

9000

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

→ Series 9000



■ 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
Type approval WRAS
Type approval SVGW
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



■ MATERIAL



■ SPECIFICATION



1/2" – 2"



+5°C to +85°C



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

■ 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



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Serie 9000 ■ VALVE VERSION

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

F	liquid	for drinking water. Not suitable for steam. Other medium on request.
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■ TYPE OF LIFTING MECHANISM

0	without lifting device
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■ OUTLET PRESSURE RANGES

SP	Standard version	Inlet pressure: up to 16 bar / 25 bar	Outlet pressure: from 1,5 to 7 bar
HP	High-pressure version	Inlet pressure: up to 16 bar / 25 bar	Outlet pressure: from 3 to 12 bar
LP	Low-pressure version	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

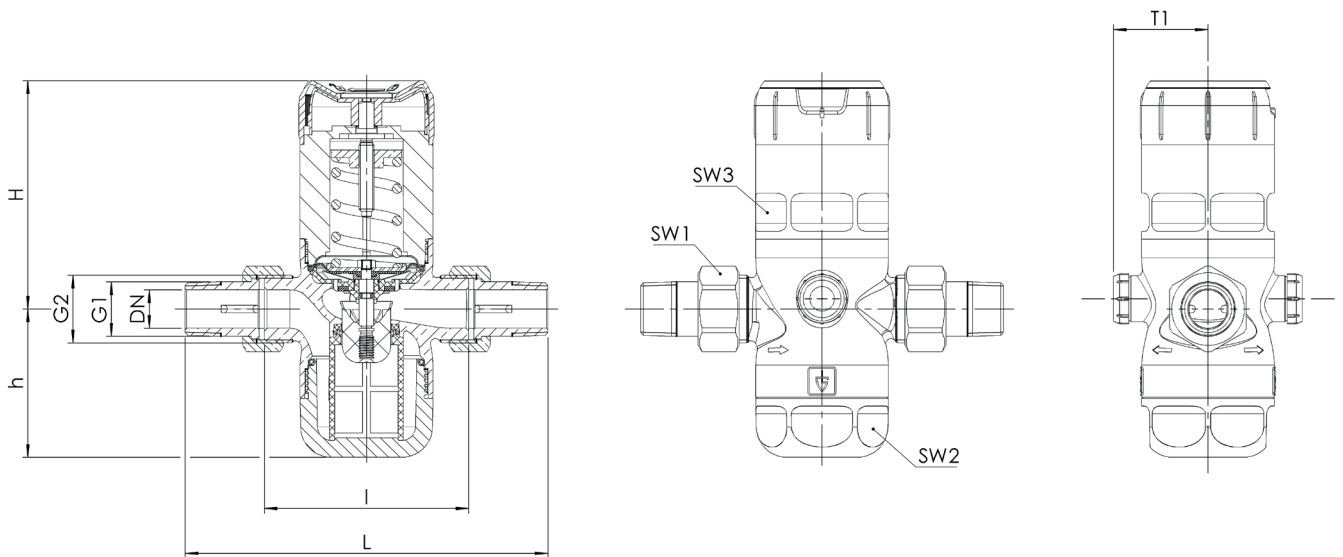
■ SEALS

EPDM	Ethylene propylene diene	Elastomere moulded diaphragm and seals
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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	max. 16	max. 16	max. 16	max. 16	max. 16
Inlet pressure filter cup made of lead-free gunmetal	bar	max. 25	max. 25	max. 25	max. 25	max. 25	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
	I	80	90	100	105	130	140
	H	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	1/4" axial	1/4" axial	1/4" axial	1/4" axial	1/4" axial
	Weight	kg	0,8	0,9	1,7	1,9	3,9
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

Series	Valve version	Medium	Lifting device	Outlet pressure range	Nominal diameter DN	Connection type		Connection size		PN	Options	Seal	Quantity
						Inlet	Outlet	Inlet	Outlet				
9000	m	F	0	SP	20	BSP-T m	BSP-T m	20	20	PN16	S111	EPDM	8
9000	m	F	0	SP	15	BSP-T m	BSP-T m	15	15	PN16		EPDM	4
9000	m	F	0										
9000	m	F	0										

■ PROPERTIES

S17	Supply with manometers: plastic housing, brass connection thread, max. operating temperature 60°C (SP: 0- 10 bar LP: 0 – 4 bar HP: 0 – 25 bar)	<input type="checkbox"/>
S20	Supply without threaded connections	<input type="checkbox"/>
S111	Supply with threaded connections lead-free	<input type="checkbox"/>

■ CERTIFICATES / APPROVALS

C01	Factory certificate acc. DIN EN 10204 2.2 (WKZ 2.2)	<input type="checkbox"/>
C02	Test certificate acc. DIN EN 10204 3.1 (WPZ 3.1)	<input type="checkbox"/>
C03	Material test certificate acc. DIN EN 10204 3.1 (MPZ 3.1) (pressure retaining part)	<input type="checkbox"/>

■ ADMISSIONS / ACCREDITATIONS

AA1	EC Type examination acc. to Directive 2014/68/EU	<input checked="" type="checkbox"/>	AB2	Water regulations and advisory scheme WRAS type approval	<input type="checkbox"/>
AA4	EAC - certificate/declaration with passport for the valve and laser marking of the valve	<input type="checkbox"/>	AB3	Attestation de Conformité Sanitaire, ACS type approval	<input type="checkbox"/>
AB1	Deutscher Verein des Gas- und Wasserfaches, DVGW type approval	<input type="checkbox"/>	AB5	Schweizerischer Verein des Gas- and Wasserfaches - type approval	<input type="checkbox"/>

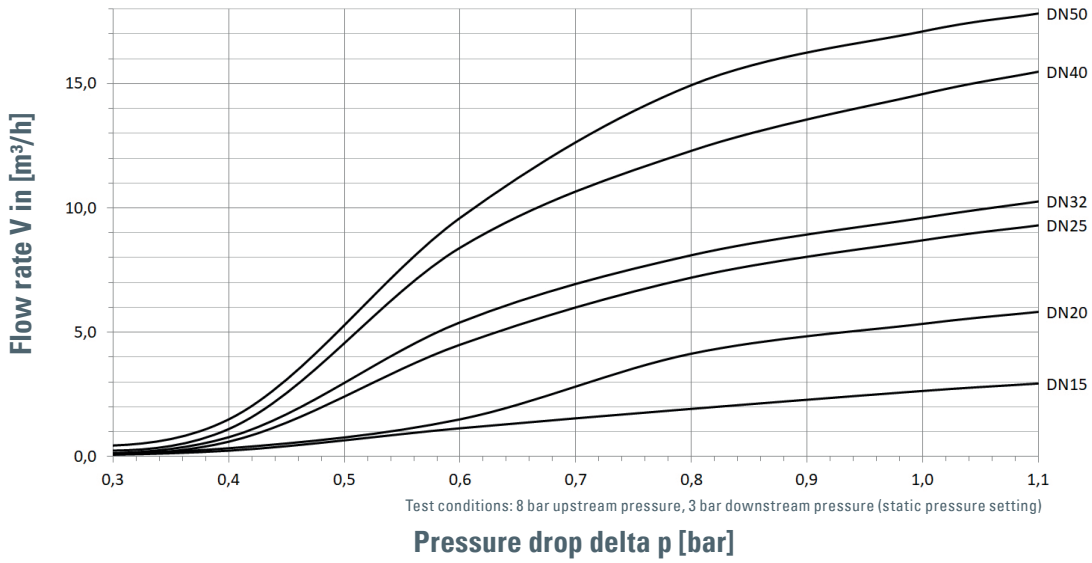
■ ENQUIRY

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Series 9000:

Dimensioning by pressure loss on the outlet pressure side

Flow chart water



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.

