

# a clear edge

Drystar GV80 pump and booster  
configured packages



for more info [CLICK HERE](#)  
**Ideal**  
vacuum products  
[www.idealvac.com](http://www.idealvac.com)

 **EDWARDS**  
Vacuum science... product solution.

# *a clear edge*

*maximise your productivity and performance*

## *Features and benefits*

Pre-configured pumping systems enabling ease of installation and operation

Packages and pumping systems suitable for a wide range of applications and environments

Packages configured for Hydrocarbon or PFPE lubrication (fluid Included)

Maximum uptime with minimal maintenance for reduced user intervention

Able to operate continuously at high pressure levels

Consistent and repeatable performance in the most demanding of applications

No contaminated waste oil for disposal or reclaim

# *Drystar<sup>®</sup> GV80 and EH500 booster configured packages*

**Edwards DRYSTAR<sup>®</sup> GV80 dry vacuum pump provides a clean, robust and low cost alternative to traditional oil-sealed pumps.**

The pump is designed to handle large volumes of condensable vapours and particulate loads for a consistent pumping performance, minimal service intervention and low cost of ownership.

The DRYSTAR<sup>®</sup> GV80 dry pump is available as a stand alone unit for 80m<sup>3</sup>h<sup>-1</sup> repeatable fast pump performance, or combined with the EH500 hydrokinetic drive mechanical booster offering 500m<sup>3</sup>h<sup>-1</sup> for applications where increased pumping speed and/or lower vacuum levels are required.



# Applications

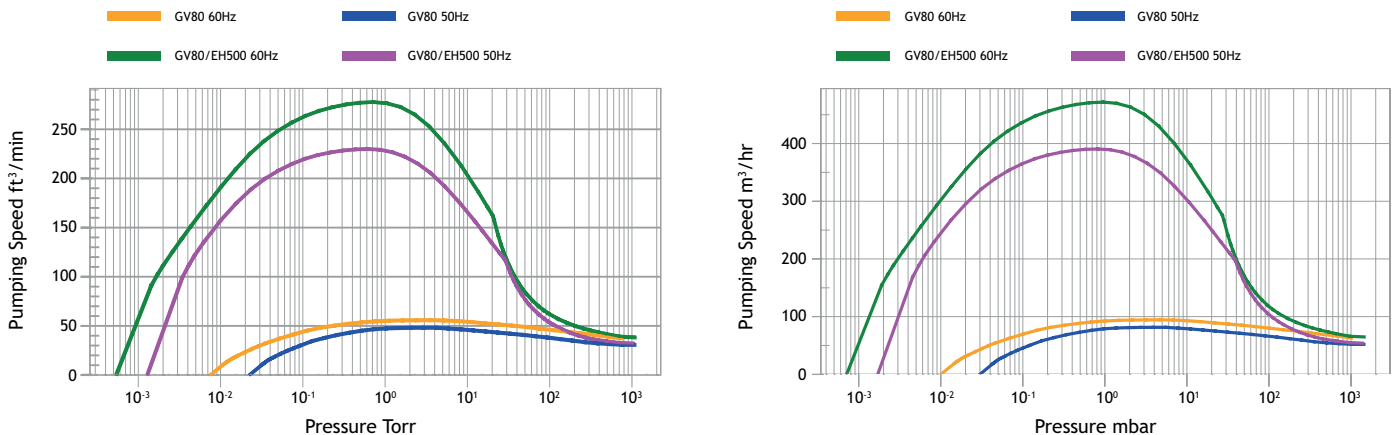
**You can be assured Edwards has the application expertise and the Drystar® pump or integrated system solution to meet your needs.**

- Backing pump for high vacuum applications
- Flat panel display
- Gas cylinder evacuation
- Heat treatment
- Pharmaceutical freeze drying
- Refrigeration and air conditioning system evacuation, drying, and backfilling
- Research and development
- Surface treatment
- Thin film coating technologies
- Vacuum drying and distillation
- Vacuum metallurgy processes

# Technical data

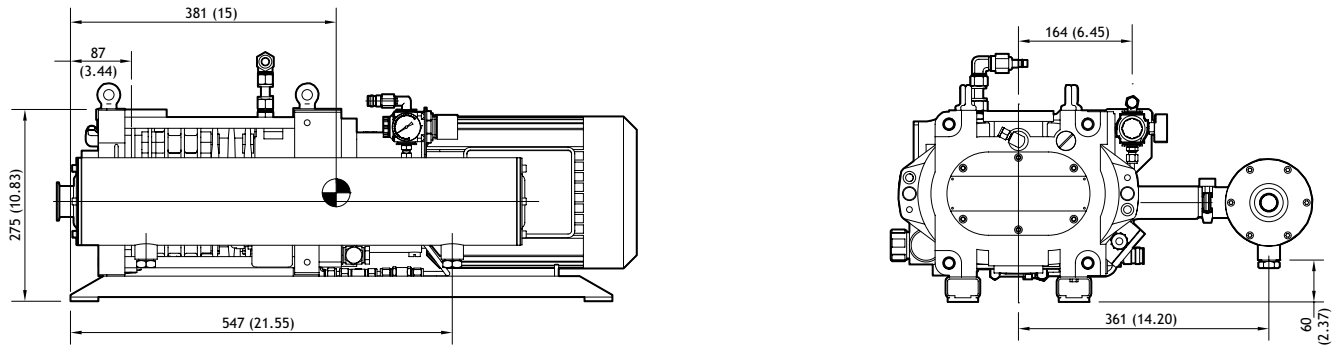
		Unit	Drystar® GV80	Drystar® GV80/EH500
Peak pumping speed 50 Hz		m <sup>3</sup> /hr (cfm)	80 (47)	390 (230)
Peak pumping speed 60 Hz		m <sup>3</sup> /hr (cfm)	94 (56)	471 (277)
Ultimate pressure		mbar (Torr)	<3 x 10 <sup>-2</sup> (<2 x 10 <sup>-2</sup> )	<3 x 10 <sup>-3</sup> (<2 x 10 <sup>-3</sup> )
Full load power	@ ultimate pressure	Kw (hp)	3.6 (4.8)	4.3 (5.6)
	@ peak pumping load	Kw (hp)	5.8 (7.8)	6.7 (9.0)
Electrical	Supply options	200-230 V 3Ø 50/60 Hz or 380-460 V 3Ø 50/60 Hz Note: See part numbers for specific voltage offerings		
Vacuum couplings	Inlet		ISO40	ISO100
	Exhaust			NW40
Cooling			Water	Water/Air
Cooling water	Flow	l/min (gal/min)	1 (0.26)	1 (0.26)
	Supply pressure (MAX)	bar.a (psig)		8 (116)
	DP across pump (MIN)	bar.a (psig)		2.1 (30)
	Temperature	°C (°F)		5-35 (41-95)
	Connection	In	1/2" Quick connect coupling (mating half provided)	
	Out	1/2" Quick connect plug (mating half provided)		
Purge gas (N <sub>2</sub> or CDA)	Pressure	bar.a (psig)	0.5 (6-8)	
	Light duty	sl/min	15	
	Connection		1/4" Quick connect coupling (mating half provided)	
Dimensions	L x W x H	mm (in)	832 x 607 x 344 (32.6 x 23.9 x 13.5)	904 x 607 x 624 (35.6 x 23.9 x 24.6)
	Footprint	m <sup>2</sup> (ft <sup>2</sup> )	0.43 (4.63)	
Weight		Kg (lbs)	145 (320)	220 (485)
Noise level with exhaust silencer		dB(A)	<78	
Exhaust Back Pressure (MAX)		bar.a (psig)	1.3 (0.4)	
Lubrication	Volume	l (gal)	0.4 (0.1)	1.4 (0.4)
	Type	Hydrocarbon	SHC 629	SHC 629/Ultragrade 20
		PFPE	YVAC 25/6	YVAC 25/6 / YVAC 16/6

# Performance curves

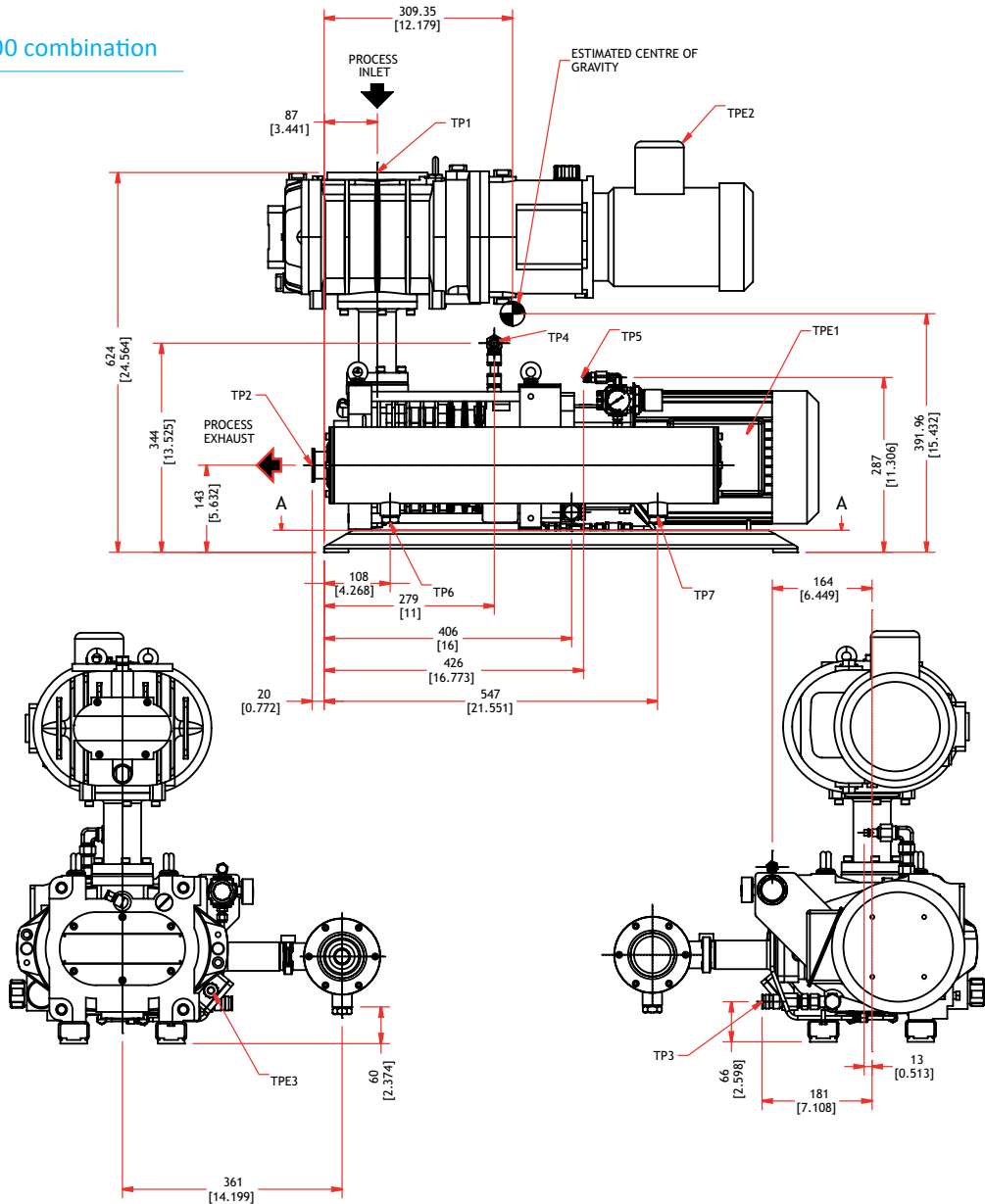


# Dimensions

## Drystar® GV80



## Drystar® GV80 & EH500 combination



# Ordering information

Part Number	Description	Voltage
NR8030000	DRYSTAR® GV80 SSP	380-415 V 50 Hz
NR8031000	DRYSTAR® GV80 SSP	230/460 V 60 Hz
NR8032000	DRYSTAR® GV80 SSP	380 V 60 Hz
NR8033000	DRYSTAR® GV80 SSP	200 V 50 Hz
NR8034000	DRYSTAR® GV80 SSP	200 V 60 Hz
NR8035000	DRYSTAR® GV80 PFPE SSP	380-415 V 50 Hz
NR8036000	DRYSTAR® GV80 PFPE SSP	230/460 V 60 Hz
NR8037000	DRYSTAR® GV80 PFPE SSP	380 V 60 Hz
NR8038000	DRYSTAR® GV80 PFPE SSP	200 V 50 Hz
NR8039000	DRYSTAR® GV80 PFPE SSP	200 V 60 Hz
NRV041000	DRYSTAR® GV80/EH500 SSP	380-415 V 50 Hz
NRV042000	DRYSTAR® GV80/EH500 SSP	230/460 V 60 Hz
NRV043000	DRYSTAR® GV80/EH500 SSP	380 V 60 Hz
NRV044000	DRYSTAR® GV80/EH500 SSP	200 V 50 Hz
NRV045000	DRYSTAR® GV80/EH500 SSP	200 V 60 Hz
NRV046000	DRYSTAR® GV80/EH500 PFPE SSP	380-415 V 50 Hz
NRV047000	DRYSTAR® GV80/EH500 PFPE SSP	230/460 V 60 Hz
NRV048000	DRYSTAR® GV80/EH500 PFPE SSP	380 V 60 Hz
NRV049000	DRYSTAR® GV80/EH500 PFPE SSP	200 V 50 Hz
NRV050000	DRYSTAR® GV80/EH500 PFPE SSP	200 V 60 Hz
NRV29W000	DRYSTAR® GV80 SSP (24VAC Solenoid) Silencer Wall Mount MCM	208 V 60 Hz
NRV29X000	DRYSTAR® GV80/EH500 SSP (24vac Solenoid) Silencer Wall Mount MCM	208 V 60 Hz
NRV29Y000	DRYSTAR® GV80F (PFPE) SSP (24vac Solenoid) Silencer Wall Mount MCM	208 V 60 Hz
NRV29Z000	DRYSTAR® GV80/EH500F (PFPE) SSP (24vac Solenoid) Silencer Wall Mount MCM	208 V 60 Hz
NRV2A0000	DRYSTAR® GV80 SSP (24VAC Solenoid) Silencer Wall Mount MCM	230 V 60 Hz
NRV2A1000	DRYSTAR® GV80/EH500 SSP (24vac Solenoid) Silencer Wall Mount MCM	230 V 60 Hz
NRV2A2000	DRYSTAR® GV80F (PFPE) SSP (24vac Solenoid) Silencer Wall Mount MCM	230 V 60 Hz
NRV2A3000	DRYSTAR® GV80/EH500F (PFPE) SSP (24vac Solenoid) Silencer Wall Mount MCM	230 V 60 Hz
NRV2A4000	DRYSTAR® GV80 SSP (24VAC Solenoid) Silencer Wall Mount MCM	460 V 60 Hz
NRV2A5000	DRYSTAR® GV80/EH500 SSP (24vac Solenoid) Silencer Wall Mount MCM	460 V 60 Hz
NRV2A6000	DRYSTAR® GV80F (PFPE) SSP (24vac Solenoid) Silencer Wall Mount MCM	460 V 60 Hz
NRV2A7000	DRYSTAR® GV80/EH500F (PFPE) SSP (24vac Solenoid) Silencer Wall Mount MCM	460 V 60 Hz

## Accessories

NRA640450	Atmospheric Shaft Seal Purge Kit
A50805020	Exhaust Silencer
A50575000	Acoustical Enclosure ( Customer Assembly)
A70212825	DRYSTAR® GV80 Routine Maintenance Kit
A30151815	EH500 Clean and Overhaul Kit

Note: Atmospheric Seal Purge to be used in clean applications only, not suitable for applications with continuous operating pressures above 100 torr.

SSP = Shaft Seal Purge  
 PFPE = Filled with Inert Fluid  
 MCM = Motor Control Module  
 (Motors Stators, Fault Indication EMO and Remote Start Stop Capability)



# Global contacts

## Belgium

Brussels +32 2 300 0730

## Brazil

Sao Paulo +55 11 3952 5000

## China

Shanghai (toll free) 400 111 9618

## France

Paris +33 1 4121 1256

## Germany

Munich 0800 000 1456

## India

Pune +91 20 4075 2222

## Israel

Qiryat Gat +972 8 681 0633

## Italy

Milan +39 02 48 4471

## Japan

Yachiyo +81 47 458 8831

## Korea

Bundang +82 31 716 7070

## Singapore

Singapore +65 6546 8408

## Taiwan R.O.C.

Jhunan Town +886 3758 1000

## United Kingdom

Crawley +44 1293 528844

UK (local rate) 08459 212223

## United States

Niagara (toll free) 1 800 848 9800