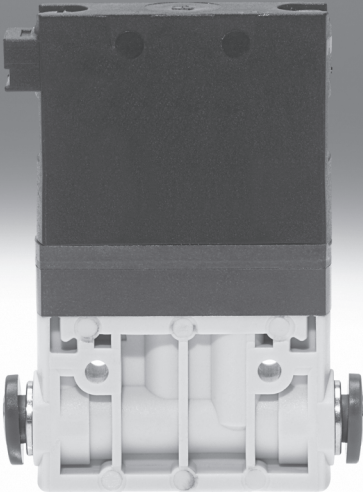


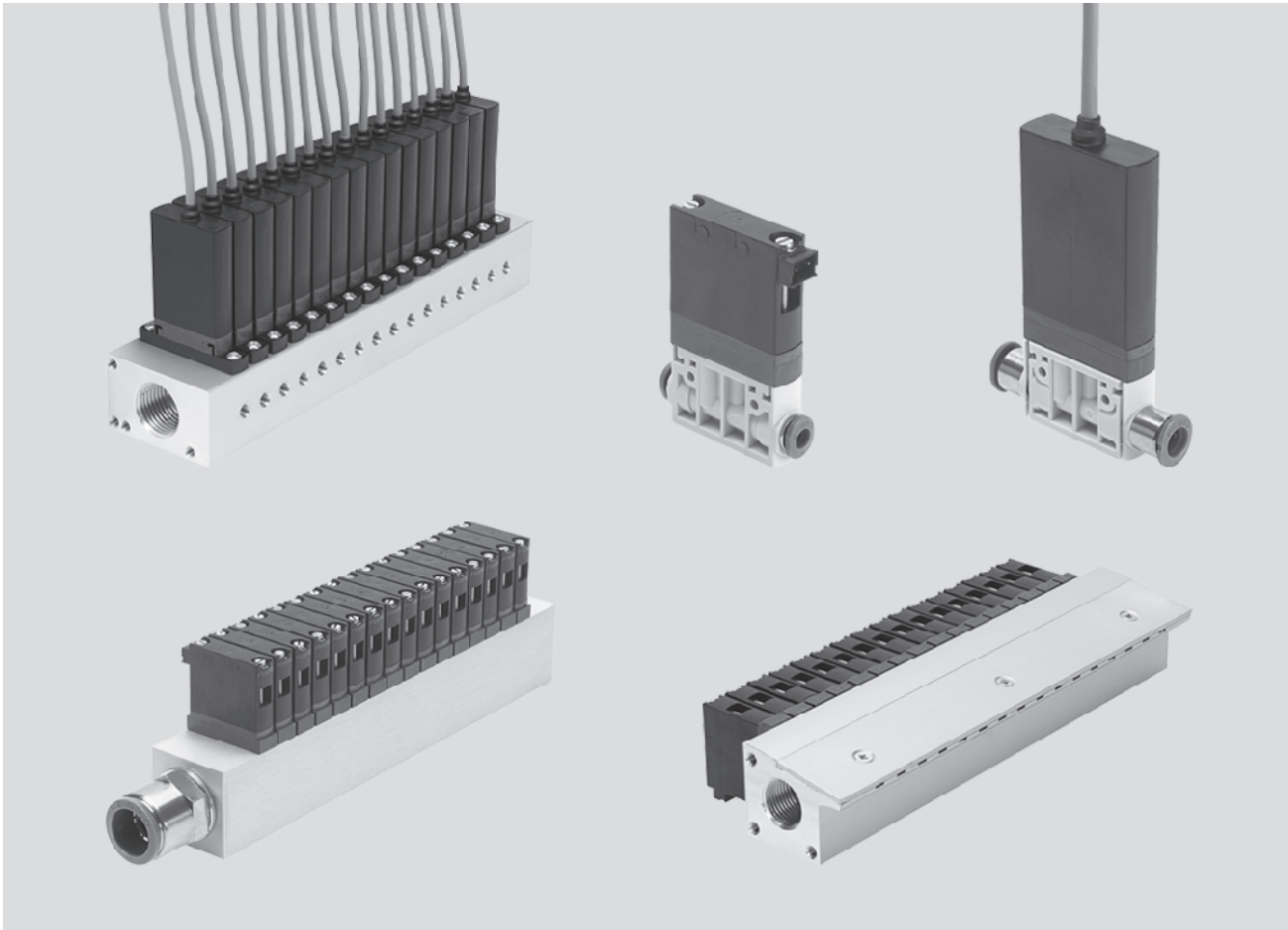
Solenoid valves MHJ, fast-switching valves



Solenoid valves MHJ, fast-switching valves

Key features

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Innovative

- Individual electrical connection via connecting cable and square plug sockets with integrated control electronics for MHJ9 or via moulded-in cable for MHJ10, control electronics are contained in the valve
- Manifold rail with air nozzle outlet for MHJ9
- Switching times of less than one millisecond
- Signal control range 3 ... 30 V DC

Versatile

- Modular system offering a range of configuration options
- Identical basic valves for individual valve and manifold assembly
- Flexible air supply with air connection at both ends on the manifold rails
- Actuation of the MHJ9 valves without plug socket with cable MHJ9-KMH subject to consultation with Festo

Reliable

- Reliability of service thanks to valves that can be replaced quickly and easily
- No electrical plug connectors with MHJ10 thanks to integrated control electronics
- Up to 5 billion switching cycles

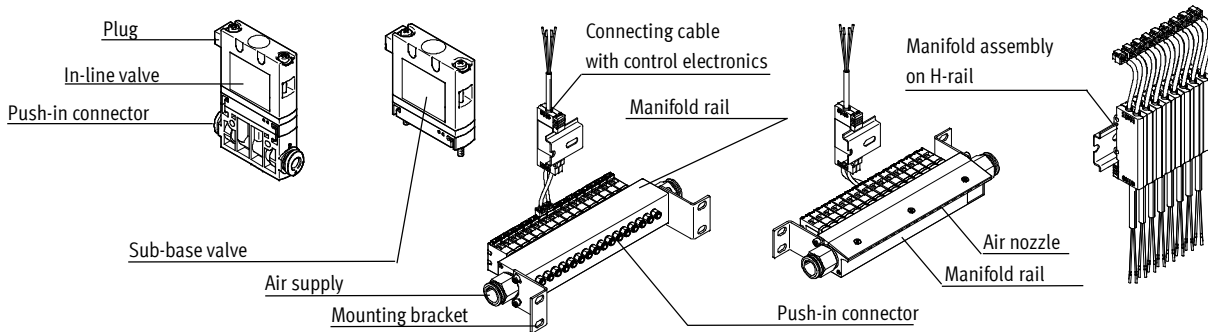
Easy to mount

- Solid wall mounting or H-rail mounting of the connecting cables with MHJ9
- Manifold rail for MHJ9 with connecting cable block on H-rail can be mounted directly in the application

Solenoid valves MHJ, fast-switching valves

Key features

MHJ9



In-line valve

- Integrated push-in connector
- Electrical connection IP40
- Modular design

Valve manifold with individual outputs

- Air supply at both ends
- Mounting bracket assembly in 4 directions
- Stable manifold rail

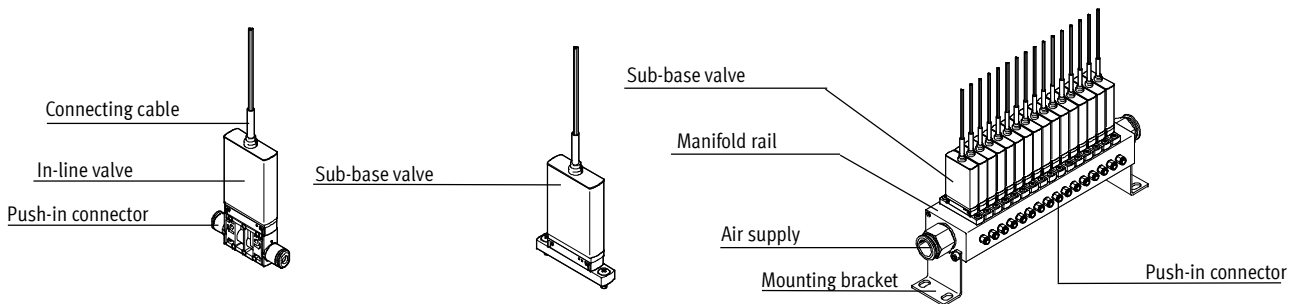
Valve manifold with air nozzles

- Air supply at both ends
- Mounting bracket assembly in 2 directions
- Accessible air ducts

Connecting cable with control electronics for two valves

- Individual mounting or on H-rail

MHJ10



In-line valve

- Integrated push-in connector
- Electrical connection with moulded-in connecting cable, IP65
- Modular design

Valve manifold with individual outputs

- Air supply at both ends
- Stable manifold rail

Integrated control electronics

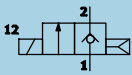
- Mounting bracket assembly in 2 directions

Integrated control electronics

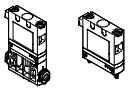
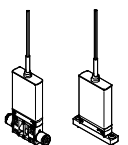
- Compact design
- Quick installation

Solenoid valves MHJ, fast-switching valves

Product range overview

Function	Design	Operating voltage [V DC]	Type	Electrical connection	Switching time ¹⁾		→ Page/ Internet
					Off	On	
2/2-way valve 	LF = Standard nominal flow rate 50 l/min						
	In-line valve	12 ... 53	MHJ9	Plug	0.9	0.7	8
		24	MHJ10	With moulded-in cable	1	0.8	16
	Sub-base valve	12 ... 53	MHJ9	Plug	0.9	0.7	8
		24	MHJ10	With moulded-in cable	1	0.8	16
	MF = Standard nominal flow rate 100 l/min						
	In-line valve	12 ... 53	MHJ9	Plug	0.4	0.8	8
		24	MHJ10	With moulded-in cable	0.4	0.8	16
	Sub-base valve	12 ... 53	MHJ9	Plug	0.4	0.8	8
		24	MHJ10	With moulded-in cable	0.4	0.8	16
	HF = Standard nominal flow rate 160 l/min						
	In-line valve	12 ... 53	MHJ9	Plug	0.5	1	8
		24	MHJ10	With moulded-in cable	0.6	1.2	16
	Sub-base valve	12 ... 53	MHJ9	Plug	0.5	1	8
		24	MHJ10	With moulded-in cable	0.6	1.2	16
	HF/LP = Standard nominal flow rate 160 l/min						
	In-line valve	12 ... 53	MHJ9	Plug	0.4	1	8
		24	MHJ10	With moulded-in cable	0.5	1	16
	Sub-base valve	12 ... 53	MHJ9	Plug	0.4	1	8
		24	MHJ10	With moulded-in cable	0.5	1	16

1) Switching time at 24 V DC and 4 bar

Mounting options			
Design		In-line valve	Sub-base valve
MHJ9 with plug			
	Direct mounting	■	-
	Manifold assembly	-	■
MHJ10 with moulded-in cable			
	Direct mounting	■	-
	Manifold assembly	-	■

Solenoid valves MHJ, fast-switching valves

Type codes

MHJ 10 - S - 2,5 - QS-4 - MF

Valve series

MHJ	Fast-switching valves
-----	-----------------------

Width

9	9 mm
10	10 mm

Control electronics

-	Without integrated control electronics (only with MHJ9)
S	With integrated control electronics (only with MHJ10)

Cable length for MHJ10

0,35	0.35 m
2,5	2.5 m

Push-in connector for in-line valves

-	Sub-base valves
QS-4	Push-in connector for tubing O.D. 4 mm
QS-6	Push-in connector for tubing O.D. 6 mm

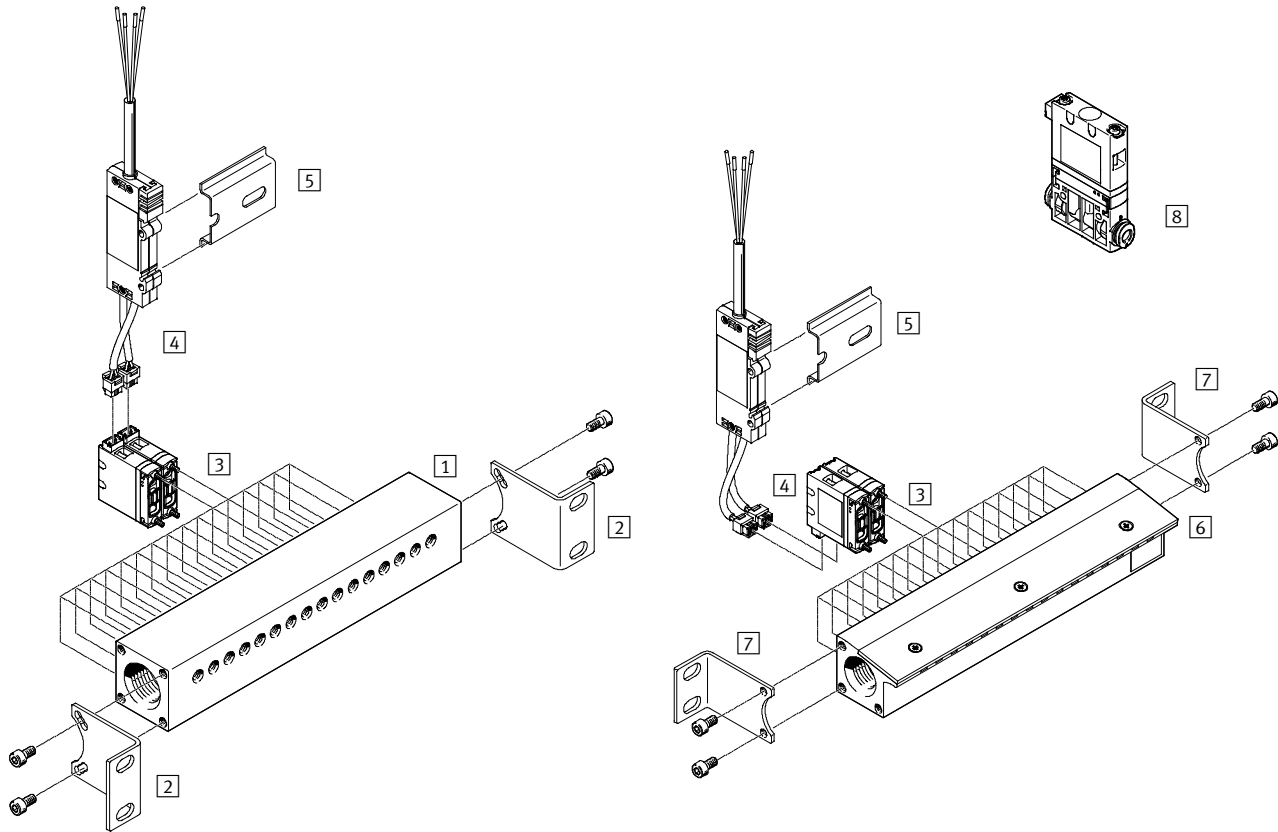
Flow class

LF	Low flow (50 l/min)
MF	Mid flow (100 l/min)
HF	High flow (160 l/min)
HF/LP	High flow/low pressure (160 l/min, 0.5 ... 4 bar)

Solenoid valves MHJ9, fast-switching valves

Peripherals overview

Valve manifold design

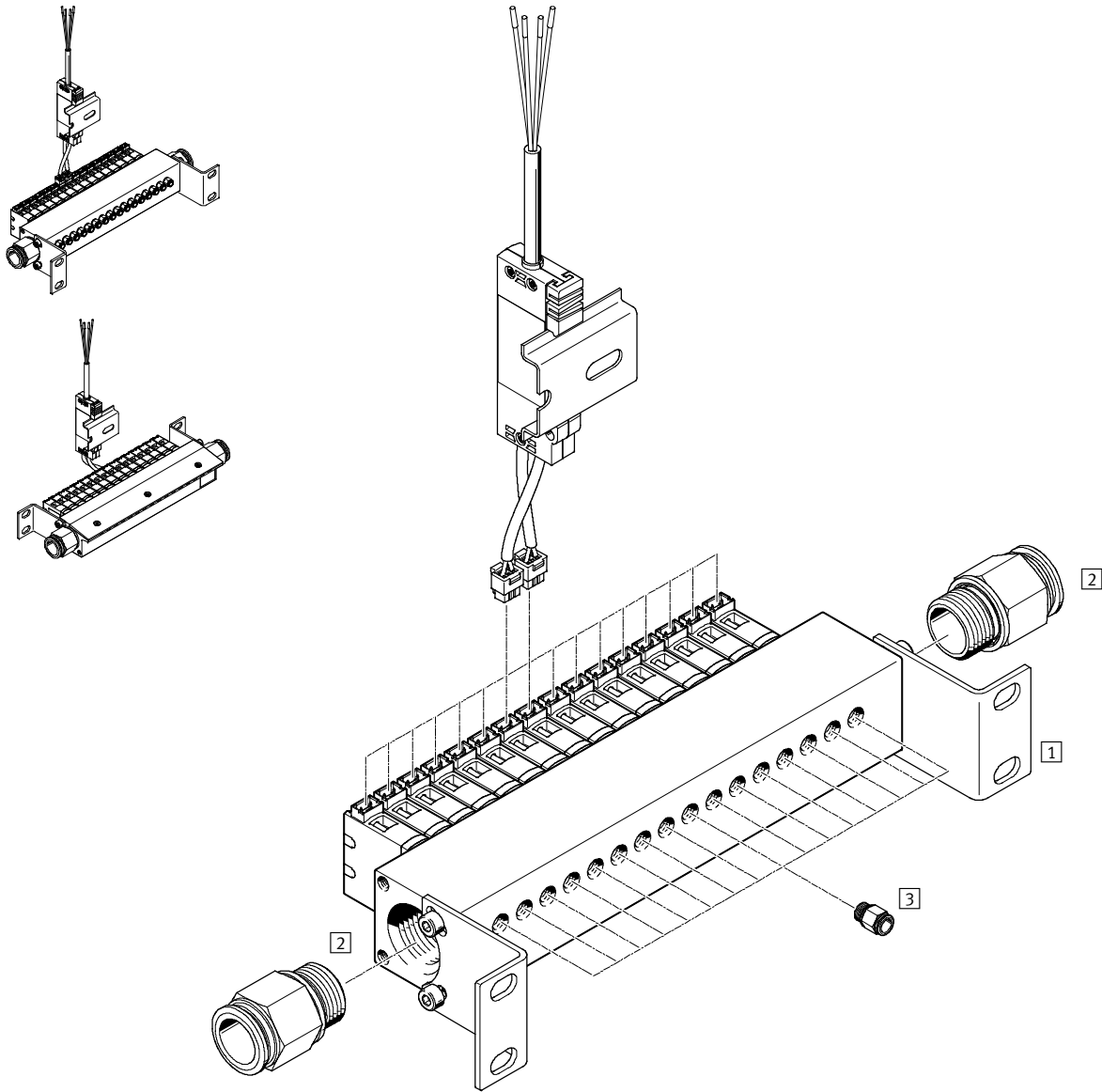


	Type	Brief description	→ Page/Internet	
1	Manifold rail	MHJ9-P16	With 16 valve positions	23
2	Mounting kit	MHJ-HW1	Consisting of 2 mounting brackets and 4 socket head screws	23
3	Sub-base valve	MHJ9	2/2-way solenoid valve	22
4	Connecting cable	MHJ9-KMH	With control electronics for 2 solenoid valves	22
5	H-rail	NRH-35-2000	2 m long	22
6	Manifold rail	MHJ9-PN16	With 16 valve positions	23
7	Mounting kit	MHJ-HW2	Consisting of 2 mounting brackets and 4 socket head screws	23
8	In-line valve	MHJ9	2/2-way solenoid valve	22

Solenoid valves MHJ9, fast-switching valves

Peripherals overview

Valve manifold with accessories



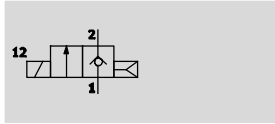
	Type	Brief description	→ Page/Internet
1	Manifold rail	MHJ9-P16 With mounting kit MHJ-HW1	23
2	Push-in fitting	QS For air supply 1	23
3	Push-in fitting	QS For valve output 2	23

Solenoid valves MHJ9, fast-switching valves

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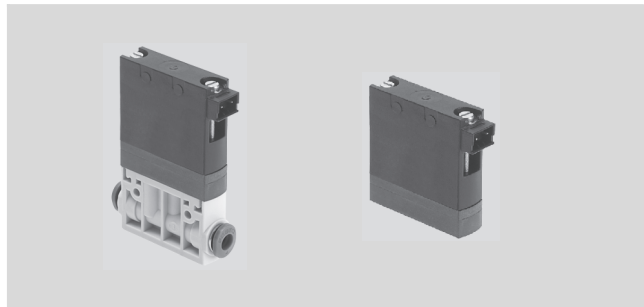
Technical data

Function



- - Width
9 mm

- - Temperature range
-5 ... +60 °C



General technical data									
Type	In-line valve MHJ9-QS				Sub-base valve MHJ9				
	LF	MF	HF	HF/LP	LF	MF	HF	HF/LP	
Valve function	2/2-way valve, single solenoid, closed								
Design	Poppet valve without mechanical spring return								
Sealing principle	Hard								
Note on operation	Do not operate without flow rate								
Service life in billions of switching cycles ¹⁾	5	5	0.5	0.5	5	5	0.5	0.5	
Actuation type	Electric								
Reset method	Pneumatic spring								
Type of control	Direct								
Direction of flow	Non-reversible								
Mounting position	Any								
Width [mm]	9 ²⁾								
Grid dimension [mm]	9.5								
Standard nominal flow rate ³⁾	[l/min]	50	100	160	160	50	100	160	160
C value	[l/sbar]	0.2	0.4	0.66	0.66	0.2	0.4	0.66	0.66
b value		0.5	0.38	0.36	0.36	0.5	0.38	0.36	0.36
Type of mounting	In-line installation or via through-holes				On sub-base				
Pneumatic connection 1 and 2	QS4	QS4	QS6	QS6	Sub-base M7				
Product weight [g]	30				25				
Max. tightening torque of valve mounting [Nm]	-				0.28				

1) The long service life of the valves can only be achieved with the "hard" sealing principle, which, however, results in minor leakage when the valve is closed.

2) Min. permissible grid dimension 9.5 mm

3) The specified flow rate refers to the valve without sub-base. The maximum flow rate that can be achieved may deviate from the specified value when the valve is mounted on a sub-base.

Operating and environmental conditions				
Type	LF	MF	HF	HF/LP
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]			
Note on operating/pilot medium	Operation with lubricated medium not possible			
Operating pressure [bar]	+0.5 ... +8	+0.5 ... +6	+0.5 ... +6	+0.5 ... +4
Ambient temperature [°C]	-5 ... +60			
With manifold assembly [°C]	Max. +45	Max. +45	-	Max. +45
Temperature of medium [°C]	-5 ... +60			
Storage temperature [°C]	-20 ... +50			
Corrosion resistance class CRC	2 ¹⁾			
Note on materials	RoHS-compliant			

1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Solenoid valves MHJ9, fast-switching valves

Technical data

Electrical data in combination with connecting cable MHJ9-KMH					
Type		LF	MF	HF	HF/LP
Operating voltage range ¹⁾	[V DC]	12 ... 53			
Duty cycle ²⁾	[%]	100	100	–	100
Operating conditions to DIN VDE 0580 ²⁾	With individual valve	–	–	S3 50% 20 min	–
	With manifold assembly	–	–	S3 15% 20 min	–
Electrical connection		2-pin, plug KMH			
Protection class to EN 60529		IP40			

1) If there is a current limit, during the switching operation it must be set to at least 1.7 A for LF, MF and HF/LP valves and to at least 1.85 A for HF valves.

2) Air must flow through the valve continuously.



Note

The specified values apply exclusively when using the connecting cable MHJ9-KMH.

Ask your technical consultant about other actuation options for the MHJ valves.

Switching times ¹⁾ and frequencies						
Type		LF	MF	HF	HF/LP	
Maximum switching frequency	[Hz]	500	1,000	500	500	
Switching times at 12 V DC						
Pressure 4 bar	Switching time on	[ms]	1	1.1	1.4	1.3
	Switching time off	[ms]	0.9	0.4	0.6	0.5
Switching times at 24 V DC						
Pressure 0.5 bar	Switching time on	[ms]	0.7	0.7	0.9	0.8
	Switching time off	[ms]	0.9	0.5	0.7	0.5
Pressure 4 bar	Switching time on	[ms]	0.7	0.8	1	1
	Switching time off	[ms]	0.9	0.4	0.5	0.4
Pressure 6 bar	Switching time on	[ms]	–	0.9	1.3	–
	Switching time off	[ms]	–	0.4	0.5	–
Pressure 8 bar	Switching time on	[ms]	0.8	–	–	–
	Switching time off	[ms]	0.9	–	–	–
Switching times at 48 V DC						
Pressure 4 bar	Switching time on	[ms]	0.6	0.6	0.8	0.8
	Switching time off	[ms]	0.8	0.4	0.4	0.4

1) Tolerance ±15%



Note

The maximum switching frequency that can be achieved decreases as the temperature of the valve increases or as the operating and ambient temperature increases.

The ambient temperature must therefore be limited accordingly so that the maximum switching frequency can be reached.

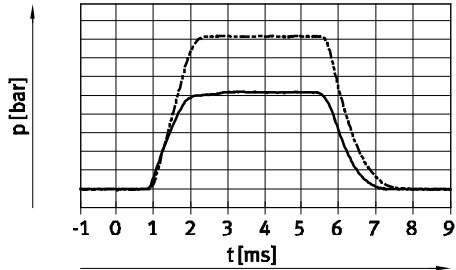
Solenoid valves MHJ9, fast-switching valves

Technical data



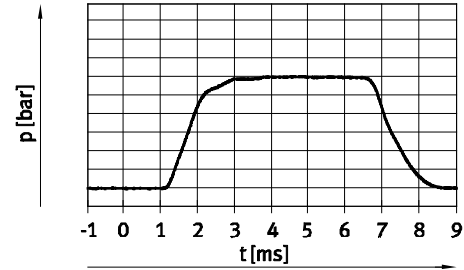
Switching behaviour – Operating pressure

Type LF, MF and HF/LP



— 4 bar
- - - 6 bar

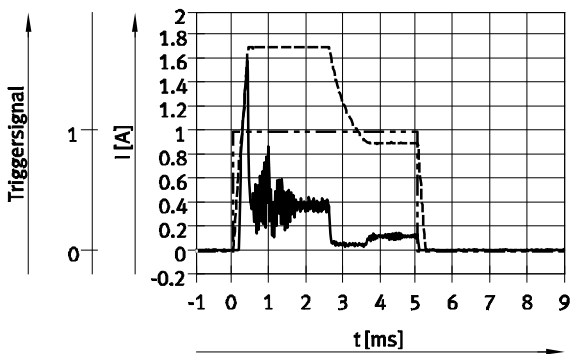
Type HF



— 4 bar

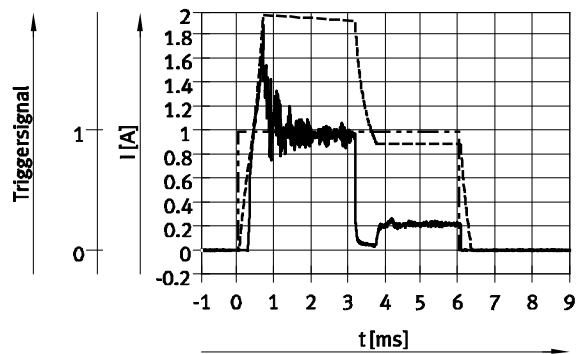
Switching behaviour – Current/voltage curve

Type LF, MF and HF/LP



— Current in the supply line at 24 V
- - - Coil current
- · - · - Trigger signal

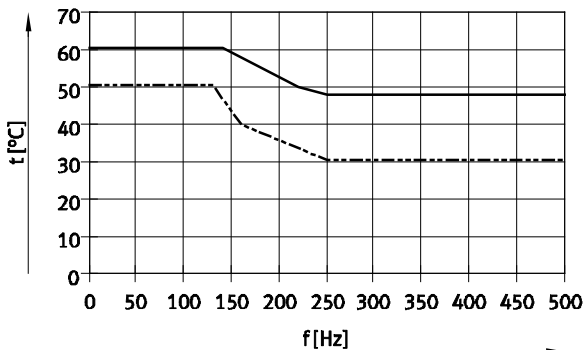
Type HF



— Current in the supply line at 24 V
- - - Coil current
- · - · - Trigger signal

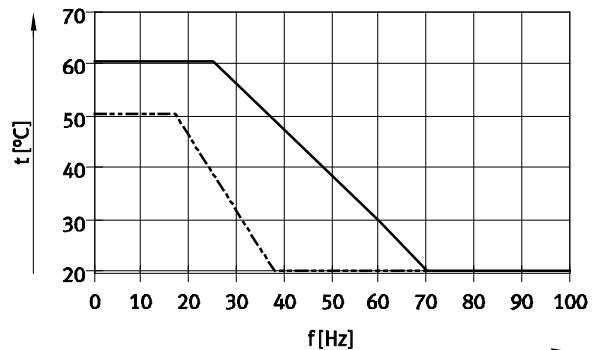
Maximum permissible ambient temperature as a function of switching frequency

Type LF, MF and HF/LP



— Individual valve, 4 bar
- - - Manifold assembly/sub-base valve, 4 bar

Type HF



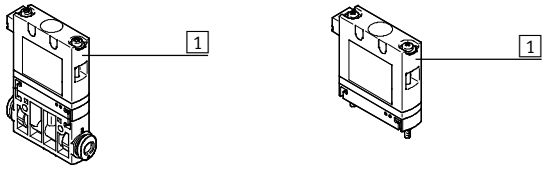
— Individual valve, 4 bar
- - - Manifold assembly/sub-base valve, 4 bar

Solenoid valves MHJ9, fast-switching valves

Technical data



Materials

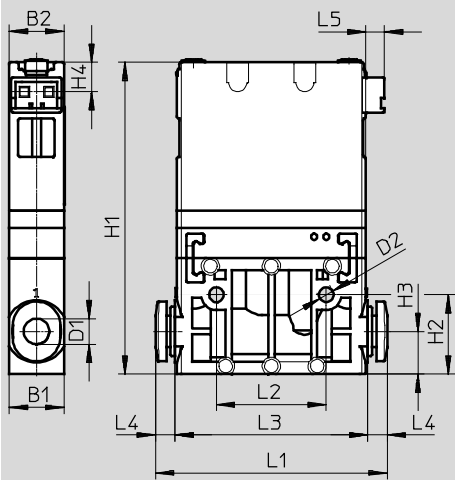


1	Housing	Reinforced polyamide
-	Seals	HNBR
-	Screws	Steel
-	Manifold rail	Anodised wrought aluminium alloy

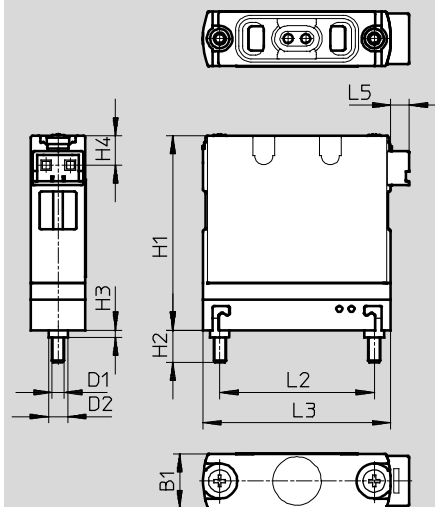
Dimensions

Download CAD data → www.festo.com

Semi in-line valve



Sub-base valve



Type	B1	B2	D1	D2	H1	H2	H3	H4	L1	L2	L3	L4	L5
MHJ9-QS-4	9	9	4	2.4	51	13	7	5	38	1	32	3.2	3
MHJ9-QS-6	10	9	6						51	8		9.5	

Type	B1	D1	D2	H1	H2	H3	H4	L2	L3	L5
MHJ9	9	M2	3	32	5.3	1.2	5	25.5	31	3

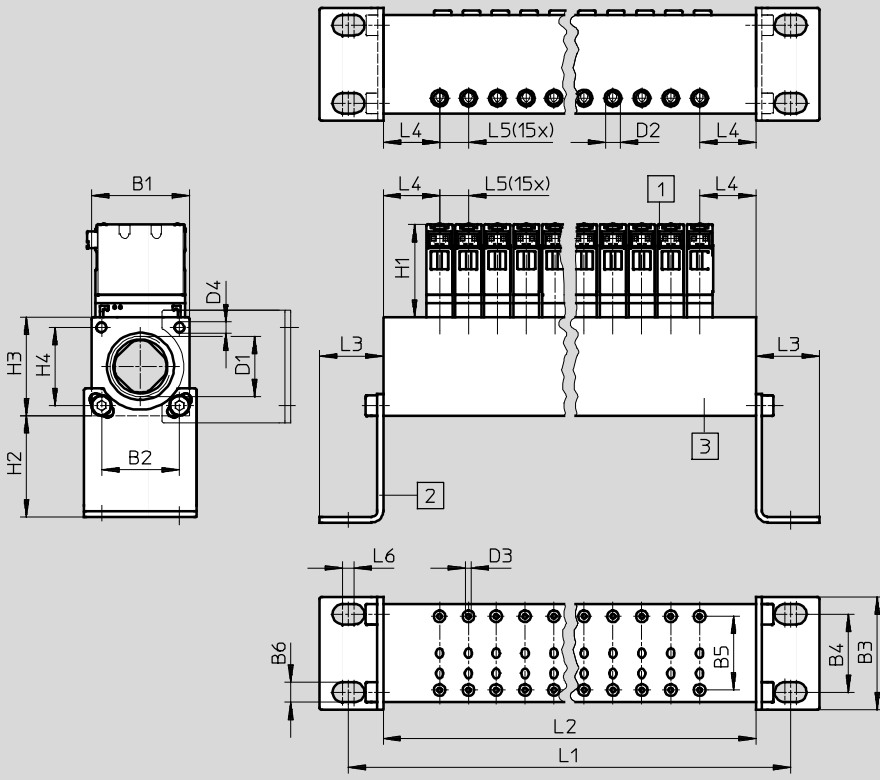
Solenoid valves MHJ9, fast-switching valves

Technical data

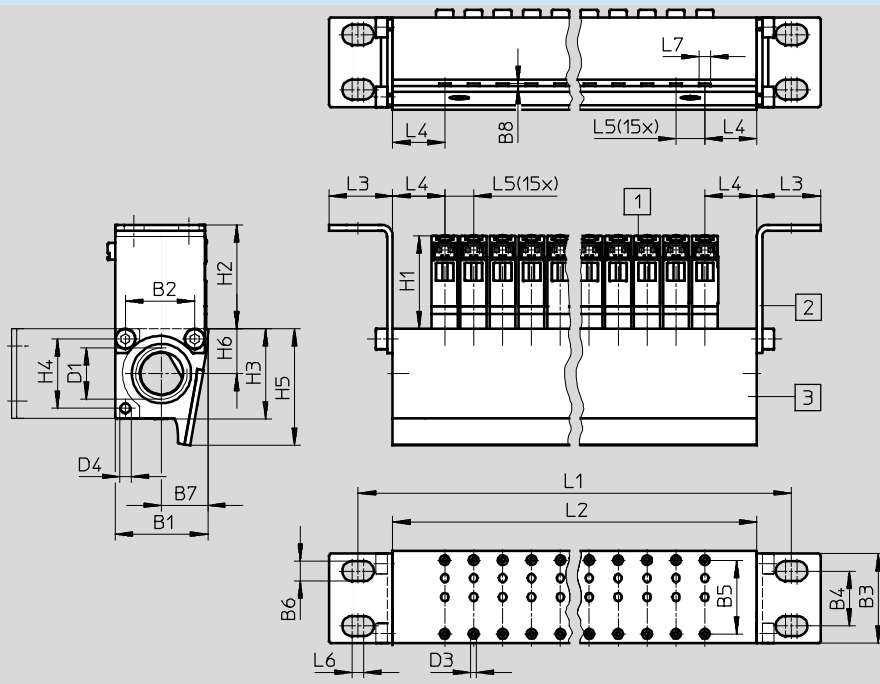
Dimensions

Download CAD data → www.festo.com

Manifold mounting on MHJ9-P16 (with pneumatic connection M7)



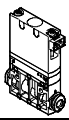

Manifold mounting on MHJ9-PN16 (with air nozzles)

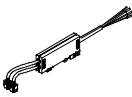
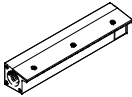
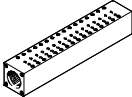
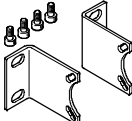
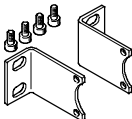




Type	B1	B2	B3	B4	B5	B6	B7	B8	D1	D2	D3	D4	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	L6	L7
MHJ9-P16	34	27	39	27	26	7	-	-	G $\frac{1}{2}$	M7	M2	M4	32	35	34	27	-	-	213	189	22	20	10	4	-
MHJ9-PN16	32	24	31	19	26	7	15	1	G $\frac{3}{8}$	-	M2	M4	32	36	31	24	40	16	210	186	22	18	10	4	5

Solenoid valves MHJ9, fast-switching valves

Technical data

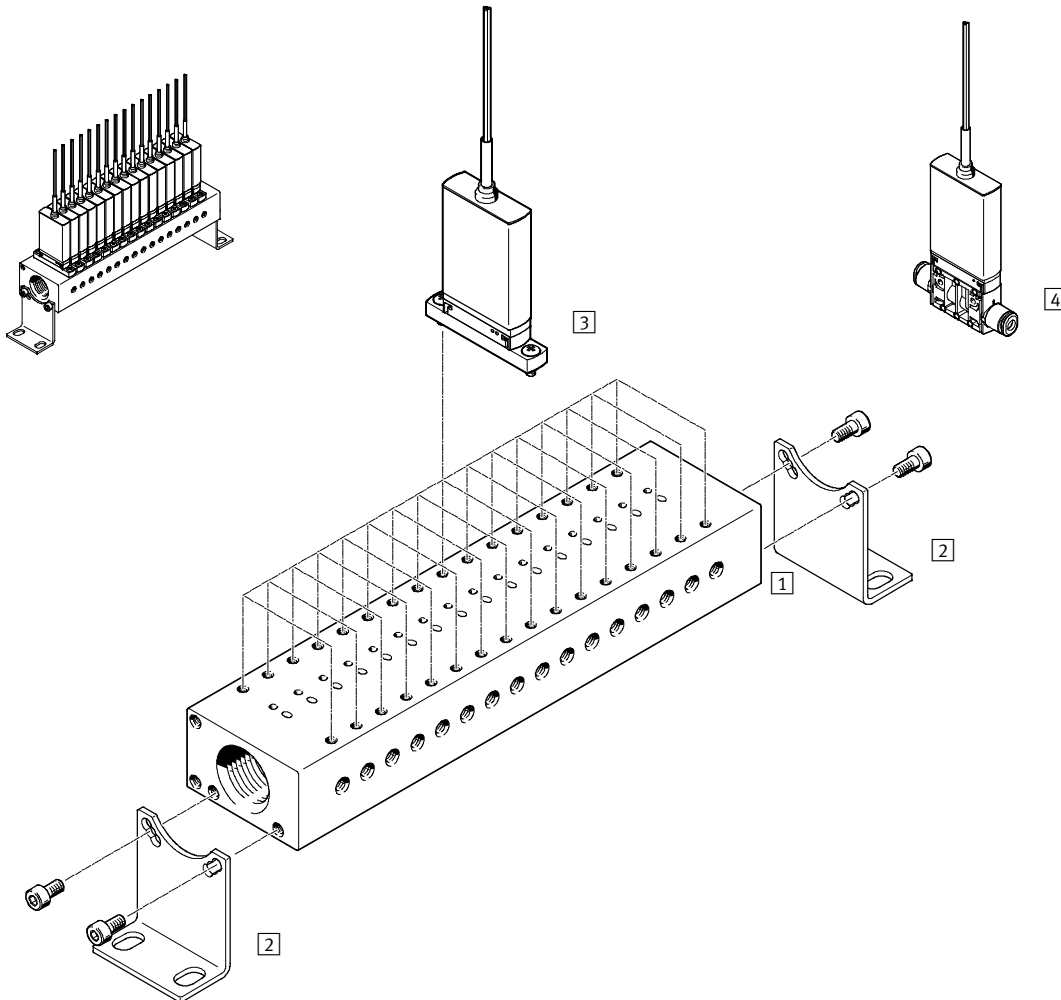
Ordering data					
	Description	Standard nominal flow rate	Operating pressure	Part No.	Type
In-line valve without connecting cable					
	2/2-way solenoid valve	50 l/min	+0.5 ... +8 bar	572079	MHJ9-QS-4-LF
		100 l/min	+0.5 ... +6 bar	553118	MHJ9-QS-4-MF
		160 l/min	+0.5 ... +6 bar	567790	MHJ9-QS-6-HF
			+0.5 ... +4 bar	567793	MHJ9-QS-6-HF/LP
Sub-base valve without connecting cable					
	2/2-way solenoid valve	50 l/min	+0.5 ... +8 bar	572078	MHJ9-LF
		100 l/min	+0.5 ... +6 bar	553115	MHJ9-MF
		160 l/min	+0.5 ... +6 bar	553117	MHJ9-HF
			+0.5 ... +4 bar	567792	MHJ9-HF/LP

Ordering data – Accessories					
	Description			Part No.	Type
Connecting cable with control electronics for 2 valves					
	Mounting on H-rail, for static applications	For LF, MF and HF/LP valves	0.5 m	553121	MHJ9-KMH-0,5-MF
			2.5 m	565519	MHJ9-KMH-2,5-MF
		For HF valves	0.5 m	562170	MHJ9-KMH-0,5-HF
			2.5 m	567505	MHJ9-KMH-2,5-HF
Manifold rail					
	For 16 valves MHJ9, without mounting bracket, with air nozzles			553123	MHJ9-PN16
	For 16 valves MHJ9, without mounting bracket, with pneumatic connection M7			553125	MHJ9-P16
Mounting kit					
	For manifold rail MHJ9-P16, consisting of 2 mounting brackets and 4 socket head screws M4x8 DIN912			565455	MHJ-HW1
	For manifold rail MHJ9-PN16, consisting of 2 mounting brackets and 4 socket head screws M4x8 DIN912			565456	MHJ-HW2
Push-in fitting for valve output, port 2					
	Connecting thread M7 for tubing O.D.	For manifold rail with LF or MF valves	4 mm (10 pieces)	153319	QSM-M7-4-I
		For manifold rail with HF or HF/LP valves	6 mm (10 pieces)	153321	QSM-M7-6-I
Push-in fitting for air supply, port 1					
	Connecting thread G $\frac{1}{2}$ for tubing O.D.		12 mm (1 piece)	186104	QS-G$\frac{1}{2}$-12
			16 mm (1 piece)	186105	QS-G$\frac{1}{2}$-16
	Connecting thread G $\frac{3}{8}$ for tubing O.D.		12 mm (10 pieces)	186103	QS-G$\frac{3}{8}$-12
			16 mm (10 pieces)	186347	QS-G$\frac{3}{8}$-16

Solenoid valves MHJ10, fast-switching valves

Peripherals overview

Individual valve, valve manifold design

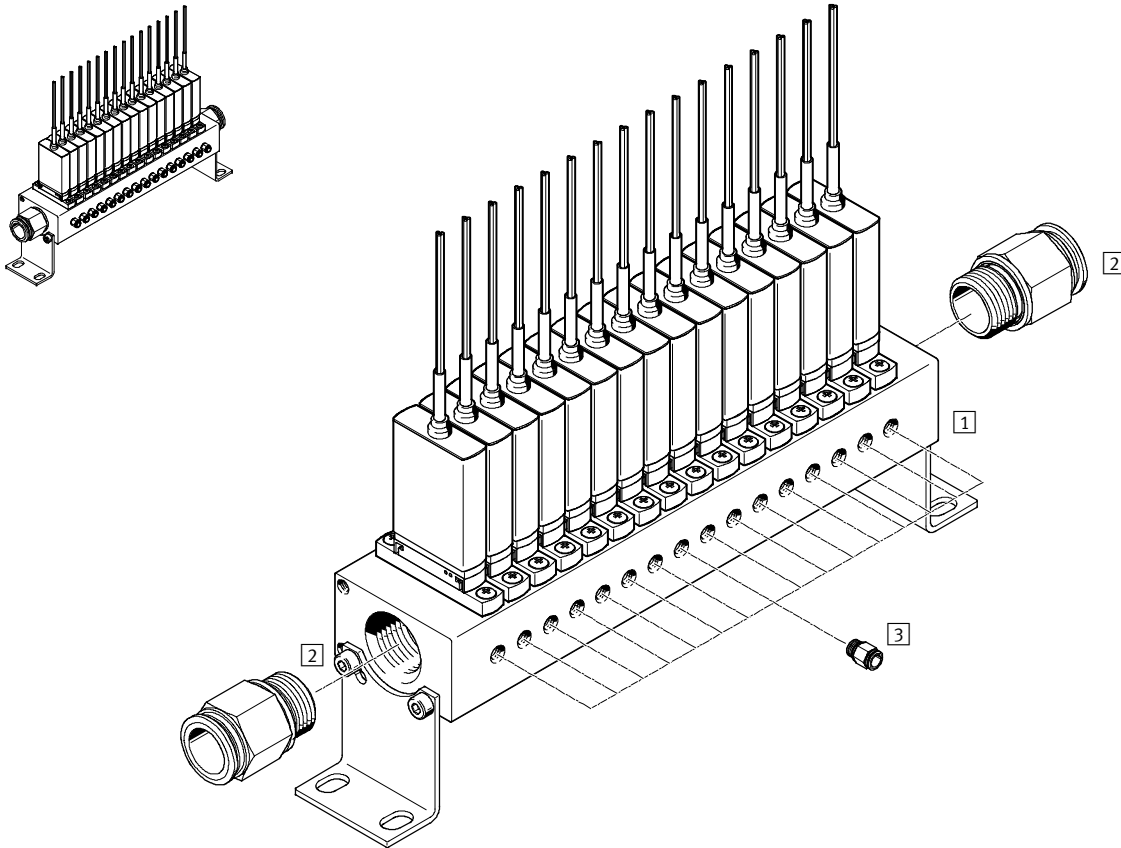


	Type	Brief description	→ Page/Internet
1	Manifold rail	MHJ10-P16 With 16 valve positions	23
2	Mounting kit	MHJ-HW1 Consisting of 2 mounting brackets and 4 socket head screws	23
3	Sub-base valve	MHJ10 2/2-way solenoid valve	22
4	In-line valve	MHJ10 2/2-way solenoid valve	22

Solenoid valves MHJ10, fast-switching valves

Peripherals overview

Valve manifold with accessories



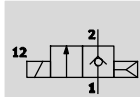
	Type	Brief description	→ Page/Internet
1	MHJ10-P16	With mounting kit MHJ-HW1	23
2	QS	For air supply 1	23
3	QS	For valve output 2	23

Solenoid valves MHJ10, fast-switching valves

FESTO

Technical data

Function



- - Width
10 mm
- - Flow rate
Max. 160 l/min
- - Voltage
24 V DC



General technical data								
Type	In-line valve MHJ10-S...QS				Sub-base valve MHJ10-S			
	LF	MF	HF	HF/LP	LF	MF	HF	HF/LP
Valve function	2/2-way valve, single solenoid, closed							
Design	Poppet valve without mechanical spring return							
Sealing principle	Hard							
Note on operation	Do not operate without flow rate							
Service life in billions of switching cycles ¹⁾	5	5	0.5	0.5	5	5	0.5	0.5
Actuation type	Electric							
Reset method	Pneumatic spring							
Type of control	Direct							
Direction of flow	Non-reversible							
Mounting position	Any							
Width [mm]	10 ²⁾							
Grid dimension [mm]	10.5							
Standard nominal flow rate [l/min]	50	100	160	160	50	100	160	160
C value [l/sbar]	0.2	0.4	0.66	0.66	0.2	0.4	0.66	0.66
b value	0.5	0.38	0.36	0.36	0.5	0.38	0.36	0.36
Type of mounting	In-line installation or via through-holes				On sub-base			
Pneumatic connection 1 and 2	QS4	QS4	QS6	QS6	Connecting thread M7			
Max. tightening torque of valve mounting [Nm]	-				0.7			

- 1) The long service life of the valves can only be achieved with the "hard" sealing principle, which, however, results in minor leakage when the valve is closed.
- 2) Min. permissible grid dimension 10.5 mm

Operating and environmental conditions				
Type	LF	MF	HF	HF/LP
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]			
Note on operating/pilot medium	Operation with lubricated medium not possible			
Operating pressure [bar]	+0.5 ... +8	+0.5 ... +6	+0.5 ... +6	+0.5 ... +4
Ambient temperature [°C]	-5 ... +60			
With manifold assembly [°C]	Max. +45	Max. +45	-	Max. +45
Temperature of medium [°C]	-5 ... +60			
Storage temperature [°C]	-20 ... +50			
Corrosion resistance class CRC ¹⁾	2			
CE marking (see declaration of conformity)	To EU EMC Directive ²⁾			
Note on materials	RoHS-compliant			

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.
- 2) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: www.festo.com → Support → User documentation.
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary. Max. permissible cable length 2.5 m.

Solenoid valves MHJ10, fast-switching valves

Technical data

Electrical data						
Type		LF	MF	HF	HF/LP	
Operating voltage ¹⁾	[V DC]	24 ±10% = 21.6 ... 26.4				
Control signal range	[V DC]	3 ... 30				
Power	Low-current phase	[W]	2	2	3.2	2
	High-current phase	[W]	7	7	14.5	7
Protection class to EN 60529		IP65				
Duty cycle ²⁾	[%]	100	100	–	100	
Operating conditions to DIN VDE 0580 ²⁾	With individual valve	–	–	S3 50% 20 min	–	
	With manifold assembly	–	–	S3 15% 20 min	–	
Electrical connection		3-wire cable				

1) If there is a current limit, during the switching operation it must be set to at least 1.7 A.

2) Air must flow through the valve continuously.

Switching times ¹⁾ and frequencies						
Type		LF	MF	HF	HF/LP	
Maximum switching frequency	[Hz]	500	1,000	500	500	
Switching times at 24 V DC						
Pressure 0.5 bar	Switching time on	[ms]	0.7	0.8	1	0.8
	Switching time off	[ms]	0.9	0.5	0.8	0.6
Pressure 4 bar	Switching time on	[ms]	0.8	0.8	1.2	1
	Switching time off	[ms]	1	0.4	0.6	0.5
Pressure 6 bar	Switching time on	[ms]	–	0.9	1.3	–
	Switching time off	[ms]	–	0.4	0.6	–
Pressure 8 bar	Switching time on	[ms]	0.9	–	–	–
	Switching time off	[ms]	0.9	–	–	–

1) Tolerance ±15%



Note

The maximum switching frequency that can be achieved decreases as the temperature of the valve increases or as the operating and ambient temperature increases.

The ambient temperature must therefore be limited accordingly so that the maximum switching frequency can be reached.

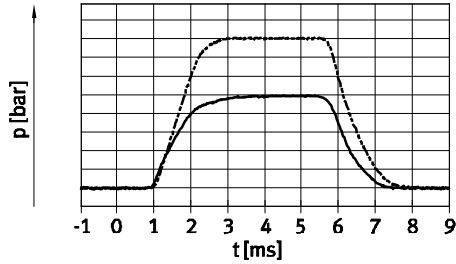
Solenoid valves MHJ10, fast-switching valves

Technical data

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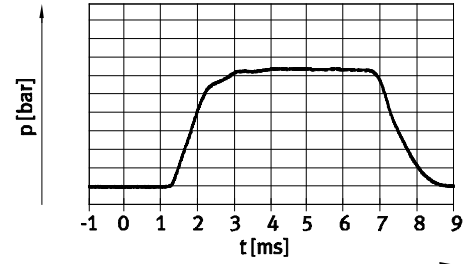
Switching behaviour – Operating pressure

Type LF, MF and HF/LP



— 4 bar
- - - 6 bar

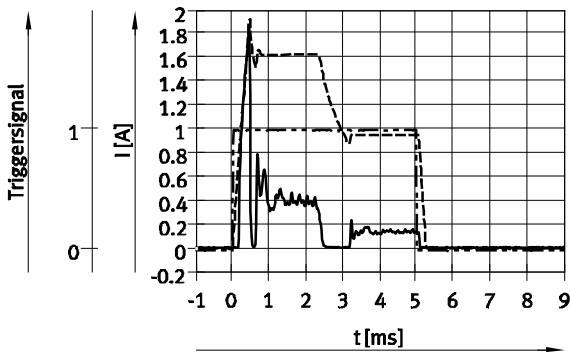
Type HF



— 4 bar

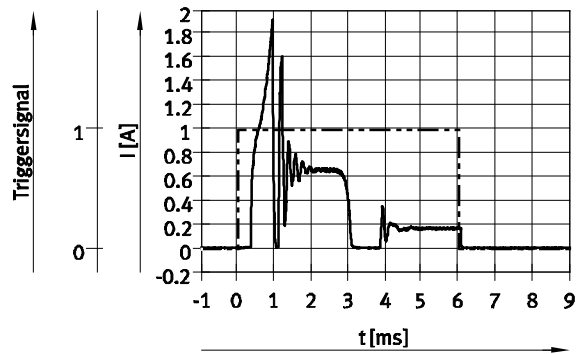
Switching behaviour – Current/voltage curve

Type LF, MF and HF/LP



— Current in the supply line at 24 V
- - - Coil current
- · - · Trigger signal

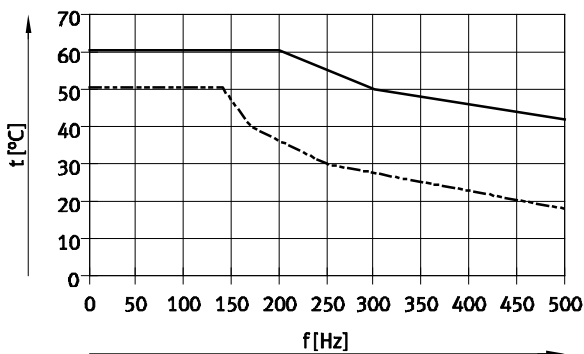
Type HF



— Current in the supply line at 24 V
- - - Trigger signal

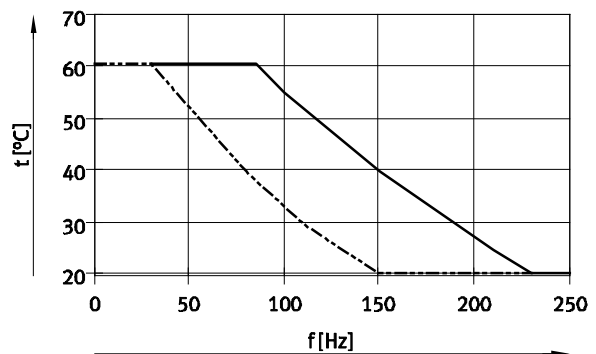
Maximum permissible ambient temperature as a function of switching frequency

Type LF, MF and HF/LP



— Individual valve, 4 bar
- - - Manifold assembly/sub-base valve, 4 bar

Type HF



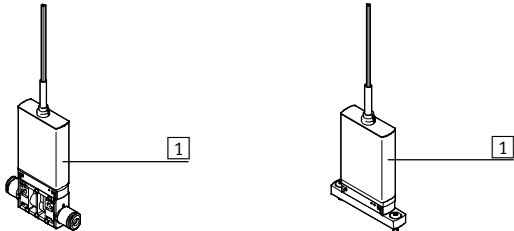
— Individual valve, 4 bar
- - - Manifold assembly/sub-base valve, 4 bar

Solenoid valves MHJ10, fast-switching valves

Technical data



Materials

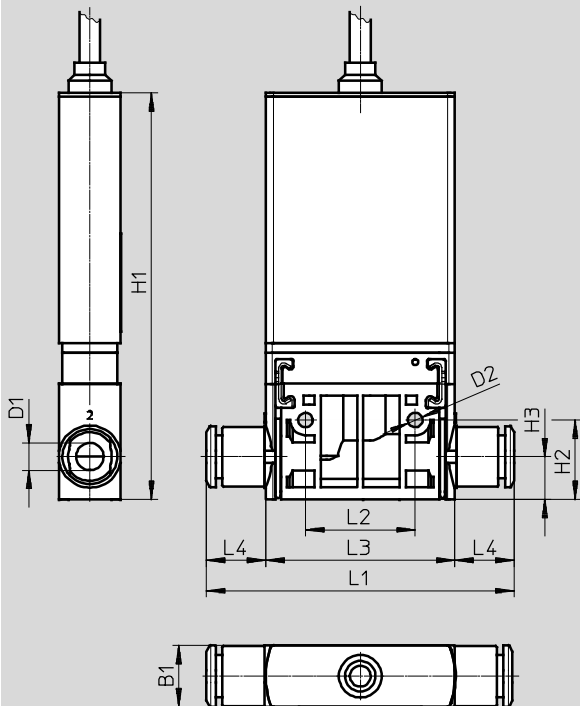


1	Housing	Reinforced polyamide
-	Seals	HNBR
-	Screws	Steel
-	Cable sheath	Polyurethane
-	Manifold rail	Anodised wrought aluminium alloy

Dimensions

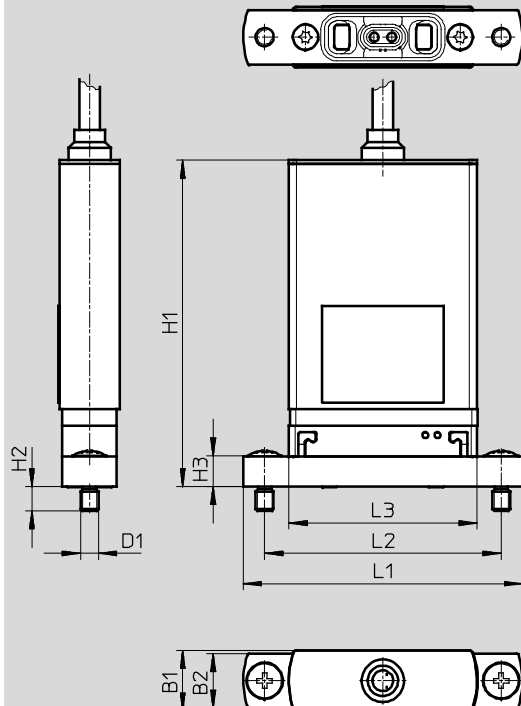
Download CAD data → www.festo.com

Semi in-line valve



Wiring allocation:
 BU = GND
 BN = Operating voltage positive
 BK = Trigger signal

Sub-base valve



Wiring allocation:
 BU = GND
 BN = Operating voltage positive
 BK = Trigger signal

Type	B1	D1	D2	H1	H2	H3	L1	L2	L3	L4
MHJ10-S...QS4	10	4	2.4	68	13	7	50.5	18	32	9.5
MHJ10-S...QS6		6								

Type	B1	B2	D1	H1	H2	H3	L1	L2	L3
MHJ10-S	10	9	M3	54	4	5	46	39	31

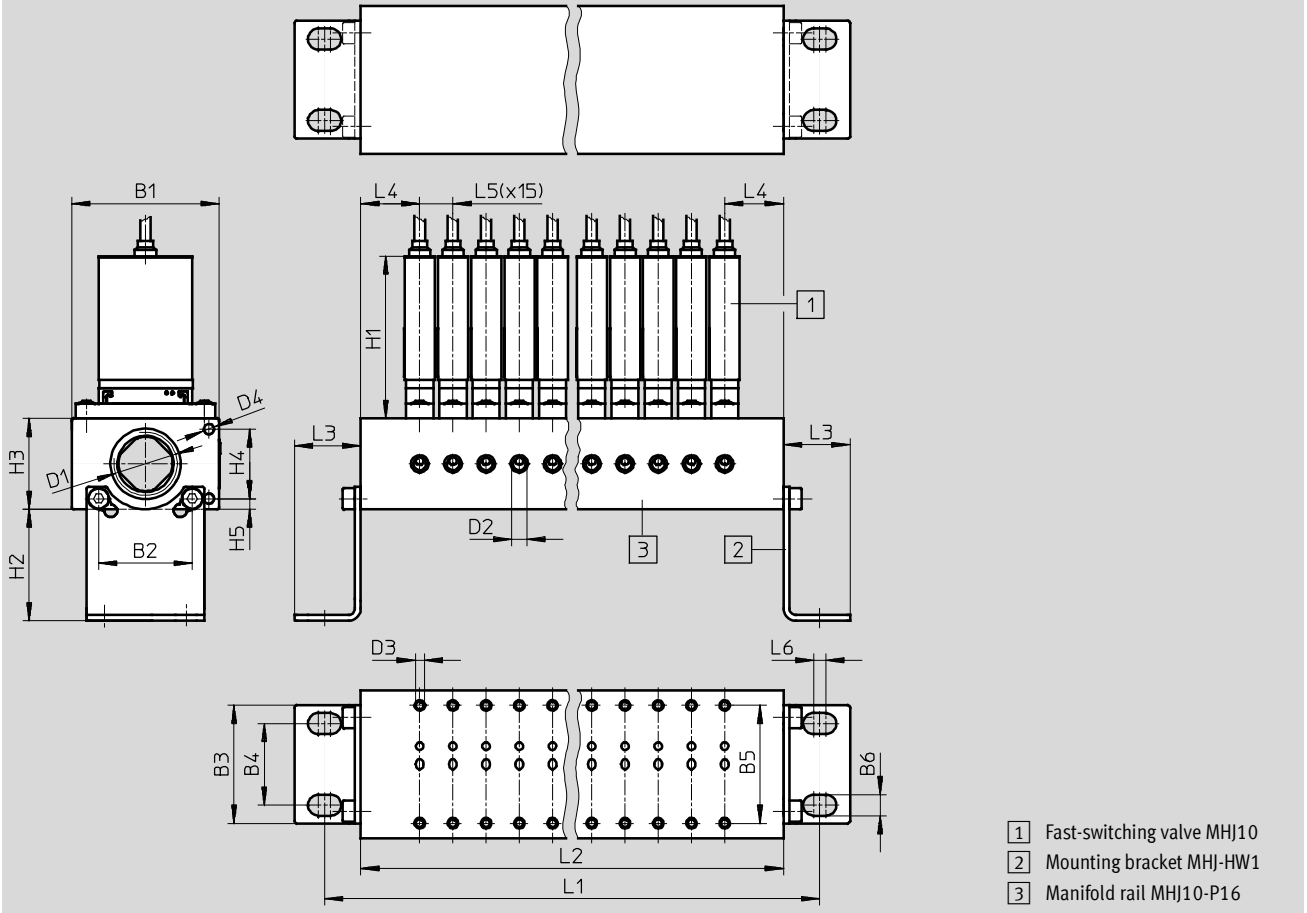
Solenoid valves MHJ10, fast-switching valves

Technical data

Dimensions

Download CAD data → www.festo.com

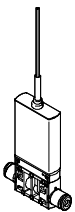
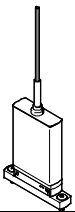
Manifold assembly

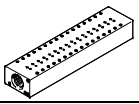
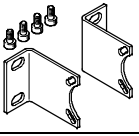




Type	B1	B2	B3	B4	B5	B6	D1	D2	D3	D4	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5	L6
MHJ10-P16	49	31	39	27	39	7	G½	M7	M3	M4	54	37	30	23	3.5	228	204	22	20	11	4

Solenoid valves MHJ10, fast-switching valves

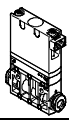

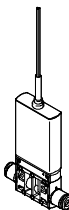
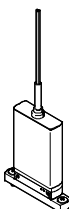
Technical data

Ordering data						
	Description	Standard nominal flow rate	Cable length	Operating pressure	Part No.	Type
In-line valve with connecting cable						
	2/2-way solenoid valve	50 l/min	2.5 m	+0.5 ... +8 bar	572081	MHJ10-S-2,5-QS-4-LF
		100 l/min	0.35 m	+0.5 ... +6 bar	557604	MHJ10-S-0,35-QS-4-MF
	2.5 m		+0.5 ... +6 bar	565515	MHJ10-S-2,5-QS-4-MF	
	160 l/min	2.5 m	+0.5 ... +6 bar	567503	MHJ10-S-2,5-QS-6-HF	
			+0.5 ... +4 bar	567798	MHJ10-S-2,5-QS-6-HF/LP	
Sub-base valve with connecting cable						
	2/2-way solenoid valve	50 l/min	2.5 m	+0.5 ... +8 bar	572080	MHJ10-S-2,5-LF
		100 l/min	0.35 m	+0.5 ... +6 bar	557601	MHJ10-S-0,35-MF
	2.5 m		+0.5 ... +6 bar	565513	MHJ10-S-2,5-MF	
	160 l/min	2.5 m	+0.5 ... +6 bar	567502	MHJ10-S-2,5-HF	
			+0.5 ... +4 bar	567796	MHJ10-S-2,5-HF/LP	

Ordering data – Accessories						
	Description				Part No.	Type
Manifold rail						
	For 16 valves MHJ10, without mounting bracket, with pneumatic connection M7				557608	MHJ10-P16
Mounting kit						
	For manifold rail MHJ10-P16, consisting of 2 mounting brackets and 4 socket head screws M4x8 DIN912				565455	MHJ-HW1
Push-in fitting for valve output, port 2						
	Connecting thread M7 for tubing O.D.	For manifold rail with LF or MF valves	4 mm (10 pieces)		153319	QSM-M7-4-I
		For manifold rail with HF or HF/LP valves	6 mm (10 pieces)		153321	QSM-M7-6-I
Push-in fitting for air supply, port 1						
	Connecting thread G $\frac{1}{2}$ for tubing O.D.		12 mm (1 piece)		186104	QS-G$\frac{1}{2}$-12
			16 mm (1 piece)		186105	QS-G$\frac{1}{2}$-16
	Connecting thread G $\frac{3}{8}$ for tubing O.D.		12 mm (10 pieces)		186103	QS-G$\frac{3}{8}$-12
			16 mm (10 pieces)		186347	QS-G$\frac{3}{8}$-16

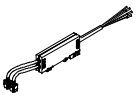
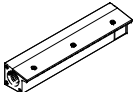
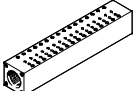
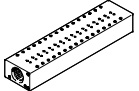
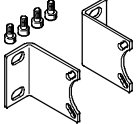
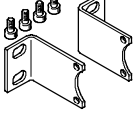


Solenoid valves MHJ, fast-switching valves

Accessories

Ordering data						
	Description	Standard nominal flow rate	Cable length	Operating pressure	Part No.	Type
In-line valve without connecting cable						
	2/2-way solenoid valve	50 l/min	–	+0.5 ... +8 bar	572079	MHJ9-QS-4-LF
		100 l/min	–	+0.5 ... +6 bar	553118	MHJ9-QS-4-MF
		160 l/min	–	+0.5 ... +6 bar	567790	MHJ9-QS-6-HF
			–	+0.5 ... +4 bar	567793	MHJ9-QS-6-HF/LP
Sub-base valve without connecting cable						
	2/2-way solenoid valve	50 l/min	–	+0.5 ... +8 bar	572078	MHJ9-LF
		100 l/min	–	+0.5 ... +6 bar	553115	MHJ9-MF
		160 l/min	–	+0.5 ... +6 bar	553117	MHJ9-HF
			–	+0.5 ... +4 bar	567792	MHJ9-HF/LP
In-line valve with connecting cable						
	2/2-way solenoid valve	50 l/min	2.5 m	+0.5 ... +8 bar	572081	MHJ10-S-2,5-QS-4-LF
		100 l/min	0.35 m	+0.5 ... +6 bar	557604	MHJ10-S-0,35-QS-4-MF
			2.5 m	+0.5 ... +6 bar	565515	MHJ10-S-2,5-QS-4-MF
		160 l/min	2.5 m	+0.5 ... +6 bar	567503	MHJ10-S-2,5-QS-6-HF
				+0.5 ... +4 bar	567798	MHJ10-S-2,5-QS-6-HF/LP
Sub-base valve with connecting cable						
	2/2-way solenoid valve	50 l/min	2.5 m	+0.5 ... +8 bar	572080	MHJ10-S-2,5-LF
		100 l/min	0.35 m	+0.5 ... +6 bar	557601	MHJ10-S-0,35-MF
			2.5 m	+0.5 ... +6 bar	565513	MHJ10-S-2,5-MF
		160 l/min	2.5 m	+0.5 ... +6 bar	567502	MHJ10-S-2,5-HF
				+0.5 ... +4 bar	567796	MHJ10-S-2,5-HF/LP

Solenoid valves MHJ, fast-switching valves

Accessories

Ordering data					
Description		Part No.	Type		
Connecting cable					
	With control electronics for 2 valves, mounting on H-rail, for static applications	For LF, MF and HF/LP valves	0.5 m	553121	MHJ9-KMH-0,5-MF
			2.5 m	565519	MHJ9-KMH-2,5-MF
		For HF valves	0.5 m	562170	MHJ9-KMH-0,5-HF
			2.5 m	567505	MHJ9-KMH-2,5-HF
Manifold rail¹⁾					
	For 16 valves MHJ9, without mounting bracket, with air nozzles			553123	MHJ9-PN16
	For 16 valves MHJ9, without mounting bracket, with pneumatic connection M7			553125	MHJ9-P16
	For 16 valves MHJ10, without mounting bracket, with pneumatic connection M7			557608	MHJ10-P16
Mounting kit					
	For manifold rail MHJ...-P16, consisting of 2 mounting brackets and 4 socket head screws M4x8 DIN912			565455	MHJ-HW1
	For manifold rail MHJ9-PN16, consisting of 2 mounting brackets and 4 socket head screws M4x8 DIN912			565456	MHJ-HW2
Push-in fitting for valve output, port 2					
	Connecting thread M7 for tubing O.D.	For manifold rail with LF or MF valves	4 mm (10 pieces)	153319	QSM-M7-4-I
		For manifold rail with HF or HF/LP valves	6 mm (10 pieces)	153321	QSM-M7-6-I
Push-in fitting for air supply, port 1					
	Connecting thread G1/2 for tubing O.D.		12 mm (1 piece)	186104	QS-G1/2-12
			16 mm (1 piece)	186105	QS-G1/2-16
	Connecting thread G3/8 for tubing O.D.		12 mm (10 pieces)	186103	QS-G3/8-12
			16 mm (10 pieces)	186347	QS-G3/8-16

1) Further versions/lengths available on request