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Edwards EH-250, EH-500

Technical Specifications

DATA SUMMARY EH MECHANICAL BOOSTERS							
PUMP		EH250	EH500				
Displacement (swept volume)							
50 Hz supply	m ³ h ⁻¹ / ft ³ min ⁻¹	310 / 185	505 / 300				
60 Hz supply	m ³ h ⁻¹ / ft ³ min ⁻¹	375 / 220	605 / 355				
Effective pumping speed* with backing pump							
E1M40 or E2M40	m ³ h ⁻¹ / ft ³ min ⁻¹	240 / 141	350 / 206				
E1M80 or E2M80	m ³ h ⁻¹ / ft ³ min ⁻¹	274 / 161	400 / 236				
E1M175 or E2M175	m ³ h ⁻¹ / ft ³ min ⁻¹		440 / 259				
E1M275 or E2M275	m ³ h ⁻¹ / ft ³ min ⁻¹		460 / 271				
Pressure differential across pump [‡]							
50 Hz supply	mbar / Torr	0 – 180 / 0 – 140	0 – 110 / 0 – 68				
60 Hz supply	mbar / Torr	0 – 150 / 0 – 115	0 - 90 / 0 - 825				
Inlet connection		ISO63	ISO100				
Outlet connection		ISO40	ISO63				

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	EH250	EH500
Rotational speed [†]		
50 Hz supply	0 – 2900 rpm	0 - 2900 rpm
60 Hz supply	0 – 3500 rpm	0 – 3500 rpm
Operating continuous inlet pressure	0 – 1000 mbar	0 – 1000 mbar
1 8 1	(0 – 760 Torr)	(0 – 760 Torr)
Maximum outlet pressure	` 1000 mbar ´	`1000 mbar ´
•	(760 Torr)	(760 Torr)
Recommended backing pumps	ĠV80, E1M/	GV80, GV160,
	E2M40, E1M/	E1M/E2M80
	E2M80	
Electrical supply voltage, 3-phase		
50 Hz	220 – 240 V /	220 – 240 V /
	380 – 415 V	380 – 415 V
60 Hz	208 – 230 V /	208 – 230 V /
	460 V	460 V
Motor power		
Hydrocarbon	2.2 kW (3 hp)	2.2 kW (3 hp)
PFPE	1.5 kW (2 hp)	1.5 kW (2 hp)
ATEX	2.2 kW	2.2 kW
Explosion proof	3 hp	3 hp
Maximum operating humidity	90% RH	90% RH
Recommended oil		
Standard version	Ultragrade 20	Ultragrade 20
PFPE version	Fomblin® YVAC	Fomblin® YVAC
	16/6	16/6
Weight	61 kg (134 lb)	74 kg (163 lb)

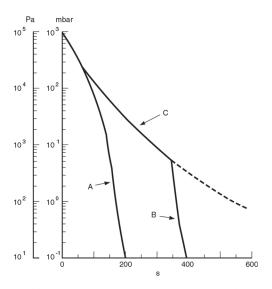
^{**} Under many circumstances, pumps may operate without cooling water. Apply to BOC Edwards for more information.

[†] Depends on pressure.

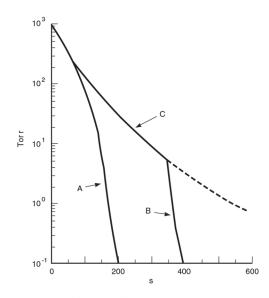
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Pumping Curves

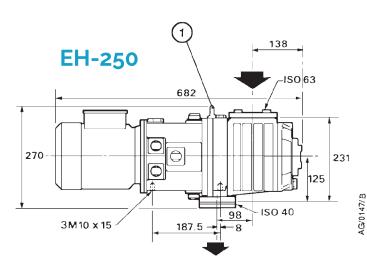


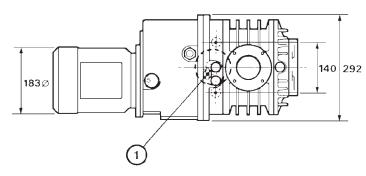
- With backing pump and EH mechanical booster pump switched on together
- With mechanical booster pump switched on at 5 mbar
- With backing pump only (pumping through booster pump)



- Α With backing pump and EH mechanical booster pump switched on together
- В With mechanical booster pump switched on at 5 mbar
- With backing pump only (pumping through booster pump)

Dimensions





Lifting point

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Features & Benefits

- unique hydrokinetic drive provides efficient power transmission with benefits in economy, performance and compactness
- pump down times cut 50%, when compared to direct drive pumps
- advanced shaft-seal technology means no oil contamination of process chamber
- no bypass lines or pressure switches required
- reduced capital and operating costs

rugged and corrosion resistant

universal voltage motors

• quiet, minimum vibration



Applications

- industrial semiconductor processing vacuum distillation/
 packaging steel de-gassing thin film coating vacuum metallurgy
- low density wind tunnels space simulation vacuum impregnation
- oil drying and de-gassing pharmaceutical freeze drying •
 CO2 lasers