PAS 150MF 250

Diesel - Qmax 150 l/s - Hmax 37 m

PAS 150MF 250 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 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.

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

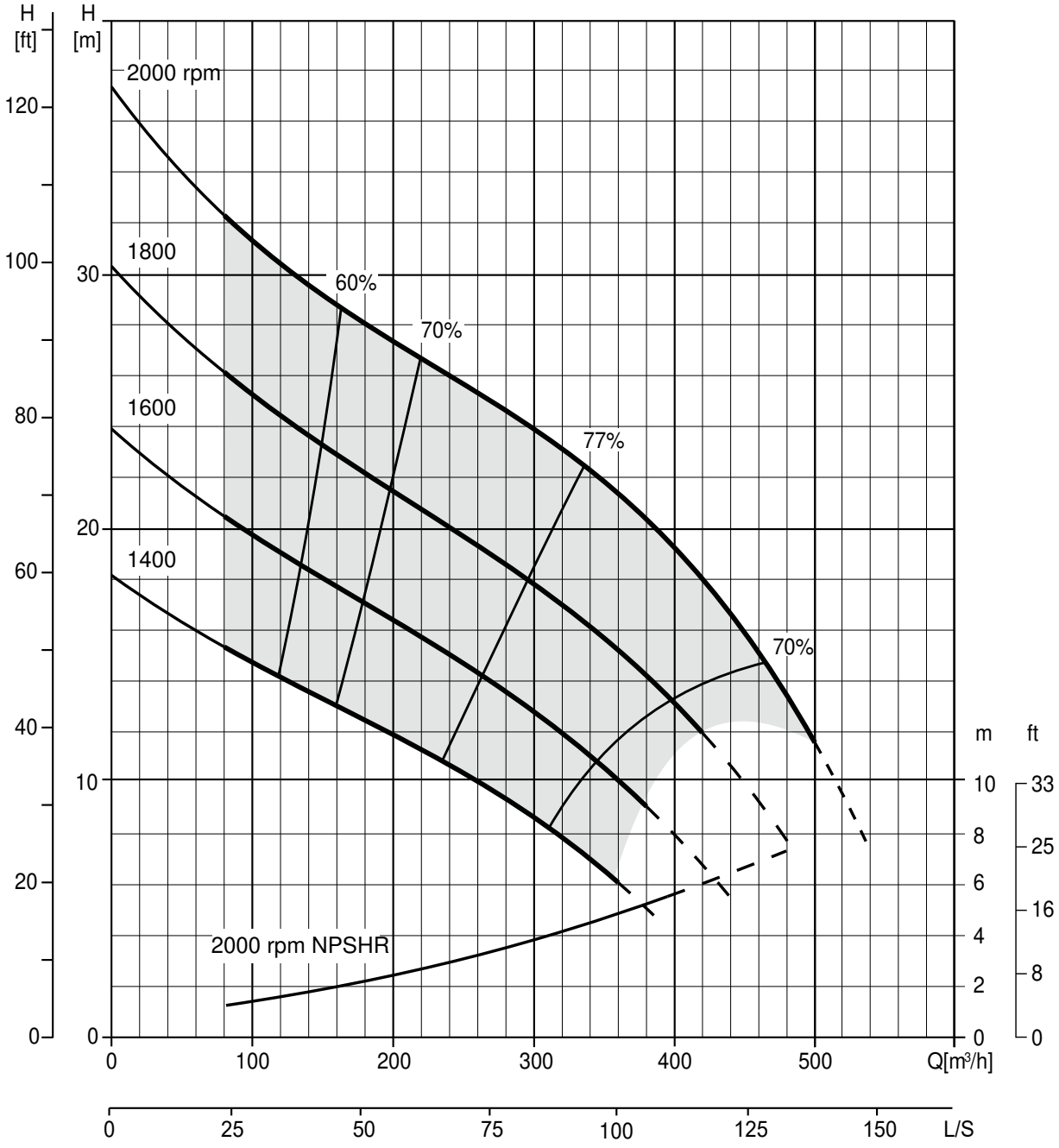
PAS 150MF 250

Performance curves

Test according to UNI EN ISO 9906 standard - level 2
Test liquid: clean water, density 1,000 kg/m³
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

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

Priming system

Vacuum pump	V20
Vacuum pump type	Diaphragm
Nominal air capacity	50 m^3/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 1903M (KL10)				D2011L03I (ZD51)			
Type	Diesel direct injection, aspirated				Diesel direct injection, aspirated			
Displacement	1.861 cm^3 (114 in^3)				2.330 cm^3 (142 in^3)			
No. cylinders	3				3			
Cooling	Liquid with radiator				Air			
Rpm type	Variable				Variable			
Standard speed	1.800 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]	**1200**	**1400**	**1600**	**1800**	**1400**	**1600**	**1800**	**2000**
Consumption [l/h]	3,5	4,4	5,1	5,4	4,2	5	5,6	6,2
Power [kW]	13,5	17,6	20,3	21,6	16,7	19,8	22,1	24,3
Power [HP]	18.1	23.6	27.2	29	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 - water overheating - lack of battery charging (engine failure alarms with LED lights)	- low oil pressure - engine overheating - lack of battery charging
	Throttle rod	Throttle rod

PAS 150MF 250

Arrangements

CNP PAS 150MF 250

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 l (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	0,72 m (2.4 ft)
Weight (KL10)	1490 kg (3,280 lb)
Noise level (KL10)	63-68 dB(A) @10 m (32 ft)
Weight (KL19)	1525 kg (3,360 lb)
Noise level (KL19)	66-71 dB(A) @10 m (32 ft)

Engines

Make	**Kohler**				**Kohler**			
Model	KDI 1903M (KL10)				KDI 2504M (KL19)			
Type	Diesel direct injection, aspirated				Diesel direct injection, aspirated			
Displacement	1.861 cm^3 (114 in^3)				2.482 cm^3 (151 in^3)			
No. cylinders	3				4			
Cooling	Liquid with radiator				Liquid with radiator			
Rpm type	Variable				Variable			
Standard speed	1.800 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				500 h			
Market	UE				UE			
Speed [rpm]	**1200**	**1400**	**1600**	**1800**	**1400**	**1600**	**1800**	**2000**
Consumption [l/h]	3,5	4,4	5,1	5,4	5,5	6,4	6,7	7,1
Power [kW]	13,5	17,6	20,3	21,6	22,5	26,1	27	28,4
Power [HP]	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