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.

**for closed set/canopy units.*

E-Pump

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.

UP TO
40%
ENERGY SAVINGS

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”).

Atlas Copco

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

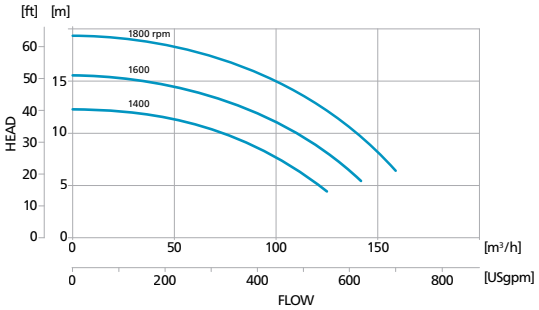
		E PAS 80MF	E PAS 100MF	E PAS 150MF
SPECIFICATIONS				
Max. Head	m	18	30	30
Max. Capacity	m³/h	140	240	480
Suction /discharge flanges	mm (in)	75 (3")/75 (3")	100 (4")/100(4")	150 (6")/150(6")
Max. Solids handling	mm (in)	40 (1.5")	50 (2")	76 (3")
Best efficiency point	%	68	70	73
Pump motor	kW (HP)	7,5 (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.

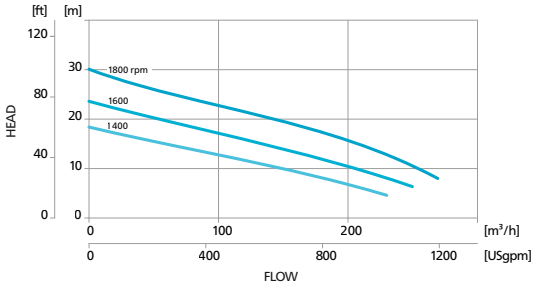
Atlas Copco

Performance curves

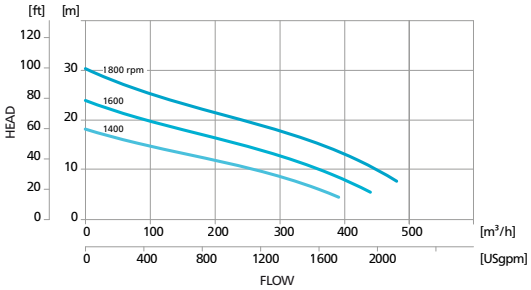
E PAS 80MF



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.

Exclusive
HardHat®
technology

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

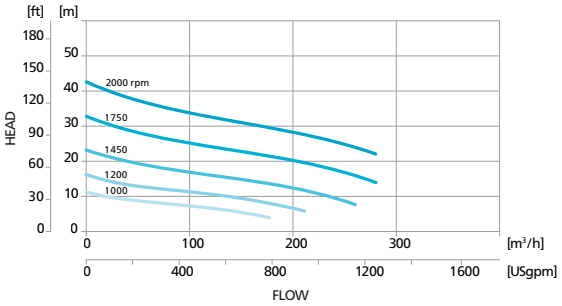
Complaint throughout the range

Technical data

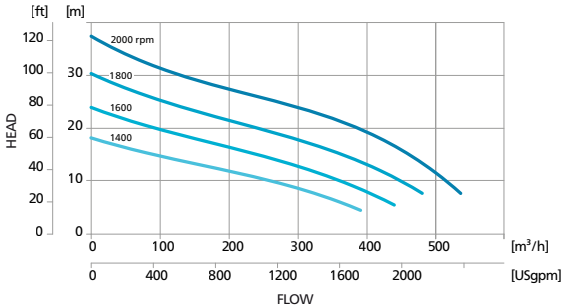
		PAS 100 HardHat®	PAS 150 HardHat®
SPECIFICATIONS			
Max. Head	m	42	37
Max. CapacitC	m^3/h	260	500
Suction /discharge size	flanged	4″ Multi-standard	6″ Multi-standard
Max. Solids handling	mm	76	76
Best efficiency point	%	70	77
Max. Absorbed power	kW	29	27
ENGINE			
Emission compliance EU (Stage)		Stage 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.

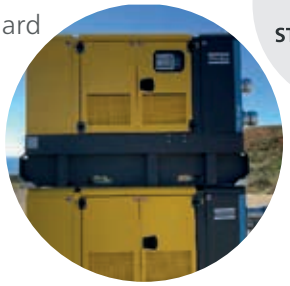
SERVICEABILITY IN ANY CONDITIONS

- 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

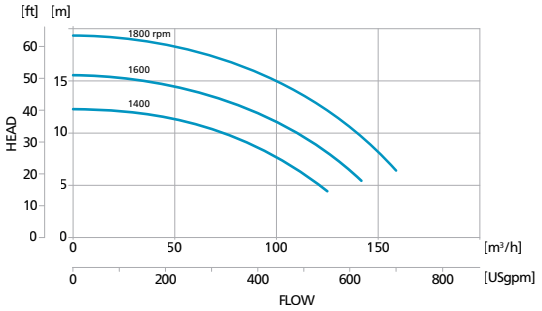
Complaint throughout the range

Technical data

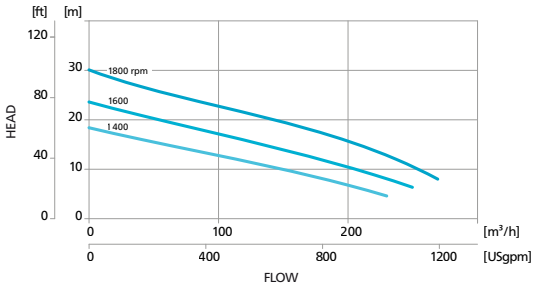
		PAS 80MF 202	PAS 100MF 250	PAS 150MF 255	PAS 200MF 310	PAS 300MF 401	PAS 100HF 250	PAS 150HF 315	PAS 200HF 315	PAS 300HF 440
SPECIFICATIONS										
Max. Head	m	19	30	37	36	25	42	51	54	82
Max. Capacity	m³/h	160	250	540	660	1200	280	550	900	2200
Suction /discharge size	flanged	3" Multistandar	4" Multistandar	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

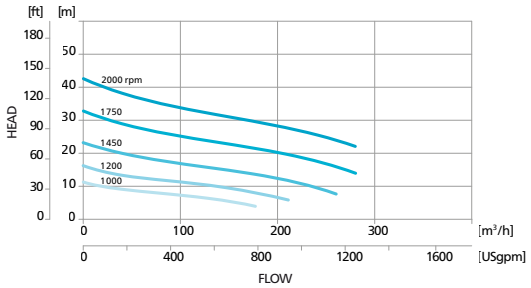
PAS 80MF 202



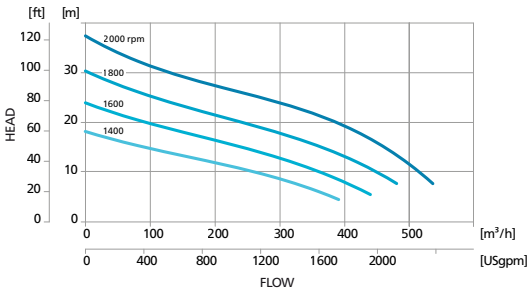
PAS 100MF 250



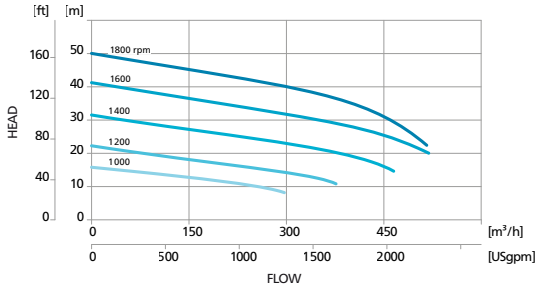
PAS 100HF 250



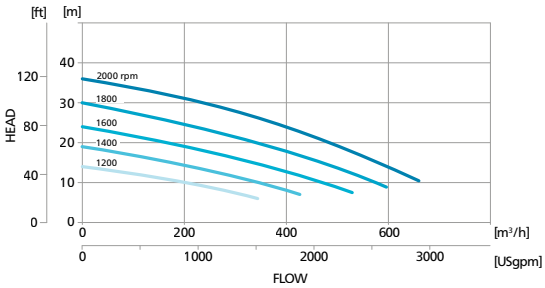
PAS 150MF 255



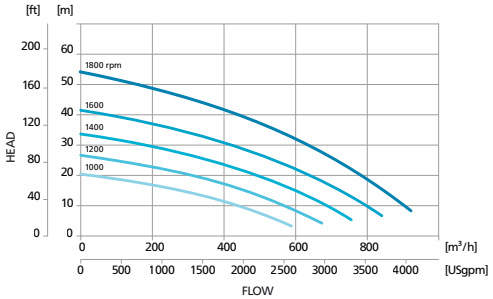
PAS 150HF 315



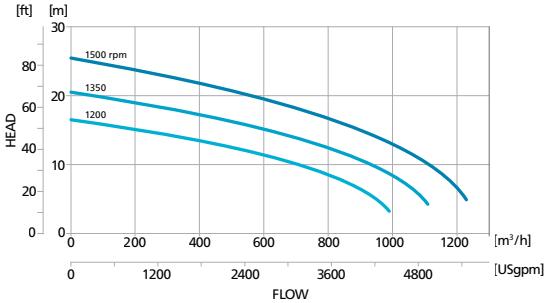
PAS 200MF 310



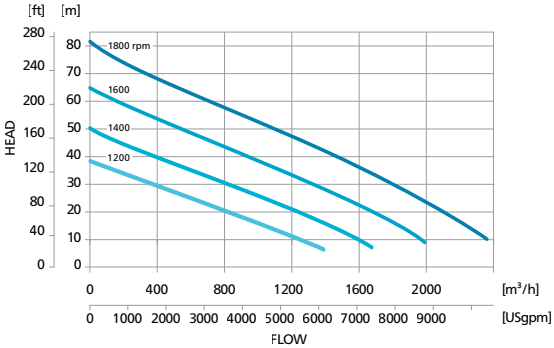
PAS 200HF 315



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.

MOBILITY PACKAGE

- Open-frame version is available.

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

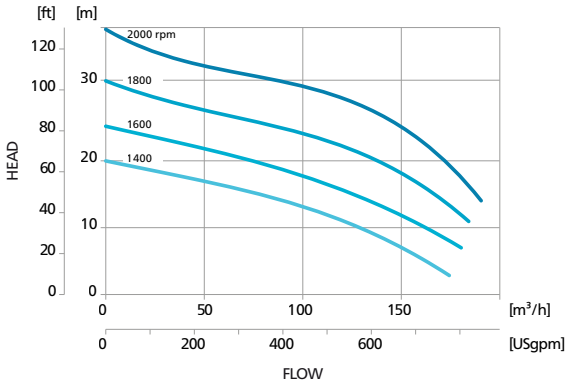
		VAR 4-250	VAR 6	VAR 6-250	VAR 8-305	VAR 10-305	VAR 12-400
SPECIFICATIONS							
Max. Head	m	40*	26	33	35	39	29,3
Max. Capacity	m3/h	180	300	340	560	690	1400
Suction /discharge size	flanged	Threaded 4"" BSP	Flanged DN 150 D.I. 1882 (6"")	Flanged DN 150 D.I. 1882 (6"")	Flanged DN 200 UNI 6082 (8"")	Flanged 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*

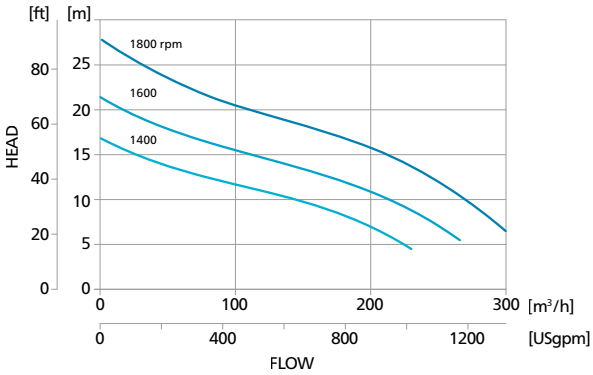
(1) Dimensions refer to the Block model. Please refer to the datasheet with overall dimensions with options

Performance curves

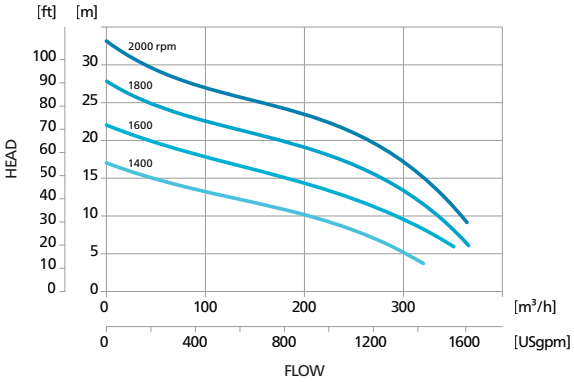
VAR 4-250



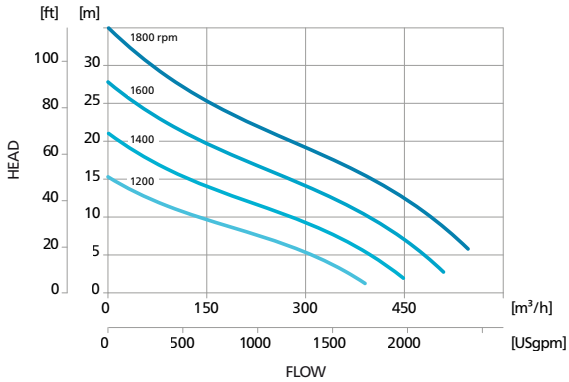
VAR 6



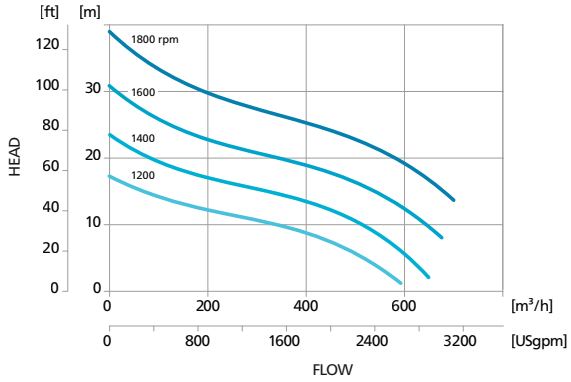
VAR 6-250



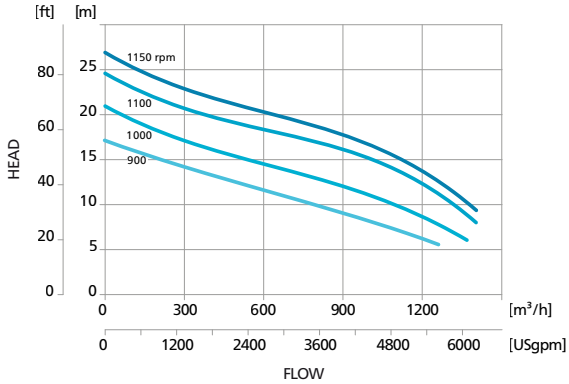
VAR 8-305



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.

Atlas Copco

Atlas Copco Power Technique

www.atlascopco.com

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