### Diesel - Qmax 850 m<sup>3</sup>/h (3,740 USqpm) - Hmax 50 m (164 ft)



PAS 200HF 305 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: 75% (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

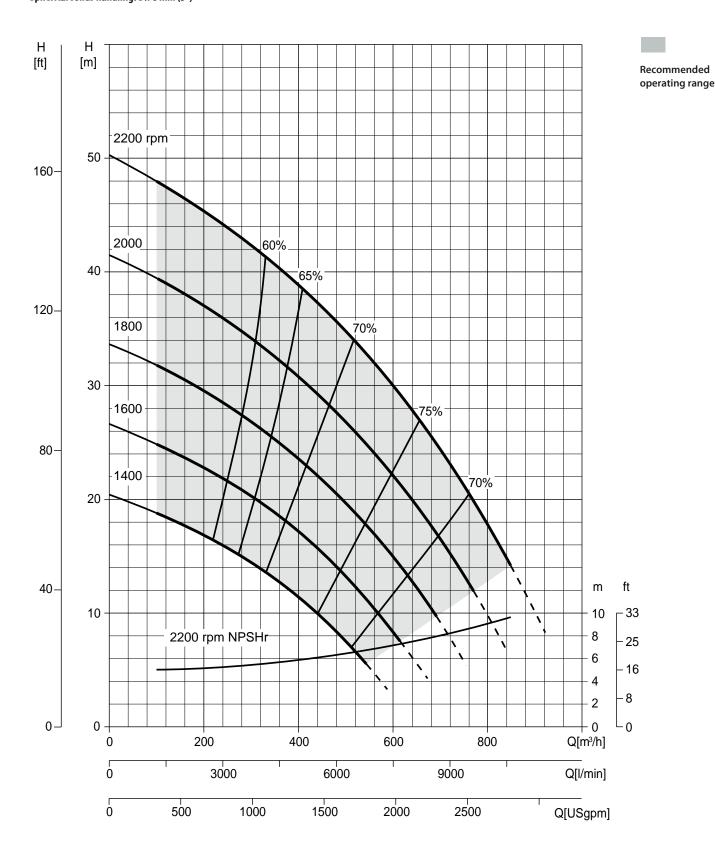
Cast iron or stainless steel (F11) wear plate, that are easily replaceable



## **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: 78,0 kW - 104.6 HP (2.200 rpm)





## **Technical data**

### Pump

Model	PAS 200HF 305
Qmax	850 m³/h - 14.170 l/min (3,700 USgpm)
Hmax	50 m (164 ft)
Q max eff.	660 m³/h - 11.000 l/min (2,900 USgpm)
Eff. max	75 %
Suction port	Flanged - DIN 200
Delivery port	Flanged - DIN 200
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		TCD 3.6 L4 (ZD55)		
Type		Diesel turbo	common rail	
Displacement		3.600 cm	n³ (220 in³)	
No. cylinders			4	
Cooling		Liquid wi	ith radiator	
Rpm type		Var	riable	
Standard speed		2.20	0 rpm	
EU emissions		2002/88/0	CE Stage IIIB	
US emissions		EPA Tier 4 final		
Starting		Electric		
Starting voltage		12 V		
Oil change interval		1000 h		
Emissions reduction		DOC + SCR		
technology				
Market		UE		
Speed [rpm]	1600	1800	2000	2200
Consumption [I/h]	17,1	19,1	19,6	20,4
Power [kW]	70,7	78,2	78,6	79,1

### **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	

104.9

94.8

105.4



106.1

## 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	450 I (118.9 USG)
Locking keys	Fuel cap



Dimensions	1430 x 2300 x 2050 mm
2	56 x 91 x 81 "
H suction port	0,76 m (2.5 ft)
Weight (ZD55)	1500 kg (3,310 lb)



Dimensions	1700 x 3260 x 2400 mm	
2	67 x 128 x 94 "	
H suction port	1,2 m (3.9 ft)	
Weight (ZD55)	1850 kg (4,080 lb)	



Dimensions	1480 x 2930 x 2190 mm
	58 x 115 x 86 "
H suction port	0,91 m (3 ft)
Weight (ZD55)	1850 kg (4,080 lb)



## Arrangements



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	450 I (118.9 USG)
Drip pan	495 I (130.8 USG) (110% of the total volume of the tank)
<b>Emergency stop</b>	Outside the canopy
Locking keys	Control panel door and canopy doors
H suction port	0,95 m (3.1 ft)
Weight (ZD55)	2000 kg (4,410 lb)
Noise level ()	- @10 m (32 ft)

### **Engines**

Make		Deutz		
Model		TCD 3.6 L4 (ZD55)		
Туре		Diesel turbo	common rail	
Displacement		3.600 cm	n³ (220 in³)	
No. cylinders			4	
Cooling		Liquid wi	ith radiator	
Rpm type		Var	iable	
Standard speed		2.20	0 rpm	
EU emissions		2002/88/0	CE Stage IIIB	
US emissions		EPA Tier 4 final		
Starting		Electric		
Starting voltage		12 V		
Oil change interval		1000 h		
Emissions reduction		200 - 602		
technology		DOC + SCR		
Market		UE		
Speed [rpm]	1600	1800	2000	2200
Consumption [l/h]	17,1	19,1	19,6	20,4
Power [kW]	70,7	78,2	78,6	79,1
Power [HP]	94.8	104.9	105.4	106.1

### **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

