



DRB 1500-3000 VSD+

DRB VSD+ and DRB booster pumps from Atlas Copco

Booster vacuum pumps, also known as Roots vacuum pumps, are generally used to increase the pumping speed of a system or with the goal of reaching a lower ultimate vacuum level. Booster pumps are used in a wide range of applications, most used in the rough vacuum range, especially when high pumping speeds and low pressures are required.

Combined with dry or oil-sealed fore-vacuum pumps, our DRB and DRB VSD+ range of booster pumps are used very effectively to increase the pumping speed at low pressures, thus extending the operating pressure range of the fore-vacuum pumps.

Due to the non-contact rotational design of these pumps, they are able to run at higher speeds, offering increased pumping speeds for the backing pumps. An added advantage is the lower energy consumption as compared to a single backing pump with the same pumping speed.



Booster pumps combined with VSD technology

The most frequent use of the DRB Roots vacuum pumps is as an enabler for smaller primary vacuum pumps. They are designed to boost the most demanding requirements for modern vacuum-based production processes. We have taken this a step further and combined it with Atlas Copco Vacuum's Variable Speed Drive (VSD) technology.

- Bluetooth connectivity gain complete remote control of your booster pump via Bluetooth
- Our DRB VSD+ series can be controlled via HEX@™, Atlas Copco's revolutionary vacuum pump controller
- Energy saving
- Soft start up
- Simpler control and systemization
- Temperature protection
- Torque protection and performance optimizer



Features and benefits

Simple and trusted design

The DRB series, non-contact rotational design offers increased pumping speeds for backing pumps. Smart design features include protection against thermal overloading. The DRB VSD+ and DRB series are available in air-cooled versions.

Robust and easy to maintain

The robust pump design boosts the most demanding process requirements for industrial applications. Service intervals are longer and requires minimal on-site maintenance.

Easy and flexible installation

The DRB VSD+ and DRB series of pumps can be easily connected to any primary vacuum pump. They are easy to integrate into existing vacuum systems due to their compact design. It is also easy to implement conversion from vertical to horizontal flow.

KEY FOIL

Energy efficient pumps

The DRB VSD+ and DRB series of booster pumps are equipped with IE3 three-phase motors and consume lesser energy and have low carbon emissions and noise levels.

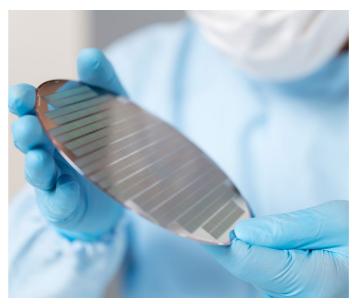
Applications

Booster pumps are used in a wide range of applications, most commonly used in the rough vacuum range, especially when high pumping speeds and low pressures are required.





- Li-ion battery production
- Food and vegetable vacuum cooling
- Vacuum drying
- Freeze-drying
- High speed packaging
- Altitude simulation
- Leak testing
- Metallurgy degassing
- Coating
- Semi-conductor crystal growth or pulling







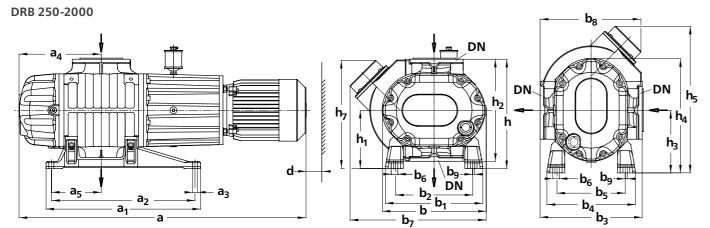




Technical specifications

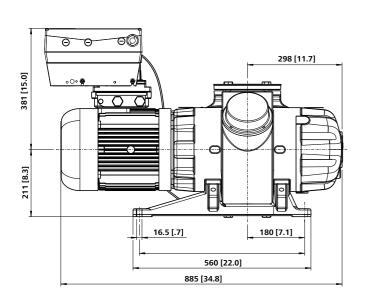
		Unit	DRB 250	DRB 500	DRB 1000	DRB 2000	DRB 1500 VSD+	DRB 3000 VSD+		
Pumping speed-50Hz		m³/hr (cfm)	253 (149)	505 (297)	1000 (589)	2050 (1208)	4500/004	2000/1767		
Pumping speed	d-60Hz	m³/hr (cfm)	304 (179)	606 (357)	1200 (707)	2460 (1449)	1500/884	3000/1767		
Max. permissible pressure differential across pump		mbar (Torr)		80 (60)		50 (38)	80 (60)			
Inlet/outlet co	nnection	-	63 15	50-K	100 ISO-K	160 ISO-K	100 ISO-K	160 ISO-K		
Nominal motor power		kW (hp)	1.1 (1.5)	2.2 (3.0)	4.0 (5.4)	7.5 (10.0)	4.0 (5.4)	7.5 (10)		
Dimensions	Length	mm (inch)	735 (28.9)	840 (33.1)	1059 (41.7)	1277 (50.3)	941/37	1042/41		
	Width	mm (inch)	305 (12.0)	390 (15.4)	494 (19.4)	638 (25.1)	496/19.5	667/26.3		
	Height	mm (inch)	300 (11.8)	340 (13.4)	396 (15.6)	530 (20.9)	592/23.3	718/28.3		
Weight net mass		kg (Ibs)	94 (207)	142 (313)	254 (560)	452 (997)	242/534	474/1045		

Technical drawings

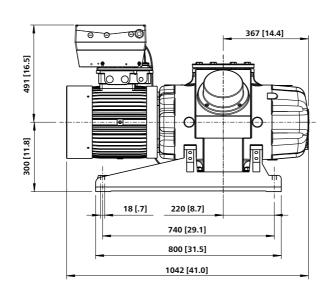


	DN	a ₁	a ₂	a ₃	a ₅	b	b ₁	b ₂	p³	b ₄	b ₅	b ₆	b ₇ 1)	b ₈ 1)	b ₉	d	h	h ₃	h ₄	h ₅ 1)	h ₇
DRB 250	65	405	365	14	120	250	270	210	280	230	170	24	305	285	7.5	50	300	180	306	360	307
DRB 500	65	486	450	14	155	310	299	229	320	271	201	24	390	313	7.5	50	340	194	348	430	332
DRB 1000	100	560	520	16.5	180	376	352	278	370	320	246	24	494	366	7.5	50	396	227	414	532	392
DRB 2000	150	800	740	18	220	463	518	388	460	422	292	24	638	456	7.5	50	530	348	578	753	523

DRB 1500 VSD+

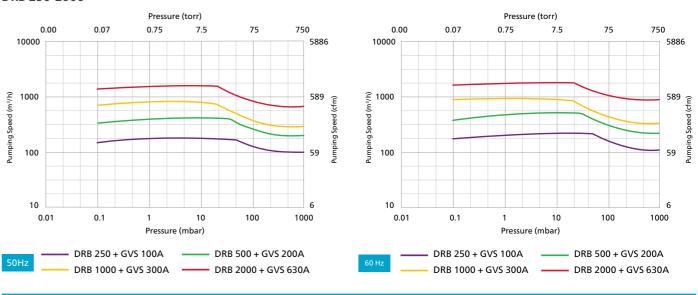


DRB 3000 VSD+

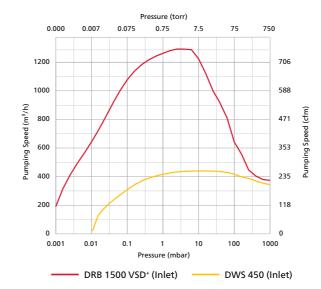


Performance curves

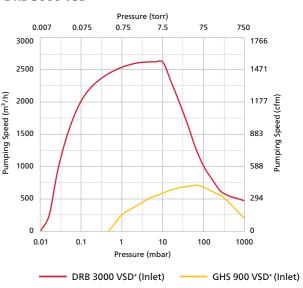
DRB 250-2000



DRB 1500 VSD+



DRB 3000 VSD+



Service support and maintenance



Complete service with our **Preventive Care plan**

We take over the maintenance planning and responsibility for servicing your vacuum pump on a regular basis. Our Preventive Care plan is tailored to your pump's needs. As your pump is serviced with the latest technology, high levels of energy efficiency are achieved. We will also optimize service events to reduce your total cost of ownership and increase your productivity. This allows you to focus fully on your production.



Cost-effective approach

Regular scheduled maintenance can identify potential problems before they occur and plans can be structured around your individual production situation. Preventive Care enables cost management as you can plan your maintenance costs in advance. In this way, expenses associated with unplanned downtime are minimized.



Maximize lifetime of your vacuum pumps

Our vacuum specialists are well-trained and experts in the field. They will help you to improve uptime and protect your processes. Regular maintenance conducted by one of our vacuum specialists reduces the risk of deterioration. Damaged or worn parts will be replaced with genuine Atlas Copco spare parts to protect your investment and increase the lifespan of your vacuum pumps.



Reliability meets non-stop productivity

We use genuine Atlas Copco spare parts and oil and our services are conducted by vacuum specialists according to manufacturer's recommendations. This enhances your vacuum pump performance, reducing the risk of downtime and enabling your production to run more smoothly.



