

# PAS 150 HARDHAT STAGE V

Diesel - Qmax 500 m<sup>3</sup>/h (2,200 USgpm) - Hmax 37 m (121 ft)



Indicative picture of the product

## PAS - Vacuum prime centrifugal pumps

The pump system consists of a centrifugal pump and a 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.

## Applications

Both Atlas Copco and Varisco have decades of experience in designing and producing pumps. We have put those years of expertise into providing solutions that work across multiple applications. The PAS range is packed with features that not only meet, but exceed the needs of the market. We are focused on an efficient, extremely versatile pump that is suitable for many industries, including construction, general dewatering and emergency applications, such as flood clean up.

## Benefits

### Pump

High efficiency: 77% (B.E.P)

### Rapid "dry" priming

Up to a height of 7,5 m (24.6 ft)

### High resistance

To abrasive liquids and turbid sandy waters

### Semi-open impeller

Solids handling up to 76 mm (3")

### Diaphragm vacuum pump

Oil free suitable for dry running: no contamination of the environment

### Easy maintenance

Hinged cover for direct access to the impeller (without lifting devices). Link belt quick to replace on the field.

### Mechanical shaft seal in oil bath

It allows the "dry running" operation of the pump

### Wear plate

Cast iron (G11 rubber lined) or stainless steel wear plates, that are easily replaceable

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## Performance curves

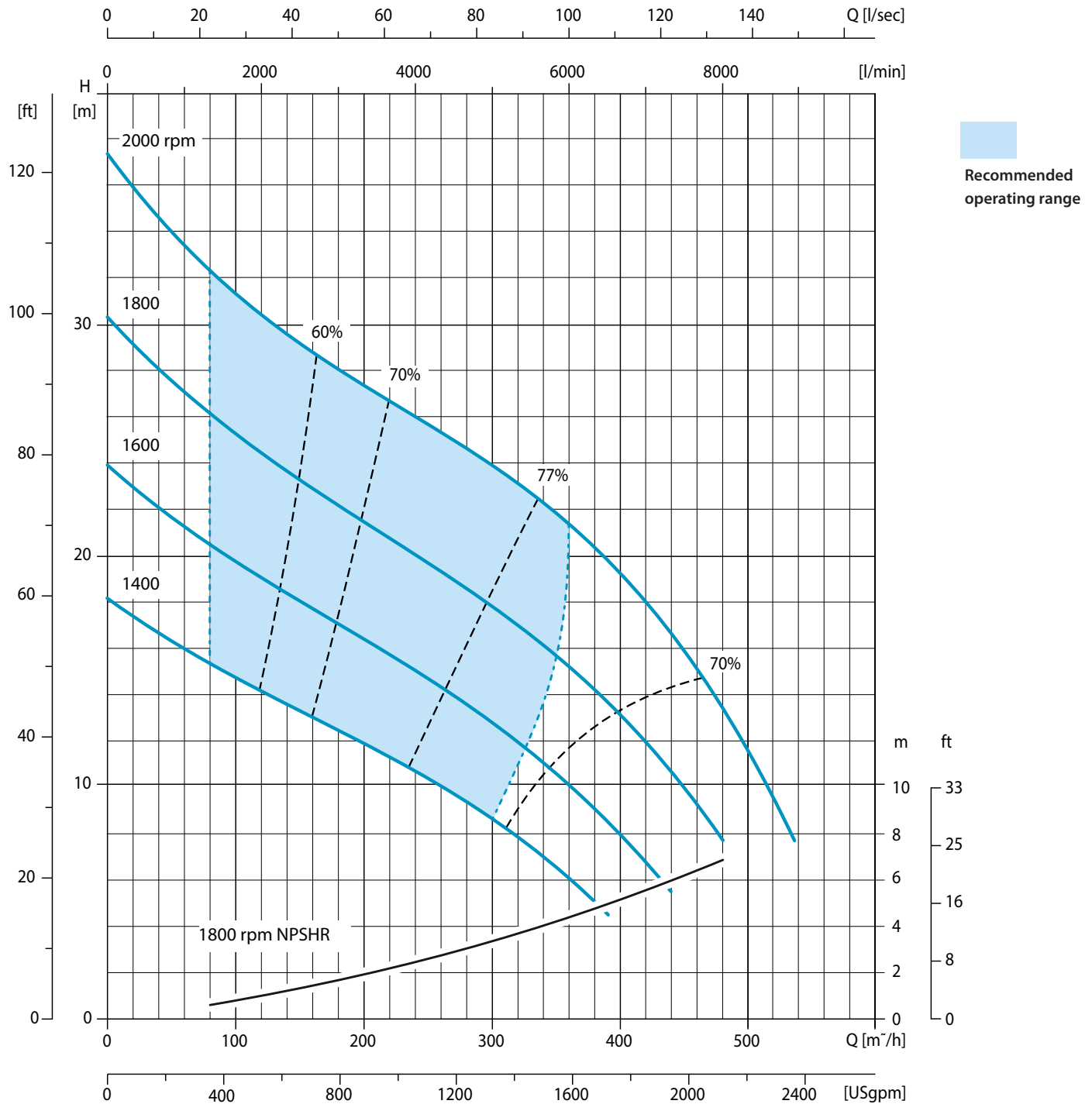
Test according to UNI EN ISO 9906 standard - level 2

Test liquid: clean water, density 1,000 kg/m<sup>3</sup>

Losses from priming system and check valve not included

Spherical solids handling: D.76 mm (3")

Max absorbed power: 27,0 kW - 36.2 HP (2.000 rpm)



# PAS 150 HARDHAT STAGE V

## Technical data

### Pump

Model	PAS 150	
Qmax	500 m <sup>3</sup> /h - 8333 l/min - (2200 USgpm)	
Hmax	37 m (121 ft)	
Q max eff.	340 m <sup>3</sup> /h - 5.670 l/min - (1497 USgpm)	
Eff. max	77 %	
Suction port	Multi Flanged - 6"	
Delivery port	Multi Flanged - 6"	
Impeller type	Semi-Open, 2 vane	
Solids handling	76 mm (3.0")	
Material	G11	F11
Casing	EN-GJL-200 cast iron	EN-GJL-200 cast iron
Impeller	EN-GJS-400 ductile iron	CF3M stainless steel
Wear plates	EN-GJL-200 rubber lined cast iron	CF3M stainless steel
Number of plates	2	2
Shaft	39NiCrMo3 steel	SAF 2205 stainless steel
Flushing	Yes	Yes
Mechanical seal	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide
Elastomers	VITON	VITON

### Priming system

Vacuum pump	V20
Vacuum pump type	Diaphragm
Nominal air capacity	50 m <sup>3</sup> /h (29.4 cfm)
Max vacuum	0,9 bar
Separator type	Valmatic
Separator material	EN-GJL-200 cast iron
Drives	Link belt

### Engine

Make	Kohler			
Model	KDI 1903TCR (KL69)			
Type	Diesel turbo common rail			
Displacement	1.861 cm <sup>3</sup> (114 in <sup>3</sup> )			
No. cylinders	3			
Cooling	Liquid with radiator			
Rpm type	Variable			
Standard speed	2.000 rpm			
EU emissions	2002/88/CE Stage V			
Starting	Electric			
Starting voltage	12 V			
EAT system	EGR+DOC+DPF			
Speed [rpm]	1400	1600	1800	2000
Consumption [l/h]	6,7	7,7	8,3	8,4
Power [kW]	27,7	31,7	33,6	34
Power [HP]	37.1	42.5	45.1	45.6

### Control panel

Model	DSE400 (PW1)
	Manual operation
	Automatic operation: start-stop with transducers or floats
	Digital display with multiple languages with:
	Hour meter, Rev counter, Liquid temperature, Oil pressure
	Battery voltmeter, Fuel level (%), Urea level
	Engine control unit (ECU) commands shutdown, derating or running depending on operating anomalies
	Automatic engine shutdown in case of:
	- low oil pressure
	- water overheating
	- low battery voltage
	(engine failure alarms with LED lights and display message)
	Service time (hours)
	Emergency stop button
	Push-button accelerator (up/down)
	(PW1 FleetLink control as option)

# PAS 150 HARDHAT STAGE V

## Arrangement

### Technical data

<b>Material</b>	S235JR EN 10025-2 carbon steel
<b>Coatings</b>	Epoxy powder, average thickness of 80 µm
<b>Color</b>	Yellow and grey Atlas Copco (standard)
<b>Features</b>	Painted steel base. Hardhart Gullwing doors.
<b>Battery</b>	Acid charge Pb-Ca maintenance free 12 V - 100 Ah - 400 A
<b>Tank</b>	200 l (52.8 USG)
<b>Drip pan</b>	250,0 l (66.0 USG) (125 % of the total volume of the tank)
<b>Emergency stop</b>	Outside the canopy
<b>Atlas Copco Hinge Kit</b>	



**Atlas Copco Hinge Door**

### PAS 150 Hardhat SKID



<b>Dimensions (w x l x h)</b>	1200 x 2420 x 1680 mm
<b>Dry weight (KL69)</b>	1415 kg (3,360 lb)
<b>Noise level</b>	63-68 dB(A) @10 m (32 ft)

### PAS 150 Hardhat RTFT



<b>Dimensions (w x l x h)</b>	1880 x 3810 x 2000 mm
<b>Dry weight (KL69)</b>	1720 kg (3,360 lb)
<b>Noise level</b>	63-68 dB(A) @10 m (32 ft)