

m-bar pressure reducing valve DM23 | DM24



Description:

Stainless steel pressure reducing valves are used to regulate the supply pressure in a system, to compensate for different inlet pressures to a certain pressure in the outlet side.

Features:

- suitable for **air & neutral gases**
- suitable for **aggressive water and other aggressive fluids**
- made of stainless steel 1.4408
- double-ended G 1/4" inch manometer fitting (for outlet pressure)
- No limited reduction ratio
- continously adjustable outlet pressure
- assembly position: horizontal, bonnet pointing downwards
- with impulse line connection\* G 1/4" inch

|                                                          |                                                                   |                                                                                                                 |
|----------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Connection:</b><br>DN15, DN20, DN25, DN32, DN40, DN50 | <b>Temperature:</b><br>-30°C to +180°C<br><br>Depending on design | <b>Pressure:</b><br>Inlet pressure: 0,5 to 10,0 bar<br>Range of adjustment: 7 – 500 mbar<br>Depending on design |
|----------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|

Subject to PED 2014/68/EU

|                           |                                                                                                                     |              |                 |
|---------------------------|---------------------------------------------------------------------------------------------------------------------|--------------|-----------------|
| <b>Design:</b>            | diaphragm-controlled pressure reducing valve                                                                        |              |                 |
| <b>Body:</b>              | Stainless steel 1.4408                                                                                              |              |                 |
| <b>Spring bonnet:</b>     | Stainless steel 1.4408                                                                                              |              |                 |
| <b>membrane / seal:</b>   | <b>TYPE DM23</b>                                                                                                    | FKM / PTFE   | -10°C to +180°C |
|                           | <b>TYPE DM24</b>                                                                                                    | EPDM**/ PTFE | -30°C to +120°C |
| <b>Internals:</b>         | Stainless steel 1.4404                                                                                              |              |                 |
| <b>Assembly position:</b> | horizontal, bonnet pointing downwards                                                                               |              |                 |
| <b>Connection:</b>        | Female thread acc. ISO 228<br>NPT-thread ASME B1.20.1<br>Flange acc. to DIN EN 1092 PN40<br>Flange acc. to ANSI 150 |              |                 |

| Pressure range:                     | Range of adjustment            | Inlet pressure  |
|-------------------------------------|--------------------------------|-----------------|
| spring 00                           | 7 to 100 mbar***               | 0,5 to 10,0 bar |
| spring 01                           | 30 to 500 mbar***              | 0,5 to 10,0 bar |
| spring 02                           | 50 to 200 mbar                 | 0,5 to 10,0 bar |
| spring 03                           | 150 to 500 mbar                | 0,5 to 10,0 bar |
| <b>Minimum pressure difference:</b> | Inlet-/outlet pressure 0,3 bar |                 |

\*An impulse line connection is used to connect an external impulse line. An external impulse line is relevant if there are long cables or significant flow losses behind the pressure reducer, as the pressure at the load could then deviate significantly from the regulated pressure.  
\*\*Note: Type DM24 with EPDM seal comes with **FDA-conformity**, therefor it can be used for food-applications.  
\*\*\*At pressures below 50 mbar, an external impulse line is strongly recommended to ensure proper functioning

## Dimensions:

| Diameter DN                      | 15   | 20   | 25   | 32     | 40     | 50   |
|----------------------------------|------|------|------|--------|--------|------|
| <b>Female thread ISO 228 (G)</b> | 1/2" | 3/4" | 1"   | 1 1/4" | 1 1/2" | 2"   |
| b1 in mm                         | 280  | 280  | 280  | 280    | 330    | 330  |
| b in mm                          | 95   | 95   | 110  | 120    | 150    | 160  |
| h1 in mm                         | 29   | 29   | 39   | 39     | 37     | 37   |
| h in mm                          | 261  | 261  | 267  | 267    | 388    | 388  |
| Gewicht kg                       | 7,0  | 7,0  | 7,8  | 7,8    | 15,2   | 15,1 |
| <b>Flange DIN EN 1092</b>        | PN40 | PN40 | PN40 | PN40   | PN40   | PN40 |
| b1 in mm                         | 280  | 280  | 280  | 280    | 330    | 330  |
| b in mm                          | 130  | 150  | 160  | 180    | 200    | 230  |
| h1 in mm                         | 48   | 53   | 58   | 70     | 75     | 83   |
| h in mm                          | 261  | 261  | 267  | 267    | 388    | 388  |
| D in mm                          | 95   | 105  | 115  | 140    | 150    | 165  |
| weight kg                        | 8,5  | 9,3  | 10,1 | 11,4   | 18,9   | 20,7 |
| kvs-value m3/h of spring 00      | 2,5  | 2,5  | 2,5  | 2,5    | 3,0    | 3,0  |
| kvs-value m3/h of spring 01      | 2,5  | 2,5  | 2,5  | 2,5    | 3,0    | 3,0  |
| kvs-value m3/h of spring 02      | 4,3  | 5,5  | 5,6  | 6,3    | 14,9   | 16,3 |
| kvs-value m3/h of spring 03      | 4,3  | 5,5  | 5,6  | 6,3    | 14,9   | 16,3 |

### With female thread:

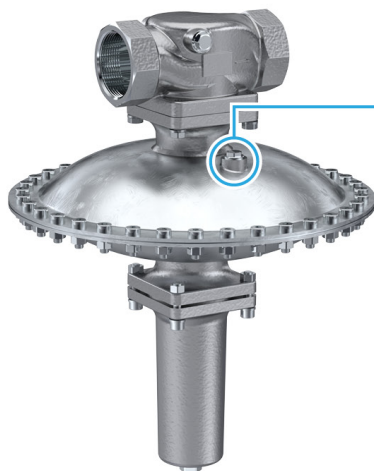


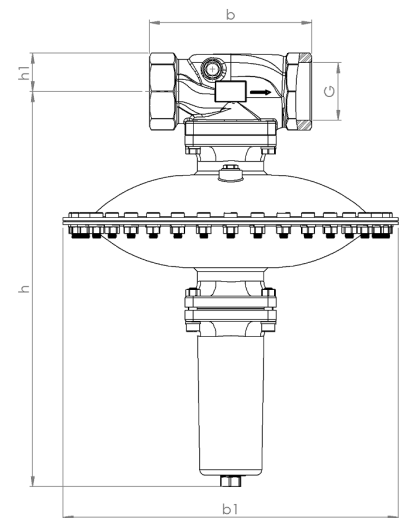
Image: Version DN50



Impulse line connection G 1/4"

Placed on the extension for DN15 – DN32

For DN40 – DN50 placed on the hood



### With flange connection:

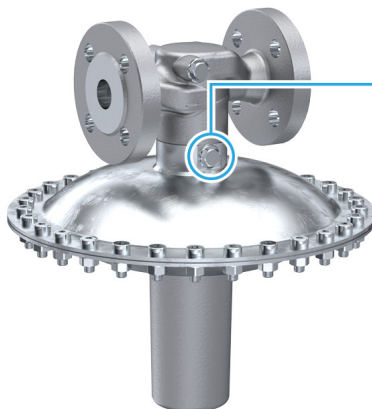
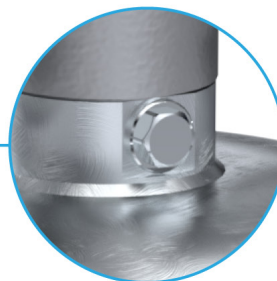


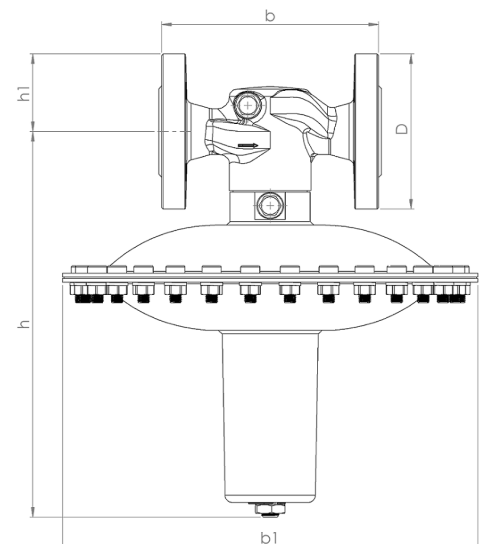
Image: Version DN20



Impulse line connection G 1/4"

Placed on the extension for DN15 – DN32

For DN40 – DN50 placed on the hood



Article number:

| Type              | Range of adjustment          | Connection                        | Size             |
|-------------------|------------------------------|-----------------------------------|------------------|
| <b>DM23</b> – FPM | <b>00</b> – 7 up to 100 mbar | <b>00</b> – female thread ISO 228 | 03 – DN15        |
| DM24 – EPDM       | 01 – 30 up to 500 mbar       | 01 – NPT-thread ASME B1.20.1      | 04 – DN20        |
|                   | 02 – 50 up to 200 mbar       | 02 – flange DIN EN 1092 PN 40     | 05 – DN25        |
|                   | 03 – 150 up to 500 mbar      | 03 – flange ANSI 150              | 06 – DN32        |
|                   |                              |                                   | <b>07</b> – DN40 |
|                   |                              |                                   | 08 – DN50        |

Example No. DM13000007:

|             |           |           |           |
|-------------|-----------|-----------|-----------|
| <b>DM23</b> | <b>00</b> | <b>00</b> | <b>07</b> |
|-------------|-----------|-----------|-----------|

Pressure reducing valve made of stainless steel  
Range of adjustment: 7 up to 100 mbar  
Membrane: FPM  
Connection: female thread ISO 228  
Size: DN40

Image similar, subject change without notice.