



# PRODUCT CATALOGUE 2012



# E2M80 Two Stage Rotary Vacuum Pumps



Edwards E2M80 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.

Supplied with Ultragrade 70 Oil. Fomblin® must be purchased separately for PFPE prepared pumps E2M40FX, E2M80FX, and E2M175FX.

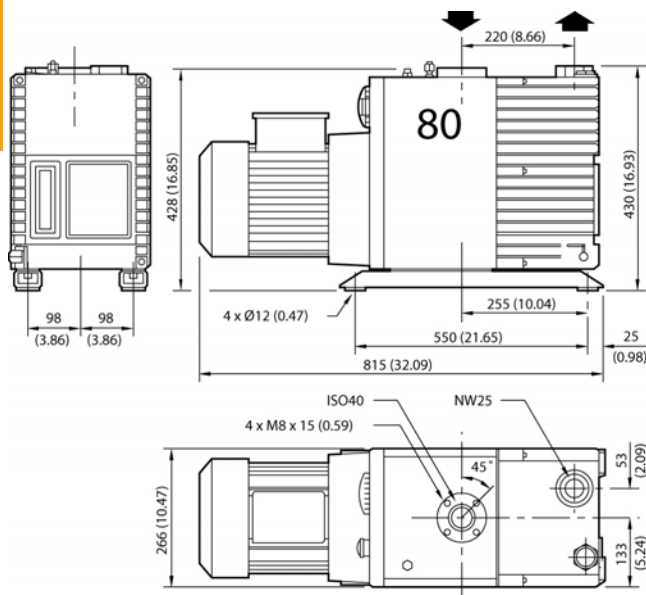
## Features & Benefits

- Advanced pressurised oil circuit to give effective lubrication even under high gas loads
- When the pump is switched off, the spring loaded distributor valve provides oil and air suck-back protection
- Gas Ballast control to assist in handling high water vapour loads
- Industrial roller bearings on drive shaft for ultimate reliability and long, trouble free life
- Full height oil sight glass for easy checking of oil level and condition

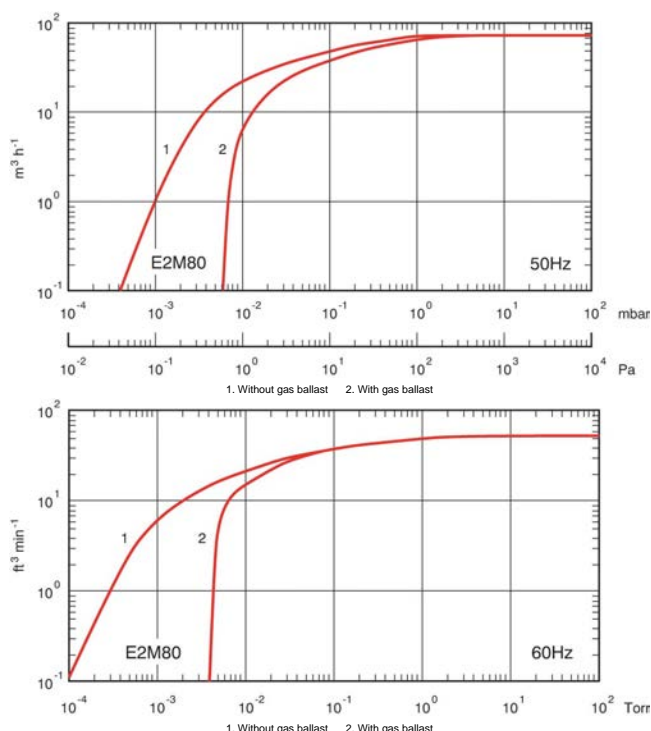
## Applications

- Vacuum metallurgy processes
- Thin film coating technologies
- Pharmaceutical freeze drying
- Refrigeration and air conditioning system evacuation, drying, and backfilling
- Transformer and cable drying and impregnation, insulating oil treatment plant

## Dimensions



## Performance Curves



## Technical Data

Displacement	
50Hz	80 m <sup>3</sup> h <sup>-1</sup> / 47.1 ft <sup>3</sup> min <sup>-1</sup>
60Hz	96 m <sup>3</sup> h <sup>-1</sup> / 56.5 ft <sup>3</sup> min <sup>-1</sup>
Speed (Pneurop)	
50Hz	74 m <sup>3</sup> h <sup>-1</sup> / 43.6 ft <sup>3</sup> min <sup>-1</sup>
60Hz	90 m <sup>3</sup> h <sup>-1</sup> / 53 ft <sup>3</sup> min <sup>-1</sup>
Number of stages	2
Ultimate vacuum (total pressure)	
Without gas ballast	1 x 10 <sup>-3</sup> mbar / 7.7 x 10 <sup>-4</sup> Torr
With gas ballast	7 x 10 <sup>-3</sup> mbar / 5.4 x 10 <sup>-3</sup> Torr
Ultimate with Fomblin®	
Without gas ballast	1 x 10 <sup>-2</sup> mbar
Inlet connection	ISO40
Outlet connection	25 mm flange suitable for NW25
Max outlet pressure	0.5 bar gauge
Max inlet pressure for water vapour	5 mbar / 3.8 Torr
Max water vapour pumping rate	0.3 kg h <sup>-1</sup> / 0.7 lb h <sup>-1</sup>
Weight	105 kg / 231 lb
Motor protection rating	IP44 or IP54
Motor power	
50Hz	2.2 kW / 3 hp
60Hz	3 kW / 4 hp
Standard oil capacity	
maximum	6.3 litre / 6.7 qt
minimum	4 litre / 4.2 qt
PFPE oil capacity	
maximum	4.01 litre / 4.2 qt
minimum	2.19 litre / 2.3 qt
Recommended oil	Ultragrade 70
Noise level	70 dB (A)

## Ordering Information

Product Description	Order No.
E2M80 220-240/380-415V, 3-ph, 50Hz	A36501935
E2M80 208-230/460V, 3-ph, 60Hz	A36502982
E2M80 200/380V, 3-ph, 50/60Hz	A36501934
E2M80FX 220-240/380-415V, 3-ph, 50Hz	A36511935
E2M80FX, 208-230/460V, 3-ph, 60Hz	A36512982
E2M80FX 200/380V, 3-ph, 50/60Hz	A36511934
E2M80T4 400V, 3-ph, 50Hz	A36518993
Accessories & Spares	Order No.
Spares Kit C&O E1/2M80 HC/F	A34501131
Spares Kit Blade E2M80	A36501050
Spares Kit Blade E1M80	A34501050
Spares Kit Major Service E1M80	A34501814
Spares Kit Major Service E2M80	A36501814