## Diesel - Qmax 720 m<sup>3</sup>/h (3,170 USgpm) - Hmax 31 m (102 ft)



PAS 200MF 300 Liquid cooled engine



PAS 200MF 300 Air 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: 73% (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 60 mm (2.4") **Easy maintenance** 

#### Without lifting devices: hinged cove

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

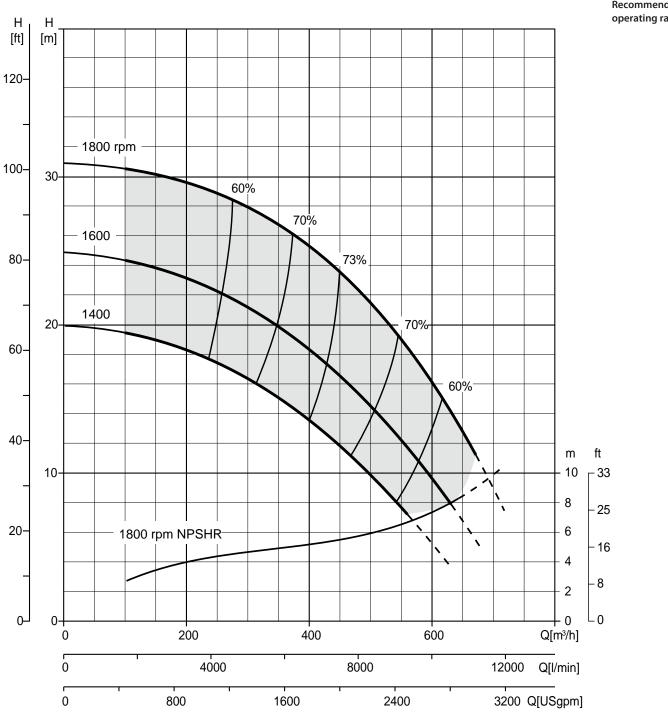
Cast iron (G10 rubber lined) or stainless steel wear plate, that are easily replaceable



## **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.60 mm (2.4")

Priming time: 30 s from 1,5 m (4.9 ft) Max absorbed power: 41,0 kW - 55.0 HP (1.800 rpm)







# **Technical data**

#### Pump

Model	PAS 200MF 300			
Qmax	720 m³/h - 12.000 l/min (3,200 USgpm)			
Hmax	31 m (102 ft)			
Q max eff.	450 m³/h - 7.500 l/	450 m³/h - 7.500 l/min (2,000 USgpm)		
Eff. max	73 %			
Suction port	Flanged - DIN 200			
Delivery port	Flanged - DIN 200			
Impeller type	Semi-Open, 4 vane			
Solids handling	60 mm (2.4 ")			
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 m³/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 2504TCR (KL28)			F4L914 (ZD52)			
Туре		Diesel turbo	common rail		Diesel direct injection, aspirated			
Displacement		2.482 cm	<sup>3</sup> (151 in <sup>3</sup> )		2.630 cm <sup>3</sup> (160 in <sup>3</sup> )			
No. cylinders		4			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 2			
US emissions		EPA Tier IV Final			EPA Tier II			
Starting		Electric			Electric			
Starting voltage		12 V			12 V			
Oil change interval		500 h			300 h			
Market		UE			Extra UE			
Speed [rpm]	1200	1400	1600	1800	1200	1400	1600	1800
Consumption [l/h]	7,5	9,3	10,7	11,4	4,2	5	5,6	11,1
Power [kW]	32	39,6	45	47,7	28,8	35,1	40,5	45
Power [HP]	42.9	53.1	60.3	64	38.6	47.1	54.3	60.3

### **Control panel**

Nodel	CP KDI 1903TCR-2504TCR	CP KL DEUTZ 01
	Manual operation	Manual operation
	High contrast LCD display (ENG-DEU)	Hour meter
	Hour meter	Engine failure alarms with LED lights in case of:
	Rev counter	- low oil pressure
		- engine overheating
		- lack of battery charging
	Oil pressure	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	
		Atlas Copco
		<u>_</u>

## Arrangements

Technical data				
Material	S275JR EN 10025-2 carbon steel			
Coatings	ings Epoxy powder, average thickness of 80 μm			
Color	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.			
BatteryAcid charge Pb-Ca maintenance free12 V - 100 Ah - 400 A				
Tank	420 l (111.0 USG)			
Locking keys	Fuel cap			





Data sheet : 2960 0580 00 © Atlas Copco 2017

# Arrangements

#### CNP PAS 200MF 300



Dimensions	1400 x 2950 x 1950 mm (55 x 116 x 77 ")		
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 470 I (124.2 USG)			
Drip pan 517 I (136.6 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	0,73 m (2.4 ft)		
Weight (KL14)	2000 kg (4,410 lb)		
Noise level ()	- @10 m (32 ft)		

#### Engines

Make	Kohler			
Model	KDI 2504TCR (KL14)			
Туре	Diesel turbo common rail			
Displacement	2.482 cm <sup>3</sup> (151 in <sup>3</sup> )			
No. cylinders	4			
Cooling	Liquid with radiator			
Rpm type	Variable			
Standard speed	1.800 rpm			
EU emissions	2002/88/CE Stage 3B			
US emissions	EPA Tier IV Final			
Starting	Electric			
Starting voltage	12 V			
Oil change interval	500 h			
Market		UE		
Speed [rpm]	1200	1400	1600	1800
Consumption [l/h]	7,5	9,3	10,7	11,4
Power [kW]	32	39,6	45	47,7
Power [HP]	42.9	53.1	60.3	64

#### **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

