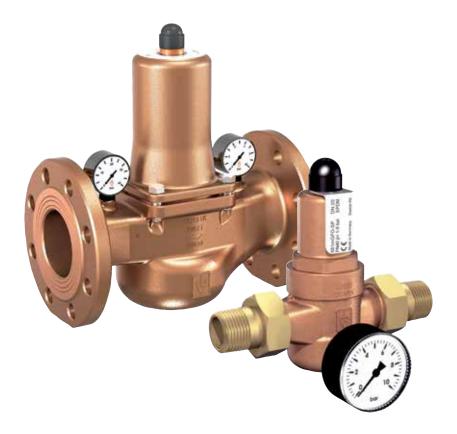


Climate Control

IMI Pneumatex

Pressoreduct HP



Pressure reducer valves

Pressure protection on the supply side in domestic, commercial and industrial sytems DN15 – DN100

Breakthrough engineering for a better world



Pressoreduct HP

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 with the threaded version.



Technical description

Application:

Potable water supply according to DIN 1988 Process water supply in industrial and building technology Snow-making equipment Fire-fighting equipment and sprinkler systems Shipbuilding industry and offshore plants

Functions:

Protection against extreme supply pressures.

Dimensions:

DN 15 - DN 100

Pressure:

SP Standard version Inlet pressure: DN 15 - 50 (PN40) up to 40 bar, DN 65 - 100 (PN16) up to 16 bar. Outlet pressure: 1 to 8 bar High and low-pressure (HP and LP) versions available on request.

Temperature:

Max. admissible temperature, TS: 120 °C Min. admissible temperature, TS_{min}: -20 °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 CC499K. Stainless steel version available on request. Internal parts: Gunmetal CC499K, Stainless Steel 1.4404 Spring: Spring steel with anti-rust protection 1.1200 Seals: EPDM Strainer: Stainless Steel 1.4404. Mesh size DN 15 to DN 32 0,6 mm DN 40 and up 0,75 mm

Approvals:

Constructed according to DIN EN 1567, DIN 1988, DIN EN ISO 3822 and PED 2014/68/EU. DIN-DVGW type examination (up to 80°C) Type approval ACS Type approval WRAS (up to 85°C) TR ZU 032/2013 - TR ZU 010/2011

Marking:

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

Warranty:

2-year warranty

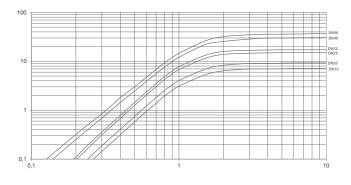


Dimensioning

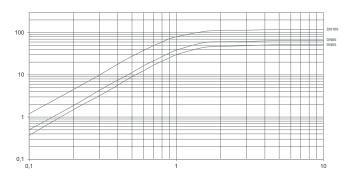
Dimensioning by pressure loss on the outlet pressure side

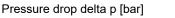
Flow chart water

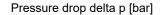
DN 15 - 50 Flow rate V in [m³/h]



DN 65 - 100 Flow rate V in [m³/h]







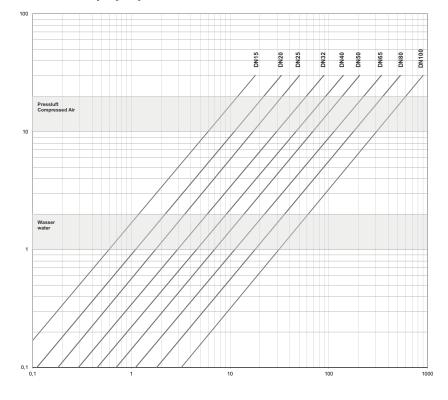
Dimensioning by flow velocity

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.

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

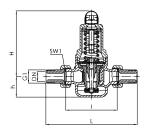
Actual cubic meter values are based on the prevailing pressure of the medium on the outlet side of the pressure reducer



Flow velocity c [m/s]

Flow volume V [m3/h]

Articles

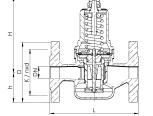


External threads Inlet pressure 40 bar

Outlet pressure 1-8 bar

DN	G1	L	I	h	н	m [kg]	SW1	Coefficient of flow K _{vs} ** m³/h	EAN	Article No
15	1/2	142	80	33	102	1,2	30	3		301052-00400
20	3/4	158	90	33	102	1,3	37	3,5		301052-00500
25	1	180	100	45	130	2,4	46	6,7		301052-00600
32	1 1/4	193	105	45	130	2,6	52	7,6		301052-00700
40	1 1/2	226	130	70	165	5,5	65	12,5		301052-00800
50	2	252	140	70	165	6,0	75	15		301052-00900

Flanged



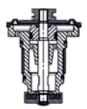
Inlet pressure SP, HP up to 16 bar Outlet pressure 1-8 bar

DN	D	L	m [kg]	h	н	K/nxd	Coefficient of flow K _{vs} ** m³/h	EAN	Article No
65	185	290	20	89	235	145 / 4xM16	25		301052-01000
80	200	310	22	96	235	160 / 8xM16	26		301052-01100
100	200	350	40	102	320	180 / 8xM16	80		301052-01200

*) Inlet DIN EN 10226

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

Accessories



Valve insert

DN	Article No.
65	301052-01010
80	301052-01110
100	301052-01210



Manometer

Display range 0-10 (0-25) bar, with green marking indicating working pressure range.

DN	Pressure Range	Article No.
15-50	0-10 bar	301052-00420
65/80	0-25 bar	301052-01020
100	0-25 bar	301052-01220



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