Diesel - Qmax 600 L/S - Hmax 71 m



ndicative picture of the product

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.

Benefits

Pump

High efficiency: 72% (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 89 mm (3.5")

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

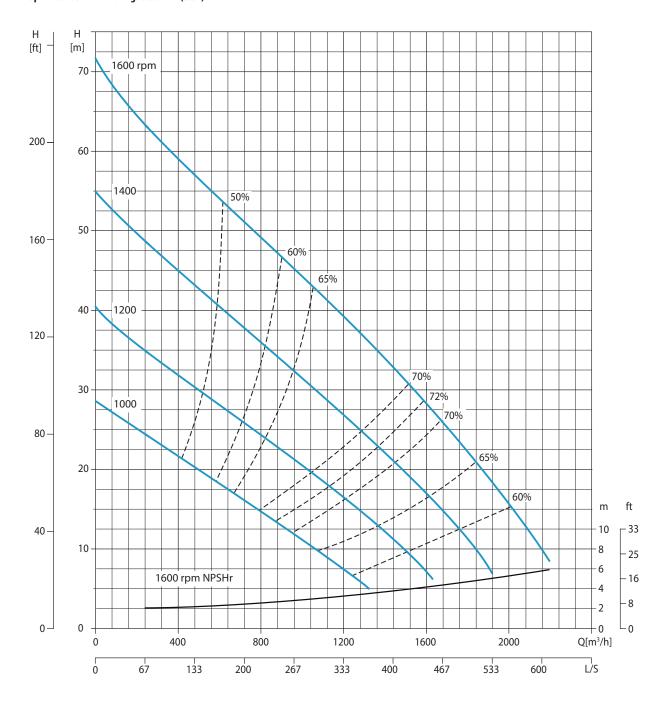
Atlas Copco

Data sheet

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.89 mm (3.5") Priming time: 30 s from 1,5 m (4.9 ft)

Max absorbed power: 195,0 kW - 261.5 HP (1.600 rpm)



2



Data sheet

Technical data

Pump

Qmax600 L/SHmax71 mQ max eff.439 L/SEff. max72 %Suction portFlanged - DIN 300Delivery portFlanged - DIN 300Impeller typeSemi-Open, 2 vaneSolids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel			
Hmax71 mQ max eff.439 L/SEff. max72 %Suction portFlanged - DIN 300Delivery portFlanged - DIN 300Impeller typeSemi-Open, 2 vaneSolids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Model	PAS 300HF 440	
Q max eff.439 L/SEff. max72 %Suction portFlanged - DIN 300Delivery portFlanged - DIN 300Impeller typeSemi-Open, 2 vaneSolids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Qmax	600 L/S	
Eff. max72 %Suction portFlanged - DIN 300Delivery portFlanged - DIN 300Impeller typeSemi-Open, 2 vaneSolids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Hmax	71 m	
Suction portFlanged - DIN 300Delivery portFlanged - DIN 300Impeller typeSemi-Open, 2 vaneSolids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Q max eff.	439 L/S	
Delivery portFlanged - DIN 300Impeller typeSemi-Open, 2 vaneSolids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Eff. max	72 %	
Impeller typeSemi-Open, 2 vaneSolids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Suction port	Flanged - DIN 300	
Solids handling89 mm (3.5 ")MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Delivery port	Flanged - DIN 300	
MaterialG10CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Impeller type	Semi-Open, 2 vane	
CasingASTM A536 ductile ironImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Solids handling	89 mm (3.5 ")	
ImpellerASTM A536 ductile ironWear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Material	G10	
Wear platesASTM A48 Class 20 cast ironNumber of plates1ShaftAISI 630 stainless steel	Casing	ASTM A536 ductile iron	
Number of plates1ShaftAISI 630 stainless steel	Impeller	ASTM A536 ductile iron	
Shaft AISI 630 stainless steel	Wear plates	ASTM A48 Class 20 cast iron	
	Number of plates	1	
Mechanical seal Silicon carbide / Tungsten carbide	Shaft	AISI 630 stainless steel	
	Mechanical seal	Silicon carbide / Tungsten carbide	
Elastomers VITON	Elastomers	VITON	

Priming system

rilling system		
Vacuum pump	V22	
Vacuum pump type	Diaphragm	
Nominal air capacity	85 m³/h (50.0 cfm)	
Max vacuum	0,9 bar	
Separator type	-	
Separator material	EN-GJL-200 cast iron	
Drives	Link belt	

Engines

Engines				
Make	Volvo			
Model	TAD852VE			
Type		Diesel turbo common rail		
Displacement		7.700 cm	³ (470 in ³)	
No. cylinders		6		
Cooling	Liquid with radiator			
Rpm type	Variable			
Standard speed	1.600 rpm			
EU emissions	2002/88/CE Stage IIIA			
US emissions	EPA Tier 3			
Starting	Electric			
Starting voltage	24 V			
Oil change interval	500 h			
Speed [rpm]	1000	1200	1400	1600
Consumption [I/h]	25,1	35,4	42,8	51,7
Power [kW]*	112,8	155,1	183,3	206,8
Power [HP]	151.2	207.9	245.7	277.2

^{*} continuous power ISO 3046 ICXN

Control panel

Model	PW 750
	Manual operation
	Automatic operation: start-stop with transducers or floats
	Digital display with 6 languages (EN, SV, FR, DE, ES, IT) with:
	Hour meter, Rev counter, Liquid temperature, Oil pressure and temperature
	Battery voltmeter, Fuel level (%) and consumption (I/h)
	Engine control unit (ECU) commands shutdown, derate or run depending on operating anomalies
	Automatic engine shutdown in case of:
	- low oil pressure
	- engine overheating
	- low battery voltage
	(engine failure alarms with LED lights and display message)
	Service time (hours)
	Emergency stop button
	Push-button accelerator (up/down)



Data sheet

Arrangement

Technical data	
Material	S275JR EN 10025-2 carbon steel
Coatings	Epoxy powder, average thickness of 80 μm
Features	Modular framework, hot dip galvanised steel lifting beam. Lockable battery box. Fuel level indicator.
Battery	$N^{\circ}2$ batteries - Acid charge Pb-Ca maintenance free 12 V - 160 Ah - 680 A
Tank	450 I (119 USG)
Locking keys	Fuel cap

PAS 300HF SKID



Dimensions	1940 x 3220 x 2195 mm
H suction port	0.81 m
Dry weight	3.750 kg approx.

