

## Vacuum generators VADM/VADMI

FESTO



## Key features

### Product overview

All Festo vacuum generators have a single-stage design and operate according to the Venturi principle.

The product series described below have been designed for a wide range of applications. The different performance classes of the individual product series make it possible to select vacuum generators tailored to suit the specific requirements of each application.

#### Standard and inline ejectors

VN



- Nominal width  
0.45 ... 3 mm
- Max. vacuum  
93%
- Temperature range  
0 ... +60°C

- A range of extremely effective generators suitable for use directly in the work space
- Available as a straight or T-shaped design
- Small footprint
- Cost effective
- No wearing parts
- Extremely fast evacuation time
- Optional vacuum switch
- Optional additional functions:
  - Integrated ejector pulse
  - Electrical control for vacuum ON/OFF
  - Combination of ejector pulse and actuation

Datasheets → Internet: vn

VAD/VAK



- Nominal width  
0.5 ... 1.5 mm
- Max. vacuum  
80%
- Temperature range  
-20 ... +80°C

- Range of vacuum generators with sturdy aluminium housing
- VAK-...: integrated volume,  
VAD-...: connection for external volume
- Maintenance-free
- VAK: reliable setting down of workpieces

Datasheets → Internet: vad

## Key features

### Compact ejectors

OVEM

Datasheets → Internet: ovem



- Nominal width  
0.45 ... 2 mm
- Max. vacuum  
93%
- Temperature range  
0 ... +50°C

- Compact design
- Minimal installation effort
- Short switching times
- Integrated solenoid valves for vacuum ON/OFF and ejector pulse
- Filter with display
- Vacuum sensor with LCD display for continuous monitoring of the entire vacuum system
- Optional air saving function
- Reliable setting down of workpieces
- Interlocking of multiple vacuum generators on a common supply manifold

VADM/VADMI

→ page 7



- Nominal width  
0.45 ... 3 mm
- Max. vacuum  
85%
- Temperature range  
0 ... +60°C

- Compact design
- Minimal installation effort
- Short switching times
- Built-in solenoid valve (on/off)
- VADMI: additional integrated solenoid valve for ejector pulse
- Filter with display
- Optional air saving function
- Optional vacuum switch
- Reliable setting down of workpieces

VAD-M

Datasheets → Internet: vad-m



- Nominal width  
0.7 ... 2 mm
- Max. vacuum  
85%
- Temperature range  
0 ... +40°C

- Compact design
- Minimal installation effort
- Short switching times
- Built-in solenoid valve (on/off)
- VAD-M-L: additional integrated solenoid valve for ejector pulse
- Reliable setting down of workpieces

## Key features

### At a glance

- Compact and sturdy design
- Components with numerous individual functions form a single unit
- Extremely short switching times thanks to integrated solenoid valves
- No external or additional components required
- Easily fitted thanks to compact dimensions and therefore particularly suitable for handling tasks
- Cost effective assembly as the solenoid valve, vacuum generator and silencer are all in a single unit
- Degree of protection IP65
- With manual override
- With integrated silencer for reducing exhaust noise
- With integrated filter for the air to be evacuated and an inspection window which shows the degree of filter contamination
- With or without integrated vacuum switch to monitor the vacuum with PNP or NPN output
- With 2 vacuum ports, optional

### Vacuum generator VADM



The compressed air supply for these vacuum generators is controlled by the integrated solenoid valve.

When the power supply is switched on, the valve is actuated and the flow of compressed air generates a vacuum at the vacuum ports using the ejector principle. Suction stops when the power supply to the valve is switched off.

The integrated silencer reduces exhaust noise to a minimum.

With the vacuum generators VADM-...-P/N the vacuum can be monitored using a vacuum switch.

- Integrated solenoid valve for:
  - Vacuum ON/OFF

### Vacuum generator VADMI with ejector pulse



Compressed air enters the vacuum generator when a voltage signal is applied to the integrated solenoid valve, thereby creating a vacuum.

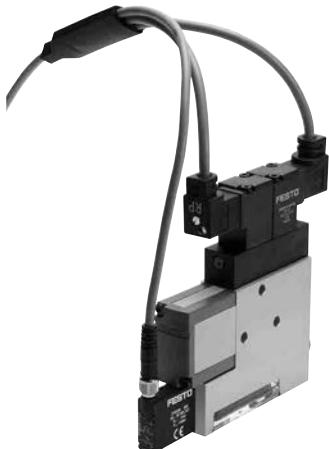
Once the voltage is switched off at the vacuum valve and switched on at the ejector pulse valve, the vacuum is rapidly purged at port 2 as a result of the application of pressure.

The integrated silencer reduces exhaust noise to a minimum.

With the vacuum generators VADMI-...-P-N, the vacuum can be monitored using a vacuum switch.

- Two integrated solenoid valves for:
  - Vacuum ON/OFF
  - Ejector pulse
- With sensing interface
- With integrated check valve as safety function
- Air saving function possible in combination with a vacuum switch and a higher-level logic circuit (e.g. PLC)

### Vacuum generator VADMI-...-LS with ejector pulse and air-saving function



This vacuum generator has an identical design to the other VADMI types. This ejector also has an integrated vacuum switch with air saving function:

If the pressure drops below the set vacuum range, vacuum generation is switched on automatically.

- Two integrated solenoid valves for:
  - Vacuum ON/OFF
  - Ejector pulse
- With sensing interface
- With integrated check valve as safety function
- Vacuum switch for pressure monitoring
- Integrated air saving function
- Cable kit with plug sockets for solenoid coils and vacuum switches included in the scope of delivery

## Key features

### Air-saving function with VADM-...-P/N and external controller

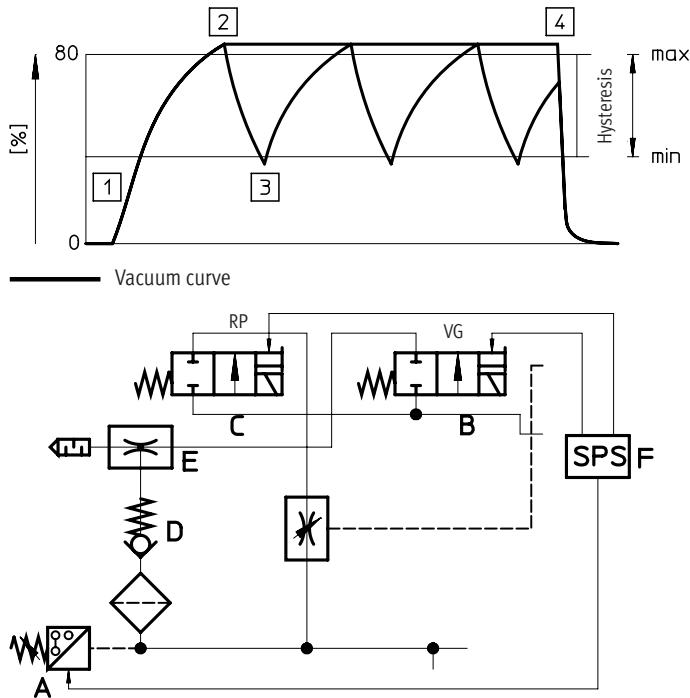
Conventional vacuum switching → A cost-effective energy saving measure

The vacuum range for holding the workpiece is set on the vacuum switch using the two potentiometers. The lower limit defines the minimum value. Provided the vacuum level is within this range, reliable workpiece transport is guaranteed.

The vacuum generator VADM is only activated by the external controller if the level drops below the minimum value and is deactivated again once the maximum value is regained.

A check valve prevents the vacuum level from being reduced during the inactive phase of vacuum generation.

### The functional sequence



RP	Solenoid valve for ejector pulse	E	Vacuum generator
VG	Solenoid valve for vacuum	D	Check valve
ON/OFF		C	Ejector pulse
		A	Vacuum switch

### Vacuum on

- [1] External controller F switches on the VG solenoid
  - Valve for compressed air supply B open
  - Vacuum generation E is activated

### Vacuum stop

- [2] The specified maximum level is achieved:
  - Vacuum switch A sends signal to external controller F
  - Controller switches VG magnet off
  - Vacuum generation E interrupted
  - Check valve D prevents reduction in the vacuum level

### Vacuum on

- [3] Leakage causes the vacuum level to drop to the minimum value
  - Vacuum switch A sends signal to external controller F
  - Controller switches VG magnet back on
  - Vacuum generation E active again
  - Constant repetition of points 2 and 3

### Cycle ended: vacuum off

- [4] Transport process ended
  - External controller F deactivates VG magnet
  - Vacuum generation E is ended
  - External controller F switches RP magnet
  - Ejector pulse C activated
  - Workpiece is set down

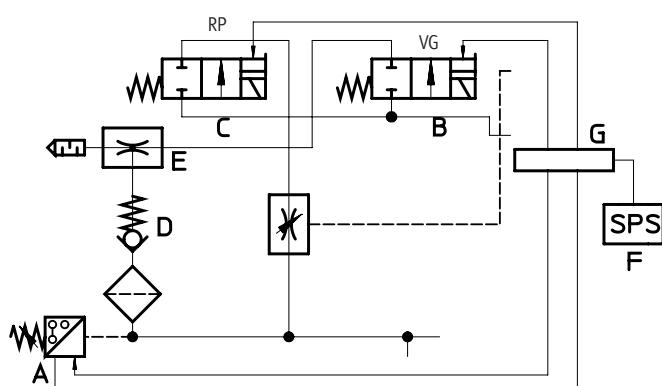
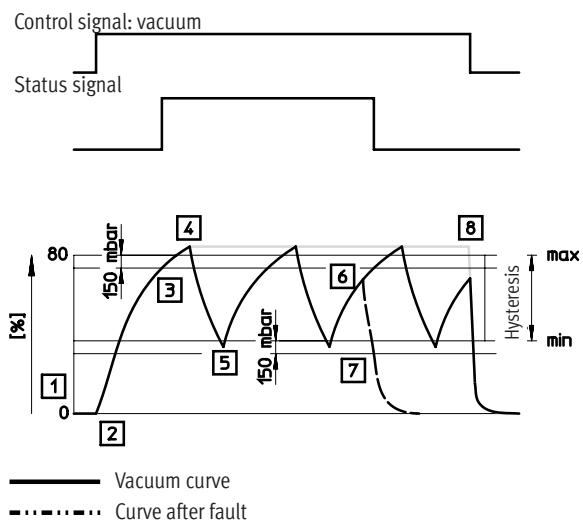
## Key features

### Air-saving function and fault signal with VADM-...-LS-P/N

The further development of the vacuum switch

When combined with the supplied cable kit, the vacuum generator VADM-...-LS-P/N has an air saving function. The vacuum range for holding the workpiece is set on the vacuum switch using the two potentiometers. The vacuum switch generates a pulsating signal which only actuates the solenoid for vacuum ON/OFF in the vacuum generator when the vacuum has fallen below the minimum value, for example due to leakage. At all other times, the vacuum is maintained with the help of the check valve, even when the vacuum generator is not switched on. In addition, a status signal A1 can be interrogated which is connected to +24 V during normal operation, but which is switched to 0 whenever vacuum again falls below the critical value by 150 mbar due to a malfunction. This is the case, for example, if the workpiece has dropped off from the suction gripper and it is therefore no longer possible to generate the selected vacuum range.

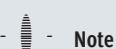
### The functional sequence



RP	Solenoid valve for ejector pulse	E	Vacuum generator
VG	Solenoid valve for vacuum	D	Check valve
ON/OFF		C	Ejector pulse
		G	Branch
		A	Vacuum switch

The three control and supply cable harnesses are combined in one branch. Just one cable containing one signal wire and three power supply wires is routed from the branch to the PLC.

Given the decentralised control of the switching function, external actuation of the vacuum switching (air saving function) would be superfluous. As a result there is significantly less wiring.



#### Note

The vacuum switch may only be operated with the included cable kit.

#### Start signal

- [1] External controller F activates the vacuum switch
  - Vacuum switch A checks vacuum status
  - No vacuum present

#### Vacuum on

- [2] Vacuum switch activates the VG solenoid
  - Valve for compressed air supply B open
  - Vacuum generation E is activated
- [3] Vacuum level exceeds 150 mbar below the maximum level
  - Vacuum switch sends release signal to external controller F
  - Transport process can start

#### Vacuum stop

- [4] The specified maximum level is achieved
  - Vacuum switch A switches VG magnet off
  - Compressed air supply stopped
  - Vacuum generation E interrupted
  - Check valve D prevents reduction in the vacuum level

#### Vacuum on

- [5] Leakage causes the vacuum level to drop to the minimum value
  - Vacuum switch A switches VG magnet back on
  - Vacuum generation E active again

#### Fault: transport stop

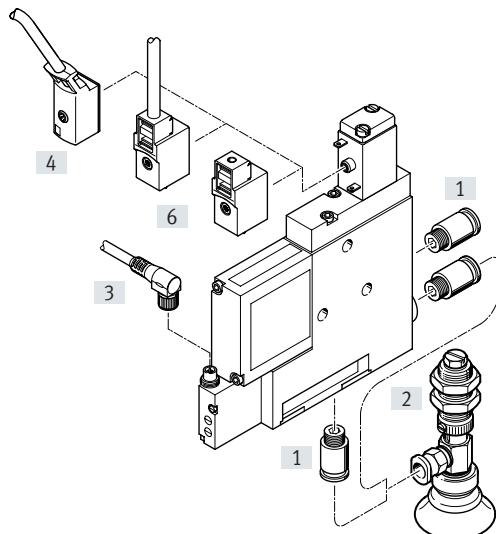
- [6] Major leakage causes an overly large drop in the vacuum level
  - Vacuum generator E cannot compensate for the drop in level
- [7] Vacuum level falls to 150 mbar below the minimum value
  - Vacuum switch A sends error message to external controller F
  - External controller F cancels transport process
  - Vacuum generation E is ended

#### Cycle ended: vacuum off

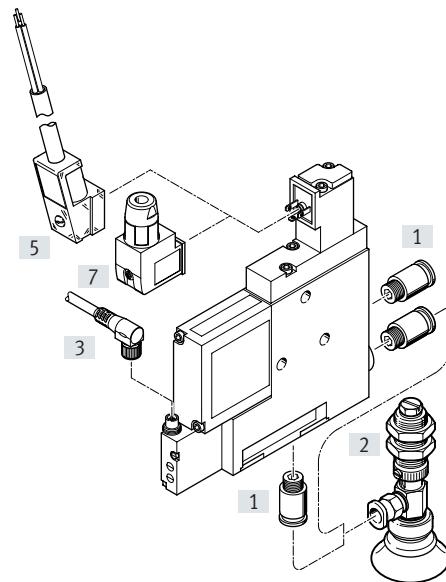
- [8] Transport process terminated
  - External controller F deactivates VG magnet
  - Vacuum generation E is ended
  - External controller F switches RP magnet
  - Ejector pulse C activated
  - Workpiece is set down

## Peripherals overview

VADM/VADM-45/70



VADM/VADM-95/140/200/300



### Mounting attachments and accessories

	VADM/VADM-45/70	VADM/VADM-95/140/200/300	→ Page/Internet
[1] Push-in fitting QS	■	■	qs
[2] Suction gripper ESG	■	■	esg
[3] Connecting cable NEBU-M8G4/M8W4	■	■	19
[4] Connecting cable KMYZ-2	■	-	19
[5] Plug socket with cable KMEB-1/2	-	■	19
[6] Plug socket MSSD-ZBZC	■	-	19
[7] Plug socket MSSD-EB	-	■	19
- Suction cup holder ESH	■	■	esh
- Suction cup ESS	■	■	ess
- Illuminating seal MEB-LD	-	■	19

## Type codes

<b>001</b>	Series
<b>VADMI</b>	Vacuum generator with ejector pulse
<b>VADM</b>	Vacuum generator without ejector pulse
<b>002</b>	Nominal width of Laval nozzle
<b>45</b>	0.45 mm
<b>70</b>	0.7 mm
<b>95</b>	0.95 mm
<b>140</b>	1.4 mm
<b>200</b>	2.0 mm
<b>300</b>	3.0 mm

<b>003</b>	Air reduction
	None
<b>LS</b>	With air saving circuit
<b>004</b>	Output signal vacuum sensor
	Without vacuum sensor
<b>P</b>	With 1 switching output PNP
<b>N</b>	With 1 switching output NPN

## Datasheet

- - Temperature range  
0 ... +60°C
- - Operating pressure  
1.5 ... 8 bar
- www.festo.com

**General technical data**

Type	VADM/VADMI	-45	-70	-95	-140	-200	-300
Nominal width of Laval nozzle [mm]	0.45	0.7	0.95	1.4	2.0	3.0	
Grid dimension [mm]	10	15	18	22	22	22	
Grade of filtration [ $\mu\text{m}$ ]	$\leq 40$						
Mounting position	Any						
Type of mounting	With through-hole						
	Via female thread						
Pneumatic connection 1 (P)	M5	M5	G1/8	G1/8	G1/4	G1/4	
Vacuum port (V)	M5	G1/8	G1/8	G1/4	G3/8	G3/8	
Pneumatic connection 3 (R)	Integrated silencer						

**Technical data – design**

Type	VADM	VADMI
Ejector characteristic	High vacuum	
Silencer design	Closed	
Integrated function	On/off valve, electric Filter – -P/-N -LS-P/-N	On/off valve, electric Filter Flow control valve Electric ejector pulse valve Check valve Vacuum switch Air saving function, electric Vacuum switch
Valve function	Closed	
Manual override	Non-detenting	

## Datasheet

Operating and environmental conditions		VADM/VADMI					
Type		Without vacuum switch -45/70	-95/140/200/300	With vacuum switch -P/N -45/70	-95/140/200/300		
Operating pressure	[MPa]	0.15 ... 0.8	0.2 ... 0.8	0.15 ... 0.8	0.2 ... 0.8		
	[bar]	1.5 ... 8	2 ... 8	1.5 ... 8	2 ... 8		
	[psi]	21.75 ... 116	29 ... 116	21.75 ... 116	29 ... 116		
Nominal operating pressure	[MPa]	0.6					
	[bar]	6					
	[psi]	87					
Max. overload pressure	[bar]	-		5 (VADMI only)			
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]					
Note on the operating/pilot medium		Lubricated operation not possible					
LABS (PWIS) conformity		VDMA24364-B1/B2-L					
Ambient temperature	[°C]	0 ... +60		0 ... +50			
Temperature of medium	[°C]	0 ... +60					
Corrosion resistance class CRC <sup>1)</sup>		2					
CE marking (see declaration of conformity)		–					
UKCA marking (see declaration of conformity)		–					
Approval		c UL us - Recognized (OL)					
		–					
		RCM					

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements that are in direct contact with a normal industrial environment.

2) Additional information: [www.festo.com/catalogue/vadm](http://www.festo.com/catalogue/vadm) → Support/Downloads.

3) Only applies to VADMI.

Performance data – high vacuum														
Type	VADM	-45	-70	-95	-140	-200	-300	VADMI <sup>2)</sup>	-45	-70	-95	-140	-200	-300
Max. vacuum	[%]	85						85						
Ventilation time <sup>1)</sup> at nominal operating pressure	[s]	5.9	2.2	1.18	0.69	0.29	0.26	1.9	0.59	2.04	0.19	0.15	0.2	

1) Time required to reduce the vacuum from nominal operating pressure to -0.05 bar.

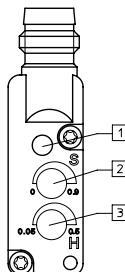
2) With ejector pulse

Technical data – electrical connection											
Electrical connection	Plug										
Operating voltage range	[V DC]	21.6 ... 26.4									
Duty cycle	[%]	100									
Degree of protection		IP65									

## Datasheet

Technical data – Vacuum switch		VADM/VADMI	VADM	
Type	-P	-N	-LS-P	-LS-N
<b>Mechanical system</b>				
Electrical connection	Plug M8x1, 4-pin			
Measured variable	Relative pressure			
Measuring principle	Piezoresistive			
Pressure measuring range	[MPa]	0 ... 0.1		
	[bar]	0 ... 1		
	[psi]	0 ... 14.5		
Setting options	Potentiometer			
Threshold value setting range	[kPa]	-90 ... 0	-90 ... -20	
	[bar]	-0.9 ... 0	-0.9 ... -0.2	
	[psi]	-13.05 ... 0	-13.05 ... -2.9	
Hysteresis setting range	[kPa]	-50 ... -5	-60 ... -10	
	[bar]	-0.5 ... -0.05	-0.6 ... -0.1	
	[psi]	-7.25 ... -0.725	-8.7 ... -1.45	
Display type	LED			
Switching status indication	Optical			
<b>Electrical system</b>				
Operating voltage range	[V DC]	15 ... 30		
Switching output	PNP	NPN	PNP	NPN
Switching element function	N/O			
Switching function	Threshold-comparator			
Reverse polarity protection	For all electrical connections			

### Vacuum switch control panel



- [1] Switching status indication, yellow LED
- [2] Potentiometer for setting threshold values
- [3] Potentiometer for setting hysteresis

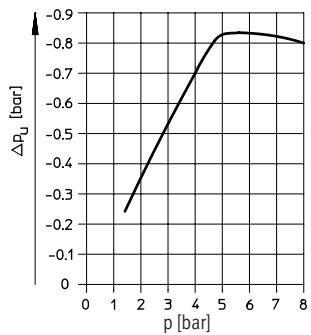
## Datasheet

Weight [g]												
Type	VADM						VADM1					
	-45	-70	-95	-140	-200	-300	-45	-70	-95	-140	-200	-300
Without vacuum switch	60	140	210	290	320	340	85	170	240	320	350	370
With vacuum switch -P-N	65	145	220	300	330	350	90	180	250	330	360	380

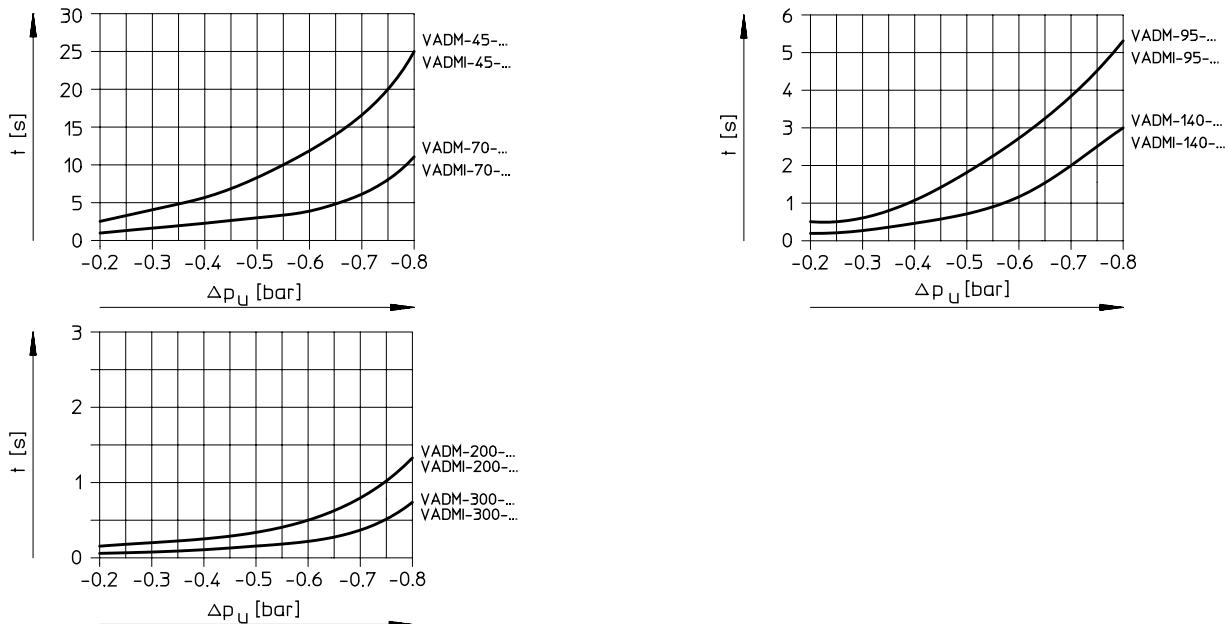
  

Materials												
Housing	Wrought aluminium alloy											
Filter casing	PC											
Silencer	PE, POM											
Piston	POM											
Jet nozzle	Nickel-plated brass											
Collector nozzle	Nickel-plated brass											
Filter	PA											
Seals	NBR											
Note on materials	Free of copper and PTFE											

### Vacuum $\Delta p_u$ as a function of operating pressure p

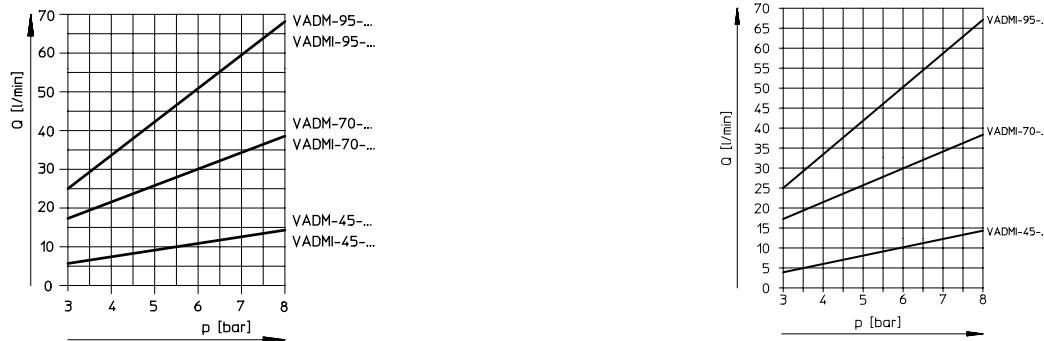


### Evacuation time t [s] for 1 litre volume at 6 bar operating pressure

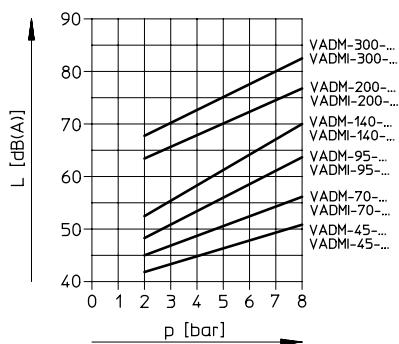


## Datasheet

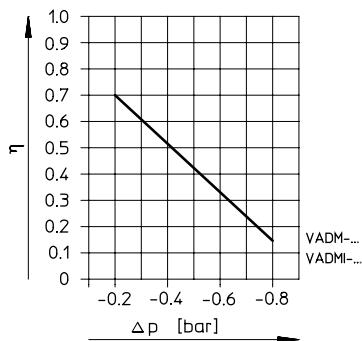
### Air consumption Q as a function of operating pressure p



### Noise level L<sub>p</sub> as a function of operating pressure p (without suction flow)



### Efficiency η as a function of vacuum Δp<sub>u</sub> at P<sub>nom</sub> 6 bar



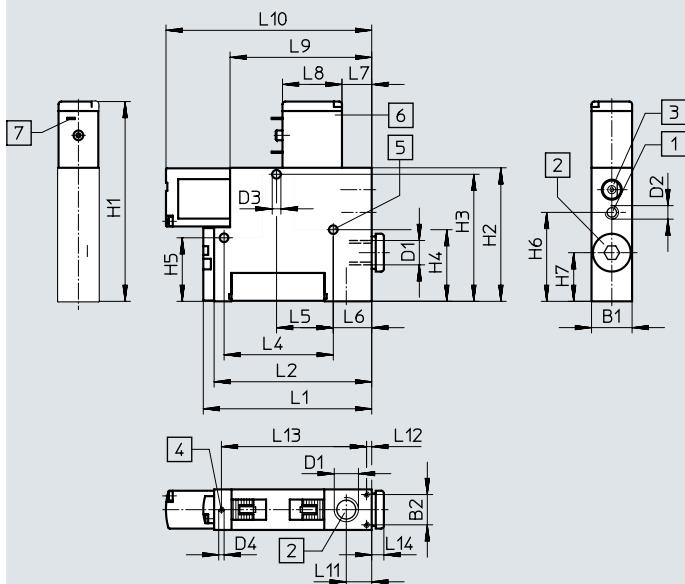
### Suction volume flow q<sub>n</sub> as a function of vacuum Δp<sub>u</sub> at P<sub>nom</sub> 6 bar



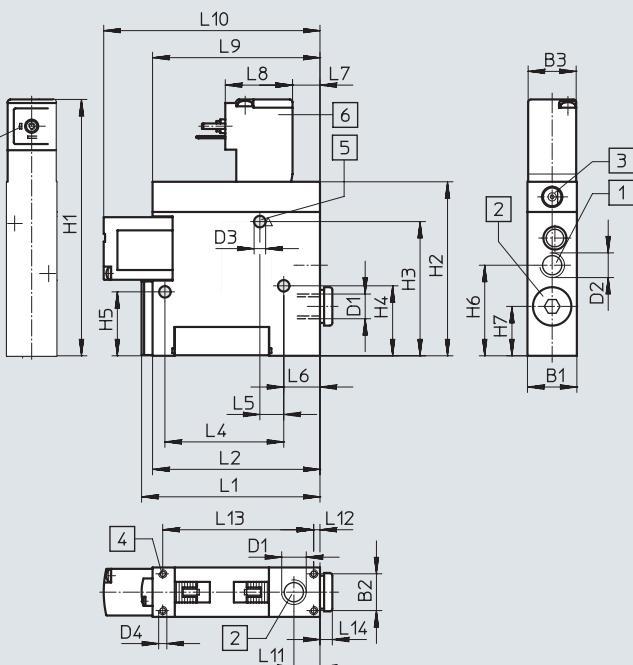
## Datasheet

## Dimensions

VADM-45/70



VADM-95/140/200/300



[1] Compressed air supply port

[2] Vacuum port

[3] Manual override

[4] Mounting thread

[5] Mounting hole

[6] Solenoid coil can be rotated 180°

[7] Suitable plug-socket for

– VADM-45/70:

– KMYZ → page 19

– MSSD-ZBZC → page 19

– VADM-95/140/200/300:

– KMEB → page 19

– MSSD-EB → page 19

Type	B1	B2	B3	D1	D2	D3 ∅	D4	H1	H2	H3	H4	H5	H6	H7
VADM-45	10	6.2	–	M5	M5	3.2	M2	64.4	44.4	40.8	23.8	23.8	29.6	18
VADM-70	15	11.2	–	G1/8	M5	3.2	M2	73.9	49.4	47	26.5	23.5	32.9	18
VADM-95	18	13.4	18	G1/8	G1/8	4.2	M2.5	93.4	63.4	48.9	25.5	23.3	33	18
VADM-140	22	16.6	18	G1/4	G1/8	5.2	M3	107.4	77.4	61.4	41.4	41.4	36	17.5
VADM-200	22	16.6	18	G3/8	G1/4	5.2	M3	113.4	83.4	67.7	41.4	41.4	40	19
VADM-300	22	16.6	18	G3/8	G1/4	5.2	M3	113.4	83.4	67.7	41.4	41.4	40	19

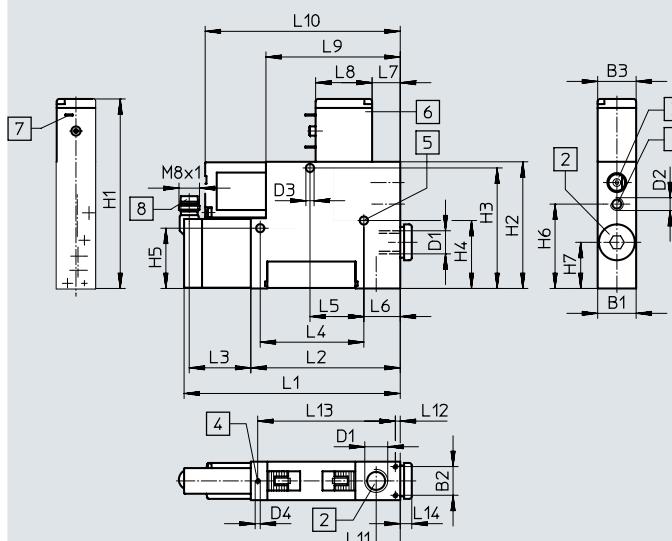
Type	L1	L2	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14
VADM-45	45	41	33.6	25	3.6	11	16	41	56	7.9	1.9	36.3	4
VADM-70	62.3	58.3	40.4	21	14.2	11	22	52.4	76.1	9.4	1.9	53.7	4.5
VADM-95	65	61	43.3	8.7	13.2	9.7	24.5	61	78.8	9.5	2.3	55	4.5
VADM-140	88	84	26	12.5	28.5	9.7	24.5	61	96.8	13.8	2.3	79.4	5
VADM-200	88	84	26	12.5	28.5	9.7	24.5	61	101.8	12.5	2.3	79.4	5
VADM-300	124.4	120.4	26	12.5	28.5	9.7	24.5	61	137.4	12.5	2.3	115.8	5

Note: This product corresponds to ISO 1179-1 and ISO 228-1.

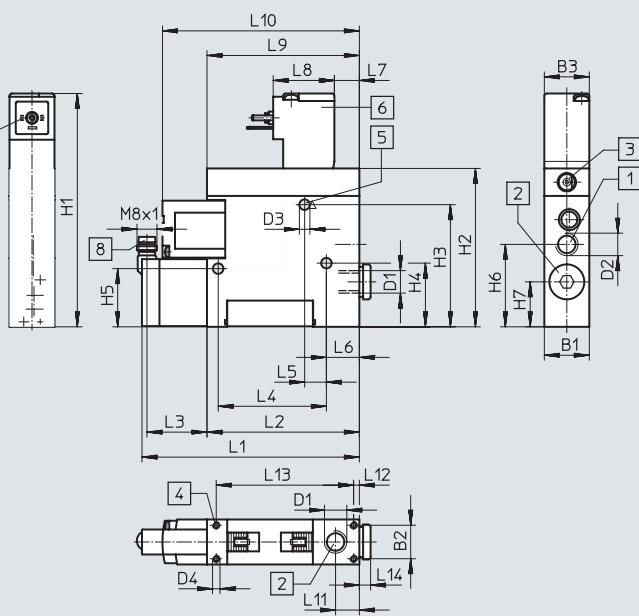
## Datasheet

## Dimensions

VADM-45/70-P/N



VADM-95/140/200/300-P/N



- [1] Compressed air supply port
- [2] Vacuum port
- [3] Manual override
- [4] Mounting thread
- [5] Mounting hole
- [6] Solenoid coil can be rotated 180°

- [7] Suitable plug-socket for
  - VADM-45/70:
  - KMYZ → page 19
  - MSSD-ZBZC → page 19
  - VADM-95/140/200/300:
  - KMEB → page 19
  - MSSD-EB → page 19

- [8] Connection for connecting cable  
NEBU-M8G4/M8W4  
→ page 19

Type	B1	B2	B3	D1	D2	D3	D4	H1	H2	H3	H4	H5	H6	H7
VADM-45-P/N	10	6.2	10	M5	M5	3.2	M2	64.4	44.4	40.8	23.8	23.8	29.6	18
VADM-70-P/N	15	11.2	15	G1/8	M5	3.2	M2	73.9	49.4	47	26.5	23.5	32.9	18
VADM-95-P/N	18	13.4	18	G1/8	G1/8	4.2	M2.5	93.4	63.4	48.9	25.5	23.3	33	18
VADM-140-P/N	22	16.6	18	G1/4	G1/8	5.2	M3	107.4	77.4	61.4	41.4	41.4	36	17.5
VADM-200-P/N	22	16.6	18	G3/8	G1/4	5.2	M3	113.4	83.4	67.7	41.4	41.4	40	19
VADM-300-P/N	22	16.6	18	G3/8	G1/4	5.2	M3	113.4	83.4	67.7	41.4	41.4	40	19

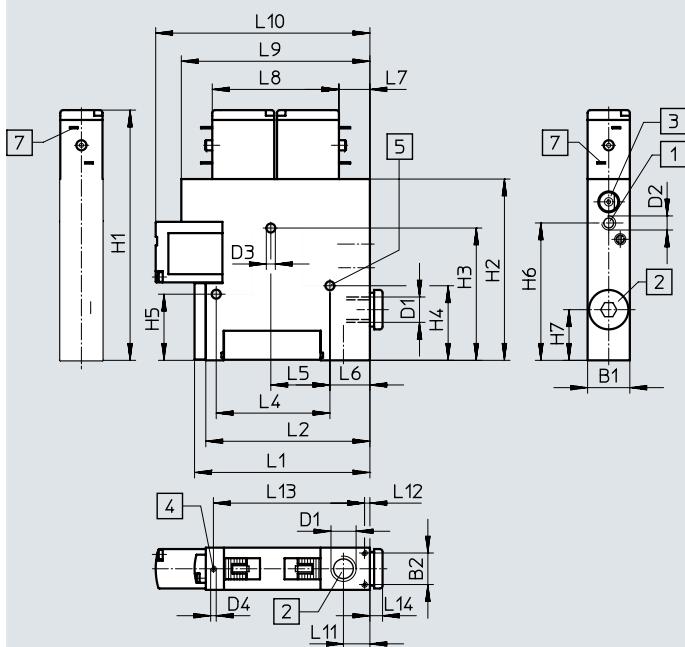
Type	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14
VADM-45-P/N	71.4	41	28.4	33.6	25	3.6	11	16	41	56	7.9	1.9	36.3	4
VADM-70-P/N	88.7	58.3	28.4	40.4	21	14.2	11	22	52.4	76.1	9.4	1.9	53.7	4.5
VADM-95-P/N	91.4	61	28.4	43.3	8.7	13.2	9.7	24.5	61	78.8	9.5	2.3	55	4.5
VADM-140-P/N	114.4	84	28.4	26	12.5	28.5	9.7	24.5	61	96.8	13.8	2.3	79.4	5
VADM-200-P/N	114.4	84	28.4	26	12.5	28.5	9.7	24.5	61	101.8	12.5	2.3	79.4	5
VADM-300-P/N	150.8	120.4	28.4	26	12.5	28.5	9.7	24.5	61	137.4	12.5	2.3	115.8	5

• Note: This product corresponds to ISO 1179-1 and ISO 228-1.

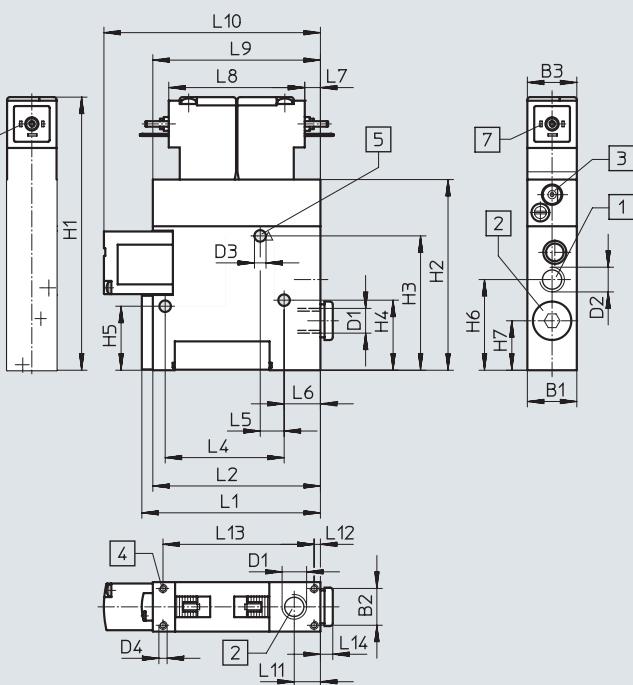
## Datasheet

## Dimensions

VADM-45/70



VADM-95/140/200/300



[1] Compressed air supply port

[2] Vacuum port

[3] Manual override

[4] Mounting thread

[5] Mounting hole

[6] Suitable plug-socket for

– VADM-45/70:

– KMYZ → page 19

– MSSD-ZBZC → page 19

– VADM-95/140/200/300:

– KMEB → page 19

– MSSD-EB → page 19

Type	B1	B2	B3	D1	D2	D3 ∅	D4	H1	H2	H3	H4	H5	H6	H7
VADM-45	10	6.2	–	M5	M5	3.2	M2	78.2	58.2	40.8	23.8	23.8	43.4	18
VADM-70	15	11.2	–	G1/8	M5	3.2	M2	88.9	64.4	47	26.5	23.5	48.8	18
VADM-95	18	13.4	18	G1/8	G1/8	4.2	M2.5	99.4	69.4	48.9	25.5	23.3	33	18
VADM-140	22	16.6	18	G1/4	G1/8	5.2	M3	113.4	83.4	61.4	41.4	41.4	36	17.5
VADM-200	22	16.6	18	G3/8	G1/4	5.2	M3	119.4	89.4	67.7	41.4	41.4	40	19
VADM-300	22	16.6	18	G3/8	G1/4	5.2	M3	119.4	89.4	67.7	41.4	41.4	40	19

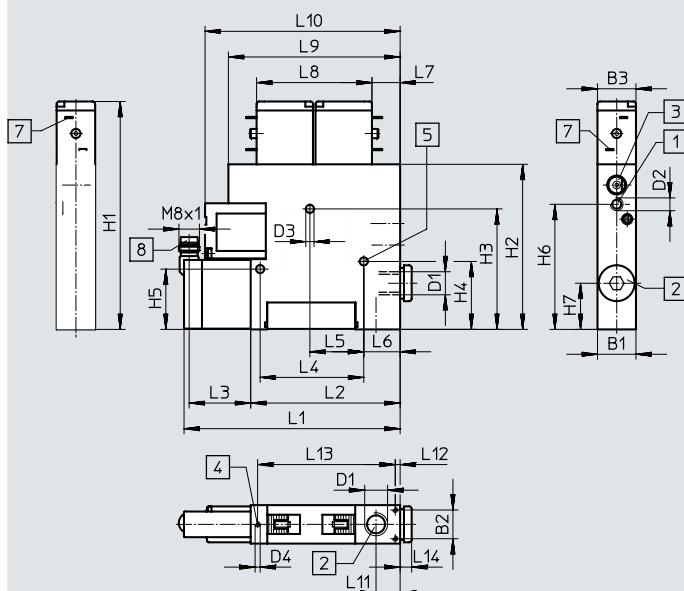
Type	L1	L2	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14
VADM-45	45	41	33.6	25	3.6	11	33	55	56	7.9	1.9	36.3	4
VADM-70	62.3	58.3	40.4	21	14.2	11	45	67	76.1	9.4	1.9	53.7	4.5
VADM-95	65	61	43.3	8.7	13.2	5.7	49.5	61	78.8	9.5	2.3	55	4.5
VADM-140	88	84	26	12.5	28.5	5.7	49.5	61	96.8	13.8	2.3	79.4	5
VADM-200	88	84	26	12.5	28.5	5.7	49.5	61	101.8	12.5	2.3	79.4	5
VADM-300	124.4	120.4	26	12.5	28.5	5.7	49.5	61	137.4	12.5	2.3	115.8	5

Note: This product corresponds to ISO 1179-1 and ISO 228-1.

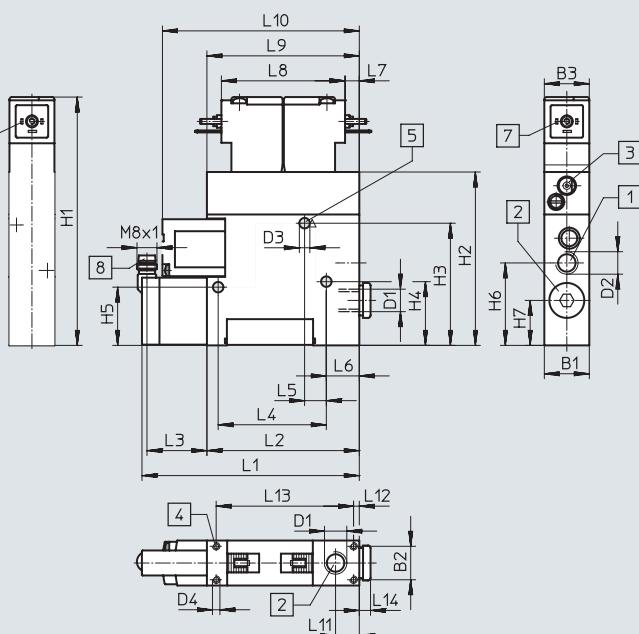
## Datasheet

## Dimensions

VADM-45/70(-LS)-P/N



VADM-95/140/200/300(-LS)-P/N



[1] Compressed air supply port

[2] Vacuum port

[3] Manual override

[4] Mounting thread

[5] Mounting hole

[7] Suitable plug-socket for

– VADM-45/70:

– KMYZ → page 19

– MSSD-ZBZC → page 19

– VADM-95/140/200/300:

– KMEB →

– MSSD-EB → page 19

[8] Connection for connecting cable

NEBU-M8G4/M8W4

→ page 19

Type	B1	B2	B3	D1	D2	D3 ∅	D4	H1	H2	H3	H4	H5	H6	H7
VADM-45(-LS)-P/N	10	6.2	10	M5	M5	3.2	M2	78.2	58.2	40.8	23.8	23.8	43.4	18
VADM-70(-LS)-P/N	15	11.2	15	G1/8	M5	3.2	M2	88.9	64.4	47	26.5	23.5	48.8	18
VADM-95(-LS)-P/N	18	13.4	18	G1/8	G1/8	4.2	M2.5	99.4	69.4	48.9	25.5	23.3	33	18
VADM-140(-LS)-P/N	22	16.6	18	G1/4	G1/8	5.2	M3	113.4	83.4	61.4	41.4	41.4	36	17.5
VADM-200(-LS)-P/N	22	16.6	18	G3/8	G1/4	5.2	M3	119.4	89.4	67.7	41.4	41.4	40	19
VADM-300(-LS)-P/N	22	16.6	18	G3/8	G1/4	5.2	M3	119.4	89.4	67.7	41.4	41.4	40	19

Type	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14
VADM-45(-LS)-P/N	71.4	41	28.4	33.6	25	3.6	11	33	55	56	7.9	1.9	36.3	4
VADM-70(-LS)-P/N	88.7	58.3	28.4	40.4	21	14.2	11	45	67	76.1	9.4	1.9	53.7	4.5
VADM-95(-LS)-P/N	91.4	61	28.4	43.3	8.7	13.2	5.7	49.5	61	78.8	9.5	2.3	55	4.5
VADM-140(-LS)-P/N	114.4	84	28.4	26	12.5	28.5	5.7	49.5	61	96.8	13.8	2.3	79.4	5
VADM-200(-LS)-P/N	114.4	84	28.4	26	12.5	28.5	5.7	49.5	61	101.8	12.5	2.3	79.4	5
VADM-300(-LS)-P/N	150.8	120.4	28.4	26	12.5	28.5	5.7	49.5	61	137.4	12.5	2.3	115.8	5

Note: This product corresponds to ISO 1179-1 and ISO 228-1.

## Datasheet

Ordering data		Without vacuum switch		With vacuum switch		NPN output		
Size	Solenoid coils	Part no.	Type	PNP output	Part no.	Type	Part no.	Type
<b>Without ejector pulse</b>								
45	MZB	162500	VADM-45	162512	VADM-45-P	162513	VADM-45-N	
70	MYB	162501	VADM-70	162514	VADM-70-P	162515	VADM-70-N	
95	MEB	162502	VADM-95	162516	VADM-95-P	162517	VADM-95-N	
140	MEB	162503	VADM-140	162518	VADM-140-P	162519	VADM-140-N	
200	MEB	162504	VADM-200	162520	VADM-200-P	162521	VADM-200-N	
300	MEB	162505	VADM-300	162522	VADM-300-P	162523	VADM-300-N	
<b>With ejector pulse</b>								
45	MZB	162506	VADMI-45	162524	VADMI-45-P	162525	VADMI-45-N	
70	MYB	162507	VADMI-70	162526	VADMI-70-P	162527	VADMI-70-N	
95	MEB	162508	VADMI-95	162528	VADMI-95-P	162529	VADMI-95-N	
140	MEB	162509	VADMI-140	162530	VADMI-140-P	162531	VADMI-140-N	
200	MEB	162510	VADMI-200	162532	VADMI-200-P	162533	VADMI-200-N	
300	MEB	162511	VADMI-300	162534	VADMI-300-P	162535	VADMI-300-N	
<b>With ejector pulse and air saving function</b>								
45	MZB	-		171053	VADMI-45-LS-P	171054	VADMI-45-LS-N	
70	MYB	-		171055	VADMI-70-LS-P	171056	VADMI-70-LS-N	
95	MEB	-		171057	VADMI-95-LS-P	171058	VADMI-95-LS-N	
140	MEB	-		171059	VADMI-140-LS-P	171060	VADMI-140-LS-N	
200	MEB	-		171061	VADMI-200-LS-P	171062	VADMI-200-LS-N	
300	MEB	-		171063	VADMI-300-LS-P	171064	VADMI-300-LS-N	

 - Note

For vacuum generators VADMI-...-LS-P/N, the cable kit with plug sockets for solenoid coils and vacuum switches is included in the scope of delivery.

These vacuum generators may only be operated with the cable supplied.

## Accessories

Ordering data – Plug socket MSSD						Datasheets → Internet: mssd	
	Description	Electrical connection	Cable connection	Part no.	Type		
	For VADM/VADMI-45/70	Angled socket	Insulation displacement connector	185521	MSSD-ZBZC		
	For VADM/VADMI-95/140/200/300	Angled socket, 3-pin, type C, to EN 175301-803	Screw terminal PG7	151687	MSSD-EB		
			Screw terminal M12	539712	MSSD-EB-M12		
		Angled socket, 4-pin, type C	Insulation displacement connector M14	192745	MSSD-EB-S-M14		
Ordering data – Connecting cable KMYZ-2						Datasheets → Internet: kmyz	
	Description	Electrical connection	Switching status indication	Cable length [m]	Part no.	Type	
	For VADM/VADMI-45/70	Angled socket, 2-pin, square design	Open cable end	LED	2.5	34997	KMYZ-2-24-2.5-LED
				LED	5	34998	KMYZ-2-24-5-LED
				LED	10	193443	KMYZ-2-24-10-LED
		Straight plug, 3-pin, M8x1	LED	0.5	177676	KMYZ-2-24-M8-0.5-LED	
				2.5	177678	KMYZ-2-24-M8-2.5-LED	
Ordering data – Plug socket with cable KMEB						Datasheets → Internet: kmeb	
	Description	Electrical connection	Switching status indication	Cable length [m]	Part no.	Type	
	For VADM/VADMI-95/140/200/300	Angled socket, 3-pin, type C, to EN 175301-803	Open cable end	LED	2.5	151688	KMEB-1-24-2.5-LED
				LED	5	151689	KMEB-1-24-5-LED
				LED	10	193457	KMEB-1-24-10-LED
		Angled socket, 4-pin, type C, to EN 175301-803	Open cable end	LED	2.5	174844	KMEB-2-24-2.5-LED
				LED	5	174845	KMEB-2-24-5-LED
		Angled socket, 5-pin, type C, to EN 175301-803	Straight plug, 5-pin, M12x1	LED	0.5	177677	KMEB-2-24-M12-0.5-LED
Ordering data – Illuminating seal MEB-LD						Datasheets → Internet: meb	
	Description			Part no.	Type		
	For plug socket with cable KMEB and plug socket MSSD-EB			151717	MEB-LD-12-24DC		
Ordering data – Connecting cable NEBU-M8						Datasheets → Internet: nebu	
	Electrical connection			Cable length [m]	Part no.	Type	
	Straight socket, M8x1, 4-pin	Open cable end		2.5	541342	NEBU-M8G4-K-2.5-LE4	
				5	541343	NEBU-M8G4-K-5-LE4	
				9	8003130	NEBU-M8G4-K-9-LE4	
	Angled socket, M8x1, 4-pin	Open cable end		2.5	541344	NEBU-M8W4-K-2.5-LE4	
				5	541345	NEBU-M8W4-K-5-LE4	
				10	575833	NEBU-M8W4-K-10-LE4	

# Festo - Your Partner in Automation



## 1 Festo Inc.

5300 Explorer Drive  
Mississauga, ON L4W 5G4  
Canada

### Festo Customer Interaction Center

Tel: 1 877 463 3786  
Fax: 1 877 393 3786  
Email: [customer.service.ca@festo.com](mailto:customer.service.ca@festo.com)

## 2 Festo Pneumatic

Av. Ceylán 3,  
Col. Tequesquínáhuac  
54020 Tlalnepantla,  
Estado de México

### Multinational Contact Center

01 800 337 8669  
[ventas.mexico@festo.com](mailto:ventas.mexico@festo.com)

## 3 Festo Corporation

1377 Motor Parkway  
Suite 310  
Islandia, NY 11749

### Festo Customer Interaction Center

1 800 993 3786  
1 800 963 3786  
[customer.service.us@festo.com](mailto:customer.service.us@festo.com)

## 4 Regional Service Center

7777 Columbia Road  
Mason, OH 45040

### Connect with us



[www.festo.com/socialmedia](http://www.festo.com/socialmedia)



[www.festo.com](http://www.festo.com)