.48 38.48   Medium Air Saturated steam   1.5 2.0 35.5   2.0 3.0 41   3.0 41 32   3.5 5.5 41   4.0 59 46   4.5 665 51   5.0 72 55				
pressure in bar (g) d <sub>0</sub> (mm) 7.0 7.0   A <sub>0</sub> (mm <sup>2</sup> ) 38.48 38.48   Medium Air Saturated steam   1.5 28 22   2.0 335 27   2.5 411 32   3.0 417 37   3.5 533 411   4.0 59 46   4.5 655 51	0	GW	3/8	3/8
in bar (g) A <sub>0</sub> (mm <sup>-</sup> ) 38.48 38.48   Medium Air Saturated steam   1.5 28 22   2.0 335 27   2.5 41 32   3.0 41 37   3.5 53 41   4.0 59 46   4.5 65 51			7.0	7.0
Medium Air Saturated steam   1.5 28 22   2.0 35 27   2.5 41 32   3.0 47 37   3.5 53 41   4.0 59 46   4.5 65 51		$A_0(mm^2)$	38.48	38.48
2.035272.541323.047373.553414.059464.56551	in bar (g)	Medium	Air	Saturated steam
2.541323.047373.553414.059464.56551	1.5		28	22
3.047373.553414.059464.56551	2.0		35	27
3.553414.059464.56551	2.5		41	32
4.059464.56551	3.0		47	37
<b>4.5</b> 65 51	3.5		53	41
	4.0		59	46
5.0 72 55	4.5		65	51
12 00	5.0		72	55

