Miniaturised vacuum valve MH1





Weight-optimised with high flow rates: the miniature vacuum valve combination. Ideal for installation on fast moving system parts - thanks to a very light individual sub-base and plastic fittings.

Lightweight

The total weight of only 30.6 g (incl. fittings) enables the valve combination to be installed in close proximity to the vacuum generator without putting unnecessary strains on any moving system parts.

Small and strong

High flow rate with small dimensions: the valve combination is based on 2/2-way valves from the MH1 series. In order to create a vacuum quickly, the flow rate has been nearly doubled compared to standard valves.

Flexible connections

The use of cartridge technology in the fittings makes them very quick to replace. The range of accessories comprises QS-4 and QS-3. The vacuum valve combination thus provides an ideal answer to your specific requirements.

Very safe

In case of a drop in energy, the component does not fall off of the suction cup – thanks to the design of the vacuum valve combination for minimum leakage.



Safe low leakage

Versatile fittings

Extremely light

206.2.**PSI**

Product Short Information

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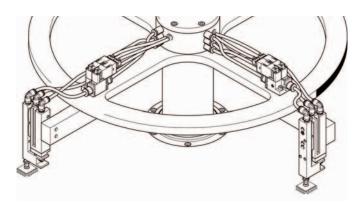
Areas of application:

- For moving small components in the electronics and semiconductor industry.
- In the food industry for packing sweets such as chocolates.

In combination with a central vacuum supply, the miniaturised vacuum valve MH1 is used to switch the vacuum and ejector pulse

Main benefits:

The light and compact design of the miniaturised vacuum valve MH1 is impressive. It enables installation very close to the suction cups, even when they are moving. The low weight does not affect the speed of the movement. The tube length between the valve and the vacuum generator is thus shortened. This means that the volume needed for "filling" or emptying with vacuum in the individual switching operations is smaller. This ensures greater energy efficiency



and optimised process times. In case of a sudden power loss within the application, any component holding a workpiece by suction might suddenly stop. In that case, the low leakage of the valves provides excellent holding security for valuable components.

Technical data

	Valve combination
Size	51x31x20 mm
Product weight	30.6 g
Mounting position	Any
Type of mounting	With screw <= M3
Grid dimension	20 mm
Pneumatic connection	QS 3, QS-4
Design	Disk, poppet
Sealing principle	Soft
Actuation type	Electric
Reset method	Mechanical spring
Type of actuation	Directly
Direction of flow	Non-reversible
Nominal size [mm]	1.5
Standard nominal flow rate [l/min]	30
Grid dimension of valve	10
Pressure range [bar]	-0.9 0 0 1.5

Operating and environmental conditions	
Operating medium	Filtered compressed air, lubricated or
	unlubricated, grade of filtration:
	40μm
Operating pressure [bar]	See general technical data
Ambient temperature	-5 50°C
Temperature of medium	-5 50°C

Electrical data	
Nominal voltage [VDC]	24 V DC +-10%
Type of connection	Plug connection KMH
Power consumption	2.5 W (pull); 0.7 (hold)
Duty cycle	100%
Response times	5 ms/5 ms
Protection class	To EN 60529
With plug socket KMH	IP 40



Vacuum valve with QS 4 cartridge

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