



Atlas Copco



DZS 500-1000 DZS 600-1200 VSD⁺

Fixed and Variable Speed Dry Claw
Vacuum Pumps



Dry claw vacuum pumps range

DZS 500



DZS 1000



DZS 600 VSD+



DZS 1200 VSD+



Fixed and variable speed dry claw vacuum pumps



At Atlas Copco Vacuum, delivering value to our customers and clean technology for the planet drives our innovation. We invest in technology like our range of dry claw vacuum pumps that deliver benefits like higher productivity, minimized energy consumption, operator-friendly control, easy maintenance, and lower operation costs. Our range of dry screw vacuum pumps are friendly on the environment – with no contaminated oil to dispose. Dry technology means no exhaust emissions and a clean, reliable performance.



Vacuum relief valve

- Prevents overheating when running at ultimate vacuum



Inlet non return valve

- Isolates pump from process when the pump is shut off
- You can integrate your vacuum pump into a central vacuum system



Silencer

- Reduced noise from the pump and into the work environment



VSD+ drive

- Integrated VSD+ inverter drive and pressure setpoint control



Coating

- PEEKCOAT on process wetted parts and rotors
- For durable and harsh applications that feature high water vapor loads



Wide range

- Available in bare shaft, fixed speed (IE4) and VSD+ variants

DZS 500-1000

The DZS 500-1000 series of dry claw vacuum pumps are dry contactless vacuum pumps with modular constructions consisting of compartments: pumping and gear chambers are separated by using labyrinth seals.

As two claws rotate in opposite direction, the air will be sucked in the pumping chamber, compressed and discharged under pressure. In gear chamber, two gears for synchronizing of claws rotation will be placed with appropriate oil lubrication. A built in antisuck back valve installed in inlet flange will prevent the air from flowing back into the vacuum chamber when the pump is shutdown. The pumps are directly driven by a flanged motor via a coupling.



◀ DZS 500 bare shaft



◀ DZS 1000 bare shaft



▲ DZS 500 with motor



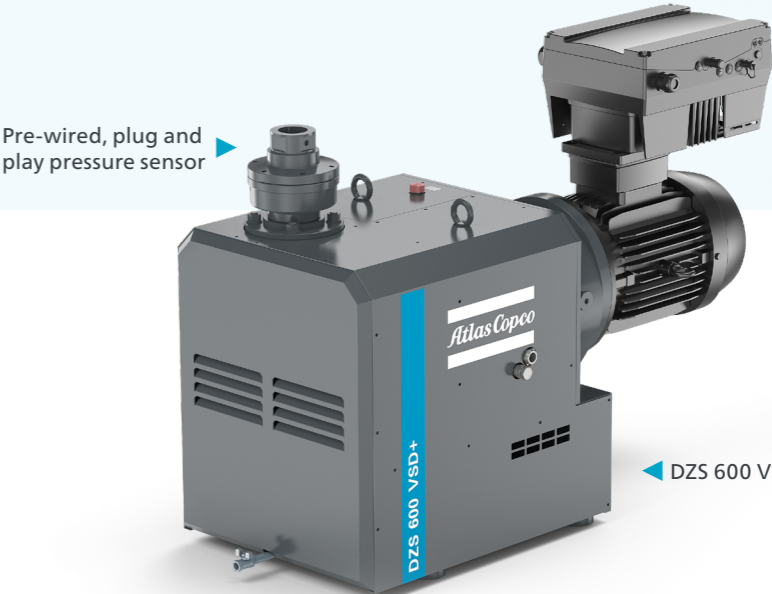
▲ DZS 1000 with motor

Key features

- Simple Modular Construction
- Air cooled & Direct Driven
- Low maintenance - No wear
- High Efficiency - Continuous Duty

DZS 600-1200 VSD+

The DZS 600 VSD+ and DZS 1200 VSD+ are a range of dry claw vacuum pumps; single stage, oil-free, air-cooled and with the VSD+ inverter drive technology built-in. The DZS VSD+ series are a range of long life and durable pumps with very low maintenance for rough vacuum applications. These compact machines with small footprint deliver high reliability through a rugged and robust design. Due to the integrated VSD+ inverter drive and pressure setpoint control, the pump is capable to run with elevated rotor speeds while matching the motor speed to the load coming from the process. The pump can run at it's ultimate vacuum level continuously without overheating.



Pre-wired, plug and play pressure sensor

◀ DZS 600 VSD+



With Bluetooth connection, smartphone control available



◀ VSD+ drive

▲ DZS 1200 VSD+

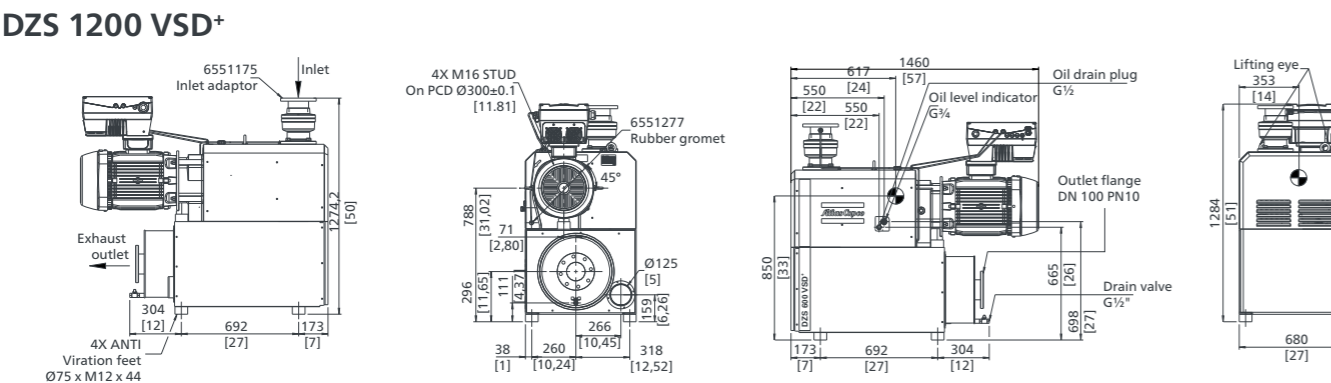
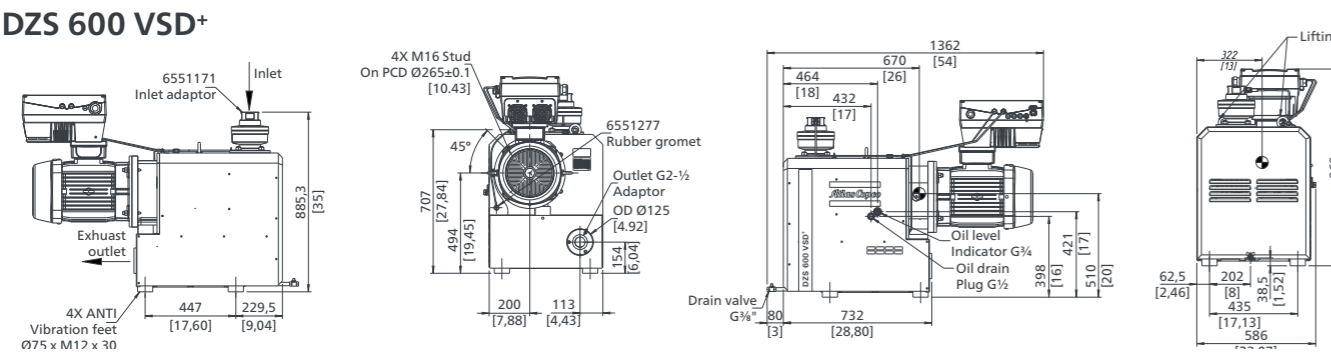
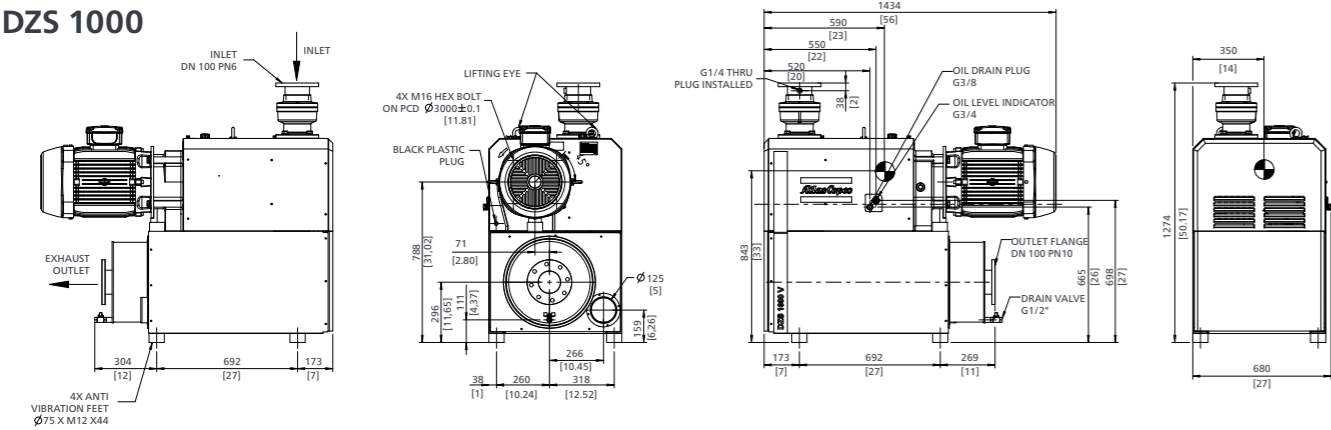
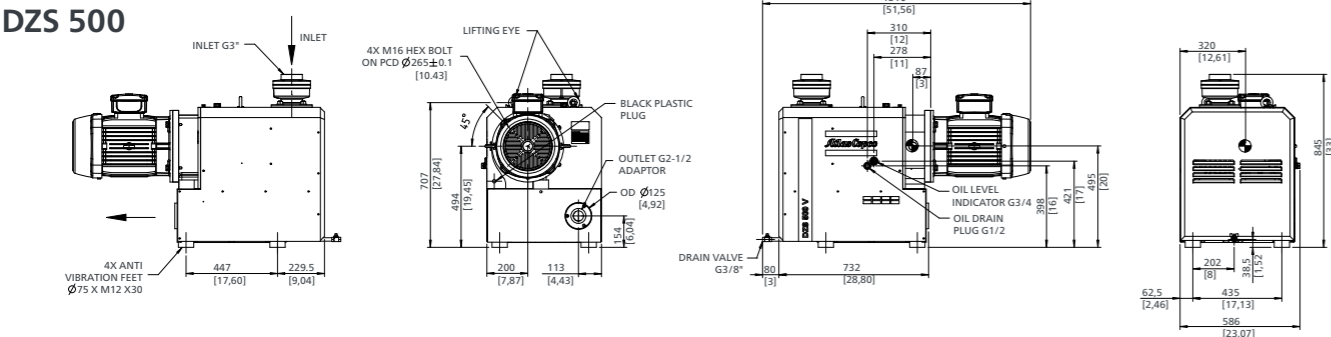


▲ Keypad foil

Applications

- CNC routing/clamping
- Tobacco
- Pneumatic conveying
- Vacuum sewage
- Pick and place
- Central vacuum systems

Drawings

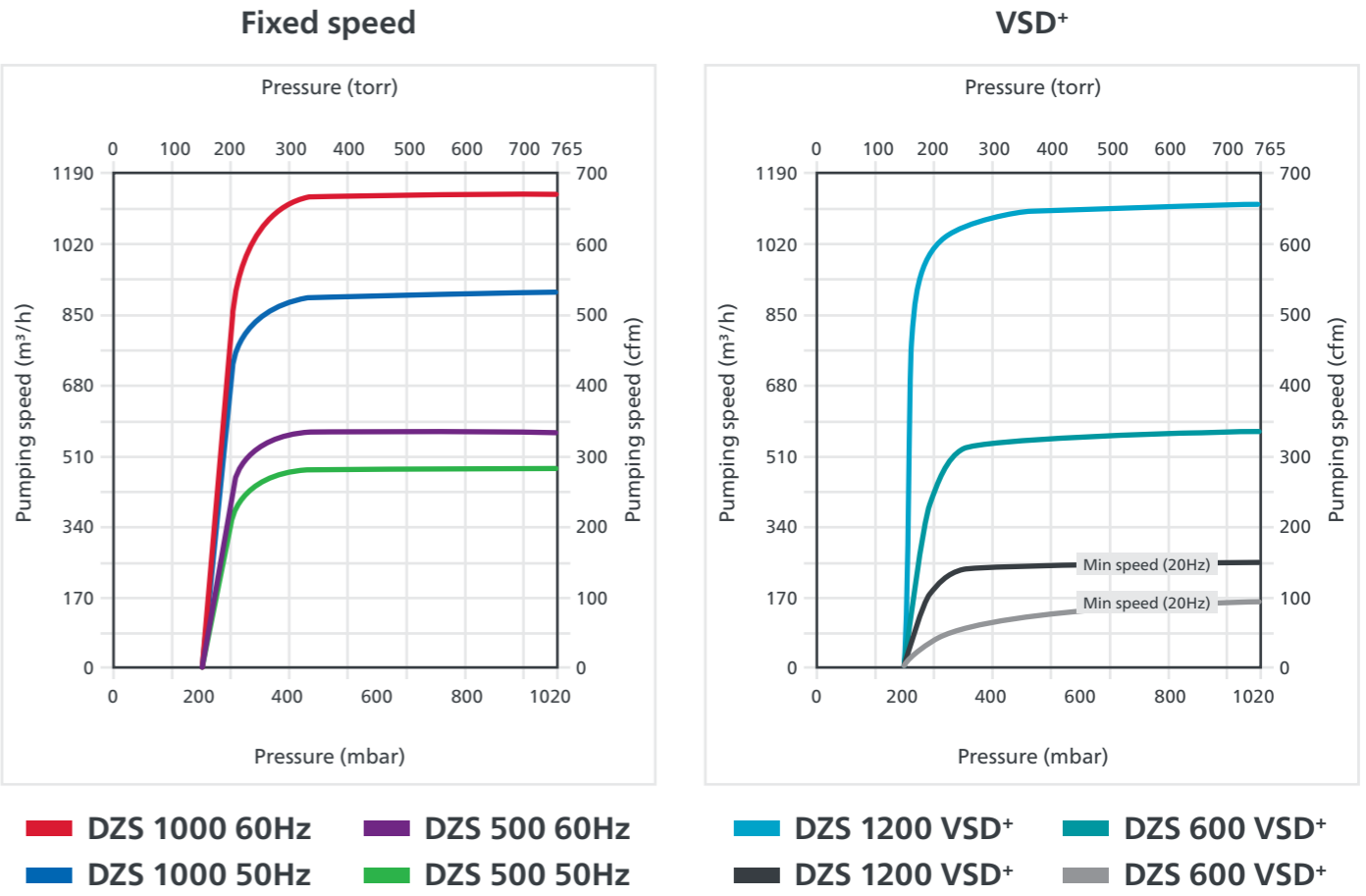


Technical data

		Unit	DZS 500	DZS 1000	DZS 600 VSD+	DZS 1200 VSD+
Performance	Peak pumping speed (60Hz)	m³h ⁻¹ / CFM	600 / 353	1140 / 670	600 / 353	1140 / 670
	Peak pumping speed (50Hz)	m³h ⁻¹ / CFM	500 / 294	950 / 558		
		Ultimate vacuum continuous	mbar / Torr	200 / 150		
Nominal motor power	@ 60Hz	kW / hp	11 / 14.7	22 / 30	11 / 14.7	22 / 30
	@ 50Hz	kW / hp	9.2 / 12.3	18.5 / 25		
	@ RPM	60Hz / 50Hz	3450 / 2850			
Vacuum connections	Inlet/ Outlet connection	Flange	**BSP(G)3"/2.5"	DN 100 PN6 / DN100 PN10	**BSP(G)3"/2.5"	DN 100 PN6 / DN100 PN10
Dimensions	W x H x L (60Hz)	mm	586 x 845 x 1310	680 x 1274 x 1434	586 x 969 x 1362	680 x 1284 x 1460
	W x H x L (50Hz)	mm	586 x 845 x 1252	680 x 1240 x 1468		
Operating data	Voltage available		400V 50Hz / 380V 60Hz / 460V 60Hz		3~200Vac -10% to 480Vac +10%, 50/60Hz ±6% 280Vdc -10% to 680Vdc +10%	
	Noise (60Hz / 50Hz)	dB(A)	78 / 76	85 / 82	up to 78	up to 85
	Operating temperature	°C / °F	5~40 / 41~104			
	Oil capacity (Gear box)	l / gal	1.5 / 0.4	2.8 / 0.7	1.5 / 0.4	2.8 / 0.7
	Accessories		Non Return Valve, Vacuum Regulator, Exhaust Silencer			

Note: 1) * Length varies to motor mfg 2) **NPT threads available upon request

Performance curves



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