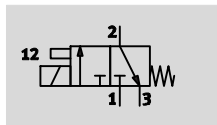
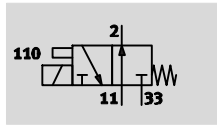





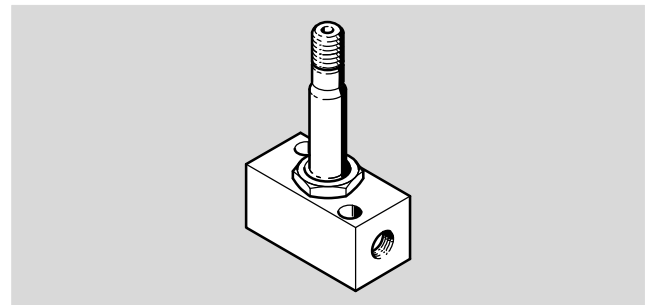
Directly actuated valves, 3/2-way solenoid valves

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
Certification	c CSA us (OL)

Directly actuated valves, 3/2-way solenoid valves

Technical data



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

1 Rotatable solenoid coil
2 Plug can be repositioned in steps of 90°
3 Manual override

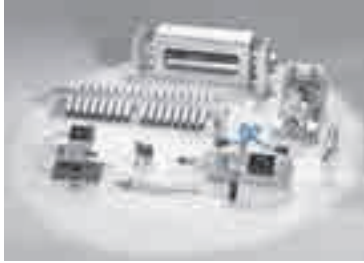
Type	B1	B2	B3	D1	D2 ∅	D3 ∅	D4	H1	H2	H3	L1	L2	L3	L4	L5	T1
MCH-3-1/8	32	22	29.5	G1/8	8	4.5	G1/8	83	25	12	50	35	78	70	17	4.7
MOCH-3-1/8	32	22	29.5	G1/8	8	4.5	G1/8	84	25	12	50	35	78	70	17	4.7

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

Product Range and Company Overview

A Complete Suite and Company Overview

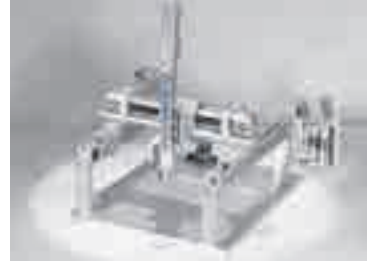
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Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.

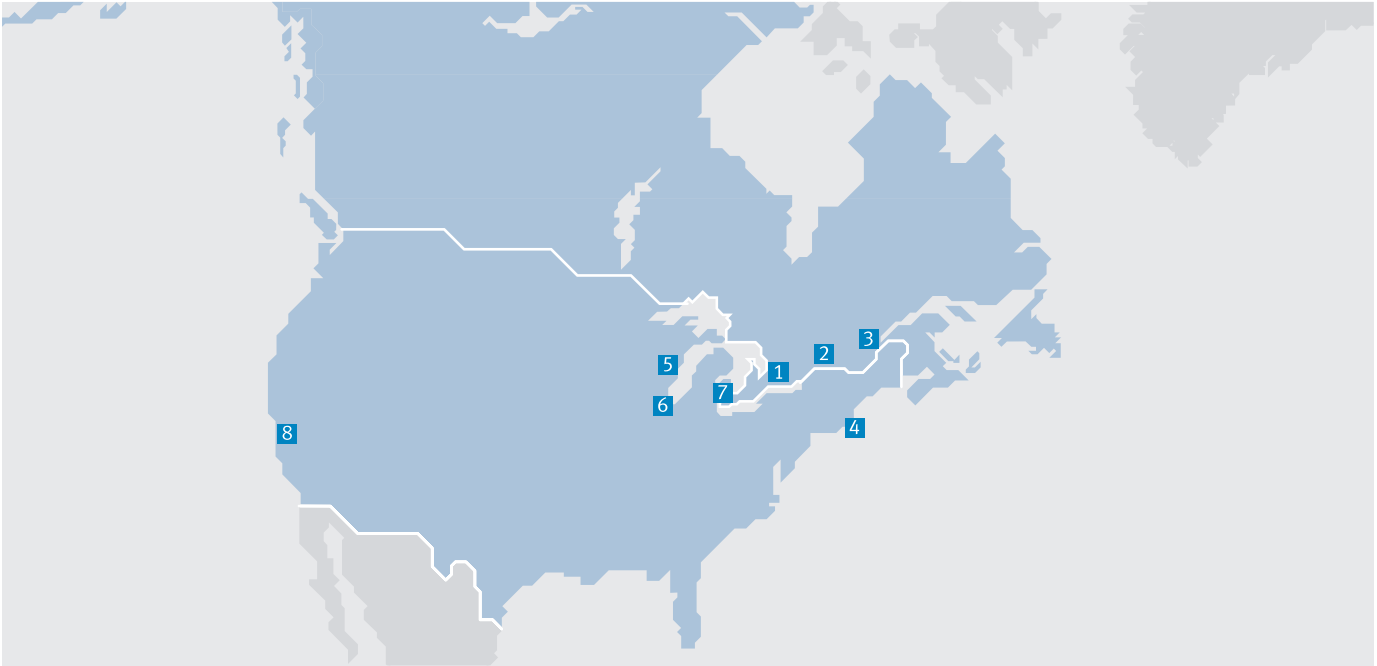


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