

M-Flow

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.

Precise setting and tightly closing: M-Flow

Tightly closing valves

- The valves are tight-closing

Direction of closing

- Cw- or ccw closing versions are available

Different device setups

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

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



M-Flow 25 Digi knob
100 divisions



M-Flow 25 Digiturn
with display 100 divisions



V-Stack with 8 outlets and
Digiturn knob with display

M-Flow

Technical Data		
Features	Compact, modular construction	
	Aluminium / brass or stainless steel	
	Seal materials: FKM, EPDM or FFKM	
	Straight valve, corner valve or valve cartridges (for self-mounting)	
	Leak-proof when closed	
	15 turn spindle, no hysteresis	
	Cw- or ccw-closing	
	Different Kv-values for optimum control ranges	
	Non-rotating valve needles for stable settings	
Every M-Flow valve is tested and controlled		
We provide customer-specific versions		
Instrument versions	Setup	Straight valve Corner valve Valve cartridge Distributor
	Material	Aluminium / brass / FKM Stainless steel / FKM Stainless steel / EPDM Stainless steel / FFKM
	Connection	M-Flow 25 G 1/4" female* G 1/8" female G 1/4" female for compression fittings NPT 1/4" female M-Flow 35 G 1/2" female M-Flow V-Stack Inlet: G 1", Outlet: G 1/2"
	Valve rotating direction	Cw-* or ccw-closed
	Actuator	Standard knob* Standard knob with locking ring Digi knob, 100 divisions, ccw-closed valve Locking nut (instead of standard-knob) Digiturn, 100 divisions, cw-closed valve

Technical Data			
Type	M-Flow 25	M-Flow 35	M-Flow V-Stack
Straight valve	●	●	
Corner valve	●		
Valve cartridge	●	●	
Gas distribution system			●
Cw-closed	●	●	●
Ccw-closed	●		
Leak rate	< 1 x 10 ⁻⁵ mbar l/s He	< 1 x 10 ⁻⁵ mbar l/s He	< 1 x 10 ⁻⁵ mbar l/s He
Max. pressure	20 bar	20 bar	20 bar
Min. temperature	-40 °C	-40 °C	-40 °C
Max. temperature	150 °C	150 °C	150 °C

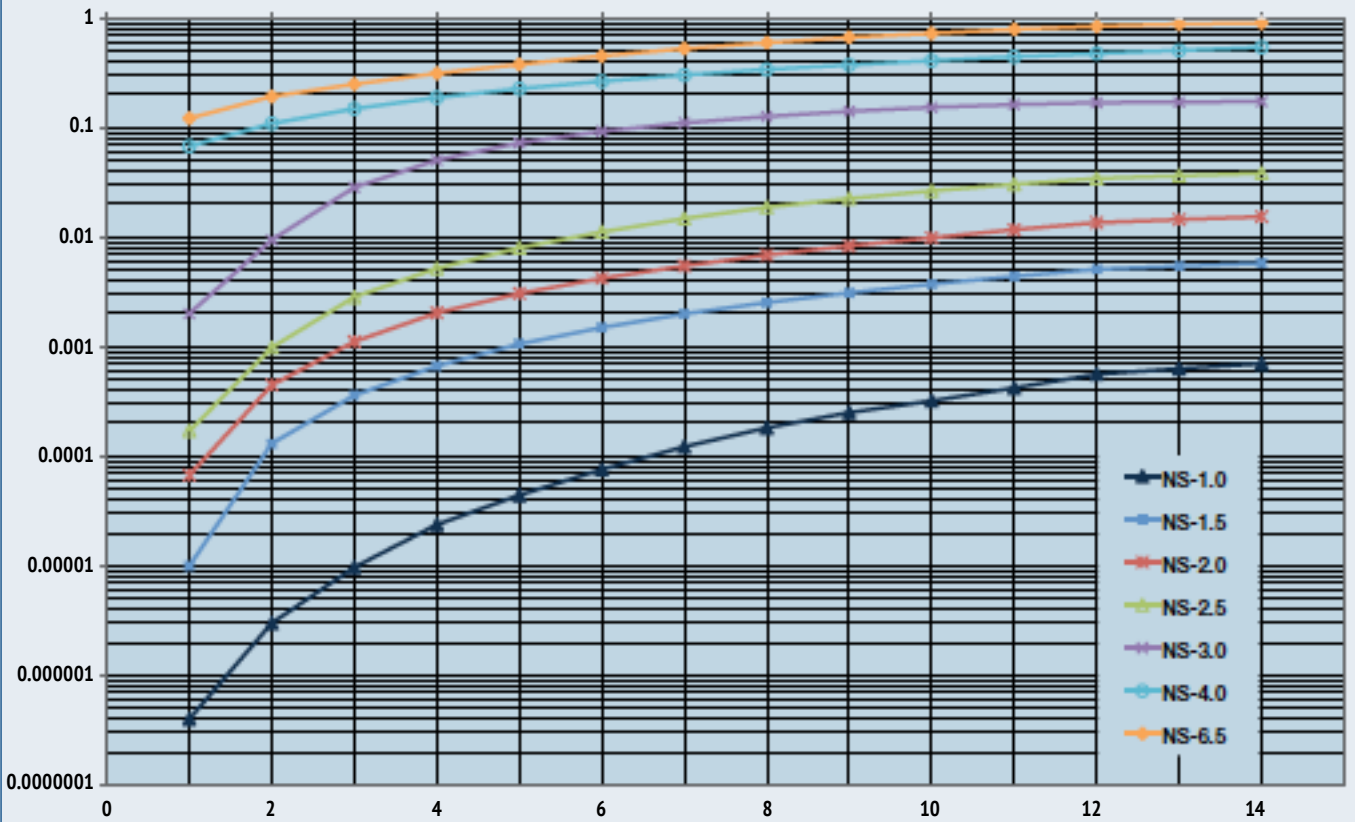
*Standard – Subject to technical alterations

Rev. II_032018_M-Flow_engl - subject to technical alterations

M-Flow

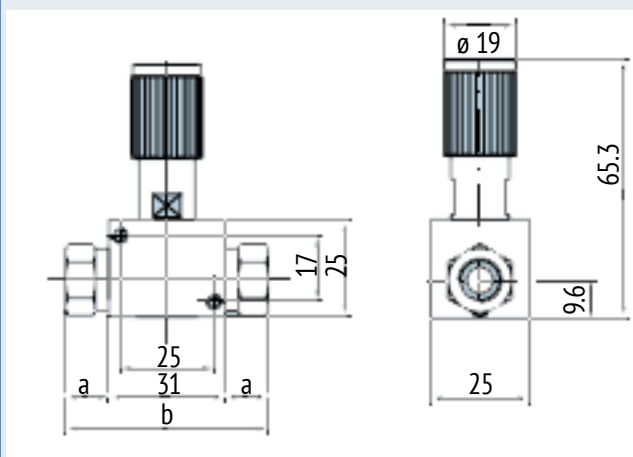
Kv-values high-precision control valves M-Flow (air)

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)



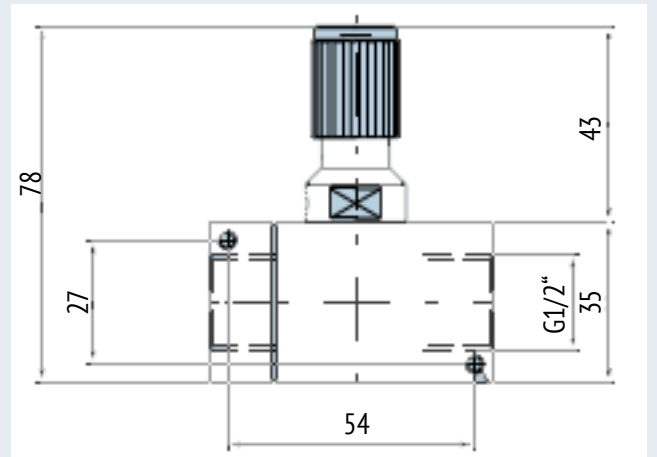
Dimensions high-precision control valves M-Flow

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

Rev. II_032018_M-Flow_engl - subject to technical alterations

M-Flow

Type code high-precision control valves M-Flow										
Instrument type	M-Flow	F	L	M						
Instrument size	25							A		
	35							B		
	V-Stack							C		
Materials (body, seals)	Aluminium/brass, FKM							S		
	Stainless steel, FKM							E		
	Stainless steel, EPDM							T		
	Stainless steel, FFKM							W		
	Customer-specific / OEM							K		
Setup	Straight valve**							S		
	Corner valve							E		
	Valve cartridge (without body)							O		
	V-Stack, 1 valve/outlet							B		
	V-Stack, 2 valves/outlets							C		
	V-Stack, 3 valves/outlets							D		
	V-Stack, 4 valves/outlets							F		
	V-Stack, 5 valves/outlets							G		
	V-Stack, 6 valves/outlets							H		
	V-Stack, 7 valves/outlets							I		
	V-Stack, 8 valves/outlets							J		
	V-Stack, 9 valves/outlets							M		
	V-Stack, 10 valves/outlets							N		
	V-Stack, 11 valves/outlets							P		
V-Stack, 12 valves/outlets Q							Q			
Customer-specific / OEM								K		
Valve (rotating direction)	Valve cw-closed**							S		
	Valve ccw-closed							L		
	Customer-specific / OEM							K		
Process connection (in- and outlet)	G 1/4" female** (Type 25)								S	
	G 1/8" female (Type 25)								B	
	G 1/4" female, compression fittings (Type 25)								C	
	NPT 1/4" female (Type 25)								D	
	G 1/2" female (Type 35)								S	
	Inlet: G 1", Outlet: G 1/2" (Type V-Stack)								S	
	Customer-specific / OEM								K	
Valve size	NS 1.0 (Type 25)									A
	NS 1.5 (Type 25)									B
	NS 2.0 (Type 25)									C
	NS 2.5 (Type 25)									D
	NS 3.0 (Type 25)									E
	NS 4.0 (Type 35 / V-Stack)									F
	NS 6.5 (Type 35 / V-Stack)									G
	Customer-specific / OEM									K
Options	Locking ring (for standard knob)									A
	Locking nut (instead of standard knob)									B
	Digiturn (cw-closed valve only)									C
	Star grip for digiturn									D
	Digi knob, 100 divisions (ccw-closed valve only)									L
	Hose connectors PVC, G 1/4" / 4mm									N
	Hose connectors PVC, G 1/4" / 6mm									O
	Hose connectors PVC, G 1/4" / 8mm									Q
	Customer-specific / OEM									K
Type code		F	L	M	-				-	-

** Standard

Needle Valve M-Flow WITH G1½"-CONNECTION



Compact, modular micro valves for fine dosage of gases and liquids

Vorteile

- Available as valve insert and straight valve (no corner valve)
- With valve up to NS6.5
- Flow rate up to 600 l/min with 2.5 bar a inlet pressure (air)
- Cv-value 1
- Materials Aluminium/Brass/Stainless steel
Complete version in stainless steel on request
- 15 turn spindle
- Leak-proof when closed
- Seals: FKM, EPDM
- Cw-closed
- Available knobs*:
 - Standard knob
 - Standard knob with locking ring
 - Locking nut
 - Large digi-knob (digiturn)
- Spindle with no hysteresis
- Stable and precise regulation
- Customer specific versions
- Every single valve is tested and controlled by the manufacturer

Dimensions in mm

Version	Length	Width	Height
Standard	62	35	80
With locking nut	62	35	78
With digiturn	62	35	104
Mounted on red-y compact meter/switch			
Overall dimensions	207	80*	54

* Standard: Front-mounted knob (see picture)