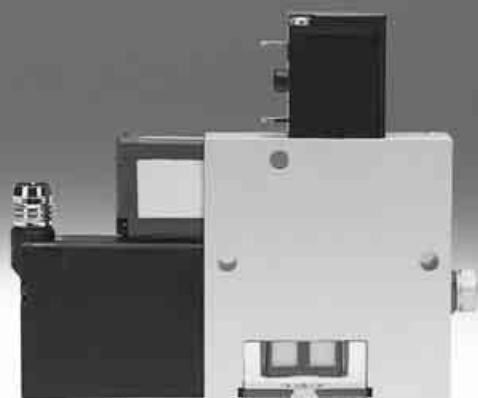


Vacuum generators VADM/VADMI

FESTO



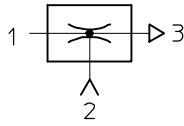
Vacuum generators VADM/VADMI

FESTO

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

FESTO

Key features

Compact ejectors

OVEM

Technical data → Internet: ovom



- 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

FESTO

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 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



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Key features

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

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

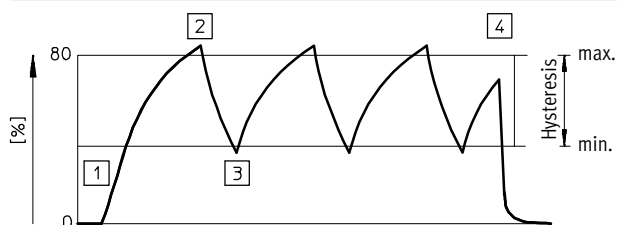
The vacuum range for holding the workpiece is set on the vacuum switch using the two potentiometers. The lower limit defines the minimum value.

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

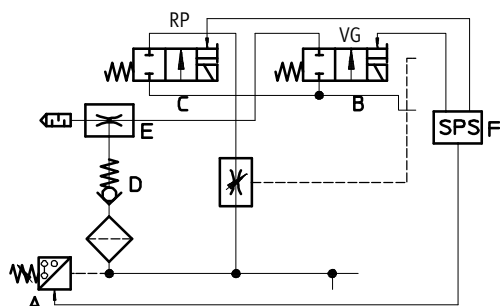
value and is deactivated again once the maximum value is regained. A check valve prevents the vacuum level from being reduced during the inactive phase of vacuum generation.



The functional sequence



Vacuum curve



RP Solenoid valve for ejector pulse

VG Solenoid valve for vacuum
ON/OFF

E Vacuum generator

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

FESTO

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

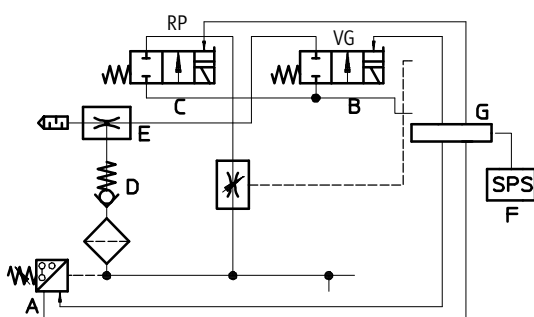
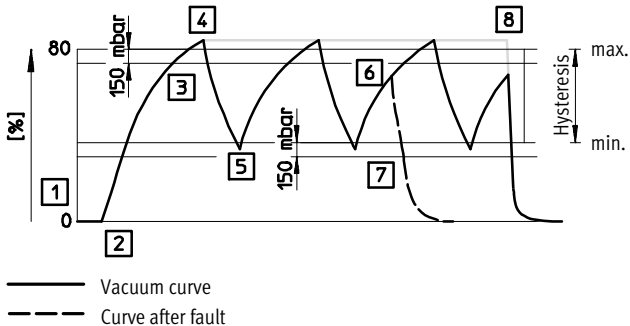
Control signal: vacuum

ON

OFF

Status signal

A1



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

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

Vacuum on

- 2 Vacuum switch activates the VG solenoid
 - Valve for compressed air supply B is opened
 - Vacuum generation E is activated
- 3 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

- 4 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

- 5 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

- 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 an error message to the external controller F
 - External controller F interrupts the transport process
 - Vacuum generation E is ended

Cycle ended: vacuum off

- 8 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

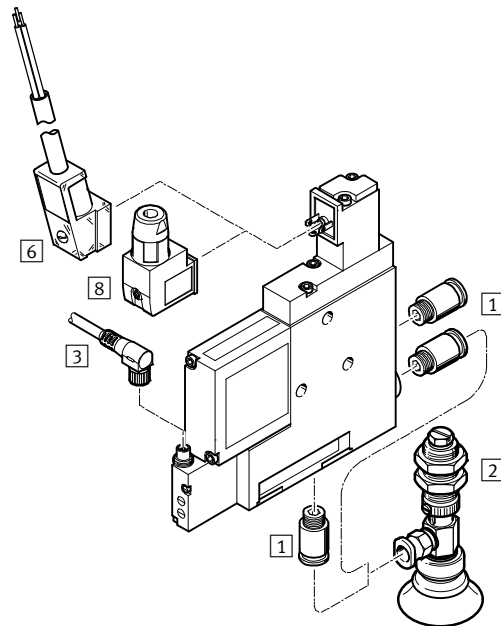
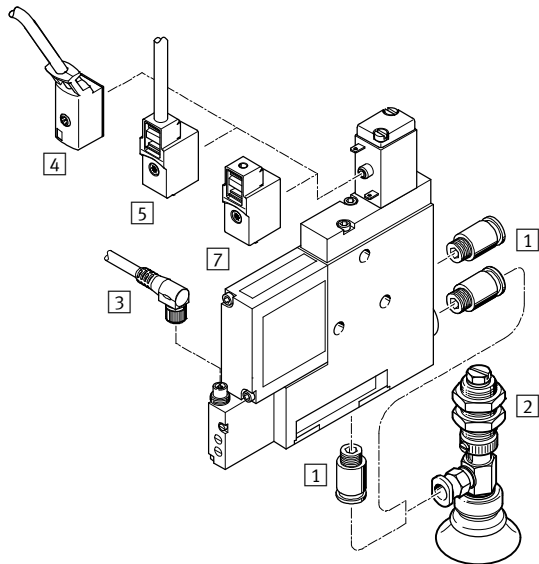
Vacuum generators VADM/VADMI

Peripherals overview

FESTO

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	■	■	LEERER MERKER
4	Connecting cable KMYZ-2	■	—	LEERER MERKER
5	Plug socket with cable KMYZ-4	■	—	LEERER MERKER
6	Plug socket with cable KMEB-1/2	—	■	LEERER MERKER
7	Plug socket MSSD-ZBZC	■	—	LEERER MERKER
8	Plug socket MSSD-EB	—	■	LEERER MERKER
—	Suction cup holder ESH	■	■	esh
—	Suction cup ESS	■	■	ess
—	Illuminating seal MEB-LD	—	■	LEERER MERKER

Vacuum generators VADM/VADMI

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Type codes

		VADMI	—	45	—	LS	—	P
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

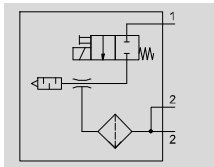
Possible combinations can be found in the ordering data.

Vacuum generators VADM/VADMI

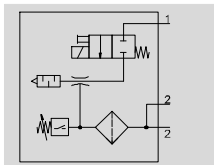
Technical data

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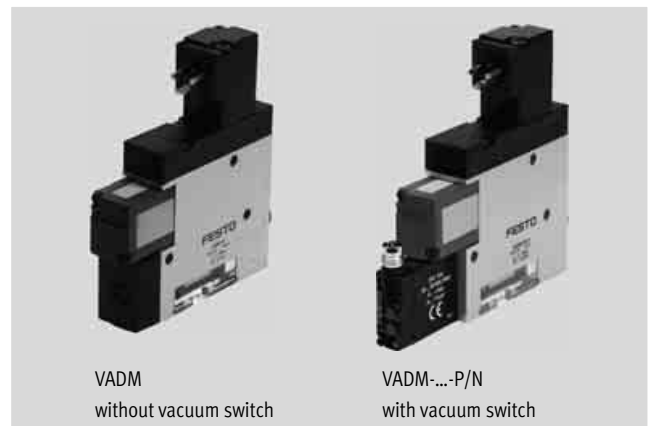
VADM without vacuum switch



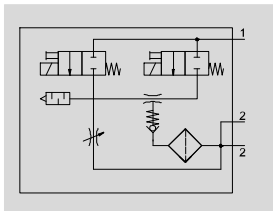
VADM with vacuum switch



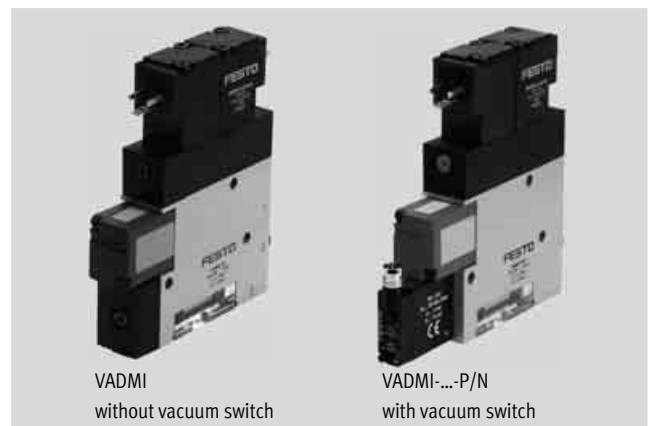
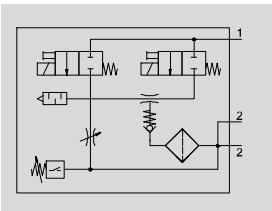
-  Temperature range
0 ... +60 °C
-  Operating pressure
1.5 ... 8 bar
-  www.festo.com



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	Electric on-off valve
	Filter	Filter
	–	Flow control valve
	–	Ejector pulse valve, electrical
	–	Check valve
	-P/-N Vacuum switch	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 ¹⁾		2			
CE marking (see declaration of conformity)		–		To EU EMC Directive ²⁾	
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 → User documentation.
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 ¹⁾ for 1 l volume, at p ₁ = 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

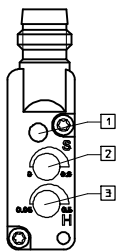
Vacuum generators VADM/VADMI

Technical data

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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
Switching element function	N/O contact			
Switching function	Threshold value comparator			
Reverse polarity protection	For all electrical connections			

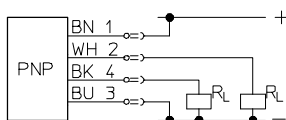
Vacuum switch control panel



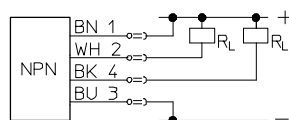
- 1 Switching status indication, yellow LED
- 2 Potentiometer for setting threshold values
- 3 Potentiometer for setting hysteresis

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

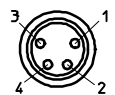
PNP output



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

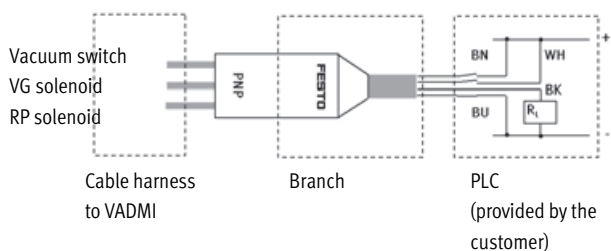
BK = Black

BU = Blue

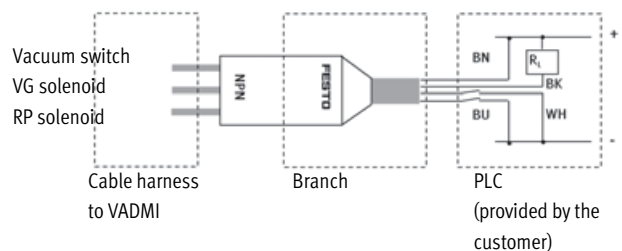
RL = Load

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

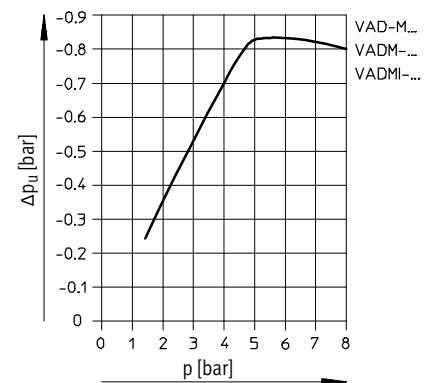
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Technical data

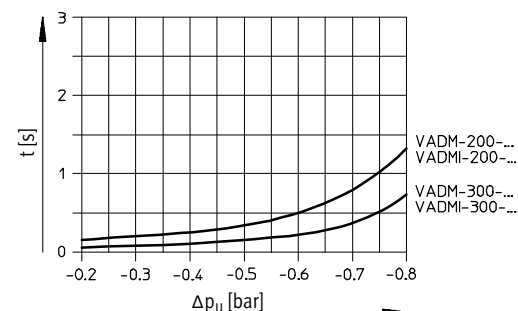
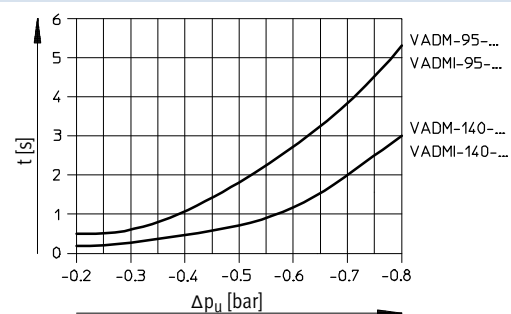
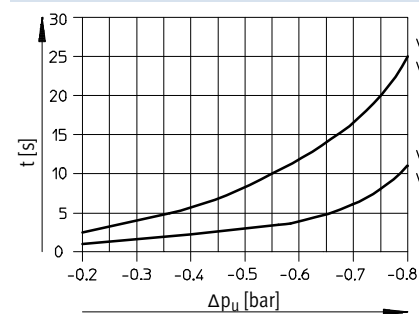
Weight [g]												
Type	VADM						VADMI					
	-45	-70	-95	-140	-200	-300	-45	-70	-95	-140	-200	-300
Without vacuum switch	60	140	210	290	320	340	85	170	240	320	350	370
With vacuum switch -P/-N	65	145	220	300	330	350	90	180	250	330	360	380

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 Δp_u as a function of operating pressure p



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

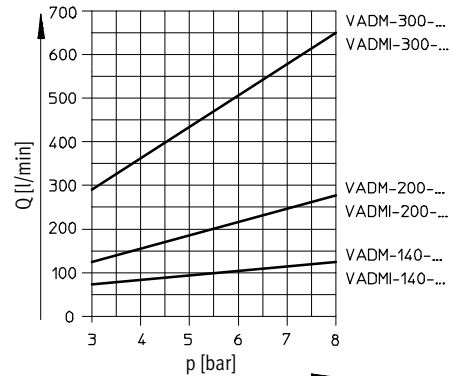
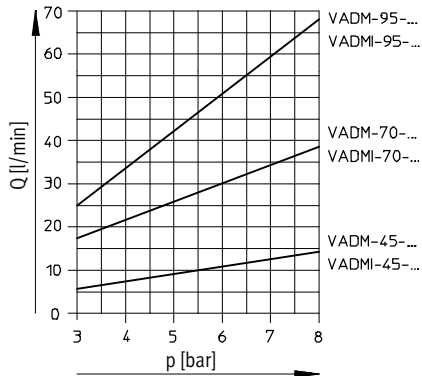


Vacuum generators VADM/VADMI

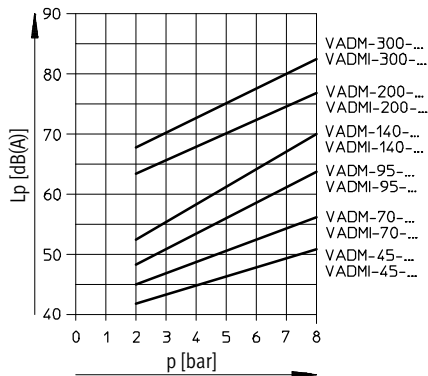
Technical data

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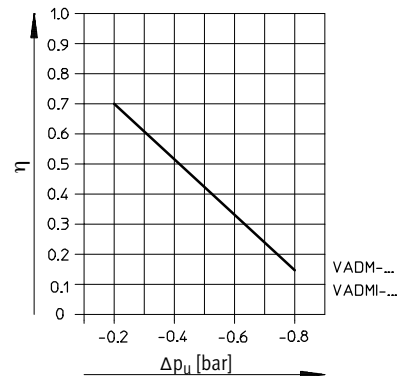
Air consumption Q as a function of operating pressure p



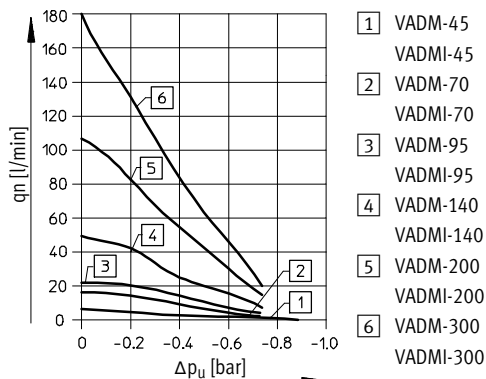
Noise level L_p as a function of operating pressure p (without suction flow)



Efficiency η as a function of vacuum Δp_u at P_{nom} of 6 bar



Suction rate q_n as a function of vacuum Δp_u at P_{nom} of 6 bar



Vacuum generators VADM/VADMI

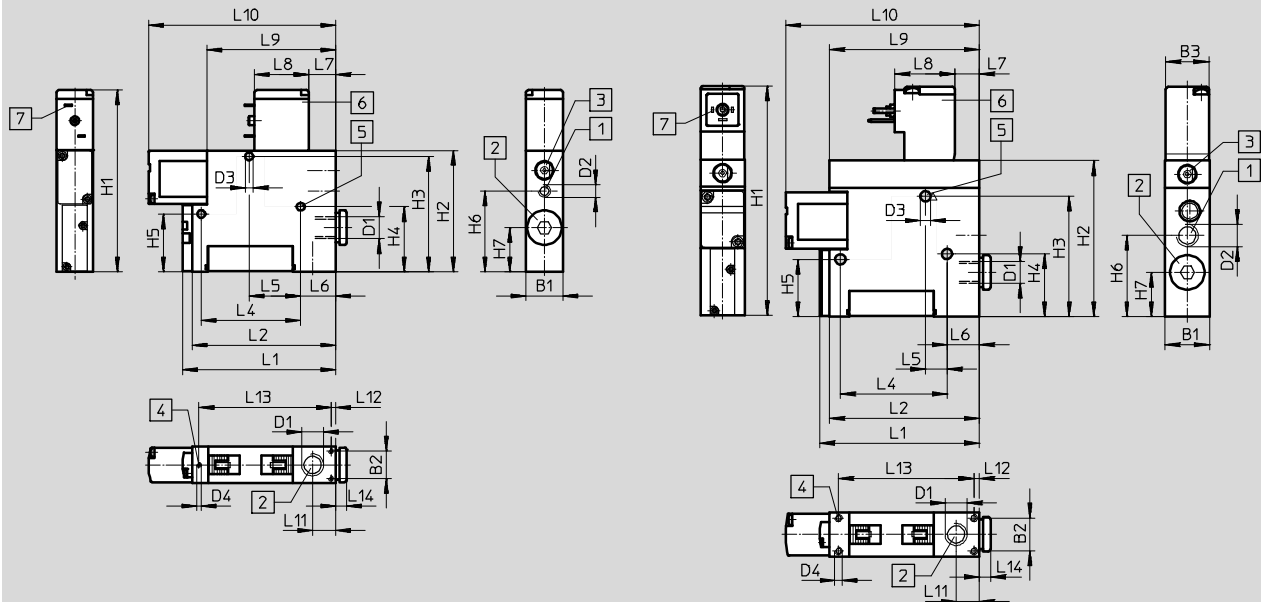
Technical data

FESTO

Dimensions

VADM-45/70

VADM-95/140/200/300



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

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

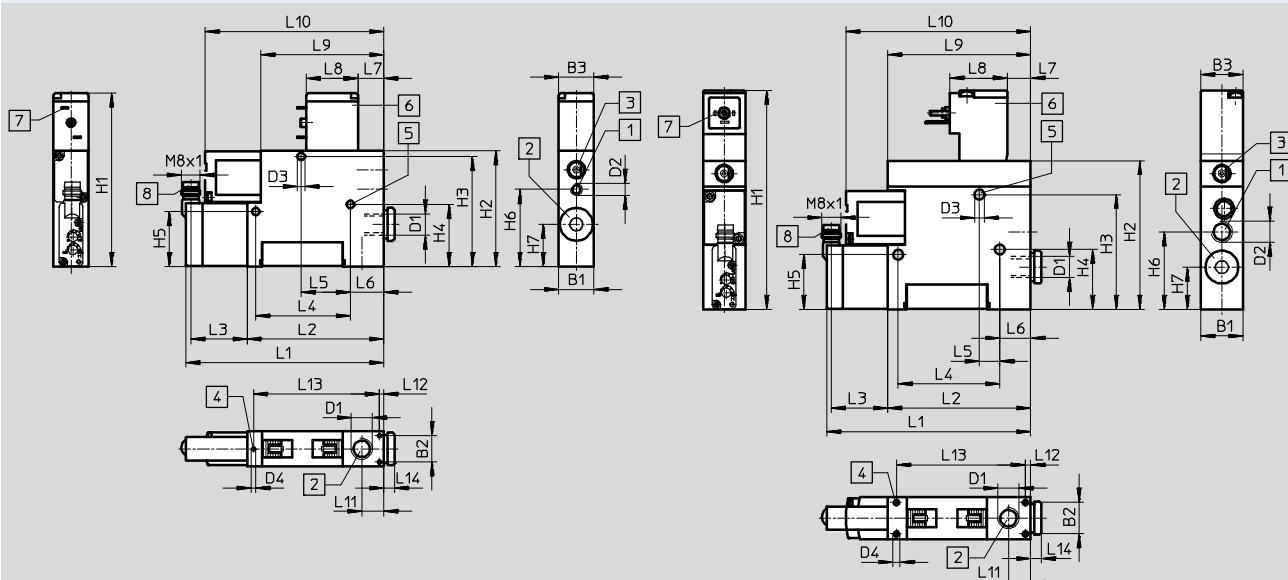
Technical data

FESTO

Dimensions

VADM-45/70-P/N

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



- | | | |
|--|-------------------------|-----------------------------|
| 1 Supply port | 7 Suitable socket for | 8 Connection for connecting |
| 2 Vacuum port | – VADM-45/70: | cable NEBU-M8G4/M8W4 |
| 3 Manual override | KMYZ → LEERER MERKER | → LEERER MERKER |
| 4 Mounting thread | MSSD-ZBZC → | |
| 5 Mounting hole | LEERER MERKER | |
| 6 Solenoid coil can be rotated by 180° | – VADM-95/140/200/300: | |
| | KMEB → LEERER MERKER | |
| | MSSD-EB → LEERER MERKER | |

Type	B1	B2	B3	D1	D2	D3 Ø	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

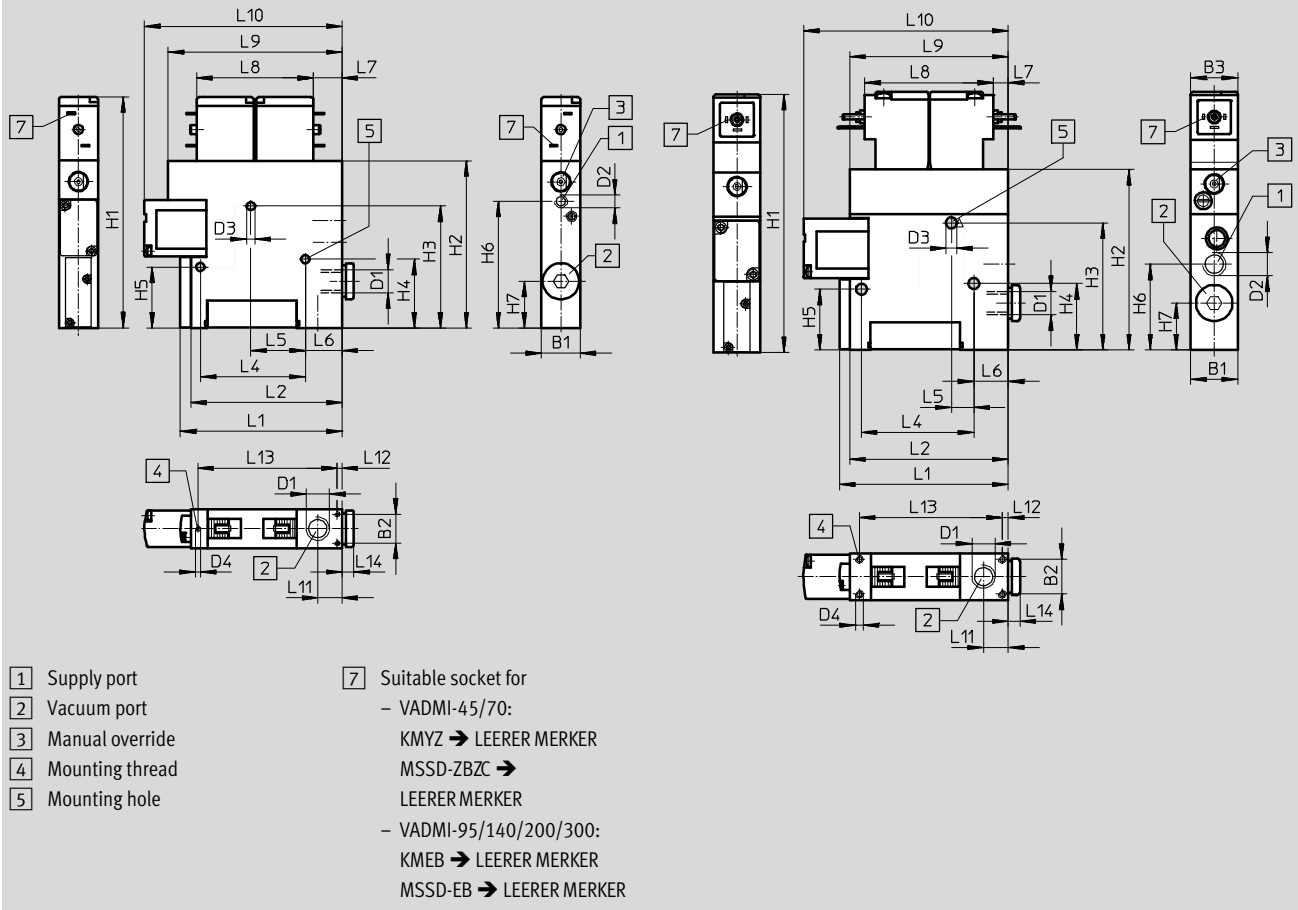
Technical data

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Dimensions

VADMI-45/70

VADMI-95/140/200/300



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

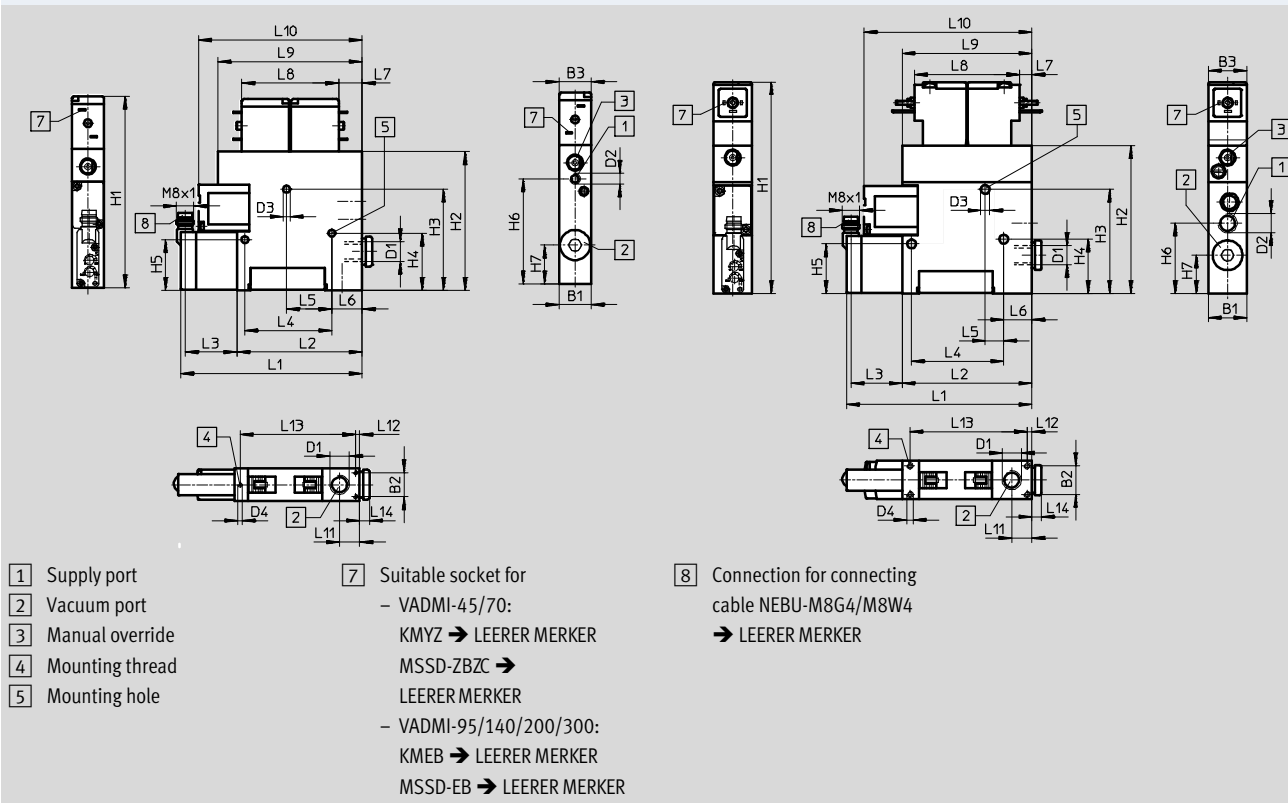
Technical data

FESTO

Dimensions

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

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



Type	B1	B2	B3	D1	D2	D3 Ø	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	G $\frac{1}{8}$	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	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(-LS)-P/N	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(-LS)-P/N	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(-LS)-P/N	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	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

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Technical data

Ordering data						
Size	Solenoid coils	Without vacuum switch		With vacuum switch		
				PNP output		NPN output
		Part No.	Type	Part No.	Type	Part No.
Without ejector pulse						
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
With ejector pulse						
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
With ejector pulse and air saving function						
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.

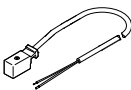
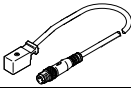
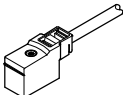
These vacuum generators may only be operated with the cable supplied.

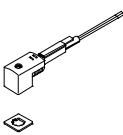
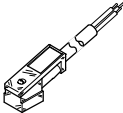
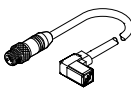
Vacuum generators VADM/VADMI

Accessories

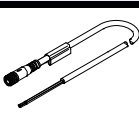
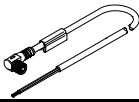
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Ordering data – Plug socket MSSD				Technical data → Internet: mssd	
	Description	Electrical connection	Cable connection	Part No.	Type
	For VADM/ VADMI-45/70	Angled socket	Insulation displacement connector	185521	MSSD-ZBZC
	For VADM/ VADMI-95/ 140/200/300	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/plug socket with cable KMYZ-4						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	34997	KMYZ-2-24-2,5-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
		Angled socket, square design MSZB	Open cable end	–	0.5	185519	KMYZ-4-24-0,5
					2.5	185520	KMYZ-4-24-2,5

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	151688	KMEB-1-24-2,5-LED
					5	151689	KMEB-1-24-5-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
					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			Technical data → 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				Technical data → 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

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