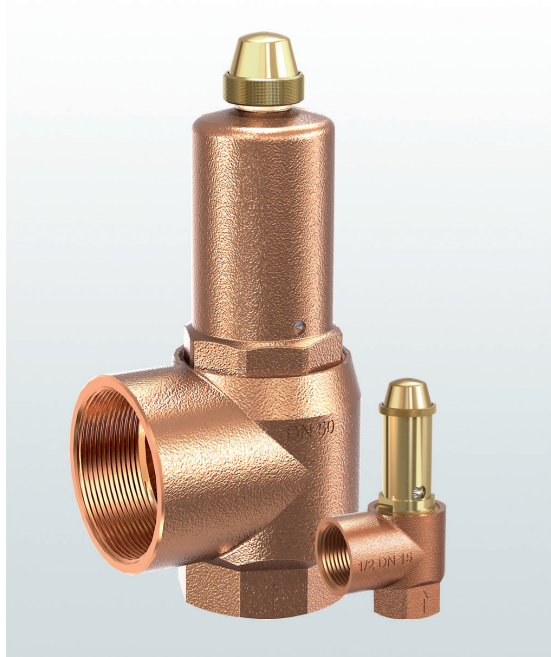


**651mHNK**

Safety valves made of gunmetal, angle-type with threaded connections

→ **Series 651mHNK**



■ SUITABLE FOR

Hot water



■ EXAMPLES OF USE

For the protection of:

- thermostatically protected closed-circuit water heating systems with flow temperatures of up to 120°C and a permissible heating output of up to 2.700 kW according to TRD 721, DIN 4751 and DIN EN 12828.

Should the thermostatic limiting and control unit fail, the safety valve has to blow-off the total heating output of the boiler as hot water and steam. Thanks to the all-metal design these safety valves can also be installed in cases of high environmental or radiation temperatures

- heating systems for building technology- and industrial-applications
- co-generation plants (CHP)

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

■ APPROVALS

|                                 |   |
|---------------------------------|---|
| TÜV Type test approval 516      | H |
| EC type examination             | H |
| TSG ZF001-2006                  | H |
| TR ZU 032/2013 - TR ZU 010/2011 | H |

**Requirements**

TRD 721  
DIN 4751 Part 2  
DIN EN 12828  
DIN EN ISO 4126-1  
PED 2014/68/EU

**Classification society**

|                                       |         |
|---------------------------------------|---------|
| DNVGL                                 | DNVGL   |
| Lloyd's Register EMEA                 | LR EMEA |
| American Bureau of Shipping           | ABS     |
| Bureau Veritas                        | BV      |
| Russian Maritime Register of Shipping | RS      |



■ MATERIAL



■ SPECIFICATION



1/2" – 2"



– 10°C to + 120°C



2,5 bar and 3,0 bar

■ MATERIALS

| Component      | Material                               | DIN EN | ASME      |
|----------------|----------------------------------------|--------|-----------|
| Inlet body     | Gunmetal                               | CC499K | CC499K    |
| Outlet body    | Gunmetal                               | CC499K | CC499K    |
| Internal parts | Brass                                  | CW617N | CW617N    |
| Spring         | Spring steel with anti-rust protection | 1.1200 | ASTM A228 |

Series 651mHNK ■ VALVE VERSION

|          |                         |                                                                                                                                 |
|----------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>m</b> | Standard with diaphragm | The diaphragm prevents the medium entering into the spring housing and protects moving parts from being affected by the medium. |
|----------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------|

■ MEDIUM

|           |                                  |                                                   |
|-----------|----------------------------------|---------------------------------------------------|
| <b>HN</b> | Hot water (national for Germany) | Flow temperature ≤ 120°C in water heating systems |
|-----------|----------------------------------|---------------------------------------------------|

■ TYPE OF LIFTING MECHANISM

|          |                                            |
|----------|--------------------------------------------|
| <b>K</b> | Standard with twist-type lifting mechanism |
|----------|--------------------------------------------|

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

| Nominal diameter DN | 15          | 20        | 25      | 32          | 40          | 50      |
|---------------------|-------------|-----------|---------|-------------|-------------|---------|
| <b>Inlet</b>        | 1/2" (15)   | 3/4" (20) | 1" (25) | 1 1/4" (32) | 1 1/2" (40) | 2" (50) |
| <b>Outlet</b>       | 1/2" (15)   |           |         |             |             |         |
|                     | 3/4" (20)   | ■         |         |             |             |         |
|                     | 1" (25)     |           | ■       |             |             |         |
|                     | 1 1/4" (32) |           |         | ■           |             |         |
|                     | 1 1/2" (40) |           |         |             | ■           |         |
|                     | 2" (50)     |           |         |             |             | ■       |
|                     | 2 1/2" (65) |           |         |             |             |         |

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

|              |          |                                           |                                               |
|--------------|----------|-------------------------------------------|-----------------------------------------------|
| <b>f / f</b> | Standard | Female thread BSP-P / Female thread BSP-P | DIN EN 10226, ISO 7-1 / DIN EN 10226, ISO 7-1 |
|--------------|----------|-------------------------------------------|-----------------------------------------------|

■ SEALS

|             |                          |                                                                  |                 |
|-------------|--------------------------|------------------------------------------------------------------|-----------------|
| <b>EPDM</b> | Ethylene propylene diene | Elastomere flat seal and diaphragm (up to 100% glycol resistant) | -10°C to +120°C |
|-------------|--------------------------|------------------------------------------------------------------|-----------------|

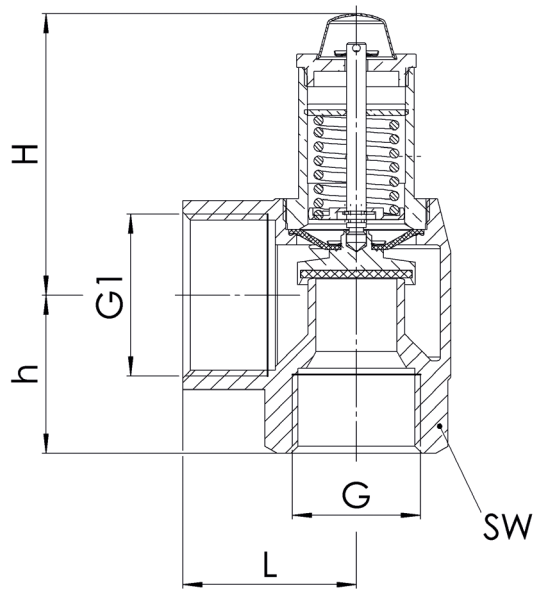
■ OPTIONS

|                              |
|------------------------------|
| Special versions on request. |
|------------------------------|

■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

| Series 651mHNK: Connection, installation dimensions, ranges of adjustment |     |                  |                  |                  |                  |                  |                  |
|---------------------------------------------------------------------------|-----|------------------|------------------|------------------|------------------|------------------|------------------|
| Nominal diameter                                                          | DN  | 15               | 20               | 25               | 32               | 40               | 50               |
| Connection DIN EN 10226-1                                                 | G   | 1/2" (15)        | 3/4" (20)        | 1" (25)          | 1 1/4" (32)      | 1 1/2" (40)      | 2" (50)          |
| Outlet DIN EN 10226-1                                                     | G1  | 3/4" (20)        | 1" (25)          | 1 1/4" (32)      | 1 1/2" (40)      | 2" (50)          | 2 1/2" (65)      |
| Installation dimensions in mm                                             | L   | 34               | 40               | 45               | 55               | 62               | 75               |
|                                                                           | H   | 70               | 65               | 75               | 85               | 155              | 185              |
|                                                                           | h   | 28               | 34               | 41               | 47               | 54               | 65               |
|                                                                           | SW  | 27               | 32               | 40               | 49               | 56               | 68               |
| Weight                                                                    | kg  | 0,3              | 0,45             | 0,75             | 1,1              | 2,2              | 3,2              |
| Set pressure                                                              | bar | 2,5 bar<br>3 bar | 2,5 bar<br>3 bar | 2,5 bar<br>3 bar | 2,5 bar<br>3 bar | 2,5 bar<br>3 bar | 2,5 bar<br>3 bar |

■ 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 |      |         |              |          |
| 651    | m             | HN     | K              | 15                  | f               | f      | 15              | 20     | EPDM |         | 2,5          | 2        |
| 651    | m             | HN     | K              |                     |                 |        |                 |        | EPDM |         |              |          |
| 651    | m             | HN     | K              |                     |                 |        |                 |        | EPDM |         |              |          |
| 651    | m             | HN     | K              |                     |                 |        |                 |        | EPDM |         |              |          |

■ ENQUIRY

Copy and send to: [order@goetze-armaturen.de](mailto:order@goetze-armaturen.de).

Order form easily to be found online under the section for each series.

■ CAPACITY TABLE ACC. TO ISO 4126-1 / AD2000 A2

| Series 651mHMK: Blowing-off rates at 0,5 bar above set pressure |      |    |        |     |        |     |         |     |         |     |         |     |         |
|-----------------------------------------------------------------|------|----|--------|-----|--------|-----|---------|-----|---------|-----|---------|-----|---------|
| Nominal diameter DN                                             |      | 15 |        | 20  |        | 25  |         | 32  |         | 40  |         | 50  |         |
| Set pressure bar                                                |      | kW | Kcal/h | kW  | Kcal/h | kW  | Kcal/h  | kW  | Kcal/h  | kW  | Kcal/h  | kW  | Kcal/h  |
| Heating                                                         | 2,50 | 50 | 45.000 | 100 | 90.000 | 200 | 175.000 | 350 | 300.000 | 600 | 500.000 | 900 | 750.000 |
|                                                                 | 3,00 | 50 | 45.000 | 100 | 90.000 | 200 | 175.000 | 350 | 300.000 | 600 | 500.000 | 900 | 750.000 |

To achieve heating output according to TRD 721, up to three valves per system with separate discharge pipes can be installed.