

Solenoid valves MN1H-MS, brass design

FESTO



Characteristics

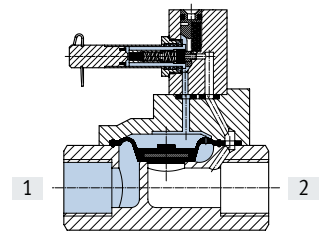


Function

When the power supply is switched on and the solenoid is energised, the valve is actuated.

The valve MN1H-2-1 1/2-MS has adjustable closing cushioning.

- [1] Supply port
- [2] Supply and output line



Note

The diaphragm opens briefly when pressure is connected.

Type codes

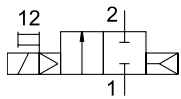
001	Series
MN1H	Single solenoid valve, for N1 solenoid coil, brass version



002	Valve function
2	2/2-way valve

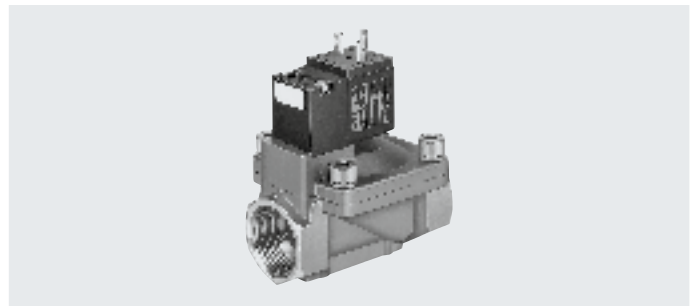
003	Connection, valve
1/4	G1/4
3/8	G3/8
1/2	G1/2
3/4	G3/4
1	G1
1 1/2	G1 1/2

004	Housing material
MS	Brass

Data sheet




-  - Flow rate
2000 ... 30500 l/min
-  - Voltage
24 V DC
110, 230 V AC



General technical data		G1/4	G3/8	G1/2	G3/4	G1	G1 1/2
Process valve connection							
Valve function		2/2-way, single solenoid					
Design		Diaphragm valve					
Sealing principle		Soft					
Actuation type		Electric					
Reset method		Pneumatic spring					
Type of control		Piloted					
Flow direction		Non-reversible					
Exhaust air function		Without throttling option					
Manual override		Non-detenting, detenting via accessory					
Type of mounting		In-line installation					
Mounting position		Any					
Nominal size	[mm]	13	13	13	20	25	40
Standard nominal flow rate	[l/min]	2000	2900	3100	10000	11500	30500
Product weight	[g]	450	450	400	1100	1000	2600
Max. tightening torque ¹⁾	[Nm]	35	60	105	200	380	850

1) Port 1 and 2

 **Note**
This product conforms to ISO 1179-1 and ISO 228-1

Operating and environmental conditions	
Medium	Filtered compressed air, grade of filtration 200 µm
Note on the operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Medium pressure	[bar] 0.5 ... 10
Ambient temperature	[°C] -10 ... +60
Temperature of medium	[°C] -10 ... +60

Valve switching times		
Process valve 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 ... 1000

Materials		
Solenoid valves		Material number
Housing	Brass	-
Screws	High-alloy stainless steel	1.4301

Data sheet

Electrical data

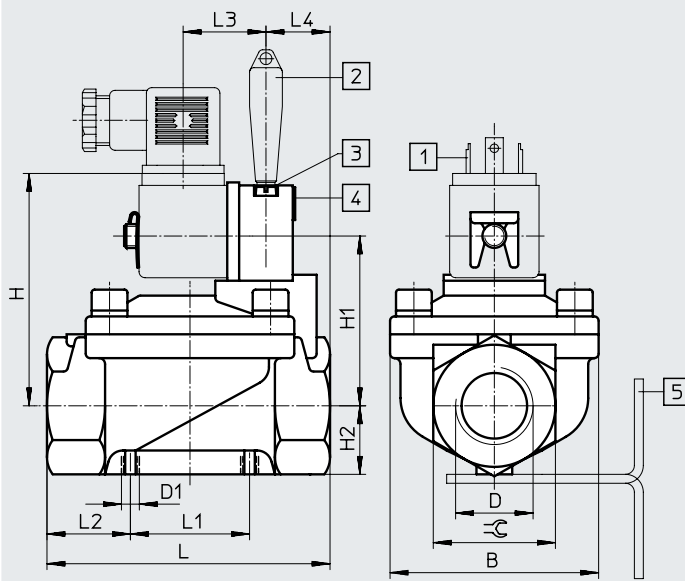
N1 solenoid coil

Electrical connection	Plug, square design to EN 175301-803, type A		
Operating voltage	Direct voltage	[V DC]	24
	AC voltage	[V AC]	110/230 (50 ... 60 Hz)
Characteristic coil data	Direct voltage	[W]	2.5
	AC voltage	[VA]	Pull: 5 Hold: 3.7
Degree of protection to EN 60 529	IP65 (with plug socket)		

Dimensions

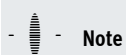
Download CAD data → www.festo.com

2/2-way valve



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

Process valve connection D	B	D1	H	H1	H2	L	L1	L2	L3	L4	⌀
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 to ISO 1179-1 and ISO 228-1

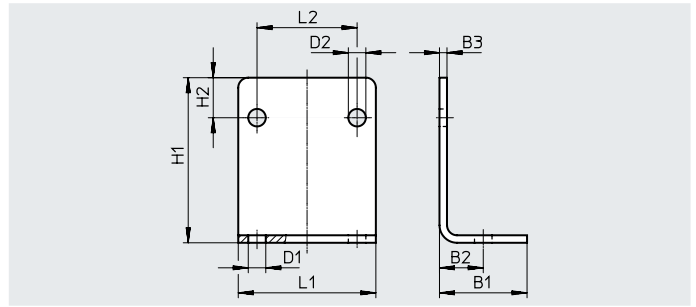
Ordering data

Circuit symbol	Process valve connection	Part no.	Type
	G1/4	161725	MN1H-2-1/4-MS
	G3/8	161727	MN1H-2-3/8-MS
	G1/2	161728	MN1H-2-1/2-MS
	G3/4	161731	MN1H-2-3/4-MS
	G1	161732	MN1H-2-1-MS
	G1 1/2	161734	MN1H-2-1 1/2-MS

Accessories

Mounting bracket HRM

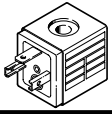
Material:
Galvanised steel

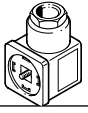



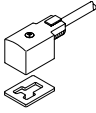
Dimensions and ordering data

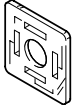
For valve with pneumatic connection	B	B1	B2	D ∅	D1 ∅	H	H1	L	L1	Weight [g]	Part no.	Type
G1/4 ... G1/2	25	12.5	2	6	5	37	10	40	25	39	9769	HRM-1
G3/4 ... G1	35	17.5	3	7	7	66	16	55	40	130	9770	HRM-2
G1 1/2	47	23.5	3	9	7	87	23	75	59.5	246	9771	HRM-3


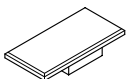
Accessories

Ordering data – Solenoid coils		Data sheets → Internet: msn1	
	Voltage	Part no.	Type
	24 V DC	123060	MSN1G-24DC-OD
	110 V AC, 50 ... 60 Hz	123061	MSN1W-110AC-OD
	230 V AC, 50 ... 60 Hz	123062	MSN1W-230AC-OD

Ordering data – Plug sockets, connecting cables					
	Voltage	Cable length [m]	Switching status indication via LED	Part no.	Type
Plug socket without cable					Data sheets → Internet: mssd-c
	–	–	–	34583	MSSD-C
Plug socket without cable with insulation displacement technology					Data sheets → Internet: mssd-c
	–	–	–	192748	MSSD-C-S-M16

Ordering data – Connecting cables					
	Voltage	Cable length [m]	Switching status indication via LED	Part no.	Type
Connecting cables					Data sheets → Internet: kmc1
	24 V DC	2.5	■	30931	KMC-1-24DC-2.5-LED
	24 V DC	5	■	30933	KMC-1-24DC-5-LED
	24 V DC	10	■	193459	KMC-1-24DC-10-LED
	Up to 230 V	2.5	–	30932	KMC-1-230AC-2.5
	Up to 230 V	5	–	30934	KMC-1-230AC-5

Ordering data – Illuminating seals		Data sheets → Internet: mc-ld	
	Voltage	Part no.	Type
	12 ... 24 V DC	19145	MC-LD-12-24DC
	230 V DC/V AC	19146	MC-LD-230AC

Ordering data – General accessories			
		Part no.	Type
Manual override			
	For N1 coils	157651	AHB-MD/MF/MV
Inscription labels			
	Scope of delivery 20 labels in frame	18182	IBS-9x20