

PAS 100MF 225

Diesel - Qmax 230 m³/h (1,010 USgpm) - Hmax 58,5 m (192 ft)



PAS 100MF 225 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.

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 35 mm (1.4")

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

PAS 100MF 225

Performance curves

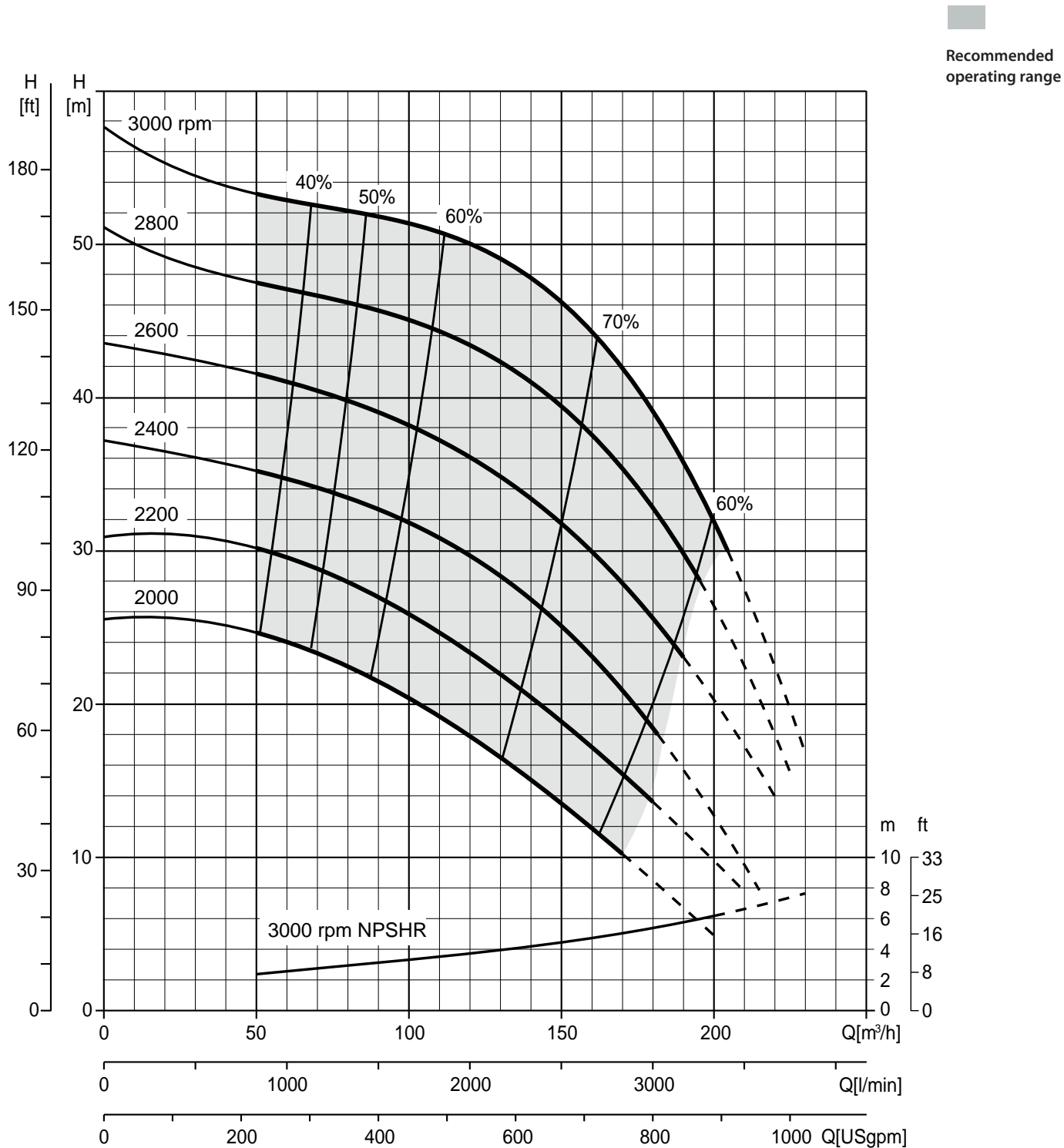
Test according to UNI EN ISO 9906 standard - level 2

Test liquid: clean water, density 1,000 kg/m³

Spherical solids handling: D.35 mm (1.4")

Priming time: 22 s from 1,5 m (4.9 ft)

Max absorbed power: 30,0 kW - 40.2 HP (3.000 rpm)



Recommended operating range

PAS 100MF 225

Technical data

Pump

Model	PAS 100MF 225		
Qmax	230 m ³ /h - 3.830 l/min (1,000 USgpm)		
Hmax	58,5 m (192 ft)		
Q max eff.	160 m ³ /h - 2.670 l/min (700 USgpm)		
Eff. max	70 %		
Suction port	Flanged - DIN 100		
Delivery port	Flanged - DIN 100		
Impeller type	Semi-Open, 2 vane		
Solids handling	35 mm (1.4 ")		
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	Hatz		
Model	3M41 (HT27)		
Type	Diesel direct injection, aspirated		
Displacement	2.574 cm ³ (157 in ³)		
No. cylinders	3		
Cooling	Air		
Rpm type	Variable		
Standard speed	3.000 rpm		
EU emissions	2002/88/CE Stage 3A		
US emissions	EPA Tier III		
Starting	Electric		
Starting voltage	12 V		
Oil change interval	300 h		
Market	UE		
Speed [rpm]	2000	2400	3000
Consumption [l/h]	7,5	8,7	9,7
Power [kW]	31,1	34,4	35,8
Power [HP]	41.7	46.1	48

Control panel

Model	CP HATZ M41
	Manual operation
	Digital hour meter
	Engine failure alarms with LED lights in case of:
	- low oil pressure
	- water overheating
	- lack of battery charging
	Throttle rod

PAS 100MF 225

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 l (79.3 USG)
Locking keys	Fuel cap

BLOCK PAS 100MF



Dimensions	995 x 2020 x 1520 mm 39 x 80 x 60 "
H suction port	0,585 m (1.9 ft)
Weight (HT27)	965 kg (2,130 lb)

SKID01 PAS 100MF



Dimensions	995 x 2200 x 1630 mm 39 x 87 x 64 "
H suction port	0,695 m (2.3 ft)
Weight (HT27)	1075 kg (2,370 lb)

SKID02 PAS 100MF



Dimensions	1070 x 2220 x 1670 mm 42 x 87 x 66 "
H suction port	0,735 m (2.4 ft)
Weight (HT27)	1090 kg (2,400 lb)

STACK PAS 100MF



Dimensions	995 x 2020 x 1565 mm 39 x 80 x 62 "
H suction port	0,59 m (1.9 ft)
Weight (HT27)	1015 kg (2,240 lb)

TRAILER PAS 100MF



Dimensions	1410 x 2350 x 1880 mm 56 x 93 x 74 "
H suction port	0,945 m (3.1 ft)
Weight (HT27)	1095 kg (2,410 lb)

PAS 100MF 225

Arrangements

CNP PAS 100MF 225



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	0,71 m (2.3 ft)
Weight (PK06)	1270 kg (2,800 lb)
Noise level (PK06)	66-71 dB(A) @10 m (32 ft)

Engines

Make	Perkins				
Model	404D-22 (PK06)				
Type	Diesel direct injection, aspirated				
Displacement	2.200 cm ³ (134 in ³)				
No. cylinders	4				
Cooling	Liquid with radiator				
Rpm type	Variable				
Standard speed	3.000 rpm				
EU emissions	2002/88/CE Stage 3A				
US emissions	EPA Tier III				
Starting	Electric				
Starting voltage	12 V				
Oil change interval	300 h				
Market	UE				
Speed [rpm]	2200	2400	2600	2800	3000
Consumption [l/h]	8,4	9,1	9,7	10,4	11
Power [kW]	31,5	33,5	35	36,5	38
Power [HP]	42.2	44.9	46.9	48.9	51

Control panel

Model	CP CNP 01
	Manual operation, automatic operation (start/stop 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