

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

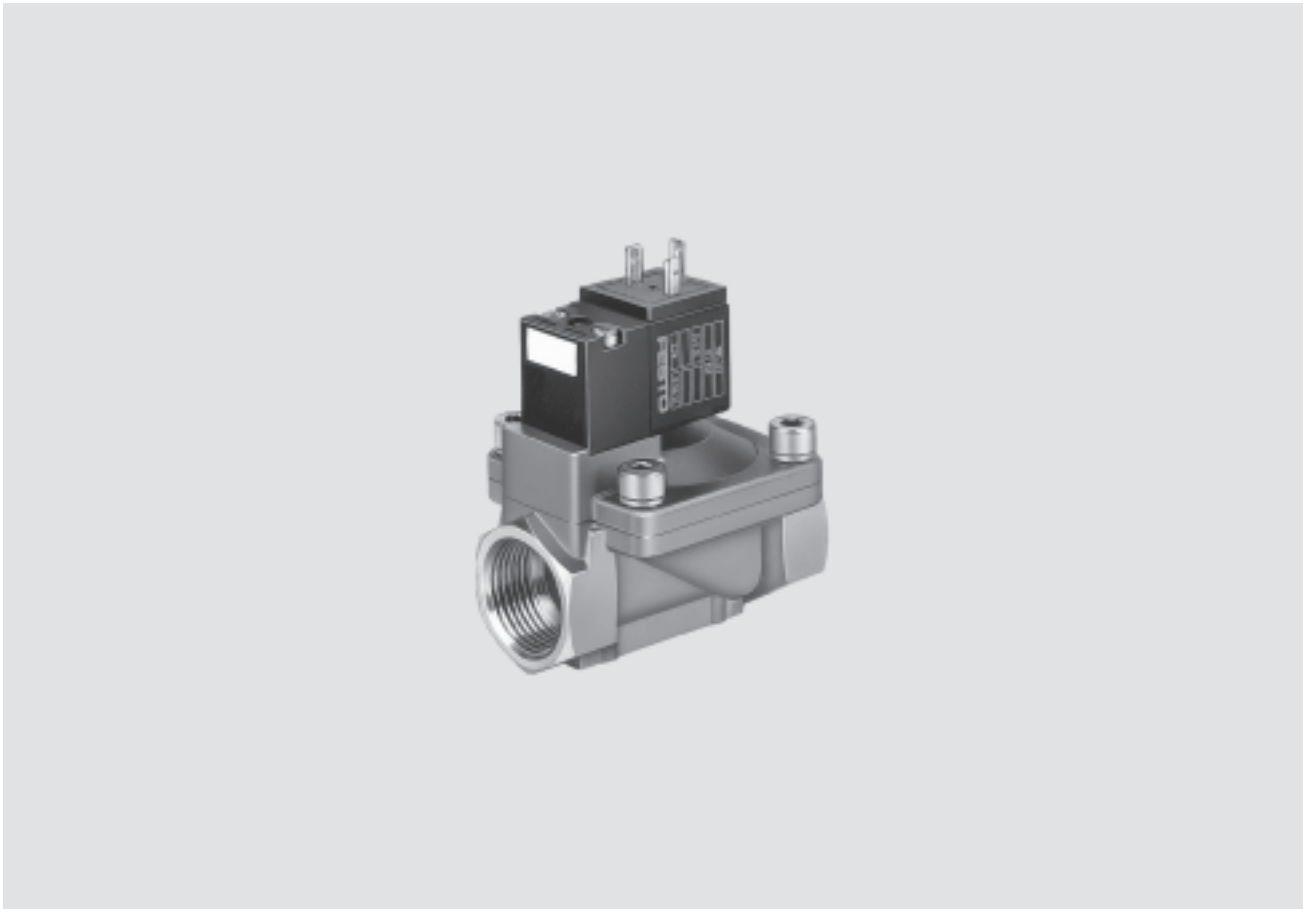
# Solenoid valves MN1H-MS, brass design

Key features



Application-optimised directional control valves  
Media and process valves

3.6

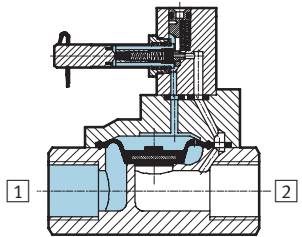



### Function

When the solenoid is energised, the valve is actuated.

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

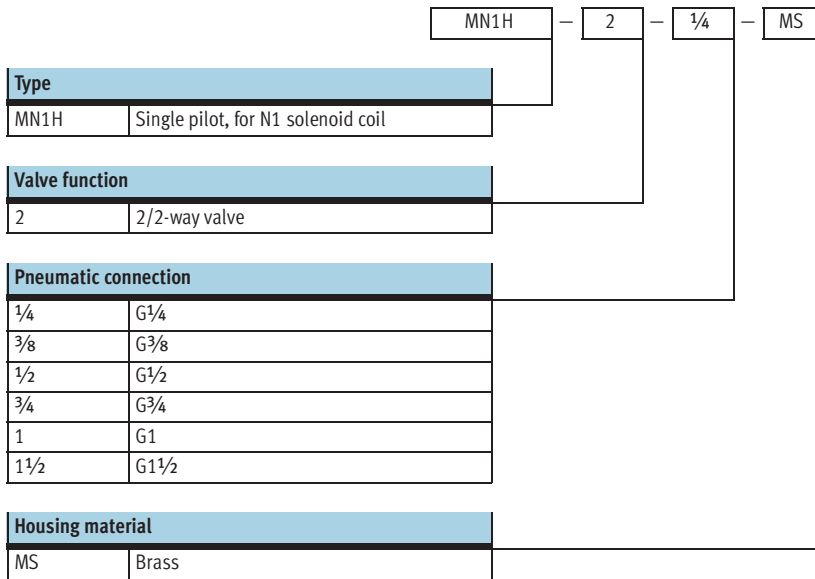
- 1 Supply port
- 2 Working or outlet line



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

# Solenoid valves MN1H-MS, brass design

Type codes

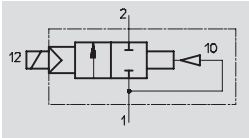



# Solenoid valves MN1H-MS, brass design


Technical data

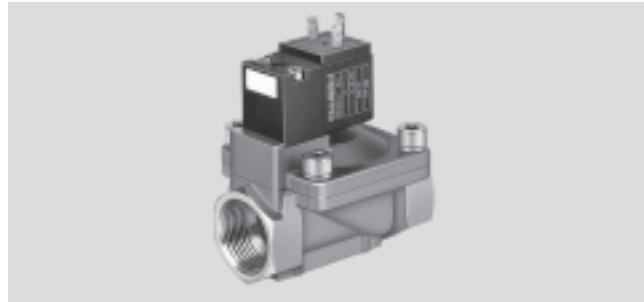
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Function



-  - 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					
	Diaphragm					
	Brass					
	Nitrile rubber					
Max. tightening torque <sup>1)</sup> [Nm]	35	60	105	200	380	850

1) Ports 1 and 2

-  - Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

## 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	⌀C
G1/4	48	M4	67	46	15	67	25	21	26.5	20	27
G3/8	48	M4	67	46	15	67	25	21	26.5	20	27
G1/2	48	M4	67	46	15	67	25	21	26.5	20	27
G3/4	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
G1 1/2	96	M6	91.5	70.5	31.5	140	59.5	38.3	26.5	30	58

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Ordering data			
Circuit symbol	Pneumatic connection	Part No.	Type
	G1/4	161 725	MN1H-2-1/4-MS
	G3/8	161 727	MN1H-2-3/8-MS
	G1/2	161 728	MN1H-2-1/2-MS
	G3/4	161 731	MN1H-2-3/4-MS
	G1	161 732	MN1H-2-1-MS
	G1 1/2	161 734	MN1H-2-1 1/2-MS

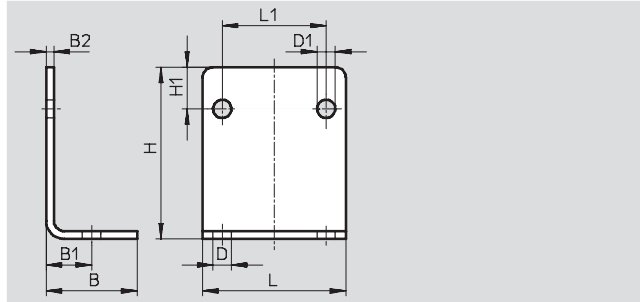
# Solenoid valves MN1H-MS, brass design

Accessories



## Mounting bracket HRM

Material:  
Galvanised steel



Dimensions and ordering data												
For valve with pneumatic connection	B	B1	B2	D ∅	D1 ∅	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


Application-optimised directional control valves  
Media and process valves


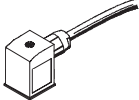
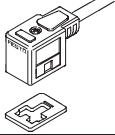
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# Solenoid valves MN1H-MS, brass design





Accessories

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

Ordering data – Plug sockets, plug sockets with cable				
	Voltage	Cable length [m]	Switching status display with LED	Part No. Type
Plug socket without cable				Technical data → 2 / 7.2-12
	–	–	–	34 583 MSSD-C
Plug socket without cable with insulation displacement technology				Technical data → 2 / 7.2-12
	–	–	–	192 748 MSSD-C-S-M16
Plug socket with cable				Technical data → 2 / 7.3-27
	24 V DC	2.5	■	30 931 KMC-1-24DC-2,5-LED
	24 V DC	5	■	30 933 KMC-1-24DC-5-LED
	24 V DC	10	■	193 459 KMC-1-24DC-10-LED
	Up to 230 V	2.5	–	30 932 KMC-1-230AC-2,5
	Up to 230 V	5	–	30 934 KMC-1-230AC-5

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

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

