

Overflow and pressure control valves
made of stainless steel, angle-type
with threaded connections
-externally adjustable-

→ Series 418



■ MATERIAL



■ SPECIFICATION



3/8" – 1 1/4"
DN 10 – DN 32



– 60°C to + 225°C
depending on version



0,2 – 30 bar

■ SUITABLE FOR

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

■ EXAMPLES OF USE

For the protection of:

- pumps against overloading in closed circuits for neutral / non-neutral, non-sticking liquids

For the control of:

- systems under pressure for neutral/ non-neutral gases and vapours and – depending on the sealing material – also for steam.

- chemical plants, biogas plants
- desalination plants
- mechanical engineering and process equipment construction
- shipbuilding industry and marine equipment
- industrial applications
- secondary areas in the food-, beverage-, pharmaceutical- and cosmetics-industries

■ APPROVALS

European Pressure Equipment Directive

TR ZU 032/2013 - TR ZU 010/2011

Requirements

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 |

■ MATERIALS

| Component | Material | DIN EN | ASME |
|----------------|-----------------|--------|-------|
| Inlet body | Stainless steel | 1.4404 | 316 L |
| Outlet body | Stainless steel | 1.4408 | CF8M |
| Internal parts | Stainless steel | 1.4404 | 316 L |
| Spring | Stainless steel | 1.4310 | 302 |

| | | |
|----------|------------------------------------|--|
| t | gastight version of spring housing | for neutral and non-neutral media, not counter pressure compensated. The environment is protected from being affected by the medium. Only available without lifting device. Adjustable under operating conditions without medium escaping into the atmosphere. |
|----------|------------------------------------|--|

Complete functional cartridge available as replacement part (order code: 418 cartridge-DN.-seal) can be exchanged without removing the valve.

Valves can be delivered unset within a pressure range or set and sealed at the factory.

■ MEDIUM

| | | |
|-----------|--------------------|---|
| GF | gaseous and liquid | Air, vapours, gases, liquids and - depending on seal - also for steam |
|-----------|--------------------|---|

■ TYPE OF LIFTING MECHANISM

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

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

| Nominal diameter DN | | 10 | 15 | 20 | 25 | 32 |
|---------------------|-------------|-----------|-----------|-----------|---------|-------------|
| Inlet | | 3/8" (10) | 1/2" (15) | 3/4" (20) | 1" (25) | 1 1/4" (32) |
| Outlet | 3/8" (10) | ■ | | | | |
| | 1/2" (15) | | ■ | | | |
| | 3/4" (20) | | | ■ | | |
| | 1" (25) | | | | ■ | |
| | 1 1/4" (32) | | | | | ■ |

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

| | | | |
|-------------------------|------------|---|-------------------------------------|
| f / f | Standard | Female thread BSP-P / Female thread BSP-P | DIN EN ISO 228-1 / DIN EN ISO 228-1 |
| m / f | On request | Male thread BSP-P / Female thread BSP-P | DIN EN ISO 228-1 / DIN EN ISO 228-1 |
| KLSDIN / KLS DIN | On request | Clamp connection DIN / clamp connection DIN | DIN 32676 / DIN 32676 |

■ SEALS

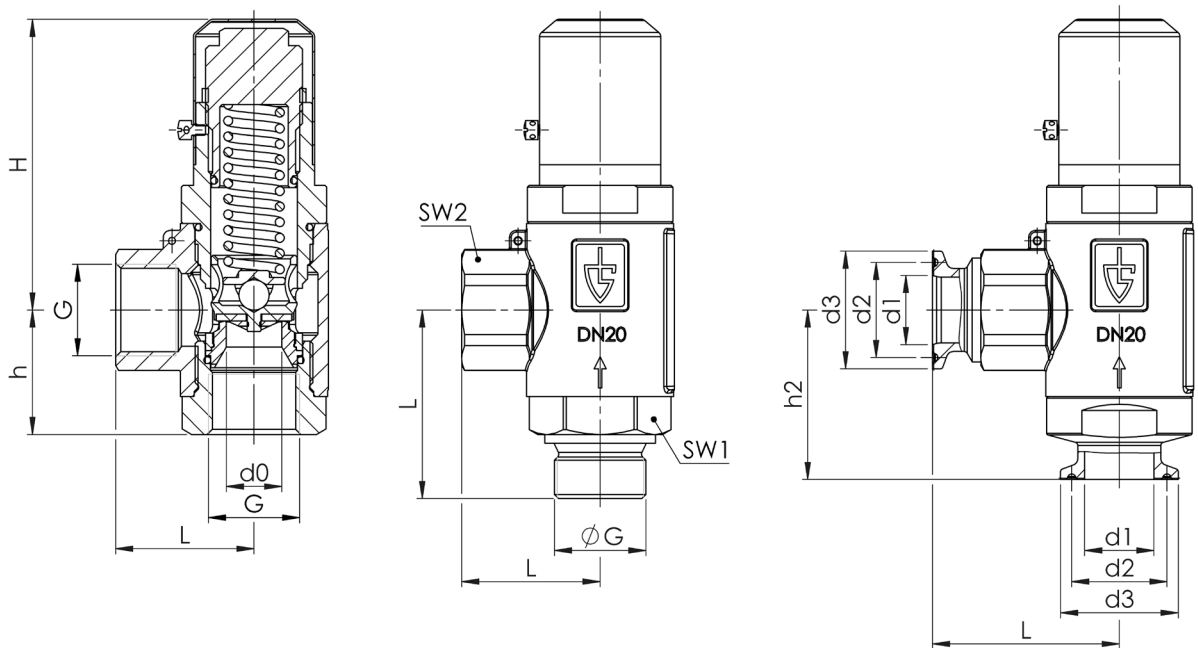
| | | | |
|-------------|---------------------------|-----------------------------------|-----------------|
| NBR | Nitrile rubber (standard) | Elastomere flat seal 0,2 – 30 bar | -30°C to +130°C |
| EPDM | Ethylene propylene diene | Elastomere flat seal 0,2 – 30 bar | -50°C to +150°C |
| FKM | Fluorocarbon | Elastomere flat seal 0,2 – 30 bar | -20°C to +200°C |
| PTFE | Polytetrafluoroethylene | Flat seal 0,5 – 30 bar | -60°C to +225°C |

If the seal is made of PTFE the O-rings of the cartridge are as standard made of FPM. FPM possible on request against surcharge.

■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

| Series 418: Connection, installation dimensions, ranges of adjustment | | | | | | |
|---|--------|-----------|-----------|-----------|----------|-------------|
| Nominal diameter | DN | 10 | 15 | 20 | 25 | 32 |
| Connection DIN EN ISO 228 | G | 3/8" (10) | 1/2" (15) | 3/4" (20) | 1" (25) | 1 1/4" (32) |
| Outlet DIN EN ISO 228 | G | 3/8" (10) | 1/2" (15) | 3/4" (20) | 1" (25) | 1 1/4" (32) |
| Installation dimensions in mm | L | 34 | 34 | 40 | 50 | 50 |
| | L1 | 45 | 43,5 | 54 | 61 | 61 |
| | H | 73 | 73 | 84 | 98 | 98 |
| | h | 33 | 33 | 36 | 48 | 48 |
| | h1 | 47,5 | 50 | 54,5 | 69 | 75 |
| | h2 | 42,5 | 42,5 | 49 | 63 | 66 |
| | d1 | 10 | 16 | 20 | 26 | 32 |
| | d2 | 27,5 | 27,5 | 27,5 | 43,5 | 43,5 |
| | d3 | 34 | 34 | 34 | 50,5 | 50,5 |
| | SW1 | 30 | 30 | 36 | 50 | 50 |
| | SW2 | 28 | 28 | 32 | 41 | 50 |
| | do | 10 | 14 | 16 | 25 | 25 |
| | Weight | kg | 0,5 | 0,5 | 0,8 | 1,8 |
| Set pressure | bar | 0,2 - 30 | 0,2 - 30 | 0,2 - 30 | 0,2 - 30 | 0,2 - 30 |
| Range of adjustment | bar | 0,2-1,2 | 0,2-1,2 | 0,2-1,2 | 0,2-1,2 | 0,2-1,2 |
| | | 1,2-3 | 1,2-3 | 1,2-3 | 1,2-3 | 1,2-3 |
| | | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| | | 12-30 | 12-30 | 12-30 | 12-30 | 12-30 |

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



| Series | Valve version | Medium | Lifting device | Nominal diameter DN | Connection type | | Connection size | | Seal | Options | Pressure range / set pressure | Quantity |
|--------|---------------|--------|----------------|---------------------|-----------------|--------|-----------------|--------|------|---------|-------------------------------|----------|
| | | | | | Inlet | Outlet | Inlet | Outlet | | | | |
| 418 | t | GF | 0 | 15 | f | f | 15 | 15 | NBR | | 2 - 12 | 5 |
| 418 | t | GF | 0 | 25 | KLSDIN | f | 25 | 25 | PTFE | FFKM | 8 | 2 |
| 418 | t | GF | 0 | | | | | | | | | |
| 418 | t | GF | 0 | | | | | | | | | |

■ TECHNICAL FINISHES, VARIANTS, ACCESSORIES

| | | | |
|-----|------------------------------|--------------------------|--------------------------|
| S3 | Auxiliary seals made of FFKM | <input type="checkbox"/> | <input type="checkbox"/> |
| S24 | Auxiliary seals made of EPDM | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> |

■ PROPERTIES

| | | | |
|-----|--|--------------------------|--------------------------|
| GOX | Especially for gaseous O2 applications by employment of specific materials including oil- and grease free production process | <input type="checkbox"/> | <input type="checkbox"/> |
| P01 | Oil- and grease-free production | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> |

■ CERTIFICATES / APPROVALS

| | | | | | |
|-------|--|--------------------------|-----|--|--------------------------|
| C01 | Factory certificate acc. DIN EN 10204 2.2 (WKZ 2.2) | <input type="checkbox"/> | C06 | ATEX evaluation acc. to 2014/34/EU | <input type="checkbox"/> |
| C02-1 | Test certificate acc. DIN EN 10204 3.1 (WPZ 3.1) for non TÜV-CE valves marking of individual serial number is required | <input type="checkbox"/> | C10 | Certificate of oil- and grease free production | <input type="checkbox"/> |
| C03 | Material test certificate acc. DIN EN 10204 3.1 (MPZ 3.1) (pressure retaining part) | <input type="checkbox"/> | C11 | Certification of the production process especially for gaseous oxygen applications by employment of specific materials | <input type="checkbox"/> |
| C05 | Sealing material Manufacturer certification (FDA, USP 3, 3-A,...), Please indicate description of certificate: _____ | <input type="checkbox"/> | | | <input type="checkbox"/> |

■ ADMISSIONS / ACCREDITATIONS

| | | | | | |
|-----|--|--------------------------|-----|--|--------------------------|
| AA1 | EC Type examination acc. to Directive 2014/68/EU | <input type="checkbox"/> | AK1 | DNV-GL (DNVGL) type approval | <input type="checkbox"/> |
| AA4 | EAC - certificate/declaration with passport for the valve and laser marking of the valve | <input type="checkbox"/> | AK2 | Lloyd's Register (LR) type approval | <input type="checkbox"/> |
| | | <input type="checkbox"/> | AK3 | American Bureau of Shipping (ABS) type approval | <input type="checkbox"/> |
| | | <input type="checkbox"/> | AK4 | Bureau Veritas (BV) type approval | <input type="checkbox"/> |
| | | <input type="checkbox"/> | AK5 | Russian Maritime Register of Shipping (RMRS) type approval | <input type="checkbox"/> |
| | | <input type="checkbox"/> | AK6 | Registro Italiano Navale (RINA) type approval | <input type="checkbox"/> |
| | | <input type="checkbox"/> | AL | Individual inspection by notified body inspector – (body to be indicated): _____ | <input type="checkbox"/> |

■ ENQUIRY

Copy and send to: order@goetze-armaturen.de.

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

■ CAPACITY TABLE

| Series 418: Kv values at 1 bar overpressure | | | | | | | | | | | | |
|---|--------------------------|---------|--------|---------|---------------------------|---------|--------|---------|--------------|---------|--------|---------|
| Nominal diameter DN | 10 | | | | 10 | | | | 10 | | | |
| | Air [Nm ³ /h] | | | | Water [m ³ /h] | | | | Steam [kg/h] | | | |
| Pressure range bar | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 |
| Set pressure bar | | | | | | | | | | | | |
| 0,2 | 87 | | | | 2,9 | | | | 62,0 | | | |
| 0,7 | 106 | | | | 3,0 | | | | 74,7 | | | |
| 1,2 | 113 | 81 | | | 3,2 | 2,3 | | | 79,3 | 56,9 | | |
| 2,0 | | 96 | 47 | | | 2,6 | | | | 67,0 | | |
| 3,0 | | 99 | 51 | | | 2,6 | 1,2 | | | 68,7 | 35,4 | |
| 4,0 | | | 56 | | | | 1,2 | | | | 38,8 | |
| 5,0 | | | 62 | | | | 1,1 | | | | 42,7 | |
| 6,0 | | | 65 | | | | 1,1 | | | | 44,7 | |
| 7,0 | | | 70 | | | | 1,0 | | | | 48,0 | |
| 8,0 | | | 77 | | | | 1,0 | | | | 52,6 | |
| 9,0 | | | 86 | | | | 0,8 | | | | 58,6 | |
| 10,0 | | | 94 | | | | 0,7 | | | | 63,9 | |
| 11,0 | | | 105 | | | | 0,5 | | | | 71,3 | |
| 12,0 | | | 108 | 81 | | | 0,4 | 0,7 | | | 73,1 | 54,9 |
| 13,0 | | | | 78 | | | | 0,6 | | | | 52,9 |
| 14,0 | | | | 74 | | | | 0,6 | | | | 50,1 |
| 15,0 | | | | 72 | | | | 0,6 | | | | 48,6 |
| 16,0 | | | | 62 | | | | 0,6 | | | | 41,8 |
| 17,0 | | | | 55 | | | | 0,6 | | | | 37,1 |
| 18,0 | | | | 48 | | | | 0,5 | | | | 32,3 |
| 19,0 | | | | 40 | | | | 0,4 | | | | 26,9 |
| 20,0 | | | | 29 | | | | 0,4 | | | | 19,5 |
| 21,0 | | | | 22 | | | | 0,4 | | | | 14,8 |
| 22,0 | | | | 16 | | | | 0,3 | | | | 10,8 |
| 23,0 | | | | 12 | | | | 0,3 | | | | 8,1 |
| 24,0 | | | | 6 | | | | 0,2 | | | | 4,0 |
| 25,0 | | | | 3 | | | | 0,2 | | | | 2,0 |
| 26,0 | | | | < 1 | | | | 0,2 | | | | < 1 |
| 27,0 | | | | < 1 | | | | 0,1 | | | | < 1 |
| 28,0 | | | | < 1 | | | | 0,1 | | | | < 1 |
| 29,0 | | | | < 1 | | | | 0,1 | | | | < 1 |
| 30,0 | | | | < 1 | | | | 0,1 | | | | < 1 |

| Series 418: Kv values at 1 bar overpressure | | | | | | | | | | | | |
|---|--------------------------|---------|--------|---------|---------------------------|---------|--------|---------|--------------|---------|--------|---------|
| Nominal diameter DN | 15 | | | | 15 | | | | 15 | | | |
| | Air [Nm ³ /h] | | | | Water [m ³ /h] | | | | Steam [kg/h] | | | |
| Pressure range bar | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 |
| Set pressure bar | | | | | | | | | | | | |
| 0,2 | 107 | | | | 3,4 | | | | 76,3 | | | |
| 0,7 | 119 | | | | 3,7 | | | | 83,9 | | | |
| 1,2 | 126 | 92 | | | 3,8 | 2,8 | | | 88,5 | 64,6 | | |
| 2,0 | | 107 | 47 | | | 2,4 | | | | 74,7 | | |
| 3,0 | | 115 | 54 | | | 2,1 | 1,4 | | | 79,8 | 37,5 | |
| 4,0 | | | 63 | | | | 1,4 | | | | 43,6 | |
| 5,0 | | | 70 | | | | 1,5 | | | | 48,2 | |
| 6,0 | | | 81 | | | | 1,5 | | | | 55,7 | |
| 7,0 | | | 98 | | | | 1,4 | | | | 67,3 | |
| 8,0 | | | 103 | | | | 1,3 | | | | 70,4 | |
| 9,0 | | | 107 | | | | 1,2 | | | | 72,9 | |
| 10,0 | | | 112 | | | | 1,1 | | | | 76,2 | |
| 11,0 | | | 118 | | | | 0,9 | | | | 80,1 | |
| 12,0 | | | 122 | 61 | | | 0,8 | 0,7 | | | 82,6 | 41,3 |
| 13,0 | | | | 70 | | | | 0,6 | | | | 47,5 |
| 14,0 | | | | 78 | | | | 0,6 | | | | 52,8 |
| 15,0 | | | | 85 | | | | 0,5 | | | | 57,4 |
| 16,0 | | | | 97 | | | | 0,5 | | | | 65,4 |
| 17,0 | | | | 105 | | | | 0,5 | | | | 70,7 |
| 18,0 | | | | 114 | | | | 0,5 | | | | 76,8 |
| 19,0 | | | | 78 | | | | 0,5 | | | | 52,5 |
| 20,0 | | | | 34 | | | | 0,4 | | | | 22,9 |
| 21,0 | | | | 12 | | | | 0,4 | | | | 8,1 |
| 22,0 | | | | < 1 | | | | 0,4 | | | | < 1 |
| 23,0 | | | | < 1 | | | | 0,3 | | | | < 1 |
| 24,0 | | | | < 1 | | | | 0,3 | | | | < 1 |
| 25,0 | | | | < 1 | | | | 0,2 | | | | < 1 |
| 26,0 | | | | < 1 | | | | 0,2 | | | | < 1 |
| 27,0 | | | | < 1 | | | | 0,2 | | | | < 1 |
| 28,0 | | | | < 1 | | | | 0,1 | | | | < 1 |
| 29,0 | | | | < 1 | | | | 0,1 | | | | < 1 |
| 30,0 | | | | < 1 | | | | 0,1 | | | | < 1 |

■ CAPACITY TABLE

| Series 418: Kv values at 1 bar overpressure | | | | | | | | | | | | |
|---|-------------|---------|--------|---------|--------------|---------|--------|---------|--------------|---------|--------|---------|
| Nominal diameter DN | 20 | | | | 20 | | | | 20 | | | |
| | Air [Nm³/h] | | | | Water [m³/h] | | | | Steam [kg/h] | | | |
| Pressure range bar | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 |
| Set pressure bar | | | | | | | | | | | | |
| 0,2 | 151 | | | | 4,7 | | | | 107,7 | | | |
| 0,7 | 166 | | | | 5,4 | | | | 117,0 | | | |
| 1,2 | 182 | 123 | | | 5,8 | 3,5 | | | 127,8 | 86,4 | | |
| 2,0 | | 139 | 88 | | | 3,4 | | | | 97,0 | | |
| 3,0 | | 150 | 97 | | | 2,8 | 1,7 | | | 104,1 | 67,3 | |
| 4,0 | | | 102 | | | | 1,6 | | | | 70,6 | |
| 5,0 | | | 111 | | | | 1,6 | | | | 76,4 | |
| 6,0 | | | 124 | | | | 1,4 | | | | 85,2 | |
| 7,0 | | | 132 | | | | 1,3 | | | | 90,6 | |
| 8,0 | | | 136 | | | | 1,0 | | | | 93,0 | |
| 9,0 | | | 143 | | | | 0,8 | | | | 97,5 | |
| 10,0 | | | 148 | | | | 0,7 | | | | 100,6 | |
| 11,0 | | | 153 | | | | 0,6 | | | | 103,9 | |
| 12,0 | | | 159 | 114 | | | 0,6 | 0,4 | | | 107,7 | 77,2 |
| 13,0 | | | | 118 | | | | 0,5 | | | | 80,0 |
| 14,0 | | | | 121 | | | | 0,7 | | | | 81,9 |
| 15,0 | | | | 124 | | | | 0,8 | | | | 83,7 |
| 16,0 | | | | 129 | | | | 0,9 | | | | 87,0 |
| 17,0 | | | | 125 | | | | 0,9 | | | | 84,2 |
| 18,0 | | | | 136 | | | | 1,1 | | | | 91,6 |
| 19,0 | | | | 141 | | | | 1,0 | | | | 94,9 |
| 20,0 | | | | 144 | | | | 0,7 | | | | 96,9 |
| 21,0 | | | | 130 | | | | 0,6 | | | | 87,5 |
| 22,0 | | | | 115 | | | | 0,5 | | | | 77,4 |
| 23,0 | | | | 100 | | | | 0,4 | | | | 67,3 |
| 24,0 | | | | 87 | | | | 0,3 | | | | 58,5 |
| 25,0 | | | | 55 | | | | 0,3 | | | | 37,0 |
| 26,0 | | | | 36 | | | | 0,2 | | | | 24,2 |
| 27,0 | | | | 29 | | | | 0,2 | | | | 19,5 |
| 28,0 | | | | 20 | | | | 0,1 | | | | 13,4 |
| 29,0 | | | | 12 | | | | 0,1 | | | | 8,1 |
| 30,0 | | | | 4 | | | | 0,1 | | | | 2,7 |

| Series 418: Kv values at 1 bar overpressure | | | | | | | | | | | | |
|---|-------------|---------|--------|---------|--------------|---------|--------|---------|--------------|---------|--------|---------|
| Nominal diameter DN | 25 | | | | 25 | | | | 25 | | | |
| | Air [Nm³/h] | | | | Water [m³/h] | | | | Steam [kg/h] | | | |
| Pressure range bar | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 |
| Set pressure bar | | | | | | | | | | | | |
| 0,2 | 348 | | | | 10,3 | | | | 248,1 | | | |
| 0,7 | 402 | | | | 11,6 | | | | 283,3 | | | |
| 1,2 | 431 | 381 | | | 11,2 | 9,4 | | | 302,6 | 267,5 | | |
| 2,0 | | 398 | 179 | | | 9,8 | | | | 277,8 | | |
| 3,0 | | 372 | 212 | | | 8,5 | 4,3 | | | 258,3 | 147,2 | |
| 4,0 | | | 244 | | | | 4,3 | | | | 169,0 | |
| 5,0 | | | 288 | | | | 4,4 | | | | 198,3 | |
| 6,0 | | | 308 | | | | 4,5 | | | | 211,6 | |
| 7,0 | | | 314 | | | | 4,7 | | | | 215,5 | |
| 8,0 | | | 319 | | | | 4,9 | | | | 218,0 | |
| 9,0 | | | 331 | | | | 5,2 | | | | 225,7 | |
| 10,0 | | | 346 | | | | 5,6 | | | | 235,3 | |
| 11,0 | | | 351 | | | | 5,3 | | | | 238,3 | |
| 12,0 | | | 363 | 142 | | | 4,8 | 1,9 | | | 245,8 | 96,2 |
| 13,0 | | | | 160 | | | | 1,9 | | | | 108,5 |
| 14,0 | | | | 187 | | | | 1,9 | | | | 126,5 |
| 15,0 | | | | 208 | | | | 2,0 | | | | 140,4 |
| 16,0 | | | | 223 | | | | 2,0 | | | | 150,3 |
| 17,0 | | | | 229 | | | | 2,2 | | | | 154,3 |
| 18,0 | | | | 234 | | | | 2,4 | | | | 157,6 |
| 19,0 | | | | 240 | | | | 2,0 | | | | 161,6 |
| 20,0 | | | | 247 | | | | 1,3 | | | | 166,3 |
| 21,0 | | | | 252 | | | | 1,0 | | | | 169,6 |
| 22,0 | | | | 258 | | | | 0,9 | | | | 173,6 |
| 23,0 | | | | 265 | | | | 0,8 | | | | 178,2 |
| 24,0 | | | | 270 | | | | 0,7 | | | | 181,6 |
| 25,0 | | | | 276 | | | | 0,6 | | | | 185,5 |
| 26,0 | | | | 287 | | | | 0,5 | | | | 192,9 |
| 27,0 | | | | 300 | | | | 0,4 | | | | 201,6 |
| 28,0 | | | | 310 | | | | 0,3 | | | | 208,2 |
| 29,0 | | | | 328 | | | | 0,2 | | | | 220,3 |
| 30,0 | | | | 336 | | | | 0,1 | | | | 225,6 |

■ CAPACITY TABLE

| Series 418: Kv values at 1 bar overpressure | | | | | | | | | | | | |
|---|-------------|---------|--------|---------|--------------|---------|--------|---------|--------------|---------|--------|---------|
| Nominal diameter DN | 32 | | | | 32 | | | | 32 | | | |
| | Air [Nm³/h] | | | | Water [m³/h] | | | | Steam [kg/h] | | | |
| Pressure range bar | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 | 0,2 - 1,2 | 1,2 - 3 | 2 - 12 | 12 - 30 |
| Set pressure bar | | | | | | | | | | | | |
| 0,2 | 426 | | | | 12,1 | | | | 303,7 | | | |
| 0,7 | 457 | | | | 14,2 | | | | 322,0 | | | |
| 1,2 | 460 | 386 | | | 14,5 | 10,3 | | | 322,9 | 271,0 | | |
| 2,0 | | 441 | 187 | | | 10,9 | | | | 307,8 | | |
| 3,0 | | 477 | 229 | | | 12,0 | 4,3 | | | 331,2 | 159,0 | |
| 4,0 | | | 278 | | | | 4,4 | | | | 192,5 | |
| 5,0 | | | 303 | | | | 4,5 | | | | 208,6 | |
| 6,0 | | | 326 | | | | 4,6 | | | | 224,0 | |
| 7,0 | | | 345 | | | | 4,7 | | | | 236,8 | |
| 8,0 | | | 369 | | | | 4,8 | | | | 252,2 | |
| 9,0 | | | 397 | | | | 5,0 | | | | 270,7 | |
| 10,0 | | | 413 | | | | 5,2 | | | | 280,8 | |
| 11,0 | | | 431 | | | | 5,7 | | | | 292,6 | |
| 12,0 | | | 448 | 167 | | | 6,5 | 2,1 | | | 303,4 | 113,1 |
| 13,0 | | | | 192 | | | | 2,5 | | | | 130,2 |
| 14,0 | | | | 220 | | | | 2,7 | | | | 148,8 |
| 15,0 | | | | 245 | | | | 3,1 | | | | 165,3 |
| 16,0 | | | | 252 | | | | 3,2 | | | | 169,9 |
| 17,0 | | | | 261 | | | | 2,6 | | | | 175,9 |
| 18,0 | | | | 267 | | | | 2,2 | | | | 179,8 |
| 19,0 | | | | 275 | | | | 1,9 | | | | 185,1 |
| 20,0 | | | | 283 | | | | 1,7 | | | | 190,5 |
| 21,0 | | | | 307 | | | | 1,5 | | | | 206,6 |
| 22,0 | | | | 328 | | | | 1,3 | | | | 220,7 |
| 23,0 | | | | 347 | | | | 1,2 | | | | 233,4 |
| 24,0 | | | | 359 | | | | 1,0 | | | | 241,4 |
| 25,0 | | | | 373 | | | | 0,8 | | | | 250,7 |
| 26,0 | | | | 381 | | | | 0,6 | | | | 256,1 |
| 27,0 | | | | 394 | | | | 0,5 | | | | 264,7 |
| 28,0 | | | | 401 | | | | 0,4 | | | | 269,4 |
| 29,0 | | | | 406 | | | | 0,3 | | | | 272,7 |
| 30,0 | | | | 412 | | | | 0,2 | | | | 276,6 |