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
0-rings	Elastomere	EPDM
Plugd	Plastic	PA Glass fibre reinforced



Serie 9000 ■	VALVE	VERSION
•		·····

<b>m</b> with diaphragm High-quality, heat-resistant moulded elastomere, fabric-reinfo	rorcea alaphragm.
--	-------------------

#### ■ 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
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

i			
	EPDM	Ethylene propylene diene	Elastomere moulded diaphragm and seals

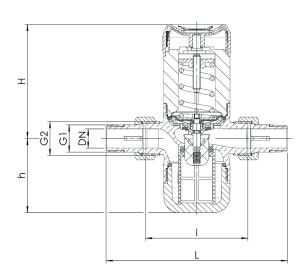


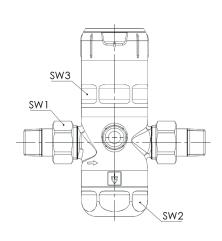
## Series 9000 ■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

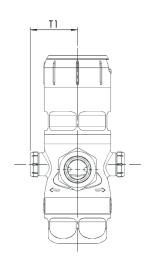
Series 9000: Connection, installation dimension	R   R   R   R   R   R   R   R   R   R						
Nominal diameter	DN	15	20	25	32	40	50
Threaded nozzle connection DIN EN 10226-1	G1	R 1/2"	R 3/4"	R 1"	R 1 1/4"	R 1 1/2"	R 2"
Connection body DIN ISO 228-1	G2	G 3/4"	G 1"	G 1 1/4"	G 1 1/2"	G 2"	G 2 1/2"
Inlet pressure 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







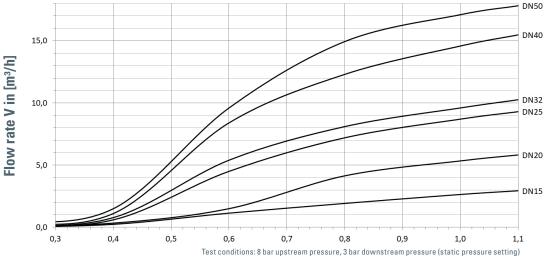
Series	Valve version	Medium	Lifting device	Outlet pressure	Nominal diameter DN	Connec	tion type	Conne	ction size	PN	Options	Seal	Quantity
				range		Inlet	Outlet	Inlet	Outlet				
9000	m	F	0	SP	20	BSP-T m	BSP-T	n 20	20	PN16	S111	<b>EPDM</b>	8
9000	m	F	0	SP	15	BSP-T m	BSP-T	n 15	15	PN16		<b>EPDM</b>	4
9000	m	F	0										
9000	m	F	0										
■ PRO	PERTIES												
S17	Supply with m (SP: 0- 10 bar				connection th	nread, max.	. operatir	g temperat	ure 60°C				
S20	Supply without	t threaded o	connections										
S111	Supply with the	readed con	nections lea	ıd-free									
■ CERT	TIFICATES / A	PPROVAL:	 S										
C01	Factory certif			1422(WK7	2 2)								
C02	Test certificate				2.21								
C03	Material test c			, ,	P7 3 1\ /prossu	ro rotaining	nartl						
003	iviaterial test c	ertilloate a	CC. DIN LIN	10204 3.1 (101)	1 2 3.1/ (pressu	i e i etaiiiii g	μαιτή						
■ ADM	IISSIONS / AC	CREDITAT	TIONS		······								•••••
AA1	EC Type exam	ination acc	. to Directiv	/e 2014/68/E	U [		AB3	Attestation	de Conforn	nité Sani	taire, ACS t	ype approva	al _
AA4	EAC - certifica and laser mark			assport for t	he valve		AKh	Schweizeris ype approv		n des Ga	s- and Was	serfaches -	
AB1	Deutscher Ver DVGW type ap		s- and Was	serfaches,			AK3	American B	ureau of Sh	ipping (	ABS) type a	pproval	
AB2	Water regulat WRAS type ap		dvisory sch	eme			AK6	Registro Ital	iano Naval	e (RINA	) type appro	val	



#### Series 9000:

Dimensioning by pressure loss on the outlet pressure side

## Flow chart water

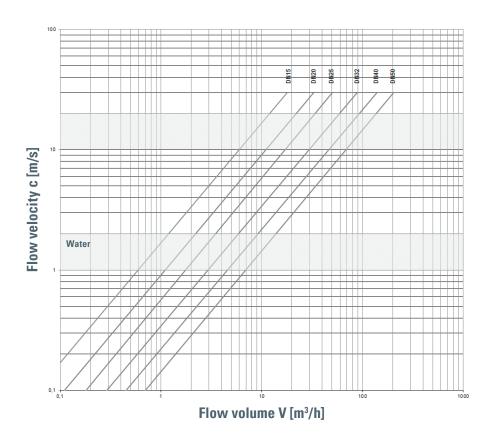


Pressure drop delta p [bar]

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.



GŒTZE