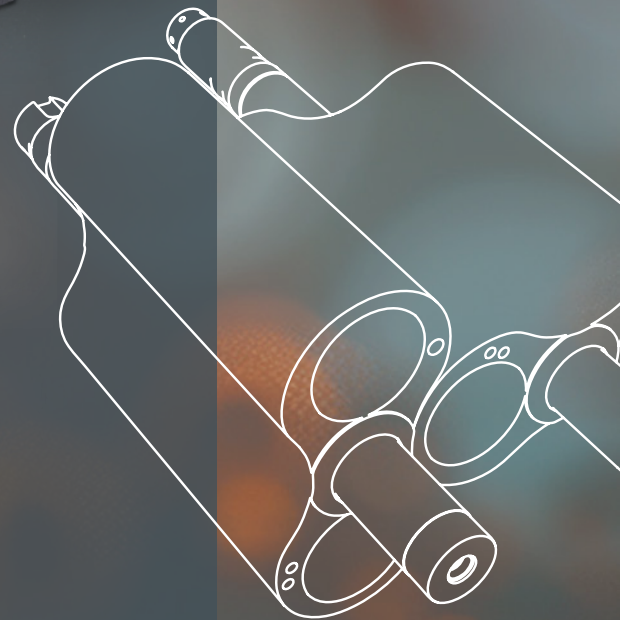
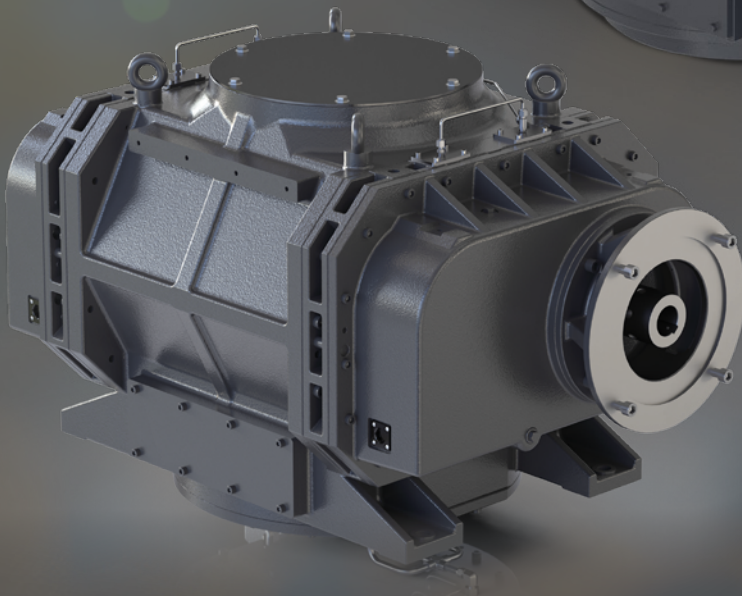
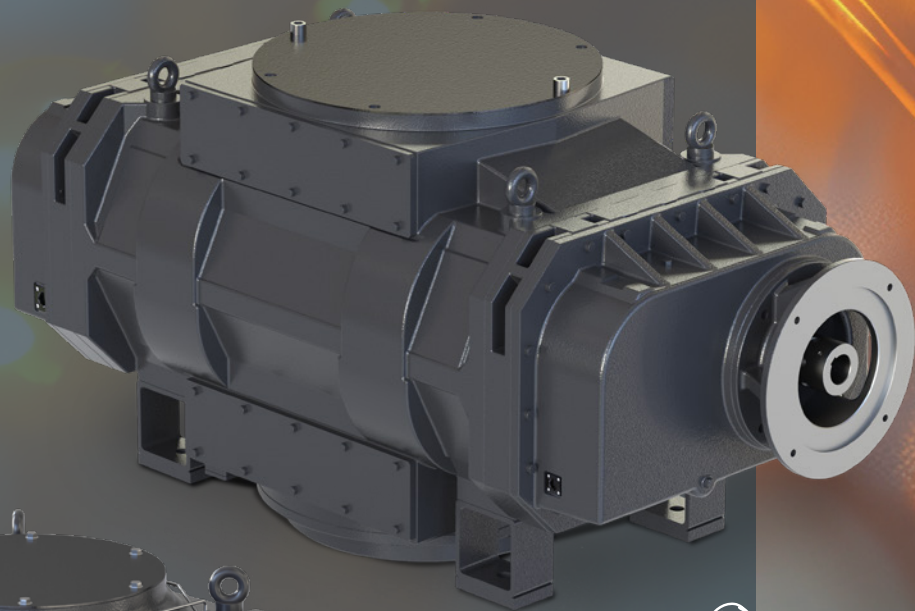


GMB ROOTS VACUUM BOOSTER PUMPS

 **EDWARDS**



HIGH CAPACITY ROOTS VACUUM BOOSTER PUMPS

The new Edwards GMB25-40K roots vacuum booster pumps designed for harsh applications feature an innovative composite rotor design of high-strength alloy-steel shafts. Equipped with lightweight rotor lobes, the patented construction safely enables higher running speeds while offering maximum displacement.

The small footprint and weight of the GMB25-40K roots pump ensures a high degree of flexibility when designing large vacuum systems. The GMB25-40K is scalable with multiple backing configurations available. Built to global standards IEC and NEMA flange compatibility. ATEX options are also available for hazardous or chemical applications.



Economical – low cost of ownership

- Reduced installation costs: Small footprint and efficient design
- Increased efficiency: Low power consumption at vacuum
- Controllable vacuum: Ensures optimum process conditions



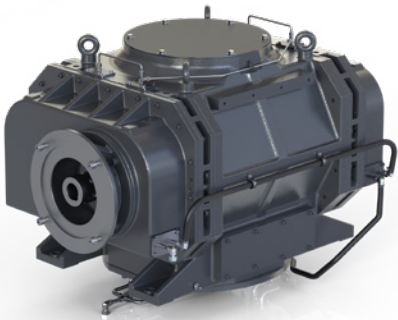
Flexible – multiple systemisation options

- Global standards: IEC and NEMA motor options
- Hazardous area options: ATEX / Class 1 Div 1 ready
- Systems engineering: Scalable technology with multiple backing configurations

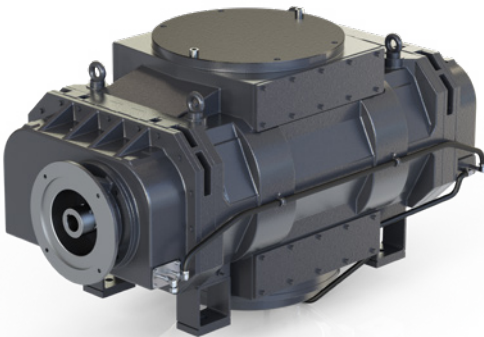


Reliable – peace of mind for your process

- Robust: Designed for harsh applications
- Service: Minimal in situ service to maximise process uptime
- Increased safety: Ensures mechanical integrity during process malfunctions



GMB25K



GMB40K

APPLICATIONS

- Steel degassing
- Vacuum metallurgy
- Low density wind tunnels
- Space simulation
- Chemical process industries



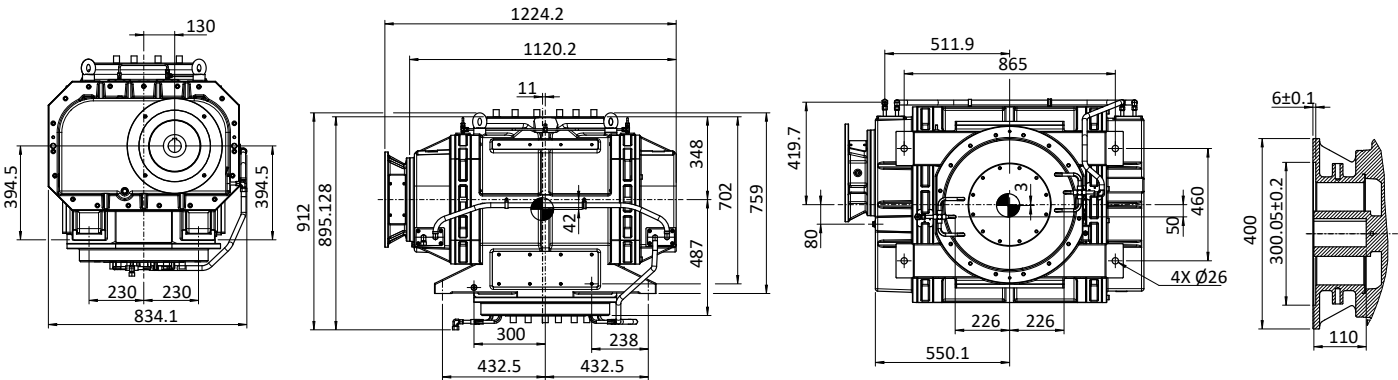
TECHNICAL SPECIFICATIONS

	Units	GMB25K	GMB40K
Displacement (swept volume) at 3,960 rpm	m³/hr (cfm)	25500 (15009)	44300 (26074)
Minimum backing capacity	m³/hr (cfm)	4500 (2649)	6500 (3825)
Maximum Δpressure across booster	mbar (torr)	30 (22.56)	25 (18.75)
Total input power at ultimate	kW (hp)	3.6 (4.8)	
Ultimate pressure	mbar (torr)	<0.01* (<0.008)	
Rotational speed	rpm (min)	540	
	rpm (max)	3960	
Motor power	kW (hp)	IEC – 30 (NEMA – 40)	
Vibration	mm s ⁻¹ (inch s ⁻¹)	<4 (<0.16)	
Cooling water connections		R1/2" female	
Cooling water temperature	°C (°F)	5 – 40 (41 – 104)	
Minimum cooling water flow (@max. temp.)	litres min ⁻¹ (US gal min ⁻¹)	10 (2.6)	
Minimum cooling water pressure drop	bar (psi)	1 (14.7)	
Seal purge connection, suitable for		1/4" outside diameter rigid tube	
Purge gas pressure	bar (psi)	0.3 – 0.5 (5 – 7)	
Purge gas flow (minimum)	slm	4	
Recommended lubrication type	Synthetic booster gear oil	Ultragrade 150	
Lubricant quantity	litres (US gal)	7 (1.85)	
Connection flanges	Inlet	DN350 PN6	DN500 PN6
	Outlet	ISO250	
Weight (without motor)	kg (lbs)	1400 (3086)	2088 (4603)
Ambient T	°C (°F)	-20 – 40 (-4 – 104)	

*With typical Edwards based backing pumps

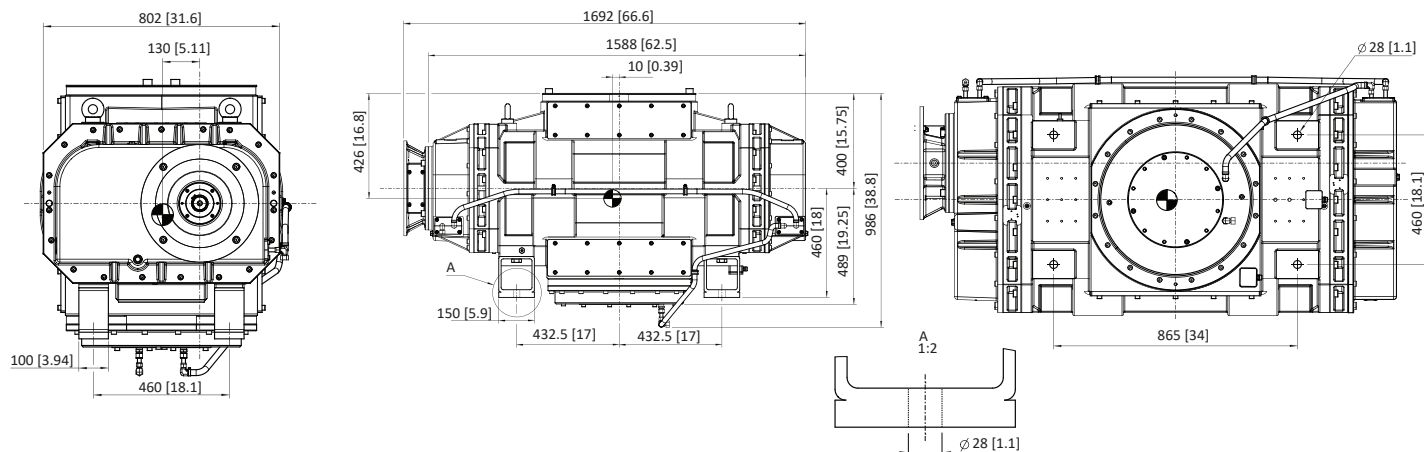
DIMENSIONS

GMB25K



DIMENSIONS

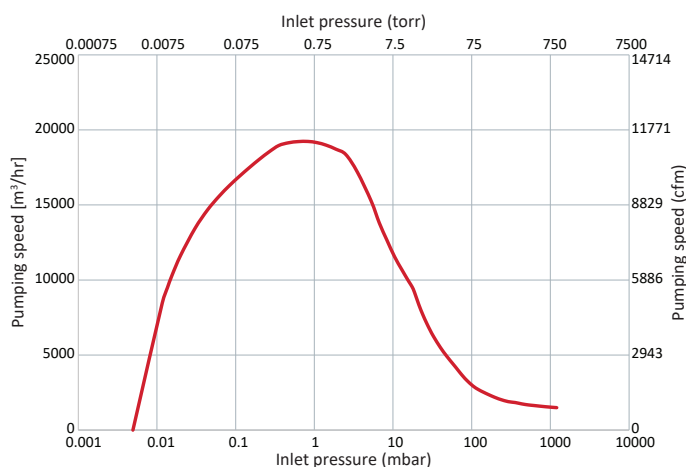
GMB40K



PERFORMANCE CURVES

GMB25K

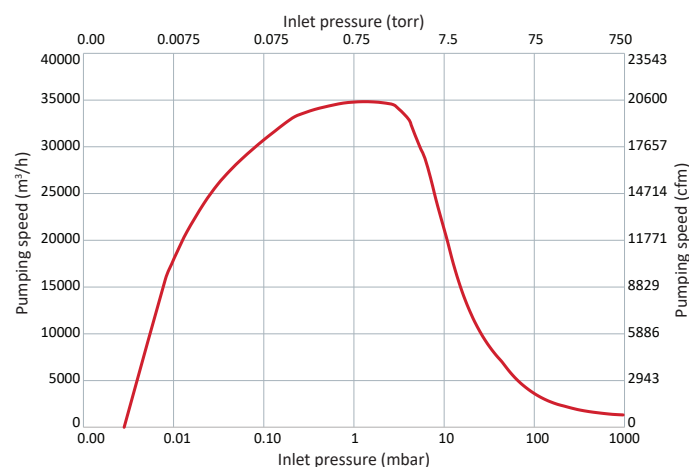
Typical pumping speed of GMB25K (as part of system)*



*With typical Edwards based backing pumps

GMB40K

Typical pumping speed of GMB40K (as part of system)*



*With typical Edwards based backing pumps

ORDERING INFORMATION

GMB25K Standard Pump

A30601985	GMB25K BS IEC SD
A30602985	GMB25K BS NEMA SD
A30605985	GMB25K BS IEC CPI
A30605986	GMB25K BS NEMA CPI

GMB25K ATEX Pump

A30603985	GMB25K BS ATEX Cat. 2 INT T2 IEC SD
A30603986	GMB25K BS ATEX Cat. 2 INT T2 NEMA SD
A30607985	GMB25K BS ATEX Cat. 2 INT-2EXT T3 IEC CPI
A30607986	GMB25K BS ATEX Cat. 2 INT-2EXT T3 NEMA CPI

GMB40K Standard Pump

A30801985	GMB40K BS IEC SD
A30802985	GMB40K BS NEMA SD
A30805985	GMB40K BS IEC CPI
A30805986	GMB40K BS NEMA CPI

GMB40K ATEX Pump

A30803985	GMB40K BS ATEX Cat. 2 INT T2 IEC SD
A30803986	GMB40K BS ATEX Cat. 2 INT T2 NEMA SD
A30807985	GMB40K BS ATEX Cat. 2 INT-2EXT T3 IEC CPI
A30807986	GMB40K BS ATEX Cat.2 INT-2EXT T3 NEMA CPI

