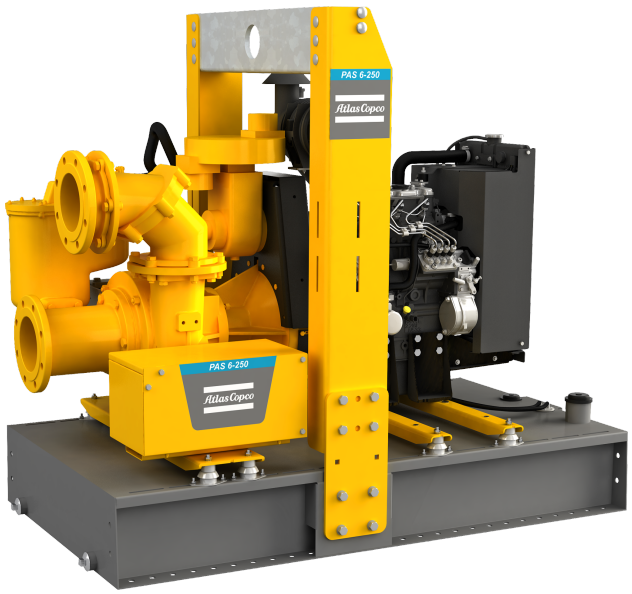
PAS 300MF 390

Diesel - Qmax 1,130 m^3/h (4,980 USgpm) - Hmax 29,5 m (97 ft)



PAS 300MF 390 Liquid cooled engine

PAS MF - Vacuum prime centrifugal pumps

The pump system consists of a centrifugal pump and a SuperDuo 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 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 expertize into providing a solutions portfolio that works across multiple applications. The PAS MF (medium 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: 60% (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

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

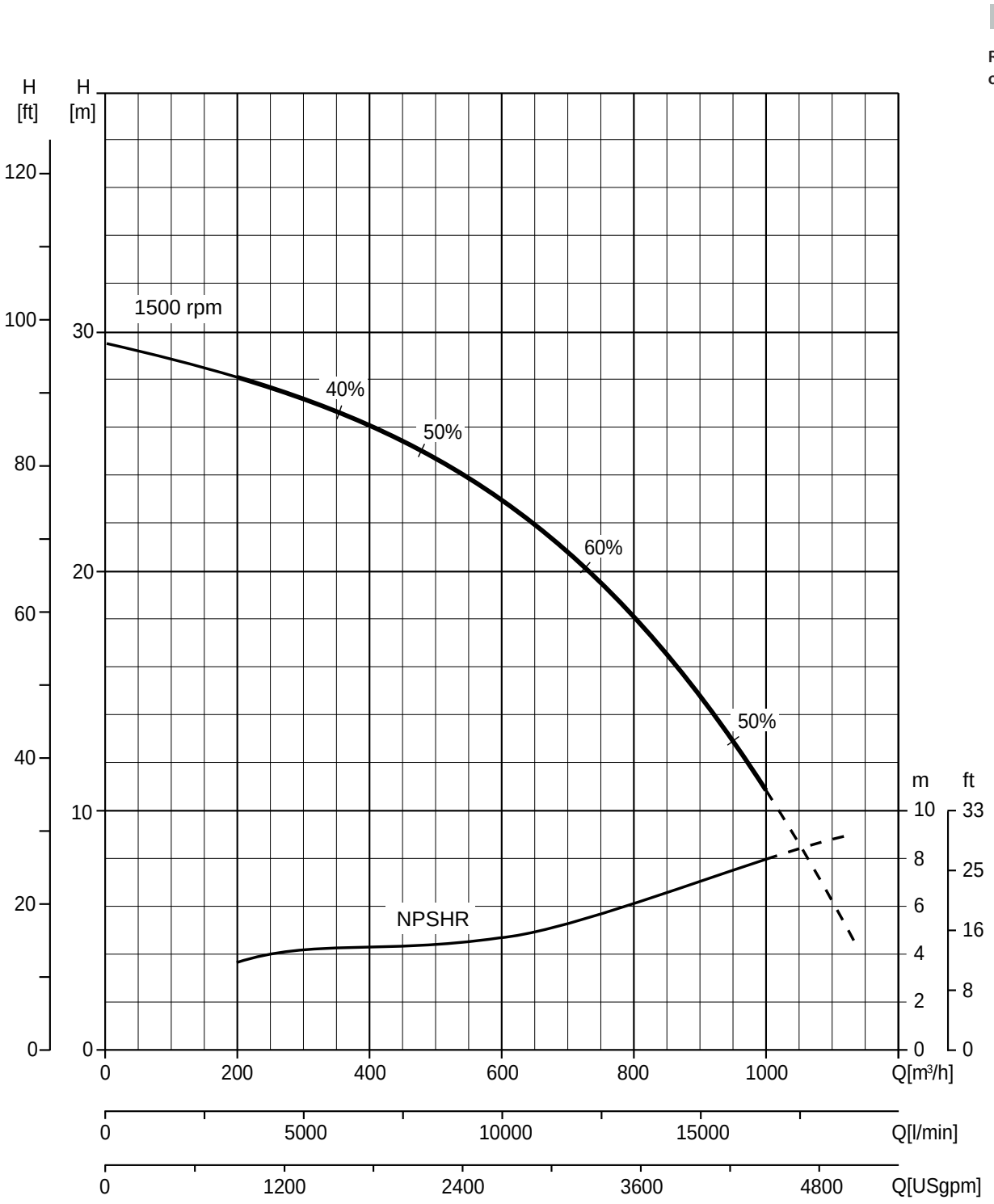
Rotary vane vacuum pump
Lubricated with oil recovery system and coalescing filters: no contamination of the environment

PAS 300MF 390

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: 40 s from 1,5 m (4.9 ft)
Max absorbed power: 68,0 kW - 91.2 HP (1.500 rpm)



PAS 300MF 390

Technical data

Pump

Model	PAS 300MF 390	
Qmax	1.130 m^3/h - 18.830 l/min (5,000 USgpm)	
Hmax	29,5 m (97 ft)	
Q max eff.	725 m^3/h - 12.080 l/min (3,200 USgpm)	
Eff. max	60 %	
Suction port	Flanged - DIN 300	
Delivery port	Flanged - DIN 300	
Impeller type	Semi-Open, 2 vane	
Solids handling	76 mm (3.0 ")	
Material	**G10**	**F10**
Casing	EN-GJL-200 cast iron	EN-GJL-200 cast iron
Impeller	EN-GJS-400 cast iron	CF8M stainless steel
Wear plates	EN-GJL-200 cast iron	CF8M stainless steel
Number of plates	1	1
Shaft	39NiCrMo3 steel	AISI 329 stainless steel
Mechanical seal	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide
Elastomers	VITON	VITON

Priming system

Vacuum pump	V04
Vacuum pump type	rotary vane
Nominal air capacity	75 m^3/h (44.1 cfm)
Max vacuum	0,9 bar
Separator type	Superduo
Separator material	EN-GJL-200 cast iron
Drives	

Engines

Make	Perkins
Model	1104D-E44TAG2 (PK12)
Type	Diesel turbo common rail
Displacement	4.400 cm^3 (269 in^3)
No. cylinders	4
Cooling	Liquid with radiator
Rpm type	Fixed
Standard speed	1.500 rpm
EU emissions	2002/88/CE Stage 3A
US emissions	EPA Tier III
Starting	Electric
Starting voltage	12 V
Oil change interval	500 h
Market	UE
Speed [rpm]	**1500**
Consumption [l/h]	24,5
Power [kW]	92,1
Power [HP]	123.5

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 300MF 390

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 support bases, bullbars 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	780 l (206.1 USG)
Locking keys	Fuel cap

BLOCK PAS 300MF

Dimensions	995 x 2450 x 1700 mm 39 x 96 x 67 "
H suction port	0,66 m (2.2 ft)
Weight (PK12)	1800 kg (3,970 lb)

SKID01 PAS 300MF

Dimensions	995 x 2750 x 1810 mm 39 x 108 x 71 "
H suction port	2757 m (9045 ft)
Weight (PK12)	2000 kg (4,410 lb)

SKID02 PAS 300MF

Dimensions	1070 x 3310 x 1850 mm 42 x 130 x 73 "
H suction port	0,81 m (2.7 ft)
Weight (PK12)	1910 kg (4,210 lb)

STACK PAS 300MF

Dimensions	995 x 2450 x 1745 mm 39 x 96 x 69 "
H suction port	0,66 m (2.2 ft)
Weight (PK12)	1940 kg (4,280 lb)

TRAILER PAS 300MF

Dimensions	1610 x 2850 x 2110 mm 63 x 112 x 83 "
H suction port	1,07 m (3.5 ft)
Weight (PK12)	1970 kg (4,340 lb)

PAS 300MF 390

Arrangements

CNP PAS 300MF

Dimensions	1550 x 3395 x 2165 mm (61 x 134 x 85 ")
Material	S275JR 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; modular frame, stackable
Battery	Acid charge Pb-Ca maintenance free, 12 V - 100 Ah - 400 A
Tank	500 l (132.1 USG)
Drip pan	550 l (145.3 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	0,81 m (2.7 ft)
Weight (PK12)	3300 kg (7,280 lb)
Noise level (PK12)	67-72 dB(A) @10 m (32 ft)

Engines

Make	**Perkins**
Model	1104D-E44TAG2 (PK12)
Type	Diesel turbo common rail
Displacement	4.400 cm^3 (269 in^3)
No. cylinders	4
Cooling	Liquid with radiator
Rpm type	Fixed
Standard speed	1.500 rpm
EU emissions	2002/88/CE Stage 3A
US emissions	EPA Tier III
Starting	Electric
Starting voltage	12 V
Oil change interval	500 h
Market	UE
Speed [rpm]	**1500**
Consumption [l/h]	24,5
Power [kW]	92,1
Power [HP]	123.5

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