



MV3/2-H

#### **Special Features**

- Electrically heated up to max. 180 °C [356 °F]
- Integrated thermostat
- Status contact output
- Reliable connection technique
- No cold bridges
- Easy maintenance
- Optionally ball valve with position indicator

# Electrically Heated Valves Series V3/2-H, MV3/2-H

Version V3/2-H /PE: 3/2-way ball valve, electrically heated up to 180 °C;

Version MV3/2-H: 3/2-way solenoid valve, electrically heated up to 180  $^\circ\mathrm{C}$ 

#### Application

In analytical technology, temperatures must often be maintained above the sample gas dew point. Therefore, it is absolutely necessary to avoid cold bridges. In order to ensure this, the temperature-controlled M&C threeway valves V3/2-H and MV3/2-H are used for shutting off or switching over sample gases and test gases up to an operating temperature of 180 °C [356 °F].

#### Description

The M&C 3/2-way ball valves V3/2-H and V3/2-H/PE including position indicator and the 3/2-way solenoid valve MV3/2-H are fixed on a heat-decoupled mounting plate. Heating is provided by a high-performance heating element. The control temperature can be adjusted up to 180  $^{\circ}$ C [356  $^{\circ}$ F] on the integrated control thermostat with high-temperature limiter and low-temperature alarm contact.

The thermally insulated cover with an opening for the dial thermometer is equipped with quick-release clamps. The connection terminals and the thermostat for temperature control are located in the electrical connection box. An additional connection box is used for the contact output of the position indicator for version V3/2-H/PE and in the case of version MV3/2-H, for the solenoid valve supply 24 V DC.

To avoid cold bridges, the connection fittings are also heated by means of heat-conducting jaws. Mouning brackets are available for fixing the electrically heated sample lines 3/4/5-N/M/H - see data sheet "Electrically Heated Sample Lines Type 3/4/5-N/M/H, Type 3 with PTFE tube, non-replaceable, Type 4 with PTFE tube, replaceable Type 5 with stainless steel tube, non-replaceable".

### Dimensions

# Electrically heated 3/2-way ball valve, version V3/2-H



# Electrically heated 3/2-way ball valve with position identification, version V3/2-H/PE



#### Electrically heated 3/2-way solenoid valve, version MV3/2-H



Dimensions in mm [Inches]

2 3

# **Technical Data**



	V3/2-H	V3/2-H/PE	MV2/2-H	MV3/2-H
Part No.	03V3000(a)*	03V3010(a)*	03V1500(a)*	03V2000(a)*
Position indicator	No	Yes	No	
Nominal width/C <sub>v</sub> -value	DN 7, C <sub>v</sub> 1.7	DN 7, C <sub>v</sub> 1.7	DN 4, C <sub>v</sub> 0.4	
Operating pressure	Max. 30 bar		Max. 2 bar	
Sample gas temperature	Max. +180 °C [356 °F]			
Ambient temperature	-25 to +60 °C [-13 to 140 °F]			
Storage temperature	-25 to +80 °C [-13 to 176 °F]			
Gas connections	Tube connectors ø 6 mm, optional ø 1/4" type Swagelok			
Temperature controller	Capillary thermostat with high-temperature limiter and low-temperature alarm integrated in electrical connection box			
Operating temperature	Adjustable from 0 to 180 °C [32 to 356 °F], factory-set to 180 °C [356°F]			
Dial thermometer	Indicating range from 50 to 250 °C [122 to 482 °F]			
Low temperature alarm contact	Alarm point $\Delta$ T 30 °C, change over contact, voltage free; contact rating 250 V, 3 A~, 0.25 A=			
Position identification	Change-over contact Voltage-free, Contact rating 250 V AC 1 A			
Power supply solenoid valves			24 V DC 15 W	
Power supply	230 V/50 Hz, 350 VA or Part No. with (a)*: 115 V/60 Hz			
Electrical connections	Terminals 4 mm <sup>2</sup> , 2x cable glands PG13 (3x with V3/2-H/PE, MV3/2-H)			
Degree of protection/electrical standard	IP54 EN 60529/EN 61010, EN 60519-1			
Dimensions (W x H x D)	350 x 320 x 150 mm [≈ 13.8" x 12.6" x 5.9"]		350 x 320 x 135 mm [≈ 13.8" x 12.6" x 5.3"]	
Weight	7.5 kg [≈ 16.5 lbs]		8 kg [≈ 17.6 lbs]	
Stagnant volume	Approx. 5 cm <sup>3</sup>		Approx. 5 cm <sup>3</sup>	
Materials of sample-contacting parts	SS 316Ti, PTFE		SS 316Ti, FFKM, FKM	
Type of Mounting	Wall-mounting			

\* (a) is an addition to the Part No. for 115 V versions.

Please note: NI/h and NI/min refer to the German standard DIN 1343 and are based on these standard conditions: 0 °C [32 °F], 1013 mbar.