



PRODUCT CATALOGUE 2012



E2M28 Two Stage Rotary Vane Pump

The EM range of oil-sealed rotary pumps - renowned for its high ultimate vacuum, rapid pumping speed, quiet operation and ability to handle vapour - has become the industry standard laboratory and light industrial applications.

The E2M28 pump is a two-stage, direct drive, sliding vane pump. The pump is oil sealed and designed for reliable, long-term operation in both laboratory and industrial environments. 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, lifting plate. Fomblin® must be purchased separately for PFPE pumps.



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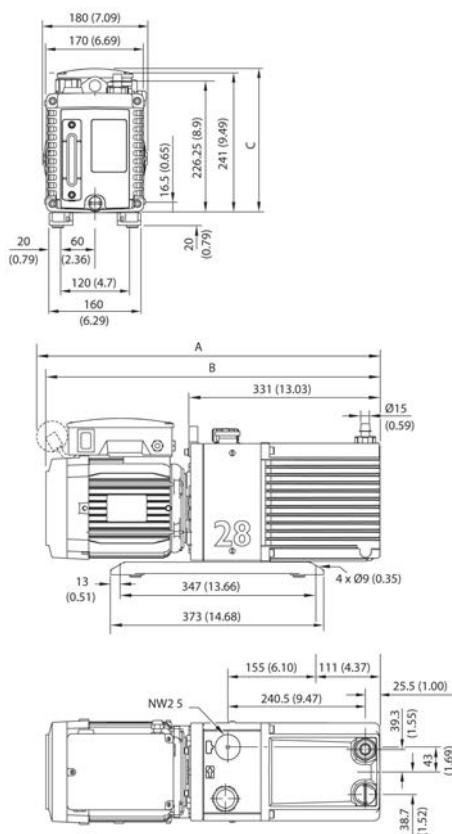
Features & Benefits

- The pump is designed for reliable, long-term operation.
- Thermal overload device prevents overheating (single phase only).
- The pump is a free-standing unit.
- 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.

Applications

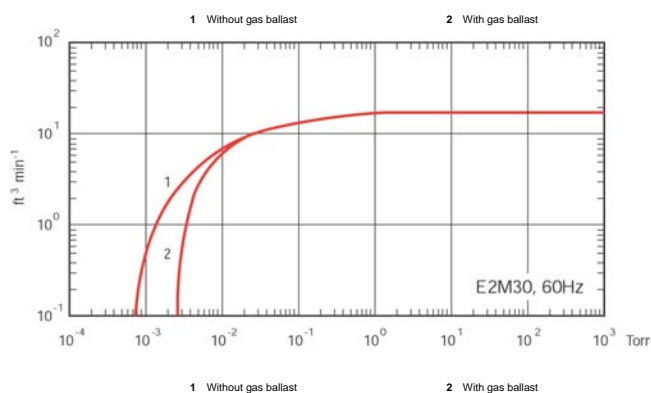
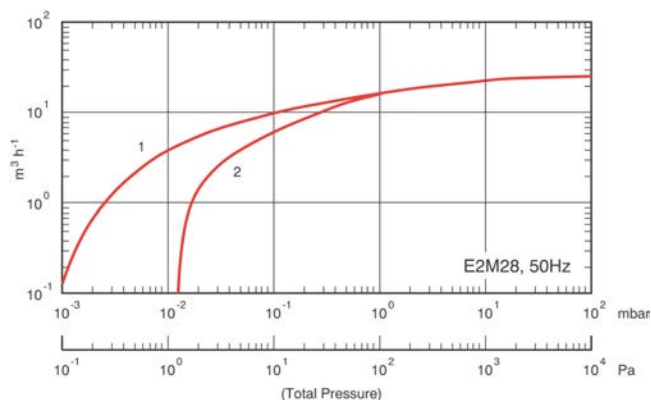
- Analytical instruments - LCMS
- Automotive
- Beam lines and high energy physics
- Centrifuges, ultra-high speed
- Coating

Dimensions



| Ordering No. | A | B | C |
|--------------|-----|-----|-----|
| A37310940 | - | 553 | 217 |
| A37315904 | 598 | 584 | 251 |
| A37317984 | - | 584 | 251 |

Performance Curves



Technical Data

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| Displacement (swept volume) 50 Hz | 32.2m ³ h ⁻¹ / 19 ft ³ min ⁻¹ |
| Displacement (swept volume) 60 Hz | 38.9 m ³ h ⁻¹ / 22.3 ft ³ min ⁻¹ |
| Speed (Pneurop 6602) 50 Hz | 27.5 m ³ h ⁻¹ / 16.2 ft ³ min ⁻¹ |
| Speed (Pneurop 6602) 60Hz | 33.0 m ³ h ⁻¹ / 19.5 ft ³ min ⁻¹ |
| Ultimate vacuum (total pressure) | |
| without gas ballast | 1 x 10 ⁻³ mbar / 7.5 x 10 ⁻⁴ Torr |
| with gas ballast | 1.5 x 10 ⁻² mbar / 1.1 x 10 ⁻² Torr |
| with Fomblin® | 1 x 10 ⁻² mbar / 7.5 x 10 ⁻³ Torr |
| Inlet connection | NW25 flange |
| Outlet connection | Nozzle 15 mm external Ø removable from 3/4 in BSP tapped hole |
| Max allowed pressure at outlet | 0.5 bar gauge / 7 psig |
| Max inlet pressure for water vapour | 30 mbar / 23 Torr |
| Max water vapour pumping rate | 0.7 kg h ⁻¹ |
| Operating temperature range | 13 – 40 °C |
| Nominal rotation speed | 1440 / 1720 rpm |
| Motor power 50 Hz | 0.75 kW |
| Motor power 60 Hz | 0.90 kW |
| Power Connector 1-ph* | IEC EN60320 C19 |
| Weight | 40 kg / 88 lbs |
| Noise | 57 dB(A) @ 50 Hz |
| Oil capacity - max | 1.5 litre |
| Oil capacity - min | 1.2 litre |
| Recommended oil (supplied) | Ultragrade 19 |

* Pumps listed with IEC connector only

Ordering Information

| Product Description | Order No. |
|---|-----------|
| E2M28 200-230/380-415 V, 3-ph, 50 Hz or 200-230/460 V, 3-ph, 60 Hz | A37310940 |
| E2M28 100/200 V, 1-ph, 50 Hz or 100-105/200-210 V, 1-ph, 60 Hz | A37315904 |
| E2M28 115/200-230 V, 1-ph, 50/60 Hz with IEC60320 connector fitted | A37317984 |
| PFPE E2M28 200-230/380-415 V, 3-ph, 50 Hz or 200-230/460 V, 3-ph, 60 Hz | A37321940 |
| PFPE E2M28 115/200-230 V, 1-ph, 50/60 Hz with IEC60320 connector fitted | A37325984 |
| Accessories & Spares | Order No. |
| Model MF30 mist filter | A46233000 |
| 2m Electrical supply cable, UK, three-pin plug | A50505003 |
| 2m Electrical supply cable, North European plug | A50506003 |
| 2m Electrical supply cable, North America/Japan plug | A50507003 |
| 2m Electrical supply cable, no plug | A50508003 |
| Spares Kit C&O E2M28 | A37301131 |
| Spares Kit Blade Sprung E2M28/30 | A37301135 |
| NW25 to 28mm bore tube adaptor | C10520201 |
| 3/4" BSP to NW25 outlet adaptor | C10501414 |