Diesel - Qmax 280 m³/h (1,230 USgpm) - Hmax 42 m (138 ft)



ndicative picture of the product

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 expertize 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: 70% (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

Mechanical shaft seal in oil bath

It allows the "dry running" operation of the pump

Easy maintenance

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

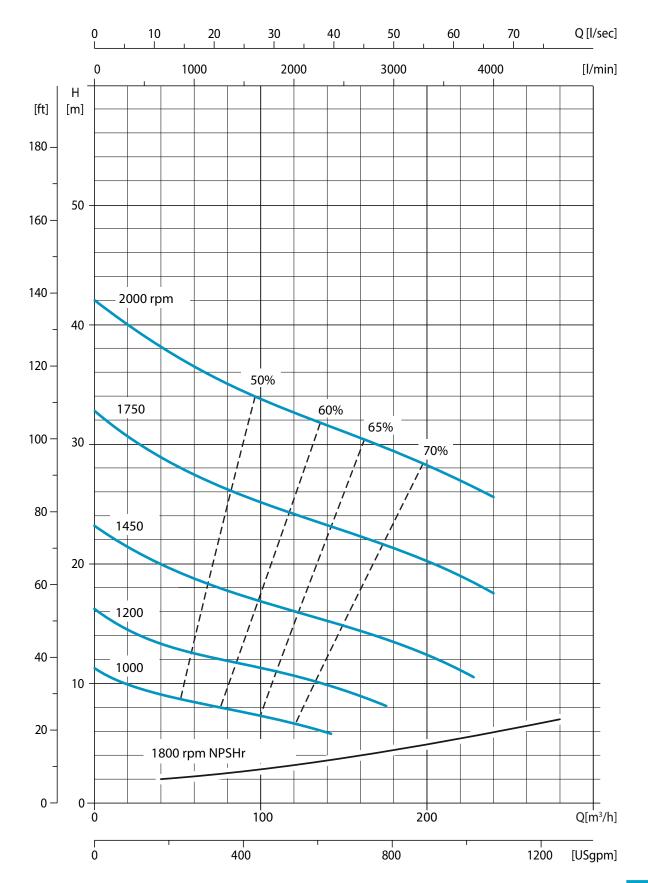
Wear plate

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



Performance curves

Test according to UNI EN ISO 9906 standard - level 2 Test liquid: clean water, density 1,000 kg/m³ Losses from check valve not included Spherical solids handling: D.76 mm (3")
Max absorbed power: 24,0 kW - 32.2 HP (2.000 rpm)





Technical data

Pump

Model	PAS 1	100HF
Qmax	240 m³/h - 4.000 l/s	min (1,056 USgpm)
Hmax	42 m ((138 ft)
Q max eff.	200 m ³ /h - 3.330 l/	/min (900 USgpm)
Eff. max	70	0%
Suction port	Flanged -	- DIN 100
Delivery port	Flanged -	- DIN 100
Impeller type	Semi-Ope	en, 2 vane
Solids handling	76 mm	n (3.0 ")
Makadal	C11	F44

Material	G11	F11
Casing	EN-GJL-200 cast iron	EN-GJL-200 cast iron
Impeller	EN-GJS-500 ductile iron	CF8M stainless steel
Wear plates	EN-GJL-200 rubber lined cast iron	CF8M stainless steel
Number of plates	2	2
Shaft	39NiCrMo4 steel	39NiCrMo4 steel
Flushing	Yes	Yes
Mechanical seal	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide
Elastomers	VITON	VITON

Priming system

Vacuum pump	V22	
Vacuum pump type	Diaphragm	
Nominal air capacity	85 m ³ /h (50.0 cfm)	
Max vacuum	0,9 bar	
Separator type	Atlas Copco	
Separator material	EN-AC-42100 Aluminium	
Drives	Link belt	

Engines

9				
Make		Ко	hler	
Model		KDI 1903TCR (KL69)		
Type		Diesel turbo common rail		
Displacement		1.861 cm ³ (114 in ³)		
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		
Emissions reduction		ECD DOC DDE		
technology		EGR+DOC+DPF		
Speed [rpm]	1400	1600	1800	2000
Consumption [I/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	PW750 (PW1)	
	Manual operation	
	Automatic operation: start-stop with transducers or floats	
	Digital display with 8 languages (EN, SV, FR, DE, ES, IT, PT, NL) 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	
	- engine overheating	
	- low battery voltage	
	(engine failure alarms with LED lights and display message)	
	Emergency stop button	
	Push-button accelerator (up/down)	
	(PW1 FleetLink control as option)	



Arrangement

Technical data	
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; stackable frame
Battery	Acid charge Pb-Ca maintenance free, 12 V - 100 Ah - 400 A
Tank	320 I (84.5 USG)
Optional supply	(External fuel connection as option)
Drip pan	352,0 I (93.0 USG) (110% of the total volume of the tank)
Emergency stop	Outside the canopy
Locking keys	Control panel door and canopy doors

CNP PAS 100HF SV



Dimensions	1110 x 2280 x 1560 mm	
	44 x 90 x 61 "	
H suction port	0,71 m (2.3 ft)	
Dry weight (KL69)	1525 kg (3,360 lb)	
Noise level	63-68 dB(A) @10 m (32 ft)	

