

Drystar GV80 and EH500 package

Edwards has pioneered the use of dry vacuum pumps in some of the most critical and demanding applications. By combining the well proven Edwards claw mechanism pumps with a hydrokinetic drive booster; the Edwards Drystar GV80/EH500 series provides benefits in economy, performance and compactness, with a clean robust pumping alternative to oil sealed vacuum pumping systems.

The Drystar system's non-contacting mechanism reduces wear and maintenance for higher up time and provides for faster pump down performance. The Drystar packages are effective and cost efficient, and offer the ability to handle dust and water vapour without the risk of process contamination, loss of performance and maintenance issues associated with oil sealed vacuum pumping systems.



Features and benefits

- Reduced maintenance
 - Eliminate regular oil changes, non-contacting mechanism eliminates wear
 - Extended pump life on dusty applications - no dust build-up in oil, leading to high wear
 - No need for pressure switching and bypass arrangements
- Improved process performance
 - No oil contamination of process - improved product quality
 - Consistent vacuum performance - no water contamination of seal oil which reduces pump performance and extends pump down time
 - Hydrokinetic drive booster gives faster pump down performance
- Added environmental and safety standards
 - Eliminates exhaust oil mist, oil handling and disposal costs
 - Reduces handling of contaminated pump oil, spillages and exhaust oil vapour around the pump area
 - Reduced footprint for better space utilisation
 - Global aftermarket support for improved uptime and support

Applications

You can be assured Edwards has the application expertise and the Drystar pump or integrated system solution to meet your needs.

- Coating
 - Glass, roll/web, anti-reflection (A/R)
- Plasma processing
- Cylinder evacuation and drying
- CVD
- Freeze drying and other drying applications
- Load lock
- Heat treatment
 - Low pressure nitriding, sintering, brazing



Standard options & accessories

Kit	When to use
Purges	
Standard Purge - Atmospheric seal purge	Clean, inert, non-cycling applications
Seal Purge - Nitrogen/CDA seal purge	Cycling and dusty applications
Full Purge - Nitrogen/CDA seal purge, gas ballast and exhaust purge	Cycling and dusty applications with high vapor loads/flammables or corrosives
Cooling	
Direct Water Cooling	For standard use
Indirect Cooling (with Temperature Control Valve)	Poor cooling water quality or high temperature operation for pumping condensables
Acoustics	
Silencer	
Acoustic Enclosure	
Others	
Filtration	Dusty applications
Electrical Controls	Available on request
Fomblinised pumps	High oxygen concentration pumped gases, reactive gases

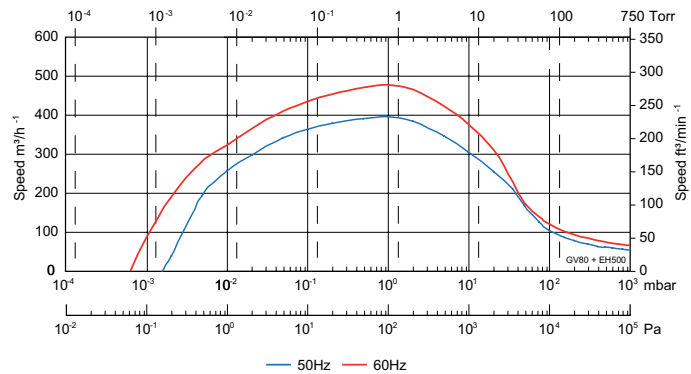
Technical data

GV80 dry pump and EH500 booster:

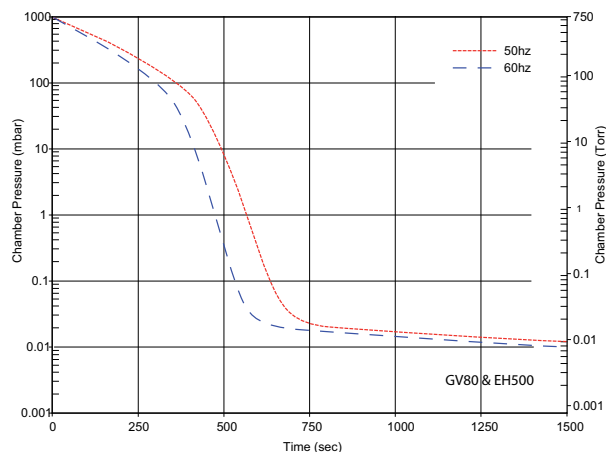
	GV80 Dry Pump	EH500 Booster	GV80 Dry Pump	EH500 Booster
	50 Hz		60 Hz	
Peak Pump Speed	400 m ³ /hr (236 cfm)		475 m ³ /hr (280 cfm)	
Ultimate	2 x 10 ⁻³ mbar (1.5 x 10 ⁻³ Torr)		7 x 10 ⁻⁴ mbar (5 x 10 ⁻⁴ Torr)	
Motor Size	4 kW	2.2 kW	5.5 kW	2.2 kW
Power at Vacuum	3 kW		3.7 kW	
Water Flow Rate	60 litres/hr max	N/A	60 litres/hr max	N/A
Seal Purge Flow Rate	25 litres/min	N/A	25 litres/min	N/A
Noise	<78 dBA	<72 dBA	<81 dBA	<72 dBA
Mass	145 kg	74 kg	145 kg	74 kg

Performance

GV80 + EH500 booster 50-60 Hz

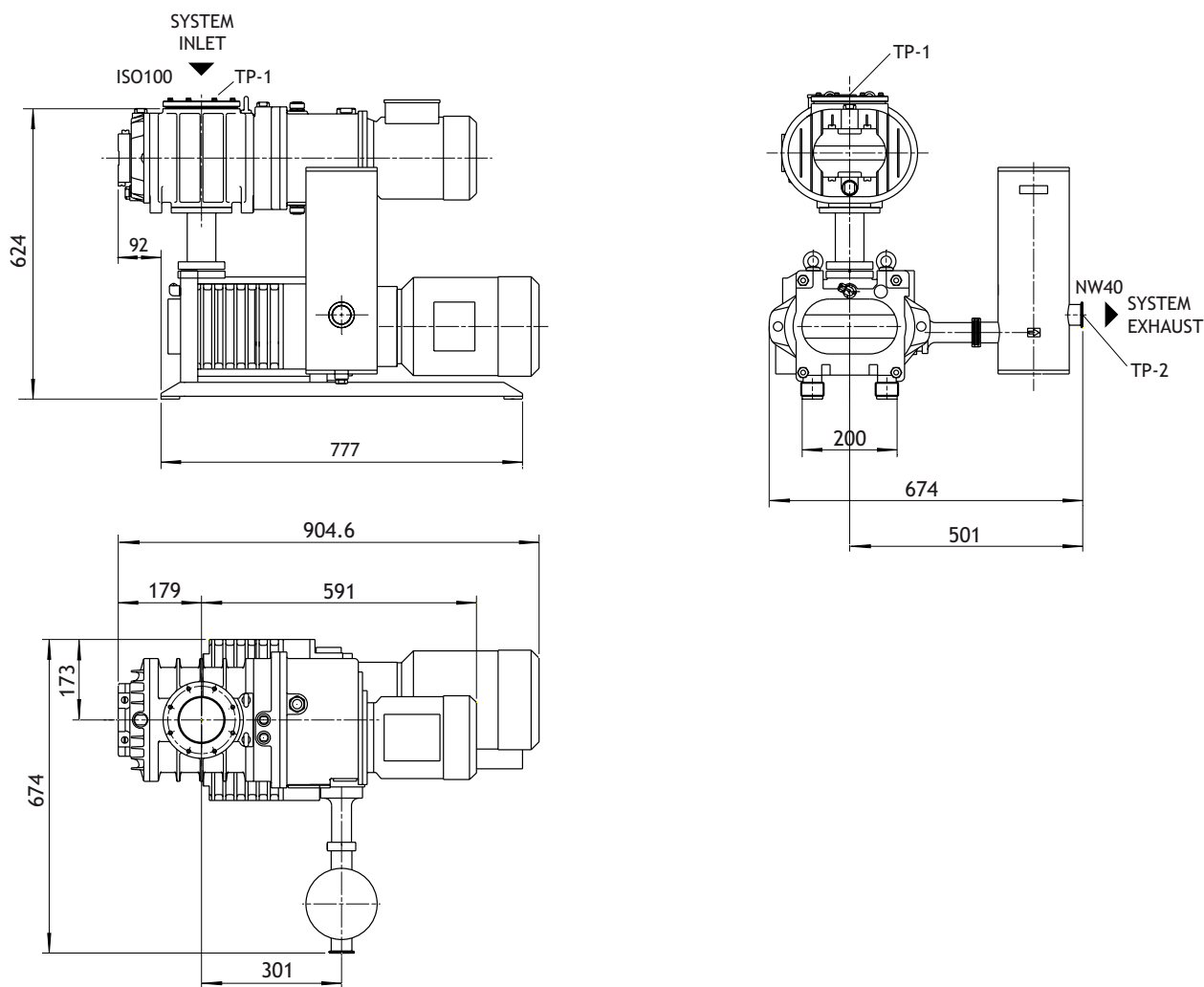


Pump down GV80 + EH500 booster 50-60 Hz



Pumpdown times - 3m³ chamber made of stainless steel and nitrile seals. Area factor of 3.

Dimensions (mm)



Standard Packages	50 Hz, 400V	60 Hz, 230/460V
GV80 + EH500, Direct Water Cooling, Atmospheric Shaft Seal Purge, St/St Silencer	GE1321111A	GE1321112A
GV80 + EH500, Direct Water Cooling, Shaft Seal Purge Module, 24V ac coil, St/St Silencer		NGJ22113106
GV80 + EH500, Indirect Water Cooling, Atmospheric Shaft Seal Purge, St/St Silencer	GE1323111A	GE1323112A
GV80 + EH500, Direct Water Cooling, Shaft Seal, Gas Ballast & Exhaust Purge Module, 24V ac coil, St/St Silencer		NGJ22213106

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