

# PAS 200MF 305

Diesel - Qmax 175 l/s - Hmax 30 m



PAS 200MF 305 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	420 l (111.0 USG)
Locking keys	Fuel cap

## Benefits

### Pump

High efficiency: 64% (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

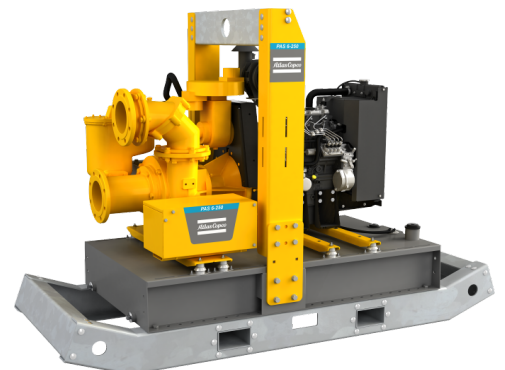
Without lifting devices: hinged cover for direct access to the impeller

### Diaphragm vacuum pump

Oil free suitable for dry running: no contamination of the environment

### Wear plate

Cast iron (G10 rubber lined) or stainless steel wear plate, that are easily replaceable



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## Performance curves

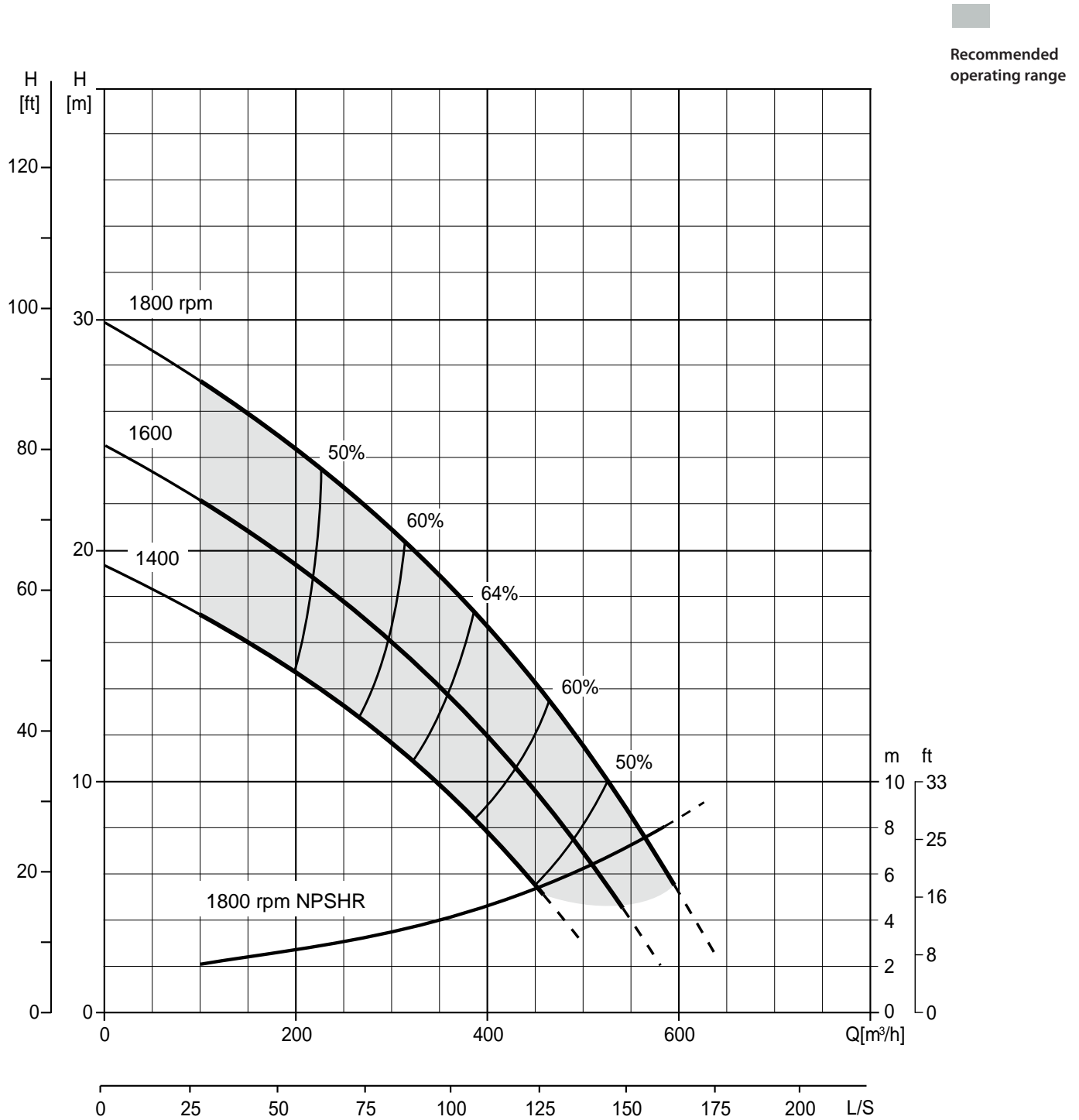
Test according to UNI EN ISO 9906 standard - level 2

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

Spherical solids handling: D.76 mm (3")

Priming time: s from 1,5 m (4.9 ft)

Max absorbed power: 33,0 kW - 44.3 HP (1.800 rpm)



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## Technical data

### Pump

Model		PAS 200MF 305	
Qmax	175 l/s- 10.500 l/min (2,800 USgpm)		
Hmax	30 m (98 ft)		
Q max eff.	102 l/s - 6.170 l/min (1,600 USgpm)		
Eff. max	64 %		
Suction port	Flanged - DIN 200		
Delivery port	Flanged - DIN 200		
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 rubber lined 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		V20
Vacuum pump type	Diaphragm	
Nominal air capacity	50 m <sup>3</sup> /h (29.4 cfm)	
Max vacuum	0,9 bar	
Separator type	Superduo	
Separator material	EN-GJL-200 cast iron	
Drives	Link belt	

### Engines

Make	Kohler				Deutz		
Model	KDI 1903TCR (KL16)				D2011L04I (ZD43)		
Type	Diesel turbo common rail				Diesel direct injection, aspirated		
Displacement	1.861 cm <sup>3</sup> (114 in <sup>3</sup> )				3.620 cm <sup>3</sup> (221 in <sup>3</sup> )		
No. cylinders	3				4		
Cooling	Liquid with radiator				Air		
Rpm type	Variable				Variable		
Standard speed	1.800 rpm				1.800 rpm		
EU emissions	2002/88/CE Stage 3B				2002/88/CE Stage 3A		
US emissions	EPA Tier IV Final				EPA Tier III		
Starting	Electric				Electric		
Starting voltage	12 V				12 V		
Oil change interval	500 h				300 h		
Market	UE				UE		
Speed [rpm]	1200	1400	1600	1800	1400	1600	1800
Consumption [l/h]	5,3	6,7	7,7	8,3	5,8	6,5	7,6
Power [kW]	21,6	27,7	31,7	33,6	23,9	27	30,6
Power [HP]	29	37.1	42.5	45.1	32.1	36.2	41

### Control panel

Model	CP KDI 1903TCR-2504TCR	CP KL DEUTZ 01
Manual operation	Manual operation	Manual operation
High contrast LCD display (ENG-DEU)	Hour meter	Hour meter
Hour meter	Engine failure alarms with LED lights in case of:	Engine failure alarms with LED lights in case of:
Rev counter	- low oil pressure	- low oil pressure
	- engine overheating	- engine overheating
	- lack of battery charging	- lack of battery charging
Oil pressure	Throttle rod	Throttle rod
Oil temperature		
Oil level		
Automatic engine shutdown in case of:		
- low oil pressure		
- water overheating		
- lack of battery charging		
Engine failure alarms with LED light and display message in case of:		
Electronic speed regulator		
Protection rating - IP67		

# PAS 200MF 305

## Arrangements

### CNP PAS 200MF 305



<b>Dimensions</b>	1400 x 2950 x 1950 mm (55 x 116 x 77 ")
<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>	470 l (124.2 USG)
<b>Drip pan</b>	517 l (136.6 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>	0,73 m (2.4 ft)
<b>Weight (KL18)</b>	2000 kg (4,410 lb)
<b>Noise level (KL18)</b>	66-71 dB(A) @10 m (32 ft)

## Engines

<b>Make</b>	<b>Kohler</b>				
<b>Model</b>	KDI 1903TCR (KL18)				
<b>Type</b>	Diesel turbo common rail				
<b>Displacement</b>	1.861 cm <sup>3</sup> (114 in <sup>3</sup> )				
<b>No. cylinders</b>	3				
<b>Cooling</b>	Liquid with radiator				
<b>Rpm type</b>	Variable				
<b>Standard speed</b>	1.800 rpm				
<b>EU emissions</b>	2002/88/CE Stage 3B				
<b>US emissions</b>	EPA Tier IV Final				
<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>	<b>2000</b>	<b>2200</b>	<b>2400</b>	<b>2600</b>	<b>1800</b>
<b>Consumption [l/h]</b>	8,3	8,4	8,9	9,4	9,9
<b>Power [kW]</b>	34	34,9	35,4	35,5	33,6
<b>Power [HP]</b>	45.6	46.8	47.5	47.6	45.1

## Control panel

<b>Model</b>	<b>CP CNP 01</b>
	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