

COMPACT VACUUM EJECTOR

Series VE31

Cat No VE31 - 01 - 01 - B

COMPACT VACUUM EJECTOR (NOZZLE DIAMETER - Ø1.5 mm)

Features

- ☐ Eco-nozzle technology allows for a high suction rate with minimized compressed air consumption
- ☐ The vacuum parameters on the LED display are very easy to read
- ☐ Integrated air-saving function reduces compressed air consumption by up to 80 %
- ☐ Integrated pneumatic valves for switching functions Normally open or Normally closed



Application

- ☐ Compact vacuum ejector for handling airtight and slightly porous workpieces
- ☐ Generation and monitoring of the vacuum in an automated systems
- ☐ Use in robot handling and on linear axes
- ☐ Pick and place applications with the shortest cycle times
- ☐ Typically for use in fully automated small parts handling applications

Technical Specifications

Model		VE31 - 3 - 15	VE31 - 4 - 15
Medium		Compressed air	
Working pressure range	(bar)	3 to 6	
Ambient temperature	(°C)	0 to +50	
Nozzle diameter	(mm)	1.5	1.5
Degree of evacuation	(%)	85	85
Suction rate (maximum)	(lts/min)	65,5	65,5
Air consumption suction *	(lts/min)	98	98
Air consumption blow off	(m³/h)	7.2	7.2
Sound level suction	(dB(A))	65	65
Sound level free *	(dB(A))	77	77
Recommended external tube diameter Compressed air #	(mm)	6	6
Recommended external tube diameter Vacuum #	(mm)	8	8
Supply voltage (DC)	(V)	24	
Weight	(g)	212	195

* - At optimal operating pressure (4 bar)

- For maximum length 2 m

Caution

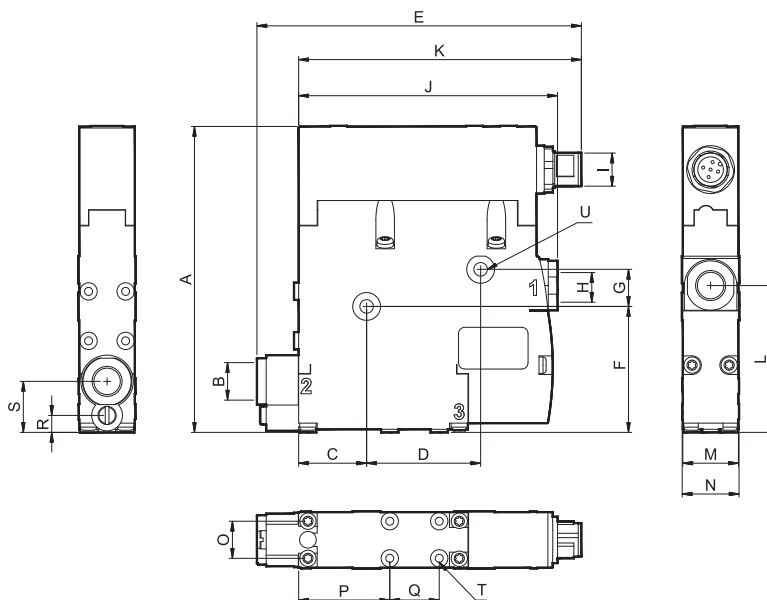
1. Do not extract harmful media such as dust, oil, mists, vapors, aerosols etc
2. Do not extract aggressive gases or media such as acids, acid fumes, bases, biocides, disinfectants or detergents
3. Do not extract liquids or bulk materials, e.g. Granulates

COMPACT VACUUM EJECTOR

Series VE31

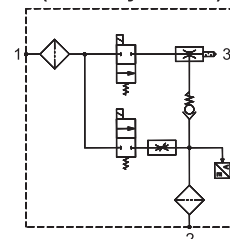
Cat No VE31 - 01 - 01 - B

Basic dimensions

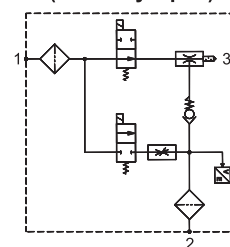


Ejector symbol

With air saving
function
(Normally Closed)



With air saving
function
(Normally Open)



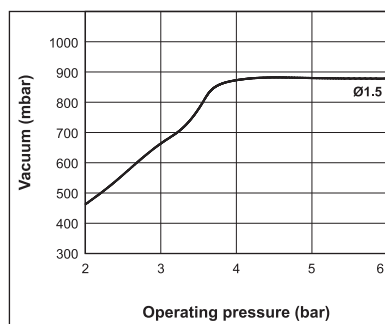
1 - Air line
2 - Vacuum line
3 - Exhaust

Model	A	B	C	D	E	F	G	H	I	J	K
VE31-3-15	99	G1/8 - F	22	36.9	105	40.8	12	G1/8 - F	M12x1 - M	84	91.5
VE31-4-15											

Model	L	M	N	O	P	Q	R	S	T	U
VE31-3-15	47.5	18	18.6	12	29.5	16	5.5	16.5	2.6	4.4
VE31-4-15										

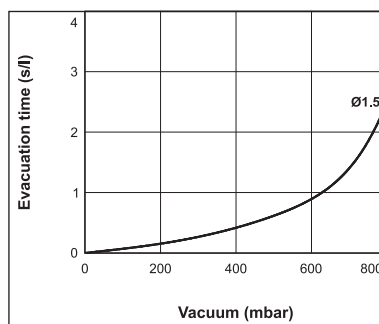
Performance Data

Ø - Nozzle diameter



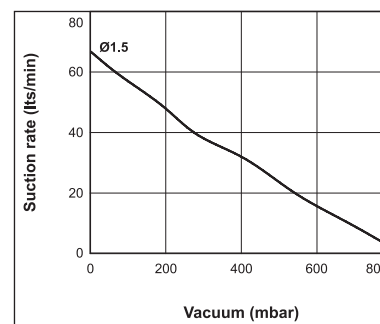
Achievable vacuum at various
operating pressures (mbar)

Ø - Nozzle diameter



Evacuation times for various
vacuum ranges (s/l)

Ø - Nozzle diameter



Suction capacity at various degrees
of evacuation (lts/min)

COMPACT VACUUM EJECTOR

Series VE31

Cat No VE31 - 01 - 01 - B

Achievable vacuum at various operating pressures (mbar)

Model		Pressure (bar)				
		2	3	4	5	6
VE31-3-15	Vacuum (mbar)	450	660	870	880	865
VE31-4-15						

Evacuation times for various vacuum ranges (s/l)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE31-3-15	Evacuation Time (s/l)	-	0.07	0.15	0.25	0.4	0.6	0.9	1.3	2.3
VE31-4-15										

Suction capacity at various degrees of evacuation (lts/min)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE31-3-15	Suction rate (lts/min)	65.5	57.1	47.4	39.3	32	25.3	17	8.8	1.5
VE31-4-15										

How to order

VE31	—	3	—	15	—	60F	—	60F	—	QD	
		Control valve		Nozzle diameter		Airline OD		Vacuum line OD		Connector type	
		3	Normally Closed	15	1.5 mm	60F	G1/8	60F	G1/8	QD	QD connector
		4	Normally Open								

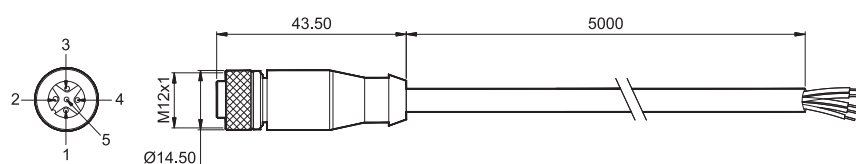
Note:
(60F) F - Female thread

Ordering example:

Ordering no. for Compact vacuum ejector with Normally Closed type, 1.5 mm - Nozzle diameter, Air line (OD) - G1/8, Vacuum line (OD) - G1/8, with QD Connector: **VE31-3-15-60F60F-QD**

Accessories: QD Connector

Ordering no. - **AC100-M125S-PUR-5M**



Pin number	Corresponding wires	Function
1	Brown	24V power supply
2	White	Suction signal input
3	Blue	0V power supply
4	Black	Parts control output
5	Gray or Green-Yellow *	Blow off signal input

* Applicable for Accessories (QD connector) only