

DVS DRY VANE VACUUM PUMPS

The latest new in Atlas Copco product portfolio are the Dry Vane pumps, that complete our offer to cover the segment of rough vacuum.

Different models are available to cover the most common applications needs.

The compact design ensure to Atlas Copco dry vane pumps to be suitable for installation even having small room available, thanks to the rotor assembled directly on the motor shaft -directly driven machine.



Dry Vane pumps do not need of oil to run. This ensures oil-free and clean operation. The DVS-series offer unparalleled design simplicity and competitive initial investment costs for rough vacuum applications.

All Atlas Copco dry vane pumps come equipped with inlet filter and outlet silencer in order to guarantee a complete solution to our customers.

The range

The DVS5, 8, 12, 16-25-40, 60-80 and 100-140 are a range of single stage, oil free and air-cooled dry vane vacuum pumps.

These compact machines, with a small footprint, deliver excellent performance with all the support expected from Atlas Copco. The performed flows are from 5 to 140 m³/h with ultimate pressure that goes from 120 to 150 mbar depending on the model. Thanks to the complete closed canopy DVS can guarantee a silence operation for the range of vane pumps. The new design with the frontal grid ensures a fast and easy service thanks to the direct access to the vanes housing.



Working Principles

Rotary vane vacuum pump works on a positive displacement pumping principle. The design consists of a rotor, which is mounted eccentrically inside a cylindrical housing or stator. High quality graphite blades mounted inside the rotor, slide in and out and turn against the inner wall of the rotor due to centrifugal force following the internal surface of the housing, creating vacuum/pressure. This process happens in a close chamber: the air enters the suction side of the chamber, where it compresses with each rotation. Once the suction chamber reaches its maximum capacity, the contents release into the discharge chamber and through the pump outlet. Finally, an exhaust valve prevents backflow by blocking contents that try to reenter the pump.



The dry running pumps use graphite vanes which rub over the surface of the housing cylinder. This creates a graphite layer on the surface which allows the vanes to slide with minimal wear. The air must also be filtered after compression to blow out nearly particle-free air. In addition, the air is normally led through an air-air cooler to reduce the temperature of the exhaust air. The pump can work 24/7.

All of this allows to get simple, dry, and reliable industrial vacuum pump which fits for all below applications.

www.atlascopco.com/en-us/vacuum-solutions • Ph: 1(800) 848-4511 • NACustomerCare@vt.atlascopco.com

Features and Benefits

➤ Efficient



- ❖ Direct drive
- ❖ Very low noise level
- ❖ Small footprint
- ❖ Long time between service

➤ Robust Design



- ❖ Reliable graphite vanes
- ❖ Design for an easy maintenance
- ❖ Compact and modular design
- ❖ Included accessories

➤ Clean



- ❖ Dry and oil-free vacuum technology
- ❖ Air cooling pump
- ❖ No emissions and contamination for your process

Applications:

Dry vane vacuum pumps are used for applications which require clean and non-oil ambient beside production lines. Plus, if required vacuum level is less 400 mbar(a) (*500 mbar(a) for example*) we don't recommend usual oil sealed vane vacuum pumps due to a big gas load on an oil system on these vacuum levels close to atmospheric pressure.

Main applications:

- Pneumatic conveying
- Holding, Lifting, Moving
- Pick & Place
- CVS
- Dust extraction systems
- Degassing


Main industries:

- Flat Glass
- Medical
- Food and Beverage
- Plastic
- Printing
- Woodworking
- Electronics
- Pharmaceutical
- Packaging

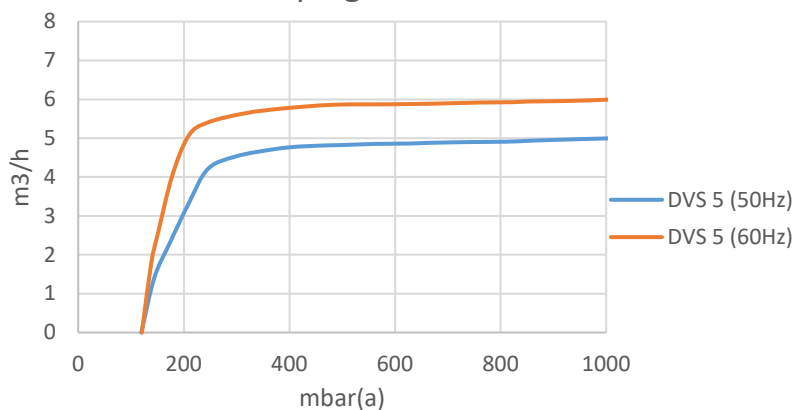
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Thank you for your interest in our dry vane vacuum pumps.
We would like to introduce following model: **Atlas Copco DVS 5 1ph**

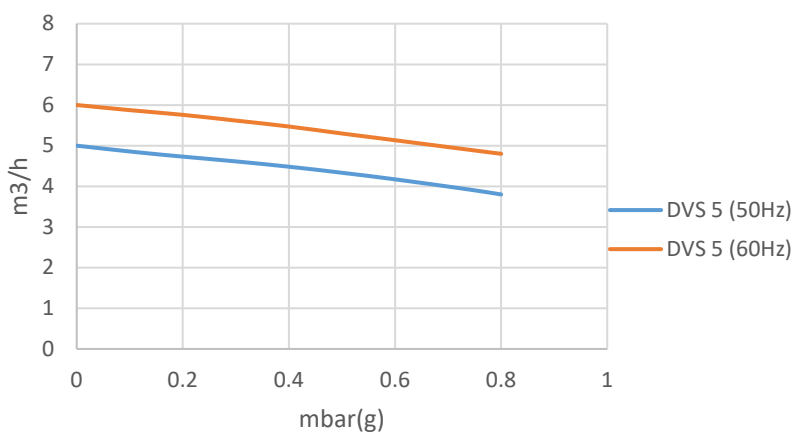
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	5 / 6	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	0.,8	
Nominal electric power (50/60 Hz), kW	0.12 / 0.15	
Nominal rpm (50/60 Hz), n/min	2800 / 3300	
Dimensions, mm	226 x 139 x 138	
Net mass, kg	5.4	
Connection inlet	G 1/8"	
Connection outlet	G 1/8"	

Pumping curve DVS 5




Performance curve DVS 5



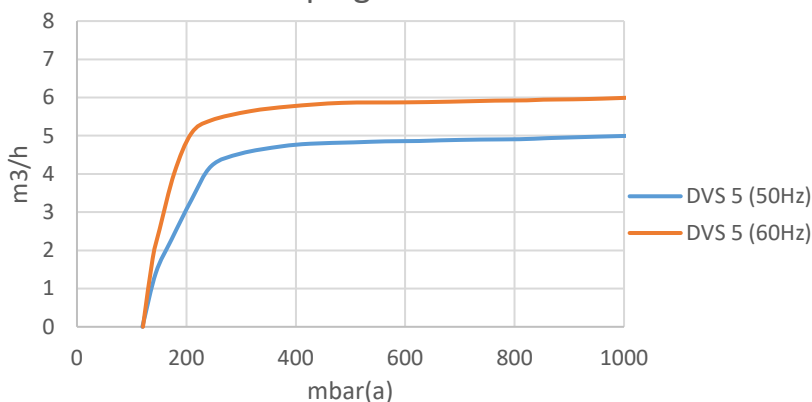
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Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 5 3ph**

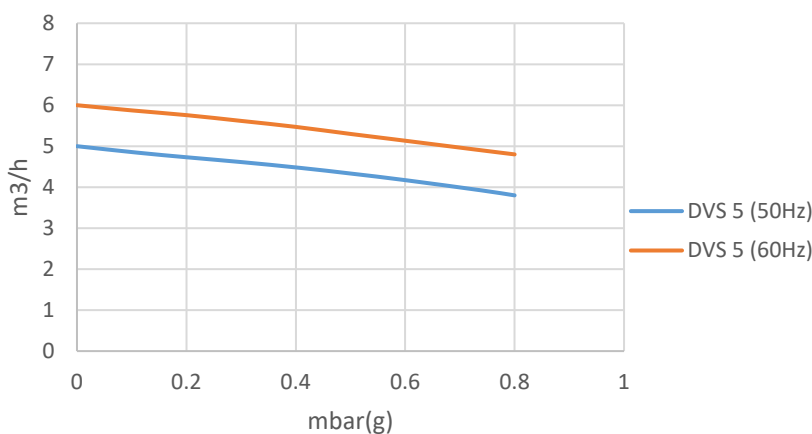
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	5 / 6	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	0.8	
Nominal electric power (50/60 Hz), kW	0.12 / 0.15	
Nominal rpm (50/60 Hz), n/min	2800 / 3300	
Dimensions, mm	226 x 120 x 138	
Net mass, kg	5.4	
Connection inlet	G 1/8"	
Connection outlet	G 1/8"	

Pumping curve DVS 5




Performance curve DVS 5



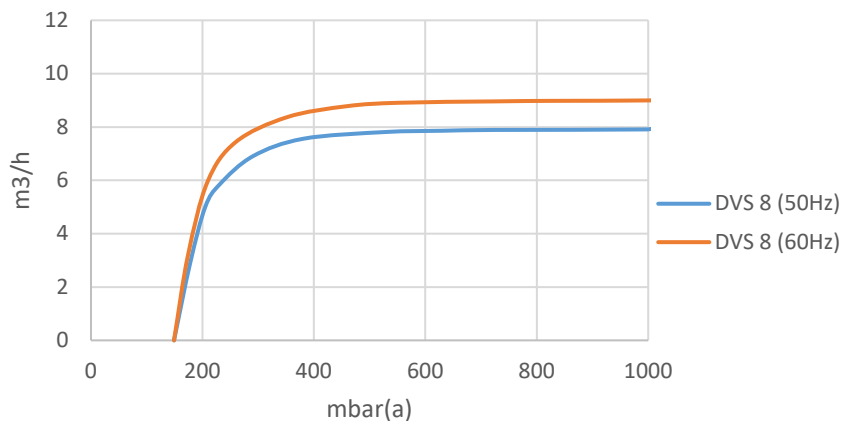
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Thank you for your interest to our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 8 1ph**

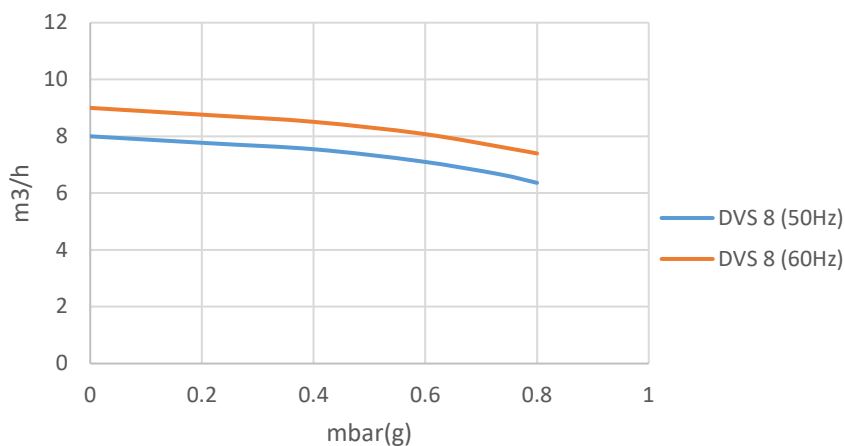
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	8 / 9	
Ultimate vacuum, mbar(a)	150	
Maximum pressure, bar(e)	0.8	
Nominal electric power (50/60 Hz), kW	0.25 / 0.3	
Nominal rpm (50/60 Hz), n/min	2800 / 3300	
Dimensions, mm	253 x 167 x 160	
Net mass, kg	8.5	
Connection inlet	G 3/8"	
Connection outlet	G 1/2"	

Pumping curve DVS 8




Performance curve DVS 8



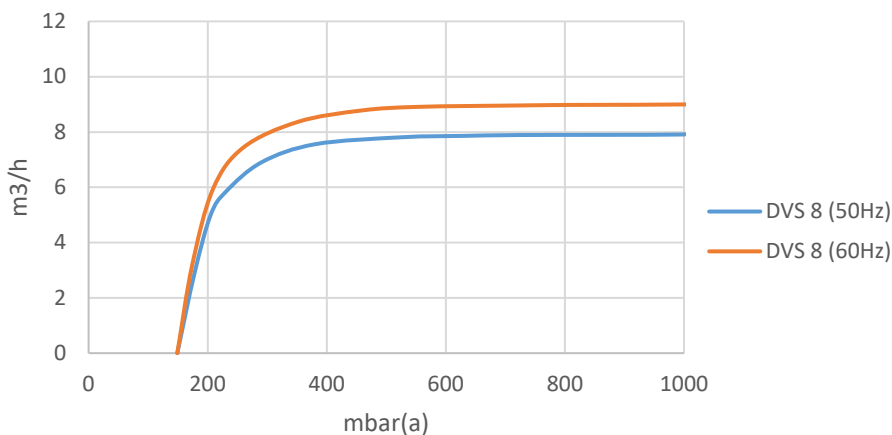
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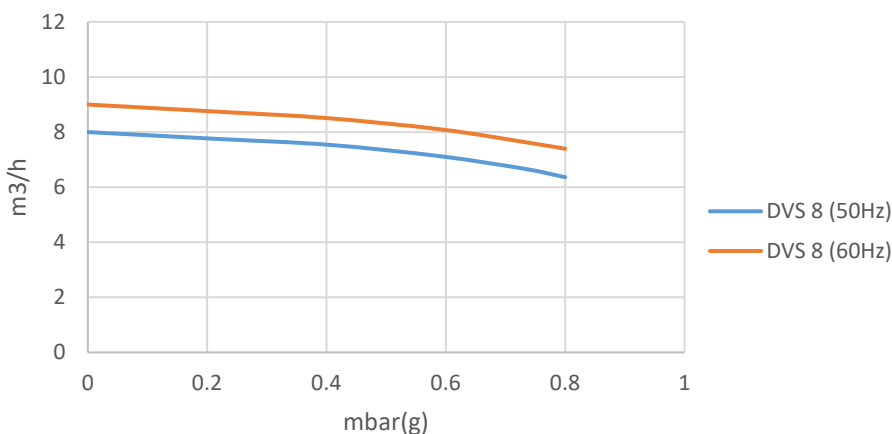
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	8 / 9	
Ultimate vacuum, mbar(a)	150	
Maximum pressure, bar(e)	0.8	
Nominal electric power (50/60 Hz), kW	0.25 / 0.3	
Nominal rpm (50/60 Hz), n/min	2800 / 3300	
Dimensions, mm	253 x 167 x 147	
Net mass, kg	8.5	
Connection inlet	G 3/8"	
Connection outlet	G 1/2"	

Pumping curve DVS 8




Performance curve DVS 8



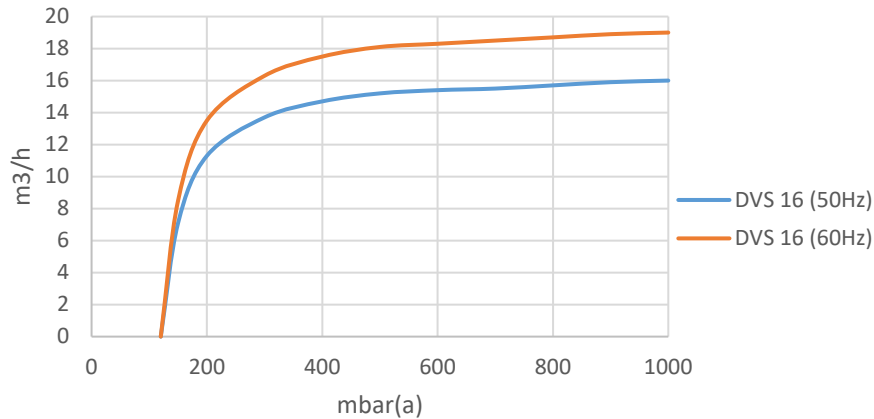
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Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 16 1ph**

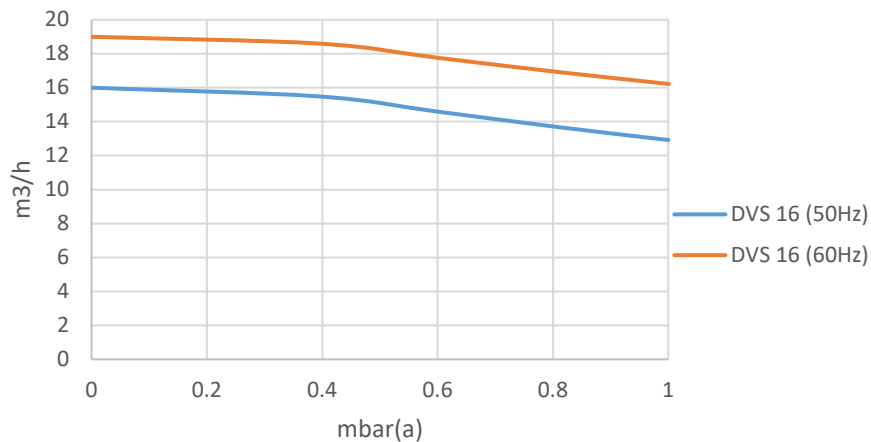
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	16 / 19	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	1.0	
Nominal electric power (50/60 Hz), kW	0.75 / 0.9	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	412 x 206 x 270	
Net mass, kg	31	
Connection inlet	G 1/2"	
Connection outlet	G 1/2"	

Pumping curve DVS 16




Performance curve DVS 16



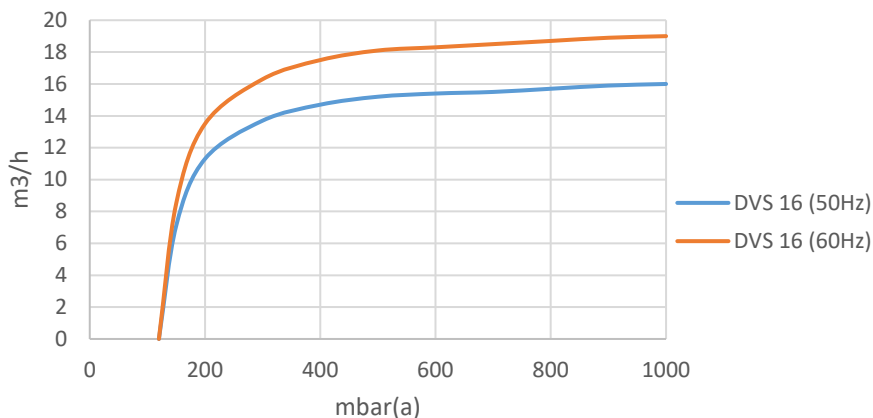
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 We would like to introduce following model: **Atlas Copco DVS 16 3ph**

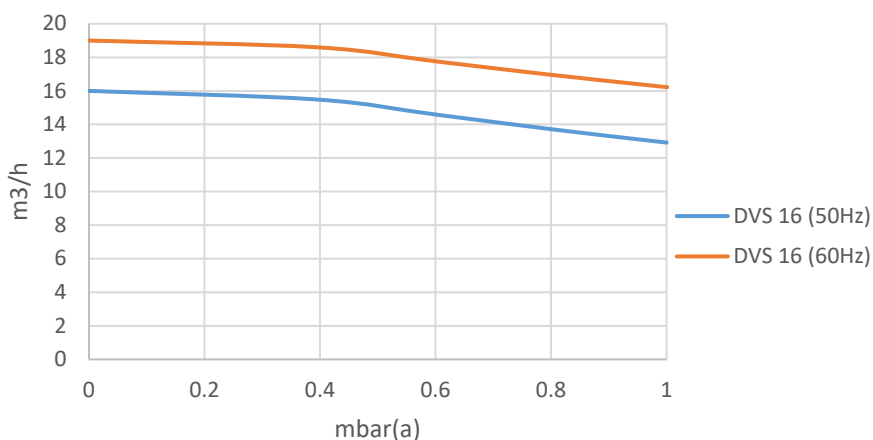
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	16 / 19	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	1.0	
Nominal electric power (50/60 Hz), kW	0.75 / 0.9	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	412 x 206 x 244	
Net mass, kg	33	
Connection inlet	G 1/2"	
Connection outlet	G 1/2"	

Pumping curve DVS 16




Performance curve DVS 16



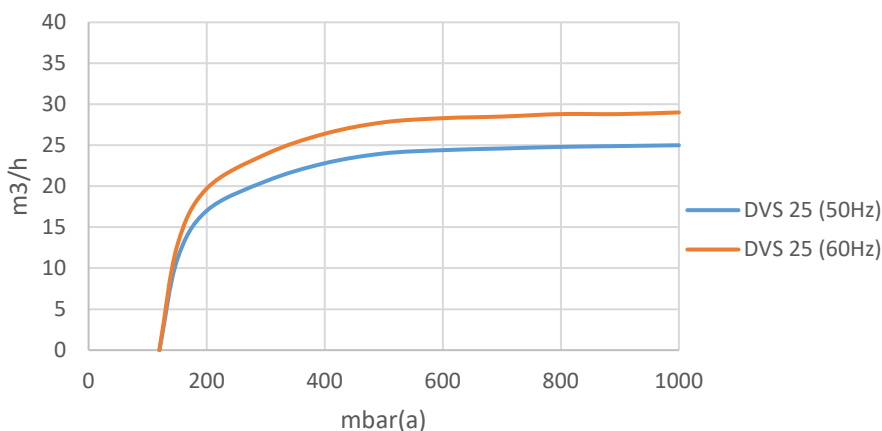
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Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 25 1ph**

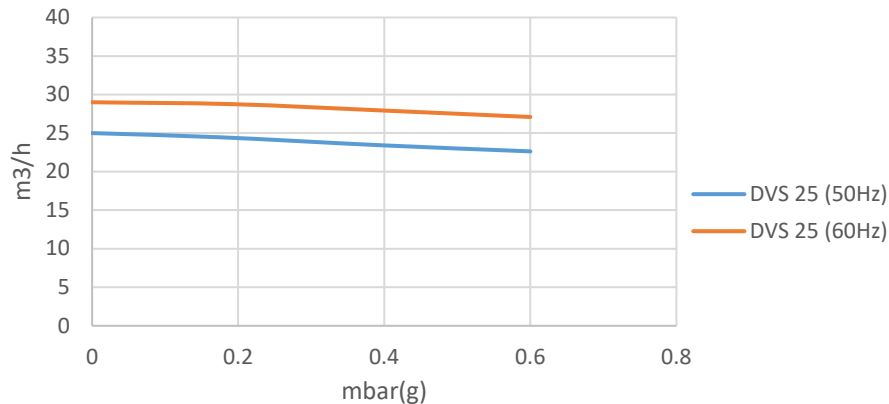
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	25 / 29	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	0.6	
Nominal electric power (50/60 Hz), kW	0.75 / 0.9	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	412 x 206 x 270	
Net mass, kg	31	
Connection inlet	G 3/4"	
Connection outlet	G 1/2"	

Pumping curve DVS 25




Performance curve DVS 25

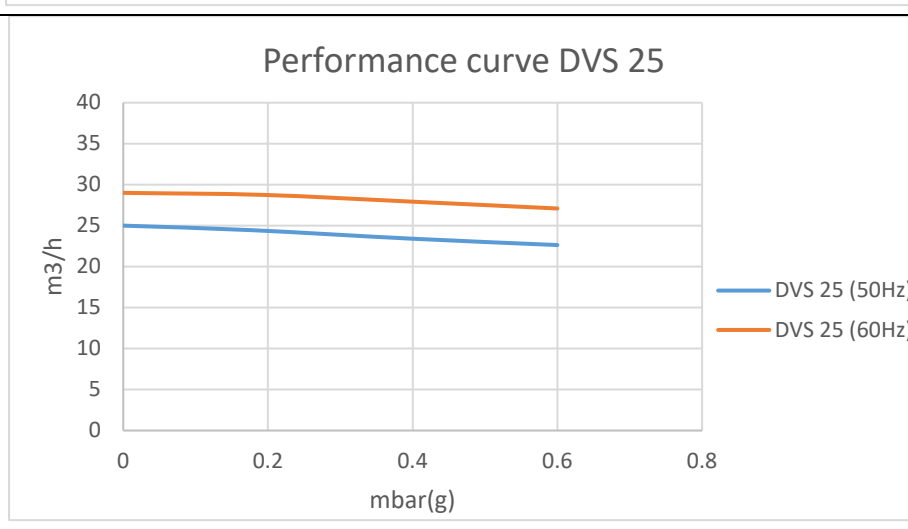
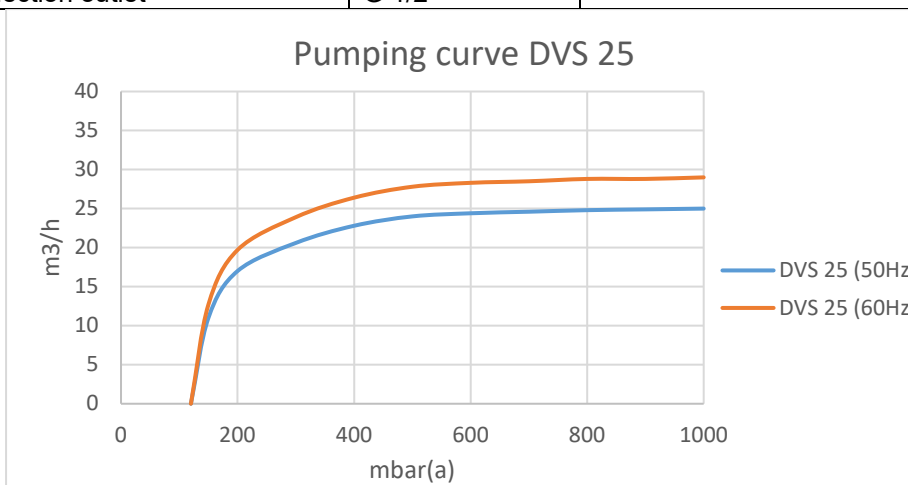


Datasheet:

Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 25 3ph**

Main technical parameters


Nominal capacity (50/60 Hz), m ³ /h	25 / 29	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	0.6	
Nominal electric power (50/60 Hz), kW	0.75 / 0.9	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	412 x 206 x 244	
Net mass, kg	33	
Connection inlet	G 3/4"	
Connection outlet	G 1/2"	

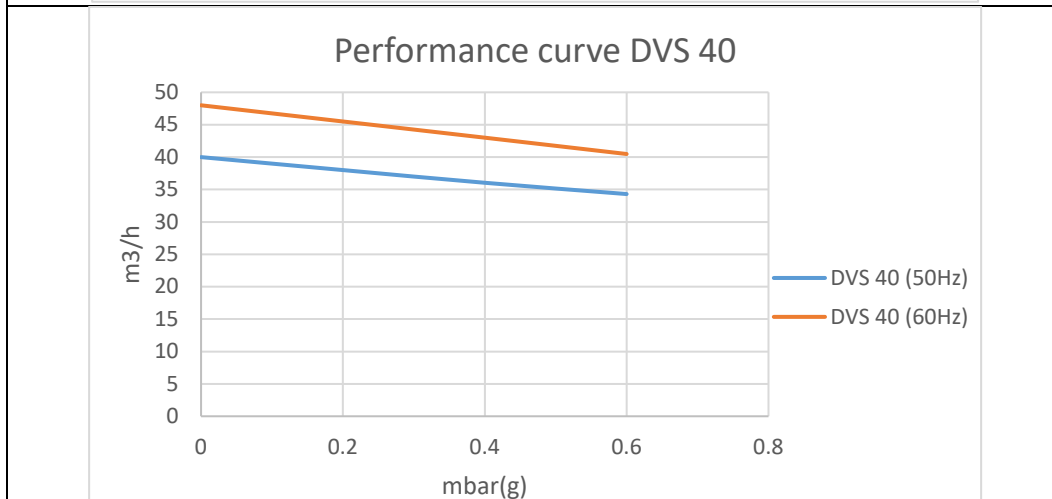
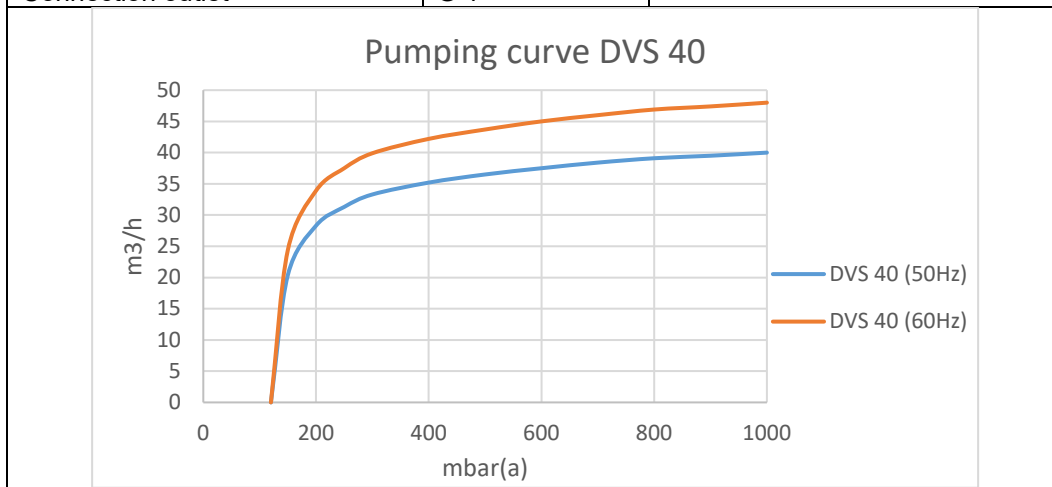


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Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 40 1ph**

Main technical parameters


Nominal capacity (50/60 Hz), m ³ /h	40 / 48	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	0,6	
Nominal electric power (50/60 Hz), kW	1.3 / 1.5	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	485 x 230 x 309	
Net mass, kg	42	
Connection inlet	G 1"	
Connection outlet	G 1"	



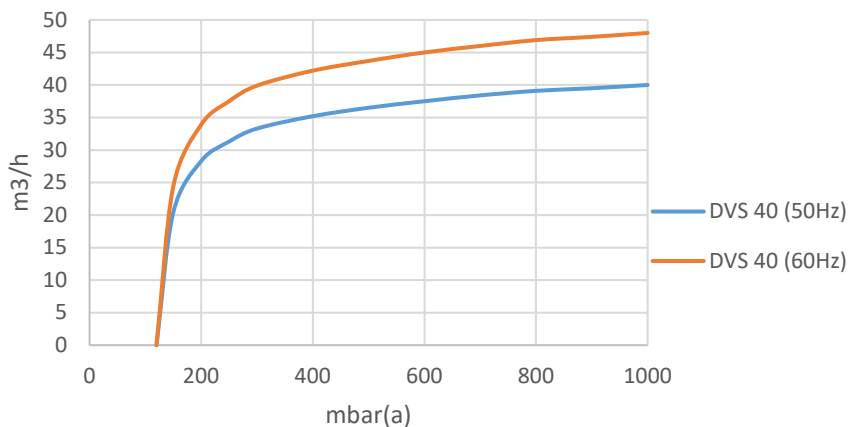
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Thank you for your interest in our dry vane vacuum pumps.
We would like to introduce following model: **Atlas Copco DVS 40 3ph**

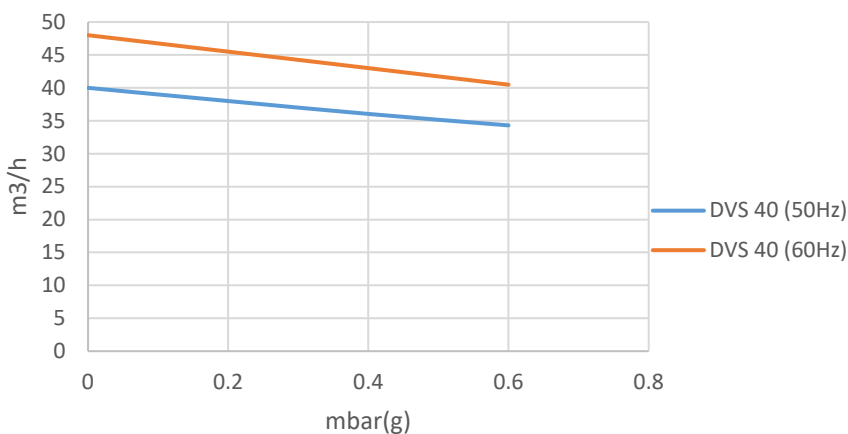
Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	40 / 48	
Ultimate vacuum, mbar(a)	120	
Maximum pressure, bar(e)	0,6	
Nominal electric power (50/60 Hz), kW	1.3 / 1.5	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	485 x 230 x 270	
Net mass, kg	45	
Connection inlet	G 1"	
Connection outlet	G 1"	

Pumping curve DVS 40




Performance curve DVS 40



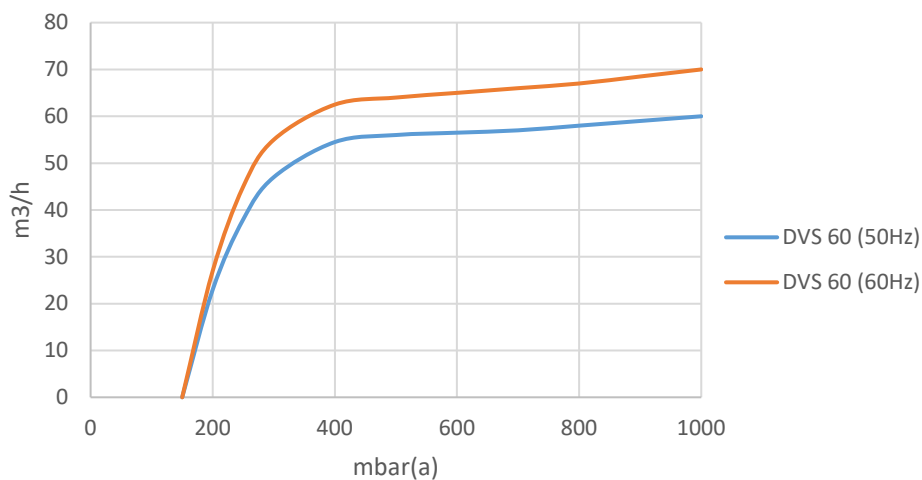
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Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 60 3ph**

Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	60 / 70	
Ultimate vacuum, mbar(a)	150	
Nominal electric power (50/60 Hz), kW	1.5 / 1.8	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	692 x 365 x 382	
Net mass, kg	66	
Connection inlet	G 1"	
Connection outlet	G 1"	


Pumping curve DVS 60

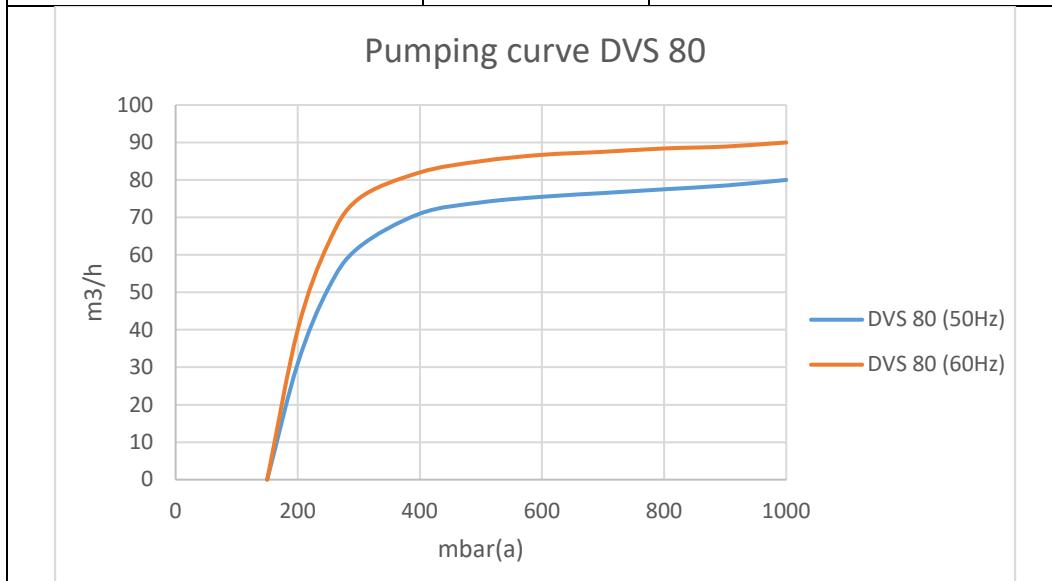


Datasheet:

Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 80 3ph**

Main technical parameters


Nominal capacity (50/60 Hz), m ³ /h	80 / 90	
Ultimate vacuum, mbar(a)	150	
Nominal electric power (50/60 Hz), kW	2.2 / 3.0	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	722 x 365 x 382	
Net mass, kg	71	
Connection inlet	G 1"	
Connection outlet	G 1"	



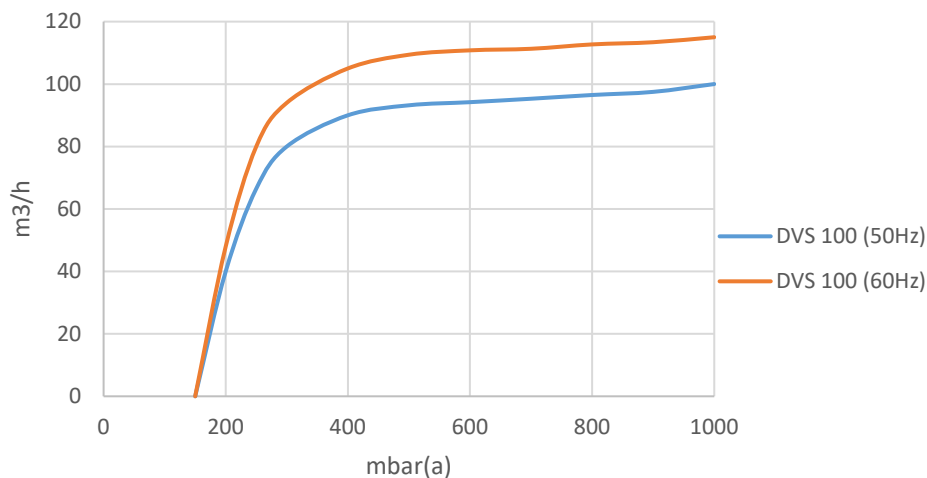
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Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 100 3ph**

Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	100 / 115	
Ultimate vacuum, mbar(a)	150	
Nominal electric power (50/60 Hz), kW	3.4 / 4.0	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	820 x 365 x 382	
Net mass, kg	87	
Connection inlet	G 1 1/2"	
Connection outlet	G 1 1/2"	


Pumping curve DVS 100



Datasheet:

Thank you for your interest in our dry vane vacuum pumps.
 We would like to introduce following model: **Atlas Copco DVS 140 3ph**

Main technical parameters

Nominal capacity (50/60 Hz), m ³ /h	130 / 150	
Ultimate vacuum (50/60 Hz), mbar(a)	150 / 200	
Nominal electric power (50/60 Hz), kW	3,4 / 4,0	
Nominal rpm (50/60 Hz), n/min	1400 / 1700	
Dimensions, mm	820 x 365 x 382	
Net mass, kg	95	
Connection inlet	G 1 1/2"	
Connection outlet	G 1 1/2"	

Pumping curve DVS 140

