

# DEWATERING SOLUTIONS

A guide to our centrifugal and piston pump range

*Sustainable Productivity*

*Atlas Copco*



# Dewatering solutions

The dewatering range was developed as a result of our over 140 years' experience working with customers across the world, combined with our acquisition of Varisco – an industry leading pump designer and manufacturer.

Our strategy fits perfectly with pumps. The first focus is providing efficient products. We strive to develop products that are better for you and better for the environment. Secondly, the products should be easy to take to your point of work. Therefore we put a huge amount of focus on making products that are smaller and lighter, with features that make them easy to move.

The range is packed with features that not only meet, but exceed the needs of the market. We are focused on producing versatile pumps that are suitable for many industries, including construction, general dewatering, wellpoint applications and emergency use, such as flood clean up.

## WHEN IT COMES TO PUMPS, WE FOCUS ON FIVE KEY CRITERIA:



### COMPACT

Made to go where you need to go. With features that make it easy to transport.



### VERSATILE

One pump should cover multiple applications. Focus on modular designs.



### DURABLE

Tested, performed and verified in the toughest working conditions.



### EFFICIENCY

Focused on reducing fuel consumption. Made to suit any environment.



### SIMPLE SERVICE

Hinged cover for simple access to key components.





# Great benefits of the range

## HINGED COVER FOR SIMPLE MAINTENANCE

Easy access to all components and made for field based service procedures



## HIGH CAPACITY DIAPHRAGM PUMP

For automatic priming



## MECHANICAL SHAFT SEALS IN OIL BATH

Dry running capability without damaging the shaft seals



## SOLIDS HANDLING

Without the risk of clogging



## HIGH EFFICIENCY HYDRAULIC END

Guaranteeing low fuel consumption



## ELECTRIC MOTOR

Option available for most models



## FIND THE PUMP THAT BEST SUITS YOUR NEEDS

### MAX HEAD

UP TO  
**58.5M**

### MAX FLOW

UP TO  
**1400 M<sup>3</sup>H**

### SOLIDS HANDLING

UP TO  
**76 MM**

### OUTLET SIZE

**40-300 MM**

[www.atlascopco.com](http://www.atlascopco.com)

# Pump range



## APPLICATION AND ADVANTAGES



### PAS

Centrifugal dry prime pumps

**Models:** 10 (3 high-flow models)

**Configurations:** 6

**Max flow:** 1130 m<sup>3</sup>/h

**Max head:** 58,5 m

**Outlet size:** 100-300 mm

Great for construction, general dewatering, drainage and emergency applications. Due to its dry prime capabilities, this highly efficient pump can start pumping from the moment you turn the switch.



### VAR

Centrifugal wet prime pumps

**Models:** 11

**Configurations:** 6

**Max flow:** 1400 m<sup>3</sup>/h

**Max head:** 58 m

**Outlet size:** 40-300 mm

Great for construction, general dewatering, drainage and emergency applications. These self-priming centrifugal pumps are for applications where the main challenge is the difficulty to start the unit in tough conditions. Due to the immediate water fill-in mechanism, the unit is always ready to prime and start pumping. An SPL version is also available.



### WEL ECO

Centrifugal wet prime pumps

**Models:** 2

**Configurations:** 5 (no canopy version)

**Max flow:** 340 m<sup>3</sup>/h

**Max head:** 27,5 m

**Outlet size:** 100-150 mm

Great for wellpoint applications along with general dewatering and drainage. This automatic, rapid, self-priming pump is designed for wellpoint applications with a high flow rate.



### WEL SPL

Centrifugal wet prime pumps with vacuum prime system

**Models:** 2

**Configurations:** 5 (no canopy version)

**Max flow:** 340 m<sup>3</sup>/h

**Max head:** 27,5 m

**Outlet size:** 100 or 150 mm

The WEL SPL range incorporates the same great features of the WEL ECO range. However, the vacuum pump makes it possible to handle considerable quantities of air efficiently.



### WEL PST

Piston positive displacement pump

**Models:** 1

**Configurations:** 2 (canopy or block)

**Max flow:** 100 m<sup>3</sup>/h

**Max head:** 20 m

**Outlet size:** 125 mm

Great for wellpoint applications where the volume and depth of the water is low. This highly efficient piston pump is specially designed to run dry without damaging the components. Low maintenance coupled with energy efficiency ensure that you realize real costs savings with this pump.



### BEN

Centrifugal wet prime pumps

**Models:** 2

**Configurations:** 5 (no canopy version)

**Max flow:** 360 m<sup>3</sup>/h

**Max head:** 27,5 m

**Outlet size:** 100 or 150 mm

Great for pumping abrasive liquids and bentonite mud. This pump features a purposely designed 'hard' cast iron impeller and casing to make the unit highly resistant against abrasion and wear, even while working in the toughest conditions. The possibility to flush the mechanical seal guarantees start up, ensuring performance under pressure.

# Modular design

You don't buy a pump. You design a system that is made for you! Modular customization is a feature of our products.

Block only

1



Skid package

2



Flex-skid package (heavy-duty)

3



Trailer package

4



Crate package

5



Canopy package

6



Not all combinations are available with all models.  
Please check with your local representative.

[www.atlascopco.com](http://www.atlascopco.com)

# 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 be sucked 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.



## TECHNICAL DATA

Specifications		PAS 100 MF 225		PAS 100 MF 250		PAS 100 MF 260		PAS 150 MF 250		PAS 200 MF 300		PAS 200 MF 305		PAS 300 MF 390		PAS 100 HF 250		PAS 150 HF 300		PAS 200 HF 305		
Max. head	m	58,5		36		42		37		31		30		29,5		51		51		50		
Max. capacity	m³/h	230		250		325		540		720		630		1130		280		520		920		
Suction / discharge size		DN100 (4")		DN100 (4")		DN100 (4")		DN150 (6")		DN200 (8")		DN200 (8")		DN300 (12")		ANSI 4"		ANSI 6"		ANSI 8"		
Max. solids handling	mm	35		50		76		76		60		76		76		76		76		76		
Best efficiency point	%	70		70		70		77		73		64		60		70		70		75		
Max. absorbed power	kW	30		17		24		27		41		33		68		29		51		78		
Engine																						
Model		Hatz	Perkins	Kohler	Deutz	Kohler	Deutz	Kohler	Deutz	Kohler	Deutz	Kohler	Deutz	Perkins	Deutz	Deutz	Deutz					
Cooling system		Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Liquid	Liquid	Liquid	Liquid				
Emission compliance		Stage 3A		Stage 3A		Stage 3A		Stage 3A		Stage 3B		Stage 3B		Stage 3A	Stage 3B	Stage 3B	Stage 3B					
Max. engine power	kW	38		24,3		28,4		28,4		47,7		33,6		92,1		31,0		51,2		79,1		
Max. operating speed	rpm	3000		2000		2000		2000		1800		1800		1500		2200		2200		2200		
Max. fuel autonomy	h	30		51		48		48		37		48		31		45		27		22		
Weight and dimensions																						
Weight	kg	965		865		830		865		1210		1180		1800		1180		1330		1500		
Width	mm	995		995		995		995		995		995		995		995		995		1430		
Length	mm	2020		2020		2020		2020		2450		2450		2450		2080		2080		2300		
Height	mm	1520		1520		1520		1520		1700		1700		1700		1800		1800		2050		

All six configurations are available.

LOOKING FOR ELECTRIC?  
**E-Pump** OPTIONS  
 ALSO AVAILABLE

*Atlas Copco*

To download a full data sheet please go to [www.podshop.com/atlascope](http://www.podshop.com/atlascope) and input the model number.



# *Hinged door access*

Easy access to components. Simple cleaning mechanism. Designed for field based service.

*Sustainable Productivity*

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# VAR range

The VAR range of self-priming centrifugal pumps are for applications where the main feature is the difficulty in priming. Even with suction heights of several meters, the machine quickly evacuates the air from the suction pipe and starts pumping. Additionally, thanks to the semi-open impeller, the VAR range is also suitable for pumping liquids with solids in suspension.



## TECHNICAL DATA

Specifications		VAR 4-225	VAR 4-250	VAR 4-316	VAR 6-250	VAR 6-251	VAR 6-350	VAR 6-400	VAR 8-300	VAR 8-305	VAR 10-305	VAR 12-400
Max. head	m	53	40	57,5	33	24,5	44	58	32,5	35	39	29,3
Max. capacity	m³/h	150	180	190	340	260	310	480	580	560	690	1400
Suction / discharge size		Threaded 4" BSP	Threaded 4" BSP	Threaded 4" BSP	Flanged DN 150 D.I. 1882 (6")	Flanged DN 150 D.I. 1882 (6")	Flanged DN 150 D.I. 1882 (6")	Flanged DN 150 D.I. 1882 (6")	Flanged DN 200 UNI 6082 (8")	Flanged DN 200 UNI 6082 (8")	Flanged DN 250 D.I. 1882 (10")	Flanged DN 300 UNI 6082 (12")
Max. solids handling	mm	35	50	38	76	50	37	50	60	76	76	70
Best efficiency point	%	65	65	55	60	65	58	64	60	53	70	54
Max. absorbed power	kW	22,8	16,5	33,5	25	11,5	34	78	41	31	45	85,5
Engine												
Model		Hatz Perkins	Deutz Kohler	Deutz Kohler	Deutz Kohler	Kohler	Deutz Kohler	Deutz	Deutz Kohler	Deutz Kohler	Deutz Kohler	Deutz Kohler
Cooling system		Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid
Emission compliance		Stage 3A	Stage 3A	Stage 3A	Stage 3A	Stage 3A	Stage 3B	Stage 3B	Stage 3B	Stage 3B	Stage 3B	Stage 3B
Max. engine power	kW	38	24,3	34	28,4	10,7	45	78,2	47,7	33,6	47,7	79,1
Max. operating speed	rpm	3000	2000	2000	2000	1700	1600	1800	1800	1800	1800	1150
Max. fuel autonomy	h	27	48	55	42	110	28	28	47	50	47	29
Weight and dimensions												
Weight	kg	780	780	820	835	700	1155	1550	1115	1080	1600	2015
Width	mm	995	995	995	995	995	995	995	995	995	995	1145
Length	mm	1770	1770	1770	1770	1770	1770	2750	2250	2250	2750	2850
Height	mm	1520	1520	1520	1520	1520	1520	1800	1700	1700	1800	2035

All six configurations are available.

LOOKING FOR ELECTRIC?  
**ED-Pump** OPTIONS  
 ALSO AVAILABLE

*Atlas Copco*

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# VAR SPL and BEN range

The VAR SPL range incorporates the same great features of the VAR range. However, the vacuum system makes it possible for the pump to also prime “dry” and handle considerable quantities of air. The vacuum system ensures continued dewatering and performance under “snore” conditions.

The BEN range is designed with a special “hard” cast iron impeller and casing to make the unit highly resistant against abrasion and wearing, even while working in the toughest conditions.



## TECHNICAL DATA

Specifications		VAR SPL 4-316	VAR SPL 6-350	VAR SPL 6-400	VAR SPL 10-305	BEN 4-250	BEN 6-250
Max. head	m	57,5	44	58	39	32	27,5
Max. capacity	m³/h	190	310	480	690	180	340
Suction / discharge size		Threaded 4" BSP	Flanged DN 150 D.I. 1882 (6")	Flanged DN 150 D.I. 1882 (6")	Flanged DN 250 D.I. 1882 (10")	Spherical quick coupling 4"	Spherical quick coupling 6"
Max. solids handling	mm	38	37	50	76	50	76
Best efficiency point	%	55	58	64	70	65	62
Max. absorbed power	kW	33,5	34	78	45	13,2	19
Engine							
Model		Deutz Kohler	Deutz Kohler	Deutz	Deutz Kohler	Deutz Kohler	Deutz Kohler
Cooling system		Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid	Air Liquid
Emission compliance		Stage 3A	Stage 3B	Stage 3B	Stage 3B	Stage 3A	Stage 3A
Max. engine power	kW	34	45	78,2	47,7	22,1	30,6
Max. operating speed	rpm	2000	1600	1800	1800	1800	1800
Max. fuel autonomy	h	55	28	28	47	53	39
Weight and dimensions							
Weight	kg	820	1155	1550	1600	790	850
Width	mm	995	995	995	995	995	995
Length	mm	1770	1770	2750	2750	1770	1770
Height	mm	1520	1520	1800	1800	1520	1520

Five configurations are available, we only offer open-frame models.

LOOKING FOR ELECTRIC?  
**ED-Pump** OPTIONS  
 ALSO AVAILABLE

# WEL range

These automatic, rapid, self-priming pumps are designed for wellpoint applications with a high flow rate. The WEL SPL range incorporates a vacuum pump, making it possible to handle considerable quantities of air efficiently. The vacuum system ensures continued dewatering and performance under “snore” conditions. The WEL PST model is great for applications where the volume and depth of the water is low.



## TECHNICAL DATA

Specifications		WEL ECO 4-250		WEL ECO 6-250		WEL SPL 4-250 D		WEL SPL 6-250 D		WEL PST 100
Max. head	m	32		27,5		32		27,5		20
Max. capacity	m³/h	180		340		180		340		100
Suction / discharge size		Spherical quick coupling 4"		Spherical quick coupling 6"		Spherical quick coupling 4"		Spherical quick coupling 6"		DIN 125
Max. solids handling	mm	50		76		50		76		-
Best efficiency point	%	65		62		65		62		93
Max. absorbed power	kW	13,2		19		13,2		19		9,8
Engine										
Model		Deutz	Kohler	Deutz	Kohler	Deutz	Kohler	Deutz	Kohler	Hatz
Cooling system		Air	Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Air
Emission compliance		Stage 3A		Stage 3A		Stage 3A		Stage 3A		Stage 3B
Max. engine power	kW	22,1		22,1		22,1		22,1		9,8
Max. operating speed	rpm	1800		1800		1800		1800		2000
Max. fuel autonomy	h	53		53		53		53		170
Weight and dimensions										
Weight	kg	960		1060		960		1060		1750
Width	mm	995		995		995		995		1100
Length	mm	1900		2115		1900		2115		2215
Height	mm	1520		1520		1520		1520		1530

Five configurations are available, we only offer open-frame models.

LOOKING FOR ELECTRIC?  
**E-Pump** OPTIONS  
 ALSO AVAILABLE

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# *Long trenches or pipelines?*

The WEL range of pumps is designed specifically for wellpoint applications



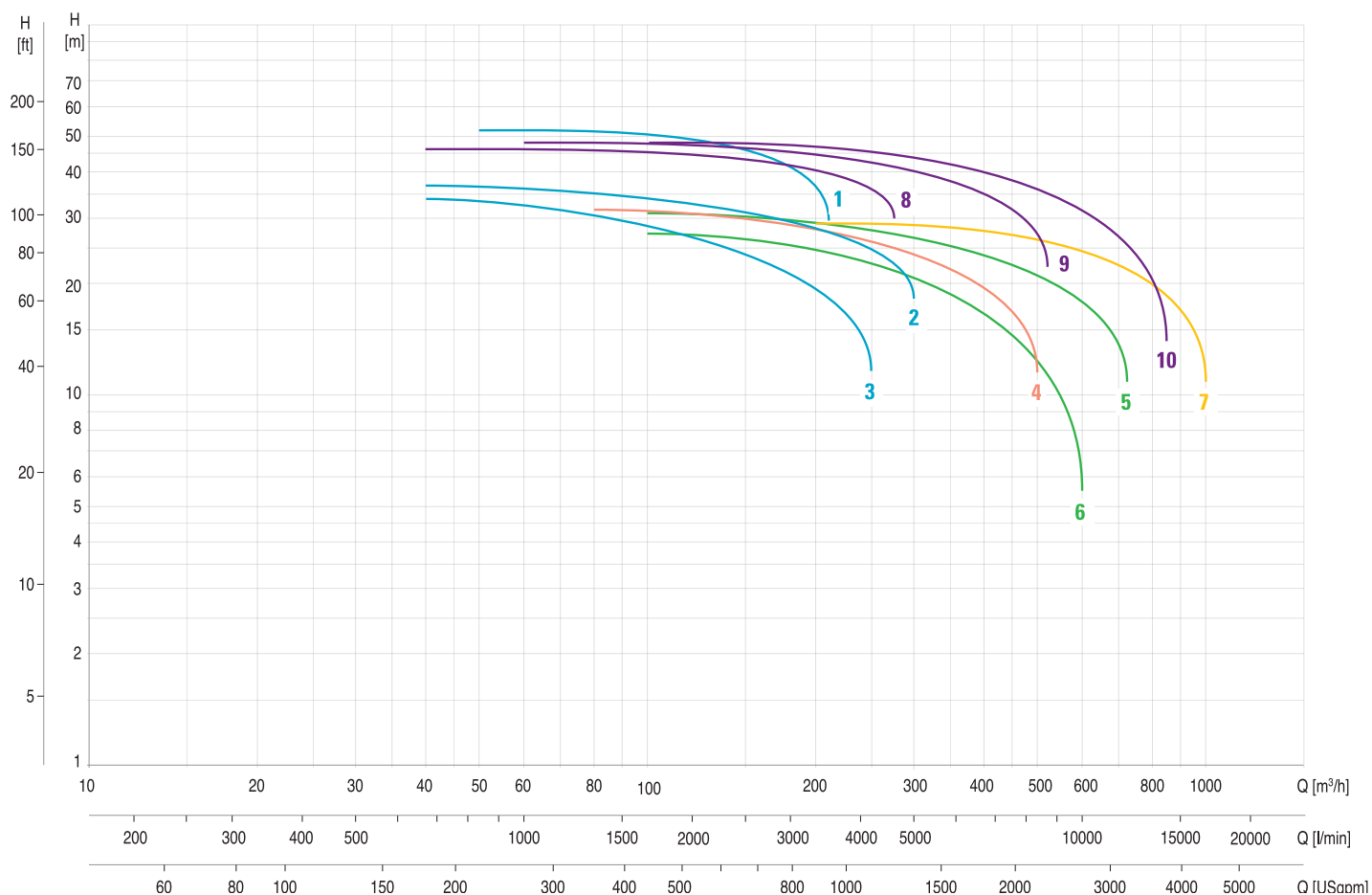
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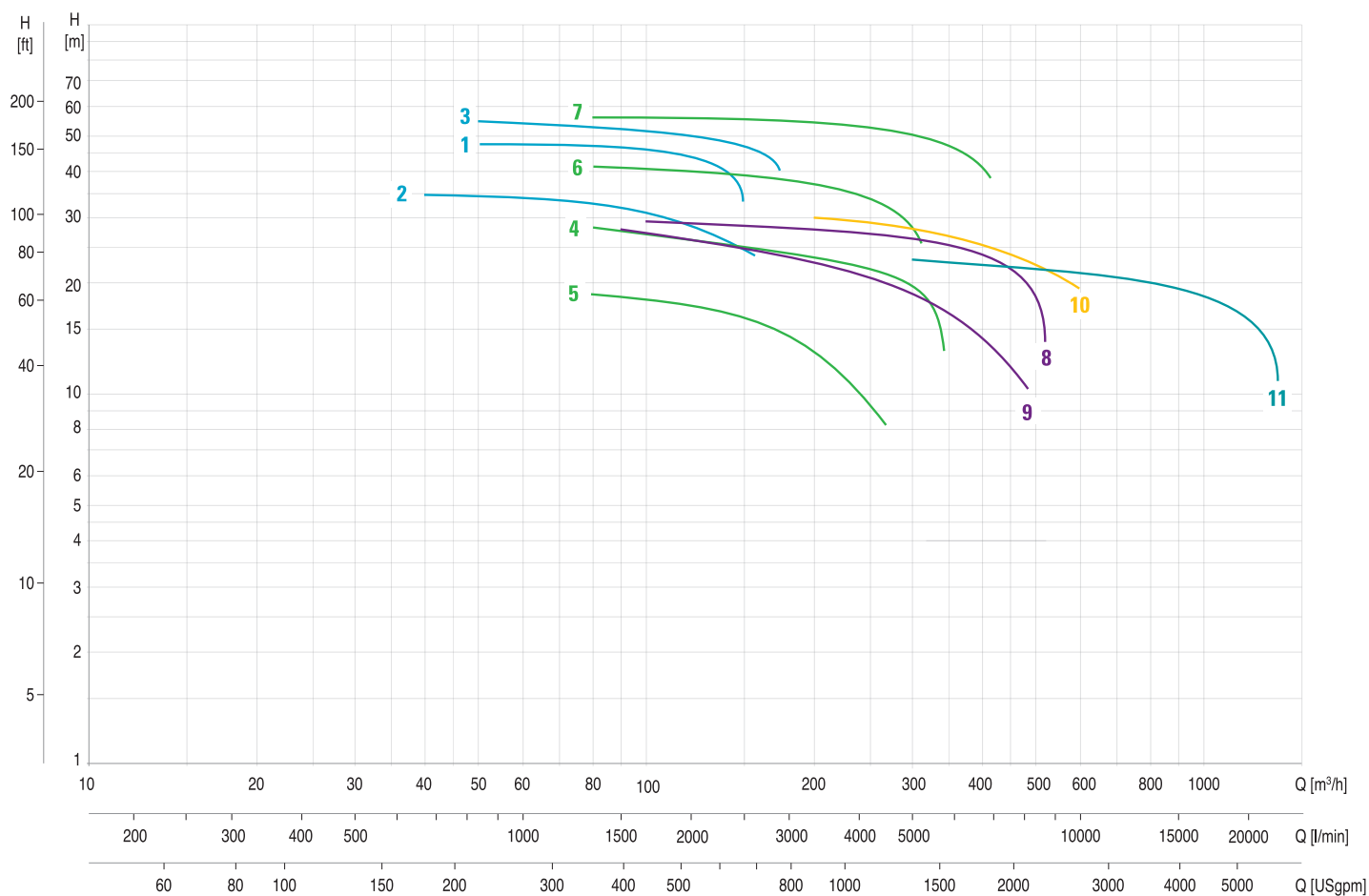
# PAS performance curves



**PAS**

- 1. PAS 100MF 225
- 2. PAS 100MF 250
- 3. PAS 100MF 260
- 4. PAS 150MF 250
- 5. PAS 200MF 300
- 6. PAS 200MF 305
- 7. PAS 300MF 390
- 8. PAS 100HF 250
- 9. PAS 150HF 300
- 10. PAS 200HF 305

# VAR performance curves



## VAR

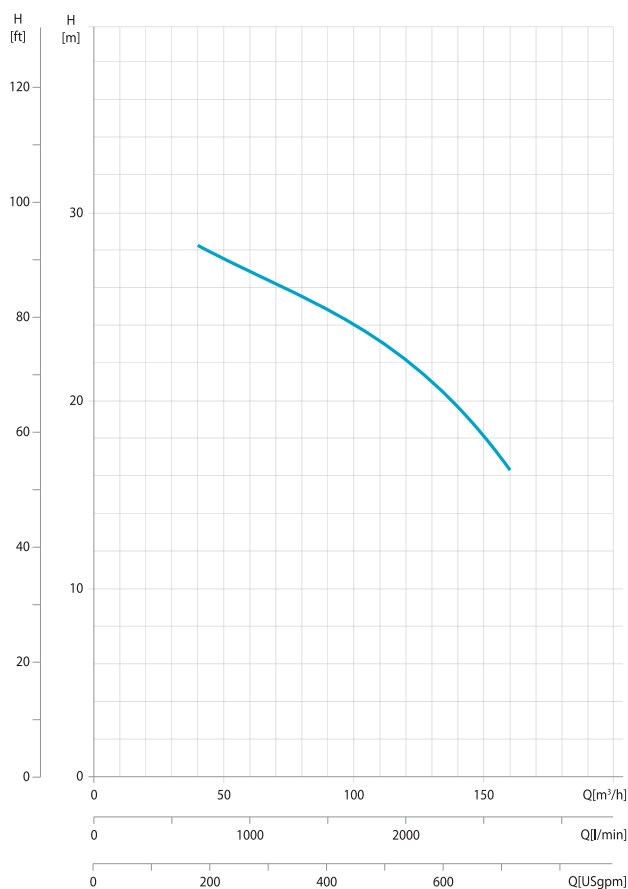
- 1. VAR 4-225
- 2. VAR 4-250
- 3. VAR 4-316 / VAR SPL 4-316
- 4. VAR 6-250
- 5. VAR 6-251
- 6. VAR 6-350 / VAR SPL 6-350
- 7. VAR 6-400 / VAR SPL 6-400
- 8. VAR 8-300
- 9. VAR 8-305
- 10. VAR 10-305 / VAR SPL 10-305
- 11. VAR 12-400



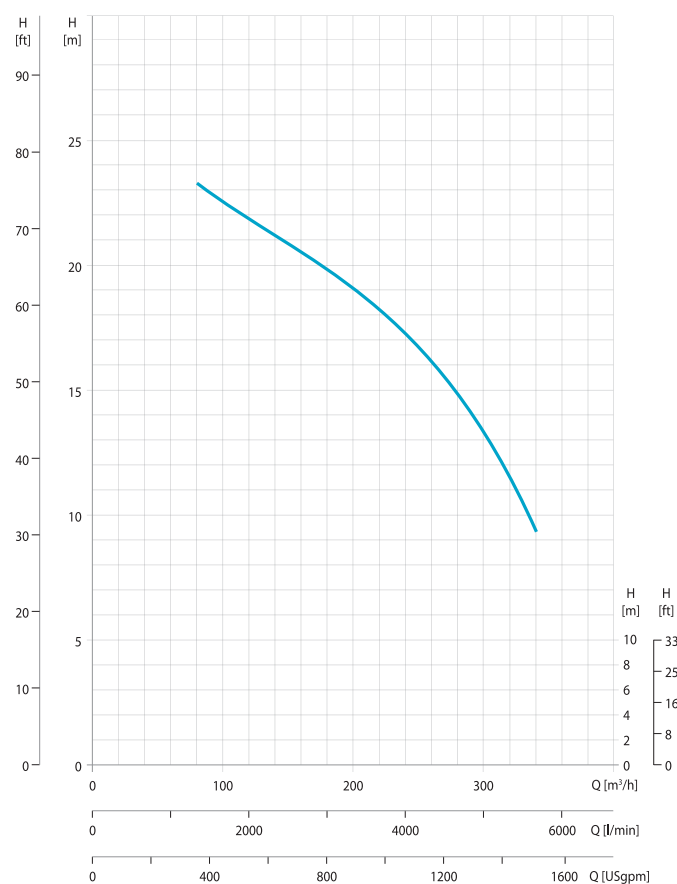
# WEL and BEN performance curves



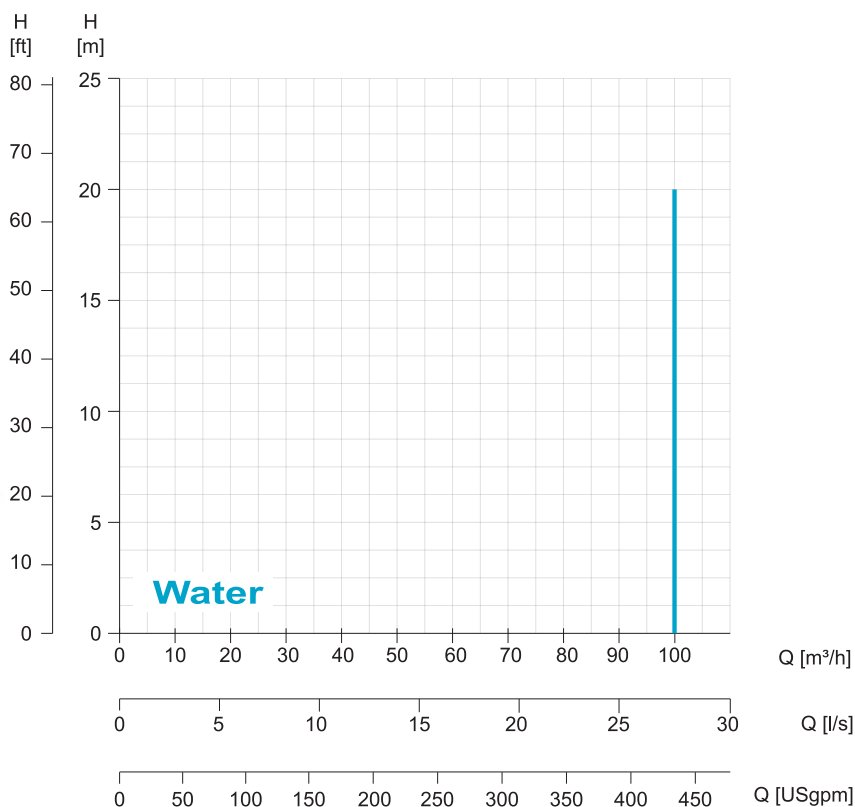
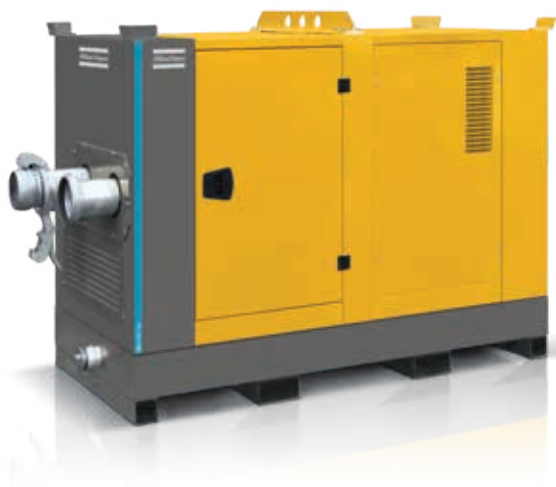
WEL ECO 4-250, WEL SPL 4-250, BEN 4-250



WEL ECO 6-250, WEL SPL 6-250, BEN 6-250



WEL PST



Atlas Copco



# The PumpWatch controller system

PumpWatch controllers were designed and engineered to keep up with the constantly evolving demands of today's water moving industry.

The PW750 comes as standard with all **PAS high-flow** units. The advanced capabilities of the optional PW1000 are significantly enhanced by its event management system, allowing the user to define operational conditions to trigger events, warnings, faults and alarms, which can even be received remotely.

PumpWatch supports accessories including transducers, float switches, flow meters and pressure gauges. The standard software supports display menus in 13 different languages, in addition to the industry standard J1939 and RS485 protocols. Both models feature propriety designs to deliver unmatched durability and dependability in the harshest of environments.



## PW750 & PW1000

### Hardware Inputs & Outputs / Event Handling

	Analog/Digital Inputs	Mag Pick-Up Speed Input	Pulse Frequency Inputs (Flow Meter)	4-20 mA Inputs (Transducer)	Resistive Sender Inputs (Temp, Pressure, Fuel, etc.)	Conditional Engine State Monitoring	Shutdown Management (Immediate/Controlled/Derate)	Warning and Shutdown on Fault	Service Interval Timers and Event History	Data Logging and Reporting	Instantaneous Flow	Totalized Flow
PW750 (standard)	12		0	1	3			✓	✓		✓	
PW1000 (option)	32	✓	2	6	6	✓	✓	✓	✓	✓	✓	✓

### System and Network Compatibility

	J1939 CANbus Network	RS485 Modbus Interface	Wi-Fi Ready	Telemetry Ready	PC-Based Configuration Tool	External Programming Port	External Configuration Connection	Configurable Settings Via Display	Multi-Language Support	Multi-Level Password Protection
PW750 (standard)	1	✓		✓	✓		✓	Some	✓	
PW1000 (option)	2	✓	✓	✓	✓	✓	✓	All	✓	✓

### Indicators & Switches

	High-Contrast Display	Green LED - Auto/Standby	Amber LED - SAE Icon Glowplug Preheat	Red LED - SAE Engine Stop/Shutdown	Amber LED - SAE Diagnostic/Warning	Red LED - User Definable	Blue LED - SCR/DEF Indication	Audible Alarm	Visual Alarm Ready	IP64 Keyswitch	2.5" Vacuum Gauge
PW750	✓	✓	✓	✓	✓	✓			✓	✓	✓
PW1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

# Portable Energy Solutions Portfolio

## AIR COMPRESSORS

### READY TO GO

- 1-5 m<sup>3</sup>/min
- 7-12 bar



### VERSATILITY

- 5,5-22 m<sup>3</sup>/min
- 7-20 bar



Diesel and electric options available

### PRODUCTIVITY PARTNER

- 19-127 m<sup>3</sup>/min
- 10-345 bar



## GENERATORS

### PORTABLE

- 1,6-13,9 kVA



### MOBILE

- 9-1250\* kVA



### INDUSTRIAL

- 10-1250\* kVA



\*Multiple configurations available to produce power for any size application

## DEWATERING PUMPS

### ELECTRIC SUBMERSIBLE

- 250-16.500 l/min



### CENTRIFUGAL

- 833-23.300 l/min



Diesel and electric options available

### SMALL PORTABLE

- 210-2500 l/min



## LIGHT TOWERS

### LED



### METAL HALIDE



### ELECTRIC



## Committed to sustainable productivity

Atlas Copco's Portable Energy division has a forward-thinking philosophy. For us, creating customer value is all about anticipating and exceeding your future needs – while never compromising our environmental principles. Looking ahead and staying ahead is the only way we can ensure we are your long term partner.

[www.atlascopco.com](http://www.atlascopco.com)

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