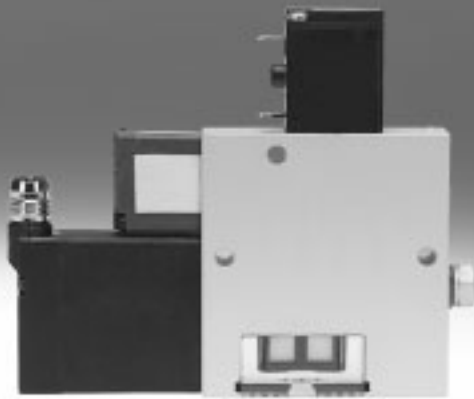


## Vacuum generators VADM/VADMI

**FESTO**

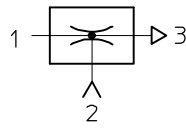


# Vacuum generators VADM/VADMI

Key features

## Product overview

Vacuum generators



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 families make it possible to select

vacuum generators tailored to suit the specific requirements of each application.

## Standard and inline ejectors

VN

Technical data → Internet: 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 working area
- Available with straight or T-shaped housing
- Minimal space required
- Cost-effective
- No wearing parts
- Extremely fast evacuation time
- Vacuum switch (optional)
- Optional additional functions:
  - Integrated ejector pulse
  - Electrical control for vacuum ON/OFF
  - Combination of ejector pulse and actuation

VAD/VAK

Technical data → Internet: vad



- 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

# Vacuum generators VADM/VADMI

Key features

## Compact ejectors

OVEM

Technical data → Internet: [ovem](#)



- Nominal width  
0.45 ... 2 mm
- Max. vacuum  
93%
- Temperature range  
0 ... +50 °C
- Compact design
- Minimal installation work required
- 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
- Blocking of multiple vacuum generators on a common supply manifold

## VADM/VADMI

→ 9



- Nominal width  
0.45 ... 3 mm
- Max. vacuum  
85%
- Temperature range  
0 ... +60 °C
- Compact design
- Minimal installation work required
- Short switching times
- Integrated solenoid valve (on/off)
- VADMI: additional integrated solenoid valve for ejector pulse
- Filter with display
- Optional air saving function
- Vacuum switch (optional)
- Reliable setting down of workpieces

## VAD-M

Technical data → Internet: [vad-m](#)



- Nominal width  
0.7 ... 2 mm
- Max. vacuum  
85%
- Temperature range  
0 ... +40 °C
- Compact design
- Minimal installation work required
- Short switching times
- Integrated solenoid valve (on/off)
- VAD-M-I: additional integrated solenoid valve for ejector pulse
- Reliable setting down of workpieces

# Vacuum generators VADM/VADMI

Key features

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## 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 generators VADM

The compressed air supply of these vacuum generators is controlled by the integrated solenoid valve. When the electrical power supply is switched on, the valve is actuated and the flow of compressed air generates a vacuum at the vacuum ports by the ejector principle.

Suction stops when the supply power 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 following the application of a voltage signal 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 by 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 as 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



# Vacuum generators VADM/VADMI

Key features

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

The conventional vacuum switch → A cost-effective energy-saving measure

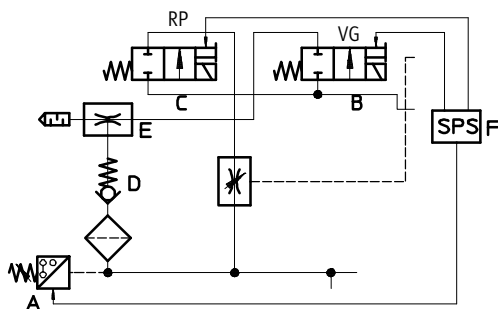
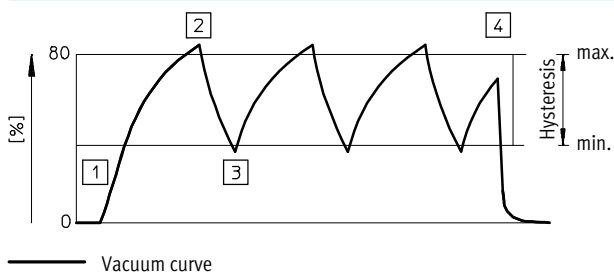
The vacuum range for holding the workpiece is set on the vacuum switch using the two potentiometers. The lower limit defines the minimum value.

Provided the vacuum level is within this range, reliable workpiece transport is guaranteed. The vacuum generator VADMI 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 ON/OFF | D Check valve      |
|                                     | C Ejector pulse    |
|                                     | A Vacuum switch    |

### Vacuum on

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

### Vacuum stop

- 2 The specified maximum level is achieved:
  - Vacuum switch A sends a signal to the external controller F
  - Controller switches the VG solenoid off
  - Vacuum generation E interrupted
  - Check valve D prevents the vacuum level from being reduced

### Vacuum on

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

### Cycle ended: vacuum off

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

# Vacuum generators VADM/VADMI

Key features

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

The further development of the vacuum switch

In conjunction with the supplied cable kit, the vacuum generator VADMI-...-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 pressure 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 pressure 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 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.

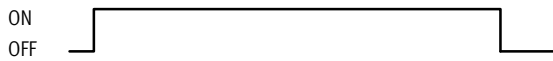


Note

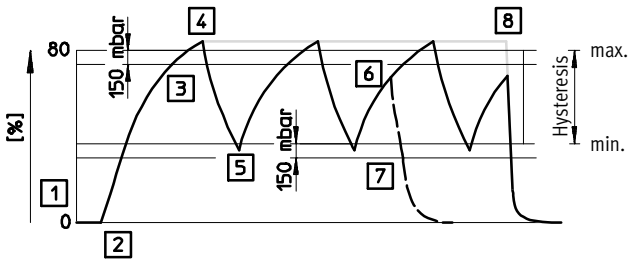
The vacuum switch may only be operated with the included cable kit.

## The functional sequence

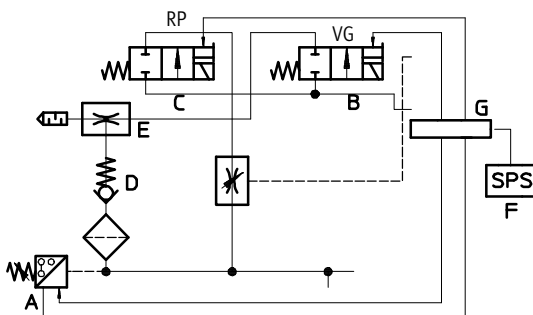
Control signal: vacuum



Status signal  
A1



— Vacuum curve  
- - - Curve after fault



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

## Start signal

- External controller F activates the vacuum switch  
→ Vacuum switch A checks the vacuum status  
→ No vacuum present

## Vacuum on

- Vacuum switch activates the VG solenoid  
→ Valve for compressed air supply B is opened  
→ Vacuum generation E is activated
- Vacuum level falls more than 150 mbar below the maximum level  
→ Vacuum switch sends an enable signal to the external controller F  
→ Transport process can start

## Vacuum stop

- The specified maximum level is achieved  
→ Vacuum switch A switches the VG solenoid off  
→ Compressed air supply stopped  
→ Vacuum generation E interrupted  
→ Check valve D prevents the vacuum level from being reduced

## Vacuum on

- Leakage causes the vacuum level to drop to the minimum value  
→ Vacuum switch A switches the VG solenoid back on  
→ Vacuum generation E is active again

## Fault: transport stop

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

## Cycle ended: vacuum off

- Transport process ended  
→ External controller F deactivates VG solenoid  
→ Vacuum generation E is ended  
→ External controller F switches on RP solenoid  
→ Ejector pulse C activated  
→ Workpiece is set down

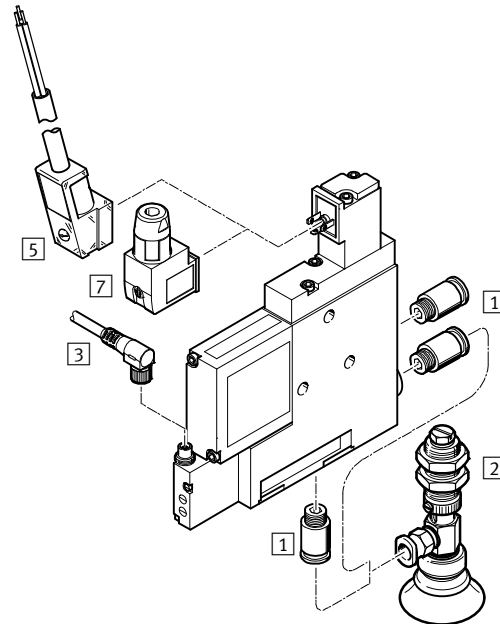
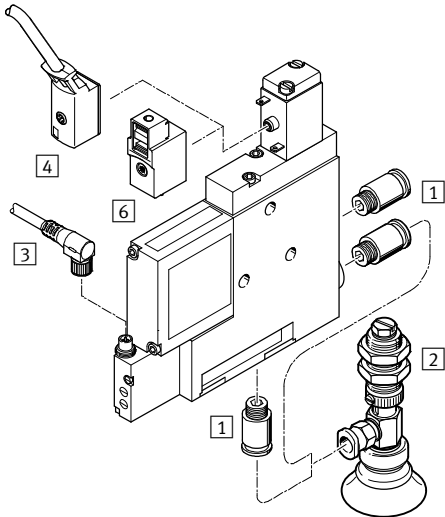
# Vacuum generators VADM/VADMI

Peripherals overview

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VADM/VADMI-45/70

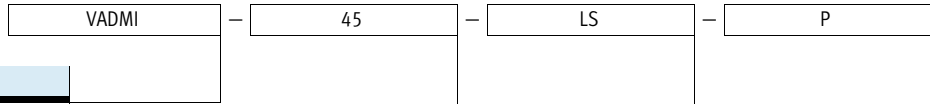
VADM/VADMI-95/140/200/300



Mounting components and accessories		VADM/VADMI-45/70	VADM/VADMI-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

# Vacuum generators VADM/VADMI

Type codes




Type	
VADM	Vacuum generator without ejector pulse
VADMI	Vacuum generator with ejector pulse

Nominal width of Laval nozzle [mm]	
45	0.45
70	0.70
95	0.95
140	1.40
200	2.00
300	3.00

Functions	
LS	With air saving function

Switching output, vacuum switch	
P	PNP
N	NPN

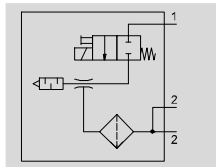
-  - Note  
Possible combinations can be found in the ordering data.



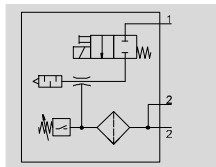
# Vacuum generators VADM/VADMI

Technical data

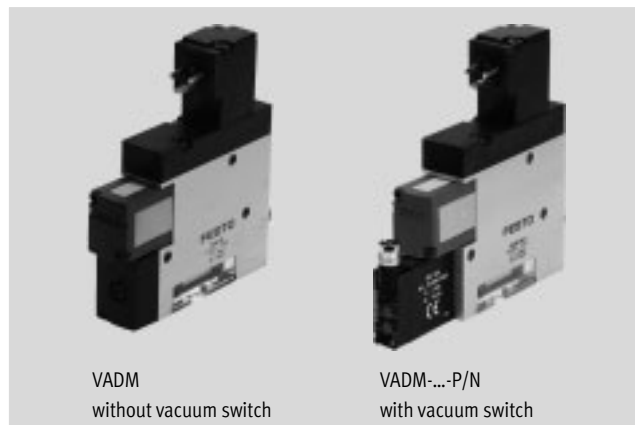
VADM without vacuum switch



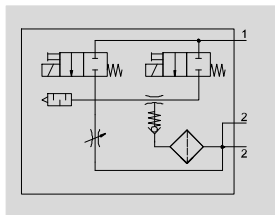
VADM with vacuum switch



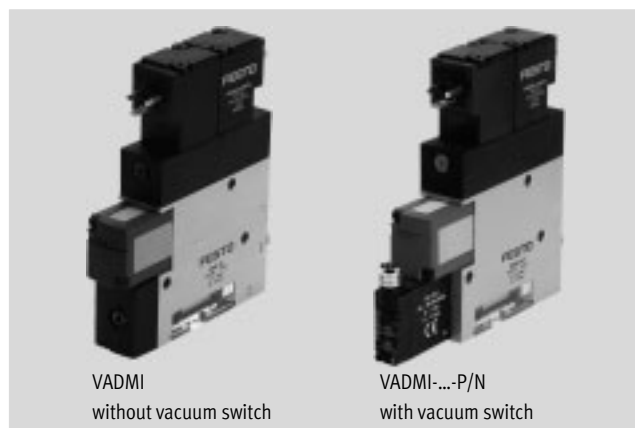
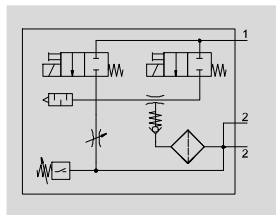
- - Temperature range  
0 ... +60 °C
- - Operating pressure  
1.5 ... 8 bar
- - [www.festo.com](http://www.festo.com)



VADMI without vacuum switch



VADMI with vacuum switch



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	[µm]	≤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	Electric on-off valve	
	Filter	
	-	
	Flow control valve	
	Ejector pulse valve, electrical	
	Check valve	
	-P/-N	Vacuum switch
-LS-P/-N	-	Air saving function, electrical
		Vacuum switch
Valve function	Closed	
Manual override	Non-detenting	

# Vacuum generators VADM/VADMI



Technical data

Operating and environmental conditions					
Type	VADM/VADMI				
	Without vacuum switch			With vacuum switch -P/N	
	-45/70	-95/140/200/300		-45/70	-95/140/200/300
Operating pressure [bar]	1.5 ... 8	2 ... 8		1.5 ... 8	2 ... 8
Nominal operating pressure [bar]	6				
Max. overload pressure [bar]	–			5 (VADMI only)	
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]				
Note on operating/pilot medium	Lubricated operation not possible				
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)	–			To EU EMC Directive <sup>2)</sup>	
Certification	c UL us - Recognized (OL)				
	–			RCM compliance mark	

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

2) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Performance data – High vacuum													
Type	VADM						VADMI						
	-45	-70	-95	-140	-200	-300	-45	-70	-95	-140	-200	-300	
Max. vacuum [%]	85						85						
Air supply time <sup>1)</sup> for 1 l volume, at p <sub>1</sub> = 6 bar [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 vacuum to –0.05 bar.

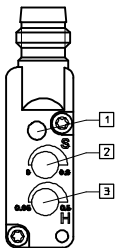
Technical data – Electrical connection	
Electrical connection	Plug
Operating voltage range [V DC]	21.6 ... 26.4
Duty cycle [%]	100
Degree of protection	IP65

# Vacuum generators VADM/VADMI

Technical data

Technical data – Vacuum switches				
Type	VADM/VADMI		VADMI	
	-P	-N	-LS-P	-LS-N
Mechanical				
Electrical connection	Plug M8x1, 4-pin		Only via supplied cable kit	
Measured variable	Relative pressure			
Measuring principle	Piezoresistive			
Pressure measuring range [bar]	-1 ... 0			
Setting options	Potentiometer			
Threshold value setting range [bar]	-0.9 ... 0		-0.9 ... -0.2	
Hysteresis setting range [bar]	-0.5 ... -0.05		-0.6 ... -0.1	
Display type	LED			
Switching status indication	Opto-electrical			
Electrical				
Operating voltage range [V DC]	15 ... 30			
Switching output	PNP	NPN	PNP	NPN
Switching element function	N/O contact			
Switching function	Threshold value comparator			
Reverse polarity protection	For all electrical connections			

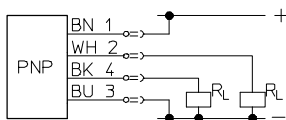
## Vacuum switch control panel



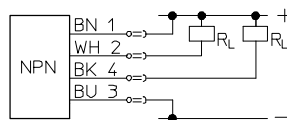
- 1 Switching status indication, yellow LED
- 2 Potentiometer for setting threshold values
- 3 Potentiometer for setting hysteresis

## Pin allocation for vacuum switch for VADM/VADMI...-P/N

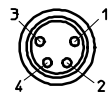
PNP output



NPN output



Pin allocation



- 1 Brown: Positive terminal
- 2 White: N/C contact
- 3 Blue: Negative terminal
- 4 Black: N/O contact

BN = Brown

WH = White

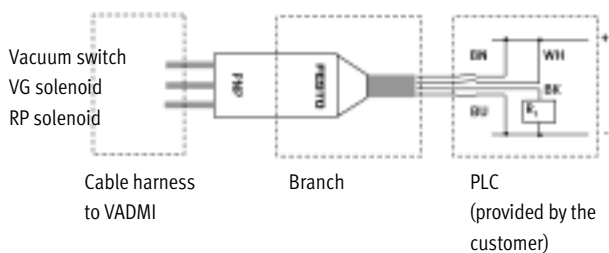
BK = Black

BU = Blue

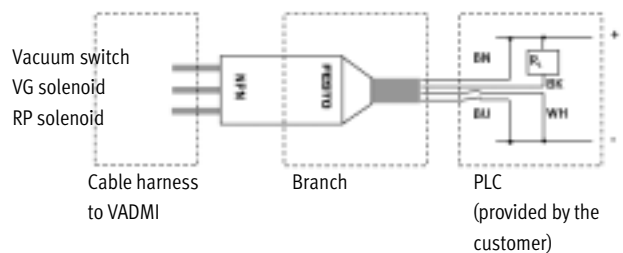
RL = Load

## Connection to PLC for VADMI...-LS-P/N

PNP circuit



NPN circuit



BN = Brown for vacuum ON/OFF, VG

WH = White for ejector pulse, RP

BK = Black for consumer RL (PLC)

BU = Blue for ground

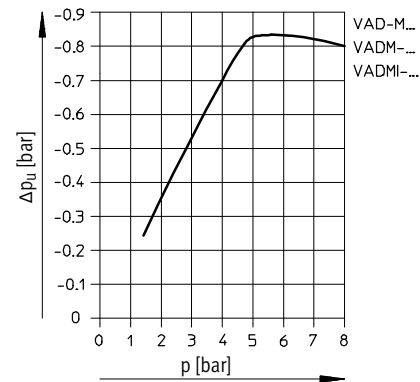
# Vacuum generators VADM/VADMI

Technical data

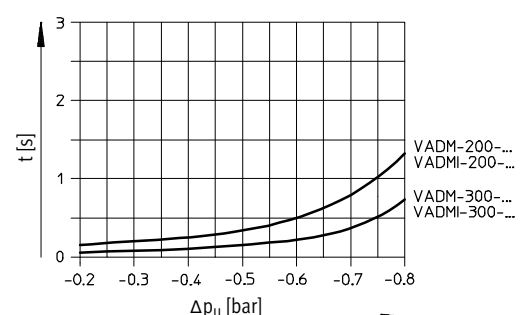
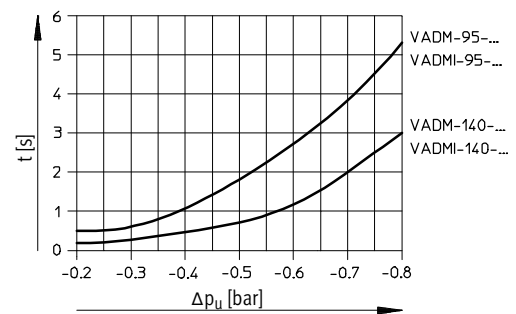
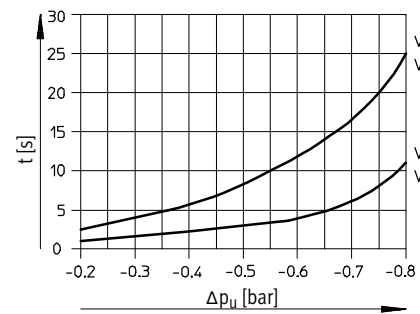
Weight [g] Type	VADM						VADMI					
	-45	-70	-95	-140	-200	-300	-45	-70	-95	-140	-200	-300
Without vacuum switch	60	140	210	290	320	340	85	170	240	320	350	370
With vacuum switch -P/-N	65	145	220	300	330	350	90	180	250	330	360	380

Materials	
Housing	Wrought aluminium alloy
Filter housing	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



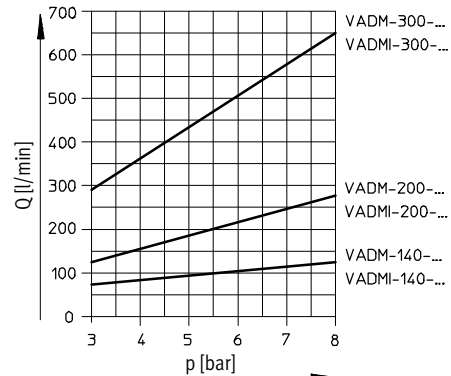
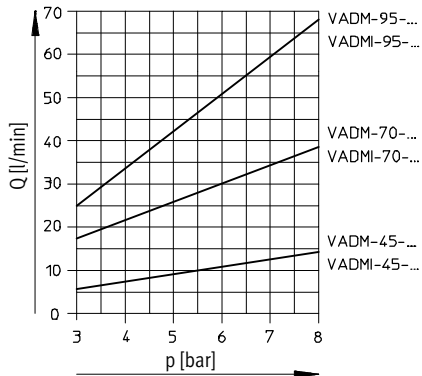
## Evacuation time t [s] for 1 litre volume at 6 bar operating pressure



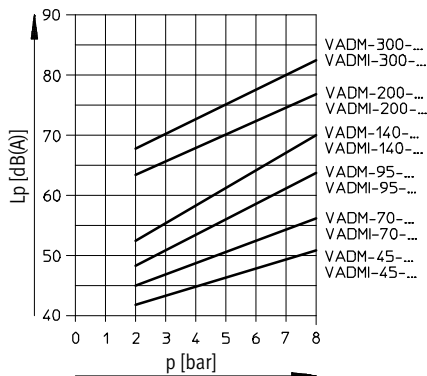
# Vacuum generators VADM/VADMI

Technical data

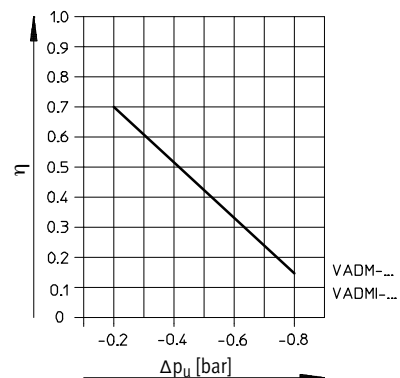
## Air consumption Q as a function of operating pressure p



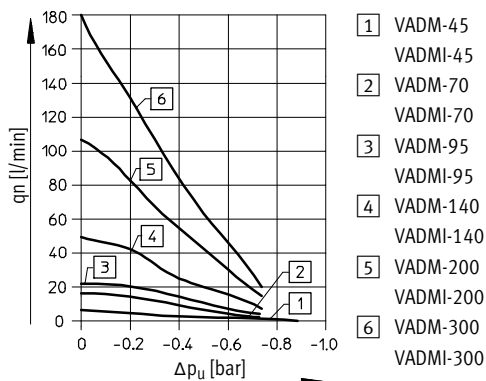
## Noise level Lp as a function of operating pressure p (without suction flow)



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



## Suction rate qn as a function of vacuum Δp<sub>U</sub> at P<sub>nom</sub> of 6 bar



# Vacuum generators VADM/VADMI

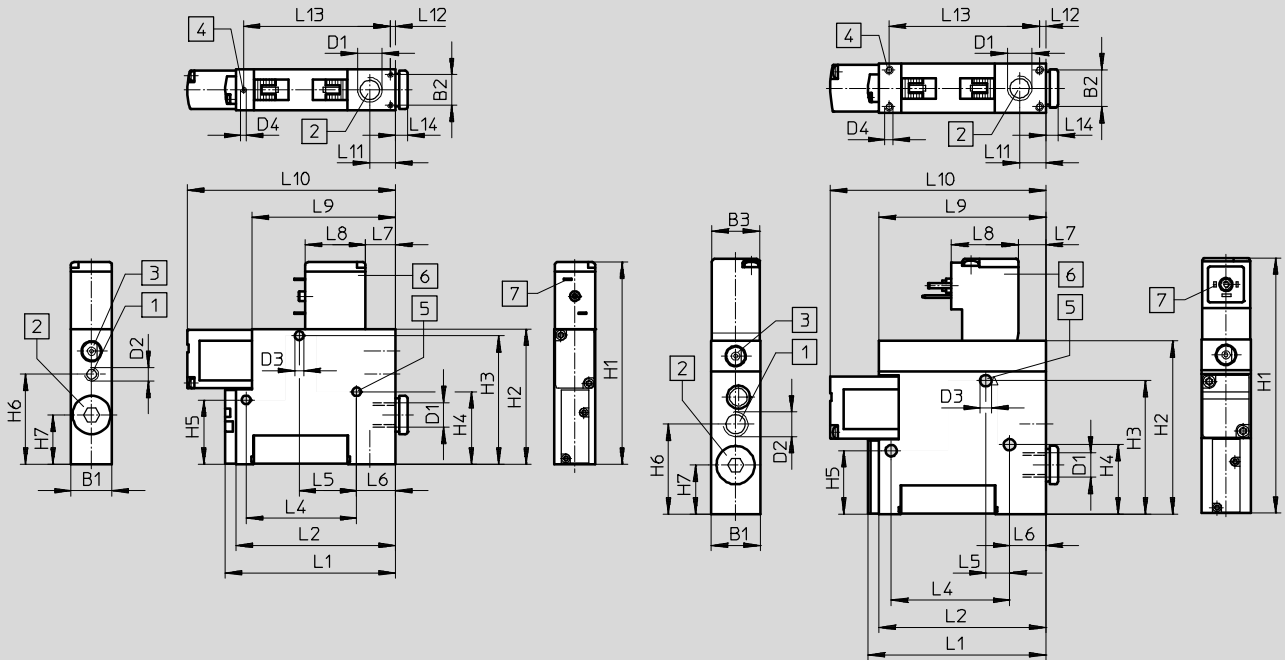
Technical data

FESTO

## Dimensions

VADM-45/70

VADM-95/140/200/300



- |   |                                      |                        |                     |
|---|--------------------------------------|------------------------|---------------------|
| 1 | Supply port                          | 7                      | Suitable socket for |
| 2 | Vacuum port                          | - VADM-45/70:          |                     |
| 3 | Manual override                      | KMYZ → 19              |                     |
| 4 | Mounting thread                      | MSSD-ZBZC → 19         |                     |
| 5 | Mounting hole                        | - VADM-95/140/200/300: |                     |
| 6 | Solenoid coil can be rotated by 180° | KMEB → 19              |                     |
|   |                                      | MSSD-EB → 19           |                     |

Type	B1	B2	B3	D1	D2	D3 Ø	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 conforms to ISO 1179-1 and to ISO 228-1

# Vacuum generators VADM/VADMI

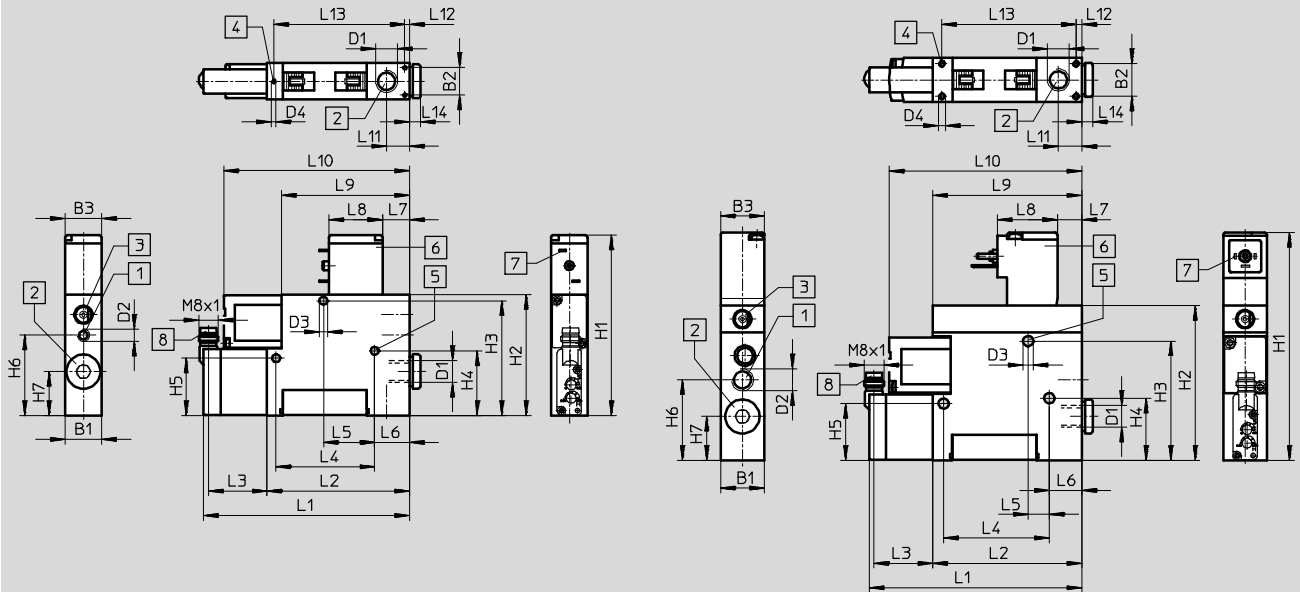
Technical data

FESTO

## Dimensions

VADM-45/70-P/N

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



- 1 Supply port
- 2 Vacuum port
- 3 Manual override
- 4 Mounting thread
- 5 Mounting hole
- 6 Solenoid coil can be rotated by 180°
- 7 Suitable socket for
  - VADM-45/70:  
KMYZ → 19  
MSSD-ZBZC → 19
  - VADM-95/140/200/300:  
KMEB → 19  
MSSD-EB → 19

- 8 Connection for connecting cable NEBU-M8G4/M8W4 → 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 conforms to ISO 1179-1 and to ISO 228-1

# Vacuum generators VADM/VADMI

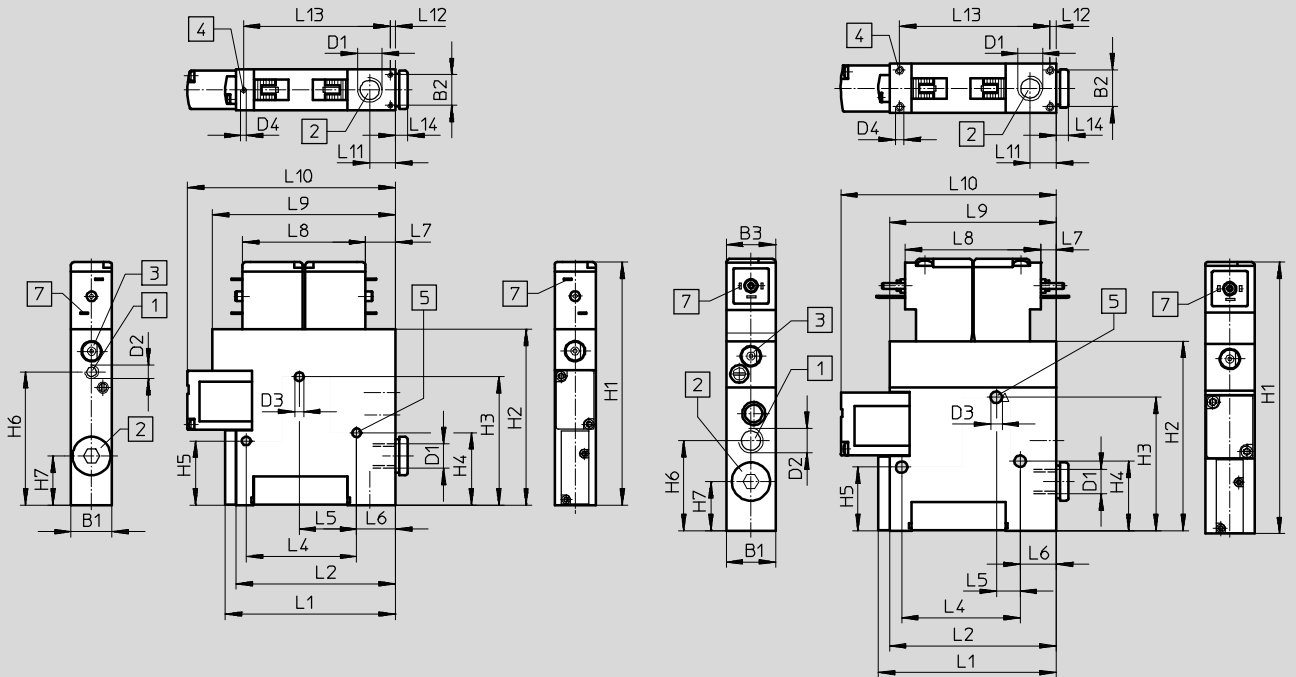
Technical data

FESTO

## Dimensions

VADMI-45/70

VADMI-95/140/200/300



- |   |                 |   |                         |
|---|-----------------|---|-------------------------|
| 1 | Supply port     | 7 | Suitable socket for     |
| 2 | Vacuum port     |   | - VADMI-45/70:          |
| 3 | Manual override |   | KMYZ → 19               |
| 4 | Mounting thread |   | MSSD-ZBZC → 19          |
| 5 | Mounting hole   |   | - VADMI-95/140/200/300: |
|   |                 |   | KMEB → 19               |
|   |                 |   | MSSD-EB → 19            |

Type	B1	B2	B3	D1	D2	D3	D4	H1	H2	H3	H4	H5	H6	H7
VADMI-45	10	6.2	-	M5	M5	3.2	M2	78.2	58.2	40.8	23.8	23.8	43.4	18
VADMI-70	15	11.2	-	G $\frac{1}{8}$	M5	3.2	M2	88.9	64.4	47	26.5	23.5	48.8	18
VADMI-95	18	13.4	18	G $\frac{1}{8}$	G $\frac{1}{8}$	4.2	M2.5	99.4	69.4	48.9	25.5	23.3	33	18
VADMI-140	22	16.6	18	G $\frac{1}{4}$	G $\frac{1}{8}$	5.2	M3	113.4	83.4	61.4	41.4	41.4	36	17.5
VADMI-200	22	16.6	18	G $\frac{3}{8}$	G $\frac{1}{4}$	5.2	M3	119.4	89.4	67.7	41.4	41.4	40	19
VADMI-300	22	16.6	18	G $\frac{3}{8}$	G $\frac{1}{4}$	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
VADMI-45	45	41	33.6	25	3.6	11	33	55	56	7.9	1.9	36.3	4
VADMI-70	62.3	58.3	40.4	21	14.2	11	45	67	76.1	9.4	1.9	53.7	4.5
VADMI-95	65	61	43.3	8.7	13.2	5.7	49.5	61	78.8	9.5	2.3	55	4.5
VADMI-140	88	84	26	12.5	28.5	5.7	49.5	61	96.8	13.8	2.3	79.4	5
VADMI-200	88	84	26	12.5	28.5	5.7	49.5	61	101.8	12.5	2.3	79.4	5
VADMI-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 conforms to ISO 1179-1 and to ISO 228-1



# Vacuum generators VADM/VADMI

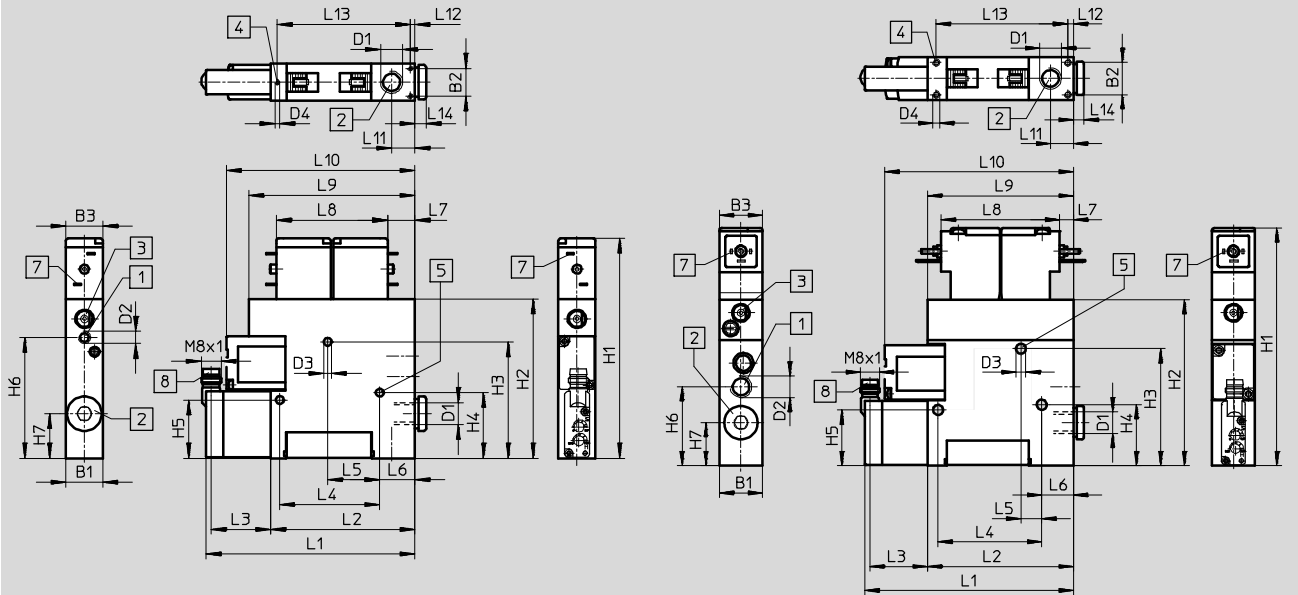
Technical data

FESTO

## Dimensions

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

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



- 1 Supply port
- 2 Vacuum port
- 3 Manual override
- 4 Mounting thread
- 5 Mounting hole
- 7 Suitable socket for
  - VADMI-45/70:
  - KMYZ → 19
  - MSSD-ZBZC → 19
  - VADMI-95/140/200/300:
  - KMEB → 19
  - MSSD-EB → 19
- 8 Connection for connecting cable NEBU-M8G4/M8W4 → 19

Type	B1	B2	B3	D1	D2	D3	D4	H1	H2	H3	H4	H5	H6	H7
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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
VADMI-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 conforms to ISO 1179-1 and to ISO 228-1

# Vacuum generators VADM/VADMI

Technical data

Ordering data							
Size	Solenoid coils	Without vacuum switch		With vacuum switch		NPN output	
				PNP output			
		Part No.	Type	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.

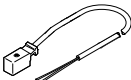
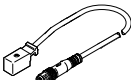
These vacuum generators may only be operated with the cable supplied.

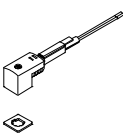
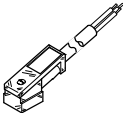
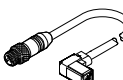
# Vacuum generators VADM/VADMI


Accessories

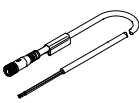
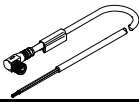
**FESTO**

Ordering data – Plug socket MSSD				Technical data → Internet: mssd	
	Description	Electrical connection	Cable connection	Part No.	Type
	For VADM/ VADMI-45/70	Angled socket	Insulation displacement connector	<b>185521</b>	<b>MSSD-ZBZC</b>
	For VADM/ VADMI-95/ 140/200/300	Angled socket, 3-pin, type C, to EN 175301-803	Screw terminal PG7	<b>151687</b>	<b>MSSD-EB</b>
		Angled socket, 4-pin, type C	Screw terminal M12	<b>539712</b>	<b>MSSD-EB-M12</b>
			Insulation displacement con- nector M14	<b>192745</b>	<b>MSSD-EB-S-M14</b>

Ordering data – Connecting cable KMYZ-2					Technical data → 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	<b>34997</b> <b>KMYZ-2-24-2,5-LED</b>
					5	<b>34998</b> <b>KMYZ-2-24-5-LED</b>
				LED	10	<b>193443</b> <b>KMYZ-2-24-10-LED</b>
					0.5	<b>177676</b> <b>KMYZ-2-24-M8-0,5-LED</b>
			Straight plug, 3-pin, M8x1	LED	2.5	<b>177678</b> <b>KMYZ-2-24-M8-2,5-LED</b>

Ordering data – Plug socket with cable KMEB					Technical data → 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	<b>151688</b> <b>KMEB-1-24-2,5-LED</b>
					5	<b>151689</b> <b>KMEB-1-24-5-LED</b>
					10	<b>193457</b> <b>KMEB-1-24-10-LED</b>
		Angled socket, 4-pin, type C, to EN 175301-803	Open cable end	LED	2.5	<b>174844</b> <b>KMEB-2-24-2,5-LED</b>
					5	<b>174845</b> <b>KMEB-2-24-5-LED</b>
		Angled socket, 5-pin, type C, to EN 175301-803	Straight plug, 5-pin, M12x1	LED	0.5	<b>177677</b> <b>KMEB-2-24-M12-0,5-LED</b>

Ordering data – Illuminating seal MEB-LD			Technical data → Internet: meb	
	Description		Part No.	Type
	For plug socket with cable KMEB and plug socket MSSD-EB		<b>151717</b>	<b>MEB-LD-12-24DC</b>

Ordering data – Connecting cable NEBU-M8				Technical data → Internet: nebu	
	Electrical connection		Cable length [m]	Part No.	Type
	Straight socket, M8x1, 4-pin	Open cable end	2.5	<b>541342</b>	<b>NEBU-M8G4-K-2.5-LE4</b>
			5	<b>541343</b>	<b>NEBU-M8G4-K-5-LE4</b>
			9	<b>8003130</b>	<b>NEBU-M8G4-K-9-LE4</b>
	Angled socket, M8x1, 4-pin,	Open cable end	2.5	<b>541344</b>	<b>NEBU-M8W4-K-2.5-LE4</b>
			5	<b>541345</b>	<b>NEBU-M8W4-K-5-LE4</b>
			10	<b>575833</b>	<b>NEBU-M8W4-K-10-LE4</b>