Diesel - Qmax 141 I/s - Hmax 51 m



PAS 150HF 300 Liquid cooled engine

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.

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 l		
Locking keys	Fuel cap		

Data sheet : **2960062000** © Atlas Copco 2017

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

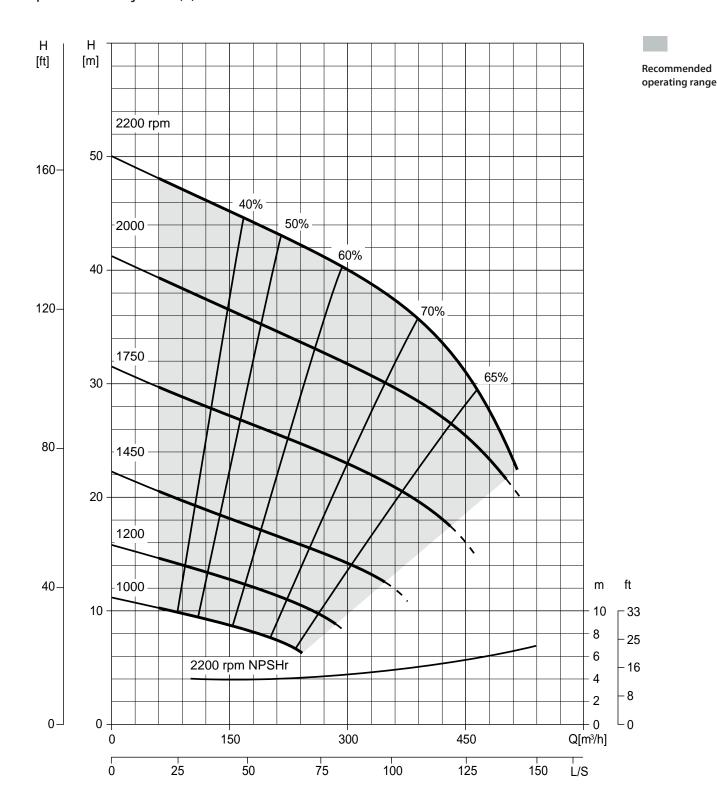
Cast iron or stainless steel (F11) wear plate, that are easily replaceable





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	141 l/s - 8.500 l/min (2,200 USgpm)
Hmax	51 m (167 ft)
Q max eff.	108 l/s - 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

Deutz			
TD 2.9 L4 (ZD54)			
	Diesel turbo common rail		
	2.900 cm³ (177 in³)		
	4		
	Liquid with radiator		
	Variable		
	2.200 rpm		
	2002/88/CE Stage IIIB		
	EPA Tier 4 final		
	Electric		
	12 V		
	1000 h		
	DOC		
DOC			
UE			
1600	1800	2000	2200
10,1	11,2	12,3	12,8
40,5	45,2	49,3	51,2
	10,1	TD 2.9 L Diesel turbo 2.900 cm Liquid wi Vari 2.200 2002/88/C EPA Tie Ele 17 100 D 1600 1800 10,1	TD 2.9 L4 (ZD54) Diesel turbo common rail 2.900 cm³ (177 in³) 4 Liquid with radiator Variable 2.200 rpm 2002/88/CE Stage IIIB EPA Tier 4 final Electric 12 V 1000 h DOC UE 1600 1800 2000 10,1 11,2 12,3

Control panel

Power [HP]

Model	C	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



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

Make	Deutz			
Model	TD 2.9 L4 (ZD54)			
Type		Diesel turbo common rail		
Displacement		2.900 cm ³ (177 in ³)		
No. cylinders		4	4	
Cooling		Liquid wit	th radiator	
Rpm type		Variable		
Standard speed		2.200 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		pag		
technology	DOC			
Market	UE			
Speed [rpm]	1600	1800	2000	2200
Consumption [l/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

