

## M-Flow product information



# High-precision control valves for gases and liquids

# Precise setting and tightly closing: High-precision control valves M-Flow

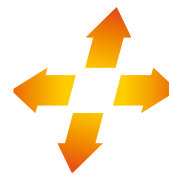
The high-precision control valves allow an accurate flow adjustment and V-Stack offers a scalable gas distribution system.

## Tightly closing valves



The valves are tight-closing

## Different device setups



The valves are available as straight valves, corner valves, or valve cartridges for self-mounting

## Direction of closing



Cw- or ccw-closing versions are available



## Various knobs

Different rotary knobs are available:

- Standard knob
- Standard knob with locking ring (see picture)
- Digi knob, 100 divisions
- Locking nut (instead of standard knob)
- Digiturn with display, 100 division

## Gas distribution system V-Stack

The compact gas distribution system V-Stack is capable of metering up to 12 outlets individually



- 1 inlet (G 1" female)
- Up to 12 outlets with one valve per outlet (G 1/2" female)
- Can be easily expanded by the customer (up to 12 outlets)
- Type 35 instrument size only



V-Stack  
with 8 outlets and Digiturn knob with display



M-Flow 25  
Digi knob  
100 divisions



M-Flow 25  
Digiturn with display  
100 divisions

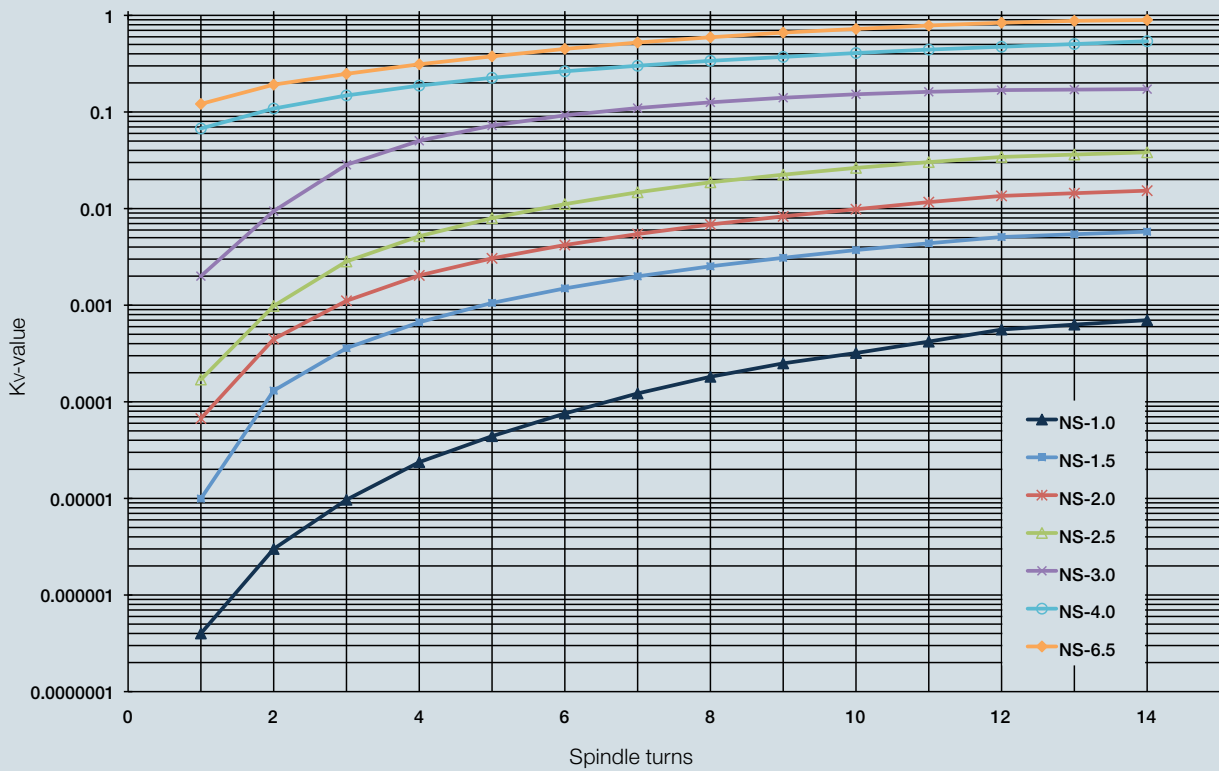
## Technical specifications high-precision control valves M-Flow

|                            |   |  |                                    |                                    |
|----------------------------|---|--|------------------------------------|------------------------------------|
| <b>Instrument versions</b> | <b>Compact, modular construction</b><br><b>Aluminium/brass or stainless steel</b><br><b>Seal materials: FKM, EPDM or FFKM</b><br><b>Straight valve, corner valve or valve cartridges (for self-mounting)</b><br><b>Leak-proof when closed</b><br><b>15 turn spindle, no hysteresis</b><br><b>Cw- or ccw-closing</b><br><b>Different Kv-values for optimum control ranges</b><br><b>Non-rotating valve needles for stable settings</b><br><b>Every M-Flow valve is tested and controlled</b><br><b>We provide customer-specific versions</b> |  |                                    |                                    |
| <b>Instrument versions</b> | <b>Setup</b>  | Straight valve<br>Corner valve<br>Valve cartridge<br>Distributor   |                                    |                                    |
|                            | <b>Material</b>   | Aluminium/brass/FKM<br>Stainless steel/FKM<br>Stainless steel/EPDM<br>Stainless steel/FFKM   |                                    |                                    |
|                            | <b>Connection</b>   | <i>M-Flow 25</i> G 1/4" female*<br>G 1/8" female<br>G 1/4" female for compression fittings<br>NPT 1/4" female<br><i>M-Flow 35</i> G 1/2" female<br><i>M-Flow V-Stack</i> Inlet: G 1", Outlet: G 1/2" |                                    |                                    |
|                            | <b>Valve rotating direction</b>   | Cw-* or ccw-closed   |                                    |                                    |
|                            | <b>Actuator</b>   | Standard knob*<br>Standard knob with locking ring<br>Digi knob, 100 divisions, ccw-closed valve<br>Locking nut (instead of standard-knob)<br>Digitum, 100 divisions, cw-closed valve                 |                                    |                                    |
| <b>Technical data</b>      | <b>Type</b>   | <b>M-Flow 25</b>   | <b>M-Flow 35</b>                   | <b>M-Flow V-Stack</b>              |
|                            | <b>Straight valve</b>   | ●  | ●                                  |                                    |
|                            | <b>Corner valve</b>   | ●  |                                    |                                    |
|                            | <b>Valve cartridge</b>  | ●  | ●                                  |                                    |
|                            | <b>Gas distribution system</b>  |  |                                    | ●                                  |
|                            | <b>Ccw-closed</b>   | ●  |                                    |                                    |
|                            | <b>Leak rate</b>  | < 1 x 10 <sup>-5</sup> mbar l/s He   | < 1 x 10 <sup>-5</sup> mbar l/s He | < 1 x 10 <sup>-5</sup> mbar l/s He |
|                            | <b>Max. pressure</b>  | 20 bar   | 20 bar                             | 20 bar                             |
|                            | <b>Min. temperature</b>   | -40 °C   | -40 °C                             | -40 °C                             |
|                            | <b>Max. temperature</b>   | 150 °C   | 150 °C                             | 150 °C                             |

\*Standard – Subject to technical alterations

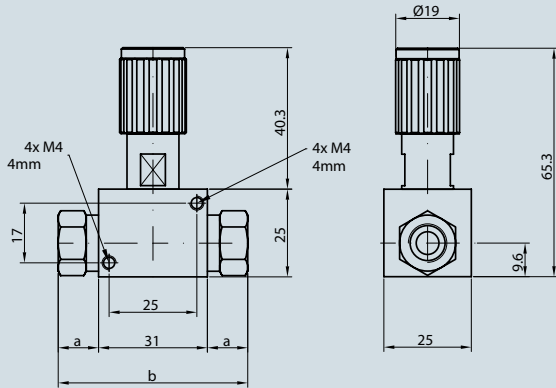
# Kv-values high-precision control valves M-Flow

Kv-values for valves NS 1.0 to NS 3.0 (M-Flow 25) and NS 4.0 to NS 6.5 (M-Flow 35)



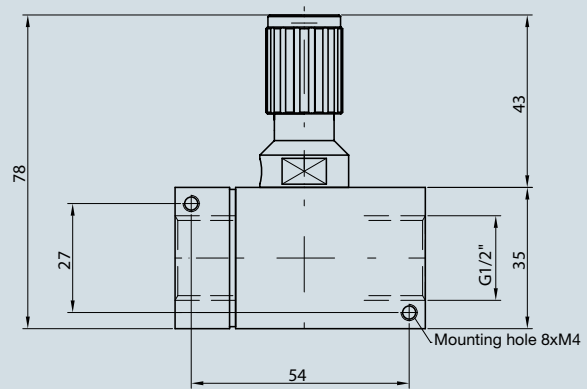
# Dimensions high-precision control valves M-Flow

M-Flow 25 (dimensions in mm)



Find detailed dimensions for fittings, knobs and corner valve in the V-Flow Line manual

M-Flow 35 (dimensions in mm)



Find detailed dimensions for fittings and knobs in the V-Flow Line manual

