

MECHANICAL BOOSTERS

MAXIMISE YOUR PRODUCTIVITY AND PERFORMANCE

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Mechanical Boosters

- EH Mechanical Booster Pumps
- pXH Mechanical Booster Pumps
- Stokes 6" Mechanical Booster Pumps
- HV Mechanical Booster Pumps

Edwards provides a wide range of mechanical booster pumps to suit all the requirements of Industrial and Chemical processes.

Product ranges

The **EH Mechanical Booster** range gives our customers reassurance and peace of mind thanks to its large installed base, both in Industrial and Chemical markets. EH pumps, available in sizes from 250 to 4200 m³h⁻¹ displacement, feature the unique hydrokinetic drive, providing an efficient power transmission with benefits in economy, performance and compactness.



The **pXH Pumps** represent the new generation of large mechanical boosters providing high pumping capacity with reduced footprint. Available in sizes from 6965 to 8358 m³h⁻¹ displacement, are packaged as separate pumps with inverter driven controls. They are designed to be easily integrated with GXS, the last generation Edwards Industrial on board controlled dry pumps, into a high pumping speed dry pumping system.



The **Stokes 6"** Series features a rugged design for robust and reliable operation. Available in sizes from 1040 to 6630 m³h⁻¹ displacement is configurable to customer needs: bare shaft or direct drive, 1800-3600 rpm, vertical or horizontal gas flow orientation with by-pass versions available.



HV Pumps feature a rugged design for robust and reliable operation in very large scale processes in Industrial and Chemical markets. Available in sizes from 7200 to 36000 m³h⁻¹ displacement, are configurable to customer needs: bare shaft or with direct drive motor fitted, can be specified with variable frequency drives for greater versatility.



ATEX

ATEX classified EH boosters are annotated with the suffix "T3" or "T4".







- EH boosters may be supplied with ATEX classification either as part of a pump system or stand-alone.
- ATEX compliance is typically specified for use in Europe, but may also be required in other areas.

ATEX compliant EH boosters are suitable for operation in ATEX systems:

All of the EH250C, EH250 T4, EH500C, EH500 T3, EH1200C, EH1200 T4, EH2600C, EH2600 T3, EH2600 T4, EH4200C, EH4200 T3 and EH4200 T4 chemical EH pumps are fitted with flameproof motors:


- Pumps suitable for 50 Hz operation are fitted with a flameproof motor approved to EEx d. Gas Group IIA, IIB, Temperature Class T4.
- Pumps suitable for 60 Hz operation are fitted with a flameproof motor approved to CSA, Division 1 area, Gas Class I Group C & D, and Dust Class II Group F & G, Temperature Class T3C.
- The 60Hz pumps with flameproof motors are designated C versions.

Internal and External Classifications

	Internal	External
	 II 1 G bc T4	 II 2 G IIB T4
	or	or
	 II 1 G bc T3	 II 2 G IIB T3
EH500	 II 1 G bc T3	 II 2 G IIB T3

Internal ATEX is suitable for all gas types.

The notations used in these ratings are as follows:

Symbol	Meaning
	Specifies that the chemical EH pump can be used in a potentially explosive atmosphere
II	Equipment group II
1 G	Equipment category 1
b	Control of ignition source
c	Constructional safety
IIB	Suitable to pump gas group IIB
T3 / T4	Gas auto-ignition temperature

Gas Auto-Ignition Temperature

The temperature classifications applied to the chemical EH pumps relate to the auto-ignition temperature of flammable materials that can be pumped:

- The EH250C, EH500C, EH1200C, EH2600C, EH4200C and ATEX EH pumps that have a T3 classification are suitable for pumping flammable materials that have an auto-ignition temperature greater than 200 °C.
- ATEX EH pumps that have a T4 classification are suitable for pumping flammable materials that have an auto-ignition temperature greater than 135 °C.

Flame Proof

Chemical boosters are annotated with the suffix "C".

- EH boosters may be ordered with Flame proof motors either individually, or as part of a Chemical system.
- Flame proof is generally applicable in N. America and the rest of the world (excluding Europe).

Chemical boosters will be supplied with a flame proof motor (suitable for 60 Hz operation) approved to CSA, Division 1 area, Gas Class I Group C & D and Dust Class II Group F & G, Temperature Class T3C.



EH Pumps with Hydrokinetic Drive

EH booster pumps have a unique and patented hydrokinetic fluid drive, which couples the motor to the pumping mechanism. The hydrokinetic drive offers the following advantages:

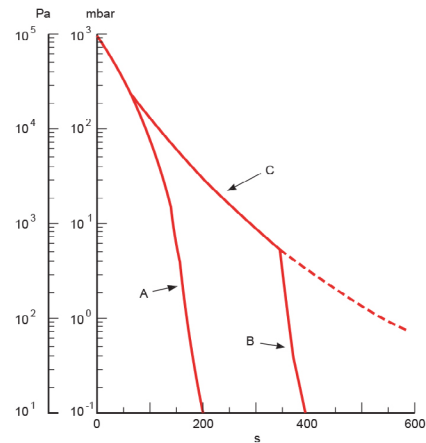
- Pump down times cut by up to 50%
- Reduced capital and operating costs
- No pressure sensors, by-pass lines or valves
- Can operate continuously at all pressures – when used with a backing pump.

EH booster pumps have universal voltage, air-cooled motors and are available with effective pumping speeds of up to 4140 m³h⁻¹ / 2440 ft³min⁻¹. The pump bodies of the EH1200, EH2600 and EH4200 pumps are water-cooled.

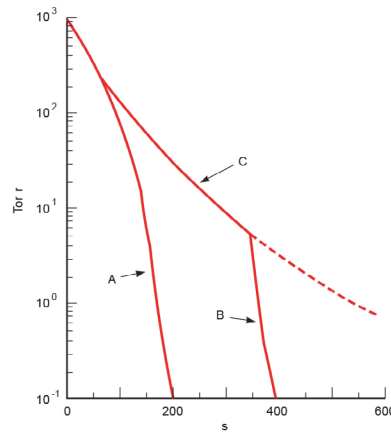
Two versions of each EH booster pump are available, with different oils used for the lubrication of the seals and gears. The standard version uses mineral oils, such as Ultragrade 20. The alternative version has PFPE (perfluoropolyether) oils and is suitable for applications where oxygen or other reactive and corrosive gases are processed. Fomblin® must be purchased separately for PFPE prepared pumps:

Pump-Down Times cut by up to 50%

The hydrokinetic drive allows the booster pump to be started at the same time as the backing pump (at atmospheric pressure) as it prevents motor overload. The EH booster pump therefore assists the pumping process from the start of pump-down. In comparison pumping systems with conventional, direct drive mechanical booster pumps (where the booster pump is switched on when the chamber pressure has been reduced to, typically, less than 10 mbar / 7.5 Torr), the total evacuation time can be reduced by as much as 50%. The graph below shows data for a 2.8 m³ / 100 ft³ chamber, with a 2600 m³h⁻¹ / 2600 ft³min⁻¹ mechanical booster pump and a 255 m³h⁻¹ / 150 ft³min⁻¹ backing pump:



A With backing pump and EH mechanical booster pump switched on together
B With mechanical booster pump switched on at 5 mbar
C With backing pump only (pumping through booster pump)



A With backing pump and EH mechanical booster pump switched on together
B With mechanical booster pump switched on at 5 mbar
C With backing pump only (pumping through booster pump)

Automatic Overload Protection

The hydrokinetic drive automatically varies the rotational speed of the pump. This protects the motor from overload, prevents over-heating, and allows the pump to operate with high pressure differentials. Consequently, EH booster pumps are not damaged by sudden increases of inlet pressure and even by the entry of solid debris into the pump.

Important Cost Savings

When you use EH mechanical booster pumps, you save money on installation and operation. Your capital costs are reduced as you do not need valves, by-pass lines and pressure switches, and you can use a smaller backing pump than with conventional drive booster pumps. Operation costs are reduced because EH booster pumps have smaller motors than direct drive pumps and, when operating at full speed, they use only a fraction of the rated power.

EH MECHANICAL BOOSTER PUMP

THE INTELLIGENT CHOICE



The EH mechanical booster pumps feature the unique hydrokinetic drive, providing an efficient power transmission with benefits in economy, performance and compactness. The hydrokinetic drive provides pump down times cut by 50%, when compared with direct drive pumps, no bypass lines or pressure switches required, universal voltage motors, reduced capital and operating costs, air cooled motors – with water cooled options, and quiet, minimum vibration. The EH mechanical booster pumps, based on the simple Roots principle, remain the favorite pumps for applications where high pumping speeds over $3000 \text{ m}^3\text{h}^{-1}/1776 \text{ ft}^3\text{min}^{-1}$ are required in the pressure region of 0.01 to 50 mbar/0.0075 to 37.5 Torr. These must always be backed by another pump which can deliver against a high pressure differential to atmospheric pressure. Operating at relatively low pressures, the mechanical booster pump is not exposed to the same concentrations of corrosive process media as is the backing pump, which makes it highly reliable.



Features and Benefits

- Performance – fast pump down time due to unique hydrokinetic drive.
- Increased productivity – faster pump down time.
- More performance for less – larger displacement than equivalent competitor models.
- Stable operation – optimised clearances and after coolers.
- Simplicity – Continuous operation at all pressures.
- Simple installation – no need for pressure switches, bypass lines or variable frequency drives.
- Reliability – automatic overload protection, reliable shaft seal design.
- Safe operation – automatic overload protection.
- Robust operation even for harsh duties – proven shaft seal design to protect pumping mechanism and gearbox from cross-contamination.
- High uptime and low maintenance – internal evacuation of gearboxes extends shaft seal life.
- Reassurance.
- Peace of mind – industry proven with large installed base.

Applications

- Vacuum distillation.
- Vacuum packaging.
- Steel degassing.
- Thin film coating.
- Industrial freeze drying.
- Semiconductor processing.

Pump Range

EH

- EH250
- EH500
- EH1200
- EH2600
- EH4200
- PFPE Prepared
- EH250FX
- EH500FX
- EH1200FX
- EH2600FX
- EH4200FX



Performance Curves

EH250 Mechanical Booster Pump

EH250



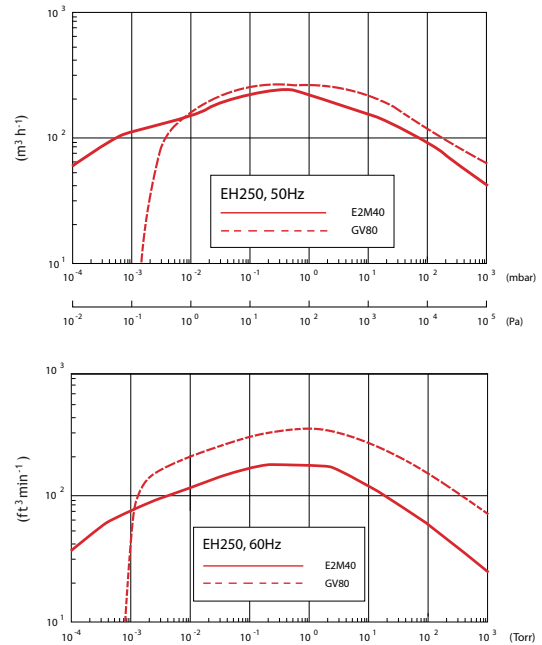
Displacement	
50 Hz	310 m ³ h ⁻¹ 185 ft ³ min ⁻¹
60 Hz	375 m ³ h ⁻¹ 220 ft ³ min ⁻¹

Ordering information

Product description	Order no:
EH250 HC IE3 Asia 50 Hz 200 V 50 Hz	A30105934
EH250 HC IE3 EU/CN 50 Hz 380-400 V 50 Hz	A30105945
EH250 HC IE3 Asia 60 Hz 200 V 60 Hz, 380 V 60 Hz	A30106934
EH250 HC IE3 US 60 Hz 230/460 V 60 Hz	A30106946
EH250 FX IE3 Asia 50 Hz 200 V 50 Hz	A30107934
EH250 FX IE3 EU/CN 50 Hz 380-400 V 50 Hz	A30154936
EH250 FX IE3 Asia 60 Hz 200 V 60 Hz, 380 V 60 Hz	A30108934
EH250 FX IE3 US 60 Hz 230/460 V 60 Hz	A30108946
EH250C 460 V 3-ph 60 Hz 3 hp	NRA997000
EH250T4 220-240/380-415 V 3ph 50 Hz 2.2 kW	NRA996000

Please note that Fomblin® must be purchased separately with PFPE-prepared pumps. Fomblin YVac 16/6 is appropriate

EH250 Performance Curve



EH500 Mechanical Booster Pump

EH500



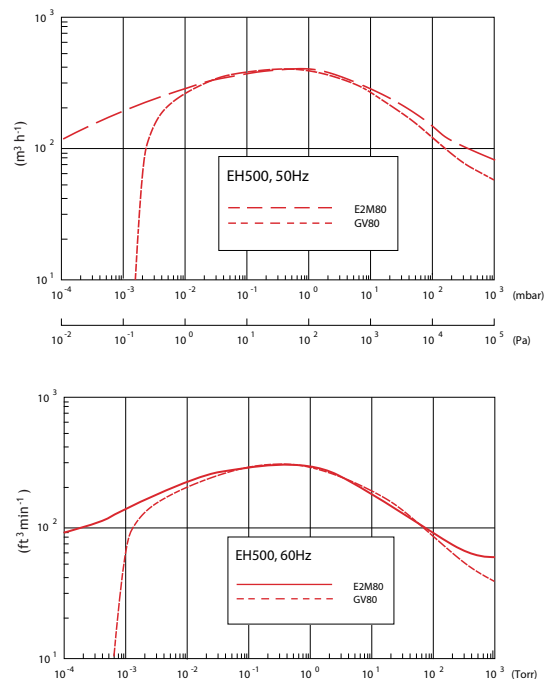
Displacement	
50 Hz	505 m ³ h ⁻¹ 300 ft ³ min ⁻¹
60 Hz	605 m ³ h ⁻¹ 335 ft ³ min ⁻¹

Ordering information

Product description	Order no:
EH500 HC IE3 Asia 50 Hz 200 V 50 Hz	A30205934
EH500 HC IE3 EU/CN 50 Hz 380-400 V 50 Hz	A30205945
EH500 HC IE3 Asia 60 Hz 200 V 60 Hz, 380 V 60 Hz	A30206934
EH500 HC IE3 US 60 Hz 230/460 V 60 Hz	A30206946
EH500 FX IE3 Asia 50 Hz 200 V 50 Hz	A30207934
EH500 FX IE3 EU/CN 50 Hz 380-400 V 50 Hz	A30207945
EH500 FX IE3 Asia 60 Hz 200 V 60 Hz, 380 V 60 Hz	A30208934
EH500 FX IE3 US 60 Hz 230/460 V 60 Hz	A30208946
EH500C 460 V 3-ph 60 Hz 3 hp	NRA999000
EH500T3 220-240/380-415 V 3ph 50 Hz 2.2 kW	NRA998000

Please note that Fomblin® must be purchased separately with PFPE-prepared pumps. Fomblin YVac 16/6 is appropriate

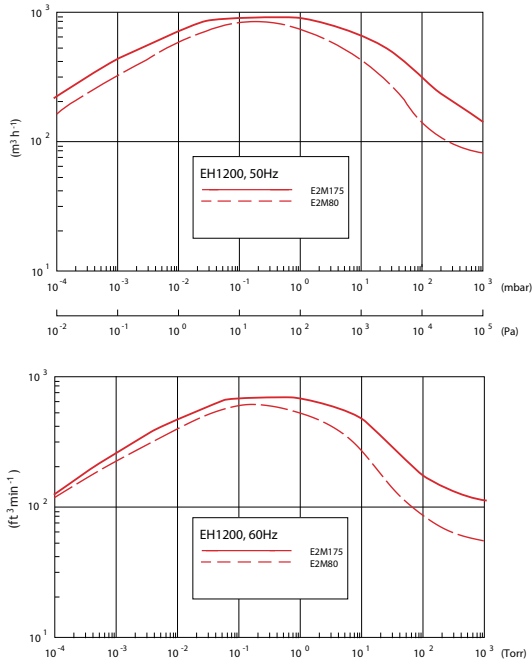
EH500 Performance Curve



EH1200 Mechanical Booster Pump

EH1200 Performance Curve

EH1200



Displacement	
50 Hz	1195 m^3/h
	715 ft^3/min
60 Hz	1435 m^3/h
	845 ft^3/min



Ordering information

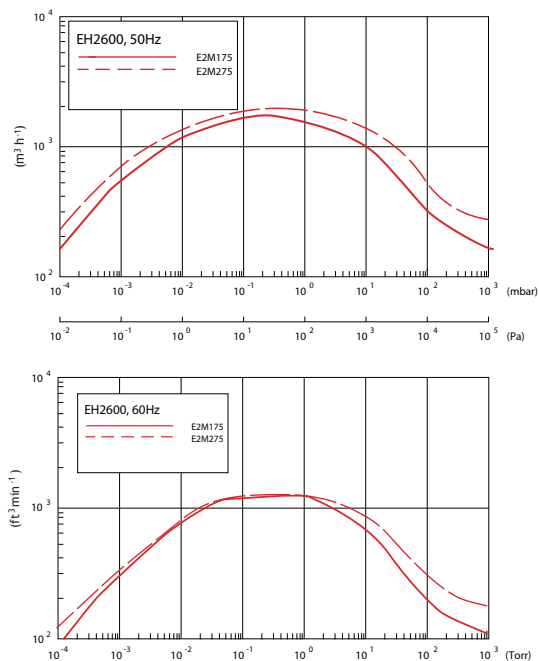
Product description	Order no:
EH1200 HC IE3 Asia50 Hz 200 V50 Hz	A30505934
EH1200 HC IE3 EU/CN50 Hz 380-400 V50 Hz	A30505945
EH1200 HC IE3 Asia60 Hz 200 V60 Hz, 380 V60 Hz	A30506934
EH1200 HC IE3 US60 Hz 230 / 460 V60 Hz	A30506946
EH1200 FX IE3 Asia50 Hz 200 V50 Hz	A30507934
EH1200 FX IE3 EU/CN50 Hz 380-400 V50 Hz	A30507945
EH1200 FX IE3 Asia60 Hz 200 V60 Hz, 380 V60 Hz	A30508934
EH1200 FX IE3 US60 Hz 230 / 460 V60 Hz	A30508946
EH1200C 230/460 V 3-ph 60 Hz 4 hp	A30556982
EH1200T4 380-415 V 3ph 50 Hz 3 kW	A30557900

Please note that Fomblin® must be purchased separately with PFPE-prepared pumps. Fomblin YVac 16/6 is appropriate

EH2600 Mechanical Booster Pump

EH2600 Performance Curve

EH2600



Displacement	
50 Hz	2590 m^3/h
	1525 ft^3/min
60 Hz	3110 m^3/h
	1830 ft^3/min



Ordering information

Product description	Order no:
EH2600 HC IE3 Asia50 Hz 200 V50 Hz	A30705934
EH2600 HC IE3 EU/CN50 Hz 380-400 V50 Hz	A30705945
EH2600 HC IE3 Asia60 Hz 200 V60 Hz, 380 V60 Hz	A30706934
EH2600 HC IE3 US60 Hz 230 / 460 V60 Hz	A30706946
EH2600 FX IE3 Asia50 Hz 200 V50 Hz	A30707934
EH2600 FX IE3 EU/CN50 Hz 380-400 V50 Hz	A30707945
EH2600 FX IE3 Asia60 Hz 200 V60 Hz, 380 V60 Hz	A30708934
EH2600 FX IE3 US60 Hz 230 / 460 V60 Hz	A30708946
EH2600C 230/460 V 3-ph 60 Hz 15 hp	A30756982
EH2600T3 380-415 V 3ph 50 Hz 11 kW	A30741935
EH2600T4 380-415 V 3ph 50 Hz 11 kW	A30779900

Please note that Fomblin® must be purchased separately with PFPE-prepared pumps. Fomblin YVac 16/6 is appropriate

Performance Curves

EH4200 Mechanical Booster Pump

EH4200



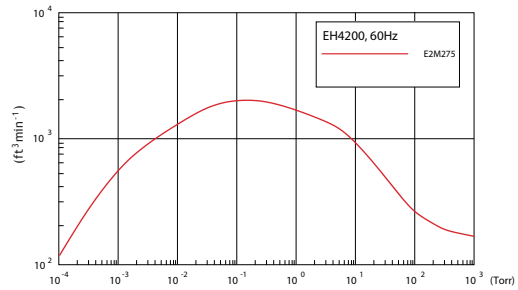
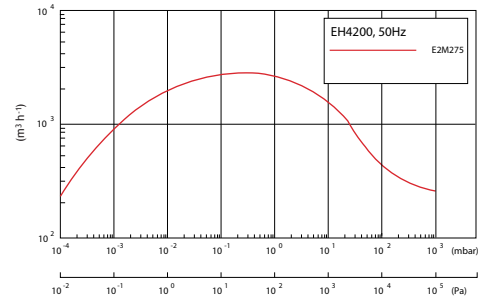
Displacement

50 Hz	4140 m ³ h ⁻¹
	2440 ft ³ min ⁻¹
60 Hz	4940 m ³ h ⁻¹
	2935 ft ³ min ⁻¹

Ordering information

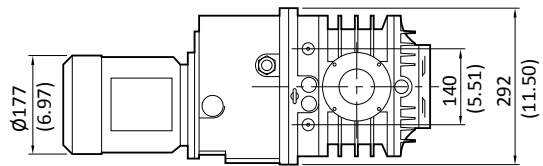
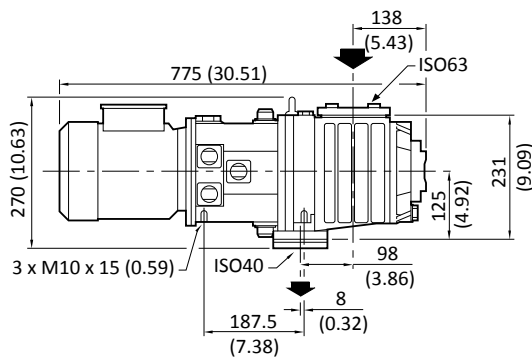
Product description	Order no:
EH4200 HC IE3 Asia 50 Hz 200 V 50 Hz	A30905934
EH4200 HC IE3 EU/CN 50 Hz 380-400 V 50 Hz	A30905945
EH4200 HC IE3 Asia 60 Hz 200 V 60 Hz, 380 V 60 Hz	A30906934
EH4200 HC IE3 US 60 Hz 230/460 V 60 Hz	A30906946
EH4200 FX IE3 Asia 50 Hz 200 V 50 Hz	A30907934
EH4200 FX IE3 EU/CN 50 Hz 380-400 V 50 Hz	A30907945
EH4200 FX IE3 US 60 Hz 230/4 60 V 60 Hz	A30908946
EH4200 FX IE3 Asia 60 Hz 200 V 60 Hz, 380 V 60 Hz	A30908934
EH4200C 230/460 V, 3-ph, 60 Hz, 15 hp	A30956982
EH4200T3 380-415 V, 3-ph, 50 Hz, 11 kW	A30941935
EH4200T4 380-415 V, 3ph, 50 Hz, 11 kW	A30979900

EH4200 Performance Curve

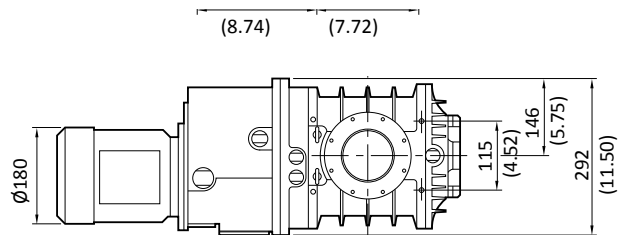
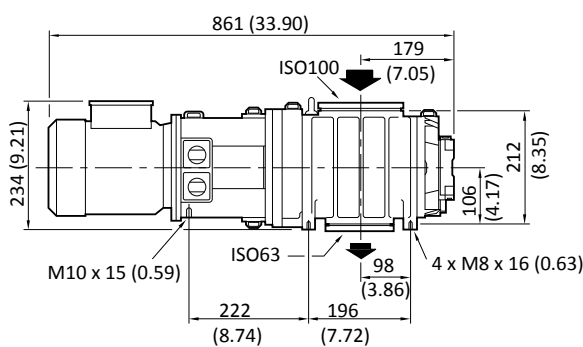


Dimensions

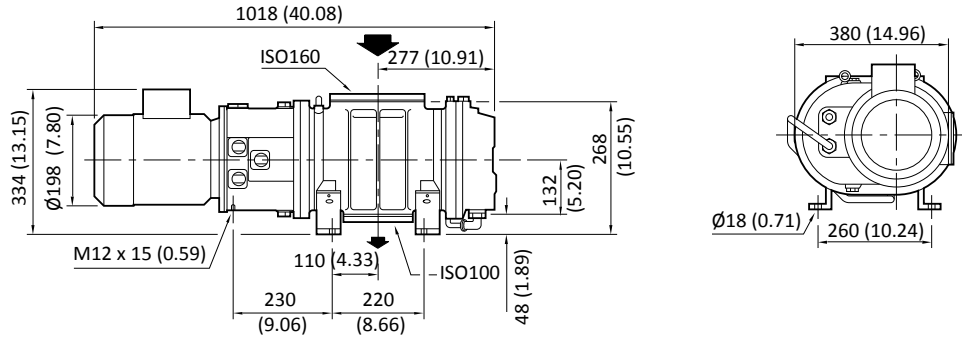
EH250 dimensions



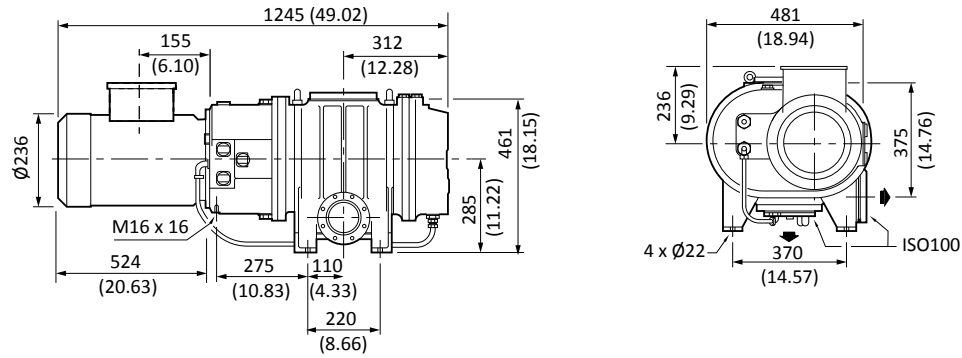
EH500 dimensions



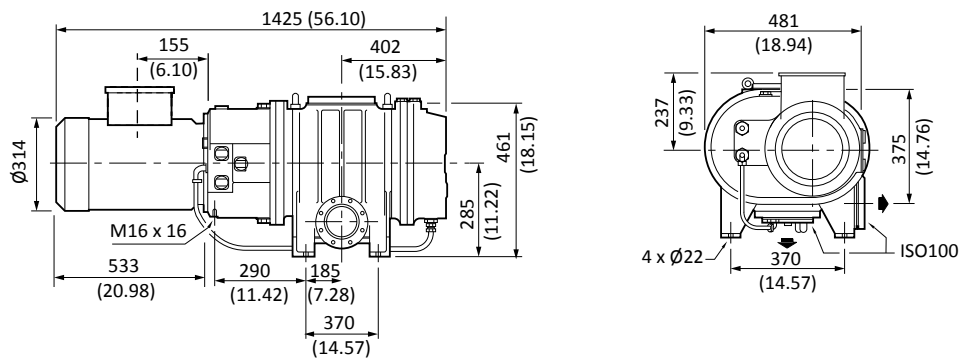
EH1200 dimensions



EH2600 dimensions



EH4200 dimensions



Technical Data



	Units	EH250	EH500	EH1200	EH2600	EH4200
Displacement (swept volume)						
50 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	310/185	505/300	1195/715	2590/1525	4140/2440
60 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	375/220	605/335	1435/845	3110/1830	4985/2935
Effective pumping speed with backing pump						
E2M40	m ³ h ⁻¹ /ft ³ min ⁻¹	240/141	350/206	840/495	-	-
E2M80	m ³ h ⁻¹ /ft ³ min ⁻¹	274/161	400/236	840/495	-	-
E2M175	m ³ h ⁻¹ /ft ³ min ⁻¹	-	440/259	930/548	1750/1031	-
E2M275	m ³ h ⁻¹ /ft ³ min ⁻¹	-	460/271	1020/601	1900/1119	3100/1825
Pressure differential across pump +						
50 Hz	mbar/Torr	0-180/0-140	0-110/0-83	0-90/0-68	0-120/0-90	0-70/0-52
60 Hz	mbar/Torr	0-150/0-115	0-90/0-68	0-75/0-56	0-67/0-50	0-50/0-38
Inlet connection		ISO63	ISO100	ISO160	ISO160	ISO250
Outlet connection		ISO40	ISO63	ISO100	ISO100	ISO100
Rotational speed						
50 Hz	rpm	0-2900 rpm				
60 Hz	rpm	0-3500 rpm				
Operating continuous inlet pressure	mbar/Torr	0-1000 mbar/0-760 Torr				
Maximum outlet pressure	mbar/Torr	1000 mbar/760 Torr				
Recommended backing pumps		GV80, E2M40, E2M80, ES100, 212J	GV80, E2M80, ES100, ES200, ES300, 212J, 412J	GXS160, GXS250, E2M80, E2M175, ES200, ES300, ES630, 212J, 412J, IDX1000, IDX1300	GXS250, GXS400, E2M175, E2M275, ES300, ES630, 412J, IDX1000, IDX1300	GXS450, E2M275, ES300, ES630 , 412J, IDX1000, IDX1300
Electrical supply voltage, 3-ph						
50 Hz		200 V/380-400 V				
60 Hz		200 V/380 V/230 V/460 V				
Motor power						
Hydrocarbon	kW/hp	2.2/3		3/4		11/15
PFPE	kW/hp	2.2/3		3/4		11/15
ATEX	kW	2.2		3		11
Explosion proof		3		4		15
Ambient temperature range						
Operating	°C/F	5 to 40/40 to 104				
Storage	°C/F	-10 to 80/14 to 176				
Maximum operating humidity	RH	90%				
Cooling method		Air cooled	Air cooled	Water cooled+	Water cooled	Water cooled
Recommended oil						
Standard version		Ultragrade 20				
PFPE version		Fomblin® YVAC 16/6				
Oil capacity						
Gear case	litre	-	-	1.25	3.5	3.5
Coupling cover	litre	1.5		2.4	6.5	6.5 l
Shaft seal reservoir	litre	0.125		1.5		
Weight	kg/lb	75/165	85/187	151/332	339/746	409/900

+ Depends on pressure

Service, Spares and Accessories

EH Accessories

Product description	Order no:
Inlet Mesh Assy ISO63 EH250	A60041569
Inlet Mesh Assy ISO100 EH500	A60041029
Inlet Mesh Assy ISO160 EH1200/2600	A60041570
Inlet Mesh Assy ISO250 EH4200	A60041571
OLM500 oil level monitor*	A50434000

* Not suitable for ATEX boosters

Fomblin® YVAC16/6

Product description	Order no:
Fomblin® YVAC16/6	
1 kg	H11306019
5 kg	H11306020

Ultragrade Oil

Product description	Order no:
Ultragrade 20 Oil (1 litre)	H11024015
Ultragrade 20 Oil (12 x 1 litre)	H11024012
Ultragrade 20 Oil (4 litre)	H11024013
Ultragrade 20 Oil (4 x 4 litre)	H11024011

Service kits

Product description	Order no:
Spares Kit Con C&O EH/QMB250/500A	A30151815
Spares Kit Module EH/QMB250/500A	A30151820
Spares Kit Shim EH/QMB250/500A	A30151825
Spares Kit Con C&O EH/QMB1200	A30551815
Spares Kit Module EH/QMB1200	A30551820
Spares Kit Con C&O EH/QMB26/4200	A30751815
Spares Kit Module EH/QMB26/4200	A30751820
Spares Kit Shim EH/QMB12/26/4200	A30751825
Spares Kit Con C&O EH/QMB26/4200	A30751815
Spares Kit Module EH/QMB26/4200	A30751820
Spares Kit Shim EH/QMB12/26/4200	A30751825



pXH MECHANICAL BOOSTER PUMPS

THE INTELLIGENT CHOICE



The pXH pumps represent the new generation of large mechanical boosters providing high pumping capacity with reduced footprint. Available in sizes from 6965 to 8358 m³h⁻¹ displacement, are packaged as separate pumps with inverter driven controls. Designed to withstand harsh processes, they have a field proven reliability from the large installed base. pXH can be easily integrated with GXS, the last generation Edwards Industrial on board controlled dry pumps, into a high pumping speed dry pumping system.



Features and Benefits

- Inverter driven control for 'Plug and Pump', flexible operation and automated control of your process.
- Low installation costs.
- Consistent output.
- Designed to withstand harsh industrial applications.
- Robust and reliable.

Applications

R&D/others

- Space simulation chambers evacuation.
- Load lock evacuation.
- Oil treatment.
- Vacuum packaging.

Drying

- Transformer drying.
- Transformer vapour phase drying.
- Pipeline drying.
- Capacitor drying.
- Li Ion battery drying.

Coating

- Glass coating.
- Roll/web coating.
- Hard coating/CVD.
- Surface activation.
- Plasma spray.

Steel Degassing

- VD vacuum degassing.
- VOD vacuum oxygen decarburising.

Metallurgy

- VIM vacuum induction melting.
- VAR vacuum arc remelting.
- MIM/vacuum sintering.
- PIC (investment casting).
- Electroslag remelting.
- Carbon vapour impregnation.

Performance Curves

pXH Mechanical Booster Pump

pXH

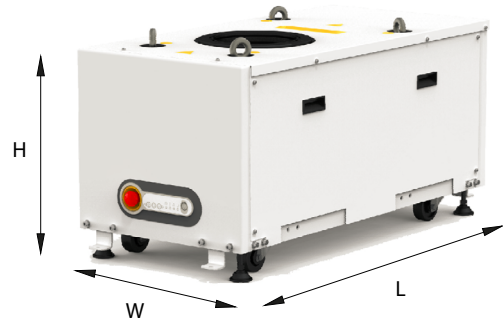


Ordering information

Product description	Order no:
pXH4500 380-460 V	ACG000120300
pXH4500 200-230 V	AC6000120300
pXH6000 380-460 V	ACH000120300
pXH6000 200-230 V	AC7000120300

Dimensions

pXH dimensions



		pXH4500	pXH6000
Length	mm	1086	1086
Width	mm	517	517
Height	mm	531	531

Technical data

		Units	pXH4500	pXH6000
Displacement		m ³ h ⁻¹	6965	8358
System inlet connection			ISO200	ISO250
System outlet connection			ISO160	NW160
Noise		dB (A)	66	
Mass		kg	400	435
Cooling water	Cooling water connection		3/8" BSP quick connect	
	Maximum supply pressure	barg	6.9	
	Supply temperature	°C	10-25	
	Minimum pressure differential	barg	1.25	
	Typical water cooling flow rate	lmin ⁻¹	6	
Electrical supply type		200-230 V 50/60 Hz/380-460 V 50/60 Hz		
			Han K 4/4	
Motor rating		kW (hp)	7.5 (10.0)	
Power at ultimate pressure (kW)		kW (hp)	1.9 (2.5)	



STOKES 6" SERIES MECHANICAL BOOSTER PUMPS

THE INTELLIGENT CHOICE



Stokes 6" series mechanical boosters are designed to be used in conjunction with rotary piston, dry vacuum, rotary vane, liquid ring or on the inlet of the backing pump to create a compact integrated package to increase pumping speed at working pressures and reduce the pump down time significantly.

The 6" Series are available in bare-shaft or direct drive motor variants, horizontal or vertical gas flow and with a single mechanical seal or a Process Isolation variant with 5 mechanical seals for optimum protection from dust and particulate contamination in arduous applications. Also By-pass variants are available which eliminate the need for pressure switches making the 6" Series one of the most versatile and flexible boosters.



Features and Benefits

Robust

- Over 80 years of time tested proven performance with experienced service and technical support.
- Increased lifetime, reliability and simple to use – large diameter shafts, ring feeder keyless gear locking system and dynamically balanced impellers.

Reliable

- Easy to maintain – single mechanical seal.
- Increased productivity – 5 seal design for optimal process protection.

Versatile

- Configured for your needs – bare shaft or direct drive, 1800-3600 rpm. Vertical or horizontal gas flow orientation with by-pass versions available.
- Simple to service – simple maintenance requirements result in long term reliability.

Applications

- Automotive.
- Chemical processing.
- Heat treatment.
- Leak detection.
- Metallurgy.
- PET processing.
- Pharmaceuticals.
- Thermal processing.
- Transformer drying and cable fluid conditioning.
- Vacuum coating.
- Vacuum melting.
- Many other industrial applications.

Pump Range

Stokes	
- 607	- 61B
- 615	- 622

Performance Curves

Stokes 607

Stokes 607 Series Mechanical Booster



	Displacement	
Direct drive 1800 rpm	1040 m ³ h ⁻¹	612 cfm
Direct drive 3000 rpm	1733 m ³ h ⁻¹	1020 cfm
Direct drive 3600 rpm	2080 m ³ h ⁻¹	1224 cfm

* Note: H = Horizontal Gas Flow
V = Vertical Gas Flow

Ordering information

Product description	Order no:
607 MHR CE, IE3 7.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	900607MHR940
607 MHR CE, IE3 7.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	900607MHR934
607 MVR CE, IE3 7.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	900607MVR940
607 MHR CE, IE3 7.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	900607MVR934
607 MHR (bare shaft) Horizontal flow	900-607-MHR
607 MHR (bare shaft) Horizontal flow (pfpe pre.)	900607MHR101
607 MVR (bare shaft) Vertical flow	900-607-MVR
607 MVR (bare shaft) Vertical flow (pfpe prep.)	900607MVR101
607 MHR (bare shaft) Horizontal flow	900-607-MHR
607 MVR (bare shaft) Vertical flow	900-607-MVR
607 MH20, 20 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-607-MH20
607 MV05, 5 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-607-MV05
607 MV20, 20 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-607-MV20
607 MH05, 5 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-607-MH05

*Note: 607, 615 61B and 622 vertical gas flow
boosters do not include mounting feet.
6" Mounting foot kit 426-715-002

Stokes 607 Series Process Isolation Booster



	Displacement	
Direct drive 1800 rpm	1040 m ³ h ⁻¹	612 cfm
Direct drive 3000 rpm	1733 m ³ h ⁻¹	1020 cfm
Direct drive 3600 rpm	2080 m ³ h ⁻¹	1224 cfm

* Note: H = Horizontal Gas Flow
V = Vertical Gas Flow

Ordering information

Product description	Order no:
607 5HR CE, IE3 7.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	9006075HR940
607 5HR CE, IE3 7.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	9006075HR934
607 5VR CE, IE3 7.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	9006075VR940
607 5HR CE, IE3 7.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	9006075VR934
607 5HR (bare shaft) Horizontal flow	900-607-5HR
607 5VR (bare shaft) Vertical flow	900-607-5VR
607 5H10, 10 hp, 230/460 V, 3-ph, 900-607-5H10_60 Hz @ 1800 rpm	900-607-5H10
607 5V10, 10 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-607-5V10



Performance Curves

Stokes 615

Stokes 615 Series Mechanical Booster



		Displacement	
V Belt	2750 rpm	3375 m ³ h ⁻¹	2000 cfm
Direct drive	1800 rpm	2210 m ³ h ⁻¹	1300 cfm
Direct drive	3000 rpm	3685 m ³ h ⁻¹	2170 cfm
Direct drive	3600 rpm	4420 m ³ h ⁻¹	2600 cfm

* Note: H = Horizontal Gas Flow
V = Vertical Gas Flow

Stokes 615 Series Process Isolation Booster



		Displacement	
V Belt	2750 rpm	3375 m ³ h ⁻¹	2000 cfm
Direct drive	3000 rpm	3685 m ³ h ⁻¹	2170 cfm
Direct drive	3600 rpm	4420 m ³ h ⁻¹	2600 cfm

* Note: H = Horizontal Gas Flow
V = Vertical Gas Flow

Ordering information

Product description	Order no:
615 MHR CE, IE3 11 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	900615MHR940
615 MHR CE, IE3 11 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	900615MHR934
615 MVR CE, IE3 11 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	900615MVR940
615 MVR CE, IE3 11 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	900615MVR934
615 MHR (bare shaft) Horizontal flow	900-615-MHR
615 MHR (bare shaft) Horizontal flow (pfpe pre.)	900615MHR101
615 MVR (bare shaft) Vertical flow	900-615-MVR
615 MVR (bare shaft) Vertical flow (pfpe prep.)	900615MVR101
615 MH10, 10 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-615-MH10
615 MH15, 15 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-615-MH15
615 MV10, 10 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-615-MV10
615 MV15, 15 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-615-MV15

*Note: 607, 615 61B and 622 vertical gas flow boosters do not include mounting feet.

6" Mounting foot kit 426-715-002

Ordering information

Product description	Order no:
615 5HR CE, IE3 11 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	9006155HR940
615 5HR CE, IE3 11 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	9006155HR934
615 5VR CE, IE3 11 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz(3000/3600 rpm)	9006155VR940
615 5VR CE, IE3 11 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	9006155VR934
615 5HR (bare shaft) Horizontal flow	900-615-5HR
615 5VR (bare shaft) Vertical flow	900-615-5VR
615 5H15, 15 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-615-MH15
615 5V15, 15 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-615-5V15

For performance curves of the various Stokes 6" booster coupled with a backing pump please consult Edwards

Stokes 61B

Stokes 61B Series By-Pass Mechanical Booster



		Displacement	
V Belt	2750 rpm	3375 m ³ h ⁻¹	2000 cfm
Direct drive	1800 rpm	2210 m ³ h ⁻¹	1300 cfm
Direct drive	3000 rpm	3685 m ³ h ⁻¹	2170 cfm
Direct drive	3600 rpm	4420 m ³ h ⁻¹	2600 cfm

Ordering information

Product description	Order no:
61B MHR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	90061BMHR940
61B MHR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	90061BMHR934
61B MVR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	90061BMVR940
61B MVR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	90061BMVR934
61B MHR (bare shaft) Horizontal flow	900-61B-MHR
61B MVR (bare shaft) Vertical flow	900-61B-MVR
61B MH10, 10 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-61B-MH10
61B MH25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-61B-MH25
61B MV10, 10 hp, 230/460 V, 3-ph, 60 Hz @ 1800 rpm	900-61B-MV10
61B MV25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-61B-MV25

*Note: 607, 615 61B and 622 vertical gas flow boosters do not include mounting feet.

6" Mounting foot kit 426-715-002

Stokes 61B Series Process Isolation Booster



		Displacement	
V Belt	2750 rpm	3375 m ³ h ⁻¹	2000 cfm
Direct drive	3000 rpm	3685 m ³ h ⁻¹	2170 cfm
Direct drive	3600 rpm	4420 m ³ h ⁻¹	2600 cfm

Ordering information

Product description	Order no:
61B 5HR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	90061B5HR940
61B MHR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	90061B5HR934
61B 5VR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	90061B5VR940
61B 5VR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	90061B5VR934
61B 5HR (bare shaft) Horizontal flow	900-61B-5HR
61B 5VR (bare shaft) Vertical flow	900-61B-5VR
61B 5H25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-61B-5H
61B 5V25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-61B-5V25



Performance Curves

Stokes 622

Stokes 622 Series Mechanical Booster



	Displacement	
V Belt 2750 rpm	2750 m ³ h ⁻¹	3000 cfm
Direct drive 3000 rpm	5525 m ³ h ⁻¹	3254 cfm
Direct drive 3600 rpm	6528 m ³ h ⁻¹	3840 cfm

Ordering information

Product description	Order no:
622 MHR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	900622MHR940
622 MHR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	900622MHR934
622 MVR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz(3000/3600 rpm)	900622MVR940
622 MVR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	900622MVR934
622 MHR (bare shaft) Horizontal flow	900-622-MHR
622 MVR (bare shaft) Vertical flow	900-622-MVR
622 MH25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-622-MH25
622 MV25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-622-MV25

* Note: 607, 615 61B and 622 vertical gas flow boosters do not include mounting feet.
6" Mounting foot kit 426-715-002

Stokes 622 Series Process Isolation Booster



	Displacement	
V Belt 2750 rpm	2750 m ³ h ⁻¹	3000 cfm
Direct drive 3000 rpm	5525 m ³ h ⁻¹	3254 cfm
Direct drive 3600 rpm	6528 m ³ h ⁻¹	3840 cfm

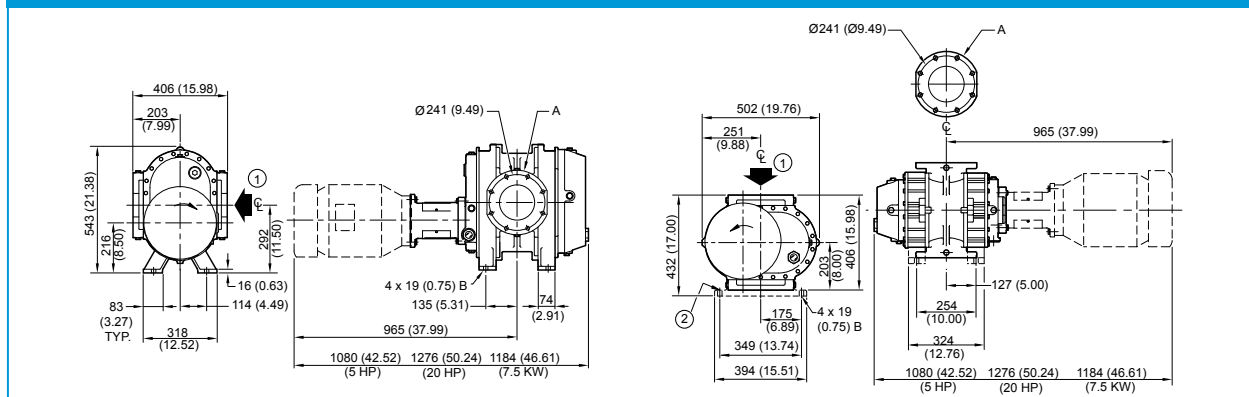
Ordering information

Product description	Order no:
622 5HR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	9006225HR940
622 5HR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	9006225HR934
622 5VR CE, IE3 18.5 kW, EU/US/CH 50/60Hz 380-400v 50Hz /230/460v 60Hz (3000/3600 rpm)	9006225VR940
622 5VR CE, IE3 18.5 kW, Asia 50/60Hz 200v 50/60Hz 380v 60Hz (3000/3600 rpm)	9006225VR934
622 5HR (bare shaft) Horizontal flow	900-622-5HR
622 MVR (bare shaft) Vertical flow	900-622-5VR
622 5H25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-622-5H25
622 5V25, 25 hp, 230/460 V, 3-ph, 60 Hz @ 3600 rpm	900-622-5V25

For performance curves of the various Stokes 6" booster coupled with a backing pump please consult Edwards

Dimensions

Stokes 607 dimensions

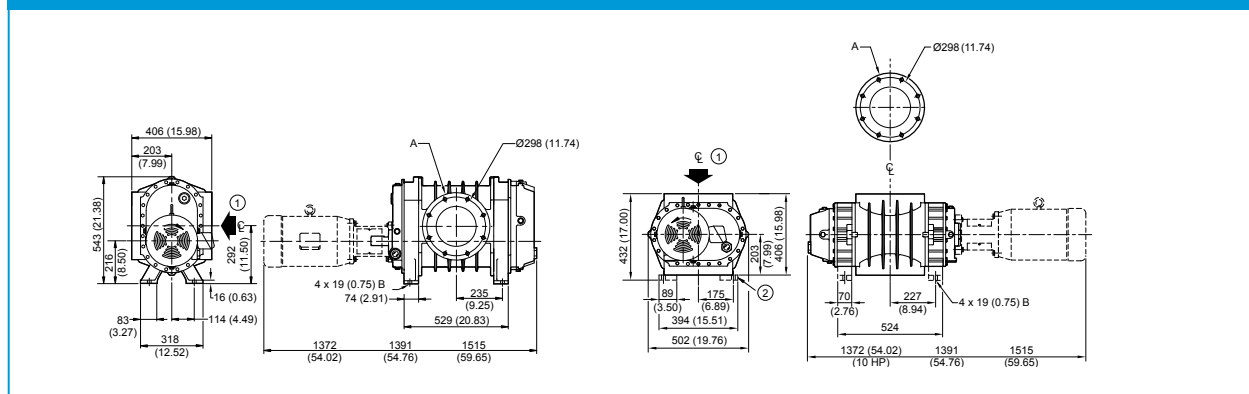


A 6" pipe flange connection 11" (279 mm) OD x (152 mm) ID 8 x 3/4⁻¹⁰ NC-2B x 1 1/8" (29 mm) holes straddle both CL both flanges

B DIA. Holes

- ① STD Inlet
- ② Optional feet

Stokes 615 dimensions



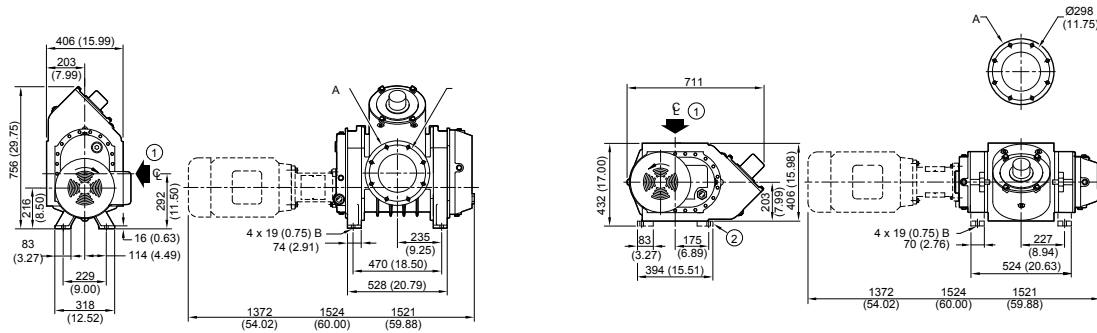
A 8" pipe flange connection 13 1/2" (343 mm) OD x 8" (203 mm) ID 8 x 3/4⁻¹⁰ NC-2B x 1 1/8" (29 mm) holes straddle both CL both flanges

B DIA. Holes

- ① STD Inlet
- ② Optional feet

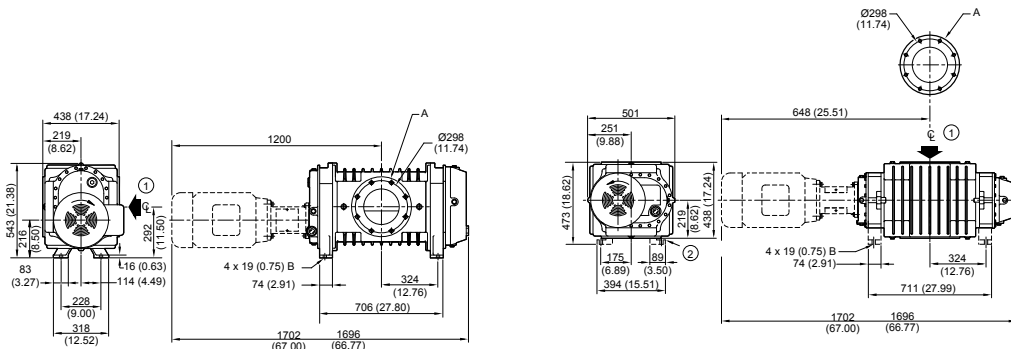
Product length may vary due to motor variant, contact Edwards for specific size for specific regions and voltage variants.

Stokes 61B dimensions



- A 8" pipe flange connection 13 1/2" (343 mm) OD x 8" (203 mm) ID 8 x 3/4⁻¹⁰ NC-2B x 1 1/8" (29 mm) holes straddle both CL both flanges
- B DIA. Holes
- 1 STD Inlet
- 2 Optional feet

Stokes 622 dimensions



- A 8" pipe flange connection 13 1/2" (343 mm) OD x 8" (203 mm) ID 8 x 3/4⁻¹⁰ NC-2B x 1 1/8" (29 mm) holes straddle both CL both flanges
- B DIA. Holes
- 1. STD Inlet
- 2. Optional feet

Product length may vary due to motor variant, contact Edwards for specific size for specific regions and voltage variants.

Technical Data



Units	607	607 PIB	615	615 PIB
Displacement				
V belt 2750 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	1589/935	1589/935	3375/2000
Direct drive 1800 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	1040/612	-	2210/1300
Direct drive 3000 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	1733/1020	1733/1020	3685/2170
Direct drive 3600 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	2080/1224	2080/1224	4420/2600
Inlet/outlet flanges	ASA/ANSI flange	6"		8"
Motor power	hp (kW)	5/20 (7.5)	10 (7.5)	10 (11)
Cooling method		Air cooled	-	Air cooled
By-pass available				
Cooling water	l min ⁻¹ /gal min ⁻¹	-	7.6-11.4/2-3	-
Oil capacity (horizontal flow)	litre/gal	1.9/0.51	1.9/0.51	1.9/0.51
Oil capacity (vertical flow)	litre/gal	4.1/1.1		
Max pressure differential	mbar/Torr	506/380		
Max temp rise	°C/F	135/275		
Max discharge temp	°C/F	191/375		
Weight bare shaft	kg/lbs	215/475		234/515
Weight TEFC direct drive	kg/lbs	408/900	345/760	390/860
Recommended oil		V- Lube H		



Units	61B	61B PIB	622	622 PIB
Displacement				
V belt 2750 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	3375/2000	3375/2000	5100/3000
Direct drive 1800 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	2210/1300	-	5525/2350
Direct drive 3000 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	3685/2170	3685/2170	6630/3900
Direct drive 3600 rpm	m ³ h ⁻¹ /ft ³ min ⁻¹	4420/2600		6630/3900
Inlet/outlet flanges	ASA/ANSI flange	8"		
Motor power	hp (kW)	1 10/25 (8.5)		25 (18.5)
Cooling method		Air cooled		Air cooled
By-pass available		Yes		-
Cooling water	l min ⁻¹ /gal min ⁻¹	-	7.6-11.4/2-3	-
Oil capacity (horizontal flow)	litre/gal	1.9/0.51	1.9/4.1	1.9/0.51
Oil capacity (vertical flow)	litre/gal	4.1/1.1	4.1/8.8	4.1/1.1
Max pressure differential	mbar/Torr			333/250
Max temp rise	°C/F	135/275		151/27
Max discharge temp	°C/F	191/375		177/350
Weight bare shaft	kg/lbs	284/625		335/740
Weight TEFC direct drive	kg/lbs	530/1170	538/1185	617/1360
Recommended oil				V-Lube H

Service, Spares and Accessories

Spares

Product description	Order no:
6 Inch MSeal seal kit	607-552-001
6 Inch MSeal maintenance kit *	607-552-002
Process Isolation 6XX-5HR kit †	607-552-004
6" Vertical gas flow mounting feet	426-715-002

* This kit is the same as kit 607-552-001, but with bearings.

† This kit is for process isolation booster pumps, and must be used in conjunction with Kit 607-552-001 or 607-552-002.

Service

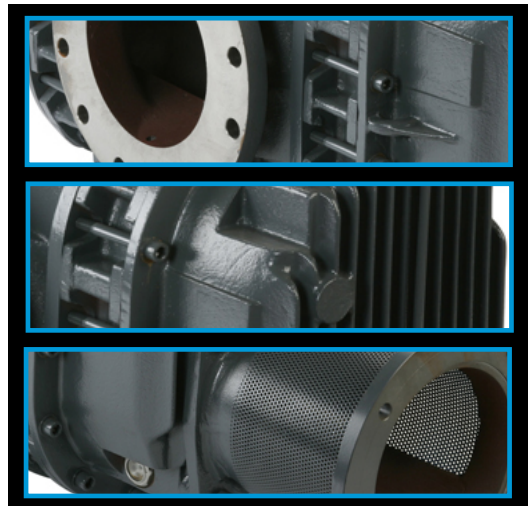
Edwards products, spares and accessories are available from Edwards companies in Belgium, Brazil, China, France, Germany, Israel, Italy, Japan, Korea, Singapore, United Kingdom, U.S.A. and a worldwide network of distributors. The majority of these centres employ Service Engineers who have undergone comprehensive Edwards training courses. Order spare parts and accessories from your nearest Edwards company or distributor.

When you order, please state for each part required:

- Model and item number of your equipment.
- Serial number (if any).
- Item number and description of the part.

HV8000 MECHANICAL BOOSTER PUMP

MAXIMISE YOUR PRODUCTIVITY AND PERFORMANCE



The Edwards HV8000 high vacuum mechanical booster has been developed to provide high reliability operation in aggressive environments. With a nominal pumping speed of 7200 m³h⁻¹ (4241 ft³ min⁻¹) at 50 Hz, it is ideal for large industrial and chemical applications. IE3 energy efficiency 3 phase motors are now fitted to our standard motor pumps



Features and Benefits

Performance

- Stable process for consistent output – suitable for continuous operation over wide pressure ranges on heavy duty large scale applications.

Reliability

- No unplanned downtime – high performance water cooled mechanical shaft seal, large diameter shaft and large helical gears.

Adaptability

- Easy integration and safe – optional water cooled exhaust gas after cooler, shaft seal safety purge, temperature monitoring and VFD available.

Flexibility

- Configured to your needs – can be supplied with standard motor or without motor to allow a local motor to be fitted. Horizontal or vertical flow to suit application and system design.

Applications

- Steel degassing.
- Metallurgy.
- Coating.
- Process engineering industries.

Pump Range

- HV**
- HV8000



Performance Curves

HV8000 Mechanical booster pump

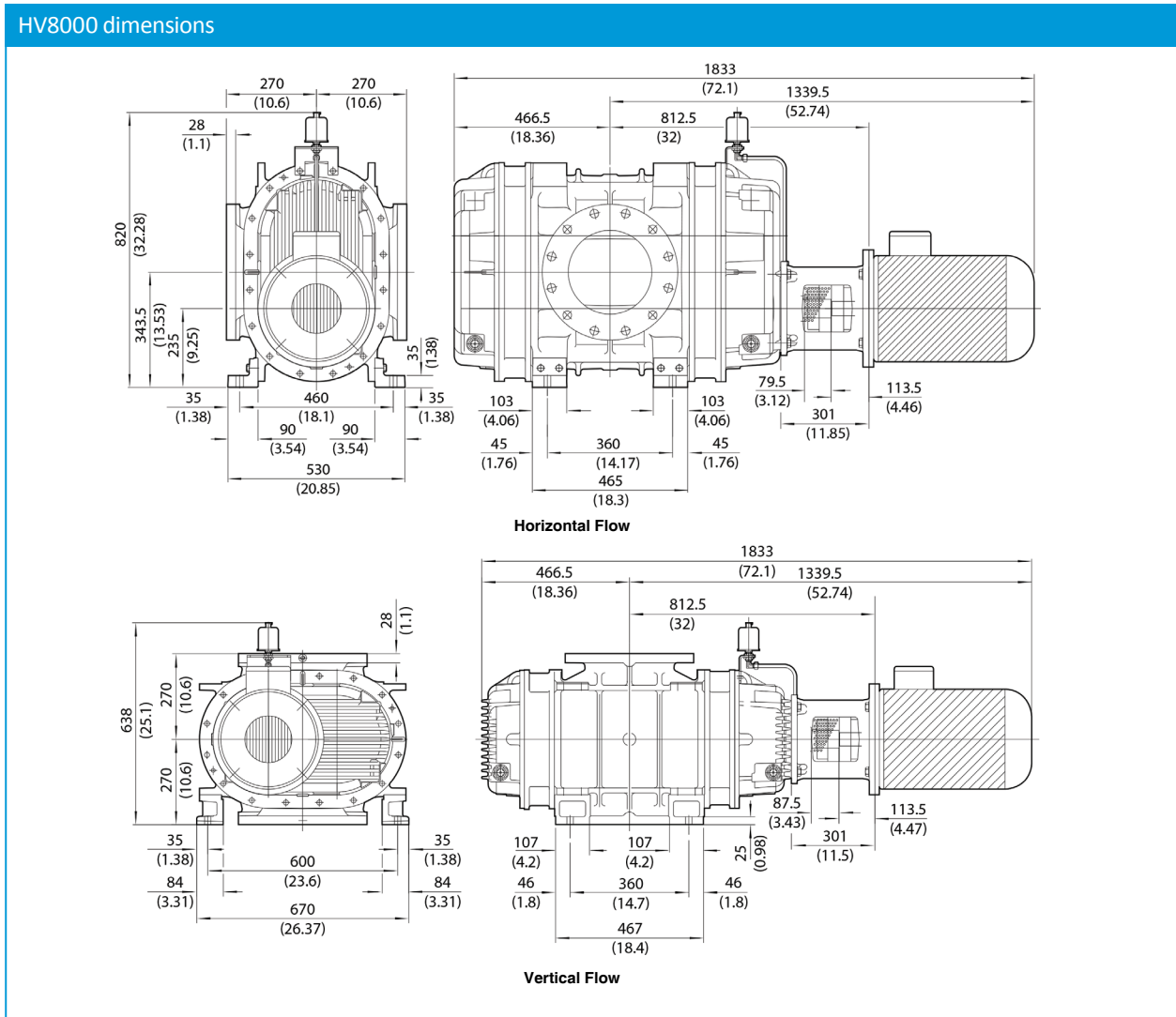
HV8000



Ordering information

Product description	Order no:
HV8000 VF IE3 Asia 50/60 Hz 200 V 50/60 Hz 380 V 60 Hz	A31103934
HV8000 VF IE3 EU/USA 50/60 Hz 18.5 kW 380-400 V 50 Hz 230/460 V 60 Hz	A31103940
HV8000 VF IE3 Asia 50/60 Hz 380 V 60 Hz	A31104934
HV8000 VF IE3 EU/USA 50/60 Hz 18.5 kW 380-400 V 50 Hz	A31104940
HV8000IND VF bare shaft	A31101985
HV8000IND HF bare shaft	A31102985

Dimensions



HV8000 pumps tend to be used in large pumping systems rather than simple combinations.

Technical Data



	Units	HV8000
Displacement (swept volume)		
50 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	7200/4241
60 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	8640/5089
Max rotation speed		
50 Hz	rpm	3000
60 Hz	rpm	3600
Max pressure differential		
50 Hz	mbar/Torr	190/143
60 Hz	mbar/Torr	120/90
Ultimate (depends on backing set)		
50 Hz	mbar/Torr	1.5 x 10 ⁻⁴ /1 x 10 ⁻⁴
60 Hz	mbar/Torr	2 x 10 ⁻⁴ /1.5 x 10 ⁻⁴
Standard motor power	kW/hp	18.5/25
Standard backing set speed requirements	m ³ h ⁻¹ /ft ³ min ⁻¹	2600/1530
Recommended oil		Mobil SHC 629
Max oil capacity (vertical gas flow config)	litre/US gal	8.3/2.18
Inlet/outlet connection		10" class 150 ASME B16.5
Inlet/outlet cooling water connection		Rp ½ ISO 7-1 (½ BSP)
End cover purge gas inlet		Rp ¾ ISO 7-1 (¾ BSP)
Max cooling water supply pressure	bar/psi	4/58
Max cooling water supply temp	°C/F	35/95
Cooling water flow rate	lmin ⁻¹ /US gal min ⁻¹	15/3.96
Noise level		82 dB(A)
Weight (without motor)	kg/lb	570/1257
Weight (with standard motor)	kg/lb	670/1474



Service, Spares and Accessories

HV Kit

Product description	Order no:
HV8000 VF motor mounting kit IEC	A31101002
HV8000 VF motor mounting kit NEMA	A31101006
HV8000 HF motor mounting kit IEC	A31102002
HV8000 HF motor mounting kit NEMA	A31102006
After cooler kit HV8000	A71205550

Gear Box Oil

Product description	Order no:
Gear Box Oil 4 Ltr Mobil SHC 629	H11023011

Spares

Product description	Order no:
HV8000 Set of O-Rings spare	A31101801
HV8000 mech seal kit spare	A31101802
HV8000 mech seal + sleeve kit spare	A31101803
HV8000 gear set spare	A31101804
HV8000 bearings kit spare	A31101805
HV8000 rotors kit spare	A31101806
HV8000 oil reservoir spare	A31101807
HV8000 sight glass spare	A31101808

Service

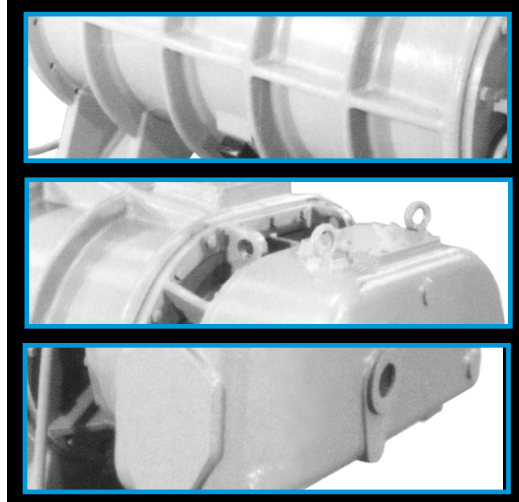
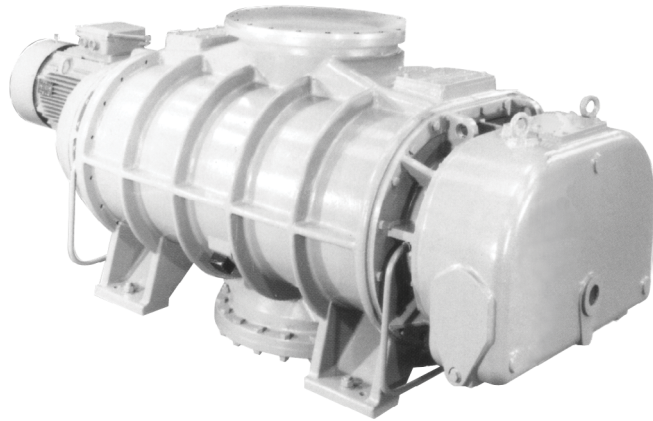
Edwards products, spares and accessories are available from Edwards companies in Belgium, Brazil, China, France, Germany, Israel, Italy, Japan, Korea, Singapore, United Kingdom, U.S.A. and a worldwide network of distributors. The majority of these centres employ Service Engineers who have undergone comprehensive Edwards training courses. Order spare parts and accessories from your nearest Edwards company or distributor.

When you order, please state for each part required:

- Model and item number of your equipment.
- Serial number (if any).
- Item number and description of the part.

HV30000/40000 MECHANICAL BOOSTER PUMP

MAXIMISE YOUR PRODUCTIVITY AND PERFORMANCE



HV30000/40000 is a high capacity mechanical booster used in the manufacture and assembly of large industrial vacuum systems. These pumps are backed by Edwards dry pumps or mechanical booster pumps. This range of high capacity booster pumps is designed to operate reliably for long periods with no need for maintenance. The HV pumps can be fitted with an inverter to allow them to be started at atmospheric pressure, at the same time as the dry pumps.



Features and Benefits

- Water cooled oil boxes and after cooler.
- Vertical flow, direct drive.
- Control with inverter or interlock with a pressure switch input.
- Very reliable with little maintenance.

Applications

- Steel degassing.
- Metallurgy.
- Coating.
- Process engineering industries.

Pump Range

- HV**
- HV30000
 - HV40000



Performance Curves

HV30000/40000 Mechanical Booster Pump

HV30000



Displacement (supply)	
50 Hz	30000 m ³ h ⁻¹ (17660 ft ³ min ⁻¹)
60 Hz	36000 m ³ h ⁻¹ (21200 ft ³ min ⁻¹)

HV40000



Displacement (supply)	
50 Hz	33333 m ³ h ⁻¹ (19620 ft ³ min ⁻¹)
60 Hz	40000 m ³ h ⁻¹ (23540 ft ³ min ⁻¹)

Ordering information

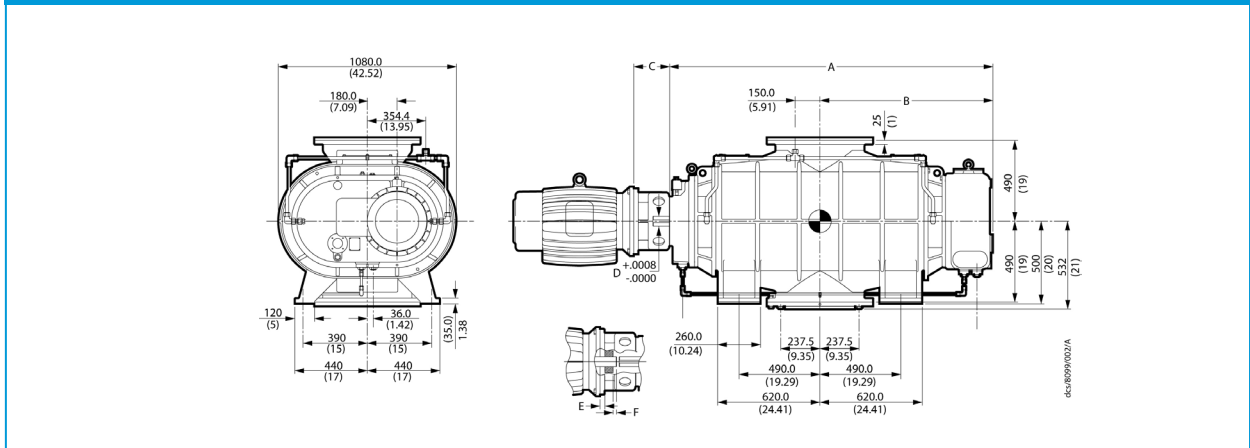
Product description	Order no:
HV30000 Vertical Flow Vacuum Booster Pump	On request

Ordering information

Product description	Order no:
HV40000 Vertical Flow Vacuum Booster Pump	On request

Dimensions

HV30000/40000 dimensions



Unit	HV30000	HV30000	HV30000	HV30000	HV40000	HV40000	HV40000	HV40000
Motor size	200 l (30 kW)	250 m (55 kW)	324 td (40 hp)	365 td (75 hp)	200 l (30 kW)	250 m (55 kW)	324 td (40 hp)	365 td (75 hp)
A	1959.36 (77.14)	1959.36 (77.14)	1959.36 (77.14)	1959.36 (77.14)	2099.31 (82.65)	2099.31 (82.65)	2099.31 (82.65)	2099.31 (82.65)
B	1048.77 (41.29)	1048.77 (41.29)	1048.77 (41.29)	1048.77 (41.29)	1118.62 (44.04)	1118.62 (44.04)	1118.62 (44.04)	1118.62 (44.04)
C	217.93 (8.58)	246.89 (9.72)	246.89 (9.72)	246.89 (9.72)	217.93 (8.58)	246.89 (9.72)	246.89 (9.72)	246.89 (9.72)
D Shaft \varnothing	2.3627	2.3627	2.3627	2.3627	2.3627	2.3627	2.3627	2.3627
E ¹	19.76 (0.78)	48.76 (1.92)	48.76 (1.92)	48.76 (1.92)	19.76 (0.78)	48.76 (1.92)	48.76 (1.92)	48.76 (1.92)
F ²	20.24 (0.80)	21.24 (0.84)	20.94 (0.82)	14.44 (0.57)	20.24 (0.80)	21.24 (0.84)	20.94 (0.82)	14.44 (0.57)

① Motor face to back of coupler.

② End of shaft to front of coupler.

Technical Data



	Units	HV30000	HV40000
Displacement			
50 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	30000/17660	33333/19620
60 Hz	m ³ h ⁻¹ /ft ³ min ⁻¹	36000/21200	40000/23540
Maximum pressure differential			
50 Hz	mbar	24	25
60 Hz	mbar	29	24
Recommended backing pumps		IDX1300 and HV8000	IDX1300 and HV8000
Maximum motor power	kW/hp	55/75	55/75
Ambient operating temperature	°C/°F	-20 to 40/-4 to 140	-20 to 40/-4 to 140
Cooling water supply			
Maximum supply temperature	°C/°F	30/85	30/85
Maximum supply pressure	bar/psi	5/73	5/73
Maximum operating humidity		90% RH	90% RH
Weight(without motor)	kg/lb	3017/6650	3400/7495



Service, Spares and Accessories

HV30000/40000 Accessories

For HV30000/40000 accessories and spares please refer to the manual on our website

Service

Edwards products, spares and accessories are available from Edwards companies in Belgium, Brazil, China, France, Germany, Israel, Italy, Japan, Korea, Singapore, United Kingdom, U.S.A. and a worldwide network of distributors. The majority of these centres employ Service Engineers who have undergone comprehensive Edwards training courses. Order spare parts and accessories from your nearest Edwards company or distributor.

When you order, please state for each part required:

- Model and item number of your equipment.
- Serial number (if any).
- Item number and description of the part.