



UV50

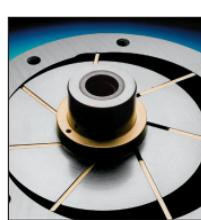
| Main Features  | Components  |
|--|---|
| <ul style="list-style-type: none"> <li><b>Air cooling</b> through an aluminum radiator and a temperature controlled fan.</li> <li><b>Operation without cooling water</b> avoids problems related to limestone, ambient temperature and unstable vacuum degree.</li> <li><b>“Closed-loop” lubrication circuit</b> ensures negligible coolant consumption.</li> <li><b>Single-stage suction volumes</b> from 177 cfm to 1908 cfm.</li> <li><b>99,95% maximum vacuum degree</b> [0.015 InHg(A)] with performance curves constant up to 95%: the best achievable result by a single stage vacuum pump.</li> <li><b>Special aluminum alloy vanes</b> provide active sealing according to the traditional Pneumofore feature and guarantee a stable performance even after years of operation, avoiding efficiency loss and minimizing cost of operation and maintenance.</li> <li><b>Reduced electric energy consumption</b> when compared to liquid ring pumps with same nominal capacity.</li> <li><b>“Plug and play” pumps</b>, easy to install and integrate.</li> <li><b>Variable speed option</b> for operation 35 to 60 Hz and constant flow and/or vacuum level.</li> </ul> | <ul style="list-style-type: none"> <li><b>Intake air filter</b> with polyester cartridge (3 or 5 µm).</li> <li><b>Coolant filter cartridge</b> for lubrication circuit.</li> <li><b>Coolant separator</b> and coolant recovery for air delivery. No coolant vapors.</li> <li><b>Cylinder-integrated non return valve</b> avoids air and coolant backflow.</li> <li><b>Direct coupling</b> between cylinder and electric motor.</li> <li><b>Limited footprint</b> - soundproof [75 dB(A)] - cabin, no foundations required.</li> <li><b>Fully automatic operation</b>: coolant temperature control, auxiliary control switches, safety vacuum gauge, system alarms and motorized suction valve.</li> <li><b>Control panel</b> with vacuum gauge, coolant separator cartridge pressure drop indicator, hour meter, active circuits control warning light, manual security button and key starter.</li> <li><b>Very low maintenance cost</b> thanks to design simplicity and to few moving parts subject to wear.</li> <li><b>Vertical layout</b> (for UV4, UV8 and UV16) for space economy.</li> <li><b>Standard CE marking</b>, US marking is optional.</li> </ul> |

| Applications            | Technical data       |         | 60 Hz   | UV4    | UV8   | UV16 | UV30 | UV50 |
|-------------------------|----------------------|---------|---------|--------|-------|------|------|------|
| • food processing       | Capacity             | cfm     | 177     | 327    | 686   | 1254 | 1908 |      |
| • packaging             | Maximum vacuum       | %       |         |        | 99.95 |      |      |      |
| • can manufacturing     | Minimum pressure     | InHg(A) |         |        | 0.015 |      |      |      |
| • material handling     | Pump motor           | HP      | 9       | 18     | 35    | 75   | 125  |      |
| • plastic heat moulding | Rotation speed       | rpm     | 1740    | 1750   | 1750  | 1765 | 1770 |      |
| • bricks production     | Fan motor            | HP      | 0.11    | 0.16   | 0.6   | 1.2  | 1.6  |      |
| • degassing             | Intake connection    | DN      | 2½" BSP | 4" BSP | 4"    | 6"   | 8"   |      |
| • polymers production   | Discharge connection |         | 2" BSP  | 3" BSP |       |      | 6"   |      |



Pneumofore engineers help customers to design the most suitable vacuum system for any application and assist them during regular operation as well as long-term maintenance.

UV16 vertical layout



Rotary vane cylinder



Exhaust air cleaner

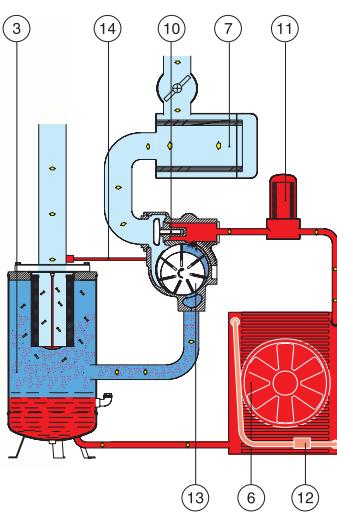
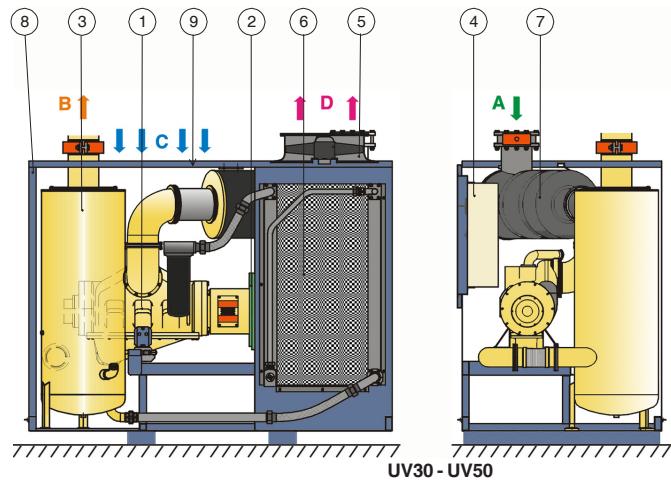


Direct coupling

# UV Series

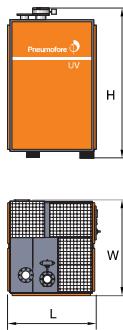
Rotary Vane Vacuum Pumps

## Components and Schematic Operating Diagram



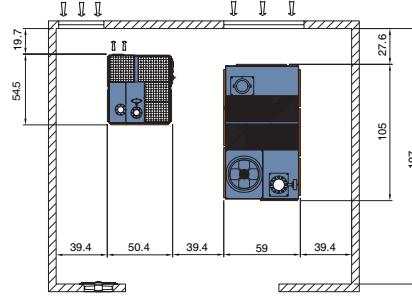
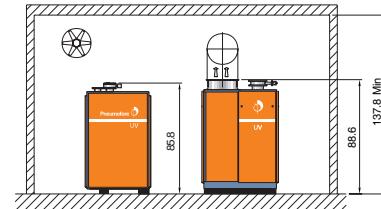
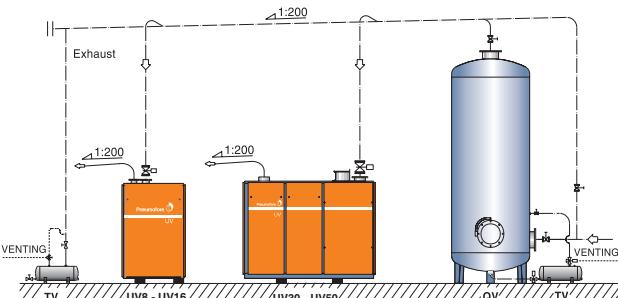
- 1 Cylinder block
- 2 Electric motor
- 3 Coolant receiver and coolant separator
- 4 Control panel
- 5 Fan
- 6 Coolant radiator
- 7 Air intake filter
- 8 Soundproof cabin
- 9 Cooling inlet air filter
- 10 Non-return valve
- 11 Coolant filter
- 12 Thermostatic valve
- 13 Rotor
- 14 Coolant recovery
- Air / coolant (blue)
- Coolant circuit (red)
- Air circuit (light blue)

## Dimensions

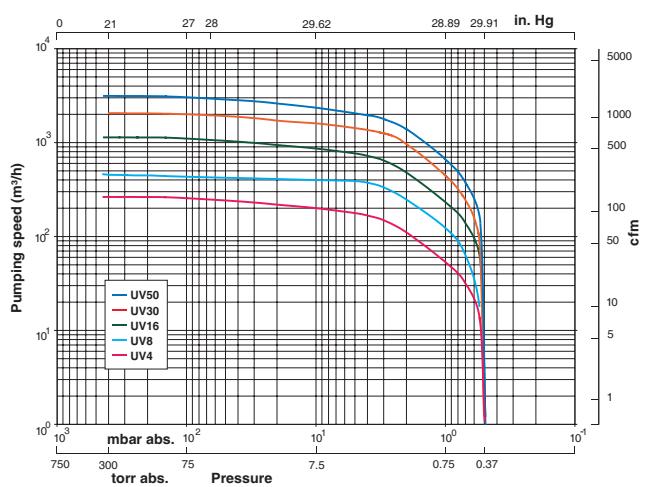


|           | UV4  | UV8  | UV16 | UV30 | UV50 |
|-----------|------|------|------|------|------|
| length in | 32.5 | 63   | 54.5 | 89.3 | 105  |
| width in  | 36   | 26.8 | 50.4 | 57   | 59   |
| height in | 46   | 70   | 85.8 | 80.7 | 88.6 |
| weight lb | 441  | 1720 | 2359 | 3968 | 4630 |

## Standard Installation



## Vacuum Flow Diagram (60Hz)



Pneumofore S.p.A.  
Headquarters  
Via N. Bruno, 34  
10098 - Rivoli (TO) - Italy

Tel: +39 011.950.40.30  
Fax: +39 011.950.40.40  
Email: info@pneumofore.com  
Web: www.pneumofore.com

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and ISO 14001: 2004

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