IMI PNEUMATEX

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Pressoreduct

Pressure reducer valves

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

IMI Hydronic Engineering

Breakthrough Engineering

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

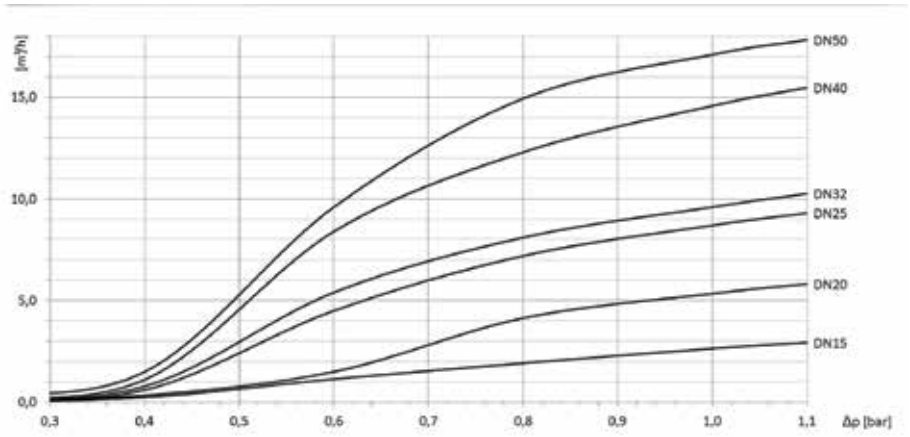
Dimensioning

Dimensioning by pressure loss on the outlet pressure side

Flow chart water

DN 15 - 50

Flow rate V in [m³/h]



Pressure drop Δp [bar]

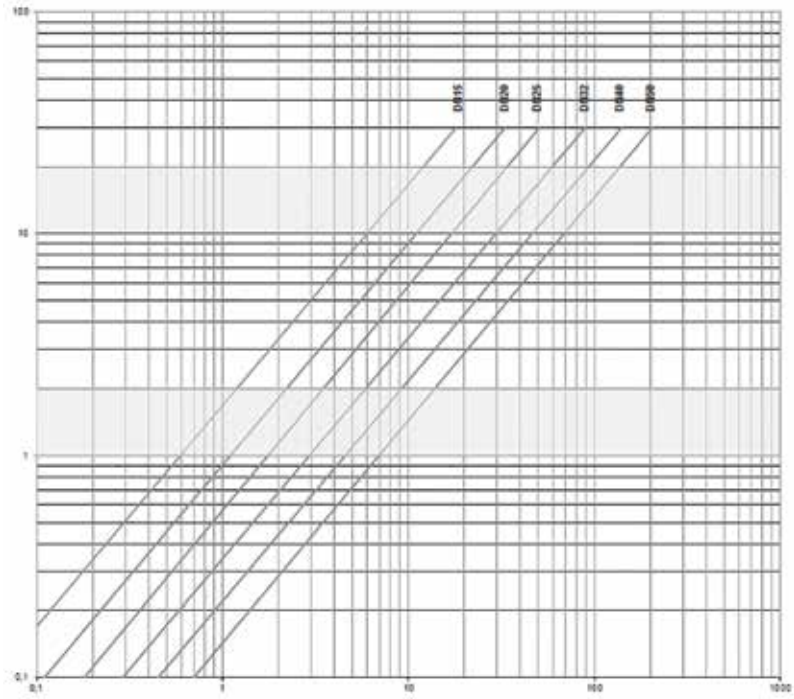
Dimensioning by flow velocity

For liquids:
Using this 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.

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

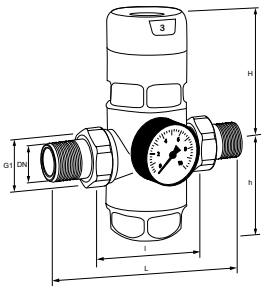
Actual cubic meter values are based on the prevailing pressure of the medium on the outlet side of the pressure reducer

Flow velocity c [m/s]



Flow volume V [m³/h]

Articles



Male thread
Outlet pressure 1,5-7 bar

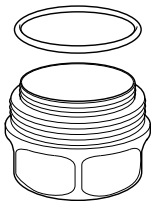
DN	G1	L	l	h	H	m [kg]	SW1	Flow coefficient K_{vs}** m^3/h	EAN	Article No
15	1/2	136	80	58	89	0,8	30	3,4		301052-00431
20	3/4	152	90	58	89	0,9	37	4,4		301052-00531
25	1	170	100	64	111	1,7	46	9,3		301052-00631
32	1 1/4	191	105	64	111	1,9	52	10,5		301052-00731
40	1 1/2	220	130	94	151	3,9	65	19,5		301052-00831
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 capcity are to be found in the graphs.

Accessories

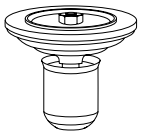
Screen insert 160 µm

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



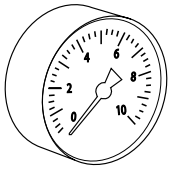
Filter Screen cup with O ring

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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