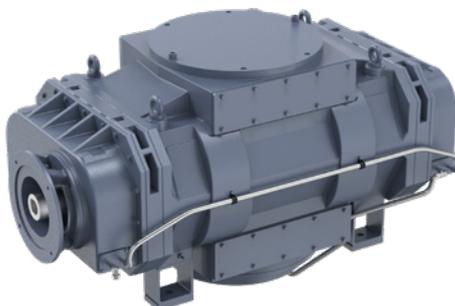
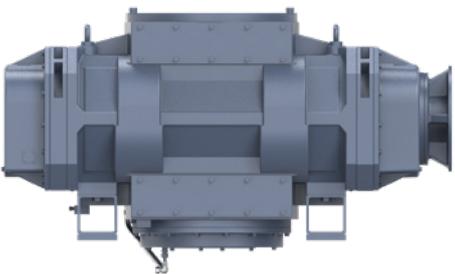
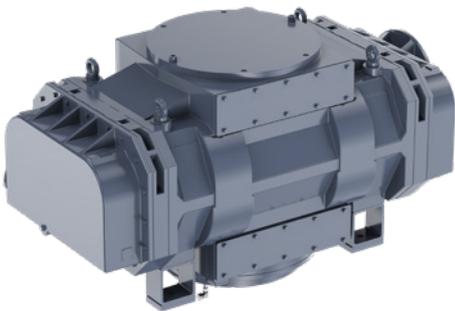


# GMB40K HIGH-CAPACITY ROOTS VACUUM BOOSTER PUMPS

edwardsvacuum.com

The new Edwards GMB40K roots 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 GMB40K roots pump ensures a high degree of flexibility when designing large vacuum systems. The GMB40K 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.



## FEATURES



### 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



### 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



### 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

## APPLICATIONS

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

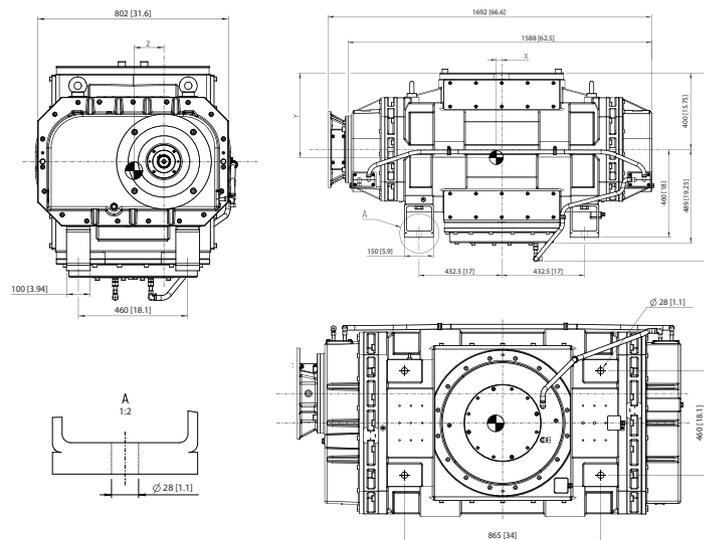
TECHNICAL DATA

	Units	GMB40K
Pumping speed	m <sup>3</sup> /hr	31,000*
	cfm	18,250
Minimum backing capacity	m <sup>3</sup> /hr	6,500
	cfm	3,825
Max pressure across booster	mbar	25
	torr	18.75
Total input power at ultimate	kW	<2.5
	hp	<3.35
Ultimate pressure	mbar	<0.01*
	torr	<0.008
Rotational speed	rpm (min)	540
	rpm (max)	3,960
Motor power	kW	IEC - 30
	hp	NEMA - 40
Noise	dB(A)	80
Vibration	mm s <sup>-1</sup>	<4
	inch s <sup>-1</sup>	<0.16
Cooling water connections	BSP (IEC variant)	1/2"
	NPT (NEMA variant)	
Cooling water temperature	°C	5 - 40
	°F	41 - 104
Minimum cooling water flow (@max temp)	litres min <sup>-1</sup>	10
	US gal min <sup>-1</sup>	2.6
Seal purge connection	BSP (IEC variant)	1/4"
	NPT (NEMA variant)	
Purge gas pressure	bar	0.3 - 0.5
	psi	5 - 7
Purge gas flow (minimum)	slm	4
Cooling water pressure	bar	1.0
	psi	14.7
Recommended lubrication type	Synthetic booster gear oil	
Lubricant quantity	litres	7
	US gal	1.85
Connection flanges	Inlet	DN500
	Outlet	ISO250
Weight (without motor)	Kg	2260
	lbs	4980
Ambient T	°C	-20 - 40
	°F	-4 - 104

\*With typical Edwards GXS or IDX based backing pumps @6,700 m<sup>3</sup>/hr

DIMENSIONS

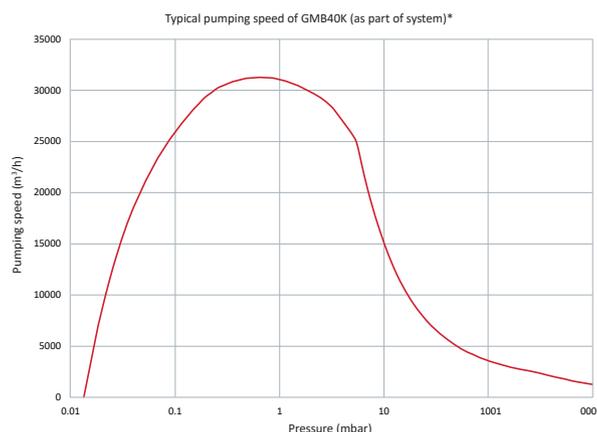
Dimension	Steel variant mm (in)	CPI variant mm (in)
W	986 (38.8)	923 (36.3)
X	10 (0.39)	10 (0.39)
Y	426 (16.8)	426 (16.8)
Z	130 (5.11)	130 (5.11)



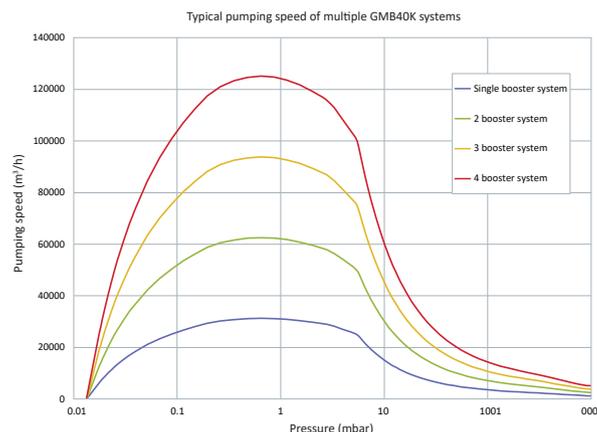
ORDERING INFORMATION

Part Number	Product Description
A30801985	GMB40K STL DEGASS IEC B-SHAFT
A30802985	GMB40K STL DEGASS NEMA B-SHAFT
A30803985	GMB40K T2 IEC B-SHAFT STL DEGASS
A30805985	GMB40K IEC B-SHAFT CPI
A30807985	GMB40K T3 IEC B-SHAFT CPI

PERFORMANCE CURVES



With a 6,700 m<sup>3</sup>/hr backing pump system. This can be achieved by 3 Standard Edwards GXS vacuum pumps.



Scalable technology for simple design of large pumping systems or adding redundancy to valuable processes.

