Diesel - Qmax 510 m³/h (2,250 USqpm) - Hmax 51 m (167 ft)



PAS 150HF 300 Liquid cooled engine

PAS MF - 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 8.5 m (27.5 ft)

High resistance

To abrasive liquids and turbid sandy waters

Semi-open impeller

Solids handling up to 76 mm (3")

Easy maintenance

Without lifting devices: hinged cover for direct access to the impeller

Diaphragm vacuum pump

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

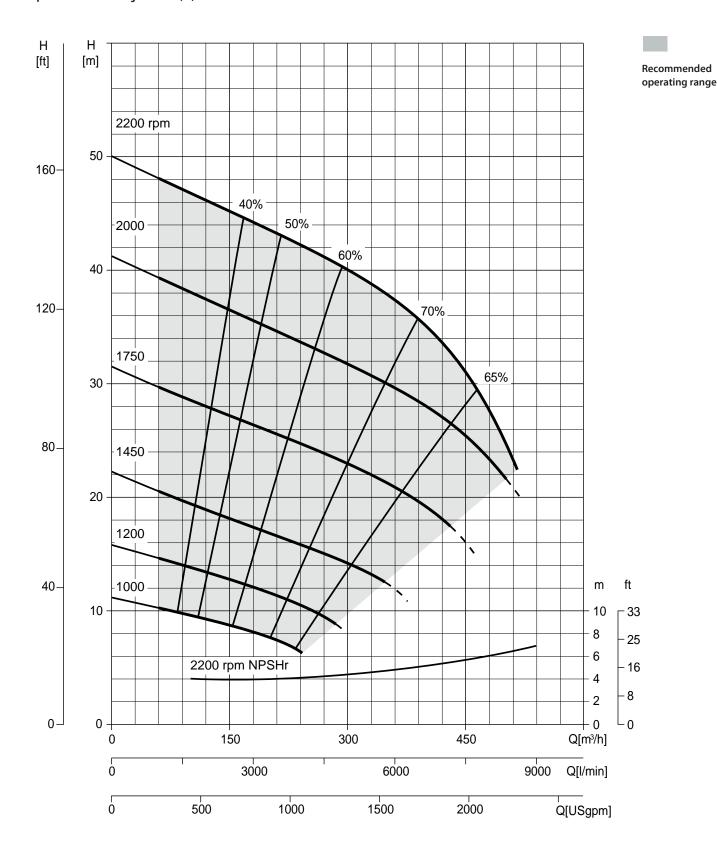
Wear plate

Cast iron or stainless steel (F11) wear plate, 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 Spherical solids handling: D.76 mm (3") Priming time: 30 s from 1,5 m (4.9 ft)
Max absorbed power: 0,0 kW - 0.0 HP (2.200 rpm)





Technical data

Pump

Model	PAS 150HF 300	
Qmax	510 m³/h - 8.500 l/min (2,200 USgpm)	
Hmax	51 m (167 ft)	
Q max eff.	390 m³/h - 6.500 l/min (1,700 USgpm)	
Eff. max	70 %	
Suction port	Flanged - DIN 150	
Delivery port	Flanged - DIN 150	
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-500 cast iron	CF8M stainless steel
Wear plates	EN-GJL-200 cast iron	CF8M stainless steel
Number of plates	1	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	V20	
Vacuum pump type	Diaphragm	
Nominal air capacity	50 m³/h (29.4 cfm)	
Max vacuum	0,9 bar	
Separator type	Valmatic	
Separator material	EN-GJL-200 cast iron	
Drives	Link belt	

Engines

Make		Deutz		
Model		TD 2.9 L4 (ZD54)		
Type		Diesel turb	o common rail	
Displacement		2.900 cr	m³ (177 in³)	
No. cylinders			4	
Cooling		Liquid w	rith radiator	
Rpm type		Va	riable	
Standard speed		2.20	00 rpm	
EU emissions		2002/88/	CE Stage IIIB	
US emissions		EPA Tier 4 final		
Starting		Electric		
Starting voltage		12 V		
Oil change interval		1000 h		
Emissions reduction		DOC		
technology		DOC		
Market		UE		
Speed [rpm]	1600	1800	2000	2200
Consumption [I/h]	10,1	11,2	12,3	12,8
Power [kW]	40,5	45,2	49,3	51,2

Control panel

Power [HP]

Model	CP DEUTZ ATS25 TCD	
	Manual operation	
	Backlighted LCD display	
	Protection rating - IP65	
	Digital hour meter	
	Digital rev counter	
	Battery voltmeter	
	Automatic engine shutdown in case of:	
	- low oil pressure	
	- water overheating	
	- lack of battery charging	
	- low fuel level	
	Up/down throttle	

60.6

66.1

54.3



68.7

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, hot dip galvanised steel skid and and lifting beam. Mudguards with galvanised steel walkable surface. Tow bar, adjustable support feet. Lockable battery box. Fuel level indicator.
Battery	Acid charge Pb-Ca maintenance free 12 V - 100 Ah - 400 A
Tank	355 I (93.8 USG)
Locking keys	Fuel cap



Dimensions	995 x 2080 x 1800 mm
	39 x 82 x 71 "
H suction port	0,66 m (2.2 ft)
Weight (ZD54)	1330 kg (2,930 lb)



Dimensions	1410 x 3150 x 2150 mm
	56 x 124 x 85 "
H suction port	1,1 m (3.6 ft)
Weight (ZD54)	1480 kg (3,260 lb)



Dimensions	1070 x 2730 x 1960 mm
2	42 x 107 x 77 "
H suction port	0,81 m (2.7 ft)
Weight (ZD54)	1480 kg (3,260 lb)



Arrangements



Dimensions	1100 x 2560 x 1705 mm (43 x 101 x 67 ")
Material	S235JR EN 10025-2 carbon steel
Coatings	Epoxy powder, average thickness of 80 μm
Color	Yellow and grey Atlas Copco (standard)
Features	Hot dip galvanised steel base; stackable frame
Battery	Acid charge Pb-Ca maintenance free, 12 V - 100 Ah - 400 A
Tank	355 I (93.8 USG)
Drip pan	390 I (103.0 USG) (110% of the total volume of the tank)
Emergency stop	Outside the canopy
Locking keys	Control panel door and canopy doors
H suction port	0,7 m (2.3 ft)
Weight (ZD54)	1680 kg (3,700 lb)
Noise level (ZD54)	66-71 dB(A) @10 m (32 ft)

Engines

<u> </u>				
Make	Deutz			
Model	TD 2.9 L4 (ZD54)			
Type		Diesel turbo	common rail	
Displacement		2.900 cm	³ (177 in ³)	
No. cylinders		•	4	
Cooling		Liquid wit	th radiator	
Rpm type		Vari	able	
Standard speed		2.200	0 rpm	
EU emissions		2002/88/C	E Stage IIIB	
US emissions		EPA Tier 4 final		
Starting	Electric			
Starting voltage		12 V		
Oil change interval		1000 h		
Emissions reduction		DOC		
technology	DUC			
Market	UE			
Speed [rpm]	1600	1800	2000	2200
Consumption [I/h]	10,1	11,2	12,3	12,8
Power [kW]	40,5	45,2	49,3	51,2
Power [HP]	54.3	60.6	66.1	68.7

Control panel

Model	CP CNP 01
	Manual operation, automatic operation (startstop with floats), emergency operation
	Hour meter
	Rev counter
	Battery voltmeter
	Fuel level indicator
	Vacuum gauge
	Emergency stop button
	Display with 6 languages
	Automatic engine shutdown in case of:
	- low oil pressure
	- water overheating
	- lack of battery charging
	(engine failure alarms with LED lights and display message)
	GSM communication module (optional)
	Throttle rod

