

Technical data

General technical data valid for all pumps		
ATEX approval if the ATEX marking is shown on the rating plate Inner part (pumped gases)		II 3/- G Ex h IIC T3 Gc X Internal Atm. only Tech.File: VAC-EX02
Maximum permissible inlet pressure (absolute)	psi (bar)	16 (1.1)
Maximum permissible outlet pressure (absolute)	psi (bar)	16 (1.1)
Maximum pressure difference between inlet and outlet	psi (bar)	16 (1.1)
Permissible ambient temperature storage / operation	°F (°C)	14 to 140 / 50 to 104 (-10 to +60 / +10 to +40)
Permissible relative atmospheric moisture during operation (no condensation)	%	30 to 85
Maximum permissible installation altitude above mean sea level	ft (m)	6500 (2000)
Rated motor power	hp (kW)	0.71 (0.53)
No-load speed	rpm	1650
Maximum permissible range of supply voltage ($\pm 10\%$) Attention: Observe specifications of rating plate!		120 V~ 50/60 Hz 200-230 V~ 50/60 Hz
Maximum rated current at: 120 V~ 50/60 Hz 200-230 V~ 50/60 Hz	A A	8.0 3.5
Device fuse		2 slow blow fuses 250 V / 8AT - 5x20
Motor protection		temperature sensor in the winding
Overvoltage category		II
Degree of protection IEC 60529		IP 40
Pollution degree		2
Inlet		small flange KF DN 25
Outlet		thread G 1/2"
Dimensions L x W x H approx.	in (mm)	21.8 x 10.2 x 14.1 (554 x 260 x 359)
Weight approx. 120 V~ version 200-230 V~ version	lbs. (kg) lbs. (kg)	66.8 (30.3) 66.6 (30.2)

We reserve the right for technical modification without prior notice!

Type		ME 16 NT	MD 12 NT
Maximum pumping speed (ISO 21360)	cfm (m ³ /h)	9.7 (16.4)	7.1 (12.1)
Ultimate vacuum (absolute)	Torr (mbar)	53 (70)	1.5 (2)
A-weighted emission sound pressure level* (uncertainty K _{pA} : 3 dB(A))	dB(A)	54	50

Type		MV 10 NT
Maximum pumping speed (ISO 21360)	cfm (m ³ /h)	6.1 (10.4)
Ultimate vacuum (absolute)	Torr (mbar)	0.38 (0.5)
A-weighted emission sound pressure level* (uncertainty K _{pA} : 3 dB(A))	dB(A)	50

* Measurement according to EN ISO 2151:2004 and EN ISO 3744:1995 at 230V/50Hz and ultimate vacuum with optional silencer at outlet.

Gas inlet temperatures

Operating condition	Inlet pressure	Permitted range of gas temperatures at inlet
Continuous operation	> 75 Torr (100 mbar) (high gas load)	➔ 50 °F to 104 °F (+10°C to +40°C)
Continuous operation	< 75 Torr (100 mbar) (low gas load)	➔ 32 °F to 140 °F* (0°C to +60°C*)
Short-time (< 5 minutes)	< 75 Torr (100 mbar) (low gas load)	➔ 14 °F to 176 °F* (-10°C to +80°C*)

* if pumping potentially explosive atmospheres: 50 °F to 104 °F (+10°C to +40°C)

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Wetted parts

Components	Wetted materials
Housing cover	aluminum alloy
Head cover	aluminum alloy (AlSi12)
Diaphragm clamping disc	aluminum alloy (AlSi12)
Diaphragm	FPM
Valves	FPM
O-rings	FPM
Small flange	stainless steel
Tubing	PTFE
Fittings	ETFE / ECTFE
Inlet / distributor	aluminum alloy
Outlet	PTFE carbon reinforced
Silencer (option)	Aluminum, anodized / PTFE / PTFE carbon reinforced / spring steel

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Abbreviations

ECTFE: Ethylene/Chlorotrifluoroethylene

ETFE: Ethylene/Tetrafluoroethylene

FPM: Fluoroelastomer

PP: Polypropylene

PTFE: Polytetrafluoroethylene