

# Pressoreduct



## Pressure reducer valves

Pressure protection on the supply side in residential and commercial systems DN15 – DN50

# Pressoreduct

Pressure reducers are used in piping systems where, despite varying pressures on the inlet side, a certain pressure must not be exceeded on the outlet side. One manometer is included.



## Technical description

### Application:

Potable water supply.  
Drinking water supply systems.  
Service water supply in building services engineering.  
Machines / plants connected to the drinking water network.  
Irrigation technology / Livestock fattening

### Functions:

Protection against extreme supply pressures.

### Dimensions:

DN 15 - DN 50

### Pressure:

SP Standard version  
Inlet pressure:  
DN 15 - 50 (PN16) up to 16 bar.  
Outlet pressure: 1,5 to 7 bar  
High and low-pressure (HP and LP)  
versions available on request.

### Temperature:

Max. admissible temperature, TS: +40 °C  
Min. admissible temperature, TSmin: +5 °C

### Media:

For water, neutral and non-sticking liquids, compressed air and neutral gases; optionally with FPM elastomere seals for non-neutral media i.e. oils, fuels, oil-laden compressed air, etc.  
Not suitable with steam.

### Material:

Body: Gunmetal leadfree CuSn4Zn2PS  
Internal parts: PPSU, Stainless Steel 1.4404, EPDM  
Spring housing: PA Glass fibre reinforced  
Seals: EPDM  
Filter: POM + Stainless Steel 1.4404  
Mesh size: 160 µm

### Approvals:

Constructed according to DIN EN 1567, DIN 1988, DIN EN ISO 3822 and PED 2014/68/EU.  
DIN-DVGW type examination (pending)  
Type approval ACS (pending)  
Type approval WRAS (pending)  
TR ZU 032/2013 - TR ZU 010/2011 (pending)  
DIN EN 1567  
DIN 4109  
UBA BWGL für metallene Werkstoffe  
DVGW W270

### Marking:

DN, material, and flow direction arrow.  
Label with technical specification, place of origin and CE.

### Warranty:

2-year warranty

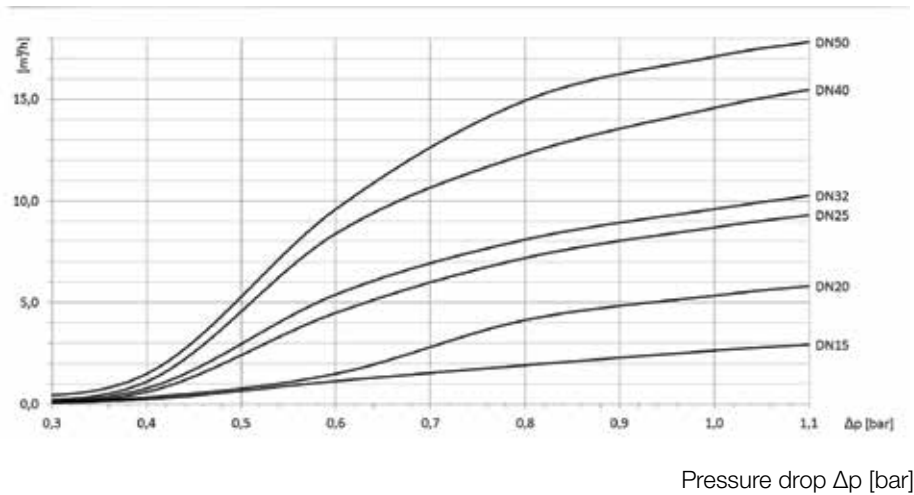
## Dimensioning

### Dimensioning by pressure loss on the outlet pressure side

Flow chart water

#### DN 15 - 50

Flow rate V in [m<sup>3</sup>/h]



### Dimensioning by flow velocity

For liquids:

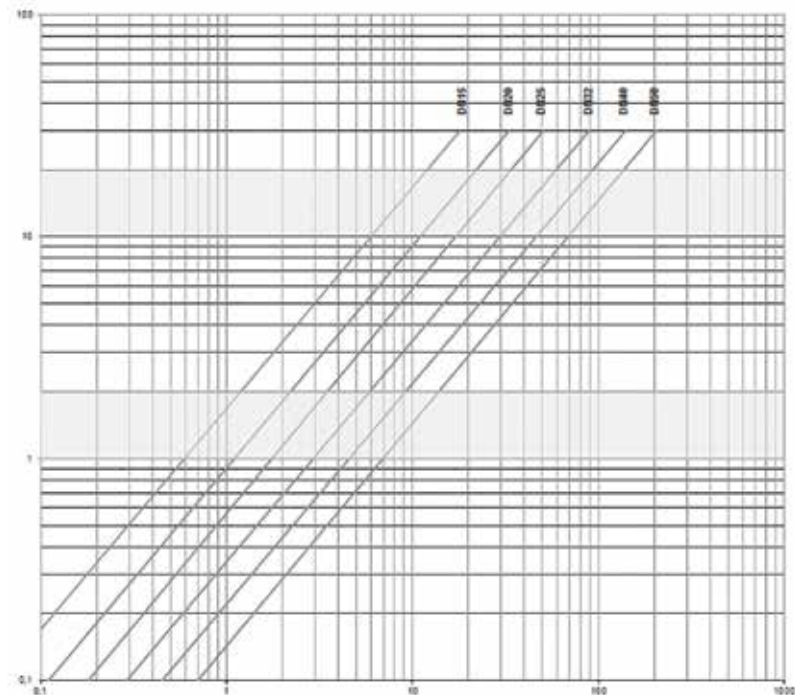
Using this chart you can determine the nominal diameter (DN) for a given flow volume V (m<sup>3</sup>/h).

According to DVGW-guidelines (DIN 1988) a flow velocity of 2 m/s in domestic water supply systems should not be exceeded.

$$V \text{ (m}^3\text{/h)} = \frac{V_{\text{Norm}} \text{ (Nm}^3\text{/h)}}{p_{\text{absolut}} \text{ (bar)}} = \frac{V_{\text{Norm}}}{p_U + 1}$$

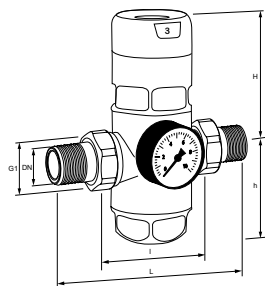
Actual cubic meter values are based on the prevailing pressure of the medium on the outlet side of the pressure reducer

Flow velocity c [m/s]



Flow volume V [m<sup>3</sup>/h]

## Articles



### Male thread

Outlet pressure 1,5-7 bar

DN	G1	L	I	h	H	m	SW1	Flow coefficient $K_{vs}^{**}$ m <sup>3</sup> /h	EAN	Article No
15	1/2	136	80	58	89	0,8	30	3,4		301052-00431
20	3/4	152	90	58	89	0,9	37	4,4		301052-00531
25	1	170	100	64	111	1,7	46	9,3		301052-00631
32	1 1/4	191	105	64	111	1,9	52	10,5		301052-00731
40	1 1/2	220	130	94	151	3,9	65	19,5		301052-00831
50	2	254	140	94	151	4,5	75	20,5		301052-00931

\*) Inlet EN 10226

\*\*) The  $K_{vs}$  value was determined according to EN 60534-2-3. Instructions on how to determine size and capacity are to be found in the graphs.

## Accessories



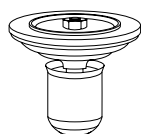
### Screen insert 160 µm

DN	EAN	Article No
15-20	4260674340789	304010-80500
25-32	4260674340932	304010-80700
40-50	4260674341052	304010-80900



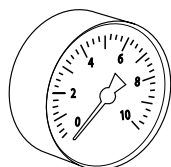
### Filter Screen cup with O ring

DN	EAN	Article No
15-20	4260674340796	304010-80501
25-32	4260674340949	304010-80701
40-50	4260674341069	304010-80901



### Valve insert with grooved ring

DN	EAN	Article No
15-20	4260674340734	304010-80502
25-32	4260674340895	304010-80702
40-50	4260674341014	304010-80902



### Manometer

Display range 0-10 bar

DN	Pressure Range	EAN	Article No
15-50	1-10 bar	4260674340826	304010-80903

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