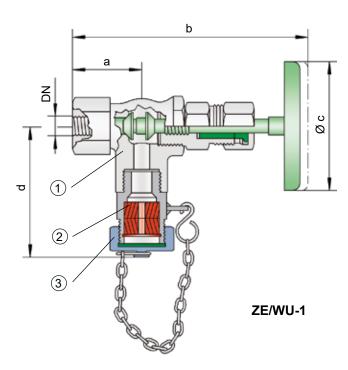


## Sampling and Air Bleed Valve

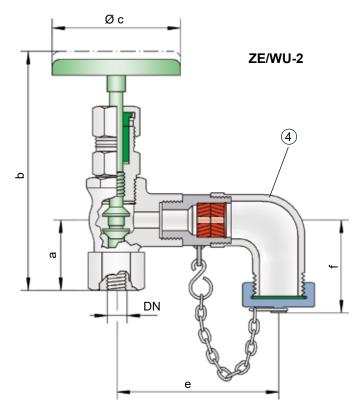
**Deflagration-proof** 

## PROTEGO® ZE/WU





Standard design up to PN 25



## **Function and Description**

The PROTEGO® sampling and air bleed valve is used for flame transmission-proof venting of pipelines and equipment that transports or processes flammable liquids and for taking liquid samples. The valve incorporates an end-of-line deflagration flame arrester. Should the gas/air mixtures or product vapor/air mixtures ignite during venting, the valve prevents flash back into the protected system.

The sampling and air bleed valve PROTEGO® ZE/WU consists of the threaded angle valve in pressure stage PN25 (1) with hand wheel as standard design, a female threaded connection (pipe thread G½"up to G1"), and the flame arrester (2) with cover (3).

Optionally, an elbow fitting (4) is available as outlet for sampling. The PROTEGO® flame arrester (2) consists of the flame arrester casing with FLAMEFILTER®.

The valve opens manually with the hand wheel. For sampling, a suitable container is required.

The simple and sturdy design makes it suitable for nearly all flammable liquids. This device can be installed in any position.

Flame transmission protection is guaranteed against atmospheric deflagrations of gas/air mixtures or product vapor/air mixtures of explosion groups up to IIB IIB (NEC group D to C) up to an operating temperature of +60°C / 140°F and an absolute operating pressure of up to 1.1 bar / 15.9 psi.

Type-approved in accordance with the current ATEX Directive and EN ISO 16852, as well as other international standards.

## **Designs and Specifications**

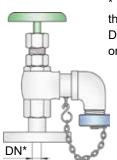
There are two designs available:

Sampling and air bleed valve, standard design **ZE/WU - 1** 

Sampling and air bleed valve with elbow ZE/WU - 2

Special designs for higher pressures are available

Also available with flange connection (see figure).



\* The flange is available in drilling pattern and thickness for DN15/ $\frac{1}{2}$ ", DN20/ $\frac{3}{4}$ ", DN25/1", DN32 / 1 $\frac{1}{4}$ ", DN40 / 1 $\frac{1}{2}$ " , and for PN25/40 or PN100 upon request.

| Table 1: Dimensions |      |       | Dimensions in mm / inches |      |       |      |
|---------------------|------|-------|---------------------------|------|-------|------|
| DN                  | а    | b     | Øс                        | d    | е     | f    |
| 15 / G½"            | 40 / | 140 / | 70 /                      | 80 / | 96 /  | 67 / |
|                     | 1.57 | 5.51  | 2.76                      | 3.15 | 3.78  | 2.64 |
| 20 / G¾"            | 50 / | 165 / | 85 /                      | 80 / | 89 /  | 67 / |
|                     | 1.97 | 6.50  | 3.35                      | 3.15 | 3.50  | 2.64 |
| 25 / G1"            | 65 / | 200 / | 100 /                     | 95 / | 104 / | 67 / |
|                     | 2.56 | 7.87  | 3.94                      | 3.74 | 4.09  | 2.64 |

| Table 2: Explosion group |                        |                    |  |  |  |  |
|--------------------------|------------------------|--------------------|--|--|--|--|
| MESG                     | Expl. Gr.<br>(IEC/CEN) | Gas Group<br>(NEC) |  |  |  |  |
| ≥ 0,50 mm                | IIB                    | В                  |  |  |  |  |

| Table 3: Material    |                 |  |  |  |  |
|----------------------|-----------------|--|--|--|--|
| Design               | Α               |  |  |  |  |
| Threaded angle valve | Stainless Steel |  |  |  |  |
| Elbow                | Stainless Steel |  |  |  |  |
| Cover                | Stainless Steel |  |  |  |  |
| FLAMEFILTER®         | Stainless Steel |  |  |  |  |

The valve must be sufficiently resistant to corrosion through the gas/air mixtures or product vapor/air mixtures. This applies especially to the FLAMEFILTER $^{\otimes}$ .

| Table 4: Type of connection |     |
|-----------------------------|-----|
| Pipe thread DIN ISO 228 T1  | DIN |