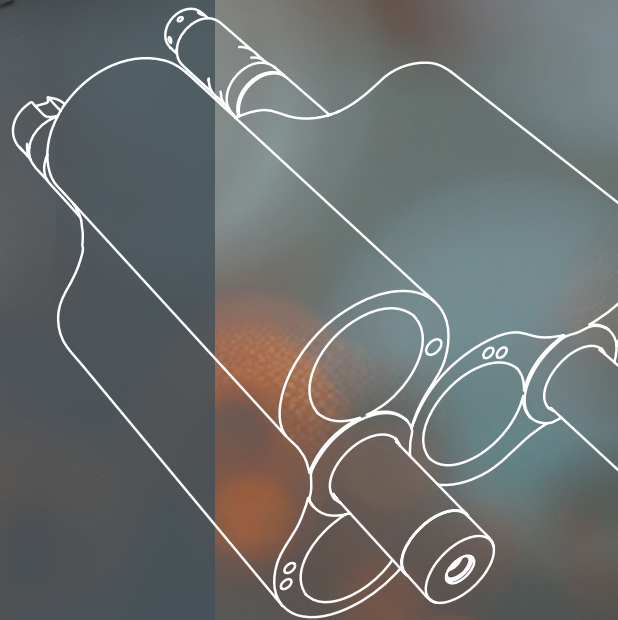
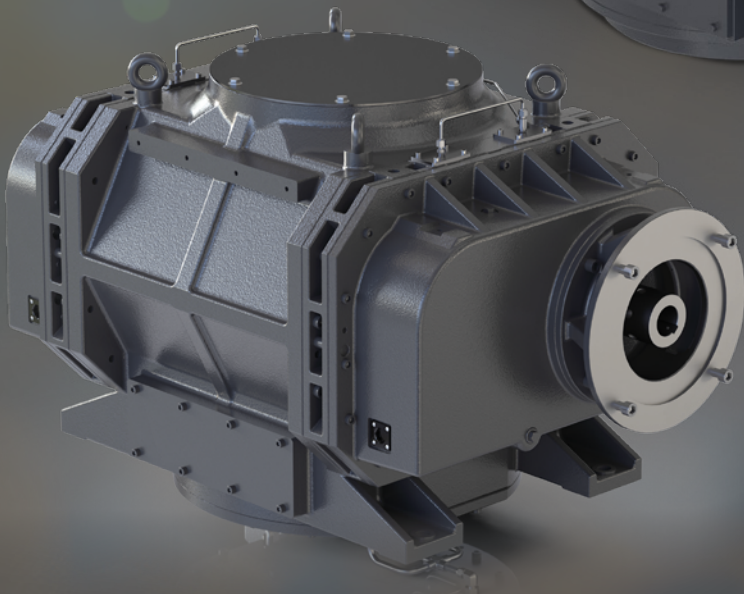
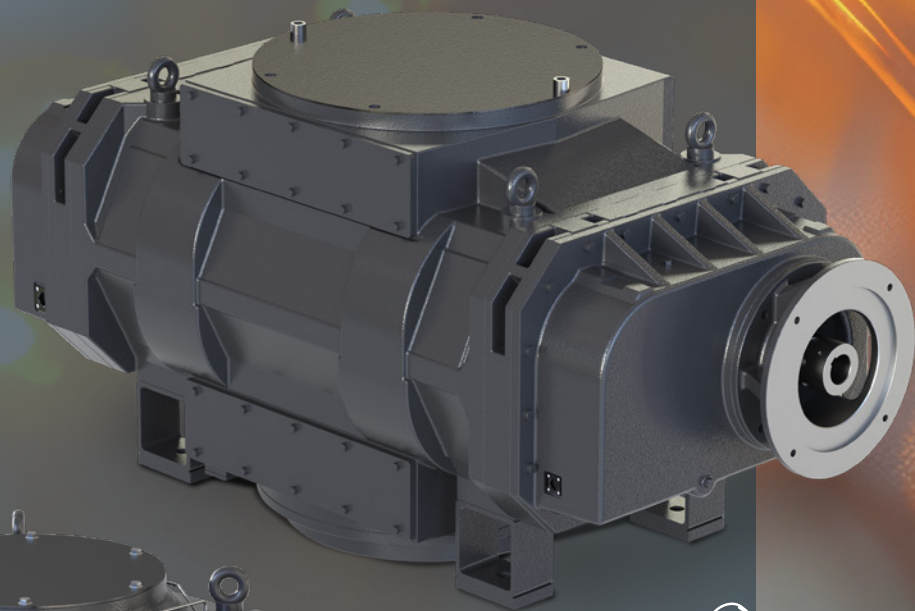


GMB ROOTS VACUUM BOOSTER PUMPS



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 vacuum booster 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

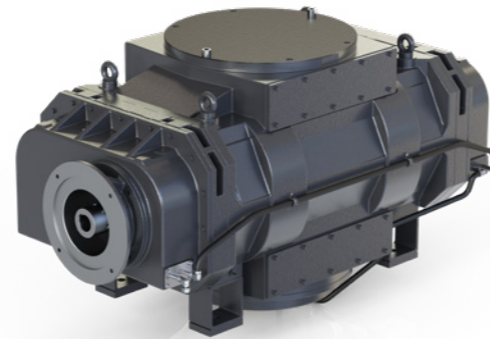


Reliable – peace of mind for your process

- 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



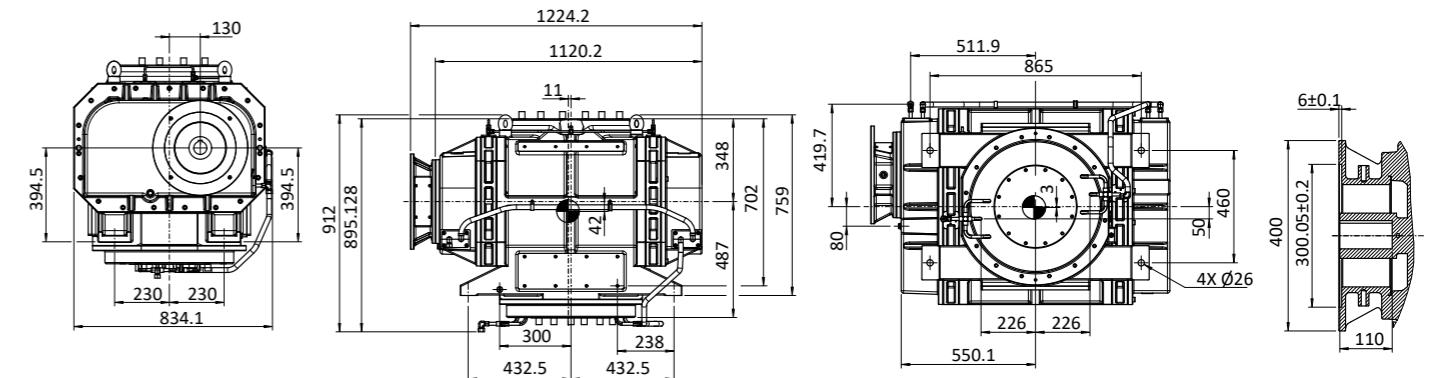
TECHNICAL SPECIFICATIONS

| | Units | GMB25K | GMB40K |
|--|--|----------------------------------|---------------|
| Displacement (swept volume) at 3,960 rpm | m ³ /hr (cfm) | 25500 (15009) | 44300 (26074) |
| Minimum backing capacity | m ³ /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

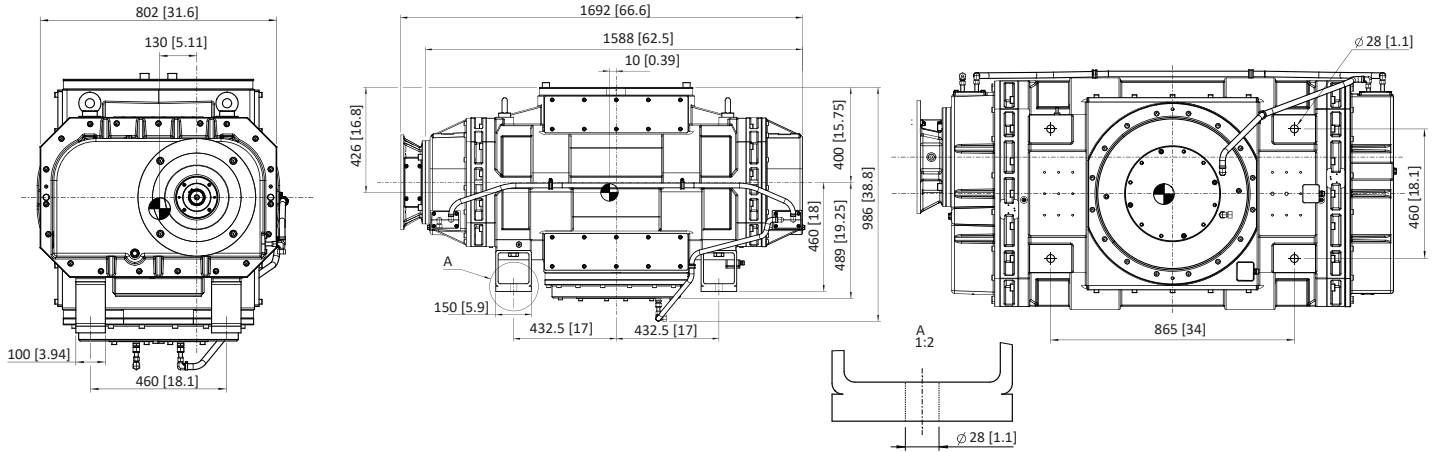
DIMENSIONS

GMB25K



DIMENSIONS

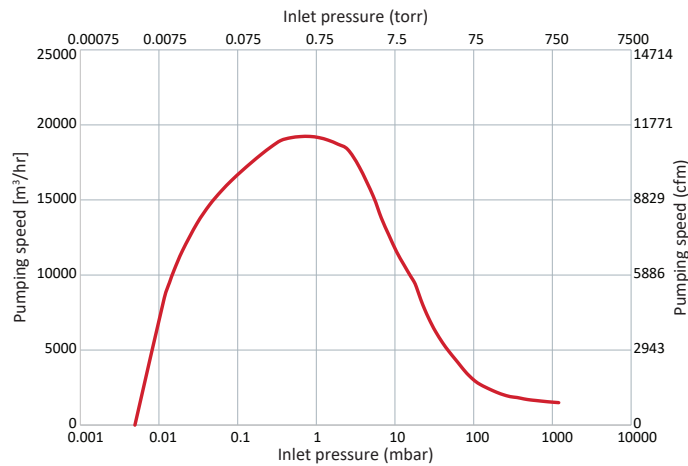
GMB40K



PERFORMANCE CURVES

GMB25K

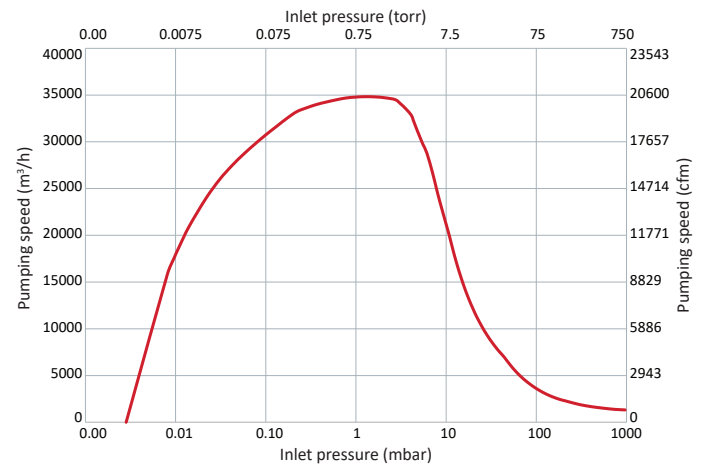
Typical pumping speed of GMB25K (as part of system)*



*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 |

