


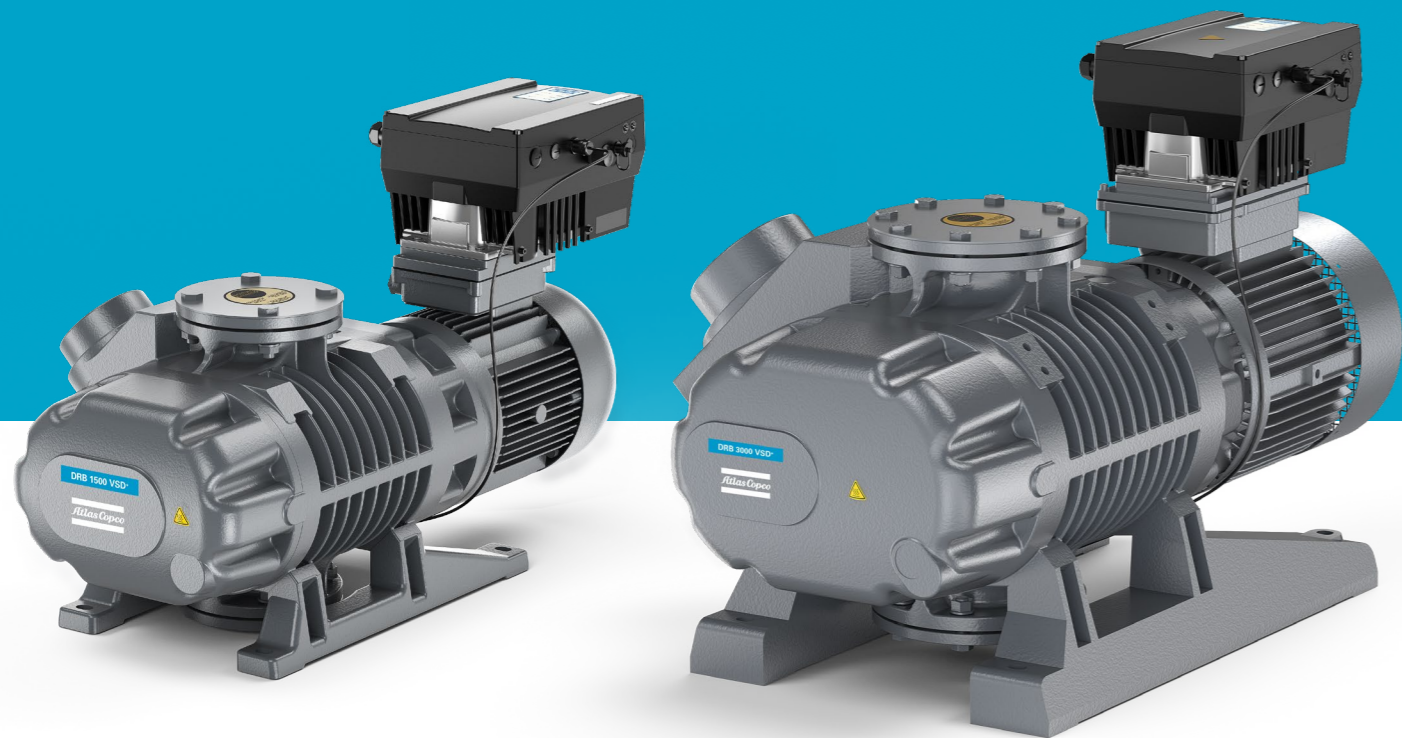


Atlas Copco



DRB and DRB VSD<sup>+</sup>  
fixed and variable speed  
booster pumps

DRB 1500-3000 VSD<sup>+</sup>  
DRB 250-2000



## DRB VSD+ and DRB booster pumps from Atlas Copco

DRB 1500-3000 VSD+

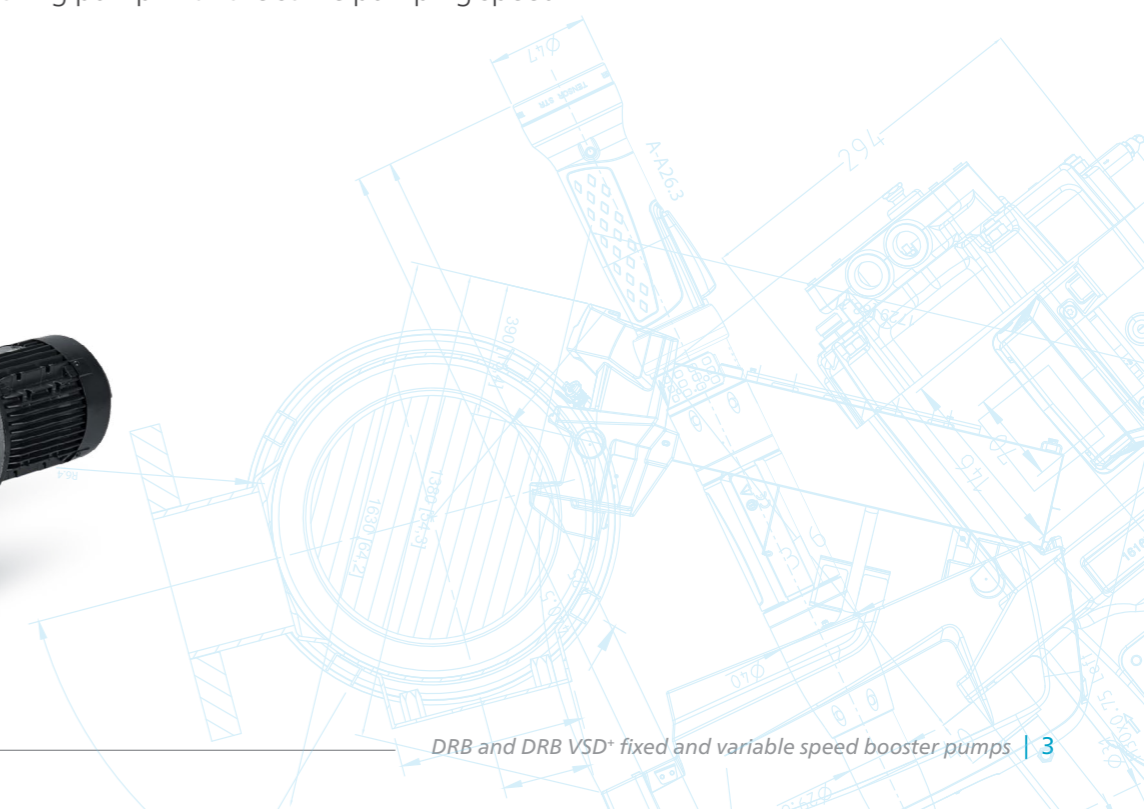
Booster vacuum pumps, also known as Roots vacuum pumps, are generally used to increase the pumping speed of a system or with the goal of reaching a lower ultimate vacuum level. Booster pumps are used in a wide range of applications, most used in the rough vacuum range, especially when high pumping speeds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



DRB 250-2000



## 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

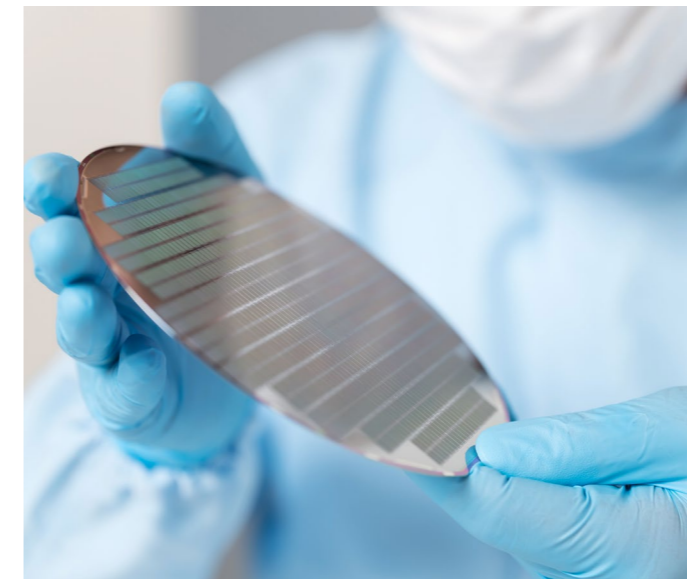
The DRB VSD+ and DRB series of pumps can be easily connected to any primary vacuum pump. They are easy to integrate into existing vacuum systems due to their compact design. It is also easy to implement conversion from vertical to horizontal flow.

### Energy efficient pumps

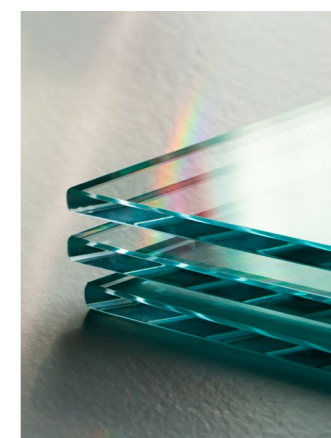
The DRB VSD+ and DRB series of booster pumps are equipped with IE3 three-phase motors and consume lesser energy and have low carbon emissions and noise levels.

## 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

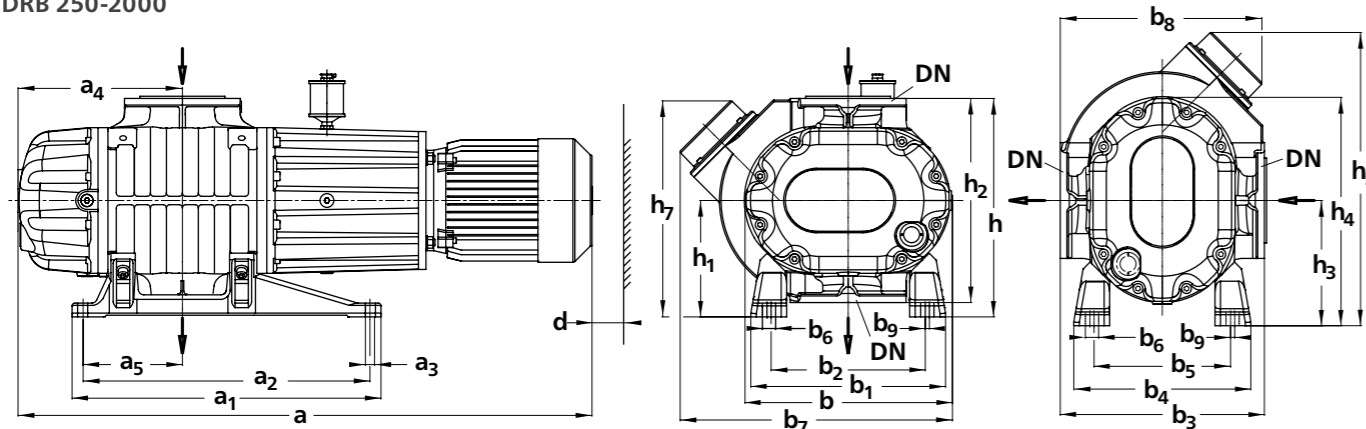


## Technical specifications

		Unit	DRB 250	DRB 500	DRB 1000	DRB 2000	DRB 1500 VSD*	DRB 3000 VSD*
Pumping speed-50Hz		m <sup>3</sup> /hr (cfm)	253 (149)	505 (297)	1000 (589)	2050 (1208)	1500/884	3000/1767
Pumping speed-60Hz		m <sup>3</sup> /hr (cfm)	304 (179)	606 (357)	1200 (707)	2460 (1449)		
Max. permissible pressure differential across pump		mbar (Torr)	80 (60)			50 (38)	80 (60)	
Inlet/outlet connection		-	63 ISO-K			100 ISO-K	160 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 (lbs)	94 (207)	142 (313)	254 (560)	452 (997)	242/534	474/1045

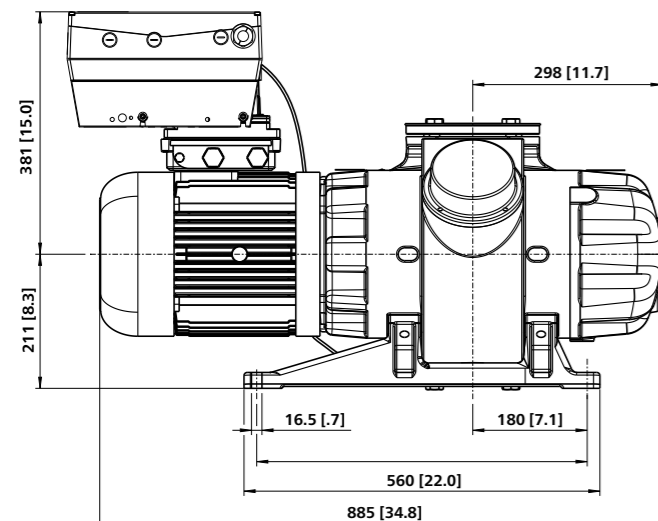
## Technical drawings

DRB 250-2000

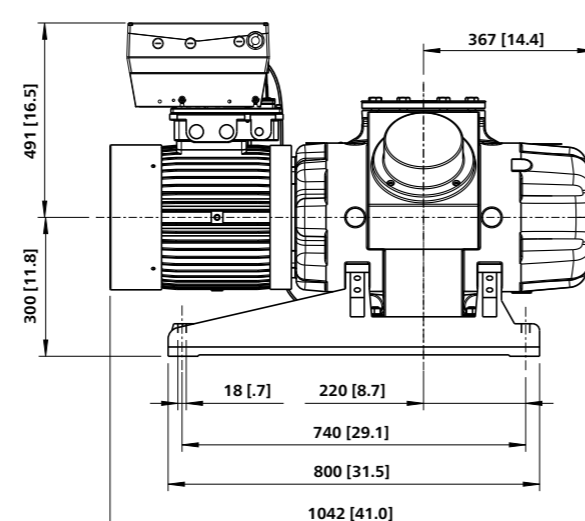


	DN	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	a <sub>5</sub>	b	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	b <sub>4</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub> <sup>1)</sup>	b <sub>8</sub> <sup>1)</sup>	b <sub>9</sub>	d	h	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub> <sup>1)</sup>	h <sub>7</sub>
<b>DRB 250</b>	65	405	365	14	120	250	270	210	280	230	170	24	305	285	7.5	50	300	180	306	360	307
<b>DRB 500</b>	65	486	450	14	155	310	299	229	320	271	201	24	390	313	7.5	50	340	194	348	430	332
<b>DRB 1000</b>	100	560	520	16.5	180	376	352	278	370	320	246	24	494	366	7.5	50	396	227	414	532	392
<b>DRB 2000</b>	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\*

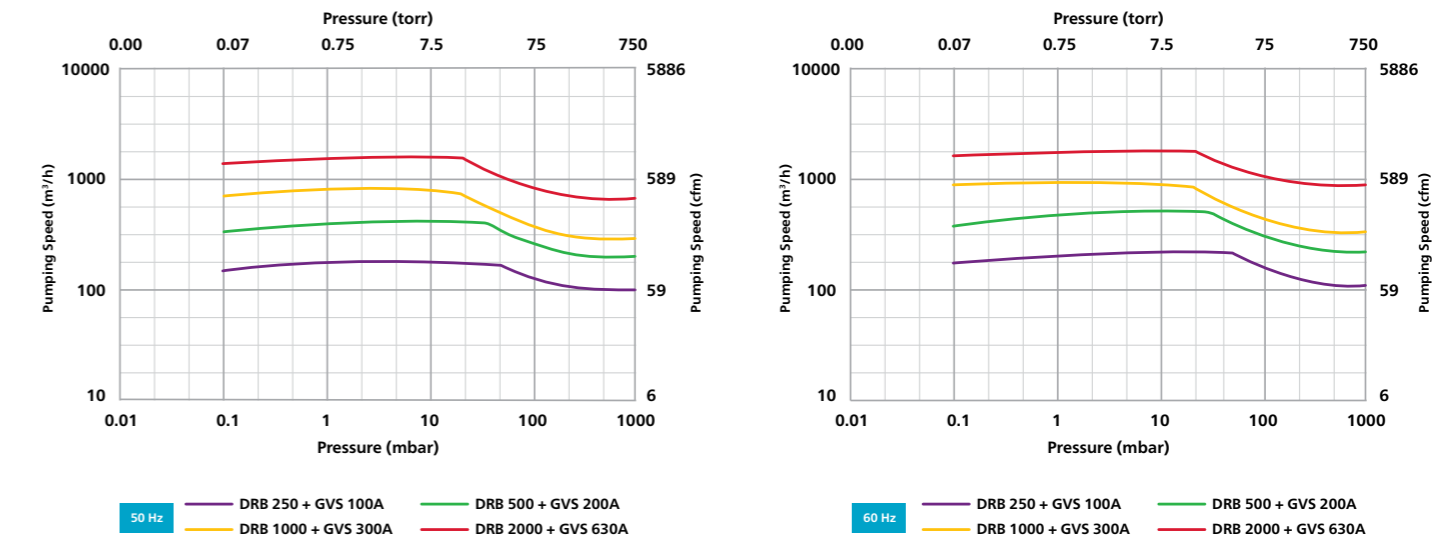


DRB 3000 VSD\*

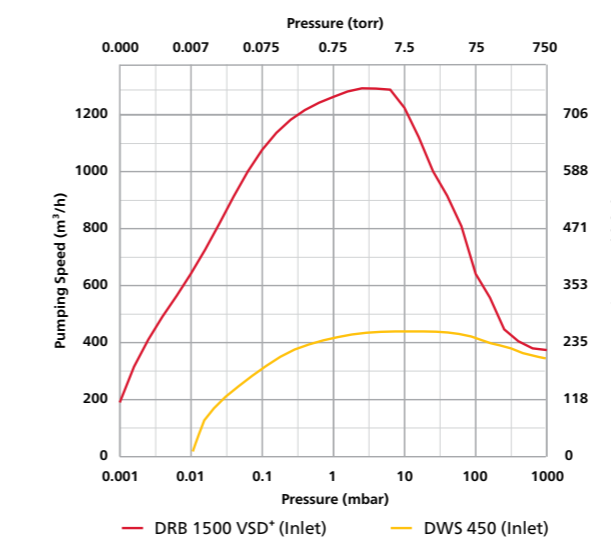


## Performance curves

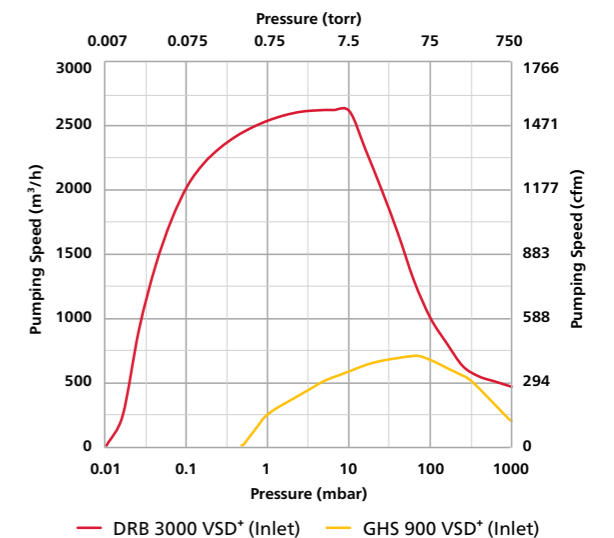
DRB 250-2000



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.

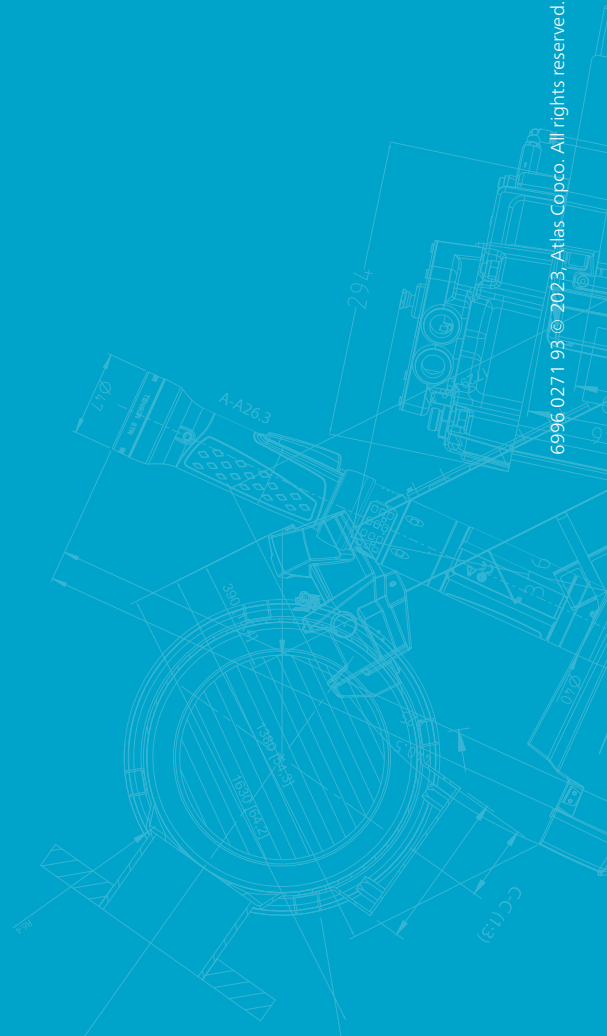
### Reliability meets non-stop productivity

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.



Atlas Copco AB

[atlas-copco.com/vacuum](https://atlas-copco.com/vacuum)



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