

# VAR 4-225

Diesel - Qmax 150 m<sup>3</sup>/h (660 USgpm) - Hmax 53 m (174 ft)



VAR 4-225 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 expertise 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 35 mm (1.4")

### Easy maintenance

Removable front cover for direct access to the impeller

### Wear plates

Cast iron or stainless steel wear plates, that are easily accessible

# VAR 4-225

## Performance curves

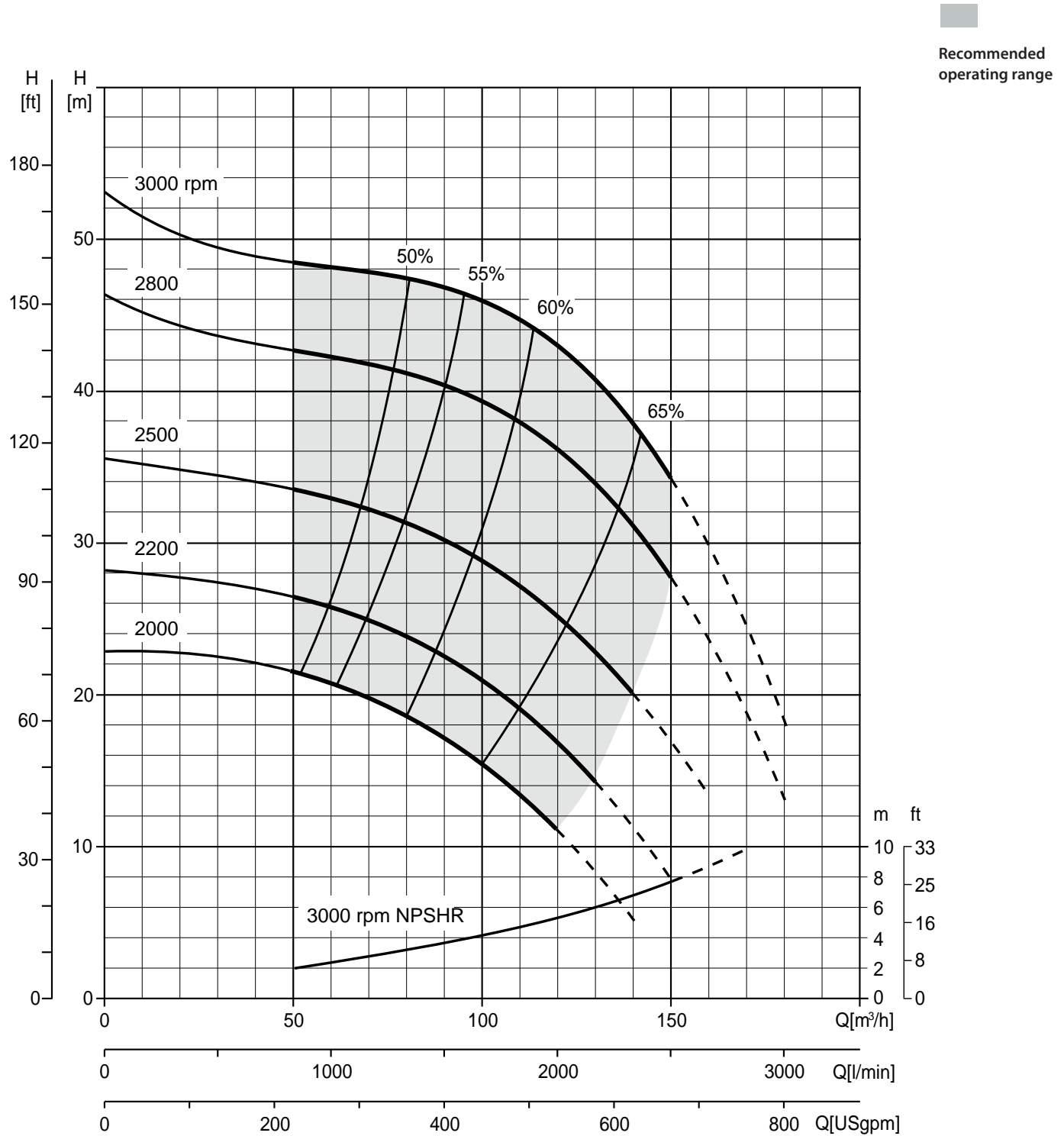
Test according to UNI EN ISO 9906 standard - level 2

Test liquid: clean water, density  $1,000 \text{ kg/m}^3$

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

Priming time: 55 s from 1,5 m (4.9 ft)

Max absorbed power: 22,8 kW - 30.6 HP (3.000 rpm)



# VAR 4-225

## Technical data

### Pump

Model	VAR 4-225		
Qmax	150 m³/h - 2.500 l/min (700 USgpm)		
Hmax	53 m (174 ft)		
Q max eff.	142 m³/h - 2.370 l/min (600 USgpm)		
Eff. max	65 %		
Suction port	Threaded - 4" BSP		
Delivery port	Threaded - 4" BSP		
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-500 ductile iron	CF8M stainless steel	EN-GJS-500 ductile iron
Wear plates	EN-GJL-200 cast iron	CF8M stainless steel	EN-GJL-200 cast iron
Number of plates	2	2	2
Shaft	39NiCrMo3 steel	AISI 316 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	Hatz		
Model	2M41 (HT26)		
Type	Diesel direct injection, aspirated		
Displacement	1.716 cm³ (105 in³)		
No. cylinders	2		
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	2500	3000
Consumption [l/h]	4,7	5,9	6,8
Power [kW]	20,2	22,4	23,7
Power [HP]	27.1	30	31.8

### Control panel

Model	CP KL DEUTZ 01
	Manual operation
	Hour meter
	Engine failure alarms with LED lights in case of:
	- low oil pressure
	- engine overheating
	- lack of battery charging
	Throttle rod

# VAR 4-225

## 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 VAR 4-225**



Dimensions	995 x 1770 x 1520 mm 39 x 70 x 60 "
H suction port	0,74 m (2.4 ft)
Weight (HT26)	780 kg (1,720 lb)

**TRAILER VAR 4-225**



Dimensions	1410 x 2330 x 1880 mm 56 x 92 x 74 "
H suction port	1,1 m (3.6 ft)
Weight (HT26)	910 kg (2,010 lb)

**SKID01 VAR 4-225**



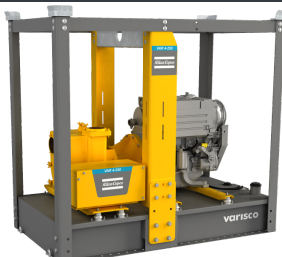
Dimensions	995 x 2200 x 1630 mm 39 x 87 x 64 "
H suction port	0,85 m (2.8 ft)
Weight (HT26)	880 kg (1,940 lb)

**SKID02 VAR 4-225**



Dimensions	1070 x 2220 x 1670 mm 42 x 87 x 66 "
H suction port	0,89 m (2.9 ft)
Weight (HT26)	905 kg (2,000 lb)

**STACK VAR 4-225**



Dimensions	995 x 1770 x 1580 mm 39 x 70 x 62 "
H suction port	0,74 m (2.4 ft)
Weight (HT26)	830 kg (1,830 lb)

# VAR 4-225

## Arrangements

### CNP VAR 4-225



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	0,72 m (2.4 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 <sup>3</sup> (134 in <sup>3</sup> )				
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 (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