

## → Series 2580



### ■ MATERIAL



### ■ SPECIFICATION



1/4" – 1/2"



– 200°C to + 200°C



0,2 – 70 bar

### ■ SUITABLE FOR

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

### ■ EXAMPLES OF USE

Overflow valve for the protection of:

- Containers and pipelines for the storage and transport of cryogenic liquified gases such as LIN, LOX, LAr, CO<sub>2</sub>, LNG.

- Tunnel freezer plants
- Dry ice blasting plants
- Cryogenic plant construction
- Liquid nitrogen dosing
- Cryogenic milling process
- Cryogenic machining
- Ground freezing plants
- Gases used in medical equipment
- Plants for cryogenic gases which come into contact with foodstuffs

**Overflow valves of this type are oil- and grease-free as standard.**

### ■ APPROVALS

TR ZU 010/2011

#### Requirements

AD 2000 Data sheet A2  
DGR 2014/68/EU

### ■ MATERIALS

| Component      | Material         | DIN EN        | ASME          |
|----------------|------------------|---------------|---------------|
| Inlet body     | Stainless steel  | 1.4404        | 316 L         |
| Outlet body    | Gunmetal / Brass | CC499K/CW617N | CC499K/CW617N |
| Internal parts | Stainless steel  | 1.4404        | 316 L         |
| Spring         | Stainless steel  | 1.4310        | 302           |
| Seal           | PTFE             | PTFE          | PTFE          |

Series 2580 ■ VALVE VERSION

|   |                                        |                                                                                                       |
|---|----------------------------------------|-------------------------------------------------------------------------------------------------------|
| s | non-gastight version of spring housing | for neutral media. Not suitable for oxygen.<br>Outlet z only available as version s.                  |
| t | gastight version of spring housing     | for neutral and non-neutral media.<br>The environment is protected from being affected by the medium. |

■ MEDIUM

|    |                    |                                                                                     |
|----|--------------------|-------------------------------------------------------------------------------------|
| GF | gaseous and liquid | Cryogenic liquified gases, vapours and liquids,<br>for oxygen max. 40bar/ max. 60°C |
|----|--------------------|-------------------------------------------------------------------------------------|

■ TYPE OF LIFTING MECHANISM

|   |                        |
|---|------------------------|
| 0 | without lifting device |
|---|------------------------|

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

| Nominal diameter DN |           | 8        |           |           |
|---------------------|-----------|----------|-----------|-----------|
| Inlet               |           | 1/4" (8) | 3/8" (10) | 1/2" (15) |
| Outlet              | 3/8" (10) | ■        | ■         | ■         |
|                     | 1/2" (15) | ■        | ■         | ■         |

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

|                         |          |                                                |                                     |
|-------------------------|----------|------------------------------------------------|-------------------------------------|
| m / f                   | Standard | Male thread BSP-P / Female thread BSP-P        | DIN EN ISO 228-1 / DIN EN ISO 228-1 |
| f / f                   |          | Female thread BSP-P / Female thread BSP-P      | DIN EN ISO 228-1 / DIN EN ISO 228-1 |
| NPT-m / f               |          | Male thread NPT / Female thread BSP-P          | ANSI B1.20.1 / DIN EN ISO 228-1     |
| NPT-m / NPT-f           |          | Male thread NPT / Female thread NPT            | ANSI B1.20.1 / ANSI B1.20.1         |
| NPT-f / NPT-f           |          | Female thread NPT / Female thread NPT          | ANSI B1.20.1 / ANSI B1.20.1         |
| With insect protection: |          |                                                |                                     |
| m/z                     |          | Male thread BSP-P / Insect protection screen   | DIN EN ISO 228-1 / –                |
| f/z                     |          | Female thread BSP-P / Insect protection screen | DIN EN ISO 228-1 / –                |
| NPT-m/z                 |          | Male thread NPT / Insect protection screen     | ANSI B1.20.1 / –                    |

■ SEALS

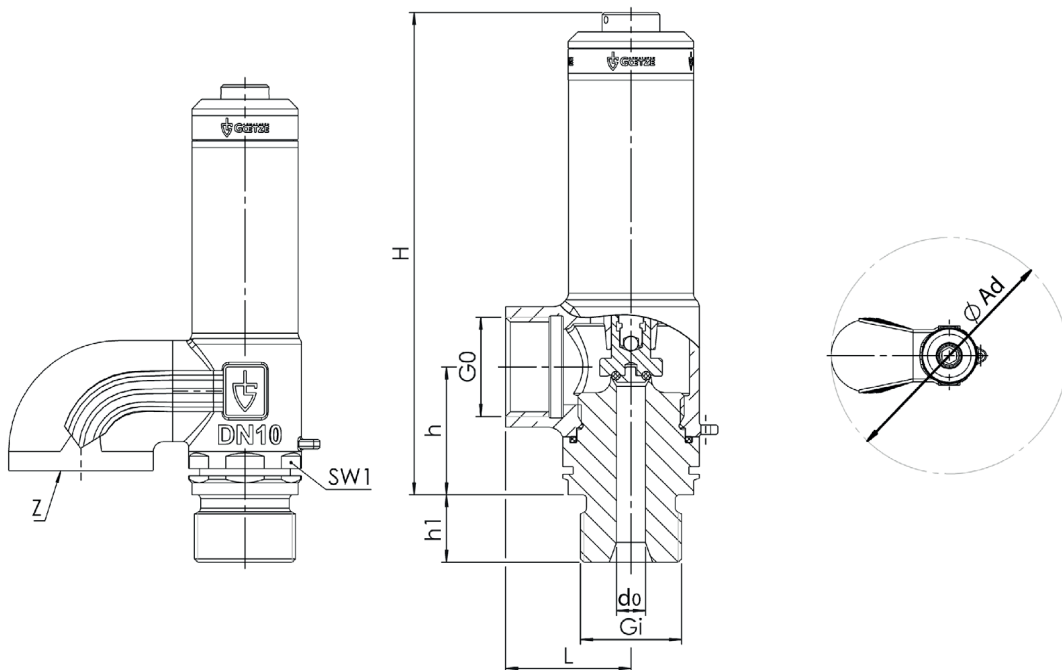
|      |                         |                          |                  |
|------|-------------------------|--------------------------|------------------|
| PTFE | Polytetrafluoroethylene | O-ring with FDA Approval | –200°C to +200°C |
|------|-------------------------|--------------------------|------------------|

## ■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

| Series 2580: Connection, installation dimensions, ranges of adjustment |                |            |           |           |           |           |           |
|------------------------------------------------------------------------|----------------|------------|-----------|-----------|-----------|-----------|-----------|
| Nominal diameter                                                       | DN             | 8          |           |           |           |           |           |
| Connection DIN EN ISO 228                                              | Gi             | 1/4" (8)   | 3/8" (10) | 1/2" (15) | 1/4" (8)  | 3/8" (10) | 1/2" (15) |
| Outlet DIN EN ISO 228                                                  | Go             | 3/8" (10)  | 3/8" (10) | 3/8" (10) | 1/2" (15) | 1/2" (15) | 1/2" (15) |
| Installation dimensions in mm                                          | h1             | 12         |           | 14        | 12        |           | 14        |
|                                                                        | h              | 22         |           |           | 26        |           |           |
|                                                                        | L              | 21         |           |           | 26        |           |           |
|                                                                        | H              | 85         |           |           | 99        |           |           |
|                                                                        | SW1            | 22         |           |           | 27        |           |           |
|                                                                        | Ad             | 47 / 98**) |           |           | 58        |           |           |
|                                                                        | d <sub>0</sub> | 6,0        |           |           | 6,0       |           |           |
| Weight                                                                 | kg             | 0,2        |           |           | 0,3       |           |           |
| Set pressure                                                           | bar            | 0,2 - 70   |           |           | 0,2 - 70  |           |           |
| Range of adjustment                                                    | bar            | 0,2-2,5    |           |           | 0,2-2,5   |           |           |
|                                                                        |                | 2,5-3,5    |           |           | 2,5-3,5   |           |           |
|                                                                        |                | 3,5-5,5    |           |           | 3,5-5,5   |           |           |
|                                                                        |                | 5,5-8      |           |           | 5,5-8     |           |           |
|                                                                        |                | 8-13       |           |           | 8-13      |           |           |
|                                                                        |                | 13-23      |           |           | 13-23     |           |           |
|                                                                        |                | 23-35      |           |           | 23-35     |           |           |
|                                                                        |                | 35-52      |           |           | 35-52     |           |           |
|                                                                        |                | 52-70      |           |           | 52-70     |           |           |
|                                                                        |                | - / Yes    |           |           | -         |           |           |
| Outlet with insect protection screen                                   | Z              |            |           |           |           |           |           |

\*\*\*) Diameter for body with insect protection screen

## ■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



| Series | Valve version | Medium | Lifting device | Nominal diameter DN | Connection type |        | Connection size |        | Seal | Set pressure | Quantity |
|--------|---------------|--------|----------------|---------------------|-----------------|--------|-----------------|--------|------|--------------|----------|
|        |               |        |                |                     | Inlet           | Outlet | Inlet           | Outlet |      |              |          |
| 2580   | s             | GF     | 0              | 8                   | m               | z      | 10              | -      | PTFE | 6,0          | 2        |
| 2580   |               | GF     |                |                     |                 |        |                 |        |      |              |          |
| 2580   |               | GF     |                |                     |                 |        |                 |        |      |              |          |
| 2580   |               | GF     |                |                     |                 |        |                 |        |      |              |          |

■ CERTIFICATES / APPROVALS

|       |                                                                                                                              |                          |     |                                                                                                                            |                          |
|-------|------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----|----------------------------------------------------------------------------------------------------------------------------|--------------------------|
| C01   | Factory certificate acc. DIN EN 10204 2.2 (WKZ 2.2)                                                                          | <input type="checkbox"/> | C05 | Sealing material<br>Manufacturer certification (FDA, USP 3, 3-A,...),<br>Please indicate description of certificate: ..... | <input type="checkbox"/> |
| C02-1 | Test certificate<br>acc. DIN EN 10204 3.1 (WPZ 3.1) for non TÜV-CE valves<br>marking of individual serial number is required | <input type="checkbox"/> | C06 | ATEX evaluation acc. to 2014/34/EU                                                                                         | <input type="checkbox"/> |
| C03   | Material test certificate acc. DIN EN 10204 3.1 (MPZ 3.1)<br>(pressure retaining part)                                       | <input type="checkbox"/> | C10 | Certificate of oil- and grease free production                                                                             | <input type="checkbox"/> |
| C04   | TÜV/DEKRA individual inspection<br>acc. EN 10204 3.2 (TÜV/DEKRA-APZ)                                                         | <input type="checkbox"/> |     |                                                                                                                            | <input type="checkbox"/> |

■ ADMISSIONS / ACCREDITATIONS

|  |                          |    |                                                                                     |                          |
|--|--------------------------|----|-------------------------------------------------------------------------------------|--------------------------|
|  | <input type="checkbox"/> | AL | Individual inspection by notified body inspector –<br>(body to be indicated): ..... | <input type="checkbox"/> |
|  | <input type="checkbox"/> |    |                                                                                     | <input type="checkbox"/> |
|  | <input type="checkbox"/> |    |                                                                                     | <input type="checkbox"/> |

| Series 2580: Kv values at 1 bar overpressure |             |         |         |       |      |       |       |       |       |
|----------------------------------------------|-------------|---------|---------|-------|------|-------|-------|-------|-------|
| Nominal diameter DN                          |             | 8       |         |       |      |       |       |       |       |
| flow diameter                                | 0,2-2,5     | 2,5-3,5 | 3,5-5,5 | 5,5-8 | 8-13 | 13-23 | 23-35 | 35-52 | 52-70 |
| Set pressure bar                             | Air [Nm³/h] |         |         |       |      |       |       |       |       |
| 0,2                                          | 23          |         |         |       |      |       |       |       |       |
| 1,0                                          | 25          |         |         |       |      |       |       |       |       |
| 1,5                                          | 27          |         |         |       |      |       |       |       |       |
| 2,0                                          | 27,5        |         |         |       |      |       |       |       |       |
| 2,5                                          | 28,5        | 25,8    |         |       |      |       |       |       |       |
| 3,0                                          |             | 26,7    |         |       |      |       |       |       |       |
| 3,5                                          |             | 27,8    | 24,8    |       |      |       |       |       |       |
| 4,0                                          |             |         | 26,2    |       |      |       |       |       |       |
| 4,5                                          |             |         | 27,5    |       |      |       |       |       |       |
| 5,0                                          |             |         | 28,2    |       |      |       |       |       |       |
| 5,5                                          |             |         | 28,9    | 25,8  |      |       |       |       |       |
| 6,0                                          |             |         |         | 27,4  |      |       |       |       |       |
| 7,0                                          |             |         |         | 29,0  |      |       |       |       |       |
| 8,0                                          |             |         |         | 29,6  | 27,8 |       |       |       |       |
| 9,0                                          |             |         |         |       | 27,9 |       |       |       |       |
| 10                                           |             |         |         |       | 28,1 |       |       |       |       |
| 11                                           |             |         |         |       | 29,5 |       |       |       |       |
| 12                                           |             |         |         |       | 31,5 |       |       |       |       |
| 13                                           |             |         |         |       | 33,0 | 31,0  |       |       |       |
| 14                                           |             |         |         |       |      | 32,3  |       |       |       |
| 15                                           |             |         |         |       |      | 33,5  |       |       |       |
| 16                                           |             |         |         |       |      | 34,0  |       |       |       |
| 17                                           |             |         |         |       |      | 35,3  |       |       |       |
| 18                                           |             |         |         |       |      | 36,5  |       |       |       |
| 19                                           |             |         |         |       |      | 37,3  |       |       |       |
| 20                                           |             |         |         |       |      | 38,0  |       |       |       |
| 21                                           |             |         |         |       |      | 38,5  |       |       |       |
| 22                                           |             |         |         |       |      | 39,3  |       |       |       |
| 23                                           |             |         |         |       |      | 40,0  | 33,9  |       |       |
| 24                                           |             |         |         |       |      |       | 35,5  |       |       |
| 25                                           |             |         |         |       |      |       | 37,0  |       |       |
| 26                                           |             |         |         |       |      |       | 38,0  |       |       |
| 27                                           |             |         |         |       |      |       | 39,5  |       |       |
| 28                                           |             |         |         |       |      |       | 41,5  |       |       |
| 29                                           |             |         |         |       |      |       | 43,0  |       |       |
| 30                                           |             |         |         |       |      |       | 44,5  |       |       |
| 32                                           |             |         |         |       |      |       | 46,0  |       |       |
| 34                                           |             |         |         |       |      |       | 47,5  |       |       |
| 36                                           |             |         |         |       |      |       | 49,0  | 52,3  |       |
| 38                                           |             |         |         |       |      |       |       | 55,4  |       |
| 40                                           |             |         |         |       |      |       |       | 58,3  |       |
| 42                                           |             |         |         |       |      |       |       | 60,5  |       |
| 44                                           |             |         |         |       |      |       |       | 63,5  |       |
| 46                                           |             |         |         |       |      |       |       | 67,2  |       |
| 48                                           |             |         |         |       |      |       |       | 70,2  |       |
| 50                                           |             |         |         |       |      |       |       | 73,2  |       |
| 52                                           |             |         |         |       |      |       |       | 73,9  | 73,9  |
| 54                                           |             |         |         |       |      |       |       |       | 76,8  |
| 56                                           |             |         |         |       |      |       |       |       | 79,7  |
| 58                                           |             |         |         |       |      |       |       |       | 82,6  |
| 60                                           |             |         |         |       |      |       |       |       | 85,5  |
| 62                                           |             |         |         |       |      |       |       |       | 88,4  |
| 64                                           |             |         |         |       |      |       |       |       | 91,3  |
| 66                                           |             |         |         |       |      |       |       |       | 94,2  |
| 68                                           |             |         |         |       |      |       |       |       | 97,1  |
| 70                                           |             |         |         |       |      |       |       |       | 100,0 |