VAR 6-250

Diesel - Qmax 340 m³/h (1,500 USgpm) - Hmax 33 m (108 ft)



VAR 6-250 Liquid cooled engine



VAR 6-250 Air cooled engine

VAR - Self-priming centrifugal pumps

These self-priming centrifugal pumps are for applications where the main feature is the difficulty in priming. Even with suction heights of several meters the machine quickly evacuates the air from the suction pipe and starts pumping. Additionally, thanks to the semi-open impeller, the VAR 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 VAR 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

Rapid self-priming
Without foot valve up to a height of 7.5 m (24.5 ft)

High resistance
To abrasive liquids and turbid sandy waters

Semi-open impeller
Solids handling up to 76 mm (3")

Easy maintenance
Removable front cover for direct access to the impeller

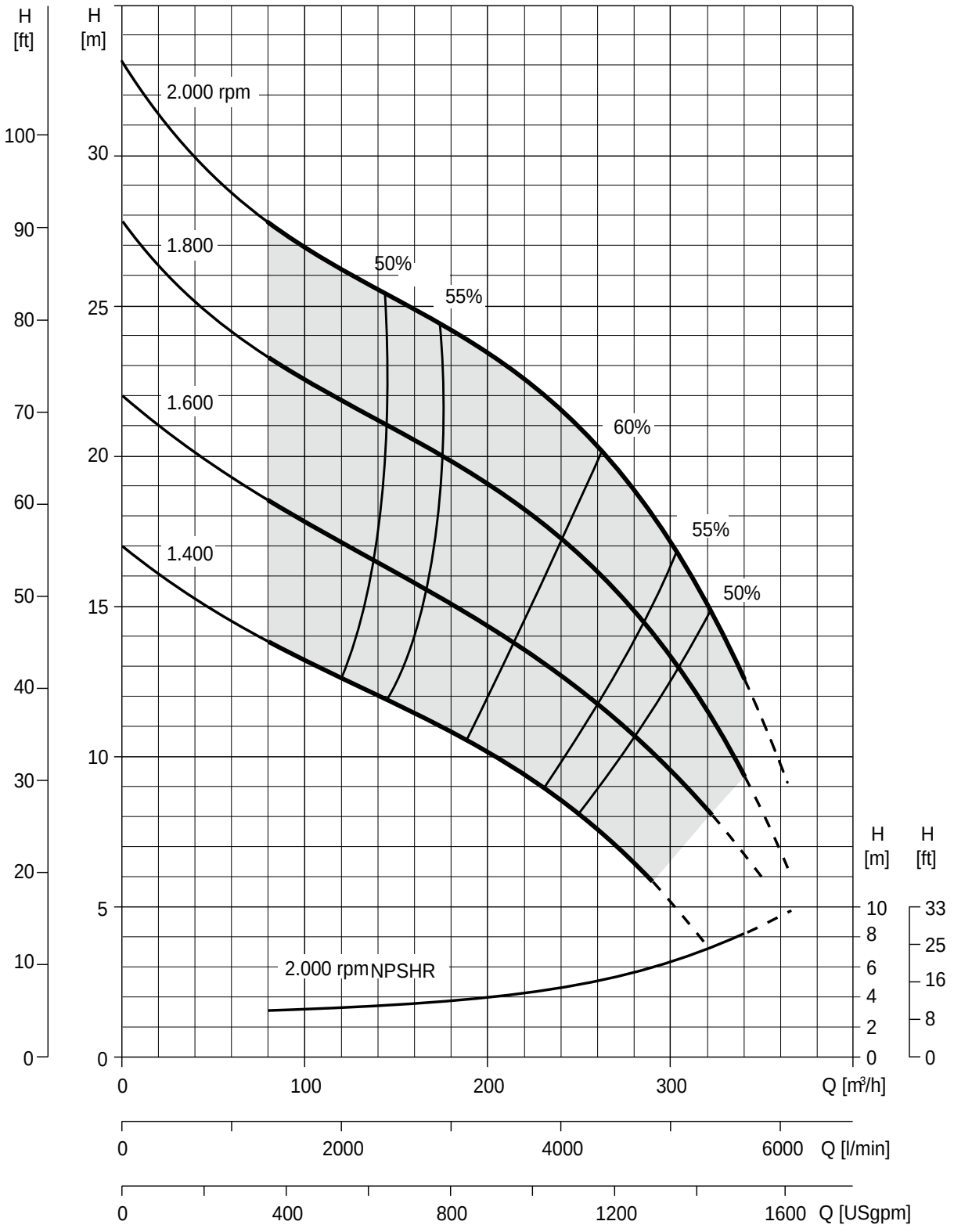
Wear plates
Cast iron (G11 rubber lined) or stainless steel wear plates, that are easily replaceable

VAR 6-250

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: 17 s from 1,5 m (4.9 ft)
Max absorbed power: 25,0 kW - 33.5 HP (2.000 rpm)



VAR 6-250

Technical data

Pump

Model	VAR 6-250		
Qmax	340 m³/h - 5.670 l/min (1,500 USgpm)		
Hmax	33 m (108 ft)		
Q max eff.	260 m³/h - 4.330 l/min (1,100 USgpm)		
Eff. max	60 %		
Suction port	Flanged - DN 150 D.I. 1882 (6")		
Delivery port	Flanged - DN 150 D.I. 1882 (6")		
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 ductile iron	CF8M stainless steel	EN-GJS-400 ductile 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	Silicon carbide / Silicon carbide	Silicon carbide / Silicon carbide	Silicon carbide / Silicon carbide
Elastomers	NBR	VITON	VITON

Engines

Make	Kohler	Kohler	Deutz	Deutz
Model	KDI 1903M (KL10)	KDI 2504M (KL19)	D2011L03I (ZD35)	D2011L03I (ZD51)
Type	Diesel direct injection, aspirated	Diesel direct injection, aspirated	Diesel direct injection, aspirated	Diesel direct injection, aspirated
Displacement	1.861 cm³ (114 in³)	2.482 cm³ (151 in³)	2.330 cm³ (142 in³)	2.330 cm³ (142 in³)
No. cylinders	3	4	3	3
Cooling	Liquid with radiator	Liquid with radiator	Air	Air
Rpm type	Variable	Variable	Variable	Variable
Standard speed	1.800 rpm	2.000 rpm	1.800 rpm	2.000 rpm
EU emissions	2002/88/CE Stage 3A	2002/88/CE Stage 3A	2002/88/CE Stage 3A	2002/88/CE Stage 3A
US emissions	EPA Tier III	EPA Tier III	EPA Tier III	EPA Tier III
Starting	Electric	Electric	Electric	Electric
Starting voltage	12 V	12 V	12 V	12 V
Oil change interval	500 h	500 h	300 h	300 h
Market	UE	UE	UE	UE

Speed [rpm]	1200	1400	1600	1800	1400	1600	1800	2000	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	3,4	4,2	5	5,6	4,2	5	5,6	6,2
Power [kW]	13,5	17,6	20,3	21,6	22,5	26,1	27	28,4	13,5	16,7	19,8	22,1	16,7	19,8	22,1	24,3
Power [HP]	18.1	23.6	27.2	29	30.2	35	36.2	38.1	18.1	22.4	26.6	29.6	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

VAR 6-250

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 VAR 6-250



Dimensions	995 x 1770 x 1520 mm 39 x 70 x 60 "
H suction port	0,81 m (2.7 ft)
Weight (KL10)	800 kg (1,760 lb)
Weight (KL19)	835 kg (1,840 lb)
Weight (ZD35)	810 kg (1,790 lb)
Weight (ZD51)	810 kg (1,790 lb)

TRAILER VAR 6-250



Dimensions	1410 x 2330 x 1880 mm 56 x 92 x 74 "
H suction port	1,17 m (3.8 ft)
Weight (KL10)	930 kg (2,050 lb)
Weight (KL19)	965 kg (2,130 lb)
Weight (ZD35)	940 kg (2,070 lb)
Weight (ZD51)	940 kg (2,070 lb)

SKID01 VAR 6-250



Dimensions	995 x 2200 x 1630 mm 39 x 87 x 64 "
H suction port	0,92 m (3 ft)
Weight (KL10)	900 kg (1,980 lb)
Weight (KL19)	935 kg (2,060 lb)
Weight (ZD35)	910 kg (2,010 lb)
Weight (ZD51)	910 kg (2,010 lb)

SKID02 VAR 6-250



Dimensions	1070 x 2220 x 1670 mm 42 x 87 x 66 "
H suction port	0,96 m (3.1 ft)
Weight (KL10)	925 kg (2,040 lb)
Weight (KL19)	960 kg (2,120 lb)
Weight (ZD35)	935 kg (2,060 lb)
Weight (ZD51)	935 kg (2,060 lb)

STACK VAR 6-250



Dimensions	995 x 1770 x 1580 mm 39 x 70 x 62 "
H suction port	0,81 m (2.7 ft)
Weight (KL10)	850 kg (1,870 lb)
Weight (KL19)	885 kg (1,950 lb)
Weight (ZD35)	860 kg (1,900 lb)
Weight (ZD51)	860 kg (1,900 lb)

VAR 6-250

Arrangements

CNP VAR 6-250



Dimensions	1100 x 2560 x 1705 mm (43 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 (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

Specification is subject to change without prior notice. Please check with your local Atlas Copco representative for the latest specifications.