

# mXDS3 AND mXDS3s DRY SCROLL VACUUM PUMPS

[edwardsvacuum.com](http://edwardsvacuum.com)

Edwards range of small dry scroll pumps is expanding with the introduction of the compact mXDS3 and mXDS3s.

The new mXDS3 dry scroll pump delivers  $3\text{m}^3\text{h}^{-1}$  pumping speed together with an ultimate pressure of 0.1 mbar making it well suited for backing turbomolecular pumps. mXDS3 is the standard option supplied with no inlet valve fitted.

mXDS3s comes factory fitted with an inlet valve featuring delay opening. It is also supplied with an exhaust silencer. Both offer the same vacuum performance and feature an IEC connector for main supply and an on/off switch for easy control.

This compact dry pump offers flexibility to the system designer and end user alike with a wide range of accessories available to choose from to meet your configuration requirements.



## FEATURES AND BENEFITS



### DRY PUMP

no oil to check, replace and dispose of making this pump more environmentally friendly.



### COMPACT

at only 8kg it is well suited for integration into OEM and analytical instruments, small system builder and laboratories.



### QUIET OPERATION

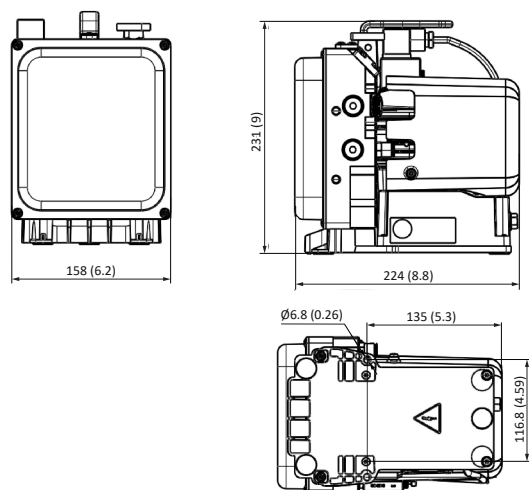
with low noise level, it makes for a better-quality working environment.



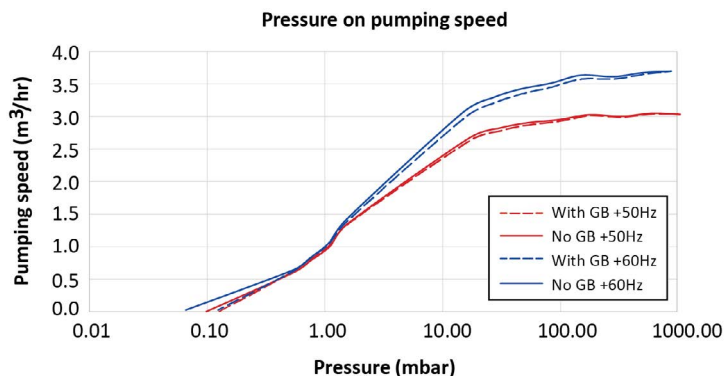
### LOW MAINTENANCE

tip seal change when required (typically 2 years)

## DIMENSIONS



## PERFORMANCE CURVE



## TECHNICAL DATA

|   | Units                          | mXDS3                         | mXDS3s   |
|---|--------------------------------|-------------------------------|--|
| <b>VACUUM DATA</b>  |                                |                               |  |
| Ultimate pressure with closed gas ballast   | mbar                           |                               | 0.1  |
| Ultimate pressure with gas ballast (1 turn)   | mbar                           |                               | 0.15   |
| Max pumping speed (50Hz)  | m <sup>3</sup> h <sup>-1</sup> |                               | 3  |
| Max pumping speed (60Hz)  | m <sup>3</sup> h <sup>-1</sup> |                               | 3.5  |
| Max permitted inlet pressure*   | mbar                           |                               | 1000   |
| Typical initial pressure rise on power loss (no inlet valve, with no inlet or gas ballast flow) | mbar l                         |                               | 5  |
| <b>MOTOR DATA</b>   |                                |                               |  |
| Supply voltage  | V                              |                               | 100 +/- 6% 1 phase                               |
|   |                                |                               | 115 +/- 10% 1 phase                              |
|   |                                |                               | 200 +/- 10% 1 phase                              |
|   |                                |                               | 230 +/- 10% 1 phase                              |
| Supply frequency  | Hz                             | 50/60                         |  |
| Power consumption at ultimate   | W                              | 180                           | 210  |
| Mains connector   |                                | IEC EN60320 C13               |  |
| <b>PHYSICAL DATA</b>  |                                |                               |  |
| Weight  | kg                             | 7.8                           | 8  |
| Inlet connection  |                                | DN 16 ISO-KF                  |  |
| Outlet connection   |                                | 1/8" BSP for 6x8mm hose       | 1/8" BSP for 6x8 mm hose exhaust filter supplied |
| Noise level   | dB(A)                          | 54.0 ±2.5                     |  |
| Vibration measured in plane of bearing  | mms <sup>-1</sup>              | Class 1C...<4.5 (rms radial)  |  |
| Leak tightness  | mbar/l.s <sup>-1</sup>         | 1x10 <sup>-4</sup>            |  |
| Overall dimensions (L x W x H)  | mm                             | 224 x 158 x 231               |  |
| Nominal rotational speed  | Hz                             | 3000 RPM @ 50 / 3600 RPM @ 60 |  |
| Ambient temperature range (operation)   | °C                             | +5 to +40                     |  |

\* These pumps are designed to pump down from atmospheric pressure, but prolonged operation at high inlet pressures may reduce bearing life.

\* These pumps are intended to exhaust to atmospheric pressure. High exhaust pressure may reduce tip-seal life.

\* Large volumes may be pumped, but prolonged operation at high inlet pressures may reduce bearing life.

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