

# PAS 300MF 390

Diesel - Qmax 313 l/s (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 expertise 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.

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

## 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

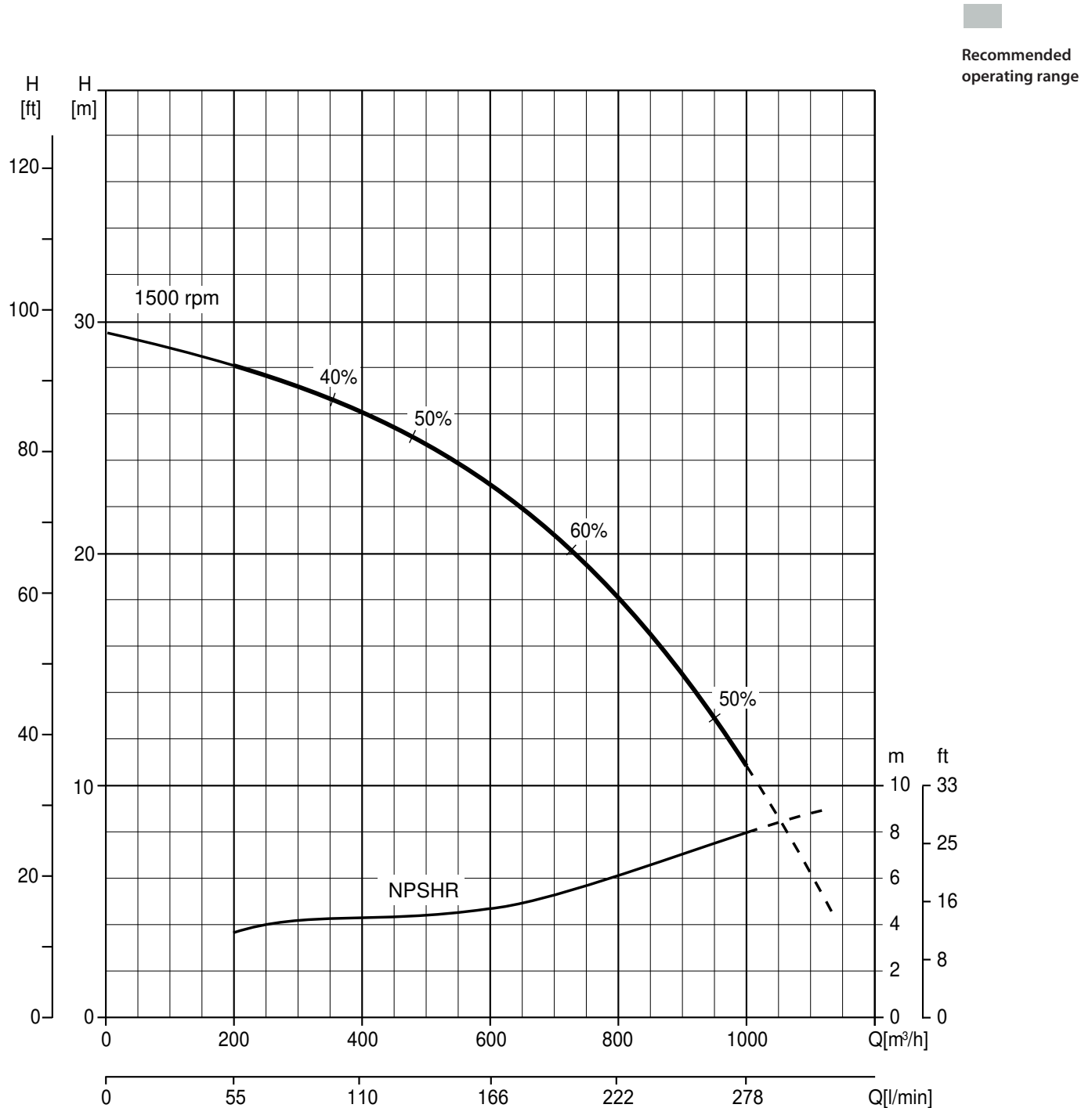
Test according to UNI EN ISO 9906 standard - level 2

Test liquid: clean water, density 1,000 kg/m<sup>3</sup>

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)



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## Technical data

### Pump

<b>Model</b>	PAS 300MF 390	
<b>Qmax</b>	313 l/s - 18.830 l/min (5,000 USgpm)	
<b>Hmax</b>	29,5 m (97 ft)	
<b>Q max eff.</b>	201 l/s - 12.080 l/min (3,200 USgpm)	
<b>Eff. max</b>	60 %	
<b>Suction port</b>	Flanged - DIN 300	
<b>Delivery port</b>	Flanged - DIN 300	
<b>Impeller type</b>	Semi-Open, 2 vane	
<b>Solids handling</b>	76 mm (3.0 ")	
<b>Material</b>	<b>G10</b>	<b>F10</b>
<b>Casing</b>	EN-GJL-200 cast iron	EN-GJL-200 cast iron
<b>Impeller</b>	EN-GJS-400 cast iron	CF8M stainless steel
<b>Wear plates</b>	EN-GJL-200 cast iron	CF8M stainless steel
<b>Number of plates</b>	1	1
<b>Shaft</b>	39NiCrMo3 steel	AISI 329 stainless steel
<b>Mechanical seal</b>	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide
<b>Elastomers</b>	VITON	VITON

### Priming system

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

### Engines

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

### Control panel

<b>Model</b>	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

### CNP PAS 300MF



<b>Dimensions</b>	1550 x 3395 x 2165 mm (61 x 134 x 85 ")
<b>Material</b>	S275JR EN 10025-2 carbon steel
<b>Coatings</b>	Epoxy powder, average thickness of 80 µm
<b>Color</b>	Yellow and grey Atlas Copco (standard)
<b>Features</b>	Hot dip galvanised steel base; modular frame, stackable
<b>Battery</b>	Acid charge Pb-Ca maintenance free, 12 V - 100 Ah - 400 A
<b>Tank</b>	500 l (132.1 USG)
<b>Drip pan</b>	550 l (145.3 USG) (110% of the total volume of the tank)
<b>Emergency stop</b>	Outside the canopy
<b>Locking keys</b>	Control panel door and canopy doors
<b>H suction port</b>	0,81 m (2.7 ft)
<b>Weight (PK12)</b>	3300 kg (7,280 lb)
<b>Noise level (PK12)</b>	67-72 dB(A) @10 m (32 ft)

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<b>Market</b>	UE
<b>Speed [rpm]</b>	<b>1500</b>
<b>Consumption [l/h]</b>	24,5
<b>Power [kW]</b>	92,1
<b>Power [HP]</b>	123.5

## Control panel

Model	CP CNP 01
	Manual operation, automatic operation (start/stop 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