Diesel - Qmax 142 l/s - Hmax 51 m





Indicative picture of the product

## **PAS HF - Vacuum prime centrifugal pumps**

The pump system consists of a centrifugal pump and a vacuum pump - making automatic priming possible. The machine quickly removes the air from the suction pipe and begins to pump, even at suction heights of several metres. The PAS MF series is also appropriate for pumping liquids with suspended solids because of the semi-open impeller.

## **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 plates

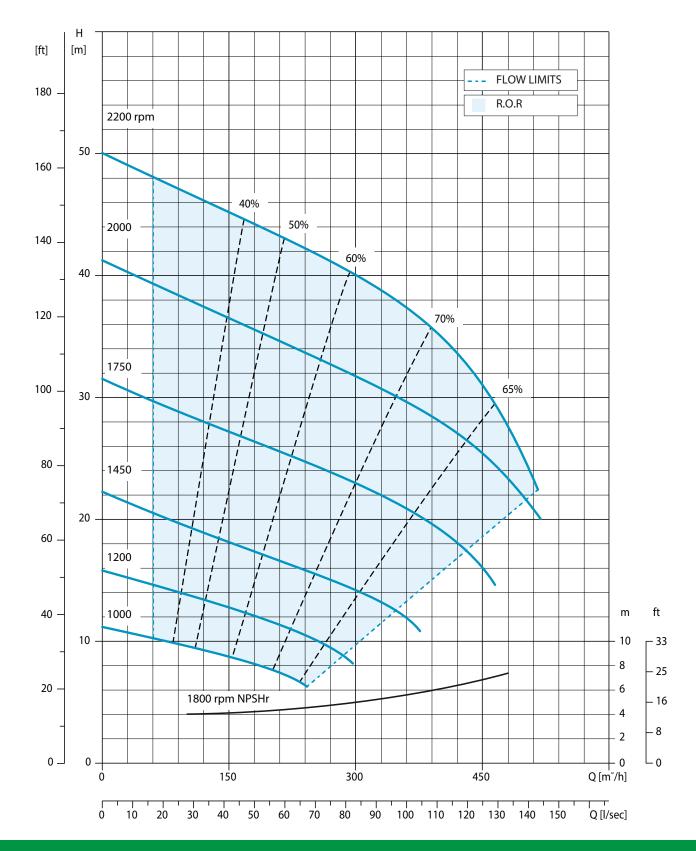
Cast iron or stainless steel (F10) wear plate, that is easily replaceable



## **Performance curves**

Test according to UNI EN ISO 9906 standard - level 2
Test liquid: clean water, density 1,000 kg/m³
Losses from priming system and check valve not included

Spherical solids handling: D.76 mm (3")
Max absorbed power: 51,0 kW - 68.4 HP (2.200 rpm)





## **Technical data**

### **Pump**

Model	PAS 1	150HF
Qmax	142 l/s - 510 m <sup>3</sup> /h - 8.5	500 l/min (2,250 USgpm)
Hmax	51 m (	(167 ft)
Q max eff.	108 l/s - 390 m <sup>3</sup> /h - 6.5	00 l/min (1,720 USgpm)
Eff. max	70	0 %
Suction port	Flanged - 150 T	TABLE E (AS 2129)
Delivery port	Flanged - 150 T	TABLE E (AS 2129)
Impeller type	Semi-Op	en, 2 vane
Solids handling	76 mn	m (3.0 ")
14 4 1 1	510	540

Material	G10	F10
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 rubber lined cast iron	CF8M stainless steel
Number of plates	2	2
Shaft	39NiCrMo4 steel	39NiCrMo4 steel
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

#### **Engine**

Make	Deutz			
Model	TD 2.9 L4 (ZD71)			
Type		Diesel direct injection, aspirated		
Displacement		2.900 cm <sup>3</sup> (177 in <sup>3</sup> )		
No. cylinders	4			
Cooling	Liquid with radiator			
Rpm type	Variable			
Standard speed	2.200 rpm			
US emissions	EPA Tier 3			
Starting	Electric			
Starting voltage		12 V		
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	PWK37 KENSHO CONTROLLER
	Manual operation: start, stop
	Automatic operation: start-stop with transducers or floats
	Digital display
	Hour meter, Rev counter, Liquid temperature, Oil pressure
	Battery voltmeter, Fuel level (%),
	Automatic engine shutdown in case of:
	- low oil pressure
	- water overheating
	- low battery voltage
	(engine failure alarms with LED lights and display message)
	Emergency stop button
	Push-button accelerator (up/down)



## **Arrangements**

Technical data	
Material	S235JR EN 10025-2 carbon steel
Coatings	Polyester powder, average thickness of 80 μm
Color	Yellow and grey Atlas Copco (standard)
Battery	Acid charge Pb-Ca maintenance free 12 V - 100 Ah - 400 A
Tank	320 I (84.5 USG)

#### PAS 150HF 300 CNP



Dimensions	1220 x 2600 x 1800 mm
Dry weight (KL38)	1680 kg
Noise level	63-68 dB(A) @10 m

#### **PAS 150HF 300 SKID**



 Dimensions
 1070 x 2730x 1960 mm

 Dry weight (KL38)
 1510 kg

 Noise level
 75-80 dB(A) @10 m

Specification is subject to change without prior notice. Please check with your local Atlas Copco representative for the latest specifications.

