

E2M175 AND 275 OIL SEALED ROTARY VANE PUMPS MAXIMISE YOUR PRODUCTIVITY AND PERFORMANCE



Edwards E2M175/275 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.

This pump is suitable for most duties and is safe to handle non-flammable gases and vapours within the normal operating parameters of the pump.



Features and Benefits

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

E2M175

- E2M175
- E2M175FX
- E2M175T3

E2M275

- E2M275
- E2M275FX
- E2M275T3

Performance Curves

E2M175 Oil Sealed Rotary Pump

E2M175



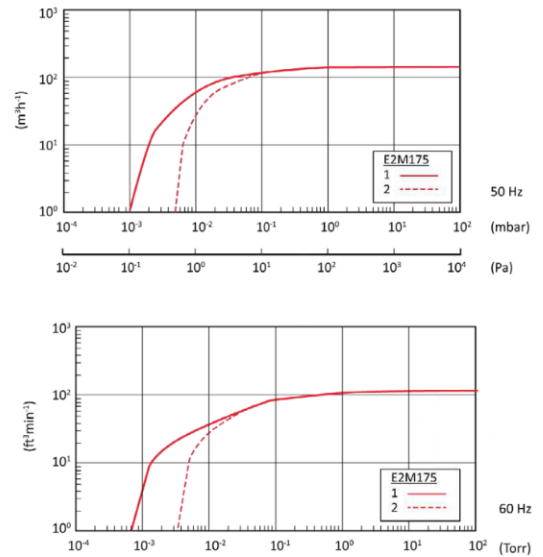
Displacement	
50 Hz	178 m ³ h ⁻¹ /105 ft ³ min ⁻¹
60 Hz	214 m ³ h ⁻¹ /126 ft ³ min ⁻¹
Speed (Pneurop)	
50 Hz	160 m ³ h ⁻¹ /94 ft ³ min ⁻¹
60 Hz	196 m ³ h ⁻¹ /115 ft ³ min ⁻¹

Ordering information

Product description	Order no.
E2M175 HC IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36604934
E2M175 HC IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36604940
E2M175 FX IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36617934
E2M175 FX IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36617940
E2M175 AZ IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36607934
E2M175 AZ IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36607940

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

E2M175 Performance Curve



- 1 Without gas ballast
- 2 With gas ballast

E2M275 Oil Sealed Rotary Pump

E2M275



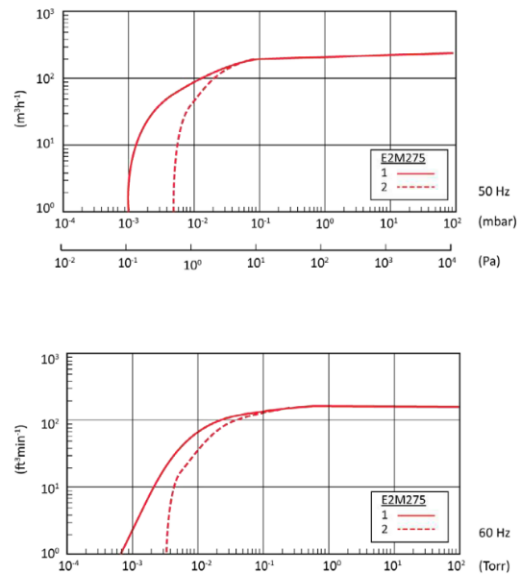
Displacement	
50 Hz	292 m ³ h ⁻¹ /172 ft ³ min ⁻¹
60 Hz	350 m ³ h ⁻¹ /206 ft ³ min ⁻¹
Speed (Pneurop)	
50 Hz	255 m ³ h ⁻¹ /150 ft ³ min ⁻¹
60 Hz	306 m ³ h ⁻¹ /180 ft ³ min ⁻¹

Ordering information

Product description	Order no.
E2M275 HC IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36704934
E2M275 HC IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36704940
E2M275 FX IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36717934
E2M275 FX IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36717940
E2M275 AZ IE3 ASIA 50/60HZ 200V 50/60HZ, 380V 60HZ	A36707934
E2M275 AZ IE3 EU/US 50/60HZ 380-400V 50HZ, 230/460V 60HZ	A36707940

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

E2M275 Performance Curve



- 1 Without gas ballast
- 2 With gas ballast

Technical Data



	Units	E2M175	E2M275
Displacement			
50 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	178/105	292/172
60 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	214/126	350/206
Speed (Pneurop)			
50 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	160/94	255/150
60 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	196/115	306/180
Number of stages		2	
Ultimate vacuum (total pressure)			
with gas ballast	mbar/Torr	1 x 10 ⁻³ /7.7 x 10 ⁻⁴	
without gas ballast	mbar/Torr	7 x 10 ⁻³ /5.4 x 10 ⁻³	5.0 x 10 ⁻³ /3.8 x 10 ⁻³
Ultimate with Fomblin®			
without gas ballast	mbar	1 x 10 ⁻²	-
Inlet connection		ISO63 blank flange with seal	
Outlet connection		ISO40 flange centre tapped	
Max outlet pressure		0.5 bar gauge	
Max inlet pressure for water vapour	mbar/Torr	20/15	12/9
Max water vapour pumping rate	kg h ⁻¹ /lb h ⁻¹	0.3/0.7	23/5.1
Weight	kg/lb	204/449	222/488
Motor protection rating		IP44	
Motor power			
50 Hz	kW/hp	5.5/7.5	7.5/10
60 Hz	kW/hp	6.5/8.5	8.5/11
Standard oil capacity			
maximum	litre/qt	25/26	28/29.5
minimum	litre/qt	16/17	19/20
PFPE oil capacity			
maximum	litre/qt	18/19	-
minimum	litre/qt	6.5/6.9	TBA
Recommended oil		Ultragrade 70	
Noise level	dB(A)	75	
Water cooling requirement	lmin ⁻¹	13	2

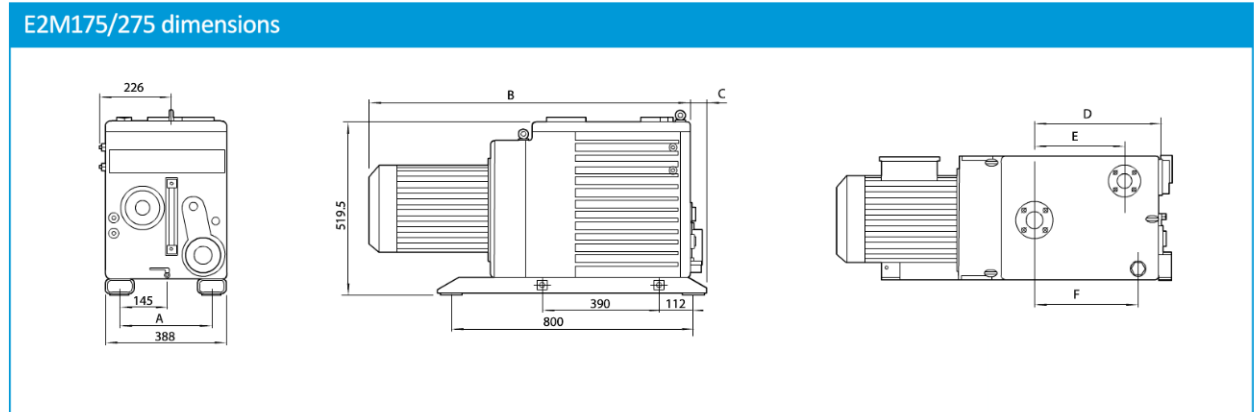
Service

Edwards products, spares and accessories are available from Edwards companies in Belgium, Brazil, China, France, Germany, Israel, Italy, Japan, Korea, Singapore, United Kingdom, U.S.A. and a worldwide network of distributors. The majority of these centres employ Service Engineers who have undergone comprehensive Edwards training courses. Order spare parts and accessories from your nearest Edwards company or distributor.

When you order, please state for each part required:

- Model and item number of your equipment.
- Serial number (if any).
- Item number and description of the part.

Dimensions



	A	B	C	D	E	F
E2M175	290 (1142)	1011 (39.80)	55 (217)	329 (1295)	196 (7.72)	237 (9.33)
E2M275	290 (1142)	1152 (45.35)	55 (217)	425 (16.73)	294 (1158)	333 (13.11)

Service and Spares

Maintenance Kits

Product description	Order no.
E2M175	
Maintenance kit	A36601831
Seals kit	A36601840
Complete interior assembly	A36601100
E2M275	
Maintenance kit	A36701831
Seals kit	A36601840
Complete interior assembly	A36701100

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