Pressure reducing valves made of lead-free gunmetal with threaded connections

→ Series 9000

















■ MATERIAL





■ SPECIFICATION



1/2" - 2"







Inlet pressure: up to 16 bar / 25 bar Outlet pressure: 0,5 - 12 bar

■ SUITABLE FOR

Potable water cold up to 40°C

Potable hot water up to 85°C

■ EXAMPLES OF USE

Protection of water supply systems in single-family homes, apartment buildings, commercial and industrial buildings or machines against excessive supply pressure. Usage of pressure reducing valves when a constant supply pressure is required in the system.

- Protection against overpressure
- Increase of comfort and reduction of water consumption
- Drinking water supply systems
- Service water supply in industrial and building services engineering
- Machines / plants connected to the drinking water network
- Irrigation technology / Cattle fattening

■ FEATURES

- First class flow rate and pressure control
- Filter screen with 160µm mesh protection of the system with easy cleaning and contamination detection with clear filter cup
- Housing made of lead-free gunmetal ready for the drinking water supply of the future
- High-quality plastic from medical technology sector
- Adjustment scale visible from two angles for adjustment without pressure gauge / operating pressure

■ APPROVALS

DIN-DVGW type test approval (up to 80°C)

Type approval ACS

Type approval PZH

TR ZU 032/2013 - TR ZU 010/2011

WRAS

Type approval SVGW

Type approval ÜA (R-15.2.4-21-17231 Land Salzburg)

FDA | All materials in contact with media are FDA conform

Noise protection class P-IX 7444/I for DN15,20 and 25, P-IX 7445/II for DN32

Requirements

DIN EN 1567

DIN 4109

UBA BWGL for metallic materials

DVGW W270

Elastomere guideline

KTW guideline

Classification society

American Bureau of Shipping ABS
Registro Italiano Navale RINA

■ MATERIALS

| Component | Material | DIN EN |
|----------------|--|---------------------------|
| Body | Gunmetal lead-free | CuSn4Zn2PS |
| Valve insert | Plastic Stainless steel Elastomere | PPSU 1.4404 EPDM |
| Filter cup | Plastic or lead-free gunmetal | PA |
| Filter screen | Plastic Stainless steel | POM 1.4401 |
| Spring housing | Plastic | PA Glass fibre reinforced |
| O-rings | Elastomere | EPDM |
| Plugd | Plastic | PA Glass fibre reinforced |



| Serie 9000 ■ VALV | /E VERSION |
|---|------------|
| *************************************** | |

| m | with diaphragm | High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm. |
|---|----------------|---|
| | | |

■ MEDIUM

| F | liquid | for drinking water. Not suitable for steam. Other medium on request. | |
|---|--------|--|--|
|---|--------|--|--|

■ TYPE OF LIFTING MECHANISM

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

■ OUTLET PRESSURE RANGES

| SP Standard version | | Inlet pressure: up to 16 bar / 25 bar | Outlet pressure: from 1,5 to 7 bar |
|---------------------|--|---------------------------------------|------------------------------------|
| 0 1 | | Inlet pressure: up to 16 bar / 25 bar | Outlet pressure: from 3 to 12 bar |
| | | Inlet pressure: up to 16 bar / 25 bar | Outlet pressure: from 0,5 to 3 bar |

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

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

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

| BSP-Tm/BSP-Tm | Standard threaded male connection | Male thread BSP-T / Male thread BSP-T | DIN EN 10226 / DIN EN 10226 |
|---|--------------------------------------|---------------------------------------|-----------------------------|
| Threaded connection hose nozzle | on request | according to customer configuration | |
| Bulkhead fitting with push-in connection | on request | according to customer configuration | |

■ NOMINAL PRESSURE RATING PN

| PN16 | nominal pressure rating PN16, maximum inlet pressure 16 bar | version with filter cup made of plastic | operating temperature 40°C |
|------|---|--|----------------------------|
| PN25 | nominal pressure rating PN25, maximum inlet pressure 25 bar | version with filter cup made of lead-free gunmetal | operating temperature 85°C |

■ SEALS

| S | | |
|---|--|--|
|---|--|--|

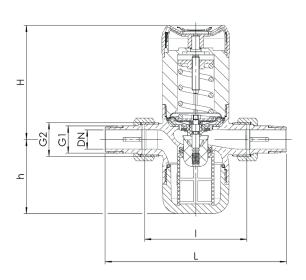


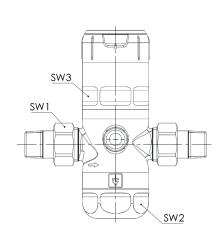
Series 9000 ■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

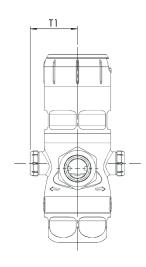
| Series 9000: Connection, installation dimensions, ranges of adjustment | | | | | | | |
|--|------|------------|------------|------------|------------|------------|------------|
| Nominal diameter | DN | 15 | 20 | 25 | 32 | 40 | 50 |
| Threaded nozzle connection DIN EN 10226-1 | G1 | R 1/2" | R 3/4" | R 1" | R 1 1/4" | R 1 1/2" | R 2" |
| Connection body DIN ISO 228-1 | G2 | G 3/4" | G 1" | G 1 1/4" | G 1 1/2" | G 2" | G 2 1/2" |
| Inlet pressure filter cup made of plastic | bar | max. 16 |
| Inlet pressure filter cup made of lead-free gunmetal | bar | max. 25 |
| Operating temperature filter cup made of plastic | °C | 40 | 40 | 40 | 40 | 40 | 40 |
| Operating temperature filter cup made of lead-free gunmetal | °C | 85 | 85 | 85 | 85 | 85 | 85 |
| Outlet pressure range SP / presetting 3 bar | bar | 1,5 - 7 | 1,5 - 7 | 1,5 - 7 | 1,5 - 7 | 1,5 - 7 | 1,5 - 7 |
| Outlet pressure range HP / presetting 5 bar | bar | 3 - 12 | 3 - 12 | 3 - 12 | 3 - 12 | 3 - 12 | 3 - 12 |
| Outlet pressure range LP / presetting 1 bar | bar | 0,5 - 3 | 0,5 - 3 | 0,5 - 3 | 0,5 - 3 | 0,5 - 3 | 0,5 - 3 |
| Installation dimensions in mm | L | 136 | 152 | 170 | 191 | 220 | 254 |
| | - 1 | 80 | 90 | 100 | 105 | 130 | 140 |
| | Н | 89 | 89 | 111 | 111 | 151 | 151 |
| | h | 58 | 58 | 64 | 64 | 94 | 94 |
| | T1 | 37 | 37 | 46 | 46 | 50 | 50 |
| | SW1 | 30 | 37 | 46 | 52 | 65 | 80 |
| | SW2 | 46 | 46 | 66 | 66 | 75 | 75 |
| | SW3 | 46 | 46 | 65 | 65 | 75 | 75 |
| | G3 | 1/4" axial |
| Weight | kg | 0,8 | 0,9 | 1,7 | 1,9 | 3,9 | 4,5 |
| Coefficient of flow Kvs | m³/h | 3,4 | 4,4 | 9,3 | 10,5 | 19,5 | 20,5 |

Installation dimensions without threaded connection like series 681 and D06F.

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS







Series 9000 ■ INDIVIDUAL SELECTION / VALVE CONFIGURATION **Options** Seal Quantity **Series** Valve version Medium Lifting Outlet **Nominal** PN **Connection type Connection size** diameter DN device pressure range Inlet Outlet Inlet Outlet 9000 m F 0 SP 20 BSP-T m BSP-T m 20 20 **PN16** S111 **EPDM** 8 F 0 9000 m SP BSP-T m BSP-T m 15 15 PN16 **EPDM** 0 9000 m F 9000 m F 0 ■ PROPERTIES Supply with manometers: plastic housing, brass connection thread, max. operating temperature 60°C **S17** (SP: 0-10 bar | LP: 0 - 4 bar | HP: 0 - 25 bar) **S20** Supply without threaded connections **S111** Supply with threaded connections lead-free ■ CERTIFICATES / APPROVALS C01 Factory certificate acc. DIN EN 10204 2.2 (WKZ 2.2) **C02** Test certificate acc. DIN EN 10204 3.1 (WPZ 3.1) C03 Material test certificate acc. DIN EN 10204 3.1 (MPZ 3.1) (pressure retaining part) ■ ADMISSIONS / ACCREDITATIONS AA1 EC Type examination acc. to Directive 2014/68/EU AB3 Attestation de Conformité Sanitaire, ACS type approval EAC - certificate/declaration with passport for the valve Schweizerischer Verein des Gas- and Wasserfaches -AA4 AB5 and laser marking of the valve type approval Deutscher Verein des Gas- and Wasserfaches, AB1 AK3 American Bureau of Shipping (ABS) type approval DVGW type approval Water regulations and advisory scheme AB2 AK6 Registro Italiano Navale (RINA) type approval WRAS type approval



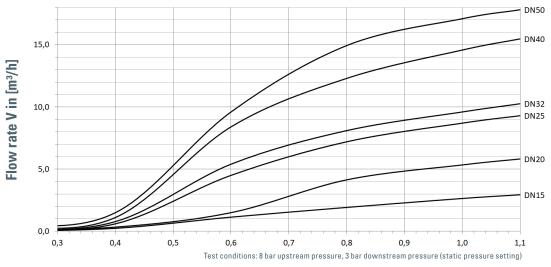
■ ENQUIRY

Copy and send to: order@goetze.de.

Series 9000:

Dimensioning by pressure loss on the outlet pressure side

Flow chart water



Pressure drop delta p [bar]

Dimensioning by flow velocity

For liquids:

With help of the chart you can determine the nominal diameter (DN) for a given flow volume V (m³/h). According to DVGW-guidelines (DIN 1988) a flow velocity of 2 m/s in domestic water supply systems should not be exceeded.

