

# Technical data

## General technical data valid for all pumps

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)
No-load speed 50/60 Hz	rpm	1500 / 1800
Device fuse		slow blow fuse 6.3 A
Motor protection		thermal cutout, manual reset*
Overvoltage category		II
Degree of protection IEC 60529		IP 40
Degree of protection UL 50E		type 1
Pollution degree		2
A-weighted emission sound pressure level** (uncertainty $K_{pA}$ : 3 dB(A))	dB(A)	45

\* In case of supply voltage below 115 V, the lock of the cutout might be restricted.

\*\* 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)

**We reserve the right for technical modification without prior notice!**

Type		ME 4 NT ME 4S NT	MZ 2 NT	MZ 2S NT
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 pumping speed 50/60 Hz (ISO 21360)	cfm (m <sup>3</sup> /h)	2.4 / 2.6 (4.0 / 4.4)	1.3 / 1.4 (2.2 / 2.4)	1.2 / 1.4 (2.0 / 2.3)
Ultimate vacuum (absolute)	Torr (mbar)	52 (70) ME 4S NT: 56 (75)	5.2 (7)	5.2 (7)
Maximum permissible inlet pressure (absolute)	psi (bar)	16 (1.1)		
Maximum permissible outlet pressure (absolute)	psi (bar)	29 (2)		
Maximum pressure difference between inlet and outlet	psi (bar)	29 (2)		
Rated motor power	hp (kW)	0.24 (0.18)		
Maximum permissible range of supply voltage ( ±10% ) Attention: Observe specifications of rating plate!  Dual voltage motor		100-115 V~ 50/60 Hz, 120 V~ 60 Hz  230 V~ 50/60 Hz  100-115 V~ 50/60 Hz, 120 V 60 Hz / 200-230 V~ 50/60 Hz		
Maximum rated current at: 100-115 V~ 50/60 Hz, 120 V~ 60 Hz 200-230 V~ 50/60 Hz 230 V~ 50/60 Hz	A  A A	3.4  1.8 1.8		
Inlet		hose nozzle for tubing I.D. 3/8" (hose nozzle DN 10 mm)		
Outlet		thread G1/4"		
Dimensions L x W x H approx.	in (mm)	9.7 x 9.4 x 7.8 (246 x 239 x 198)		
Weight approx.	lbs. (kg)	24.2 (11.0)		