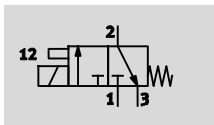
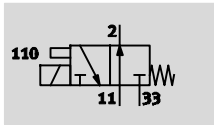


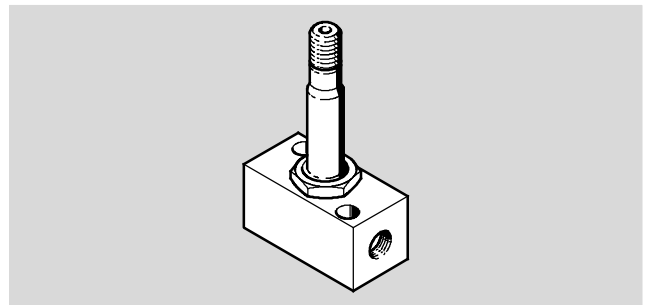
# Directly actuated valves, 3/2-way solenoid valves

Technical data

Function



- - Flow rate  
70 l/min  
160 l/min
- - Temperature range  
-5 ... +40 °C
- - Pressure  
0 ... +7 bar



## Operation with different pressures

Duty cycle

Up to an operating pressure of 5.5 bar, 100% duty cycle is permissible; for the pressure range 5.5 ... 7 bar the value is reduced to 40%.

Reverse operation

Reverse operation is not possible; the direction of flow cannot be reversed.

Vacuum operation

Vacuum operation is not possible.

General technical data		
Type	MOCH-3-1/8	MCH-3-1/8
Valve function	3/2, normally open, single solenoid	3/2, normally closed, single solenoid
Design	Poppet valve with spring return	Poppet valve with spring return
Sealing principle	Soft	Soft
Reset method	Mechanical spring	Mechanical spring
Actuation type	Electric	Electric
Type of control	Direct	Direct
Direction of flow	Non-reversible	Non-reversible
Manual override	Detenting	Detenting
Nominal width	[mm] 2.5	2.5
Standard nominal flow rate	[l/min] 70	160
Type of mounting	Via through-holes	Via through-holes
Pneumatic port	1 G1/8 2 G1/8 3 G1/8	G1/8 G1/8 G1/8
Note on materials	RoHS-compliant	RoHS-compliant

Operating and environmental conditions	
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Operating pressure	[bar] 0 ... +7
Ambient temperature	[°C] -5 ... +40
Temperature of medium	[°C] -10 ... +60
Storage temperature	[°C] -40 ... +100

# Directly actuated valves, 3/2-way solenoid valves

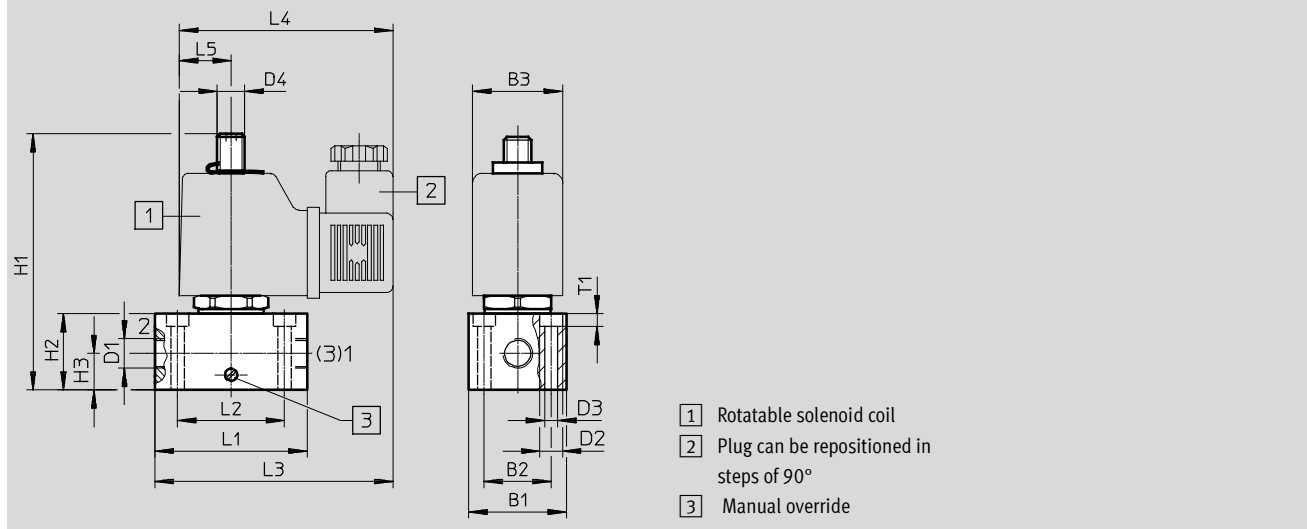
Technical data

FESTO

Electrical data											
Direct voltage	Operating voltage	[V DC]	12	24	42	96	110	220	240		
	Power consumption	[W]	11.7	11	12	11	12.7	15	17.9		
AC voltage	Operating voltage	[V AC]	12	24	42	48	110	120	220	240	380
		[Hz]	50	50	50/60	50	50/60	60	50/60	50	50/60
	Pick-up power	[VA]	30								
	Holding capacity	[VA]	22								
Duty cycle		[%]	100								
Degree of protection to EN 60529			IP65								

Response times and switching frequencies			
Switching time	On	[ms]	12
	Off	[ms]	13

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



Type	B1	B2	B3	D1	D2 Ø	D3 Ø	D4	H1	H2	H3	L1	L2	L3	L4	L5	T1
MCH-3-1/8	32	22	29.5	G1/8	8	4.5	G1/8	83	25	12	50	35	78	70	17	4.7
MOCH-3-1/8	32	22	29.5	G1/8	8	4.5	G1/8	84	25	12	50	35	78	70	17	4.7

Ordering data		Part No.	Type
	3/2-way solenoid valve, normally closed, single solenoid	<b>2199</b>	<b>MCH-3-1/8</b>
	3/2-way solenoid valve, normally open, single solenoid	<b>2211</b>	<b>MOCH-3-1/8</b>