

EM18 AND 28 OIL SEALED ROTARY VANE PUMPS PERFORMANCE YOU CAN RELY ON



The EM range of oil-sealed rotary pumps - renowned for their high ultimate vacuum, rapid pumping speed, quiet operation and ability to handle vapour - have become the industry standard for laboratory and light industrial applications. The pump is a freestanding unit with the drive provided through a flexible coupling by either a single-phase or three-phase (four pole) motor.

Supplied with: Ultragrade 19 oil, NW25 O-ring and centering ring. Fomblin® must be purchased separately for PFPE pumps.

Features and Benefits

- The pump is designed for reliable, long-term operation.
- Thermal overload device prevents overheating (single phase only).
- The drive is provided through a flexible coupling by a single-phase or three-phase (four pole) motor.
- The motors are totally enclosed and are cooled by the motor cooling fan.
- Full height O ring sealed oil sight glass for easy checking of oil level and condition.
- Large sight glass and operating oil range

Applications

- Analytical instruments
- Leak detectors, helium
- Research and development
- Backing turbomolecular pumps
- Automotive
- Beam lines and high energy physics
- Centrifuges, ultra-high speed
- Coating

Pump Range

EM

- E1/E2M18
- E1/E2M18 ATEX
- PFPE E1/E2M18
- E2M28
- PFPE E2M28

Performance Curves

E1M18 One Stage, E2M18 Two Stage Rotary Vane Pumps

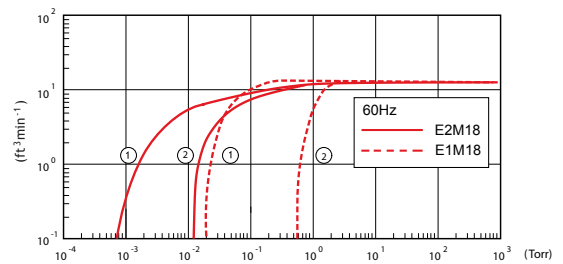
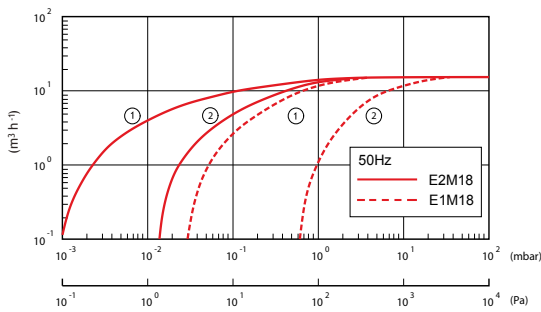
E1/E2M18



Displacement	
50Hz	20.5 m ³ h ⁻¹ (12.1 ft ³ min ⁻¹)
60Hz	25 m ³ h ⁻¹ (14.7 ft ³ min ⁻¹)
Speed (Pneurop 6602)	
50Hz	17 m ³ h ⁻¹ (10 ft ³ min ⁻¹)
60Hz	20.4 m ³ h ⁻¹ (12.1 ft ³ min ⁻¹)

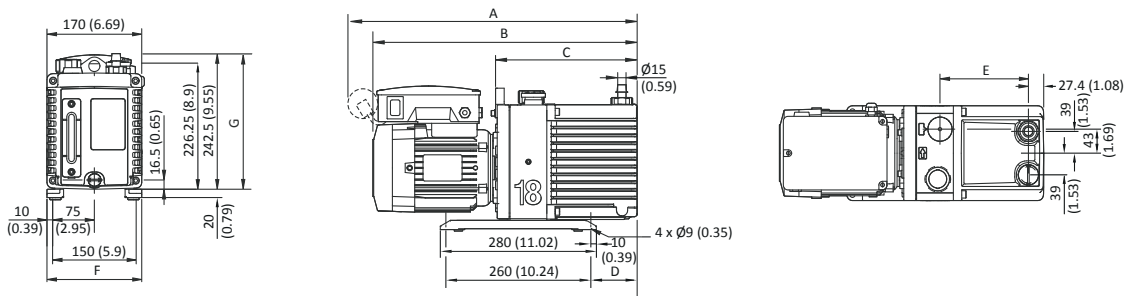
- 1 Without gas ballast
- 2 With gas ballast

E1/E2M18 Performance Curve



Dimensions

E1/ E2M18 Dimensions



Order no:	A	B	C	D	E	F	G
A34310940	-	474	247	83	159	171.4	217
A34315904	518	474	247	83	159	171.4	241
A34317984	-	504	247	83	159	171.4	251
A36310940	-	520	295	131	207	171.4	217
A36315904	564	520	295	131	207	171.4	241
A36317984	-	550	295	131	207	171.4	251

Technical Data



E1M18		
Displacement		
50Hz	m ³ h ⁻¹ / ft ³ min ⁻¹	20.5 / 12.1
60Hz	m ³ h ⁻¹ / ft ³ min ⁻¹	25.0/ 14.7
Speed (Pneurop 6602)		
50Hz	m ³ h ⁻¹ / ft ³ min ⁻¹	17.0/ 10
60Hz	m ³ h ⁻¹ / ft ³ min ⁻¹	20.4/ 12.1
Ultimate vacuum (total pressure)		
without gas purge	mbar/ Torr	3 x 10 ⁻² / 2.2 x 10 ⁻²
with gas purge	mbar/ Torr	6.5 x 10 ⁻¹ / 4.8 x 10 ⁻¹
with Fomblin®	mbar/ Torr	3 x 10 ⁻¹ / 2.56 x 10 ⁻²
Inlet connection		NW25
Outlet connection*		Nozzle 15 mm external Ø removable from 3/4 in BSP tapped hole
Max permitted pressure at outlet	bar gauge/ psig	0.5/ 7
Max inlet pressure for water vapour	mbar/ Torr	50/ 38
Max water vapour pumping rate	kg h ⁻¹	0.65
Operating temp range		13 - 40°C
Nominal Rotation speed 50/60Hz	rpm	1440 / 1720 rpm
Power connector 1-ph**		IEC EN60320 C19
Motor power 50 Hz	kW	0.55 kW
Motor power 60 Hz	kW	0.75 kW
Weight	kg/ lbs	37/ 82
Noise @ 50Hz	dB(A)	57
Oil capacity - max	litre	1.4
Oil capacity - min	litre	0.9
Recommended oil (supplied)		Ultragrade 19

* The PFPE are supplied with NW25 outlet connection

** Pumps listed with IEC connector only