

# PAS 300HF 440

Diesel - Qmax 600 l/s - Hmax 71 m



## PAS HF - 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 HF 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 a solutions portfolio that works across multiple applications. The PAS HF (high flow) 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: 72% (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 89 mm (3.5")

### Diaphragm vacuum pump

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

### Mechanical shaft seal in oil bath

It allows the "dry running" operation of the pump

# PAS 300HF 440

## Performance curves

Test according to UNI EN ISO 9906 standard - level 2

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

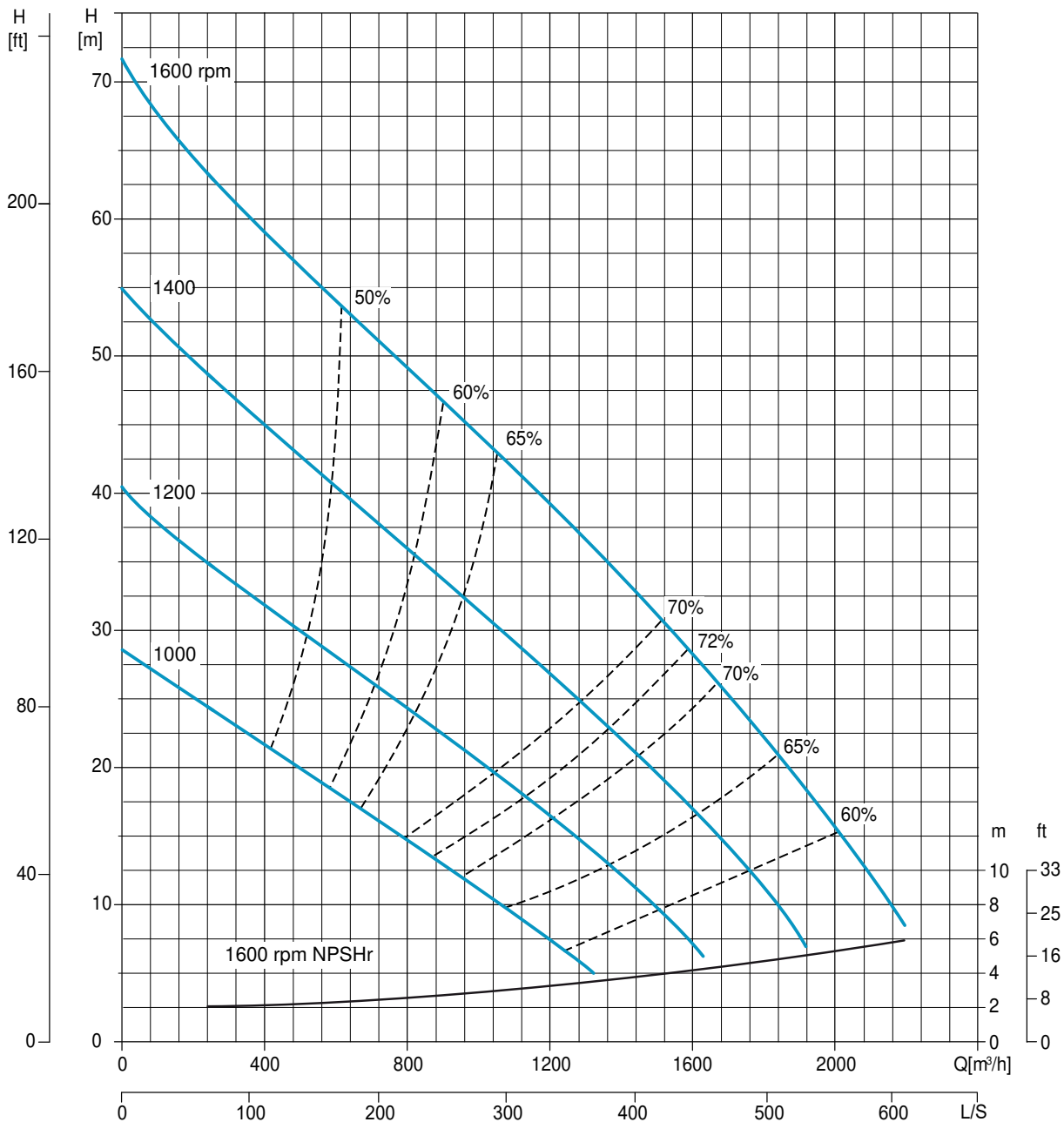
Spherical solids handling: D.89 mm (3.5")

Priming time: 30 s from 1,5 m (4.9 ft)

Max absorbed power: 195,0 kW - 261.5 HP (1.600 rpm)



Recommended operating range



# PAS 300HF 440

## Technical data

### Pump

Model	PAS 300HF 440
Qmax	600 l/s
Hmax	71 m
Q max eff.	438 l/s
Eff. max	72 %
Suction port	Flanged - DIN 300
Delivery port	Flanged - DIN 300
Impeller type	Semi-Open, 2 vane
Solids handling	89 mm (3.5 ")
Material	G11
Casing	ASTM A536 ductile iron
Impeller	ASTM A536 ductile iron
Wear plates	ASTM A48 Class 20 cast iron
Number of plates	1
Shaft	AISI 630 stainless steel
Mechanical seal	Silicon carbide / Tungsten carbide
Elastomers	VITON

### Priming system

Vacuum pump	V22
Vacuum pump type	Diaphragm
Nominal air capacity	85 m <sup>3</sup> /h (50.0 cfm)
Max vacuum	0,9 bar
Separator type	-
Separator material	EN-GJL-200 cast iron
Drives	Link belt

### Engines

Make	Volvo			
Model	TAD872VE (VL02)			
Type	Diesel turbo common rail			
Displacement	7.700 cm <sup>3</sup> (470 in <sup>3</sup> )			
No. cylinders	6			
Cooling	Liquid with radiator			
Rpm type	Variable			
Standard speed	1.600 rpm			
EU emissions	2002/88/CE Stage IV			
US emissions	EPA Tier 4 final			
Starting	Electric			
Starting voltage	24 V			
Oil change interval	500 h			
Emissions reduction technology	DOC + SCR			
Speed [rpm]	1000	1200	1400	1600
Consumption [l/h]	28	36	41	48
Power [kW]	125	160	180	210
Power [HP]	167.6	214.6	241.4	281.6

### Control panel

Model	CP PAS HF
	Manual operation
	Automatic operation: start-stop with transducers or floats
	Digital display with 6 languages (EN, SV, FR, DE, ES, IT) with:
	Hour meter, Rev counter, Liquid temperature, Oil pressure and temperature
	Battery voltmeter, Fuel level (%) and consumption (l/h)
	Automatic engine shutdown in case of:
	- low oil pressure
	- water overheating
	- low battery voltage
	(engine failure alarms with LED lights and display message)
	Emergency stop button
	Vacuum gauge
	Push-button accelerator (up/down)

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## Arrangements

Technical data	
Material	S275JR EN 10025-2 carbon steel
Coatings	Epoxy powder, average thickness of 80 µm
Color	Yellow and grey Atlas Copco (standard)
Features	Modular and demountable framework, galvanised steel lifting beam. Lockable battery box. Fuel level indicator.
Battery	Acid charge Pb-Ca maintenance free 12 V - 100 Ah - 400 A
Tank	420 l (111.0 USG)
Locking keys	Fuel cap

SKID02 PAS 300HF



Dimensions	1940 x 3250 x 2155 mm 76 x 128 x 85 "
H suction port	0,81 m (2.7 ft)
Weight (VL02)	3500 kg (7,720 lb)

## Silenced canopy

CNP PAS 300HF



Dimensions	2200 x 3900 x 2000 mm (87 x 154 x 79 ")
Material	S235JR EN 10025-2 carbon steel
Coatings	Epoxy powder, average thickness of 80 µm
Color	Yellow and grey Atlas Copco (standard)
Features	Steel base
Battery	Acid charge Pb-Ca maintenance free, 12 V - 100 Ah - 400 A
Tank	450 l (118.9 USG)
Drip pan	495 l (130.8 USG) (110% of the total volume of the tank)
Emergency stop	Inside the canopy
Locking keys	Control panel door and canopy doors
H suction port	0,81 m (2.7 ft)
Weight (VL02)	4300 kg (9,480 lb)
Noise level (VL02)	67-72 dB(A) @10 m (32 ft)

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Specification is subject to change without prior notice. Please check with your local Atlas Copco representative for the latest specifications.