

PRODUCT INFORMATION

PRESSURE AND VACUUM RELIEF

ELEVENT®

Breather Valve



REMBE® GMBH
SAFETY+CONTROL



Engineered
and Manufactured
in Germany



...for protection of vessels and tanks from ± 2 mbar

Vessels and tanks with low design pressures are effectively protected against the effects of excessive pressure and vacuum with ELEVENT® breather valves. They systematically and effectively prevent fugitive emissions of gas, or other pollutant media, while at the same time negating explosive scenarios as well as from potentially problematic air intake. A constant controlled tank pressure level is assured.

The unique low and compact ELEVENT® valve design is accomplished by the full deep-drawn stainless steel resp. metal housing.

Available with multiple connection options including sanitary clamp connections where the system offers a modular assembly as well as inter-changeable components. Maintenance is a quick and easy process requiring no special tools.

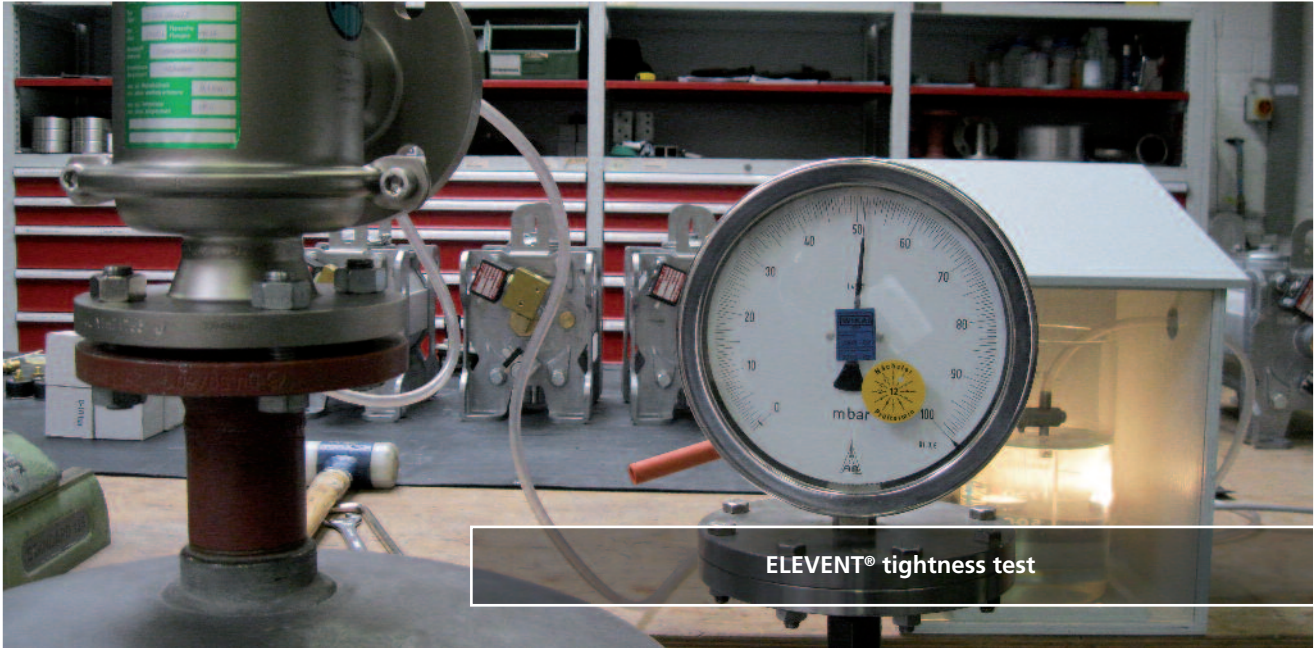
The pioneering breather valve concept with its deep-drawn housing presents a flexible configuration of available connections, allowing any client to customise according to his requirements and the specifications of the facility. Connection designs with ANSI flanges, Tri-Clamp and pipe screw connections IAW DIN 11851 as well as CF and KF flanges are available upon request.



Features

- Sizes from DN 25 (1") to DN 200 (10")
- Pressures of 2 mbar to 200 mbar dependent on size
- Special sizes and custom design up to 200 mbar
- Easy inspection and maintenance guaranteed by clamp connections
- Seat replaceable on site
- Modular design with interchangeable components
- Light and compact design
- Extraordinarily sturdy at low weight
- Advanced sealing technology
- HALAR and PFA coating*
- Special materials like hastelloy C276/C-22 for absolute corrosion resistance*
- Realization of lowest set pressures*
- Heatable designs*

*optional



Application

- Vessels with nitrogen neutralization
- Centrifuges for pharmaceutical industry and fine chemistry
- Low pressurized tanks and facilities

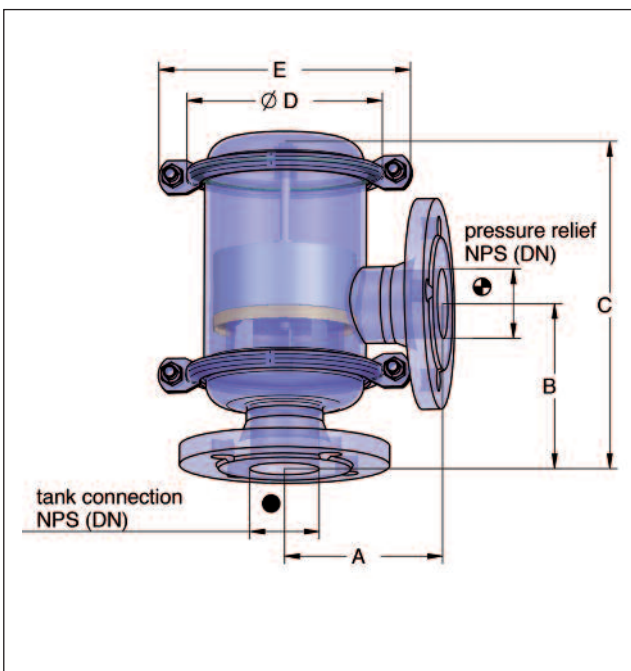
Function

The ELEVENT® breather valve maintains a tight seal until system pressure or vacuum exceeds the set pressure. When pressure occurs the weighted valve plate is lifted and the pressure can leak out. After decrease in pressure the valve reseats and maintains a reliable seal of the system.

The optimized “air cushion” sealing principle provides a smooth valve stroke while blowing off as well as repeatable leak tight sealing. Valve chatter and wear are prevented.

Technical Data

ELEVENT®



| Type | NPS | DN | Pressure | A | B | C | D | E |
|---------------|------|------|-----------|------|-----|-----|-----|-----|
| | [in] | [mm] | [mbarg] | [mm] | | | | |
| ELV E - 1 / 1 | 1" | 25 | 2 - 100 | 100 | 100 | 195 | 105 | 150 |
| ELV E - 2 / 2 | 2" | 50 | 2 - 50 | 125 | 130 | 223 | 155 | 200 |
| | | | 51 - 100 | | | 263 | | |
| | | | 101 - 200 | | | 348 | | |
| ELV E - 3 / 3 | 3" | 80 | 2 - 200 | 155 | 155 | 375 | 208 | 263 |
| ELV E - 4 / 4 | 4" | 100 | 2 - 200 | 175 | 175 | 395 | 208 | 263 |
| ELV E - 6 / 6 | 6" | 150 | 2 - 200 | 255 | 255 | 510 | 325 | 385 |
| ELV E - 8 / 8 | 8" | 200 | 2 - 200 | 265 | 325 | 570 | 325 | 385 |

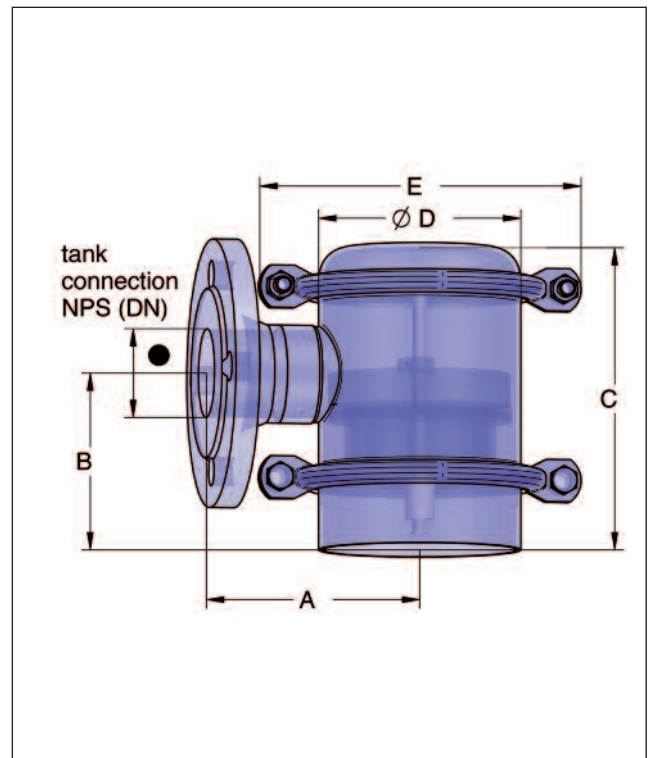
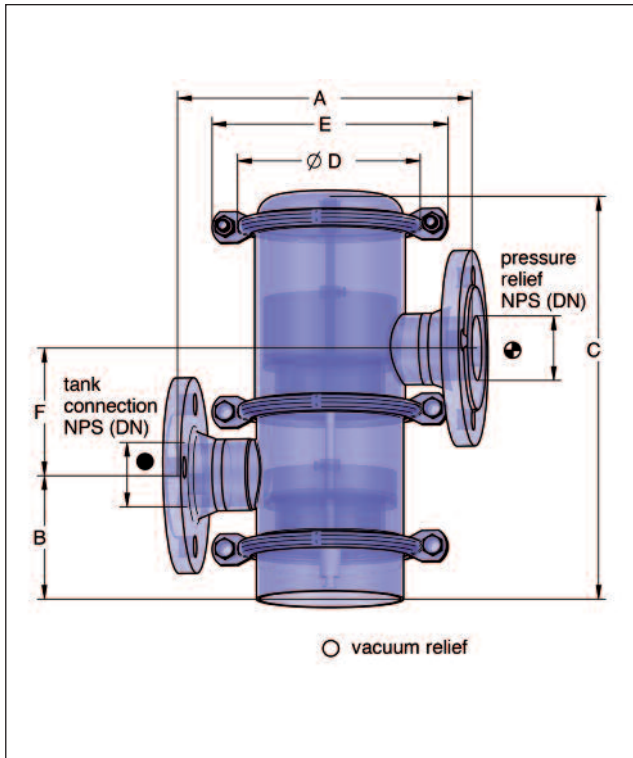
Dimensions refer to flanges IAW DIN EN 1092-1, Type 11, Form B, PN 16, other flange types on request



Technical Data

ELV-KL

ELV-U



| Type | NPS | DN | Pressure | Vacuum ¹ | A | B | C | D | E | F |
|----------------|------|------|-----------|---------------------|------|-----|-----|-----|-----|-----|
| | [in] | [mm] | [mbarg] | [mbarg] | [mm] | | | | | |
| ELV KL - 1 / 1 | 1" | 25 | 2 - 100 | 2 - 50 | 200 | 65 | 270 | 105 | 150 | 95 |
| ELV KL - 2 / 2 | 2" | 50 | 2 - 50 | 2 - 30 ² | 250 | 100 | 308 | 155 | 200 | 115 |
| | | | 51 - 100 | | | | 348 | | | |
| | | | 101 - 200 | | | | 418 | | | |
| ELV KL - 3 / 3 | 3" | 80 | 2 - 200 | 2 - 100 | 310 | 150 | 555 | 208 | 263 | 188 |
| ELV KL - 4 / 4 | 4" | 100 | 2 - 200 | 2 - 100 | 350 | 150 | 555 | 208 | 263 | 188 |
| ELV KL - 6 / 6 | 6" | 150 | 2 - 200 | 2 - 100 | 510 | 225 | 710 | 325 | 430 | 240 |
| ELV KL - 8 / 8 | 8" | 200 | 2 - 200 | 2 - 100 | 530 | 250 | 770 | 325 | 430 | 310 |

Dimensions refer to flanges IAW DIN EN 1092-1, Type 11, Form B, PN 16, other flange types on request

¹) DN 50 (2") vacuum set-up 31 - 50 mbarg (0.45 - 0.73 psig)
F* = F+40, C* = C+40

²) Higher set pressures in vacuum direction on request

| Type | NPS | DN | Vacuum | A | B | C | D | E |
|-----------|------|------|-----------|------|-----|-----|-----|-----|
| | [in] | [mm] | [mbarg] | [mm] | | | | |
| ELV U - 1 | 1" | 25 | 2 - 100 | 100 | 65 | 160 | 105 | 150 |
| ELV U - 2 | 2" | 50 | 2 - 50 | 125 | 100 | 195 | 155 | 200 |
| | | | 51 - 100 | | | 235 | | |
| | | | 101 - 200 | | | 305 | | |
| ELV U - 3 | 3" | 80 | 2 - 200 | 155 | 150 | 310 | 208 | 263 |
| ELV U - 4 | 4" | 100 | 2 - 200 | 175 | 150 | 310 | 208 | 263 |
| ELV U - 6 | 6" | 150 | 2 - 200 | 255 | 225 | 402 | 325 | 385 |
| ELV U - 8 | 8" | 200 | 2 - 200 | 265 | 250 | 472 | 325 | 385 |

Dimensions refer to flanges IAW DIN EN 1092-1, Type 11, Form B, PN 16, other flange types on request

Customer Benefits

- Reduced costs for nitrogen inert systems
- Suitable on aggressive media applications
- Simply in situ pressure/vacuum setting due to change in weight

Quality and Certifications

Each ELEVENT® breather valve is tested and delivered with inspection certificate 3.1 in accordance with EN 10204.