## Diesel - Qmax 325 m<sup>3</sup>/h (1,430 USgpm) - Hmax 42 m (138 ft)



PAS 100MF 260 Liquid cooled engine



PAS 100MF 260 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: 70% (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 plates

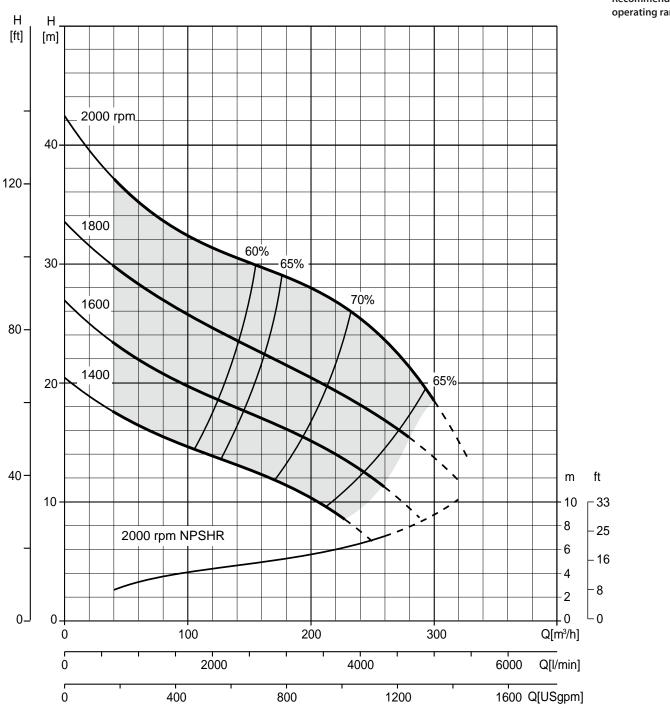
Cast iron (G11 rubber lined) or stainless steel wear plates, that are easily replaceable



# **Performance curves**

Test according to UNI EN ISO 9906 standard - level 2 Test liquid: clean water, density 1,000 kg/m<sup>3</sup> Spherical solids handling: D.76 mm (3")

Priming time: 22 s from 1,5 m (4.9 ft) Max absorbed power: 24,0 kW - 32.2 HP (2.000 rpm)



Recommended operating range



# **Technical data**

### Pump

	PAS 100MF 260		
325 m³/h - 5.420 l/min (1,400 USgpm)			
	42 m (138 ft)		
	240 m³/h - 4.000 l/min (1,100 USgpm)		
70 %			
Flanged - DIN 100			
Flanged - DIN 100			
Semi-Open, 2 vane			
	76 mm (3.0 ")		
G11	F11	P11	
EN-GJL-200 cast iron	EN-GJL-200 cast iron	EN-GJL-200 cast iron	
EN-GJS-400 cast iron	CF8M stainless steel	EN-GJS-400 cast iron	
EN-GJL-200 rubber lined cast iron	CF8M stainless steel	EN-GJL-200 cast iron	
2	2	2	
39NiCrMo3 steel	SAF 2205 stainless steel	39NiCrMo3 steel	
Yes	Yes	Yes	
Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide	
VITON	VITON	VITON	
	EN-GJL-200 cast iron EN-GJS-400 cast iron EN-GJL-200 rubber lined cast iron 2 39NiCrMo3 steel Yes Tungsten carbide / Tungsten carbide	325 m³/h - 5.420 l/min (1,400 USgpm)   42 m (138 ft)   240 m³/h - 4.000 l/min (1,100 USgpm)   70 %   Flanged - DIN 100   Flanged - DIN 100   Flanged - DIN 100   Semi-Open, 2 vane   76 mm (3.0 ")   G11 F11   EN-GJL-200 cast iron EN-GJL-200 cast iron   EN-GJL-200 cast iron CF8M stainless steel   EN-GJL-200 rubber lined cast iron CF8M stainless steel   2 2   39NiCrMo3 steel SAF 2205 stainless steel   Yes Yes   Tungsten carbide / Tungsten carbide Tungsten carbide / Tungsten carbide	

## 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 2504M (KL19)			D2011L03I (ZD51)				
Туре		Diesel direct inje	ection, aspirated	1		Diesel direct injection, aspirated			
Displacement		2.482 cm	<sup>3</sup> (151 in <sup>3</sup> )		2.330 cm <sup>3</sup> (142 in <sup>3</sup> )				
No. cylinders		4			3				
Cooling		Liquid with radiator			Air				
Rpm type		Variable			Variable				
Standard speed		2.000 rpm			2.000 rpm				
EU emissions		2002/88/CE Stage 3A			2002/88/CE Stage 3A				
US emissions		EPA Tier III			EPA Tier III				
Starting		Electric			Electric				
Starting voltage		12 V			12 V				
Oil change interval		500 h			300 h				
Market		UE			UE				
Speed [rpm]	1400	1600	1800	2000	1400	1600	1800	2000	
Consumption [l/h]	5,5	6,4	6,7	7,1	4,2	5	5,6	6,2	
Power [kW]	22,5	26,1	27	28,4	16,7	19,8	22,1	24,3	
Power [HP]	30.2	35	36.2	38.1	22.4	26.6	29.6	32.6	

### **Control panel**

Model

CP KDI 1903M-2504M	CP KL DEUTZ 01
Manual operation	Manual operation
Digital hour meter	Hour meter
Automatic engine shutdown in case of:	Engine failure alarms with LED lights in case of:
- low oil pressure	- low oil pressure
- water overheating	- engine overheating
- lack of battery charging	- lack of battery charging
(engine failure alarms with LED lights)	
Throttle rod	Throttle rod



# **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	300 I (79.3 USG)
Locking keys	Fuel cap



Dimensions 995 x 2	.020 x 1565 mm	Dimensions	1410 x 2350 x 1880
39 x 80	x 62 "	Dimensions	56 x 93 x 74 "
H suction port 0,59 m	(1.9 ft)	H suction port	0,945 m (3.1 ft)
Weight (KL19) 880 kg	(1,940 lb)	Weight (KL19)	930 kg (2,050 lb)
Weight (ZD51) 855 kg	(1,880 lb)	Weight (ZD51)	905 kg (2,000 lb)



# Arrangements

#### CNP PAS 100MF 260



Dimensions	1110 x 2560 x 1705 mm (44 x 101 x 67 ")
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	420 l (111.0 USG)
Drip pan	462 I (122.0 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	0,71 m (2.3 ft)
Weight (KL19)	1300 kg (2,870 lb)
Noise level (KL19)	66-71 dB(A) @10 m (32 ft)

### **Engines**

Make	Kohler				
Model		KDI 2504M (KL19)			
Туре		Diesel direct inj	ection, aspirated		
Displacement		2.482 cm	<sup>3</sup> (151 in <sup>3</sup> )		
No. cylinders			4		
Cooling		Liquid wit	th radiator		
Rpm type		Variable			
Standard speed	2.000 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]	1400	1600	1800	2000	
Consumption [l/h]	5,5	6,4	6,7	7,1	
Power [kW]	22,5	26,1	27	28,4	
Power [HP]	30.2	35	36.2	38.1	

### **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

