

# PAS 150MF 250

Diesel - Qmax 150 l/s - Hmax 37 m



liquid cooled engine - Flashing light and spool are available as an extra option

## 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	300 l (79.3 USG)
Locking keys	Fuel cap

## Benefits

### Pump

High efficiency: 77% (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

### SKID02 PAS 150MF 250



Dimensions 1070 x 2220 x 1670 mm

H suction port 0.735 m

Weight (KL10) 990 kg

# PAS 150MF 250

## Performance curves

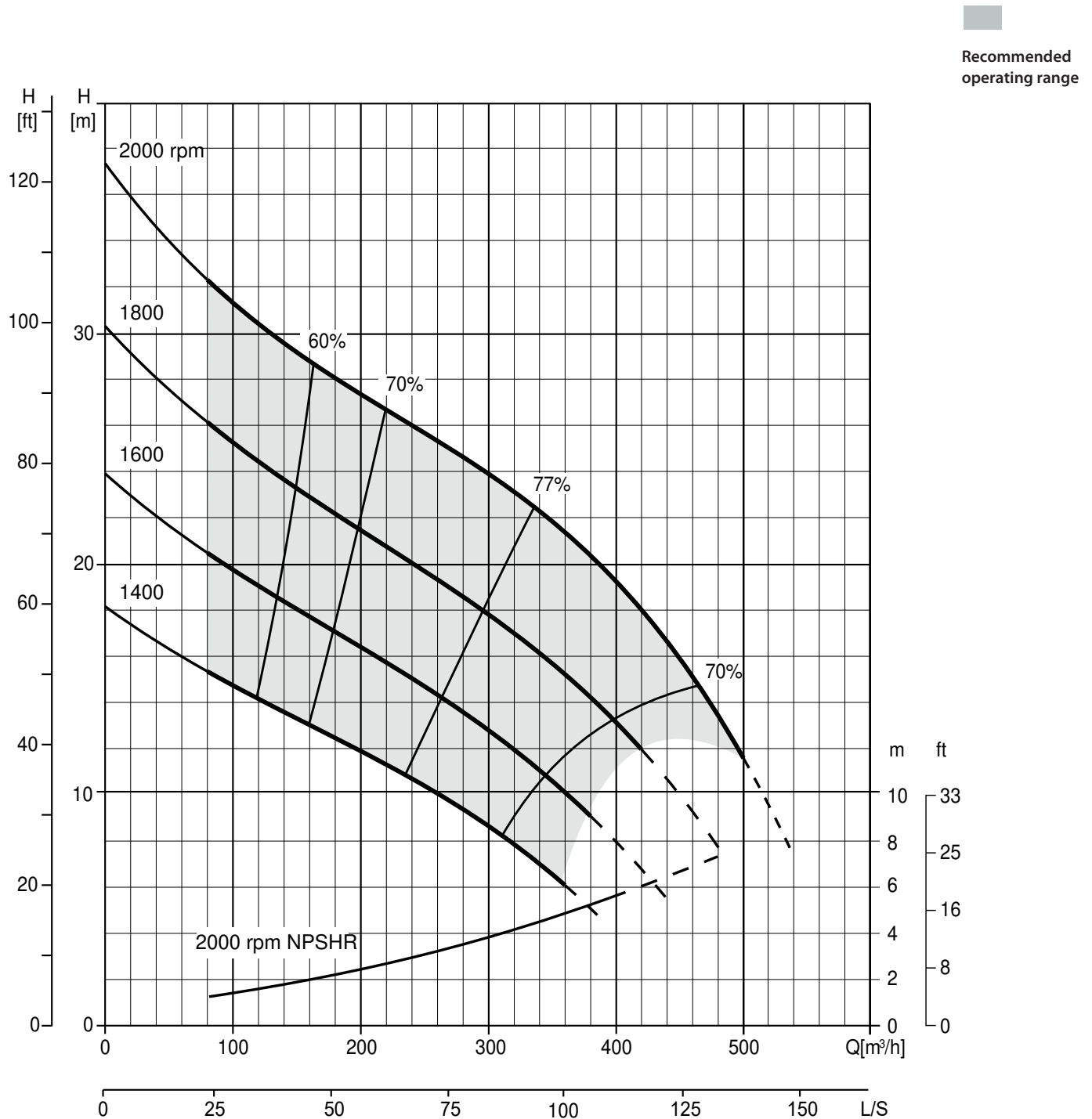
Test according to UNI EN ISO 9906 standard - level 2

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: 27,0 kW - 36.2 HP (2.000 rpm)



Recommended operating range

# PAS 150MF 250

## Technical data

### Pump

<b>Model</b>	PAS 150MF 250		
<b>Qmax</b>	150 l/s - 9.000 l/min (2,400 USgpm)		
<b>Hmax</b>	37 m (121 ft)		
<b>Q max eff.</b>	94 l/s - 5.670 l/min (1,500 USgpm)		
<b>Eff. max</b>	77 %		
<b>Suction port</b>	Flanged - DIN 150		
<b>Delivery port</b>	Flanged - DIN 150		
<b>Impeller type</b>	Semi-Open, 2 vane		
<b>Solids handling</b>	76 mm (3.0 ")		
<b>Material</b>	<b>G11</b>	<b>F11</b>	<b>P11</b>
<b>Casing</b>	EN-GJL-200 cast iron	EN-GJL-200 cast iron	EN-GJL-200 cast iron
<b>Impeller</b>	EN-GJS-400 cast iron	CF8M stainless steel	EN-GJS-400 cast iron
<b>Wear plates</b>	EN-GJL-200 rubber lined cast iron	CF8M stainless steel	EN-GJL-200 cast iron
<b>Number of plates</b>	2	2	2
<b>Shaft</b>	39NiCrMo3 steel	SAF 2205 stainless steel	39NiCrMo3 steel
<b>Flushing</b>	Yes	Yes	Yes
<b>Mechanical seal</b>	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide	Tungsten carbide / Tungsten carbide
<b>Elastomers</b>	VITON	VITON	VITON

### Priming system

<b>Vacuum pump</b>	V20
<b>Vacuum pump type</b>	Diaphragm
<b>Nominal air capacity</b>	50 m <sup>3</sup> /h (29.4 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>	Link belt

### Engines

<b>Make</b>	<b>Kohler</b>				<b>Deutz</b>			
<b>Model</b>	KDI 1903M (KL10)				D2011L03I (ZD51)			
<b>Type</b>	Diesel direct injection, aspirated				Diesel direct injection, aspirated			
<b>Displacement</b>	1.861 cm <sup>3</sup> (114 in <sup>3</sup> )				2.330 cm <sup>3</sup> (142 in <sup>3</sup> )			
<b>No. cylinders</b>	3				3			
<b>Cooling</b>	Liquid with radiator				Air			
<b>Rpm type</b>	Variable				Variable			
<b>Standard speed</b>	1.800 rpm				2.000 rpm			
<b>EU emissions</b>	2002/88/CE Stage 3A				2002/88/CE Stage 3A			
<b>US emissions</b>	EPA Tier III				EPA Tier III			
<b>Starting</b>	Electric				Electric			
<b>Starting voltage</b>	12 V				12 V			
<b>Oil change interval</b>	500 h				300 h			
<b>Market</b>	UE				UE			
<b>Speed [rpm]</b>	1200	1400	1600	1800	1400	1600	1800	2000
<b>Consumption [l/h]</b>	3,5	4,4	5,1	5,4	4,2	5	5,6	6,2
<b>Power [kW]</b>	13,5	17,6	20,3	21,6	16,7	19,8	22,1	24,3
<b>Power [HP]</b>	18.1	23.6	27.2	29	22.4	26.6	29.6	32.6

### Control panel

<b>Model</b>	<b>CP KDI 1903M-2504M</b>	<b>CP KL DEUTZ 01</b>
	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

# PAS 150MF 250

## Arrangements

### CNP PAS 150MF 250



<b>Dimensions</b>	1110 x 2560 x 1705 mm (44 x 101 x 67 ")
<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>	420 l (111.0 USG)
<b>Drip pan</b>	462 l (122.0 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>	0,72 m (2.4 ft)
<b>Weight (KL10)</b>	1490 kg (3,280 lb)
<b>Noise level (KL10)</b>	63-68 dB(A) @10 m (32 ft)
<b>Weight (KL19)</b>	1525 kg (3,360 lb)
<b>Noise level (KL19)</b>	66-71 dB(A) @10 m (32 ft)

## Engines

Make	Kohler				Kohler			
<b>Model</b>	KDI 1903M (KL10)				KDI 2504M (KL19)			
<b>Type</b>	Diesel direct injection, aspirated				Diesel direct injection, aspirated			
<b>Displacement</b>	1.861 cm <sup>3</sup> (114 in <sup>3</sup> )				2.482 cm <sup>3</sup> (151 in <sup>3</sup> )			
<b>No. cylinders</b>	3				4			
<b>Cooling</b>	Liquid with radiator				Liquid with radiator			
<b>Rpm type</b>	Variable				Variable			
<b>Standard speed</b>	1.800 rpm				2.000 rpm			
<b>EU emissions</b>	2002/88/CE Stage 3A				2002/88/CE Stage 3A			
<b>US emissions</b>	EPA Tier III				EPA Tier III			
<b>Starting</b>	Electric				Electric			
<b>Starting voltage</b>	12 V				12 V			
<b>Oil change interval</b>	500 h				500 h			
<b>Market</b>	UE				UE			
<b>Speed [rpm]</b>	1200	1400	1600	1800	1400	1600	1800	2000
<b>Consumption [l/h]</b>	3,5	4,4	5,1	5,4	5,5	6,4	6,7	7,1
<b>Power [kW]</b>	13,5	17,6	20,3	21,6	22,5	26,1	27	28,4
<b>Power [HP]</b>	18.1	23.6	27.2	29	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