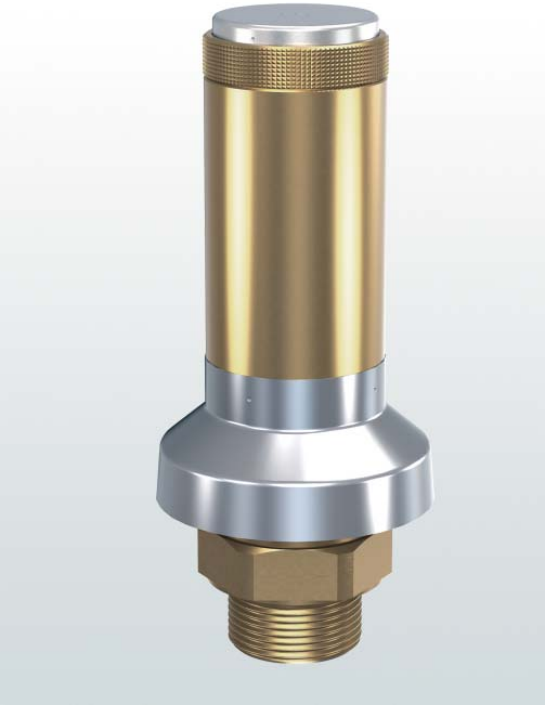
# TÜV/CE atmospheric discharge safety valves for industrial applications

# → Series 813

**813**

**Safety valves made of brass, atmospheric discharge, with threaded connections**



## SUITABLE FOR

| | | |
|---|---|---|
| Air, gases and vapours | neutral | |

## EXAMPLES OF USE

For the protection of:
- stationary pressure tanks and
- bulk transport vehicles

for liquid, granular and dusty media.
Please observe plant-specific regulations and use of appropriate valve version and sealing material.

- stationary silos
- bulk transport vehicle manufacturers and service companies
- paint spray shops
- compressed air applications in dirty environmental conditions

**Safety valves are set and sealed at the factory.**

## MATERIAL

## SPECIFICATION

| 1/2“ – 2“ | – 60°C to + 225°C<br>depending on version | 0,2 – 6 bar |
|---|---|---|

## APPROVALS

| | |
|---|---|
| **TÜV Type test approval 2003** | **D/G, F/K/S** |
| **EC type examination** | **S/G, F/K/S** |
| **GOST-R** | **D/G (S/G), F/K/S** |

**Requirements**

AD 2000 Data sheet A2
TRB 801 Nr. 22 and Nr. 23
DIN EN ISO 4126-1
PED 97/23/EC

**Classification society**

| | |
|---|---|
| Germanischer Lloyd | GL |
| Lloyd's Register EMEA | LR EMEA |
| American Bureau of Shipping | ABS |
| Det Norske Veritas | DNV |
| Bureau Veritas | BV |

## MATERIALS

| Component | Material | DIN EN | ASME |
|---|---|---|---|
| Inlet body | Brass | CW614N | CW614N |
| Outlet body | Brass | CW614N | CW614N |
| Internal parts | Brass / Stainless steel | CW614N / 1.4404 | CW614N / 316 L |
| Spring | Stainless steel | 1.4310 | 302 |
| Deflector | Stainless steel | 1.4301 | 304 |
| Sealing cap | Stainless steel | 1.4301 | 304 |

## VALVE VERSION

| | | |
|---|---|---|
| **m** | with diaphragm | cylindrical form, atmospheric discharge, for air and similar neutral gases. Spring and moving parts protected from being affected by the medium. Standard version with deflector made of stainless steel. |

## MEDIUM

| | | |
|---|---|---|
| **G** | gaseous | Air and similar neutral gases |

## TYPE OF LIFTING MECHANISM

| | |
|---|---|
| **K** | Standard with twist-type lifting mechanism |

## AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

| **Nominal diameter DN** | **15** | **20** | **25** | **32** | **40** | **50** |
|---|---|---|---|---|---|---|
| **Inlet** | 1/2“ (15) | 3/4“ (20) | 1“ (25) | 1 1/4“ (32) | 1 1/2“ (40) | 2“ (50) |
| Atmospheric discharge via outlet apertures | ■ | ■ | ■ | ■ | ■ | ■ |

## TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

| | | | |
|---|---|---|---|
| **m / –** | Standard | Male thread BSP-P / – | DIN EN ISO 228-1 / – |
| **Against surcharge** | | | |
| **BSP-Tm / –** | | Male thread BSP-T / – | DIN EN 10226, ISO 7-1 / – |
| **NPT-m / –** | | Male thread NPT / – | ANSI B1.20.1 / – |
| **Further connection types available on request** | | | |

## SEALS

| | | | |
|---|---|---|---|
| **FKM** | Fluorocarbon | Elastomere flat seal | –20°C to +200°C |
| **On request** | | | |
| **PTFE** | Polytetrafluoroethylene | Flat seal from 1 bar | –60°C to +225°C |

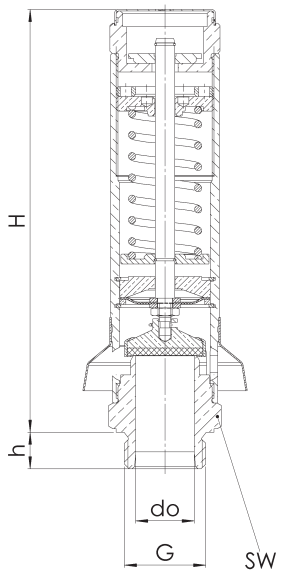
## OPTIONS

Special versions on request.

## NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

| Series 813: Connection, installation dimensions, ranges of adjustment | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Nominal diameter** | **DN** | **15** | **20** | **25** | **32** | **40** | **50** |
| **Connection DIN EN ISO 228** | **G** | 1/2" (15) | 3/4" (20) | 1" (25) | 1 1/4" (32) | 1 1/2" (40) | 2" (50) |
| **Installation dimensions in mm** | **H** | 144 | 177 | 177 | 177 | 177 | 282 |
| | **h** | 12 | 15 | 15 | 22,5 | 22,5 | 26 |
| | **SW** | 32 | 41 | 41 | 55 | 55 | 80 |
| | **do** | 14 | 20 | 24 | 31 | 31 | 48 |
| **Weight** | **kg** | 0,6 | 1,3 | 1,3 | 2,6 | 2,6 | 5,4 |
| **Range of adjustment** | **bar** | 0,2-6 | 0,2-6 | 0,2-6 | 0,2-6 | 0,2-6 | 0,2-6 |

## MAIN DIMENSIONS, INSTALLATION DIMENSIONS




## INDIVIDUAL SELECTION / VALVE CONFIGURATION

| Series | Valve version | Medium | Lifting device | Nominal diameter DN | Connection type | | Connection size | | Seal | Options | Set pressure | Quantity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Inlet | Outlet | Inlet | Outlet | | | | |
| **813** | **m** | **G** | **K** | *40* | *m* | – | *40* | – | *FKM* | | *2,0* | *3* |
| **813** | **m** | **G** | **K** | | | – | | – | | | | |
| **813** | **m** | **G** | **K** | | | – | | – | | | | |
| **813** | **m** | **G** | **K** | | | – | | – | | | | |

In this table you can configure a valve according to your individual requirements (similar to the *example* shown, which should be deleted before you enter your own data). Please complete the table by hand using the abbreviations in this datasheet and then fax it to: +49(0)7141.4889488
Please do not forget to add your personal data so that our sales team can contact you.

Name

First Name

Company

Telephone

E-Mail

## CAPACITY TABLE

| Series 813: Blowing-off rates at 10% above set pressure | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Nominal diameter DN** | | **15** | **20** | **25** | **32** | **40** | **50** |
| **Set pressure bar** | | | | | | | |
| | **0,2** | 61 | 167 | 240 | 401 | 401 | 768 |
| **Air** | **0,3** | 76 | 189 | 272 | 453 | 453 | 827 |
| **Nm³/h** | **0,4** | 88 | 205 | 296 | 493 | 493 | 887 |
| | **0,5** | 99 | 222 | 320 | 534 | 534 | 946 |
| | **0,6** | 110 | 243 | 351 | 585 | 585 | 1005 |
| | **0,7** | 121 | 262 | 377 | 629 | 629 | 1064 |
| | **0,8** | 129 | 280 | 404 | 673 | 673 | 1123 |
| | **0,9** | 138 | 299 | 431 | 719 | 719 | 1182 |
| | **1** | 147 | 319 | 459 | 766 | 766 | 1370 |
| | **1,2** | 168 | 357 | 514 | 858 | 858 | 1514 |
| | **1,4** | 186 | 396 | 571 | 952 | 952 | 1658 |
| | **1,6** | 208 | 437 | 629 | 1049 | 1049 | 1903 |
| | **1,8** | 225 | 478 | 688 | 1148 | 1148 | 2055 |
| | **2** | 245 | 520 | 749 | 1249 | 1249 | 2325 |
| | **2,5** | 291 | 617 | 889 | 1483 | 1483 | 2724 |
| | **3** | 338 | 717 | 1032 | 1723 | 1723 | 3177 |
| | **3,5** | 386 | 809 | 1165 | 1943 | 1943 | 3583 |
| | **4** | 436 | 923 | 1330 | 2219 | 2219 | 4056 |
| | **4,5** | 480 | 1018 | 1465 | 2445 | 2445 | 4469 |
| | **5** | 524 | 1112 | 1601 | 2671 | 2671 | 4962 |
| | **5,5** | 569 | 1206 | 1736 | 2897 | 2897 | 5382 |
| | **6** | 613 | 1300 | 1872 | 3123 | 3123 | 5802 |