

- Pneumatic connection  
G $\frac{1}{4}$  to G1 $\frac{1}{2}$
- Flow rates  
2,000 to 30,500 l/min
- Variants with adjustable closing cushioning

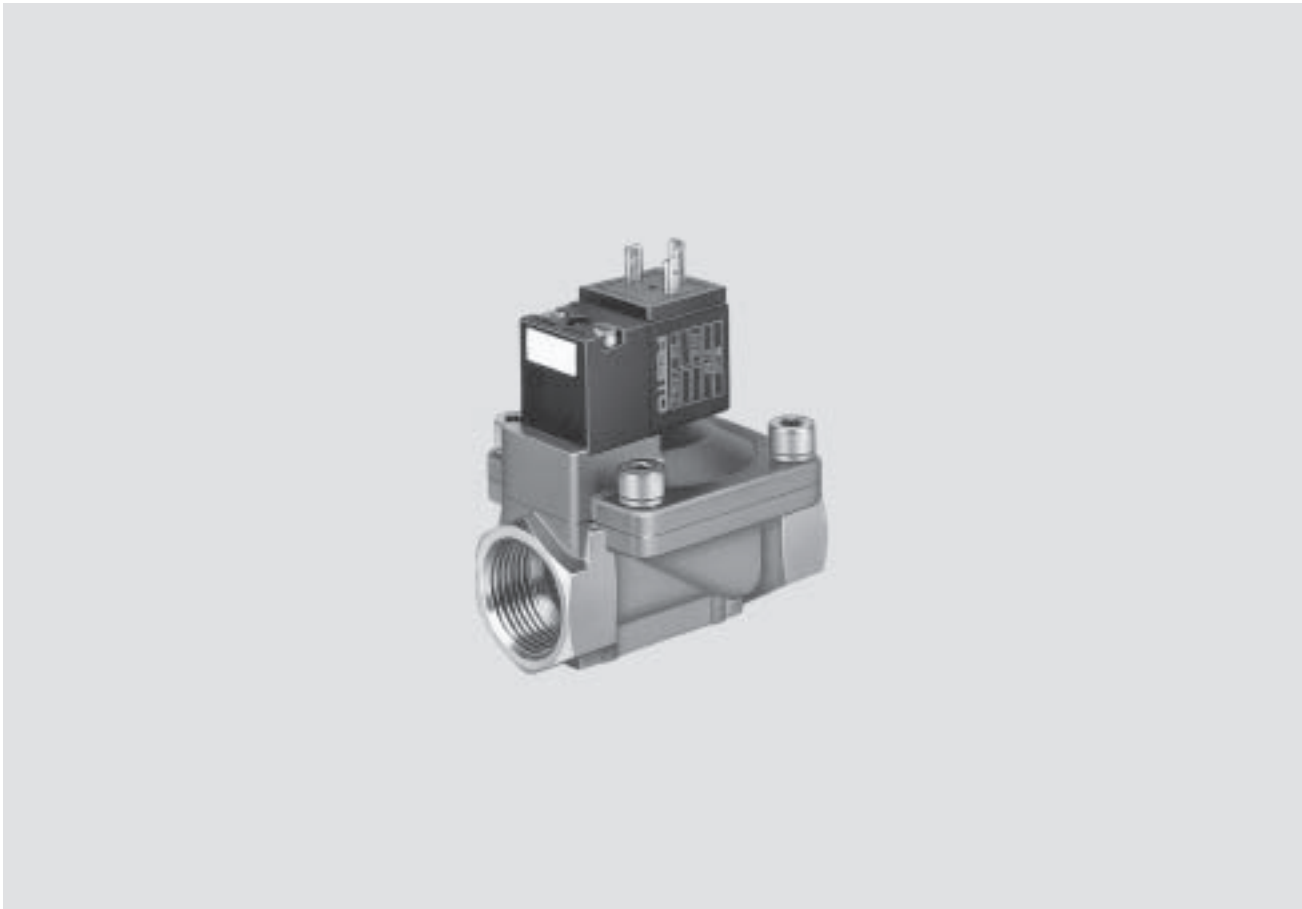
# Solenoid valves MN1H-MS, brass design

Key features



Application-optimised directional control valves  
Media and process valves

3.6

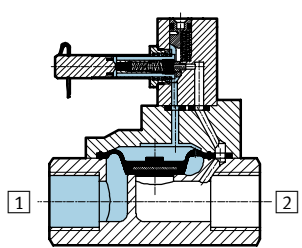



### Function

When the solenoid is energised, the valve is actuated.

The valve MN1H-2-1½-MS is equipped with adjustable closing cushioning.

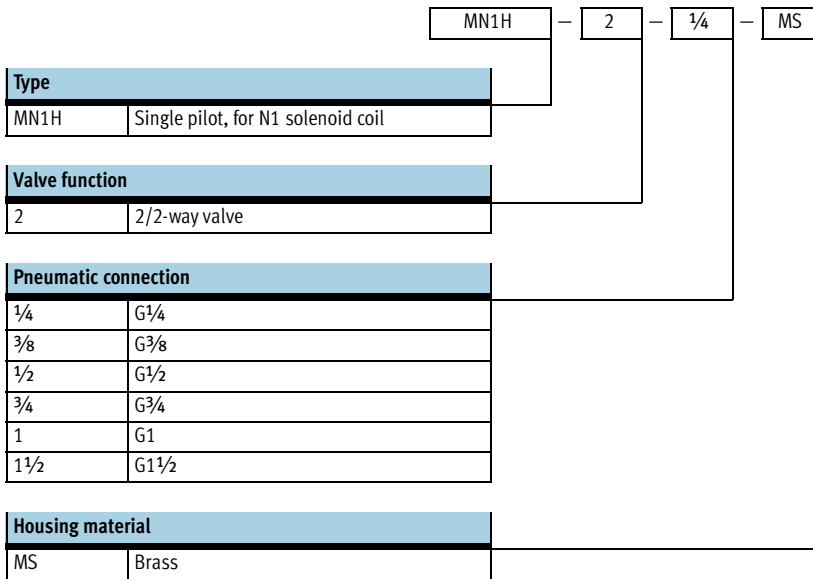
- 1 Supply port
- 2 Working or outlet line



-  - Note  
The diaphragm opens briefly when pressure is connected.

# Solenoid valves MN1H-MS, brass design

Type codes

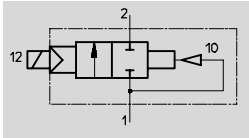




# Solenoid valves MN1H-MS, brass design

Technical data



Function



-  - Flow rate  
2,000 ... 30,500 l/min
-  - Voltage  
24 V DC  
110, 230 V AC



General technical data							
Pneumatic connection		G1/4	G3/8	G1/2	G3/4	G1	G1 1/2
Valve function	2/2-way, single pilot						
Constructional design	Poppet valve						
Sealing principle	Soft						
Actuation type	Electrical						
Type of reset	Air spring						
Type of pilot control	Piloted						
Direction of flow	Non-reversible						
Exhaust function	No flow control						
Manual override	Resetting, detenting via accessory						
Type of mounting	In-line mounting or via through-holes						
Mounting position	Any						
Nominal size	[mm]	13	13	13	20	25	40
Standard nominal flow rate	[l/min]	2,000	2,900	3,100	10,000	11,500	30,500
Product weight	[g]	450	450	400	1,100	1,000	2,600
Materials	Housing	Brass					
	Diaphragm	Nitrile rubber					
Max. tightening torque <sup>1)</sup>	[Nm]	35	60	105	200	380	850

1) Ports 1 and 2

Operating and environmental conditions	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure	[bar] 0.5 ... 10
Ambient temperature	[°C] -10 ... +60
Temperature of medium	[°C] -10 ... +60

Valve response times		
Pneumatic connection	On	Off
G1/4	30	100
G3/8	30	100
G1/2	30	100
G3/4	120	180
G1	120	180
G1 1/2	230 ... 440	300 ... 1,000

# Solenoid valves MN1H-MS, brass design



Technical data

Electrical data			
N1 solenoid coil			
Electrical connection		Plug, square design to EN 175301-803, type A	
Operating voltage	D.C. voltage	[V DC]	24
	A.C. voltage	[V AC]	110/230 (50 ... 60 Hz)
Coil characteristics	D.C. voltage	[W]	2.5
	A.C. voltage	[VA]	Pull: 5 Hold: 3.7
Protection class to EN 60 529		IP65 (with plug socket)	

## Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

2/2-way valve

- 1 Wiring at plug socket to EN 175301-803, type A
- 2 Manual override, detenting
- 3 Manual override, resetting
- 4 Location for inscription labels IBS-9x20
- 5 Mounting bracket HRM-...

Pneumatic connection D	B	D1	H	H1	H2	L	L1	L2	L3	L4	⌀
G <sup>1</sup> / <sub>4</sub>	48	M4	67	46	15	67	25	21	26.5	20	27
G <sup>3</sup> / <sub>8</sub>	48	M4	67	46	15	67	25	21	26.5	20	27
G <sup>1</sup> / <sub>2</sub>	48	M4	67	46	15	67	25	21	26.5	20	27
G <sup>3</sup> / <sub>4</sub>	70	M6	78	57	23	95	40	27.5	26.5	21.5	41
G1	70	M6	78	57	23	95	40	27.5	26.5	21.5	41
G <sup>1</sup> / <sub>2</sub>	96	M6	91.5	70.5	31.5	140	59.5	38.3	26.5	30	58

Ordering data			
Circuit symbol	Pneumatic connection	Part No.	Type
	G <sup>1</sup> / <sub>4</sub>	161 725	MN1H-2- <sup>1</sup> / <sub>4</sub> -MS
	G <sup>3</sup> / <sub>8</sub>	161 727	MN1H-2- <sup>3</sup> / <sub>8</sub> -MS
	G <sup>1</sup> / <sub>2</sub>	161 728	MN1H-2- <sup>1</sup> / <sub>2</sub> -MS
	G <sup>3</sup> / <sub>4</sub>	161 731	MN1H-2- <sup>3</sup> / <sub>4</sub> -MS
	G1	161 732	MN1H-2-1-MS
	G <sup>1</sup> / <sub>2</sub>	161 734	MN1H-2-1 <sup>1</sup> / <sub>2</sub> -MS

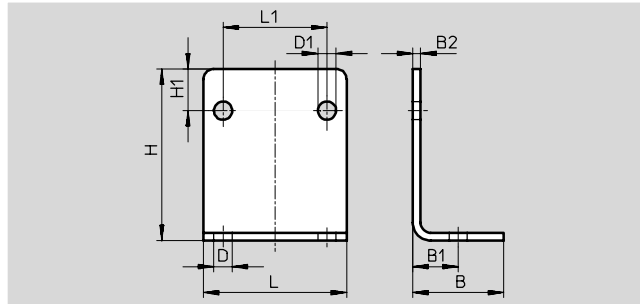
# Solenoid valves MN1H-MS, brass design

Accessories



## Mounting bracket HRM

Material:  
Galvanised steel




### Dimensions and ordering data


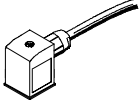
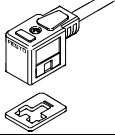
For valve with pneumatic connection	B	B1	B2	D Ø	D1 Ø	H	H1	L	L1	Weight [g]	Part No.	Type
G $\frac{1}{4}$ ... G $\frac{1}{2}$	25	12.5	2	6	5	37	10	40	25	39	9 769	HRM-1
G $\frac{3}{4}$ ... G1	35	17.5	3	7	7	66	16	55	40	130	9 770	HRM-2
G1 $\frac{1}{2}$	47	23.5	3	9	7	87	23	75	59.5	246	9 771	HRM-3


# Solenoid valves MN1H-MS, brass design






Accessories

Ordering data – Solenoid coils			Data sheets → 2 / 7.1-0
	Voltage	Part No.	Type
	24 V DC	<b>123 060</b>	<b>MSN1G-24DC-OD</b>
	110 V AC, 50 ... 60 Hz	<b>123 061</b>	<b>MSN1W-110AC-OD</b>
	230 V AC, 50 ... 60 Hz	<b>123 062</b>	<b>MSN1W-230AC-OD</b>

Ordering data – Plug sockets, plug sockets with cable					
	Voltage	Cable length [m]	Switching status display with LED	Part No.	Type
Plug socket without cable					Data sheets → 2 / 7.2-10
	–	–	–	<b>34 583</b>	<b>MSSD-C</b>
Plug socket without cable with insulation displacement technology					Data sheets → 2 / 7.2-10
	–	–	–	<b>192 748</b>	<b>MSSD-C-S-M16</b>
Plug socket with cable					Data sheets → 2 / 7.3-21
	24 V DC	2.5	■	<b>30 931</b>	<b>KMC-1-24DC-2,5-LED</b>
	24 V DC	5	■	<b>30 933</b>	<b>KMC-1-24DC-5-LED</b>
	24 V DC	10	■	<b>193 459</b>	<b>KMC-1-24DC-10-LED</b>
	Up to 230 V	2.5	–	<b>30 932</b>	<b>KMC-1-230AC-2,5</b>
	Up to 230 V	5	–	<b>30 934</b>	<b>KMC-1-230AC-5</b>

Ordering data – Illuminating seal			Data sheets → 2 / 7.4-1
	Voltage	Part No.	Type
	12 ... 24 V DC	<b>19 145</b>	<b>MC-LD-12-24DC</b>
	230 V DC/V AC	<b>19 146</b>	<b>MC-LD-230AC</b>

Ordering data – General accessories			
		Part No.	Type
Manual override tool			
	For N1 coils	<b>157 651</b>	<b>AHB-MD/MF/MV</b>
Inscription labels			
	Scope of delivery 20 labels in frame	<b>18 182</b>	<b>IBS-9x20</b>

 Core Range