

E2M40 AND 80 OIL SEALED ROTARY VANE PUMPS MAXIMISE YOUR PRODUCTIVITY AND PERFORMANCE



Edwards E2M series two stage oil sealed rotary vane vacuum pumps are renowned for their high ultimate vacuum, rapid pumping speeds, quiet operation and ability to handle water vapour. These direct drive rotary vane pumps are inherently compact and vibration free, and with their finger-proof fan and coupling housings they offer excellent operator protection.

A comprehensive range of accessories is available to allow use on a wide variety of vacuum applications.

Features and Benefits

Reliability

- Reliable and stable process – effective lubrication even under high gas loads.

Robust

- No contamination of process – oil and air suck-back protection.

Performance

- Long and trouble free life – industrial roller bearings on drive shaft.

Reassurance

- Peace of mind – tried, tested and industry standard for years.
- Reliable and stable – high vacuum performance.

Applications

- Vacuum metallurgy processes.
- Thin film coating technologies.
- Pharmaceutical freeze drying.
- Refrigeration and air conditioning system evacuation, drying, and backfilling.

Pump Range

E2M40

- E2M40
- E2M40FX
- E2M40T4

E2M175

- E2M175
- E2M175FX
- E2M175T3

E2M80

- E2M80
- E2M80FX
- E2M80T4

E2M275

- E2M275
- E2M275FX
- E2M275T3

Performance Curves

E2M40 Oil Sealed Rotary Pump

E2M40



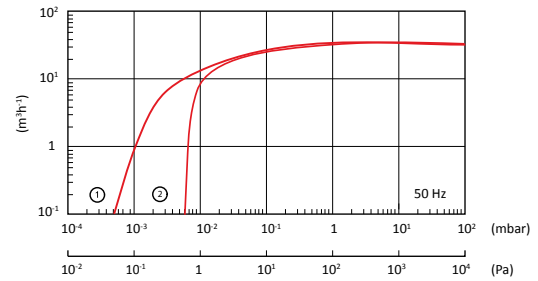
Displacement	
50 Hz	42.5 m ³ hr/25 ft ³ min ⁻¹
60 Hz	50.5 m ³ h ⁻¹ /29.7 ft ³ min ⁻¹
Speed (Pneurop)	
50 Hz	37 m ³ h ⁻¹ /21.8 ft ³ min ⁻¹
60 Hz	44 m ³ h ⁻¹ /25.9 ft ³ min ⁻¹

Ordering information

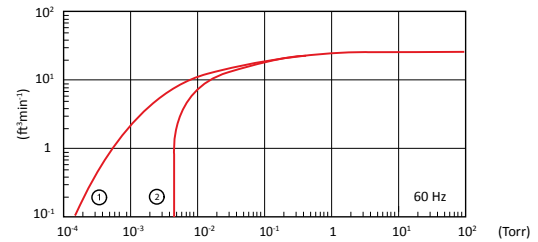
Product description	Order no.
E2M40 HC IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36404934
E2M40 HC IE3 EU/US 50/60HZ 380-400V 50HZ, 230 / 460V 60HZ	A36404940
E2M40 FX IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36417934
E2M40 FX IE3 EU/US 50/60HZ 380-400V 50HZ, 230 / 460V 60HZ	A36417940
E2M40 AZ IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36407934
E2M40 AZ IE3 EU/US 50/60HZ 380-400V 50HZ, 230 / 460V 60HZ	A36407940

Each EM pump is supplied Ultragrade 70 oil. For PFPE prepared FX pumps Fomblin® to be ordered separately.

E2M40 Performance Curve



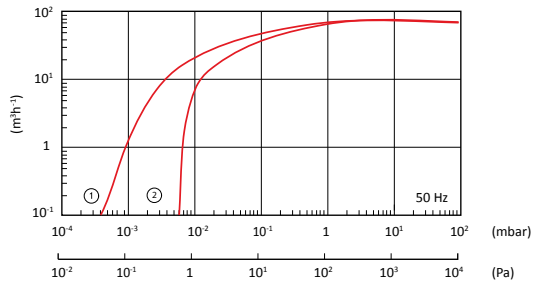
- 1 Without gas ballast
- 2 With gas ballast



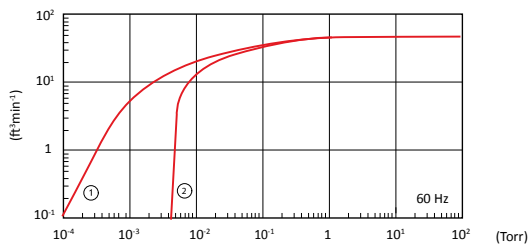
- 1 Without gas ballast
- 2 With gas ballast

E2M80 Performance Curve

E2M80



- 1 Without gas ballast
- 2 With gas ballast



- 1 Without gas ballast
- 2 With gas ballast

Displacement

50 Hz	80 m ³ h ⁻¹ /47.1 ft ³ min ⁻¹
60 Hz	96 m ³ h ⁻¹ /56.5 ft ³ min ⁻¹

Speed (Pneurop)

50 Hz	74 m ³ h ⁻¹ /43.6 ft ³ min ⁻¹
60 Hz	90 m ³ h ⁻¹ /53 ft ³ min ⁻¹



Ordering information

Product description	Order no.
E2M80 HC IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36504934
E2M80 HC IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36504940
E2M80 FX IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36517934
E2M80 FX IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36517940
E2M80 AZ IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36507934
E2M80 AZ IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36507940

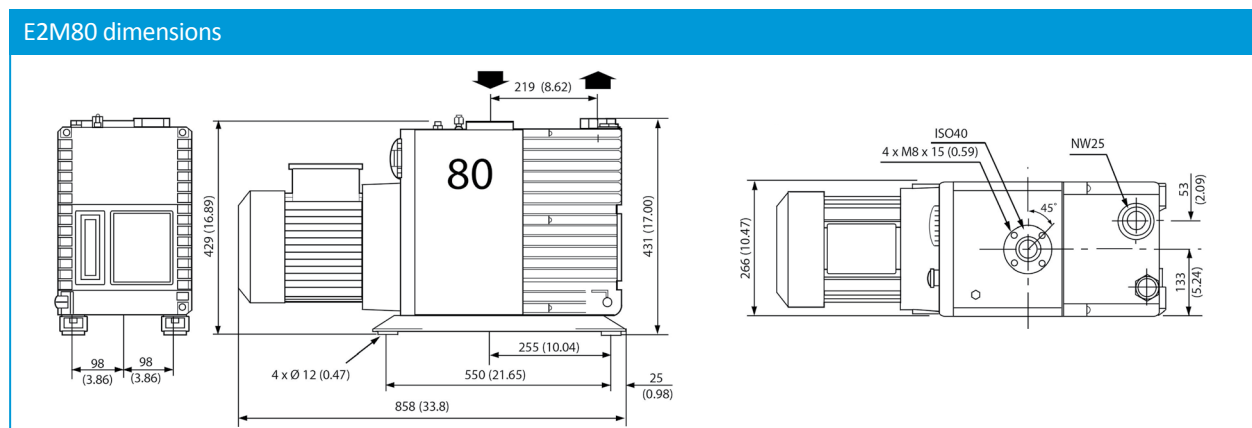
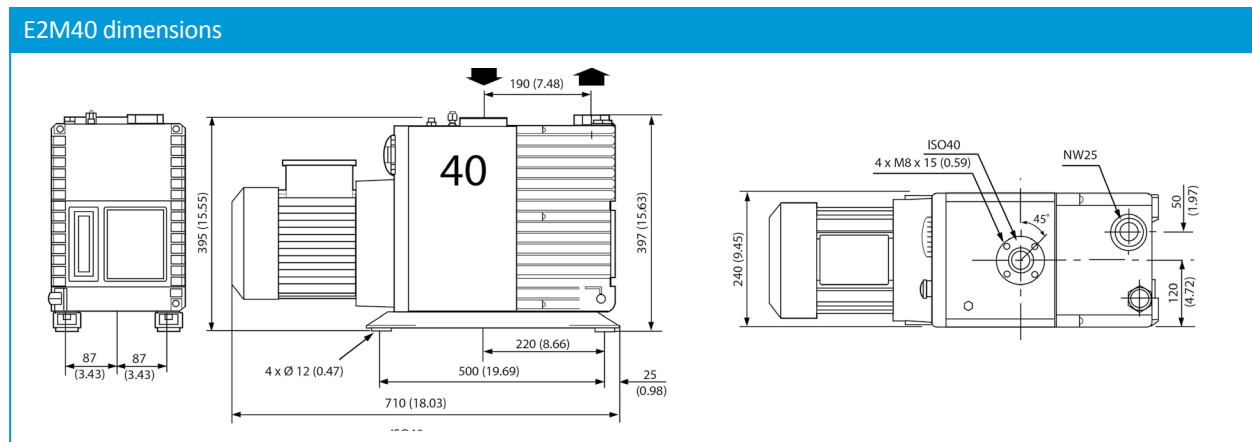
Each EM pump is supplied Ultragrade 70 oil.
For PFPE prepared FX pumps Fomblin® to be ordered separately.

Technical Data



	Units	E2M40	E2M80
Displacement			
50 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	42.5/25	80/47.1
60 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	50.5/29.7	96/56.5
Speed (Pneurop)			
50 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	37/218	74/43.6
60 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	44/25.9	90/53
Number of stages		2	
Ultimate vacuum (total pressure)			
without gas ballast	mbar/Torr	1 x 10 ⁻³ /7.7 x 10 ⁻⁴	
with gas ballast	mbar/Torr	7 x 10 ⁻³ /5.4 x 10 ⁻³	
Ultimate with Fomblin®			
without gas ballast	mbar	1 x 10 ⁻²	
Inlet connection		ISO40	
Outlet connection		25 mm flange suitable for NW25	
Max outlet pressure		0.5 bar gauge	
Max inlet pressure for water vapour	mbar/Torr	7/5.3	5/3.8
Max water vapour pumping rate	kg h ⁻¹ /lb h ⁻¹	0.2/0.4	0.3/0.7
Weight	kg/lb	75/165	102/224
Motor protection rating		IP55	
Motor power			
50 Hz	kW/hp	11/15	22/3
60 Hz	kW/hp	15/2	3/4
Standard oil capacity			
maximum	litre	4.0	6.3
minimum	litre	22	4
PFPE oil capacity			
maximum	litre	4.0	
minimum	litre	22	
Recommended oil		Ultragrade 70	
Noise level	dB(A)	65	70

Dimensions



Service and Spares

Maintenance Kits

Product description	Order no.
E2M40	
Clean and overhaul kit	A34401131
Blade Kit	A36401050
Major service kit	A36401814
Interior assembly	A36401100
E2M80	
Interior assembly	A36501100
Clean and overhaul kit	A34501131
Blade kit	A36501050
Major service kit	A36501814
All models	
Fine oil-filter	A22304041
Common seals kit	A34401820