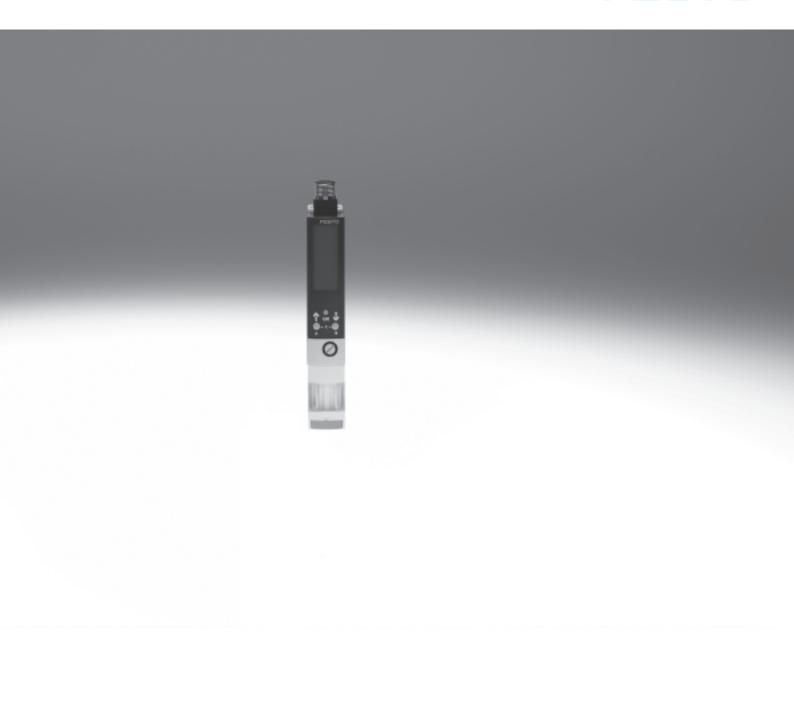
# **FESTO**



Key features

### **FESTO**

#### At a glance

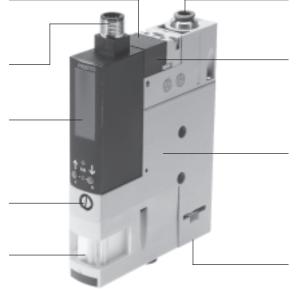
Accelerated vacuum reduction for placing the workpiece safely, through the use of an integrated solenoid valve to control the ejector pulse

Central electrical connection with M12 plug

Monitoring and visualisation of the vacuum by means of a vacuum sensor with LCD display (bar)

Adjustment of the ejector impulse via a flow control screw

An integrated filter prevents contamination of the vacuum generator



Quick and secure installation thanks to a QS fitting

Fast vacuum build-up through integrated solenoid valve for controlling the compressed air supply

Pressure drop is prevented by an integrated non-return valve

Maintenance-free operation and reduced noise level through integrated, open silencer

#### The innovative vacuum generator

Wide range of configuration options

The modular vacuum generator series OVEM offers a wide range of individual selectable functions, making it possible to find a solution for the most varied of applications.

- 3 nominal sizes 0.45 ... 0.95 mm
- Generator characteristics in two versions: high vacuum and high suction rate
- Integrated solenoid valve for controlling the ejector pulse

- Integrated solenoid valve for controlling the compressed air using two different switching functions
  - NC normally closed
  - NO normally open
- Electrical switching output of the vacuum sensor can be selected
- Alternatively selectable vacuum display (inchHg)
- Different pneumatic connection options (QS fitting or female thread)

#### Economical

- Short switching times thanks to integrated solenoid valves
  - Vacuum ON/OFF
- Ejector pulse
- Quick, precise and safe placement of the workpiece via the ejector pulse
- Cost saving through integrated air saving function
- Cost saving through preventive maintenance/service thanks to maintenance indicator
- High-performance supply to several vacuum generators via a common supply manifold (→ Page 14)

### User-friendly

- Simple installation with M12 plug and QS fittings
- Simple mounting via screws
- All control elements on one side
- Vacuum is displayed numerically and as a bar chart on the LCD display
- Important parameters and diagnostic information are displayed on the LCD display
- Quiet operation due to integrated silencers

#### Reliable

2

- Constant monitoring of the entire vacuum system via a vacuum sensor with LCD display to reduce downtimes (condition monitoring)
- Prevention of pressure loss by means of an integrated air saving function in conjunction with an integrated non-return valve

#### Space-saving

All functions are compactly integrated in one unit.

- No protruding elements such as valves or vacuum sensors
- Space-optimised installation is possible as all the control elements can be accessed from one side

#### Easy to maintain

- Integrated filter with inspection window for maintenance display
- Reduced contamination of the vacuum generator thanks to an open silencer

#### Variable mounting options

- Direct mounting or with mounting bracket
- Simple mounting on H-rail with accessories
- Forming a block of several vacuum generators on a common supply manifold (→ Page 14)



Key features

#### **FESTO**

### Operational principle of OVEM

### Vacuum ON/OFF

The compressed air supply is controlled by an integrated solenoid valve. The solenoid valve can be supplied in two different switching functions NC/NO.

- NC normally closed:
   The vacuum is generated when the vacuum generator is pressurised with compressed air and the solenoid valve has been switched.
- NO normally open:
   The vacuum is generated when the vacuum generator is pressurised with compressed air and the solenoid valve is in the normal position.

#### Vacuum sensor

The set reference value for the generated vacuum is monitored by an integrated vacuum sensor. If the reference value is reached or if it is not reached due to malfunctions (e.g. leakages, dropped workpiece), the vacuum sensor emits an electrical signal. Vacuum monitoring is the basis for the vacuum generator's air saving function.

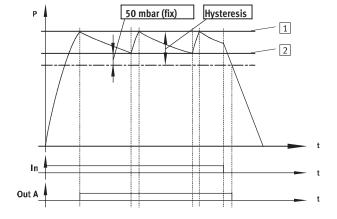
### Switching outputs/Switching input

The vacuum generator can be connected to higher-order systems by means of two digital switching outputs or one digital switching output and one analogue input, and by means of one digital switching input. The switching outputs can be configured as normally open or normally closed contacts. The switching function of the outputs can be stipulated as a threshold or window comparator. In the case of vacuum generators with two switching outputs, the outputs can be configured independently of one another. This makes it possible to use one generator to perform several tasks in parallel and thus to reduce production time, e.g. for quality sorting of parts.

#### Ejector pulse

With a second integrated solenoid valve, an ejector pulse is activated and generated after the vacuum is switched off to release the workpiece safely from the suction cup and to reduce the vacuum quickly.

### Air saving function LS (-CE, -OE)

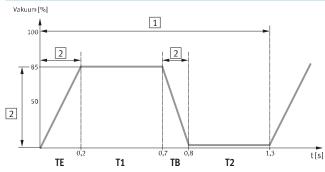


If the desired threshold  $\boxed{1}$  is reached for the vacuum, vacuum generation is automatically switched off. A non-return valve prevents the reduction of the vacuum.

Nonetheless, leakages (due to e.g. rough workpiece surfaces) will

slowly reduce the vacuum. If the pressure drops below the threshold value 2 vacuum generation is switched on automatically. Vacuum is generated until the set threshold value 1 is reached again.

### Condition monitoring and diagnosis



- 1 Cycle time
- 2 Monitoring
- TE Evacuation time
- T1 Transport time
- TB Air supply time
- T2 Return time

The most important operating parameters:

- vacuum
- evacuation time
- air supply time are constantly measured in the vacuum generator and compared to the individually set reference values (condition monitoring). Any deviations from the reference values are determined by the vacuum generator and

displayed (diagnostics). In addition, an electrical signal is transmitted to the master controller.

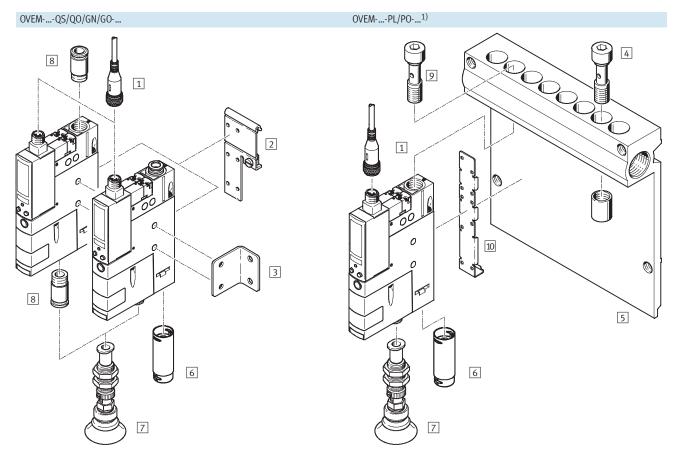
This makes it possible to take preventive action:

- performing timely maintenance in order e.g. to prevent machine failure or downtimes
- and to guarantee process reliability (adherence to the cycle time).



# Vacuum generators OVEM Peripherals overview





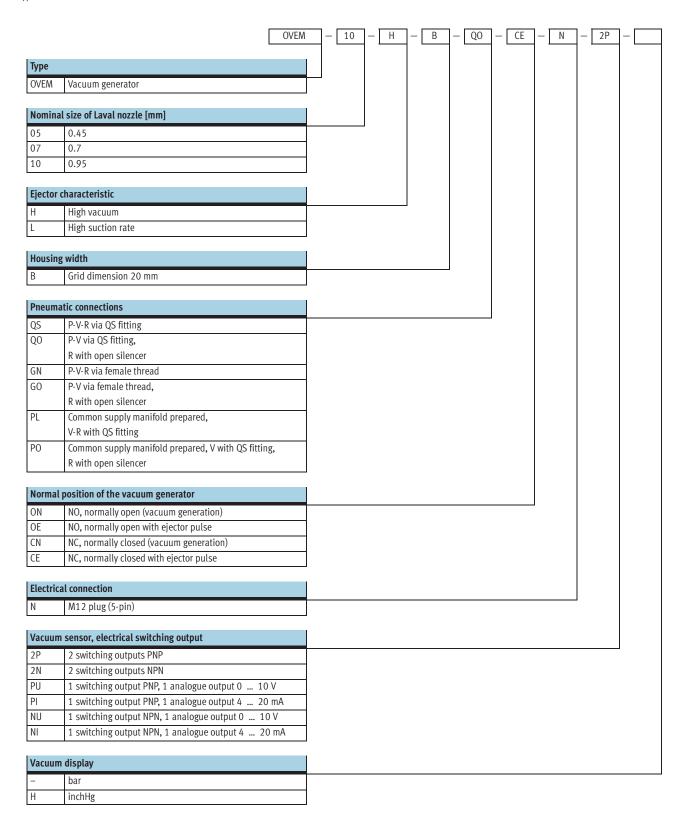
1) Hollow bolt 9 and mounting bracket 10 are included in the scope of delivery of the OVEM-...-PL/PO-....

Mou	inting attachments and accessories							
		OVEMQS	S/QO/GN/GO	)		OVEMPL/PO		→ Page/Internet
		QS	Q0	GN	GO	PL	PO	
1	Connecting cable							nebu
	NEBU-M12G5			•			•	
2	H-rail mounting							15
	OABM-H			•		-	-	
3	Mounting bracket							hrm-1
	HRM-1			•		-	-	
4	Blanking plug					_	_	15
	OASC-G1-P		-	-		•	•	
5	Common supply manifold							14
	OABM-P		-	-			•	
6	Silencer extension							uoms
	UOMS-1/4	_	_	_	_	_	-	
7	Suction gripper				•		•	esg
	ESG					•		
8	Push-in fitting							quick star
	QS	_		•	•	_	-	
-	Suction cup holder			•			•	esh
	ESH			•			•	
-	Suction cup			1			•	ess
	ESS			•		•	•	



**FESTO** 

Type codes





**FESTO** 

## Function

NC, normally closed:

- Ejector pulse
- QS fitting or female G thread
- With open silencer
- Prepared for common supply manifold

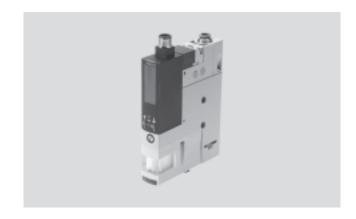
## NO, normally open:

- Ejector pulse
- QS fitting or female G thread
- With open silencer
- Prepared for common supply manifold





Operating pressure



General technical data																			
Туре		OVEN	1-05		OVE	EM-07		OVEN	<b>1</b> -10		OVEN	l-05		OVEN	N-07		OVEN	1-10	
Pneumatic connections		Q0	GO	PO	Q0	GO	PO	Q0	GO	РО	QS	GN	PL	QS	GN	PL	QS	GN	PL
Nominal size of Laval nozzle	[mm]	0.45			0.7			0.95			0.45			0.7			0.95		
Grid dimension	[mm]	20						•											
Ejector characteristic		High	vacuur	n/Stan	ndarc	l H													
		High	suctior	rate/	Stan	dard L													
Grade of filtration	[µm]	40																	
Duty cycle	[%]	100																	
Constructional design		Modu	ılar																
Mounting position		Any																	
Type of mounting			rough-																
		Via fe	emale t	hread															
		Via a	ccessoi	ies															
Pneumatic connection 1		1 -	G1/8	-	QS8		-	QS8	G1/4	-	QS6	G1/8	-	QS8	G1/4	-	QS8	G1/4	-
Vacuum port		QS6	G1/8	QS6	QS8	3 G <sup>1</sup> / <sub>4</sub>	QS8	QS8	G1/4	QS8	QS6	G1/8	QS6	QS8	G1/4	QS8	QS8	G1/4	QS8
Pneumatic connection 3		'	silenc	er, inte	egrat	ed					QS8	G1/8	QS8	QS8	G3/8	QS8	QS8	G3/8	QS8
Design, silencer		Open –																	
Integrated function	ON/CN	On-off valve, electrical																	
		Vacuum sensor																	
		Filter																	
		'	silenc								-								
	OE/CE		ff valve																
			or puls			l													
			control																
			um sen																
			iving fu		ı, ele	ectrical													
			return v	/alves															
		Filter																	
			silenc	er							-								
Valve function	ON/OE	Open																	
	CN/CE	Close																	
Manual override			detenti			-													
		Addit	ionally	via op	erat	ing butt	ons												





Operating and environmental condi	Operating and environmental conditions										
Туре		OVEM-05/07/10QO/PO/GO	OVEM-05/07/10QS/GN/PL								
Operating pressure	[bar]	2 8	2 6								
Nominal operating pressure	[bar]	6									
Operating medium		Filtered compressed air, unlubricated, grade of filtration	40 μm								
Ambient temperature	[°C]	0 +50									
Temperature of medium	[°C]	0 +50									
Corrosion resistance class CRC <sup>1)</sup>		2									
CE mark (see declaration of conform	ity)	To EU EMC Directive									
Certification		C-Tick									

<sup>1)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Performance data – High vacuum															
Туре		OVEM-	OVEM-05				OVEM-07				OVEM-10				
Normal position of the vacuum genera	ator	ON	OE	CN	CE	ON	OE	CN	CE	ON	OE	CN	CE		
Max. vacuum	[%]	93			•	•	· · · · · · · · · · · · · · · · · · ·								
Operating pressure for max. vacuum	5.1				4.1				3.5						
Max. suction rate with respect to atmosphere	[l/min]	6				16				19.5					
Suction rate at p <sub>1</sub> = 6 bar	[l/min]	5.9				15.1	15.1				16.8				
Pressurisation time <sup>1)</sup> for 1 l volume, at $p_1 = 6$ bar	[s]	4.8	2	4.8	2	1.9	0.4	1.9	0.4	1.2	0.2	1.2	0.2		
Noise level at p <sub>1</sub> = 6 bar	db(A)	51				58				73					

<sup>1)</sup> Time required to build up vacuum to -0.05 bar.

Performance data – High suction rate													
Туре		OVEM-05				OVEM-07				OVEM-10			
Normal position of the vacuum generator		ON	OE	CN	CE	ON	OE	CN	CE	ON	OE	CN	CE
Max. suction rate with respect	[l/min]	13				31.5				45			
to atmosphere													
Suction rate at p <sub>1</sub> = 6 bar	[l/min]	12.8	12.8			31.5				45			
Pressurisation time <sup>1)</sup> for 1 l volume,	[s]	2	1.3	2	1.3	1	0.2	1	0.2	0.8	0.2	0.8	0.2
at $p_1 = 6$ bar													
Noise level at $p_1 = 6$ bar	db(A)	45				53				64			

<sup>1)</sup> Time required to build up vacuum to -0.05 bar.



**FESTO** 

Technical data – Vacuum sensor											
Electrical switching output		2P	2N	PU	NU	PI	NI				
Mechanical											
Measured variable		Relative pressure									
Measuring principle		Piezoresistive									
Pressure measuring range	[bar]	-1 0									
Accuracy FS <sup>1)</sup>	[%]	3									
Repetition accuracy	[%]	0.6									
switching value FS <sup>1)</sup>											
Setting options		Via display and k	eys								
Threshold value setting range	[bar]	-0.999 0									
Hysteresis setting range	[bar]	-0.9 0									
Type of display		4-character alpha	numerical, back	lit LCD							
Displayable units	_	bar									
	Н	inchHg									
Indicating range	[bar]	-0.999 0									
	[inchHg]	-29.5 0									
Switching status display		Optical									
Switching position display		LCD									
Electrical connection		Plug M12x1, 5-pin									
Electrical											
Switching output		2x PNP	2x NPN	1x PNP	1x NPN	1x PNP	1x NPN				
Standard switching input		IEC 61131-2									
Switching element function		NO contact									
C :: I: C ::		NC contact Window comparator									
Switching function											
On anating a solt and a source	[V DC]	Threshold comparator									
Operating voltage range Idle current	[V DC] [mA]	20.4 27.6									
Coil characteristics 24 V DC	[W]		n. 0 2								
Con characteristics 24 v DC	[vv]	Low current phase: 0.3									
Residual current	[mA]	High current phase: 2.55									
Max. output current	[mA]	100									
Voltage drop	[V]	≤ 1.5									
Inductive protective circuit	[v]	Adapted to MZ, M	V MF coils								
Switch-on suppression		Yes	i, WIE COILS								
Analogue output	[V]	-		0 10		_					
/ matogae output	[mA]	_		-		4 20					
Permitted load resistance	[Ohm]	_		Min. 2000		Max. 500					
analogue output	[0]			2000							
Accuracy of analogue output FS <sup>1)</sup>	[%]	- 4									
Protection against short circuit	1.73	Yes									
Protection against overloading		Yes									
Protection against polarity reversal		For all electrical of	onnections								
Protection class		IP65									
Electrical protection class		III.									
Electrical protection class											

<sup>1) %</sup>FS = % of the measuring range final value (full scale)

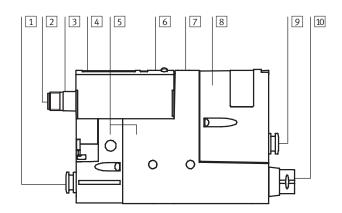




Pin allocation		
Plug M12x1, 5-pin	Pin	Description
1	1	Supply voltage +24 V DC
	2	Output B (function depending on variant)
2-(+++)-4	3	0 V
5	4	Output A (switching output for vacuum sensor)
5	5	Switching input In (vacuum ON/OFF and ejector pulse)

## Materials

Sectional view



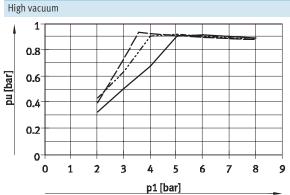
Vacu	uum generator OVEM-05/	07/10	
1	Fitting	QS	Nickel-plated brass
		Q0	
	Connecting thread	GN	Wrought aluminium alloy, anodised
		GO	
2	Plug contacts		Gold-plated brass
3	Plug housing		Nickel-plated brass
4	Inspection window		Polyamide
5	Housing		Die-cast aluminium,
			reinforced polyamide
6	Key pad		Thermoplastic polyurethane elastomer
7	Adjusting screw	CE	Steel
		OE	
8	Filter housing		Reinforced polyamide
9	Fitting	QS	Nickel-plated brass
		Q0	
		PL	
		PO	
	Connecting thread	GN	Wrought aluminium alloy, anodised
		GO	
10	Silencer	Q0	Wrought aluminium alloy,
		GO	PU foam
		PO	
	Fitting	QS	Nickel-plated brass
		PL	
	Connecting thread	GN	Wrought aluminium alloy, anodised
-	Screws		Steel
-	Pins		Steel
-	Jet nozzle		Wrought aluminium alloy
-	Receiver nozzle		Polyacetal
-	Filter		Fabric, polyamide, sintered steel
-	Seals		Nitrile rubber
-	Hollow bolt	PL	Wrought aluminium alloy
		PO	
-	Mounting bracket	PL	Stainless steel
		PO	
	Note on materials	Q0	Contains PWIS (paint-wetting
		GO	impairment substances)
		PO	





8





OVEM-05-H ----- OVEM-07-H ---- OVEM-10-H

## 0.8 pu [bar] 0.6 0.4 0.2

p1 [bar]

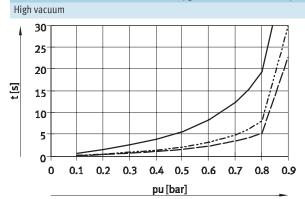
OVEM-05-L ---- OVEM-07-L ---- OVEM-10-L

0

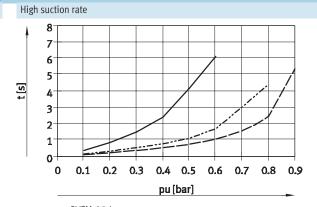
2

High suction rate

## Evacuation time t as a function of vacuum $p_u$ for 1 l volume at 6 bar operating pressure



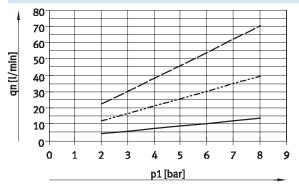
OVEM-05-H ----- OVEM-07-H ---- OVEM-10-H



 OVEM-05-L ----- OVEM-07-L ---- OVEM-10-L

## Air consumption $\boldsymbol{q}_n$ as a function of operating pressure $\boldsymbol{p}_1$

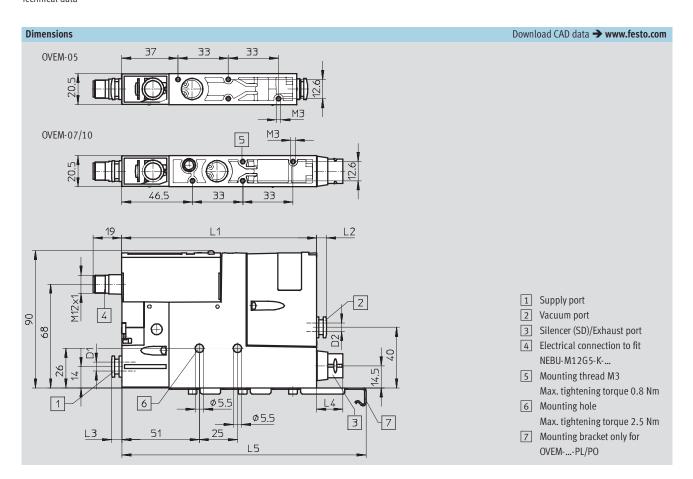
High vacuum/high suction rate



OVEM-05 ---- OVEM-07 ---- OVEM-10



**FESTO** 



Туре				L1	L2	L3	L4	L5
	Р	V	R					
	D1	D2						
OVEM-05QS	QS6		QS8			6.5	12	_
OVEM-05Q0	Q30	QS6	SD	115	6.5	0.5	-	_
OVEM-05PL	G1/4	Q30	QS8		0.5	_	12	160.5
OVEM-05PO	074		SD			_	-	100.5
OVEM-05GN	G <sup>1</sup> /8	G1/8	G1/8		8.2	8.2	8.2	_
OVEM-05GO	078	078	SD	1	0.2	0.2	-	_
OVEM-07/10QS	QS8		QS8			6.5	12	
OVEM-07/10QO	Q36	QS8	SD		6.5	0.5	17.3	_
OVEM-07/10PL	G1/4	Ų36	QS8	128	6.5		12	160.5
OVEM-07/10PO	U-∕4		SD	128		_	17.3	100.5
OVEM-07/10GN	G1/4	G1/4	G3/8		17.2	17.2	-	
OVEM-07/10GO	G-74	U-74	SD	7	17.2	17.2	17.3	_





Ordering data and weight						
Circuit symbol	Description	Electrical	Nominal	Weight	Part No.	Туре
·	,	switching output	size			
		- '	[mm]	[g]		
Normally closed	<u>'</u>		<u>'</u>	<u>'</u>	•	
1	With open silencer	2x PNP	0.45	317	538834	OVEM-05-H-B-QO-CN-N-2P
1 1 1			0.7	322	538835	OVEM-07-H-B-QO-CN-N-2P
1			0.95		538836	OVEM-10-H-B-QO-CN-N-2P
2						
	Trace to the trace of the trace	Lo. DND	To 45	Taas	T-20024	OVEN OF ILD OO CE N OD
1	With ejector pulse and	2x PNP	0.45	325	538831	OVEM-05-H-B-QO-CE-N-2P
	open silencers		0.7	331	538832	OVEM-07-H-B-QO-CE-N-2P
		2 NDN	0.95	224	538833	OVEM-10-H-B-QO-CE-N-2P
1 2		2x NPN	0.7	331	540018	OVEM-07-H-B-QO-CE-N-2N
			0.95		540019	OVEM-10-H-B-QO-CE-N-2N
		2 DND	0.7	1227	F / 004 F	OVEN AT II D CO CE N 2D
		2x PNP	0.7	334	540015	OVEM-07-H-B-GO-CE-N-2P
		a NDN	0.95	227	540016	OVEM-10-H-B-GO-CE-N-2P
		2x NPN	0.7	334	540012	OVEM-07-H-B-GO-CE-N-2N
			0.95		540013	OVEM-10-H-B-GO-CE-N-2N
Normally open						
Normally open	With open silencer	2x PNP	0.45	317	538828	OVEM-05-H-B-QO-ON-N-2P
1	with open sitencer	ZXTWI	0.7	322	538829	OVEM-07-H-B-QO-ON-N-2P
			0.95	- 322	538830	OVEM-10-H-B-QO-ON-N-2P
2			0.73		330030	0VLIN-10-11-D-Q0-0N-N-21
	With ejector pulse and	2x PNP	0.45	325	538825	OVEM-05-H-B-QO-OE-N-2P
1	open silencers	ZAFINE	0.45	331	538825	OVEM-07-H-B-QO-0E-N-2P
	open sitericers		0.7	331	538826	OVEM-07-H-B-QO-0E-N-2P
<del>                                  </del>		2x NPN	0.95	331	540009	OVEM-10-H-B-QO-OE-N-2P
		ZXINFIN	0.7	- 331	540010	OVEM-10-H-B-QO-0E-N-2N
			0.95		340010	OVENI-1U-N-D-QU-UE-N-ZN
		2x PNP	0.7	334	540006	OVEM-07-H-B-GO-0E-N-2P
			0.95	-	540007	OVEM-10-H-B-GO-OE-N-2P
		2x NPN	0.7	334	540007	OVEM-07-H-B-GO-OE-N-2N
		1	0.95	-	540004	OVEM-10-H-B-GO-OE-N-2N
		<u> </u>	0.73		74004	572m 10 m b 30-01-11-2m



## Vacuum generators OVEM Ordering data – Modular products

**FESTO** 

	Mandatory data		0	Options	
٨	lodule No.	Nominal size of Laval nozzle Housing size/width vacuum generator		um sensor e	
	Vacuum generator	Ejector characteristics Pneumatic connections Electrical connection	Alt	cuum	
5	OVEM Order	05	2P PU PI 2N NU NI	F	ı
		05 - H - B - QO - ON - N	- 2P	- H	l
Siz		20	Condi- tions	Code	Enter code
M	Module No.	539074			
	Vacuum generator	Vacuum generator with solenoid valve for vacuum on/off and manual override		OVEM	OVEM
	Nominal size of Laval [mm]	0.45		-05	
	nozzle	0.7		-07	
		0.95		-10	
	Ejector characteristic	High vacuum		-H	
		High suction rate		-L	
	Housing size/width [mm]	20		-B	-B
	Pneumatic connections	All ports with QS fittings		-QS	
		Supply/vacuum port with QS fittings, exhaust port with open silencer		-Q0	
		All ports with female G thread		-GN	
		Supply/vacuum port with female G threads, exhaust port with open silencer		-G0	
		Prepared for supply strip, vacuum port and exhaust port with QS fittings  Prepared for supply strip, vacuum port with QS fittings, exhaust port with open silencer		- PL -PO	
	Normal position of the vacuum	NO, normally open (vacuum generation)		-ON	
	generator	NO, normally open (vacuum generation)  NO, normally open (vacuum generation) with ejector pulse		-OE	
	Serierator	NC, normally closed (no vacuum generation)		-CN	
		NC, normally closed (no vacuum generation) with ejector pulse		-CE	
	Electrical connection	M12 plug (5-pin)		-N	-N
0	Vacuum sensor,	Switching output 2x PNP		-2P	
	electrical switching output	Switching output 1 x PNP + U		-PU	
	(gauge in bar, not for P1, N1)	Switching output 1 x PNP + I		-PI	
	, ,	Switching output 2 x NPN		-2N	
		Switching output 1 x NPN + U		-NU	
		Cwitching output 1 v NDN . I		NI	

Transfer order	Transfer order code													
539074	OVEM	] - 🗀		- B	<b>□-</b> □		- N	□- 🗆	_					

Switching output 1 x NPN + I

inchHG

Alternative vacuum display

-NI

-H

Accessories

**FESTO** 

## Common supply manifold OABM-P

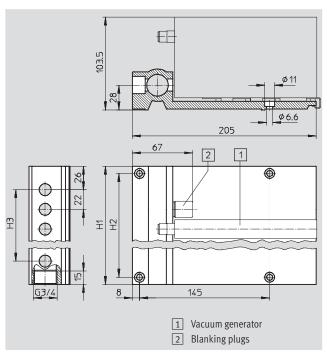
for vacuum generators OVEM-...-PL/PO

Pneumatic connection 1: G3/4
Type of mounting: Via through-holes

Material: Wrought aluminium alloy

Note on material: RoHS-compliant





Dimensions								
Number of device positions	H1	H2	Н3					
4	118	102	66					
6	162	146	110					
8	206	190	154					

Tubing i	Tubing inner diameter d <sub>i</sub> as a function of total air consumption q <sub>nN</sub>																
Total air	consump	otion [l/mi	in]														
50	75	154	175	225	310	400	480	500	750	890	1000	1190	1340	1850	2240	2300	2900
Tubing inner diameter <sup>1)</sup> [mm]																	
≥ 2.5	≥ 2.9	≥ 3.8	≥ 4	≥ 4.4	≥ 5	≥ 5.5	≥ 5.9	≥ 6	≥ 7	≥ 7.5	≥ 8	≥ 8.4	≥ 8.8	≥ 10	≥ 10.8	≥ 11	≥ 12
Recommended tubing Technical data → Internet: pun, pan																	
PUN-4	PUN-6			PUN-8			PUN-10	)		PUN-12	2	PUN-16	i				PAN-16

<sup>1)</sup> With a tubing length of 3 m



The total air consumption of the completely equipped common supply manifold can be determined by adding up the individual consumption values of the generators used. It should be noted that in the case of

vacuum generators with ejector pulse (OE, CE) the individually set values for the ejector pulse (duration and intensity) can lead to a significantly higher level of air consumption.

Ordering data and weight					
	Number of device positions	CRC <sup>1)</sup>	Weight [g]	Part No.	Туре
Common supply manifold	4	2	767	549456	OABM-P-4
	6	2	1045	549457	OABM-P-6
	8	2	1330	549458	OABM-P-8

<sup>1)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.



**FESTO** 

## **Vacuum generators OVEM**

Accessories

### Blanking plug OASC-G1-P

for common supply manifold OABM-P-...

Type of mounting: Threaded Max. tightening torque: 10 Nm

Material:

Hollow bolt: Wrought aluminium alloy Blanking cap: Steel Seals: Steel, nitrile rubber Note on material: RoHS-compliant



Ordering data				
	CRC <sup>1)</sup>	Weight	Part No.	Туре
		[g]		
Blanking plug	2	53	549460	OASC-G1-P

1) Corrosion resistance class 2 according to Festo standard 940 070 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

## H-rail mounting OABM-H

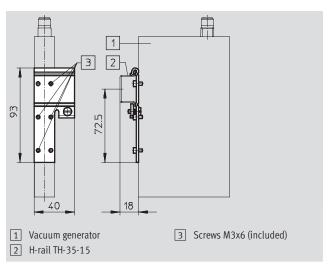
for vacuum generator OVEM

Max. tightening torque for H-rail mounting: 0.8 Nm

Material: Galvanised steel

Note on material: RoHS-compliant





Ordering data			
	Weight	Part No.	Туре
	[g]		
H-rail mounting	52	549461	OABM-H

