Diesel - Qmax 111 l/s - Hmax 37 m



PAS - Vacuum prime centrifugal pumps

The pump system consists of a centrifugal pump and 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 MF 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 expertise into providing solutions that work across multiple applications. The PAS 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: 77% (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

Easy maintenance

Hinged cover for direct access to the impeller (without lifting devices). Link belt quick to replace on the field.

Mechanical shaft seal in oil bath

It allows the "dry running" operation of the pump

Wear plate

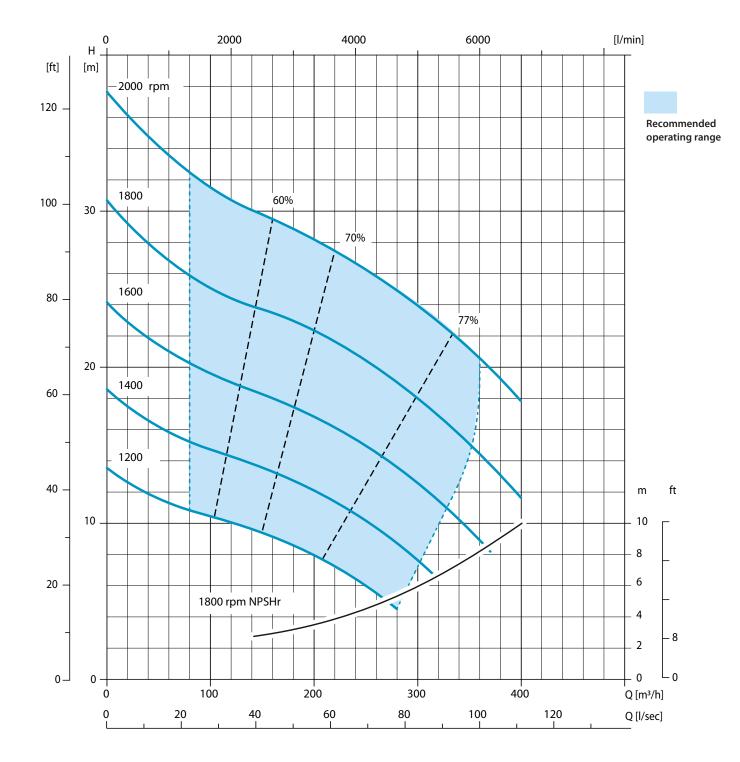
Cast iron (G11 rubber lined) or stainless steel wear plates, that are easily replaceable



Performance curves

Test according to UNI EN ISO 9906 standard - level 2B
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: 27,0 kW - 36.2 HP (2.000 rpm)





Technical data

Pump

Model	PAS	150
Qmax	111 l/s - 4	400 m³/h
Hmax	37 m (*	121 ft)
Q max eff.	95 l/s - 3	340 m³/h
Eff. max	77	⁷ %
Suction port	Flanged - 150 TA	ABLE E (AS 2129)
Delivery port	Flanged - 150 TA	ABLE E (AS 2129)
Impeller type	Semi-Ope	en, 2 vane
Solids handling	76 mm	n (3.0")
Matarial	C11	F11

Material	G11	F11
Casing	EN-GJL-200 cast iron	EN-GJL-200 cast iron
Impeller	EN-GJS-500 ductile iron	AISI 316L - CF3M stainless steel
Wear plates	EN-GJL-200 rubber lined cast iron	AISI 316L - CF3M stainless steel
Number of plates	2	2
Shaft	39NiCrMo3 steel	SAF 2205 stainless steel
Flushing	Yes	Yes
Mechanical seal	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide
Elastomers	NBR/VITON	NBR/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	Atlas Copco
Separator material	EN AC-42100 (AlSi7Mg0.3) - Aluminum
Drives	Link belt

Engine

Make		De	eutz	
Model	D 2.9 L4			
Type	Diesel direct injection, aspirated			
Displacement	2.900 cm³ (177 in³)			
No. cylinders	4			
Cooling	Liquid with radiator			
Rpm type	Variable			
Standard speed	2.000 rpm			
US emissions	EPA Tier 3			
Starting	Electric			
Starting voltage	12 V			
Speed [rpm]	1400	1600	1800	2000
Consumption [I/h]	6	7	7.7	8,4
Power [kW]	22	25	27	29,5
Power [HP]	26,5	33,5	36,3	39,5

Control panel

Model	PWK37 KENSHO CONTROLLER	
	Manual operation: start, stop	
	Automatic operation: start-stop with floats	
	Digital display with 2 languages (EN, CN) with:	
	Hour meter, Rev counter, Liquid temperature, Oil pressure	
	Battery voltmeter, Fuel level (%)	
	Engine control unit (ECU) commands shutdown, derating or running depending on operating anomalies	
	Automatic engine shutdown in case of:	
	- low oil pressure	
	- water overheating	
	- low battery voltage	
	(engine failure alarms with LED lights and display message)	
	Service time (hours)	
	Emergency stop button	
	Push-button accelerator (up/down)	



Arrangement

Technical data Material	S235 JR EN 10025-2 carbon steel
Coatings	Epoxy powder, average thickness of 80 μm
Color	Yellow and grey Atlas Copco (standard)
Features	Painted steel base. Hardhart Gullwing doors.
Battery	Acid charge Pb-Ca maintenance free 12 V - 100 Ah - 400 A
Tank	200 I (52.8 USG)
Optional supply	(External fuel connection as option)
Drip pan	250,0 l (66.0 USG) (125 % of the total volume of the tank)
Emergency stop	Outside the canopy
Emergency stop	Outside the canopy

Dimensions	POD 1200 x 2320 x 1480 mm	
	On Trailer 1900w x 1840h x 3800L mm	
H suction port	0,56 m (1.8 ft)	
Dry weight	POD 1150 kg On Trailer 1500 kg	
Wetweight	POD 1370 kg On Trailor 1730 kg	









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

