



Atlas Copco



Surface dewatering pumps solutions

PAS and VAR ranges

Surface dewatering pumps solutions

The surface pumps range are used across multiple industries for applications including construction and mine site dewatering, removing floodwater, and other municipal applications.

The **PAS range** of self-priming centrifugal pumps are the ideal solution for transporting or raising water with abrasive solids in suspension. The **VAR range** of centrifugal pumps are for applications where the main feature is difficulty in priming.



UP TO 100 mm
SOLIDS
HANDLING
CAPABILITY

24 HOURS
OF CONTINUOUS
OPERATION

UP TO 76 mm
SOLIDS
HANDLING
CAPABILITY

MAX.
HEAD UP TO
75 m

COMPACT
SIZE
with maximum flow

MAX.
HEAD UP TO
40 m

MAX.
FLOW
UP TO **2100** m³/h

MAX.
FLOW
UP TO **1400** m³/h

HINGE DOOR
3 MIN
CLEAN-UP
AND RESTART

FLUSHING
MECH SEAL
1 MIN
CLEAN-UP

There is a surface pump for any surface dewatering application



1. Oil & Gas

Oil and gas projects are based when general contractors need to realize power plant and long pipeline to transfer or to extract petroleum.

In the ballasting process, our pumps take sea water in and out into shipyard tanks during loading and off-loading to ensure trim, stability and structural integrity of the vessel.

Application

- Ballasting
- Pipeline hydrostatic test
- Drilling
- Pipeline flushing



2. Mining and Quarry

To guarantee the safety operations in alluvial mining to extract mineral by dredging alluvial deposits.

Application

- Water relaunch
- Washplants
- Silt removal
- Sludge



3. Municipalities

All the projects carried out in urban areas during maintenance works, in case of sewage network emergency situation caused, for example, by floods or heavy rains. Our units suit perfectly these situations in performance, robustness and serviceability.

Application

- Sewage bypass
- Dewatering
- Emergency water treatment



4. Construction

In site, particular attention should be used to create foundations and basic structures for buildings in residential areas. Key feature is to guarantee a good dry ground to protect the facility vs water infiltration.

Application

- Site drainage
- Jetting



5. Industry

All the effluent made by the industry process should be relaunched and aftertreated.

Our units fulfill completely their work. Thanks to supply different type of materials according to the different type of fluids pumping.

Application

- Nuclear
- Firefighting temporary protection
- Effluent processing



6. Civil works

In all engineering projects of institutional buildings, road, bridges, canals, dams, airports, railways, is necessary to drain all the water out of the site of operation.

Application

- Sump water removal
- Dewatering



7. Floods controls

To control storms, hurricanes and protect residential areas versus floods in temporary solutions.

Application

- Emergency



8. Wellpoint

All the areas with high level of ground water need to be reduced. Our units got the capability to work in very large areas. System can be installed in lines, rings around the excavation and powered by several pumping units.

Application

- Groundwater level reduction
- Pipeline on-shore
- Polluted soil remediation
- Tunneling



9. Rental

In site, particular attention should be used to create foundations and basic structures for buildings in residential areas. Key feature is to guarantee a good dry ground to protect the facility vs water infiltration.

Application

- All related

PAS range

The **PAS pump system** consists of a centrifugal pump and a SuperDuo separator, which enables air to be separated from the liquid and by a vacuum pump – making automatic priming possible. Even with suction heights of several meters, the machine rapidly evacuates the air from the suction pipe and starts to pump. Additionally, thanks to the semi-open impeller, the PAS range is also suitable for pumping liquids with solids in suspension.

SERVICEABILITY IN ANY CONDITIONS

- Patented hinge door access guarantees easy clean-up with minimal downtime.
- All wear components are easily accessible with minimal downtime.
- Easy replacement of the wear components (impeller, plate, mech seal).
- Trimming plate to guarantee the hydraulic performance as an emergency reserve, before scheduled maintenance.

**EASY
MAINTENANCE**
**3 MIN
CLEAN-UP**



PACKAGING FLEXIBILITY

- One-by-one stackability in standard canopy and open version.
- Mobility, with heavy-duty skids and road trailer equipped for a range of conditions.

STACKABILITY



INTEGRATED CONTROL AND POWER CUBICLE


- Digital controller with standard warnings, shutdown, stop/start function, emergency stop and easy-to-access and read diagnostics. Configurable set point via transducer to control engine speeds*



SOLIDS HANDLING CAPABILITY

- The whole range can handle high solids.

UP TO 100 mm
**SOLIDS
HANDLING
CAPABILITY**



FLEX-MOUNT SYSTEM

- Integrated vibration mounts eliminate unwanted vibration.

Key options

- Impeller CF3M
- Wear plate CF3M
- Stainless steel shaft
- Zinc anodized

Key features

- Hinge Kit
- Trimming plate*
- Diaphragm vacuum pump
- Dry running system
- PW 250, PW500, PW 750 control panel*

* Available options may change depending on model selected.

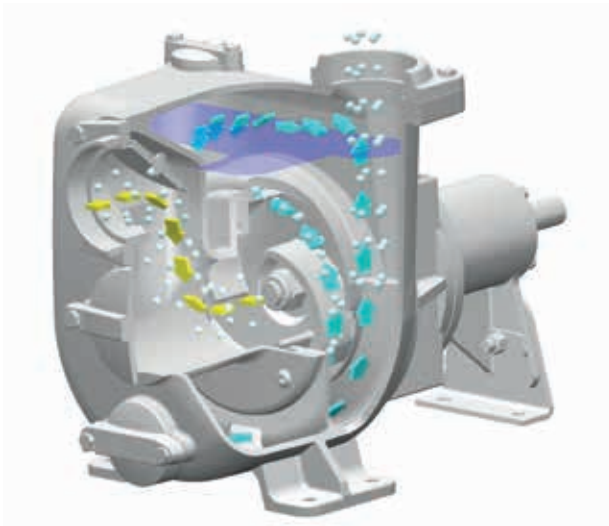
VAR range

The **VAR** series pumps range consist in centrifugal pumps, where the key is to have a simple system for first prime. The machine can, with a first water fill up, quickly evacuate the air from the suction and allow to flow the fluid with solid handlings in suspension.

The equipment suits perfectly in medium construction application, bentonite pumping and portable emergency floods control.

WET PRIME SYSTEM

- The system allow the unit to prime accorgily in every conditions trough first water filling up.
- The liquid ring will manage the air into the suction and the unit start to pump.



POSIBLE IN MOBILITY PACKAGE

- Open-frame version available



MECHANICAL SEAL FLUSHING


- Thank for the flushing predisposition on the casing backside.
- This solution can guarantee the right start up of the unit and prevent possible breaking caused by fluid solidification.



SOLIDS HANDLINGS CAPABILITY

- The whole range can handle high solids.

UP TO 76 mm
**SOLIDS
HANDLINGS
CAPABILITY**



Key options

- Impeller CF3M
- Wear plate CF3M
- Stainless steel shaft
- Zinc anodized

FLEX-MOUNT SYSTEM

- Integrated vibration mounts eliminate unwanted vibration.

PAS range

Technical data



Specifications		PAS 100 MF 250	PAS 100 MF 260	PAS 150 MF 250	PAS 200 MF 305	PAS 300 MF401	PAS 100 HF 250	PAS 150 HF 300	PAS 200 HF 305	PAS 300 HF440
Max. head	m	36	42	37	30	24	51	51	50	71
Max. capacity	m³/h	250	325	540	630	1150	280	520	920	2160
Suction / discharge size		DN100 (4")	DN100 (4")	DN150 (6")	DN200 (8")	DN300(12")	ANSI 4"	ANSI 6"	ANSI 8"	DN300 (12")
Max. solids handling	mm	50	76	76	76	100	76	76	76	89
Best efficiency point	%	70	70	77	64	62	70	70	75	72
Max. absorbed power	kW	17	24	27	33	65	29	51	78	210

Engine										
Emission compliance		Stage 3A	Stage 3A	Stage 3A	Stage 3B	Stage 4	Stage 3B	Stage 3B	Stage 4	Stage 4
Max. engine power	kW	24,3	28,4	28,4	33,6	79,1	31,0	51,2	79,1	210
Max. operating speed	rpm	2000	2000	2000	1800	1500	2200	2200	2200	1600
Max. fuel autonomy	h	51	48	48	48	24	45	27	22	12

Weight and dimensions										
Weight (dry)	kg	1260	1260	1400	1600	2600	1380	1680	2250	4200
Length	mm	2250	2250	2250	2560	2610	2560	2560	2610	3900
Width	mm	1100	1100	1100	1100	1225	1100	1100	1225	2200
Height	mm	1550	1550	1550	1705	1840	1705	1705	1840	2000

LOOKING FOR ELECTRIC?*

E-Pump OPTIONS
ALSO AVAILABLE

* Please consult with your local representative.

VAR range

Technical data



Specifications		VAR 4-250	VAR 6-250	VAR 8-305	VAR 10-305	VAR 12-400
Max. head	m	40	33	35	39	29,3
Max. capacity	m ³ /h	180	340	560	690	1400
Suction / discharge size		Threaded 4" BSP	Flanged DN 150 D.I. 1882 (6")	Flanged DN 200 UNI 6082 (8")	Flanged DN 250 D.I. 1882 (10")	Flanged DN 300 UNI 6082 (12")
Max. solids handling	mm	50	76	76	76	70
Best efficiency point	%	65	60	53	70	54
Max. absorbed power	kW	16,5	25	31	45	85,5

Engine						
Emission compliance		Stage 3A	Stage 3A	Stage 3B	Stage 4	Stage 4
Max. engine power	kW	24,3	28,4	33,6	47,7	79,1
Max. operating speed	rpm	2000	2000	1800	1800	1150
Max. fuel autonomy	h	48	42	50	47	29

Weight and dimensions ⁽¹⁾						
Weight (dry)	kg	905	935	1205	1850	2125
Length	mm	1750	1750	2500	2800	2800
Width	mm	950	950	950	1450	1450
Height	mm	1520	1520	1850	1850	1850

(1) Dimensions refer to Block model. Please refer the data sheet with overall dimensions with options

LOOKING FOR ELECTRIC?*

E-Pump OPTIONS

ALSO AVAILABLE

* Please consult with your local representative.

Product portfolio

GENERATORS

PORTABLE

1,6–12 kVA



MOBILE

9–1250* kVA



INDUSTRIAL

10–2250* kVA



CONTAINERS

800–1450 kVA



*Multiple configurations available to produce power for any size application

DEWATERING PUMPS

ELECTRIC SUBMERSIBLE

250–16.200 l/min



SURFACE PUMPS

833–23.300 l/min



SMALL PORTABLE

210–2500 l/min



Diesel and electric options available

LIGHT TOWERS

DIESEL LED AND MH



BATTERY LED



ELECTRIC LED



AIR COMPRESSORS AND HANDHELD TOOLS

AIR COMPRESSORS

1–116 m³/min
7–345 bar



HANDHELD TOOLS

Pneumatic
Hydraulic
Petrol engine driven



ONLINE SOLUTIONS

SHOP ONLINE PARTS ONLINE

Find and order the spare parts for power equipment. We handle your orders 24 hours a day.



POWER CONNECT

Scan the QR code on your machine, and go to the QR Connect Portal to find all the information about your machine.



FLEETLINK

Intelligent telematics system that helps optimize fleet usage, reduce maintenance costs, ultimately saving time and cost.



Atlas Copco

Atlas Copco AB
atlascopco.com