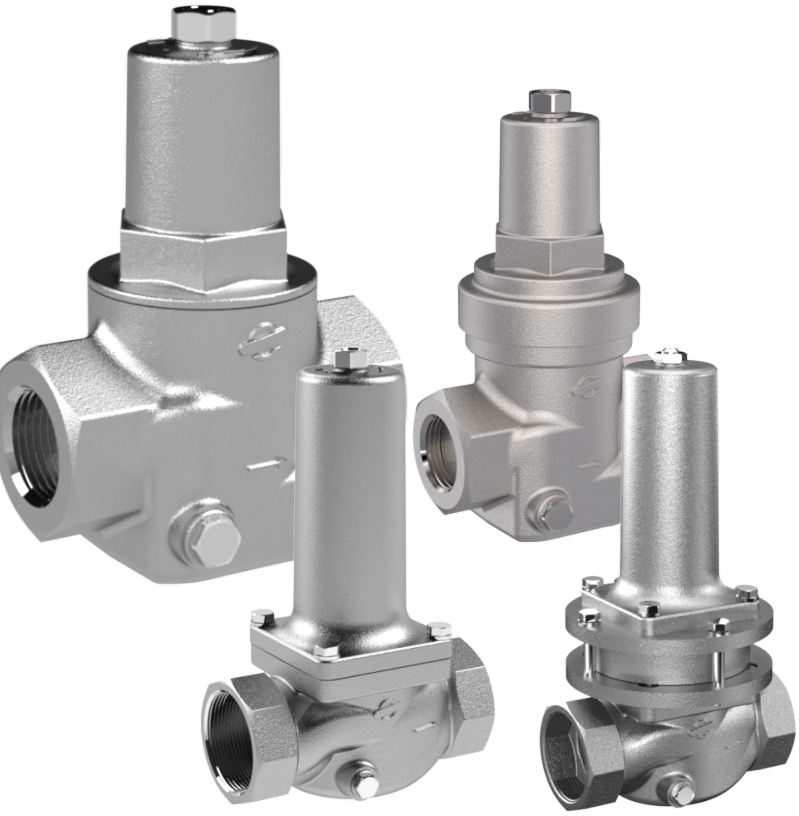
Steam pressure reducing valve type DM21



Description:

Steam pressure reducing valves made of stainless steel are used to regulate the supply pressure in a system. Compensation of different inlet pressures to a certain pressure at the outlet side.

Features:

- **suitable for steam and hot water applications**
- **also suitable for air & neutral non-inflammable gases and for aggressive water applications**
- industrial design – full metal
- manometer connection G 1/4" inch axial on both sides for outlet-pressure
- Piston-controlled, spring-loaded pressure relieved single seated valve
- mounting position: any, preferably vertical

Connection:
½", ¾", 1", 1 ¼", 1 ½", 2"

Temperature:
+20°C to +200°C

Pressure:
Inlet pressure: up to 16,0 bar
Outlet pressure: 0,3 bar - 10,0 bar - Depending on design

Subject to PED 2014/68/EU

Design:	Piston-pressure reducing valve
Body:	Stainless steel 1.4408
Spring bonnet:	Stainless steel 1.4408
diaphragm:	**TYP DM21** PTFE / EPDM / FEPM +20°C bis +200°C
Internals:	Stainless steel 1.4404 (wetted parts)
Assembly position:	any, preferably vertical spring bonnet upside down
Connection:	Female screw threaded acc. to ISO 228 (optionally NPT thread)

Outlet pressure:

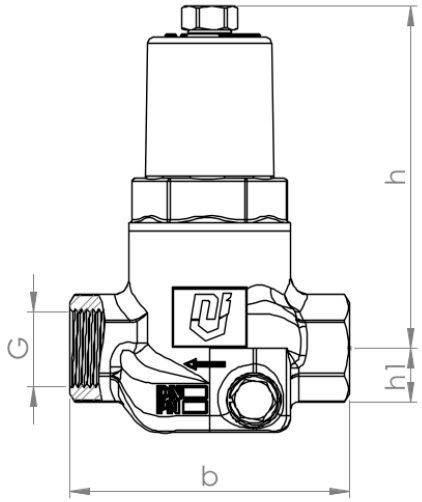
	Outlet pressure	**Inlet pressure**
Spring 00	0,3 bis 2,0 bar	bis 16,0 bar
Spring 01	2,0 bis 5,0 bar	bis 16,0 bar
Spring 02	4,0 bis 10,0 bar	bis 16,0 bar

Minimum pressure difference: Inlet-/outlet pressure 0,3 bar

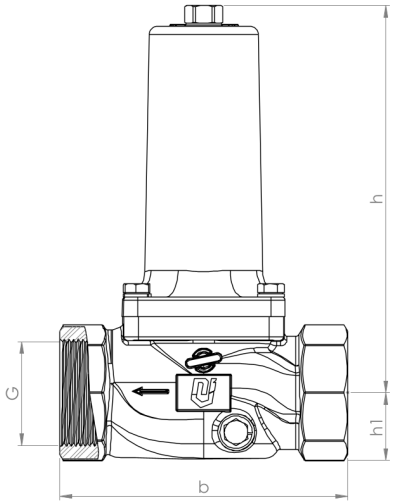
Dimensions:

Diameter DN	15	20	25	32	40	50
Female thread G	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
b̂	95	95	110	120	150	160
h1	29	29	38	38	38	38
h	117	117	17	117	214	217
Kvs-value m3/h	3,6	4,1	5,3	5,6	13,3	14,0
Weight kg	1,5	1,4	2,2	2,1	5,5	5,4
Low pressure design 0,3 - 2,0 bar						
b	95	95	110	120	150	160
h1	29	29	38	38	38	38
h	150	150	151	151	262	262
Kvs-value m3/h	3,0	3,3	4,5	4,7	11,3	12,0
weight kg	2,3	2,3	3,1	3,0	8,6	8,5

Standard

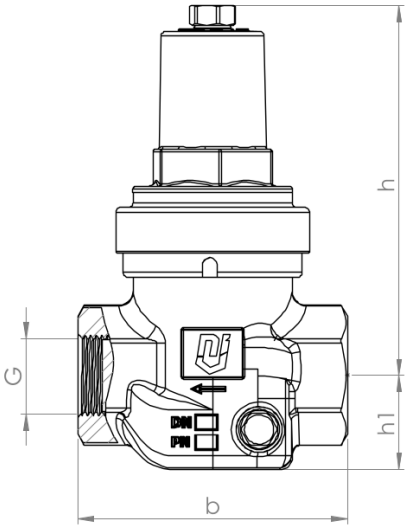


DN15-DN32

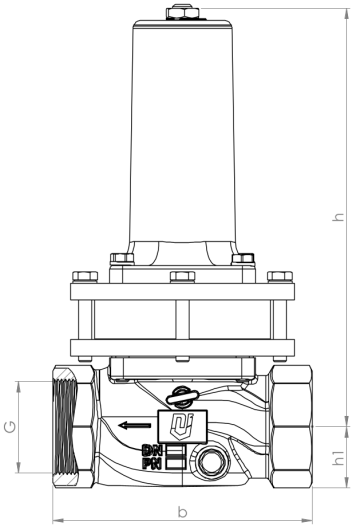


DN40-DN50

Low pressure



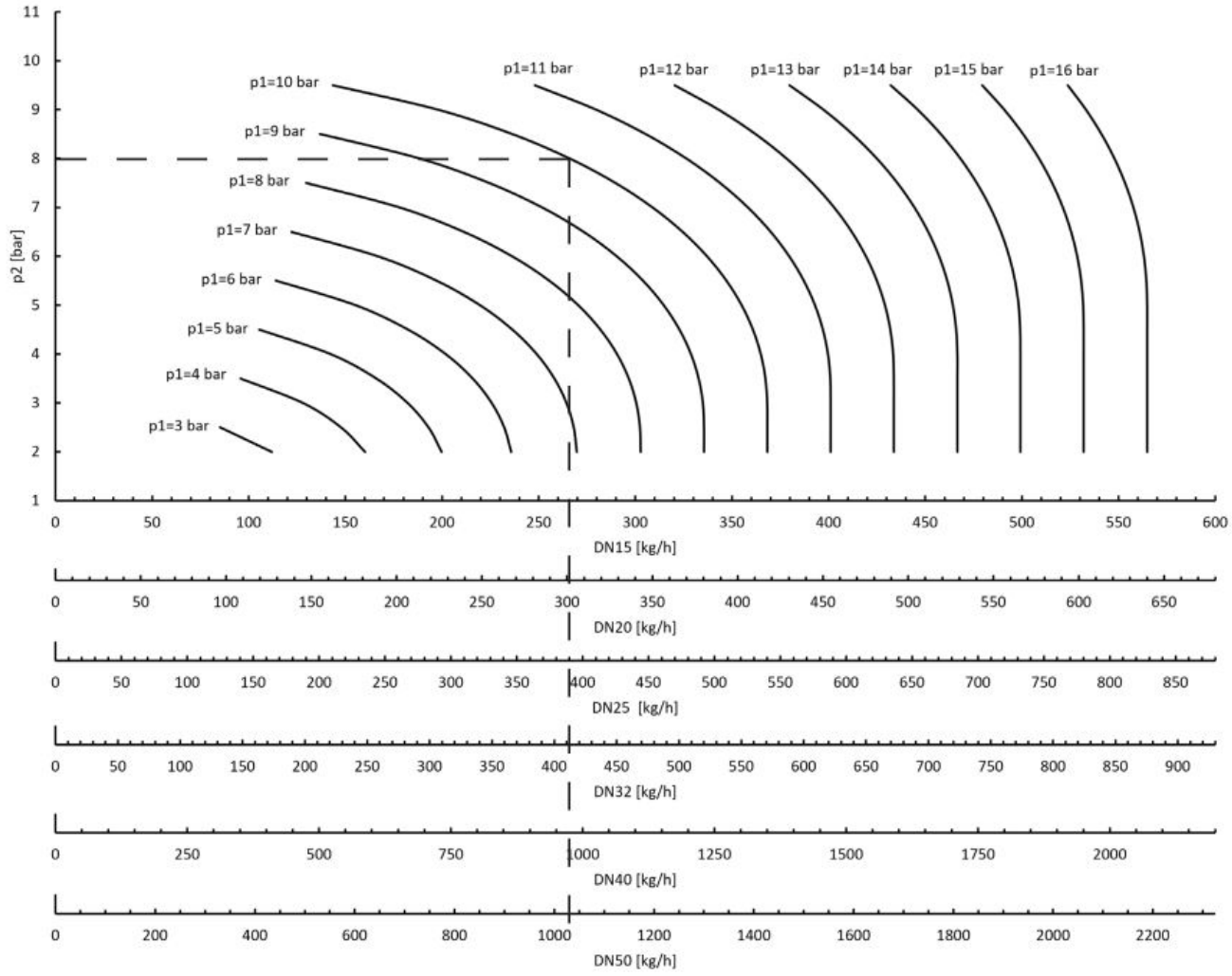
DN15-DN32



DN40-DN50

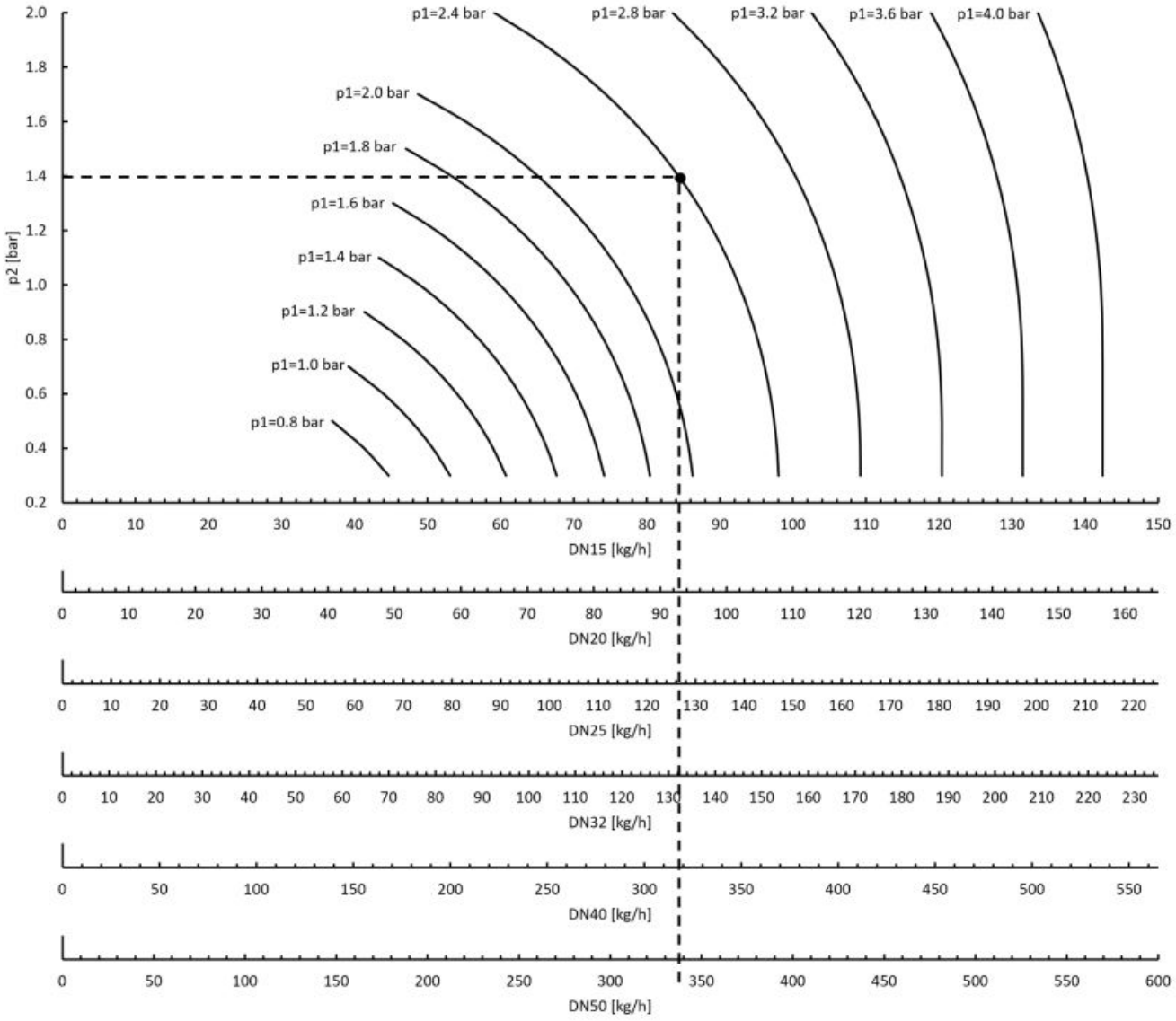
flow-diagram:

pressure range 2-5 & 4-10 bar:



Example:
Selection of a valve for an upstream pressure (p1) of 10 and a downstream pressure (p2) of 8 bar. The application requires a saturated steam mass flow of 350 kg/h. Sizing according to valve utilization: Entering the criteria shows that a DN25 valve would be sufficient (required capacity is left from the dashed line).

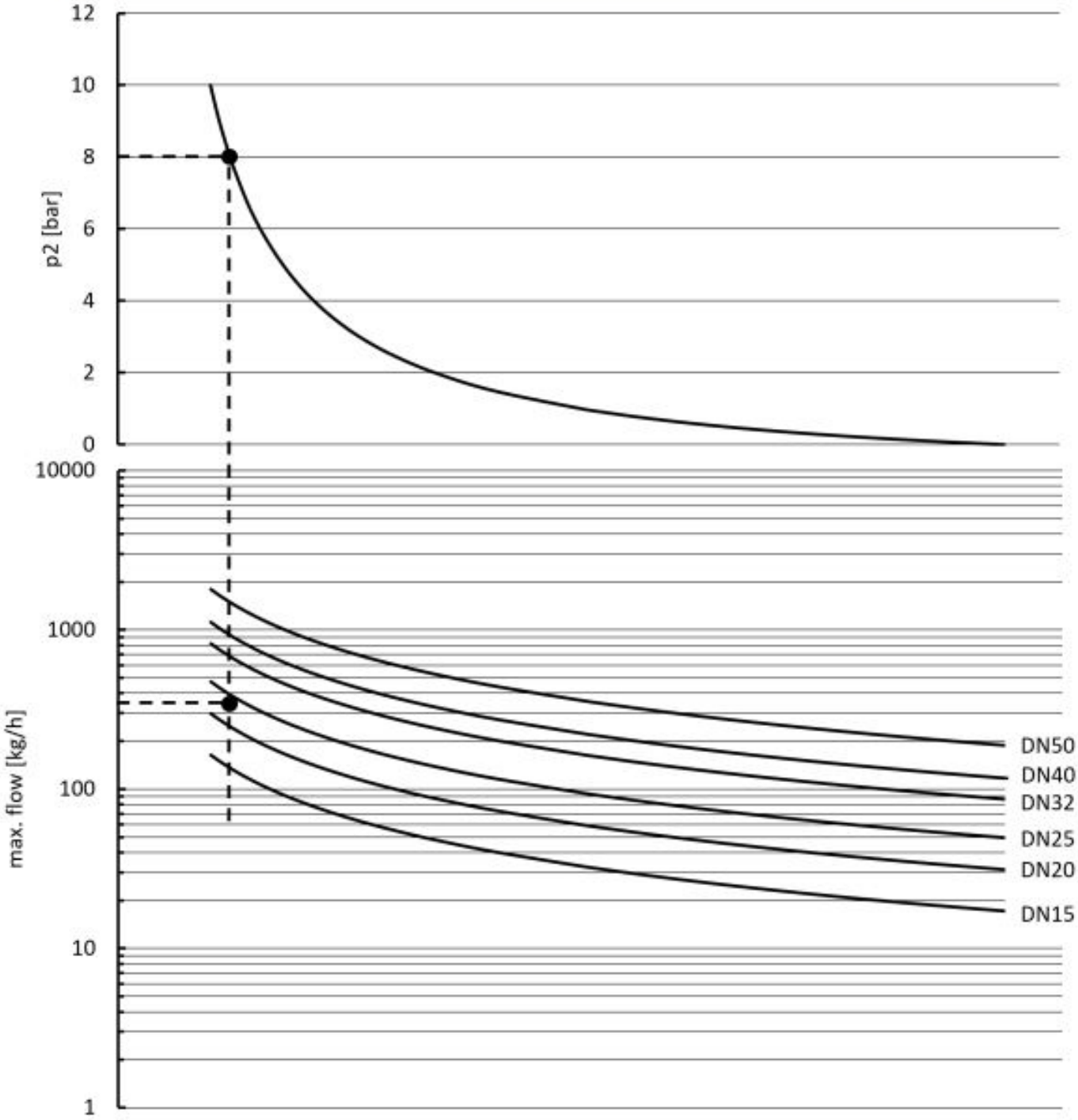
pressure range 0,3 – 2,0 bar:



Example:

Selection of a valve for an upstream pressure (p1) of 2,4 and a downstream pressure (p2) of 1,4 bar. The application requires a saturated steam mass flow of 300 kg/h. Sizing according to valve utilization: Entering the criteria shows that a DN40 valve would be sufficient (required capacity is left from the dashed line).

maximum flow velocity:



Example:

Selection of a valve for an upstream pressure (p1) of 10 and a downstream pressure (p2) of 8 bar. The application requires a saturated steam mass flow of 350 kg/h. Sizing according to maximum flow rate: Entering the criteria shows that a DN25 valve would be sufficient (curve above the required capacity).

Article number:

Type	Outlet pressure	Connection	Size
DM21 – PTFE / EPDM / FEPM	**00** – 0,3 up to 2,0 bar 01 – 2,0 up to 5,0 bar 02 – 4,0 up to 10,0 bar	00 – female thread BSP **01** – female thread NPT	**03** – 1/2" 04 – 3/4" 05 – 1" 06 – 1 1/4" 07 – 1 1/2" 08 – 2"

Example No. DM21000103:

DM21	00	01	03

Pressure reducing valve made of stainless steel for steam up to 200°C

Outlet pressure:	0,3 up to 2,0 bar
Diaphragm:	PTFE / EPDM / FEPM
Connection:	female thread NPT
Size:	1/2"

Image similar, subject change without notice.