



Multijector pumps of the M- and ML-series work with **three ejector stages** which are connected in a row. Their robust and compact aluminium casing makes the pump resistant even to strong mechanical or thermal loads. Nevertheless they are very light and offer considerable amounts of suction air at a small size. The compact form allows them to be mounted directly at the location where vacuum is needed.

Their high efficiency makes the VOLKMANN Multijectors of the M- and ML-series the ideal vacuum pump for a multitude of different handling applications, for vacuum packing, vacuum testing, vacuum transportation, vacuum fixing, de-gassing of liquids and mixing, evacuation of small casting moulds etc.

MULTIJECTOR® M

The optimal choice with the best efficiency. Vacuum pumps of this series are used when a compressed air supply of 6 bar is available: high suction power at a favourable price.

MULTIJECTOR® ML

If the pressure in the compressed air supply line decreases frequently and nevertheless a high vacuum is needed, our Vacuum Pumps of the ML-series reach high vacuum levels with an inlet pressure of only 3.5 bar. They are the clever choice to ensure a high vacuum at low operating pressure and pressure variations.

Standard delivery features

All pumps of the M- and ML-series incl. vacuum gauge and fixing device for easy mounting.

Options

If the exhaust air is emitted directly into the surrounding, we recommend the usage of our FD-silencer (order option FD). The integrated vacuum non return valve prevents system vacuum leakage by back-flow through the pump when it is switched off, so that the vacuum is held longer inside the system (order option H). You get M-types with Viton-gaskets with the order-option V.

Test Pumps can be sent to you for trials and approval.

Type	op. comp. air pres.consump.		Suction air flow (in NI/min) at the respective Vacuum (in mbar)								
	bar	NI/min	0	-100	-200	-300	-400	-500	-600	-700	-800
M 90	5.5	86	395	226	140	76	45	35	23	13	6
M 180	5.5	172	790	452	280	152	90	70	46	26	12
M 270	5.5	252	1185	678	420	228	135	105	69	39	18
M 360	5.5	344	1501	859	560	304	180	140	92	52	24
M 450	5.5	430	1876	1074	700	380	225	175	115	65	30
M 540	5.5	516	2252	1288	840	456	270	210	138	78	36
ML 50	3.5	50	181	93	52	25	21	17	12	6	2
ML 100	3.5	100	361	185	103	50	41	34	24	13	3
ML 150	3.5	150	542	278	155	75	62	51	36	19	5
ML 200	3.5	200	722	370	206	100	82	68	48	25	6
ML 250	3.5	250	903	463	258	125	103	85	60	31	8
ML 300	3.5	300	1083	555	309	150	123	102	72	38	9

Type	max. Vacuum		Time in Seconds to evacuate a 1 m³ volume from atmospheric pressure to stated vacuum level (in mbar)								
	bar	mbar	-100	-200	-300	-400	-500	-600	-700	-800	-900
M 90	5.5	-910	16	46	98	214	368	612	1024	1896	5072
M 180	5.5	-910	8	23	49	107	184	306	512	948	2536
M 270	5.5	-910	5	15	33	71	123	204	341	632	1690
M 360	5.5	-910	4	12	25	54	92	153	256	474	1268
M 450	5.5	-910	3	9	20	43	74	122	205	379	1014
M 540	5.5	-910	3	8	16	36	61	102	170	316	844
ML 50	3.5	-910	32	100	272	528	857	1342	3567	5596	26862
ML 100	3.5	-910	16	50	136	264	429	671	1212	2798	13431
ML 150	3.5	-910	11	33	91	176	286	447	1189	1865	8954
ML 200	3.5	-910	8	25	68	132	214	336	892	1399	6716
ML 250	3.5	-910	6	20	54	106	172	268	485	1119	5372
ML 300	3.5	-910	5	17	45	88	143	224	404	933	4477

General Data M + ML Series

Vacuum: max. 91 % (-910 mbar)
 Suction air flow: 180 to 1450 NI/min
 Operating pressure: 2 to 6 bar
 M-types opt. 5.6 bar
 ML-types opt. 3.5 bar
 Operating noise: 55 to 78 dB(A)
 (with FD-silencer)
 Oper. temp.range: -20 to +80 °C
 Materials: Aluminium, Stainl. Steel,
 Nitril, Polyethylene-HD,
 silicone-free

Type	Model No.	Width B	Weight
M 90	110.141	52 mm	0.7 kg
M 180	110.142	65 mm	0.8 kg
M 270	110.143	88 mm	1.0 kg
M 360	110.144	110 mm	1.4 kg
M 450	110.145	133 mm	1.7 kg
M 540	110.146	156 mm	1.9 kg
ML 50	110.180	52 mm	0.7 kg
ML 100	110.181	65 mm	0.8 kg
ML 150	110.182	88 mm	1.0 kg
ML 200	110.183	110 mm	1.4 kg
ML 250	110.184	133 mm	1.7 kg
ML 300	110.185	156 mm	1.9 kg

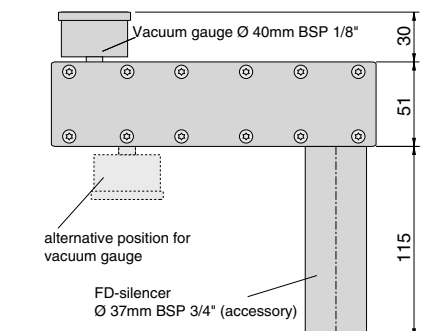
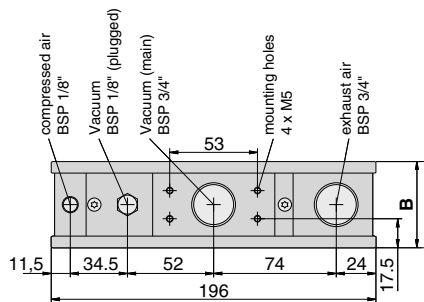
Order Options

with FD-silencer: Model No. + FD
 with Viton gaskets/flaps: Model No. + V
 with vacuum non return valve: Model No. + H

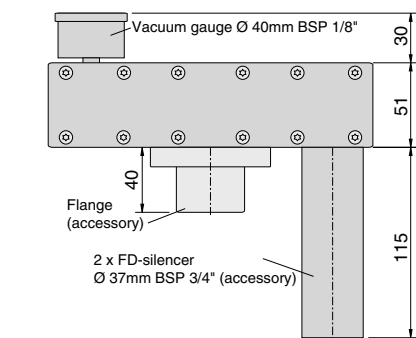
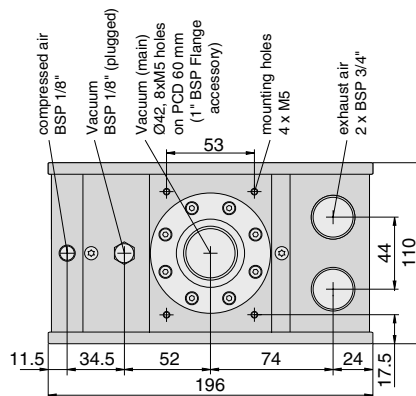
Order Example: M 270 with FD-silencer plus Viton gaskets: Model No. 110.143FDV

More detailed information can be found on the last double-page of this catalogue.

M 90 M 180 M 270



M 360 ML 200



M 450 M 540 ML 250 ML 300

