PAS 100HF 250

Diesel - Qmax 280 m^3/h (1,230 USgpm) - Hmax 50 m (164 ft)

PAS 100HF 250 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

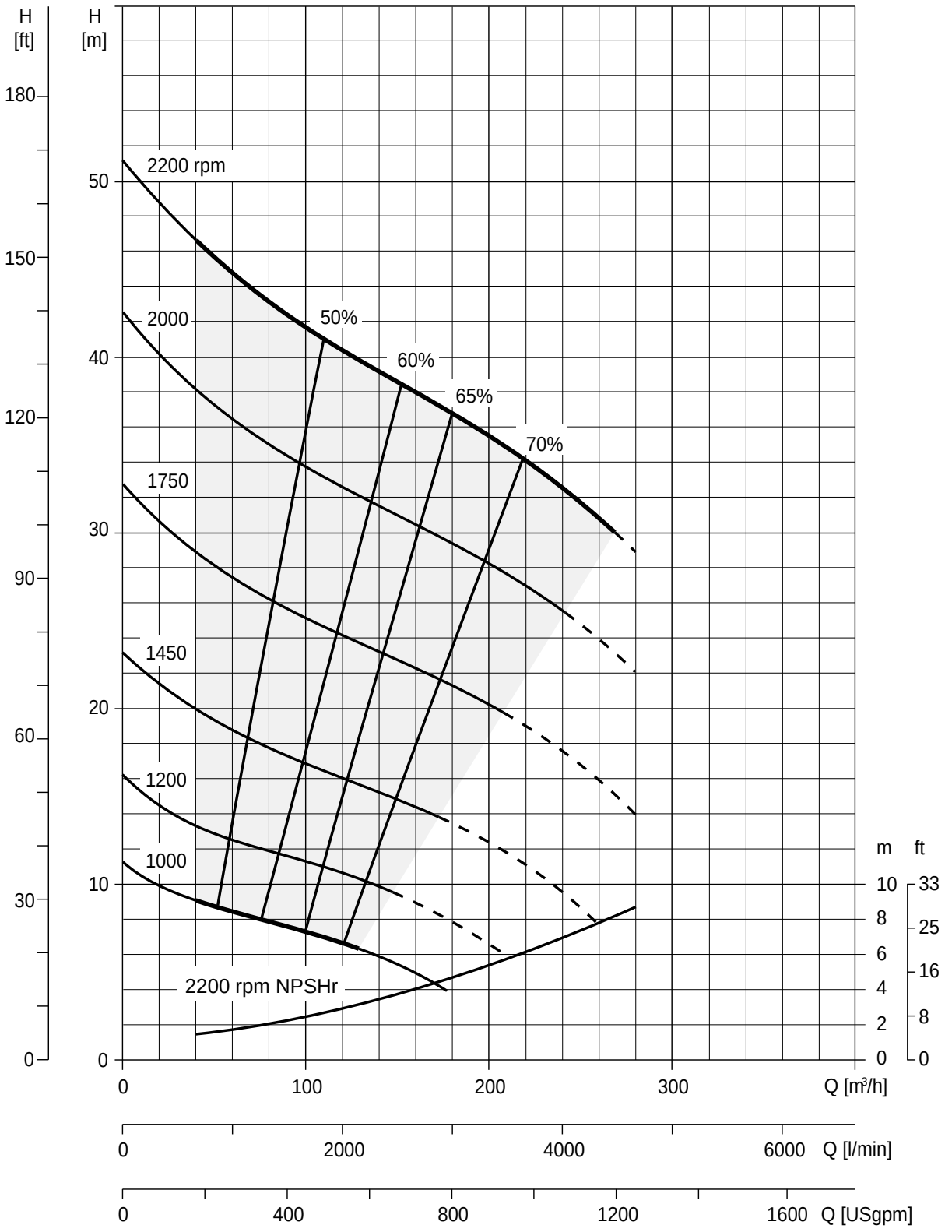
Wear plate
Cast iron or stainless steel (F11) wear plate, that are easily replaceable

PAS 100HF 250

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: 29,0 kW - 38.9 HP (2.200 rpm)



PAS 100HF 250

Technical data

Pump

Model	PAS 100HF 250	
Qmax	280 m³/h - 4.670 l/min (1,200 USgpm)	
Hmax	50 m (164 ft)	
Q max eff.	220 m³/h - 3.670 l/min (1,000 USgpm)	
Eff. max	70 %	
Suction port	Flanged - DIN 100	
Delivery port	Flanged - DIN 100	
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	D 2.9 L4 (ZD53)			
Type	Diesel direct injection, aspirated			
Displacement	2.900 cm³ (177 in³)			
No. cylinders	4			
Cooling	Liquid with 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 technology	DOC			
Speed [rpm]	**1600**	**1800**	**2000**	**2200**
Consumption [l/h]	5,8	6,4	7	7,8
Power [kW]	23,3	25,6	27,9	31
Power [HP]	31.2	34.3	37.4	41.6

Control panel

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

PAS 100HF 250

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 l (93.8 USG)
Locking keys	Fuel cap

BLOCK PAS 100HF

Dimensions	995 x 2080 x 1800 mm 39 x 82 x 71 "
H suction port	0,58 m (1.9 ft)
Weight (ZD53)	1180 kg (2,600 lb)

TRAILER PAS 100HF

Dimensions	1410 x 3150 x 2150 mm 56 x 124 x 85 "
H suction port	1 m (3.3 ft)
Weight (ZD53)	1330 kg (2,930 lb)

SKID02 PAS 100HF

Dimensions	1070 x 2730 x 1960 mm 42 x 107 x 77 "
H suction port	0,73 m (2.4 ft)
Weight (ZD53)	1330 kg (2,930 lb)

PAS 100HF 250

Arrangements

CNP PAS 100HF

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 l (93.8 USG)
Drip pan	390 l (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	0,72 m (2.4 ft)
Weight (ZD53)	1380 kg (3,040 lb)
Noise level (ZD53)	65-70 dB(A) @10 m (32 ft)

Engines

Make	**Deutz**			
Model	D 2.9 L4 (ZD53)			
Type	Diesel direct injection, aspirated			
Displacement	2.900 cm^3 (177 in^3)			
No. cylinders	4			
Cooling	Liquid with 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 technology	DOC			
Speed [rpm]	**1600**	**1800**	**2000**	**2200**
Consumption [l/h]	5,8	6,4	7	7,8
Power [kW]	23,3	25,6	27,9	31
Power [HP]	31.2	34.3	37.4	41.6

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