

- High vacuum levels of up to 88%
- Easy connection of holders and suction cups
- Lightweight and compact design
- No wearing parts
- Long service life

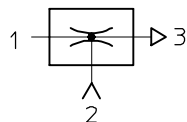


# Vacuum generators

Key features

## Product overview

Vacuum generator



All Festo vacuum generators have a single-stage design and operate according to the venturi principle. The product families 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 specific requirements.

## Standard and inline ejectors

VN-...

→ 6 / 1.1-9



- Nominal size  
0.45 ... 1.4 mm
- Max. vacuum  
88%
- Temperature range  
0 ... +60 °C
- A range of extremely effective generators suitable for use directly in the workplace
- Available as straight or T-shaped housing
- Low space requirement
- Low-cost
- No wearing parts required
- Extremely fast evacuation time

VAD-.../VAK-...

→ 6 / 1.1-27



- Nominal size  
0.5 ... 1.5 mm
- Max. vacuum  
80%
- Temperature range  
-20 ...+80 °C
- Range of vacuum generators with sturdy aluminium casing
- VAK-...: Built-in reservoir
- VAD-...: Connection for additional external reservoir
- Maintenance-free
- VAK-...: Reliable setting down of workpieces

# Vacuum generators

Key features

## Compact ejectors

VADM-...VADMI-...

→ 6 / 1.2-7



- Nominal size  
0.45 ... 3 mm
- Max. vacuum  
84%
- Temperature range  
0 ... +60 °C
- Compact design
- Minimal installation work required
- Short response times
- Built-in solenoid valve (on/off)
- VADMI-...: Additional built-in solenoid valve for ejector pulse
- Filter with display
- Air-saving circuit (optional)
- Vacuum switch (optional)
- Reliable setting down of workpieces

## VAD-M-.../VAD-M-I-...

→ 6 / 1.2-25



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

# Vacuum generators VN

Features



## At a glance

- Vacuum generators for high vacuum levels of up to 88%.
- Laval nozzles in four nominal sizes:
  - 0.45 mm
  - 0.7 mm
  - 0.95 mm
  - 1.4 mm
- Vacuum generators for high suction rates resulting in very short evacuation times
- Low space requirement
- Compact and sturdy design
- Wear-resistant and maintenance-free
- Modular system: Large selection of different types
- Can be used directly in the workplace, making them very effective
- Plastic housing
- Versatile connection options:
  - Push-in connector QS
  - Screw-in thread
  - Push-in sleeve
  - Screw-in silencer
- Easy mounting thanks to the double-sided latching function of the mounting plate

## Two housing types

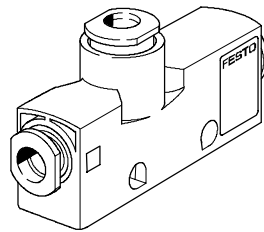
### Standard T-type

Connection options:

- QS push-in connectors
- Female thread
- Male thread
- Silencers

Mounting options:

- Direct mounting with screws
- Indirect mounting by latching onto a mounting plate. This plate is suitable for H-rails to DIN EN 50 022



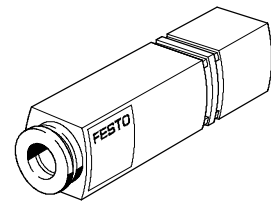
### In-line version

Connection options:

- QS push-in connectors
- Push-in sleeve

Mounting options:

Extremely compact housing with supply and vacuum port arranged in a line and with unducted exhaust air. As a result, this housing type can be installed directly into the tubing line.



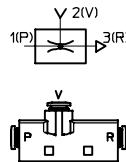
## Two operating principles

### Standard

- T-type housing

**Design:**

Supply port at 90° to vacuum port. The drawn-in flow is diverted 90° from V to R.

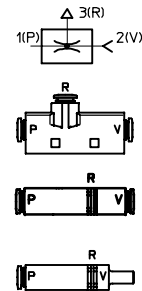


### In-line

- T-type housing with exhaust port
- Straight housing without exhaust port for space-saving assembly in a tubing line or directly in the suction cup holder

**Design:**

Supply and vacuum ports arranged in-line.



# Vacuum generators VN

Features

## Two variants

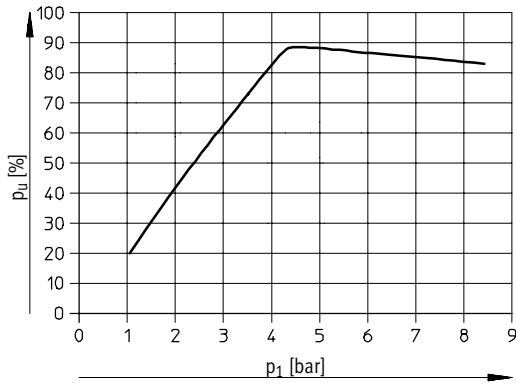
High vacuum

up to 88%

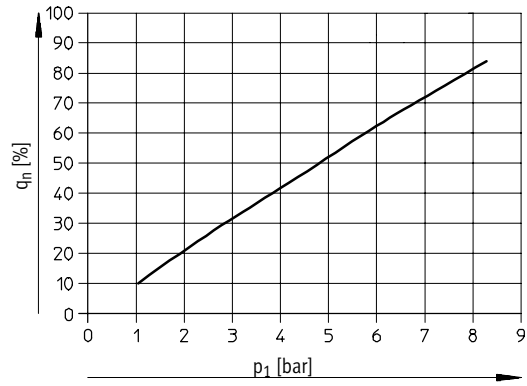
High suction volume

up to 90 l/min which results in very short evacuation times

Vacuum  $p_u$  as a function of operating pressure  $p_1$



Air consumption  $q_n$  as a function of operating pressure  $p_1$

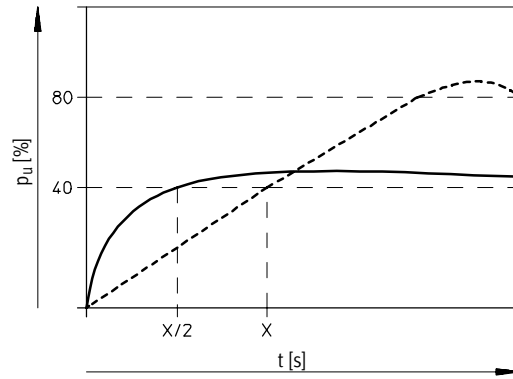


## System comparison

High vacuum – high suction volume

The first type of generator has been optimised for the generation of high vacuum at comparatively lower suction flow rates.

The second type of generator, on the other hand, can achieve very short evacuation times because of the high suction flow rate at relatively low vacuum.



----- High vacuum  
 ——— High suction volume

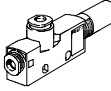
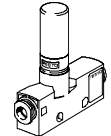
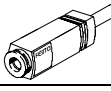
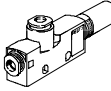
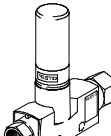
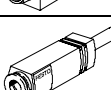
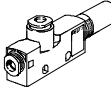
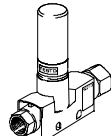
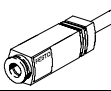
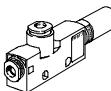
# Vacuum generators VN

Product range overview



Vacuum generators  
Pneumatic

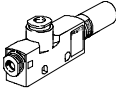
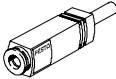
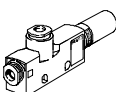
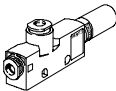
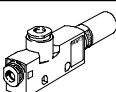
1.1

Type	Design	Function principle	Housing width					Pneumatic connection		
			T-type			In-line		Push-in connector QS	Male thread VA	Female thread VI
			10	14	18	10	14			
			[mm]	[mm]	[mm]	[mm]	[mm]			
Laval nozzle Nominal size 0.5 mm	<b>High vacuum</b>									
		Standard	■	-	-	-	-	■	-	■
			-	■	-	-	-	■	■	■
		Inline	■	-	-	-	-	■	-	■
			-	■	-	-	-	■	-	■
			-	-	-	■	-	■	-	-
			-	-	-	-	■	■	-	-
	<b>High suction rate</b>									
		Standard	■	-	-	-	-	■	-	■
			-	■	-	-	-	■	■	■
		Inline	-	■	-	-	-	■	-	■
			-	-	-	-	■	■	-	-
			-	-	-	-	■	■	-	-
			-	-	-	-	-	■	-	-
Laval nozzle Nominal size 0.7 mm	<b>High vacuum</b>									
		Standard	■	-	-	-	-	■	-	■
			-	■	-	-	-	■	■	■
		Inline	■	-	-	-	-	■	-	■
			-	■	-	-	-	■	-	■
			-	-	-	■	-	■	-	-
			-	-	-	-	■	■	-	-
	<b>High suction rate</b>									
		Standard	-	■	-	-	-	■	■	■

# Vacuum generators VN

Product range overview



Type	Design	Function principle	Housing width					Pneumatic connection		
			T-type			In-line		Push-in connector QS	Male thread VA	Female thread VI
			10 [mm]	14 [mm]	18 [mm]	10 [mm]	14 [mm]			
Laval nozzle Nominal size 1.0 mm	<b>High vacuum</b>									
		Standard	-	■	-	-	-	■	■	■
			-	-	■	-	-	■	■	-
		Inline	-	-	-	-	■	■	-	-
			<b>High suction rate</b>							
		Standard	-	■	-	-	-	■	■	■
-			-	■	-	-	■	■	-	
Laval nozzle Nominal size 1.4 mm	<b>High vacuum</b>									
		Standard	-	-	■	-	-	■	■	■
			<b>High suction rate</b>							
		Standard	-	-	■	-	-	■	■	■

# Vacuum generators VN

Type codes

FESTO

VN – 05 – H – T2 – PQ1 – VQ1 – RI2

Type	
VN	Vacuum generator

Nominal laval nozzle size [mm]	
05	0.45
07	0.7
10	0.95
14	1.4

Vacuum type	
H	High vacuum/Standard
L	High suction rate/Standard
M	High vacuum/Inline
N	High suction rate/Inline

Housing type	
I2	In-line, housing width 10 mm
I3	In-line, housing width 14 mm
T2	T-type, housing width 10 mm
T3	T-type, housing width 14 mm
T4	T-type, housing width 18 mm

Supply port (1)	
PQ1	Push-in connector QS4
PQ2	Push-in connector QS6
PI2	Female thread M5
PI4	Female thread G $\frac{1}{8}$

Vacuum port (2)	
VQ1	Push-in connector QS4
VQ2	Push-in connector QS6
VQ3	Push-in connector QS8
VI2	Female thread M5
VI4	Female thread G $\frac{1}{8}$
VI5	Female thread G $\frac{1}{4}$
VA4	Male thread G $\frac{1}{8}$
VA5	Male thread G $\frac{1}{4}$
VT1	Push-in sleeve $\varnothing$ 4 mm
VT2	Push-in sleeve $\varnothing$ 6 mm

Exhaust port (3)	
RQ1	Push-in connector QS4
RQ2	Push-in connector QS6
RQ3	Push-in connector QS8
RI2	Female thread M5
RI4	Female thread G $\frac{1}{8}$
RI5	Female thread G $\frac{1}{4}$
RA4	Male thread G $\frac{1}{8}$
RA5	Male thread G $\frac{1}{4}$
RO1	Silencer, open



Note

Possible combinations can be found in the ordering data.

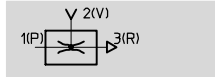


# Vacuum generators VN

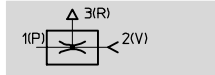
Technical data


Function


VN Standard

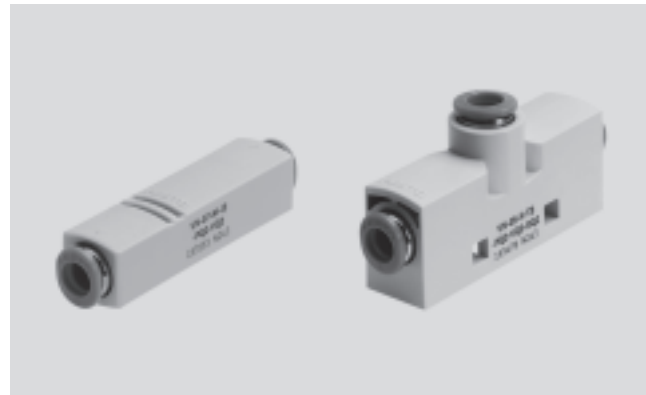


VN Inline



-  Temperature range  
0 ... +60 °C

-  Operating pressure  
1 ... 8 bar



General technical data – High vacuum							
Design	Standard (type H)					Inline (type M)	
Nominal size	05	07	10	14	05	07	
Design	T-type					In-line	
Operating medium	Dry compressed air, filtered (40 µm), unlubricated						
Mounting position	Any						
Ejector features	High vacuum						
Type of mounting	Either: Via accessories, via through-hole						
Pneumatic connection	QS4						
Nominal size of laval nozzle [mm]	0.45	0.7	0.95	1.4	0.45	0.7	
Max. vacuum [%]	88					86	
Operating pressure [bar]	1 ... 8						
Weights [g]	15.1	23.1	22.5	27.1	10.2	16.4	

General technical data – High suction volume							
Design	Standard (type L)					Inline (type N)	
Nominal size	05	07	10	14	05		
Design	T-type					In-line	
Operating medium	Dry compressed air, filtered (40 µm), unlubricated						
Mounting position	Any						
Ejector features	High suction rate						
Type of mounting	Either: Via accessories, via through-hole						
Pneumatic connection	QS6						
Nominal size of laval nozzle [mm]	0.45	0.7	0.95	1.4	0.45		
Max. vacuum [%]	50					40	
Operating pressure [bar]	1 ... 8						
Weights [g]	22	22.3	22.5	27.1	22		

Ambient conditions		
Ambient temperature [°C]	0 ... +60	
Corrosion resistance CRC <sup>1)</sup>	1	
Note on material	Free of copper, PTFE and silicone	

1) Corrosion resistance class 1 according to Festo standard 940 070  
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

# Vacuum generators VN

Technical data

FESTO

Performance data – High vacuum						
Design	Standard (type H)				Inline (type M)	
Nominal size	05	07	10	14	05	07
Vacuum $p_u$ max. [bar]	0.88	0.88	0.89	0.88	0.86	0.86
at operating pressure $p_1$ [bar]	4.5	4.7	4.5	5.0	6.0	5.8
Suction rate $q_{nS}$ with respect to atmosphere max. [l/min]	6.2	16	25	51.6	6.1	13.5
at operating pressure $p_1$ [bar]	2.1	2.1	3.1	5.1	6.3	7.0
Air supply time for 1 l volume at $p_1 = 6$ bar evacuated at max. vacuum [s]	4.8	1.9	1.1	0.5 (0.6) <sup>1)</sup>	4.7	2.1

1) Value in brackets: Version with silencer

Performance data – High suction volume						
Design	Standard (type L)				Inline (type N)	
Nominal size	05	07	10	14	05	07
Max. suction rate $q_{nS}$ with respect to atmosphere [l/min]	15.3	38.8	52.0	88.4	12.0	–
at operating pressure $p_1$ [bar]	5.5	6.2	5.2	6.2	6.0	–
target vacuum $p_u$ [bar]	0.55	0.55	0.56	0.57	0.55	–
Air supply time for 1 l volume at $p_1 = 6$ bar evacuated at max. vacuum [s]	1.7	0.5	0.46	0.25	1.57	–



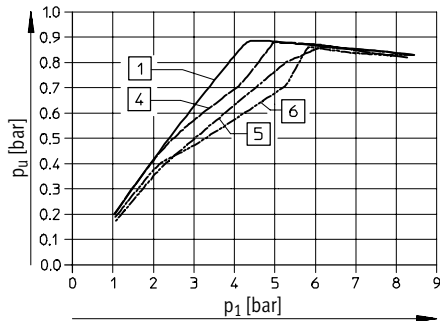
# Vacuum generators VN

Technical data



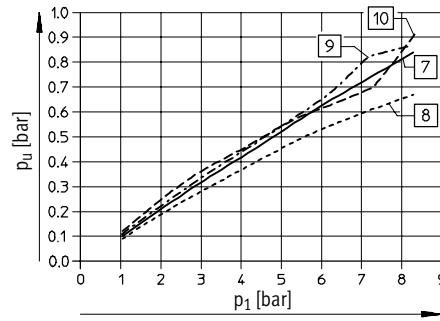
## Vacuum $p_u$ as a function of operating pressure $p_1$

High vacuum



- |              |              |
|--------------|--------------|
| 1 VN-05-H... | 5 VN-05-M... |
| VN-07-H...   | 6 VN-07-M... |
| VN-10-H...   |              |
| 4 VN-14-H... |              |

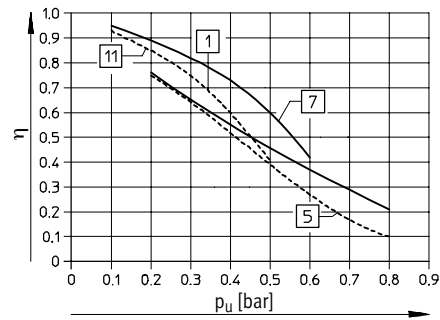
High suction volume



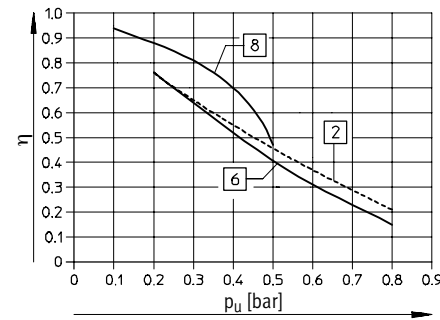
- |              |               |
|--------------|---------------|
| 7 VN-05-L... | 9 VN-10-L...  |
| 8 VN-07-L... | 10 VN-14-L... |
| VN-05-N...   |               |

## Efficiency $\eta$ as a function of vacuum $p_u$ at 6 bar operating pressure

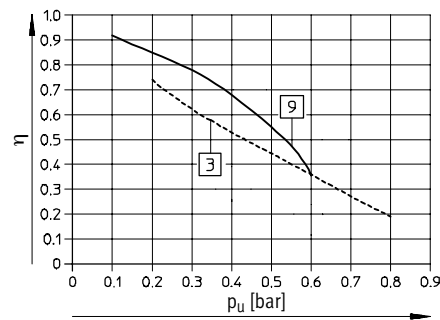
High volume/High suction volume



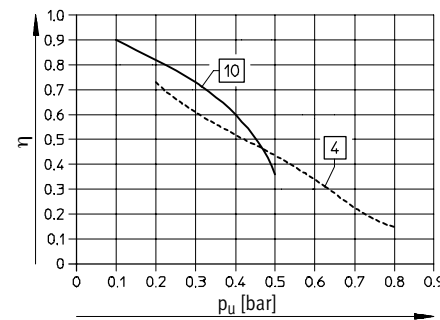
- |              |               |
|--------------|---------------|
| 1 VN-05-H... | 7 VN-05-L...  |
| 5 VN-05-M... | 11 VN-05-N... |



- |              |              |
|--------------|--------------|
| 2 VN-07-H... | 8 VN-07-L... |
| 6 VN-07-M... |              |



- |              |              |
|--------------|--------------|
| 3 VN-10-H... | 9 VN-10-L... |
|--------------|--------------|



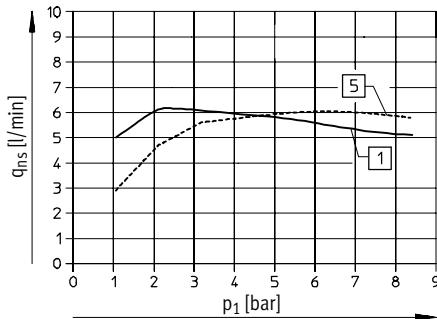
- |              |               |
|--------------|---------------|
| 4 VN-14-H... | 10 VN-14-L... |
|--------------|---------------|

# Vacuum generators VN

Technical data

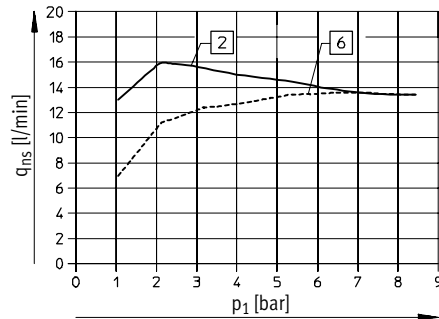
## Suction rate $q_{ns}$ with respect to atmosphere as a function of operating pressure $p_1$

High vacuum



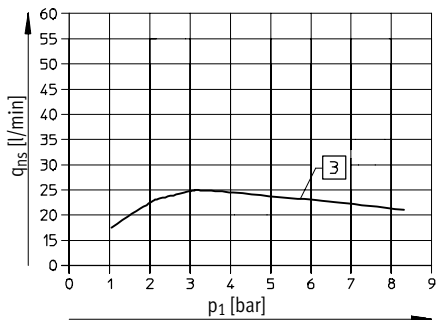
1 VN-05-H...

5 VN-05-M...

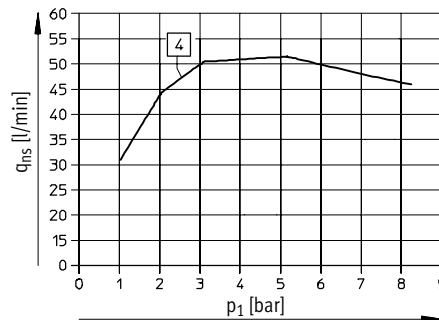


2 VN-07-H...

6 VN-07-M...

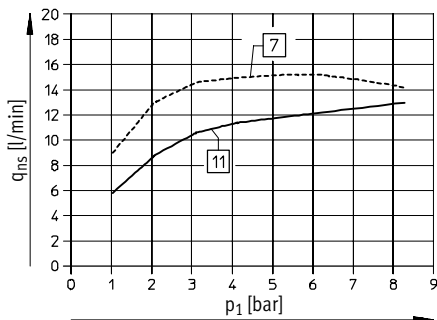


3 VN-10-H...



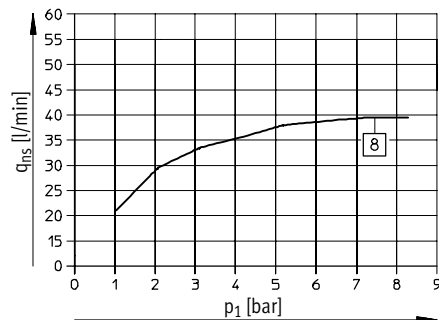
4 VN-14-H...

## High suction volume

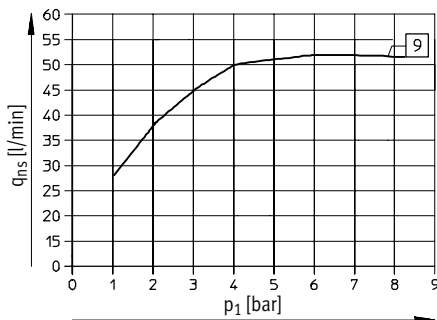


7 VN-05-L...

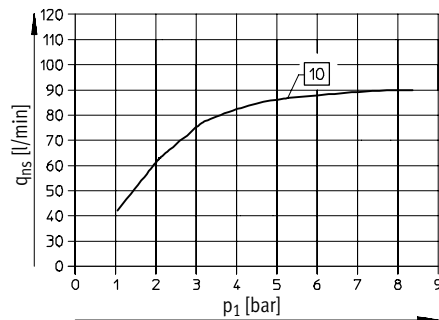
11 VN-05-N...



8 VN-07-L...



9 VN-10-L...



10 VN-14-L...

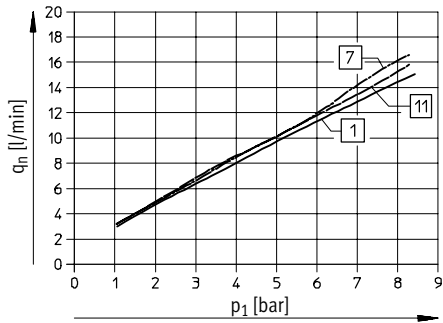
# Vacuum generators VN

Technical data

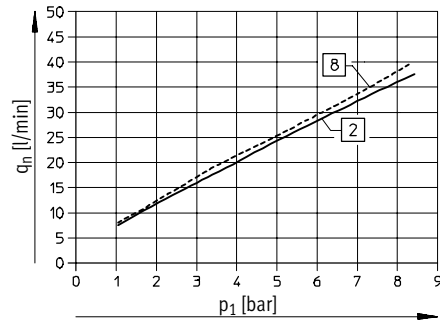


## Air consumption $q_n$ as a function of operating pressure $p_1$

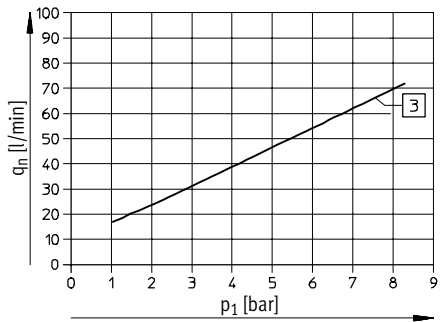
High vacuum/High suction volume



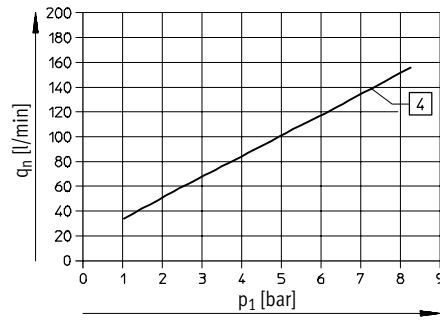
- 1 VN-05-H... VN-05-M...
- 7 VN-05-L... VN-05-N...
- 11 VN-05-N...



- 2 VN-07-H... VN-07-M...
- 8 VN-07-L...



- 3 VN-10-H..., VN-10-L...



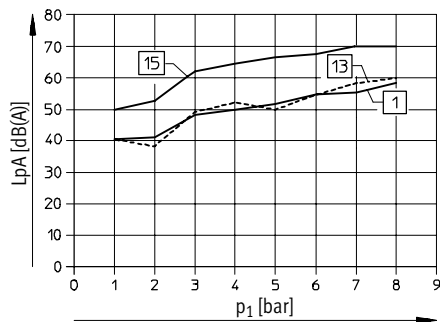
- 4 VN-14-H..., VN-14-L...

# Vacuum generators VN

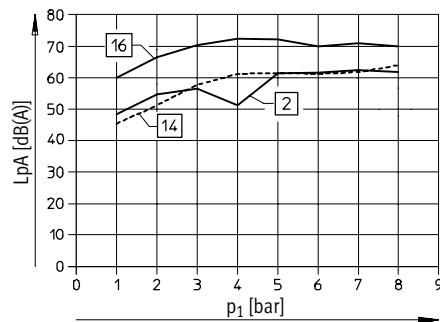
Technical data

## Noise level LpA as a function of operating pressure p<sub>1</sub>

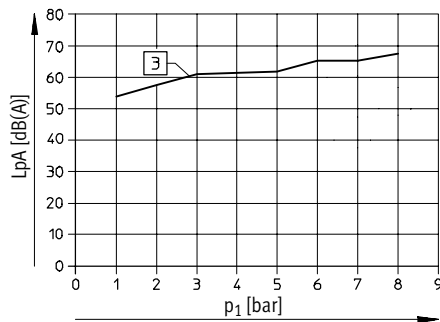
High vacuum



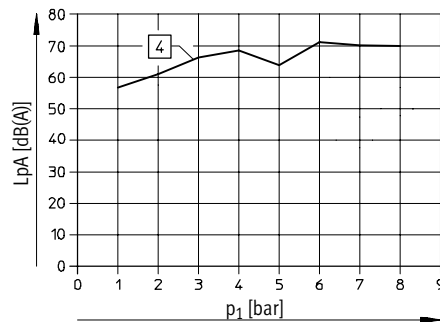
- 1 VN-05-H...
- 13 VN-05-M-T3...
- 15 VN-05-M-I3...



- 2 VN-07-H...
- 14 VN-07-M-T3...
- 16 VN-07-M-I3...



- 3 VN-10-H...



- 4 VN-14-H...

# Vacuum generators VN

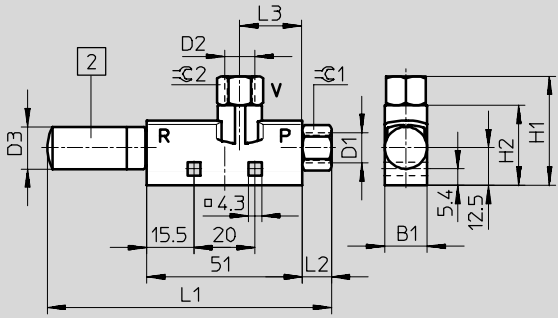
Technical data



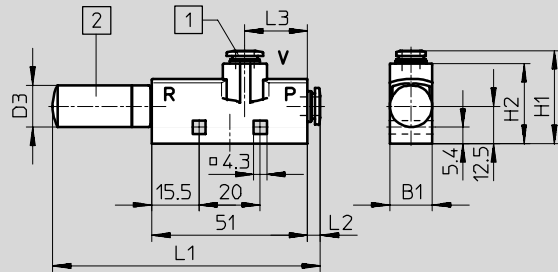
## Dimensions

T-type / Standard

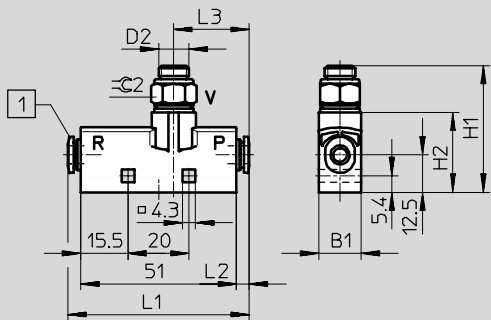
VN...-H-T...-PI...-VI...-R01



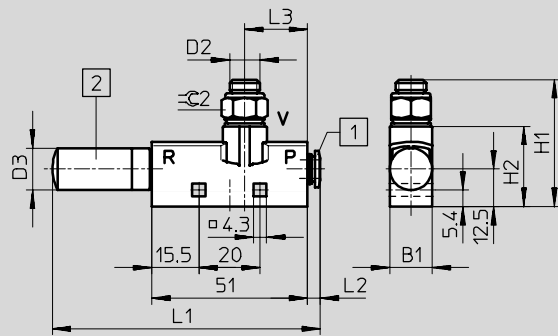
VN...-H-T...-PQ...-VQ...-R01



VN...-T...-PQ...-VA...-RQ...

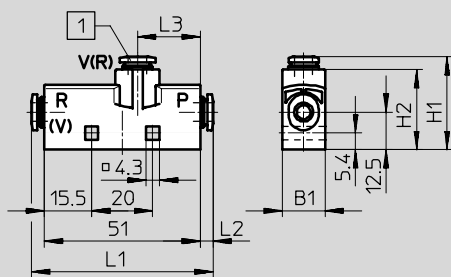


VN...-H-T...-PQ...-VA...-R01

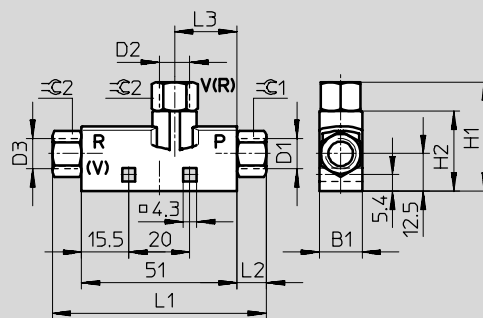


Standard/Inline

VN...-...-T...-PQ...-VQ...-RQ...

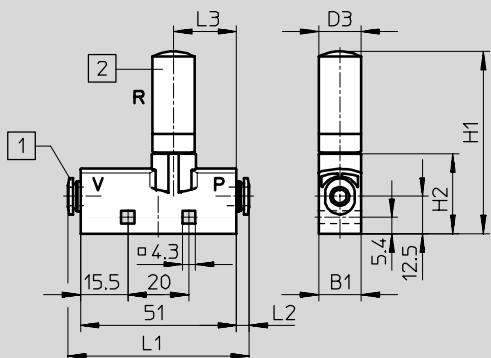


VN...-...-T...-PI...-VI...-RI...

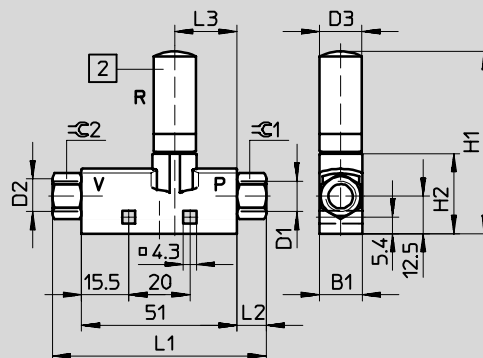


Inline

VN...-M-T...-PQ...-VQ...-R01



VN...-M-T...-PI...-VI...-R01



- 1 QS push-in connector
- 2 Silencer



# Vacuum generators VN

Technical data



Type	B1	Ports			H1	H2	L1	L2	L3	=C 1	=C 2	
		P D1	V D2	R D3								
VN-...-T2-PQ1-VQ1-RQ1	10	QS4	QS4	QS4	31.3	27.7	58.2	3.6	24.3	-	-	
VN-...-H(L)-T2-PQ1-VQ1-R01				9.8 <sup>1)</sup>			86.8					
VN-...-M-T2-PQ2-VQ2-R01				59.9			58.2					
VN-...-T2-PI2-VI2-RI2		M5	M5	M5	32.7		61	5		88.2	9	9
VN-...-H(L)-T2-PI2-VI2-R01				9.8 <sup>1)</sup>			61					
VN-...-M(N)-T2-PI4-VI4-R01				59.9			61					
VN-...-T3-PQ2-VQ2-RQ2	14	QS6	QS6	QS6	30.4	26.2	59.4	4.2	25.5	-	-	
VN-...-H(L)-T3-PQ2-VQ2-R01				13.8 <sup>1)</sup>			97.6					
VN-...-M(N)-T3-PQ2-VQ2-R01				68.6			59.4					
VN-...-T3-PI4-VI4-RI4		G <sup>1</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>8</sub>	35.7		70	9.5		102.9	13	13
VN-...-H(L)-T3-PI4-VI4-R01				13.8 <sup>1)</sup>			70					
VN-...-M(N)-T3-PI4-VI4-R01				68.6			70					
VN-...-T3-PQ2-VA4-RQ2		QS6	QS6	QS6	41.5		59.4	4.2		97.6	-	-
VN-...-T3-PQ2-VA4-R01				13.8 <sup>1)</sup>			97.6					
VN-...-T4-PQ2-VQ3-RQ3	18	QS6	QS8	QS8	35.9	30.7	63.8	4.2	25.5	-	-	
VN-...-T4-PQ2-VQ3-R01				17.8 <sup>1)</sup>			112.4					
VN-...-T4-PI4-VI5-RI5		G <sup>1</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>	48.15		81.4	9.5		117.7	13	17
VN-...-T4-PI4-VI5-R01				17.8 <sup>1)</sup>			117.7					
VN-...-T4-PQ2-VA5-RQ3		QS6	QS8	QS8	50.5		63.8	4.2		112.4	-	-
VN-...-T4-PQ2-VA5-R01				17.8 <sup>1)</sup>			112.4					

1) ∅ Silencer

## Dimensions

In-line, without exhaust port

VN-...-I2-PQ1-VQ1/VN-...-I3-PQ2-VQ2

VN-...-I2-PQ1-VT1/VN-...-I3-PQ2-VT2



1) QS push-in connector

Type	B1	Ports		D1 ∅	L1	L2	L3
		P	V				
VN-...-I2-PQ1-VQ1	10	QS4	QS4	-	57.4	50.2	3.6
VN-...-I3-PQ2-VQ2	13	QS6	QS6	-	58.6		4.2
VN-...-I2-PQ1-VT1	10	QS4	-	4	61.6	58	3.6
VN-...-I3-PQ2-VT2	13	QS6	-	6	60.2	56	4.2

- Note

Accessories:

Mounting plate VN-...  
suitable for top-hat rail  
to DIN EN 50 022







Silencer UO  
→ 6 / 4.1-15

→ 6 / 4.1-17

# Vacuum generators VN

Technical data

FESTO

Ordering data				
High vacuum, standard				
	Pneumatic connection	Housing width [mm]	Part No.	Type
<b>With push-in connector</b>				
	QS4	10	526 100	VN-05-H-T2-PQ1-VQ1-RQ1
			526 101	VN-07-H-T2-PQ1-VQ1-RQ1
	QS6	14	193 478	VN-05-H-T3-PQ2-VQ2-RQ2
			193 479	VN-07-H-T3-PQ2-VQ2-RQ2
			193 480	VN-10-H-T3-PQ2-VQ2-RQ2
	QS6, QS8	18	526 147	VN-10-H-T4-PQ2-VQ3-RQ3
193 482			VN-14-H-T4-PQ2-VQ3-RQ3	
<b>With push-in connector and silencer</b>				
	QS4	10	193 569	VN-05-H-T2-PQ1-VQ1-RO1
			193 570	VN-07-H-T2-PQ1-VQ1-RO1
	QS6	14	193 488	VN-05-H-T3-PQ2-VQ2-RO1
			193 489	VN-07-H-T3-PQ2-VQ2-RO1
			193 490	VN-10-H-T3-PQ2-VQ2-RO1
	QS6, QS8	18	526 149	VN-10-H-T4-PQ2-VQ3-RO1
193 492			VN-14-H-T4-PQ2-VQ3-RO1	
<b>With push-in connector, vacuum port with male thread</b>				
	QS6, G1/8	14	193 516	VN-05-H-T3-PQ2-VA4-RQ2
			193 517	VN-07-H-T3-PQ2-VA4-RQ2
			193 518	VN-10-H-T3-PQ2-VA4-RQ2
	QS6, G1/4, QS8	18	526 153	VN-10-H-T4-PQ2-VA5-RQ3
			193 520	VN-14-H-T4-PQ2-VA5-RQ3
<b>With push-in connector, vacuum port with male thread and silencer</b>				
	QS6, G1/8	14	193 526	VN-05-H-T3-PQ2-VA4-RO1
			193 527	VN-07-H-T3-PQ2-VA4-RO1
			193 528	VN-10-H-T3-PQ2-VA4-RO1
	QS6, G1/4	18	526 155	VN-10-H-T4-PQ2-VA5-RO1
			193 530	VN-14-H-T4-PQ2-VA5-RO1
<b>With female thread</b>				
	M5	10	526 102	VN-05-H-T2-PI2-VI2-RI2
			526 103	VN-07-H-T2-PI2-VI2-RI2
	G1/8	14	193 498	VN-05-H-T3-PI4-VI4-RI4
			193 499	VN-07-H-T3-PI4-VI4-RI4
			193 500	VN-10-H-T3-PI4-VI4-RI4
	G1/8, G1/4	18	193 502	VN-14-H-T4-PI4-VI5-RI5
<b>With female thread and silencer</b>				
	M5	10	526 104	VN-05-H-T2-PI2-VI2-RO1
			526 105	VN-07-H-T2-PI2-VI2-RO1
	G1/8	14	193 507	VN-05-H-T3-PI4-VI4-RO1
			193 508	VN-07-H-T3-PI4-VI4-RO1
			193 509	VN-10-H-T3-PI4-VI4-RO1
	G1/8, G1/4	18	193 511	VN-14-H-T4-PI4-VI5-RO1

 Core Range







# Vacuum generators VN

Technical data

FESTO

Vacuum generators  
Pneumatic

1.1

Ordering data				
High vacuum, inline				
	Pneumatic connection	Housing width [mm]	Part No.	Type
<b>With push-in connector</b>				
	QS4	10	526 106	VN-05-M-T2-PQ1-VQ1-RQ1
			526 107	VN-07-M-T2-PQ1-VQ1-RQ1
	QS6	14	193 536	VN-05-M-T3-PQ2-VQ2-RQ2
			193 537	VN-07-M-T3-PQ2-VQ2-RQ2
<b>With push-in connector and silencer</b>				
	QS4	10	526 108	VN-05-M-T2-PQ1-VQ1-RO1
			526 109	VN-07-M-T2-PQ1-VQ1-RO1
	QS6	14	193 540	VN-05-M-T3-PQ2-VQ2-RO1
			193 541	VN-07-M-T3-PQ2-VQ2-RO1
<b>With female thread</b>				
	M5	10	526 110	VN-05-M-T2-PI2-VI2-RI2
			526 111	VN-07-M-T2-PI2-VI2-RI2
	G1/8	14	193 544	VN-05-M-T3-PI4-VI4-RI4
			193 545	VN-07-M-T3-PI4-VI4-RI4
<b>With female thread and silencer</b>				
	M5	10	526 112	VN-05-M-T2-PI2-VI2-RO1
			526 113	VN-07-M-T2-PI2-VI2-RO1
	G1/8	14	193 548	VN-05-M-T3-PI4-VI4-RO1
			193 549	VN-07-M-T3-PI4-VI4-RO1
<b>Ordering data</b>				
High vacuum, in-line, without exhaust port				
	Pneumatic connection	Housing width [mm]	Part No.	Type
<b>With push-in connector</b>				
	QS4	10	193 580	VN-05-M-I2-PQ1-VQ1
			193 586	VN-07-M-I2-PQ1-VQ1
	QS6	14	193 552	VN-05-M-I3-PQ2-VQ2
			193 553	VN-07-M-I3-PQ2-VQ2
			193 554	VN-10-M-I3-PQ2-VQ2
<b>With push-in connector and barbed connector</b>				
	QS4	10	193 587	VN-05-M-I2-PQ1-VT1
			193 588	VN-07-M-I2-PQ1-VT1
	QS6	14	193 555	VN-05-M-I3-PQ2-VT2
			193 556	VN-07-M-I3-PQ2-VT2

 Core Range





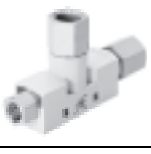

# Vacuum generators VN

Technical data

FESTO

Vacuum generators  
Pneumatic

1.1

Ordering data			
High suction rate, standard			
	Pneumatic connection	Housing width [mm]	Part No. Type
With push-in connector			
	QS4	10	526 114 VN-05-L-T2-PQ1-VQ1-RQ1
	QS6	14	193 561 VN-05-L-T3-PQ2-VQ2-RQ2
			193 562 VN-07-L-T3-PQ2-VQ2-RQ2
			193 563 VN-10-L-T3-PQ2-VQ2-RQ2
	QS6, QS8	18	526 157 VN-10-L-T4-PQ2-VQ3-RQ3
		193 565 VN-14-L-T4-PQ2-VQ3-RQ3	
With push-in connector and silencer			
	QS4	10	193 595 VN-05-L-T2-PQ1-VQ1-R01
	QS6	14	193 571 VN-05-L-T3-PQ2-VQ2-R01
			193 572 VN-07-L-T3-PQ2-VQ2-R01
			193 573 VN-10-L-T3-PQ2-VQ2-R01
QS6, QS8	18	526 159 VN-10-L-T4-PQ2-VQ3-R01	
With push-in connector, vacuum port with male thread			
	QS6, G $\frac{1}{8}$	14	193 599 VN-05-L-T3-PQ2-VA4-RQ2
			193 600 VN-07-L-T3-PQ2-VA4-RQ2
			193 601 VN-10-L-T3-PQ2-VA4-RQ2
	QS6, G $\frac{1}{4}$ , QS8	18	526 163 VN-10-L-T4-PQ2-VA5-RQ3
		193 603 VN-14-L-T4-PQ2-VA5-RQ3	
With push-in connector, vacuum port with male thread and silencer			
	QS6, G $\frac{1}{8}$	14	193 609 VN-05-L-T3-PQ2-VA4-R01
			193 610 VN-07-L-T3-PQ2-VA4-R01
			193 611 VN-10-L-T3-PQ2-VA4-R01
QS6, G $\frac{1}{4}$	18	526 165 VN-10-L-T4-PQ2-VA5-R01	
With female thread			
	M5	10	526 116 VN-05-L-T2-PI2-VI2-RI2
	G $\frac{1}{8}$	14	193 581 VN-05-L-T3-PI4-VI4-RI4
			193 582 VN-07-L-T3-PI4-VI4-RI4
			193 583 VN-10-L-T3-PI4-VI4-RI4
G $\frac{1}{8}$ , G $\frac{1}{4}$	18	193 585 VN-14-L-T4-PI4-VI5-RI5	
With female thread and silencer			
	M5	10	526 118 VN-05-L-T2-PI2-VI2-R01
	G $\frac{1}{8}$	14	193 590 VN-05-L-T3-PI4-VI4-R01
			193 591 VN-07-L-T3-PI4-VI4-R01
			193 592 VN-10-L-T3-PI4-VI4-R01





# Vacuum generators VN



Technical data

FESTO

Vacuum generators  
Pneumatic

1.1

Ordering data			
High suction rate, inline			
	Pneumatic connection	Housing width [mm]	Part No. Type
With push-in connector			
	QS6	14	193 619 VN-05-N-T3-PQ2-VQ2-RQ2
With push-in connector and silencer			
	QS6	14	193 623 VN-05-N-T3-PQ2-VQ2-RO1
With female thread			
	G1/8	14	193 627 VN-05-N-T3-PI4-VI4-RI4
With female thread and silencer			
	G1/8	14	193 631 VN-05-N-T3-PI4-VI4-RO1

Ordering data			
High suction rate, in-line, without exhaust port			
	Pneumatic connection	Housing width [mm]	Part No. Type
With push-in connector			
	QS6	14	193 635 VN-05-N-I3-PQ2-VQ2
With push-in connector and barbed connector			
	QS6	14	193 637 VN-05-N-I3-PQ2-VT2