# Self-priming surface dewatering pumps

PAS and VAR pumps

# Self-priming surface dewatering pumps

**The surface dewatering pumps are designed to take care of energy efficiency and productivity while meeting strict emission norms**.

From construction and utilities, mining and quarries to the oil and gas industry and many more applications, these electric pumps are built to perform in the harshest pumping environments. As established portable pumps experts we bring you peace of mind as we innovate to make your pumping experience sustainable, intelligent, profitable and hassle-free.

Designed with the latest digital features, our range of portable diesel and electric-driven pumps are big on savings, delivering durable performance, zero fuel consumption, reduced noise and improved return on investment. Our service driven focus ensures ease of service, high pump uptime and low maintenance cost.

| PAS RANGE | VAS RANGE |
|---|---|
| UP TO **100 MM** SOLIDS HANDLING | UP TO **76 MM** SOLIDS HANDLING |
| UP TO **82 M** MAX.HEAD | UP TO **40 M** MAX.HEAD |
| UP TO **2200 M³/H** MAX.FLOW | UP TO **1400 M³/H** MAX.FLOW |
| **3 MIN** CLEAN-UP EASY AND RESTART HINGE DOOR | **3 MIN** CLEAN-UP EASY MAINTENANCE |
| **24 HOURS** OF CONTINUOUS OPERATION | **1 MIN** CLEAN-UP FLUSHING MECH SEAL |
| COMPACT SIZE WITH MAX. FLOW | COMPACT SIZE WITH MAX. FLOW |

# There is a thoughtfully designed surface pump for the toughest dewatering needs

### CONSTRUCTION AND UTILITIES

- Civil Construction
- Sewage Bypass
- Municipal Bypass
- Site Dewatering
- Emergency Deployment
- Temporary Fire fighting

### MINING AND QUARRY

- Water Transfer
- Temporary Fire fighting
- Water Relaunch
- Site Dewatering

### OIL, GAS AND INDUSTRY

- Oil Well Fracking
- Temporary Fire fighting
- On/Offshore
- Back up system
- Pipe Testing

# E PAS range

Did you think handling demanding flows with large solids could be this clean? Introducing the E PAS: Electric, Efficient, Energy Saver. **The new E-Pump range** of self-priming E PAS electric pump models ensures significant energy savings and improved efficiency with long lasting performance, reduced noise operations* and a reduced CO2 footprint with no fuel consumption to meet emission norms.

E-Pump

**for closed set/canopy units.*

## EASY SERVICEABILITY AND CONNECTIVITY IN THE FIELD

Lower service and maintenance costs:

- Improved uptime with real time digital monitoring of machine health information.
- Patented hinge door access enables service under 30 minutes.

## ENERGY SAVER

Up to 40% energy savings with:

- Variable Speed Drive (VSD) which brings in operational efficiency.
- Revolutionary automatic self-priming system which extends the pump life.

## SOLID HANDLING CAPABILITIES

- Successfully deals with flows of up to 480 $m^3/h$.
- The whole range can manage solids of up to 76 mm (3").



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NO FUEL CONSUMPTION AND NO CO2 EMISSIONS*

*While operating the E-Pump

## FULLY ELECTRIC SELF-PRIMING PUMP

Meeting emission norms in restrictive areas:

- No fuel consumption and reduced $C0_2$ emissions during operation.
- 120% spillage-free container, making it a clean work environment.
- Reduced noise emissions

20 UNITS IN A EURO TRUCK COMPACT SIZE

## OPTIMIZE STORAGE AND TRANSPORT

- Overall transport and storage cost reduction.
- Galvanized frame with protrusions on top allows users to stack them in a 2+1 configuration, saving lots of space.
- With reduced footprint, as many as 20 units stacked 1+1 can fit into a 40-foot container.

## GROWING YOUR BUSINESS

- Up to 40% lower Total Cost of Ownership (TCO) vs traditional units.
- Improved operational efficiency, its galvanized structure and HardHat® hinge doors grant a higher resale value.
- Energy savings, lower operational costs and its increased durability ensure an improved ROI.

Up to 40% LOWER TCO

# E PAS range

E-Pump

## Technical data

| | | E PAS 80MF | E PAS 100MF | E PAS 150MF |
|---|---|---|---|---|
| **SPECIFICATIONS** | | | | |
| **Max. Head** | m | 18 | 30 | 30 |
| **Max. Capacity** | m³/h | 140 | 240 | 480 |
| **Suction /discharge flanges** | mm (in) | 75 (3")/75 (3") | 100 (4")/100(4") | 150 (6")/150(6") |
| **Max. Solids handling** | mm (in) | 40 (1.5") | 50 (2") | 76 (3") |
| **Best efficiency point** | % | 68 | 70 | 73 |
| **Pump motor** | kW (HP) | 7,5 (10) | 15 (20) | 22 (30) |
| **Speed range** | rpm | 900-1800 | 900-1800 | 900-1800 |
| **Installed VFD** | kW | 11 | 37 | 37 |
| **Supply voltage** | V | 380-460 | 380-460 | 380-460 |
| **Max. Current** | A | 16 | 32 | 63 |
| **PRIMING SYSTEM** | | | | |
| **Vacuum pump Type** | | Diaphram | Diaphram | Diaphram |
| **Nominal Air Capacity** | m³/h | 85 | 85 | 85 |
| **Max Nominal Vacuum** | bar | -0,9 | -0,9 | -0,9 |
| **Vacuum Pump Motor (@50HZ)** | kW (HP) | 1.5 (2) | 1.5 (2) | 1.5 (2) |
| **WEIGHT & DIMENSIONS** | | | | |
| **Weight** | kg | 1000 | 1100 | 1150 |
| **Length** | mm | 2000 | 2000 | 2000 |
| **Width** | mm | 1280 | 1280 | 1280 |
| **Height** | mm | 1280 | 1280 | 1280 |

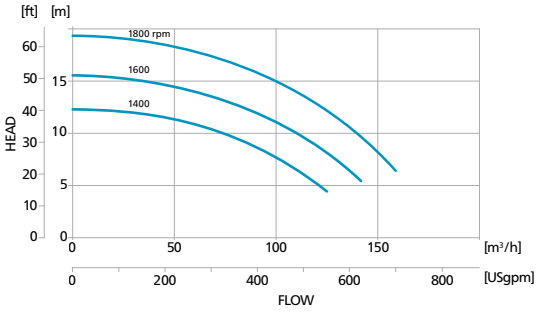
* Options on open set available as per request.
Please contact your local Atlas Copco Representative for more information.



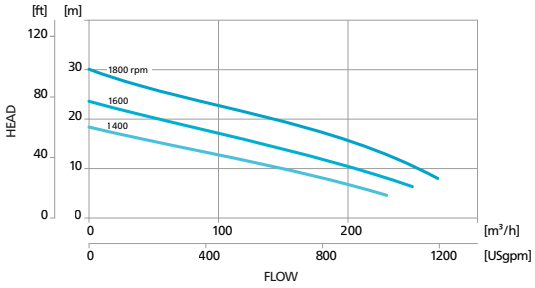
Atlas Copco

# Performance curves

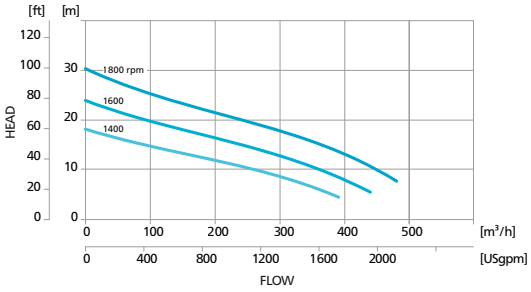
## E PAS 80MF




## E PAS 100MF




## E PAS 150MF



# PAS HardHat® range

The **PAS HardHat® models** come with Atlas Copco's innovative HardHat®, made of medium-density polyethylene instead of metal to protect the working operation underneath from the elements and tough site conditions.

## UNIQUE HardHat® TECHNOLOGY

- The Atlas Copco HardHat® Technology ensures a high level of robustness and durability in any condition.
- No matter the circumstances on-site or during transport, the PE material remains in perfect condition, increasing the resale value of your asset.

## SCAN AND ORDER

- PAS HardHat® pumps take advantage of digital technology, featuring QR codes which mean essential information about parts and spares is just a scan away.

## MULTIPLE PACKAGING OPTIONS

- The Pas Hardhat® series pump comes standard with an EU-certified Trailer with 2 stabilizer legs.
- They can also be offered on a robust galvanized skid based on needs.

ROAD TOWING
CERTIFIED
TRAILER

HVO
RENEWABLE
DIESEL

stageV

## CLEAN AND GREEN PUMPS

- The PAS HardHat® pump range is fully EU emission compliant and features a 120% fully leak-free structure, making it a clean and green machine. Offering available for worldwide emission norms and certifications,this range can also use HVO renewable diesel.

## EASY SERVICEABILITY IN THE FIELD

- The Pas PAS HardHat® range pump helps customers educe Service time.
- Advanced PW Series  Control Panel
- Features like the Atlas Copco hinge Kit and link belts mean that the wear components can be serviced and replaced without dismantling the pump.

3MIN CLEAN-UP
AND RESTART
HINGE DOOR

## ERGONOMIC LIGHTING

- The PAS HardHat® comes with internal lighting to facilitate visibility during maintenance or repair.

# PAS HardHat® range

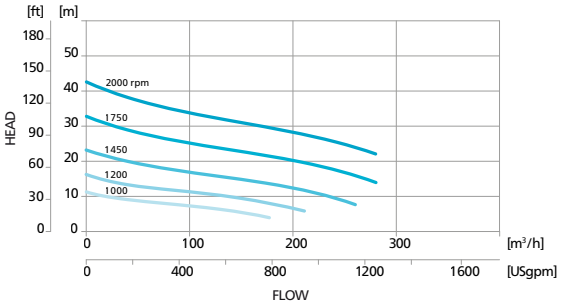
Complaint throughout the range

## Technical data

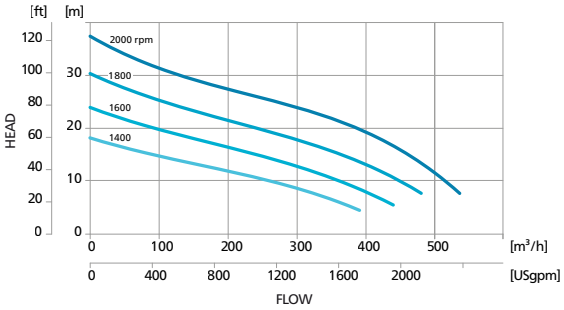
| | | PAS 100 HardHat® | PAS 150 HardHat® |
|---|---|---|---|
| **SPECIFICATIONS** | | | |
| Max. Head | m | 42 | 37 |
| Max. CapacitC | $m^3/h$ | 260 | 500 |
| Suction /discharge size | flanged | 4" Multi-standard | 6" Multi-standard |
| Max. Solids handling | mm | 76 | 76 |
| Best efficiency point | % | 70 | 77 |
| Max. Absorbed power | kW | 29 | 27 |
| **ENGINE** | | | |
| Emission compliance EU (Stage) | | Stage V | Stage V |
| Emission compliance LRC (Tier) | | T3 | T3 |
| Max. Engine power EU (Stage) | kW | 42 | 42 |
| Max. Engine power LRC (Tier) | kW | 36 | 36 |
| Max. Operating speed | rpm | 2000 | 2000 |
| Max. Fuel autonomy | h | 35 | 35 |
| **WEIGHT & DIMENSIONS** | | | |
| Weight (skid/undercarriage) | kg | 1415 / 1720 | 1415 / 1720 |
| Length (skid/undercarriage) | mm | 2420 / 3810 | 2420 / 3810 |
| Width (skid/undercarriage) | mm | 1200 / 1880 | 1200 / 1880 |
| Height (skid/undercarriage) | mm | 1680 / 2000 | 1680 / 2000 |

# Performance curves

## PAS 100 HardHat®




## PAS 150 HardHat®



# PAS MF/HF range

The **PAS MF/HF range** of dry prime pumps is engineered to offer high performance in any condition. Comprising of an air separator unit and a vacuum pump, it delivers rapid automatic primming. 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 suspensions.

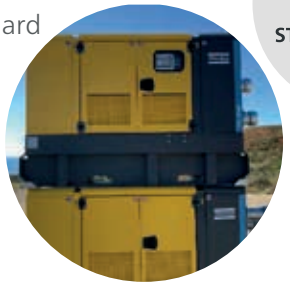
## SERVICEABILITY IN ANY CONDITIONS

- Patented Hinged 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 and wear plates).
- Trimming plate to guarantee the hydraulic performance as an emergency reserve before scheduled maintenance.

**3 MIN**
CLEAN-UP EASY MAINTENANCE

## 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

## SOLIDS HANDLING CAPABILITY

- The whole range canhandle high solids.

UP TO
**100 MM**
**SOLIDS** HANDLING

## INTEGRATED CONTROL AND POWER CUBICLE

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

## FLEX-MOUNT SYSTEM

- Integrated vibration mounts eliminate unwanted vibration.

## KEY OPTIONS

- Impeller CF3M
- Wear plate CF3M
- Stainless steel shaft
- Zinc anodes
- Fleet Link

## 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 the model selected*

# PAS MF/HF range

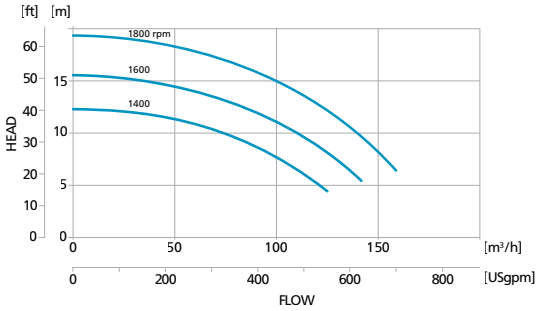
Complaint throughout the range

## Technical data

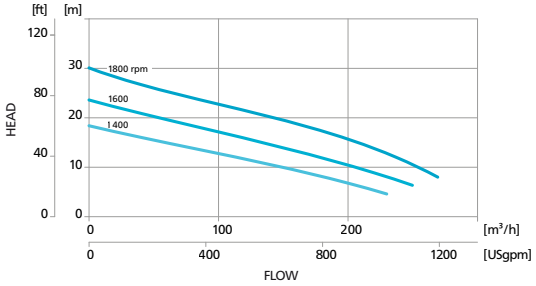
| | | PAS 80MF 202 | PAS 100MF 250 | PAS 150MF 255 | PAS 200MF 310 | PAS 300MF 401 | PAS 100HF 250 | PAS 150HF 315 | PAS 200HF 315 | PAS 300HF 440 |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPECIFICATIONS** | | | | | | | | | | |
| **Max. Head** | m | 19 | 30 | 37 | 36 | 25 | 42 | 51 | 54 | 82 |
| **Max. Capacity** | m³/h | 160 | 250 | 540 | 660 | 1200 | 280 | 550 | 900 | 2200 |
| **Suction /discharge size** | flanged | 3" Multistandar | 4" Multistandar | 6" Multistandar | 8" Multistandar | 12" Multistandar | 4" Multistandar | 6" Multistandar | 8" Multistandar | 12" Multistandar |
| **Max. Solids handling** | mm | 40 | 50 | 76 | 76 | 100 | 76 | 76 | 76 | 89 |
| **Best Efficiency point** | % | 68 | 70 | 77 | 70 | 60 | 70 | 76 | 78 | 72 |
| **Max. Absorbed power** | kW | 7,5 | 17 | 27 | 40 | 65 | 29 | 49 | 68 | 240 |
| **ENGINE** | | | | | | | | | | |
| **Emission compliance EU (Stage)** | | Stage V | Stage V | Stage V | Stage V | Stage V | Stage V | Stage V | Stage V | Stage V |
| **Emission compliance LRC (Tier)** | | T3 | T2-T3 | T2-T3 | T2-T3 | T2-T3 | T2-T3 | T2-T3 | T2-T3 | T2-T3 |
| **Max. Engine power** | kW | 8,6 | 24,3 | 28,4 | 55 | 100 | 31,0 | 51,2 | 79,1 | 210 |
| **Max. Operating speed** | rpm | 1800 | 1800 | 2000 | 2000 | 1500 | 2000 | 1800 | 2200 | 1600 |
| **Max. Fuel autonomy** | h | 120 | 51 | 48 | 45 | 24 | 45 | 27 | 22 | 12 |
| **WEIGHT & DIMENSIONS** | | | | | | | | | | |
| **Weight (dry)** | kg | 900 | 1260 | 1400 | 1650 | 2600 | 1400 | 1680 | 2250 | 4200 |
| **Length** | mm | 1850 | 2250 | 2250 | 2560 | 2610 | 2250 | 2560 | 2610 | 4100 |
| **Width** | mm | 1100 | 1100 | 1100 | 1100 | 1225 | 1100 | 1100 | 1225 | 2100 |
| **Height** | mm | 1480 | 1550 | 1550 | 1705 | 1840 | 1550 | 1705 | 1840 | 2100 |

# Performance curves

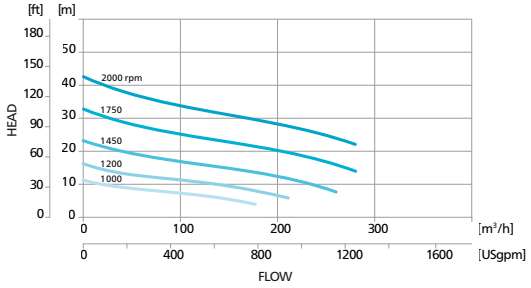
## PAS 80MF 202



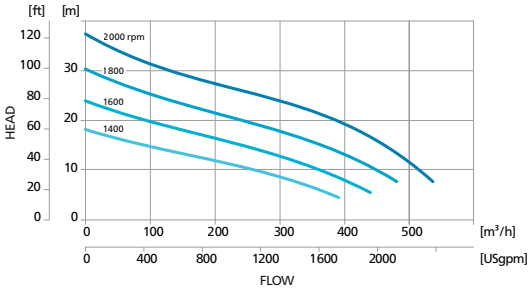

## PAS 100MF 250



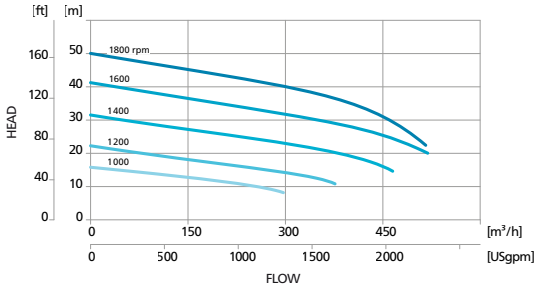

## PAS 100HF 250



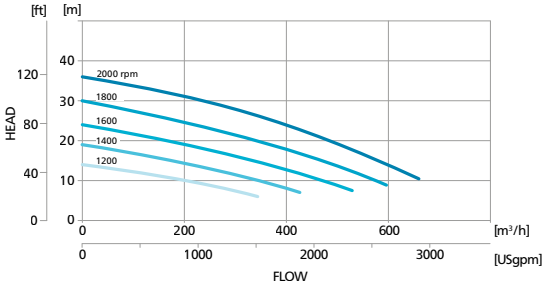

## PAS 150MF 255



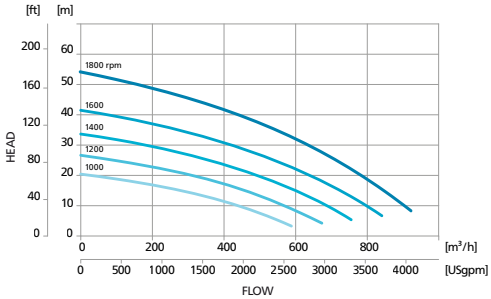

## PAS 150HF 315



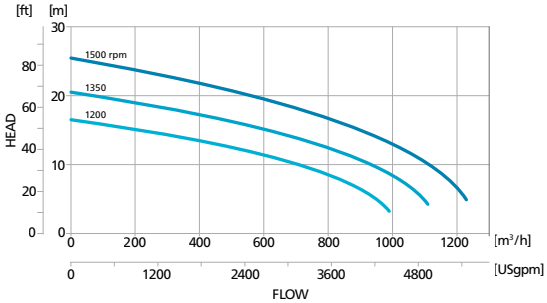

## PAS 200MF 310



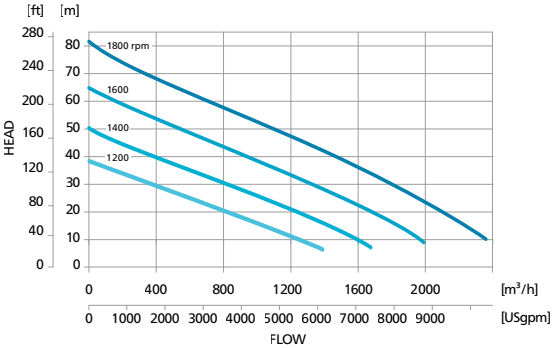

## PAS 200HF 315




## PAS 300MF 401




## PAS 300HF 440



# VAR range

**The VAR range** of wet prime pumps offers a robust and flexible solution for dewatering applications. The technology allows having a simple first prime due to its first water fill-in capabilities.

Due to its open impeller and solids handling capabilities, the equipment is perfectly suitable for medium construction and flood controls.

## WET PRIME SYSTEM

- The system allows the unit to prime in any conditions through first water fill.
- The liquid rings formed evacuate air for quick priming.

StageV

## MOBILITY PACKAGE

- Open-frame version is available.

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## MECHANICAL SEAL FLUSHING

- Integrated port on pump casing to flush the mechanical seal.
- Solution guarantees the correct startup of the units and helps prevent possible casing failure due to fluid solidification.

## SOLIDS HANDLINGS CAPABILITY

- The whole range can handle high solids.

UP TO
76 MM
SOLIDS HANDLING

## FLEX-MOUNT SYSTEM

- Integrated vibration mounts eliminate unwanted vibration.

### KEY OPTIONS

- Impeller CF3M
- Wear plate CF3M
- Stainless steel shaft
- Zinc anodes
- Fleet Link

# VAR range

Complaint throughout the range

## Technical data

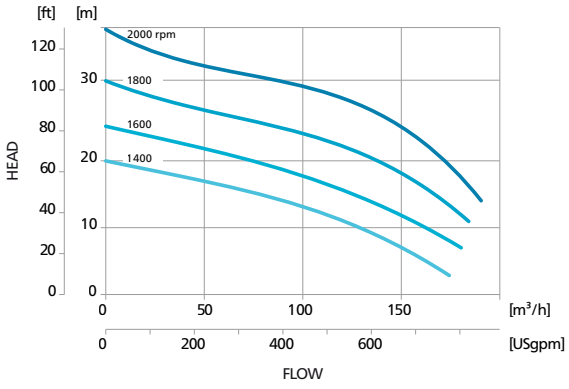
| | | VAR 4-250 | VAR 6 | VAR 6-250 | VAR 8-305 | VAR 10-305 | VAR 12-400 |
|---|---|---|---|---|---|---|---|
| **SPECIFICATIONS** | | | | | | | |
| **Max. Head** | m | 40* | 26 | 33 | 35 | 39 | 29,3 |
| **Max. Capacity** | m3/h | 180 | 300 | 340 | 560 | 690 | 1400 |
| **Suction /discharge size** | flanged | Threaded 4"" BSP | Flanged DN 150 D.I. 1882 (6"") | Flanged DN 150 D.I. 1882 (6"") | Flanged DN 200 UNI 6082 (8"") | Flanged DN 250 D.I. 1882 (10"") | Langed DN 300 UNI 6082 (12"") |
| **Max. Solids handling** | mm | 50 | 50 | 76 | 76 | 76 | 70 |
| **Best efficiency point** | % | 65 | 65 | 60 | 53 | 70 | 54 |
| **Max. Absorbed power** | kW | 16,5 | 14 | 25 | 31 | 45 | 85,5 |
| **ENGINE** | | | | | | | |
| **Emission compliance EU (Stage)** | | Stage V | Stage V | Stage V | Stage V | Stage V | Stage IV |
| **Emission compliance LRC (Tier)** | | T2-T3 | - | T2-T3 | T2-T3 | T2-T3 | T2-T3 |
| **Max. Engine power** | kW | 24,3 | 19 | 28,4 | 33,6 | 47,7 | 79,1 |
| **Max. Operating speed** | rpm | 2000 | 1800 | 2000 | 1800 | 1800 | 1150 |
| **Max. Fuel autonomy** | h | 48 | 45 | 42 | 50 | 47 | 29 |
| **WEIGHT & DIMENSIONS** | | | | | | | |
| **Weight (dry)** | kg | 905 | 950 | 935 | 1205 | 1850 | 2125 |
| **Length** | mm | 1750 | 1750 | 1750 | 2500 | 2800 | 2800 |
| **Width** | mm | 950 | 950 | 950 | 950 | 1450 | 1450 |
| **Height** | mm | 1520 | 1520 | 1520 | 1850 | 1850 | 1850 |

** Applicable for T2-T3 models only, for Stage 5 Variant max head is 32m*

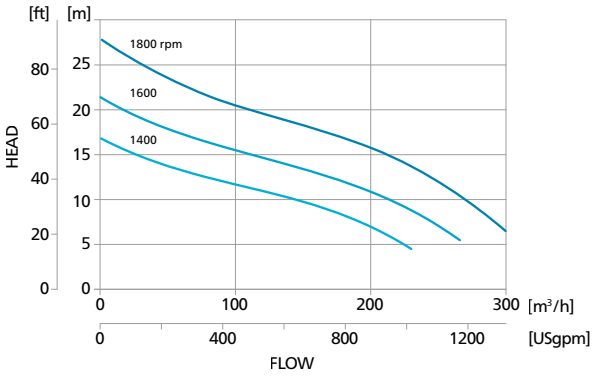
*(1) Dimensions refer to the Block model. Please refer to the datasheet with overall dimensions with options*

# Performance curves

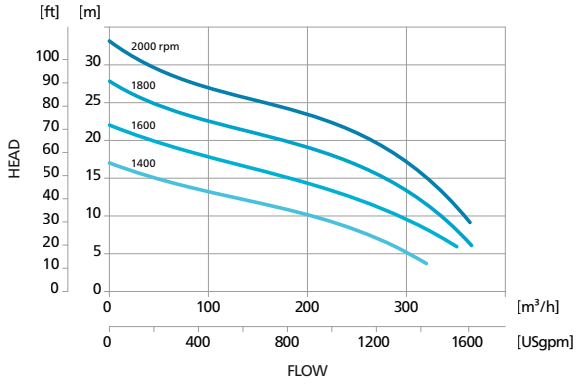
## VAR 4-250



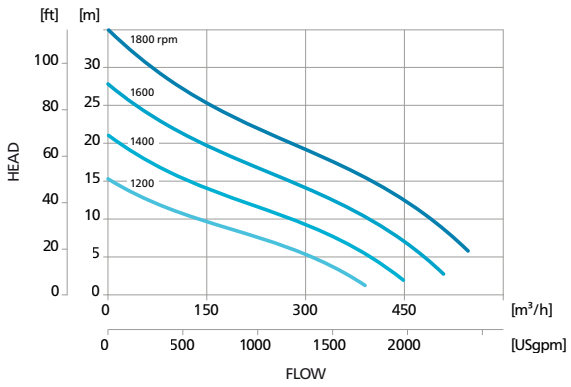

## VAR 6



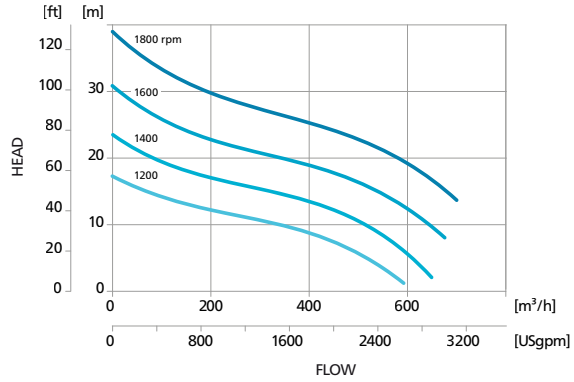

## VAR 6-250



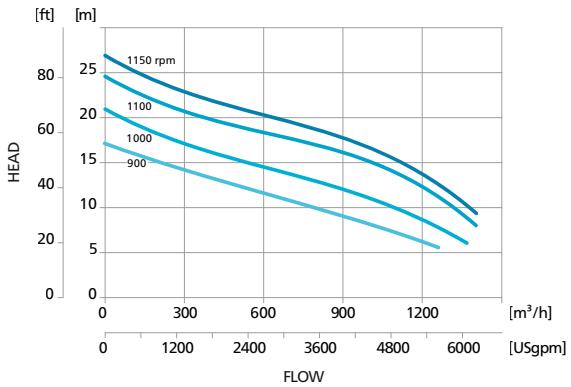

## VAR 8-305




## VAR 10-305




## VAR 12-400



# Product portfolio

## GENERATORS

**PORTABLE**
1,6–12 kVA

**SPECIALIZED**
9–660* kVA

**VERSATILE**
9–1250* kVA

**LARGE POWER**
800–1450 kVA

*Multiple configurations available to produce power for any size application

## DEWATERING PUMPS

**ELECTRIC SUBMERSIBLE**
up to 18 000 l/min

**SURFACE PUMPS**
833–23.300 l/min

Diesel and electric options available

## ENERGY STORAGE SYSTEMS

**ZENERGIZE**
45-500* kVA

## LIGHT TOWERS

**DIESEL**

**BATTERY**

**ELECTRIC**

## ONLINE SOLUTIONS

**SHOP ONLINE PARTS ONLINE**

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.

**LIGHT THE POWER: YOUR SIZING TOOL**

A useful calculator to help you choose the best solution for your power and light needs.

**FLEETLINK**

Intelligent telematics is a system that helps optimize fleet usage and reduce maintenance, ultimately saving time and cutting operating costs.

**PUMP SIZING CALCULATOR**

With a few inputs, this pump sizing calculator will help you to compare dewatering submersible models and find the right one for you.

**VISIT THE POWER ISLAND**

Live a 360° experience to discover a selection of products and solutions that we offer, in an almost real environment.

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