

# 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:**

DN15, DN20, DN25, DN32, DN40, DN50

Subject to PED 2014/68/EU

**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

**Design:**

Piston-pressure reducing valve

**Body:**

Stainless steel 1.4408

**Spring bonnet:**

Stainless steel 1.4408

**diaphragm:**

**TYP DM22** 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:**

Flanges acc. To DIN 1092 PN40 (optionally ANSI & JIS Flanges)

**Outlet pressure:**

	<b>Outlet pressure</b>	<b>Inlet pressure</b>
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

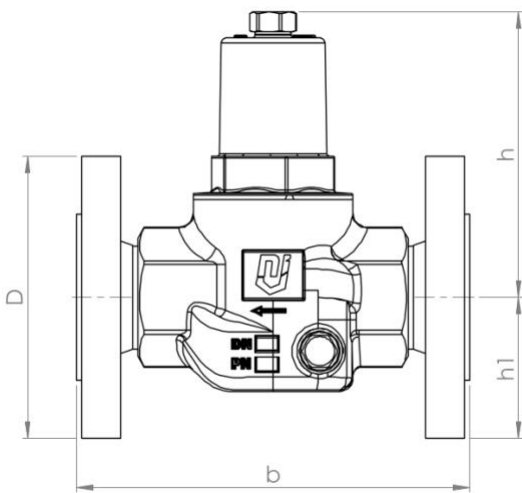
**Minimum pressure difference:**

Inlet-/outlet pressure 1 bar

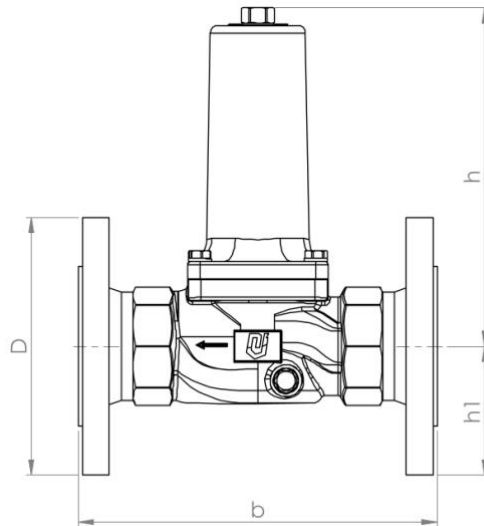
**Dimensions:**

Diameter DN	15	20	25	32	40	50
Flansch PN40	DN15	DN20	DN25	DN32	DN40	DN50
b	130	150	160	180	200	230
D	95	105	115	140	150	165
h1	48	53	58	70	75	83
h	116	116	116	116	219	219
Kvs-value m3/h	3,6	4,1	5,3	5,6	13,3	14,0
Weight kg	2,9	3,6	4,9	6,2	9,8	11,6
<b>Low pressure design 0,3 - 2,0 bar</b>						
b	130	150	160	180	200	230
D	95	105	115	140	150	165
h1	48	53	58	70	75	83
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	3,8	4,6	5,8	47,0	13,0	14,5

**Standard**

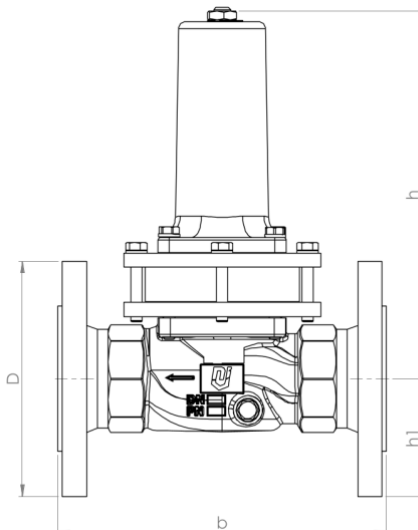
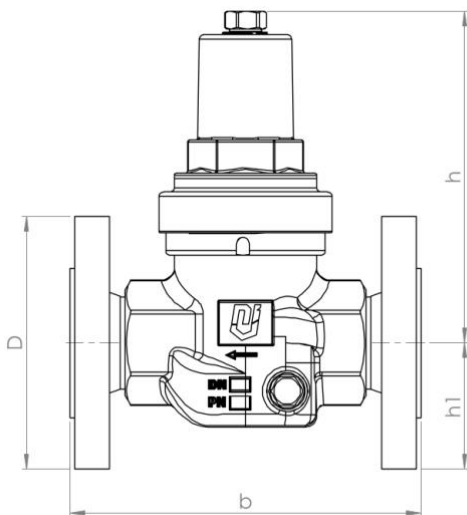


**DN15-DN32**



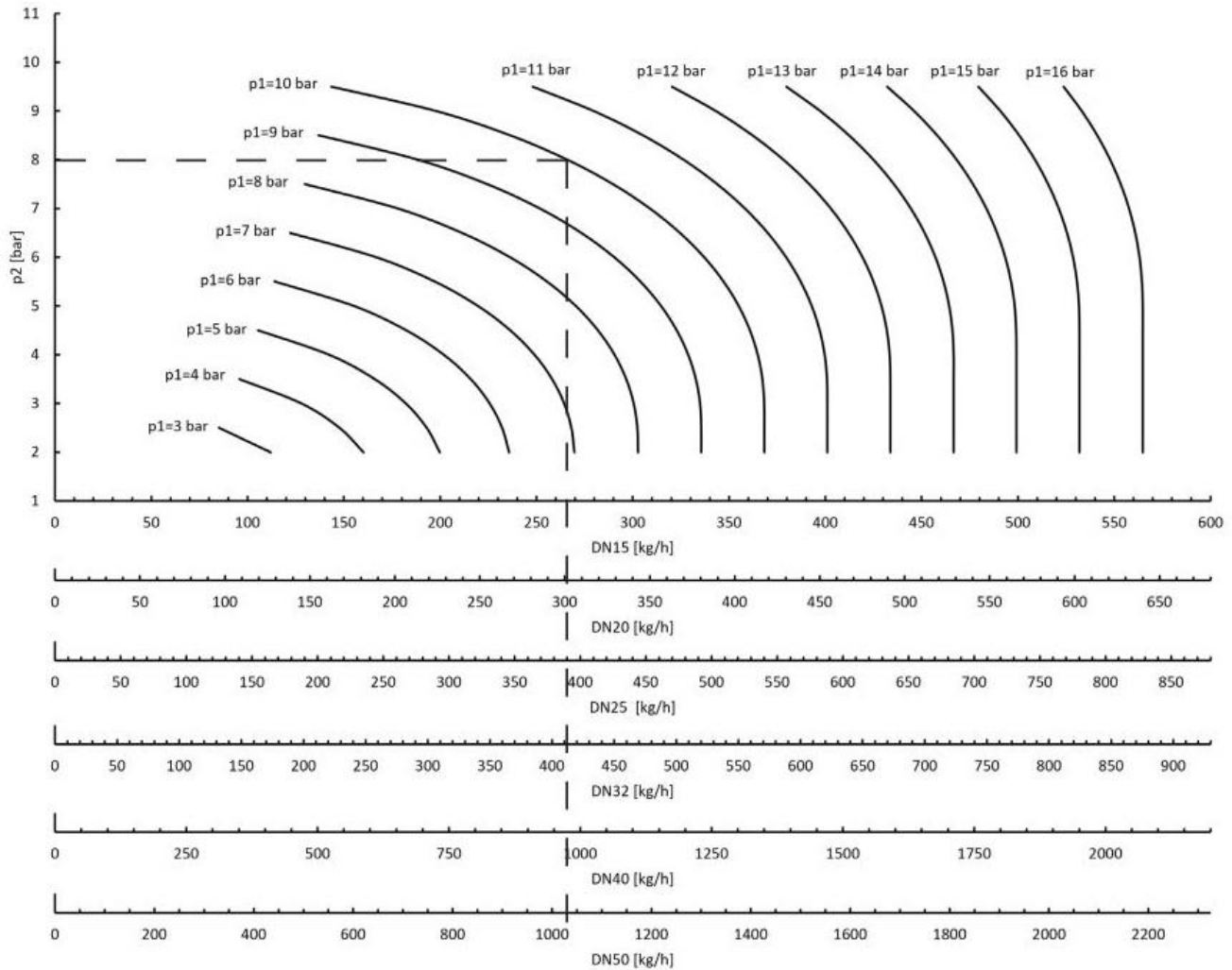
**DN40-DN50**

**Niederdruck**



flow-diagram:

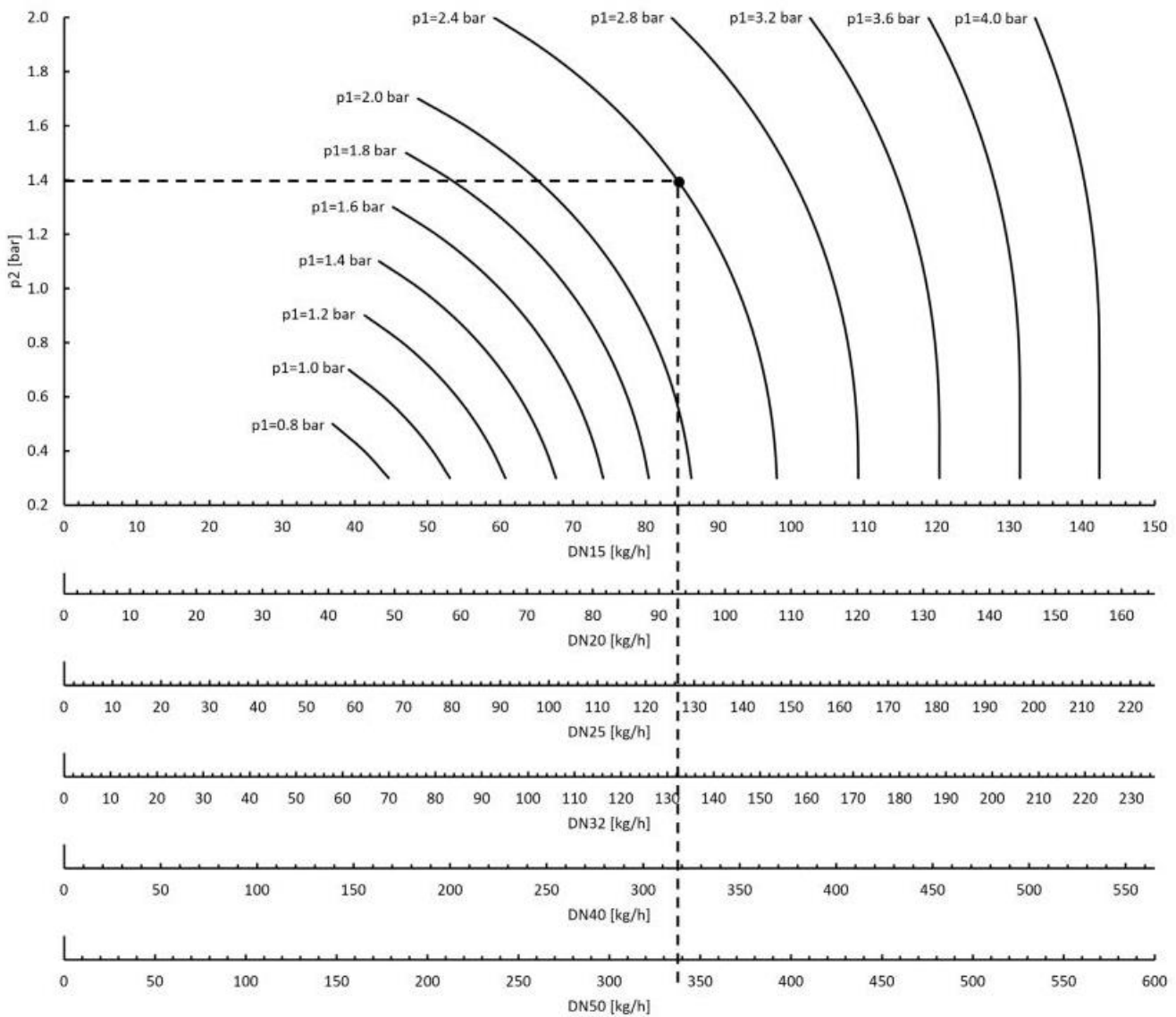
pressure range 2-5 & 4-10 bar:



**Example:**

Selection of a valve for an upstream pressure ( $p_1$ ) of 10 and a downstream pressure ( $p_2$ ) 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).

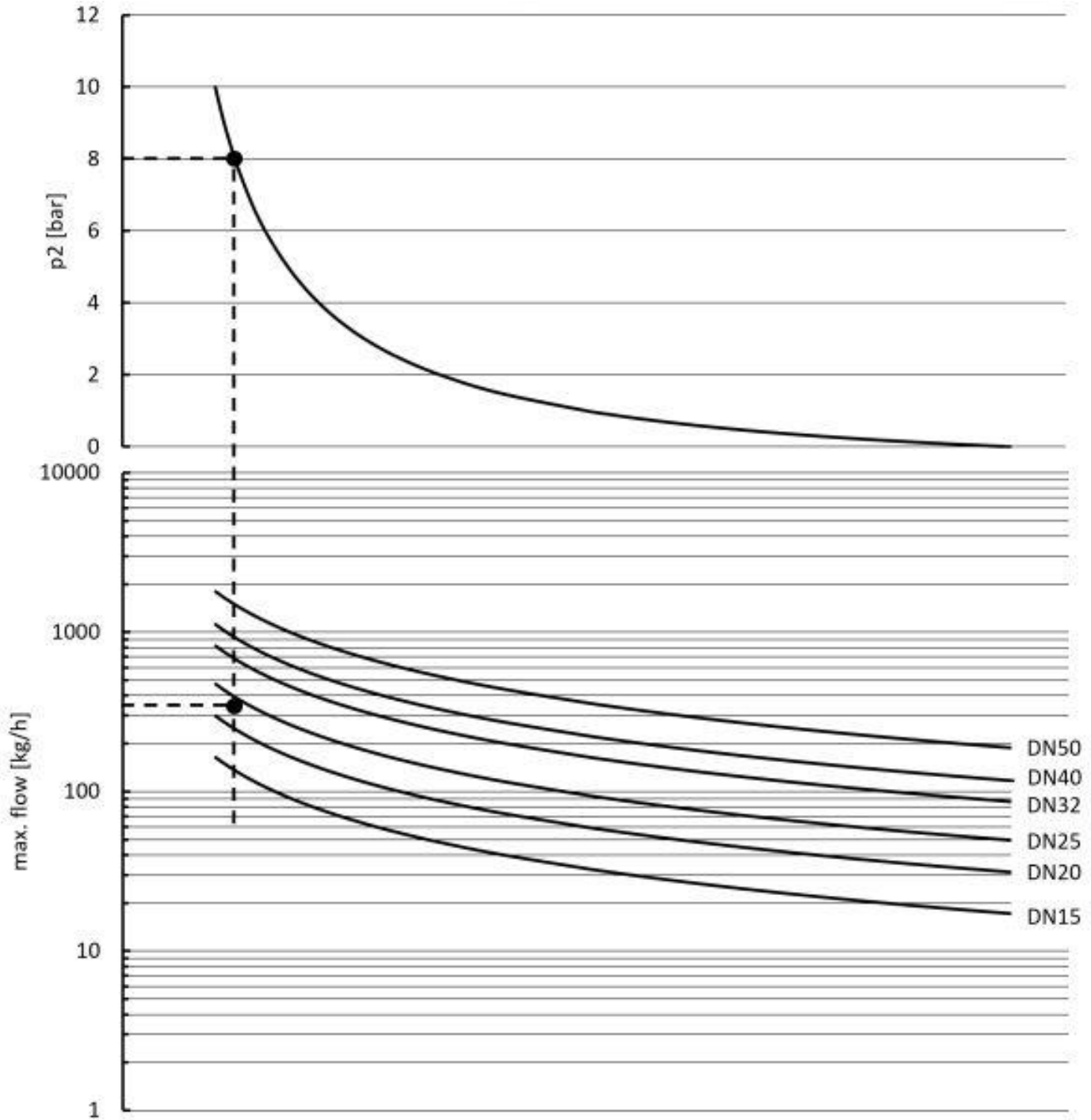
pressure range 0,3 – 2,0 bar:



**Example:**

Selection of a valve for an upstream pressure ( $p_1$ ) of 2,4 and a downstream pressure ( $p_2$ ) 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 ( $p_1$ ) of 10 and a downstream pressure ( $p_2$ ) 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
<b>DM22</b> – PTFE / EPDM / FEPM	<b>00</b> – 0,3 up to 2,0 bar 01 – 2,0 up to 5,0 bar 02 – 4,0 up to 10,0 bar	00 – flange DIN <b>01</b> – flange ANSI	<b>03</b> – DN15 04 – DN20 05 – DN25 06 – DN32 07 – DN40 08 – DN50

### Example No. DM22000103:

**DM22** | **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: flange ANSI

Size: DN15

Image similar, subject change without notice.