



# EVISA E300.R



The lubricated rotary vane pumps EVISA are designed to be used in a wide range of industrial and healthcare applications.

They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump
- Continuous operation from atmospheric pressure to end vacuum :  $6.10^{-2}$  mbar
- High pumping speed even at low pressure
- Integrated oil mist filter on the exhaust
- IE3 motor

## Technical characteristics

|                                         |                                                                                             | 50 Hz                                              | 60 Hz                                       |                                             |
|-----------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------|---------------------------------------------|
| E300.R<br>HV                            | Nominal flow rate m <sup>3</sup> .h <sup>-1</sup> - cfm                                     |                                                    | 300 - 176,5                                 | 360 - 211,8                                 |
|                                         | PNEUROP pumping speed <sup>(1)</sup> m <sup>3</sup> .h <sup>-1</sup> - cfm                  |                                                    | 280 - 165                                   | 336 - 198                                   |
|                                         | Pumping speed at 1 mbar inlet pressure <sup>(1)</sup> m <sup>3</sup> .h <sup>-1</sup> - cfm |                                                    | 171 - 101                                   | 205 - 121                                   |
|                                         | Without gas ballast End vacuum mbar - torr                                                  |                                                    | ≤ 6.10 <sup>-2</sup> - 4,5.10 <sup>-2</sup> | ≤ 6.10 <sup>-2</sup> - 4,5.10 <sup>-2</sup> |
|                                         | Fully opened gas ballast                                                                    | End vacuum mbar - torr                             | ≤ 2 - 1,5                                   | ≤ 2 - 1,5                                   |
|                                         |                                                                                             | Water vapor permitted maximum pressure mbar - torr | 18,6 - 13,9                                 | 20 - 15                                     |
| Water vapor capacity kg.h <sup>-1</sup> |                                                                                             | 2,3                                                | 3                                           |                                             |
| E300.R                                  | Without gas ballast End vacuum mbar - torr                                                  |                                                    | ≤ 3 - 2,3                                   | ≤ 3 - 2,3                                   |
|                                         | Fully opened gas ballast                                                                    | End vacuum mbar - torr                             | ≤ 5 - 3,8                                   | ≤ 5 - 3,8                                   |
|                                         |                                                                                             | Water vapor permitted maximum pressure mbar - torr | 13 - 9,7                                    | 14 - 10,5                                   |
|                                         |                                                                                             | Water vapor capacity kg.h <sup>-1</sup>            | 1,6                                         | 2                                           |
|                                         | 100 % synthetic oil                                                                         |                                                    | MV99S                                       | MV99S                                       |
|                                         | Oil capacity l - qt                                                                         |                                                    | 5 - 5,3                                     | 5 - 5,3                                     |
|                                         | Noise level dB(A)                                                                           |                                                    | 72                                          | 76                                          |

<sup>(1)</sup> Measurements according to PNEUROP 6602 specifications - 20°C

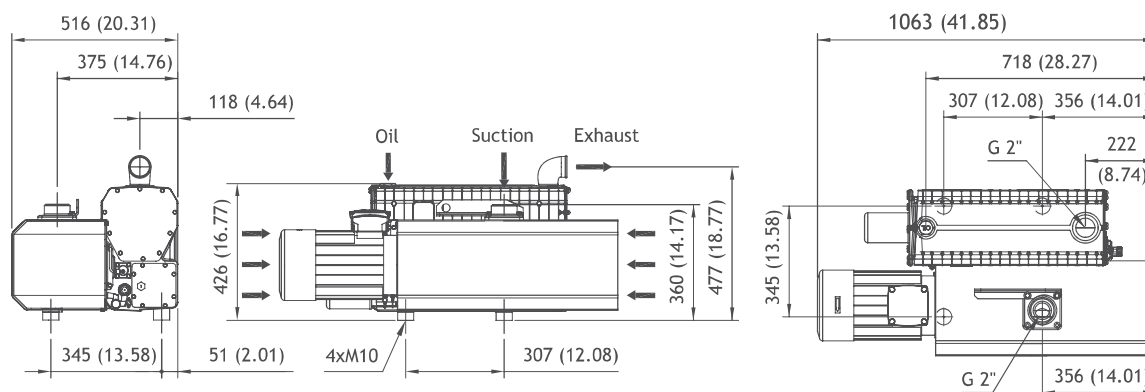
## Versions

| GEOGRAPHIC ZONE                         |                                  | EUROPE    | ASIA<br>MIDDLE-EAST | SOUTH<br>AMERICA | USA           | JAPAN        |
|-----------------------------------------|----------------------------------|-----------|---------------------|------------------|---------------|--------------|
| Electrical<br>motor                     | Number of phases                 | 3         | 3                   | 3                | 3             | 3            |
|                                         | Voltage V                        | 230 / 400 | 220 / 380           | 190 / 380        | 208-230 / 460 | 220 / 380    |
|                                         | Period Hz                        | 50        | 60                  | 50               | 60            | 50 / 60      |
|                                         | Motor power                      | 5,5 kW    | 6,6 kW              | 5,5 kW           | 10 HP         | 5,5 / 6,6 kW |
|                                         | Rotation speed $\text{min}^{-1}$ | 1500      | 1800                | 1500             | 1800          | 1500 / 1800  |
| Inlet connection <sup>(2)</sup>         |                                  | 2" BSP    | 2" BSP              | 2" NPT           | 2" NPT        | 2" BSP       |
| Outlet connection <sup>(2)</sup>        |                                  | 2" BSP    | 2" BSP              | 2" NPT           | 2" NPT        | 2" BSP       |
| Weight with oil $\text{kg} - \text{lb}$ |                                  | 172 - 380 | 182 - 402           | 198 - 437        | 198 - 437     | 179 - 395    |

<sup>(2)</sup> DN 50 ISO-KF connector can be supplied, see accessories

# Lubricated rotary vane vacuum pumps

## Dimensions mm (inch)



## References

|                                                                     | E300.R HV             |                     | E300.R                |                     |
|---------------------------------------------------------------------|-----------------------|---------------------|-----------------------|---------------------|
|                                                                     | WITH GAS BALLAST      | WITHOUT GAS BALLAST | WITH GAS BALLAST      | WITHOUT GAS BALLAST |
| <b>EUROPE</b><br>3ph, 230/400V-50Hz                                 | 823767<br>+<br>624229 | 823767              | 823831<br>+<br>624229 | 823831              |
| <b>SOUTH AMERICA / USA</b><br>3ph, 190/380V-50Hz, 208-230/460V-60Hz | 824061<br>+<br>624229 | 824061              | Contact us            | Contact us          |
| <b>ASIA / MIDDLE-EAST</b><br>3ph, 220/380V-60Hz                     | 823836<br>+<br>624229 | 823836              | 823834<br>+<br>624229 | 823834              |
| JAPAN version : contact us                                          |                       |                     |                       |                     |

## Special versions

|                                                                              | E300.R HV             |                     | E300.R                |                     |
|------------------------------------------------------------------------------|-----------------------|---------------------|-----------------------|---------------------|
|                                                                              | WITH GAS BALLAST      | WITHOUT GAS BALLAST | WITH GAS BALLAST      | WITHOUT GAS BALLAST |
| <b>CONDENSABLE VAPOUR PUMPING</b><br>(small propeller)<br>3ph, 230/400V-50Hz | 824287<br>+<br>624229 | 824287              | 823838<br>+<br>624229 | 823838              |
| <b>OXYGEN with Fomblin oil</b><br>3ph, 230/400V-50Hz                         | 823875<br>+<br>624229 | 823875              | 823874<br>+<br>624229 | 823874              |
| <b>EVISA H<sub>2</sub>O</b><br>3ph, 230/400V-50Hz                            | Contact us            | Contact us          | 823846<br>+<br>624229 | 823846              |

For booster direct mounting : contact us

## Maintenance kits

|                                                                          |        |
|--------------------------------------------------------------------------|--------|
| 3 000 hour usual maintenance<br>with silicone o'ring for oil mist filter | 724079 |
| 3 000 hour usual maintenance<br>with viton o'ring for oil mist filter    | 724080 |
| 12 000 hour preventive maintenance                                       | 724053 |
| Gasket set                                                               | 624231 |
| 3 000 hour usual maintenance<br>for OXYGEN version                       | 724090 |
| 12 000 hour preventive maintenance<br>for OXYGEN version                 | 724088 |



3 000 hour usual maintenance



12 000 hour preventive maintenance

Specifications are subject to be changed without notice.



## Accessories and Options

|                        |                                                                                         |               |
|------------------------|-----------------------------------------------------------------------------------------|---------------|
| <b>1</b>               | <b>Oil Level Safety (OLS) with float</b>                                                | <b>624245</b> |
|                        | Timer box for oil level safety (base mounting)                                          | 670810        |
|                        | NC bimetal temperature safety - opening at 120°C + SNH - Max 24V                        | 624246        |
|                        | Oil Level Safety and PT100 temperature sensor                                           | 624247        |
|                        | PT100 temperature sensor                                                                | 624248        |
| <b>2</b>               | <b>2" BSP suction filter</b>                                                            | <b>715350</b> |
|                        | Type 201                                                                                |               |
|                        | Paper cartridge                                                                         | 715351        |
|                        | Polyester cartridge                                                                     | 715352        |
|                        | Carbon cartridge                                                                        | 715352        |
|                        | Vacuum gauge fitted on filter                                                           | 617536        |
|                        | 2" BSP paper/paper double filtration 201PA + 201PA                                      | 670615        |
|                        | 2" BSP polyester/carbon double filtration 201PO + 201CH                                 | 670618        |
| <b>3</b>               | <b>Liquid trap 200</b>                                                                  | <b>724801</b> |
|                        | 340 m <sup>3</sup> .h <sup>-1</sup>                                                     |               |
|                        | 2" BSP                                                                                  |               |
|                        | Aluminium head / polycarbonate cylinder / without float                                 | 724802        |
|                        | Aluminium head / polycarbonate cylinder / with float                                    | 724803        |
|                        | Stainless steel head/ Pyrex cylinder / without float                                    | 724804        |
|                        | Stainless steel head / Pyrex cylinder / with float                                      | 615441        |
|                        | Pyrex bottle 250 ml under trap assembly                                                 | 615442        |
|                        | Pyrex bottle 500 ml under trap assembly                                                 | 615443        |
|                        | Pyrex bottle 1000 ml under trap assembly                                                | 619907        |
|                        | Bracket for wall fixing                                                                 |               |
|                        | Electro-pneumatic automatic drain with control board                                    | 816002        |
|                        | Electrical automatic drain with control board                                           | 816003        |
|                        | Adjusting valve fitted on T-square                                                      | 713842        |
|                        | Vacuum hose (0,6 m) FF 2" BSP                                                           | 618149        |
|                        | Vacuum hose (1 m) FF 2" BSP                                                             | 606099        |
|                        | Vacuum hose (1,5 m) FF 2" BSP                                                           | 607592        |
|                        | Suction hose with non-return valve (1 m)                                                | 770154        |
|                        | Exhaust double elbow mounting                                                           | 622788        |
|                        | Base frame assembly height 150 mm                                                       | 670806        |
| <b>4</b>               | <b>Elevated base frame</b>                                                              | <b>617612</b> |
|                        | (H=525 mm)                                                                              |               |
|                        | For 1 pump                                                                              | 619545        |
|                        | For 2 pumps                                                                             |               |
|                        | Without regulation contact 3-ph 400V                                                    | 770499        |
| <b>Direct starter</b>  | Without regulation contact 3-ph 230V                                                    | 770500        |
| <b>(wall mounting)</b> | With regulation contact LG7 3-ph 400V                                                   | 710426        |
|                        | With regulation contact LG7 3-ph 230V                                                   | 710434        |
|                        | Control board with FLEXO solenoid valve 3-ph, 400 + N<br>for warm up and degasing cycle | 770815        |
|                        | Control board with FLEXO solenoid valve 3-ph, 400 + N<br>for degasing cycle             | 770822        |
|                        | Aluminium adapter M2" / DN50 KF                                                         | 117132        |
|                        | Aluminium clamping collar DN50 KF                                                       | 361640        |
|                        | Centering ring stainless steel / VITON                                                  | 361643        |
|                        | Stainless steel hose (0,5 m) DN50 KF                                                    | 361648        |
|                        | Stainless steel hose (1 m) DN50 KF                                                      | 361649        |



**1** Oil Level Safety



**2** suction filter  
type 201



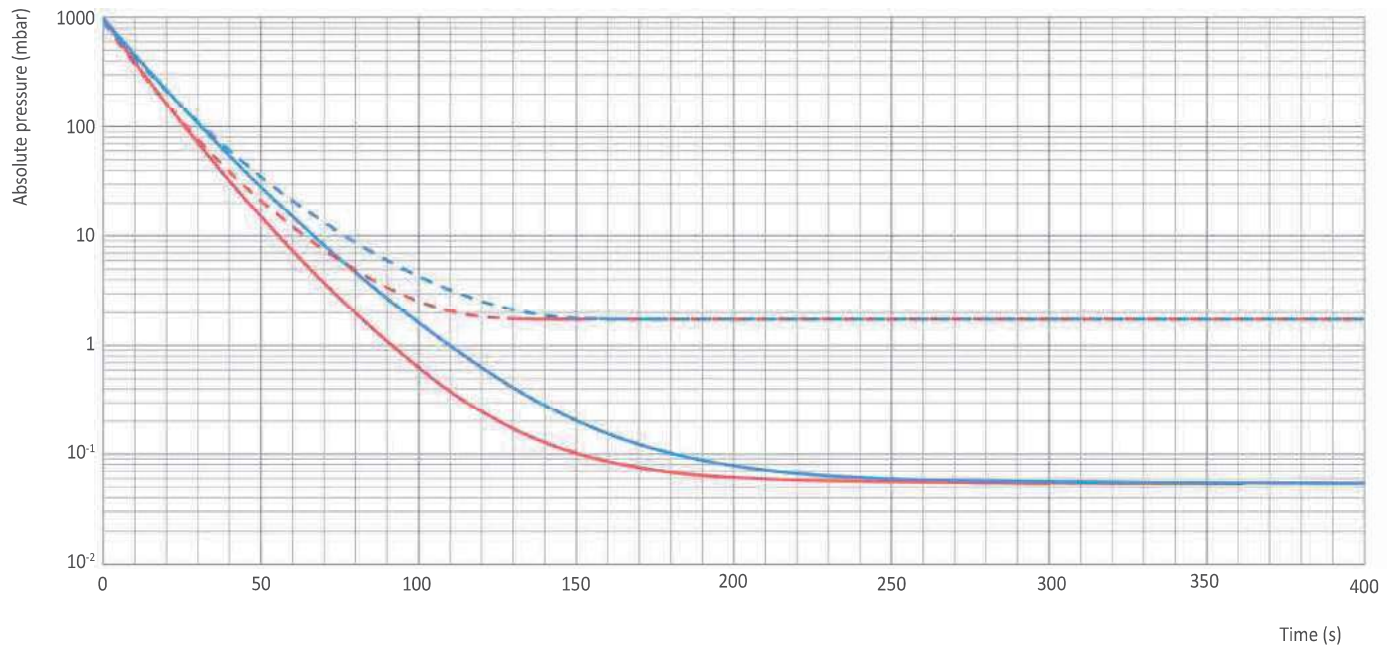
**3** Liquid trap 200  
with mechanical  
stop and  
optional bottle



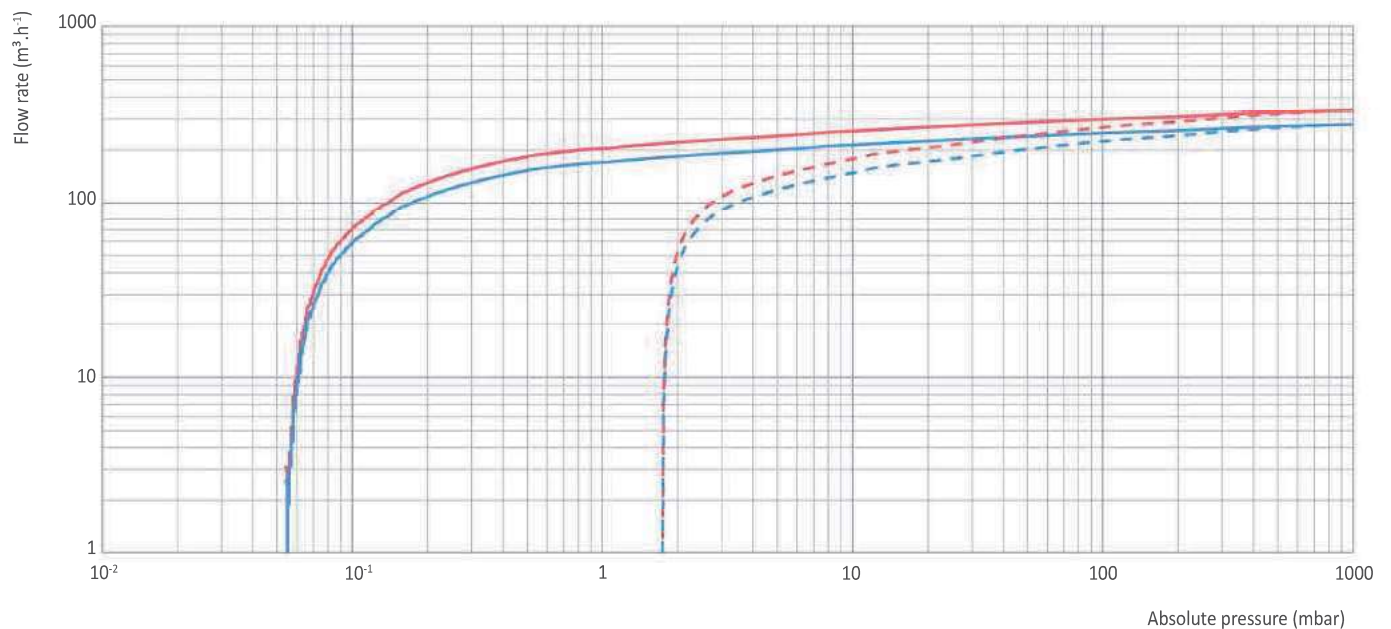
**4** Elevated base frame  
for 2 pumps

# Lubricated rotary vane vacuum pumps

## Pumping speed on 1000 l vessel



## Performance curves



— 60 Hz - without gas ballast  
— 50 Hz - without gas ballast

- - 60 Hz - with opened gas ballast  
- - 50 Hz - with opened gas ballast