

VAR 1-180

Diesel - Qmax 29 m³/h (130 USgpm) - Hmax 57 m (187 ft)



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 11 mm (0.4")

Easy maintenance

Removable front cover for direct access to the impeller

Wear plate

Cast iron (G10 rubber lined) or stainless steel wear plate, that are easily replaceable

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Performance curves

Test according to UNI EN ISO 9906 standard - level 2

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

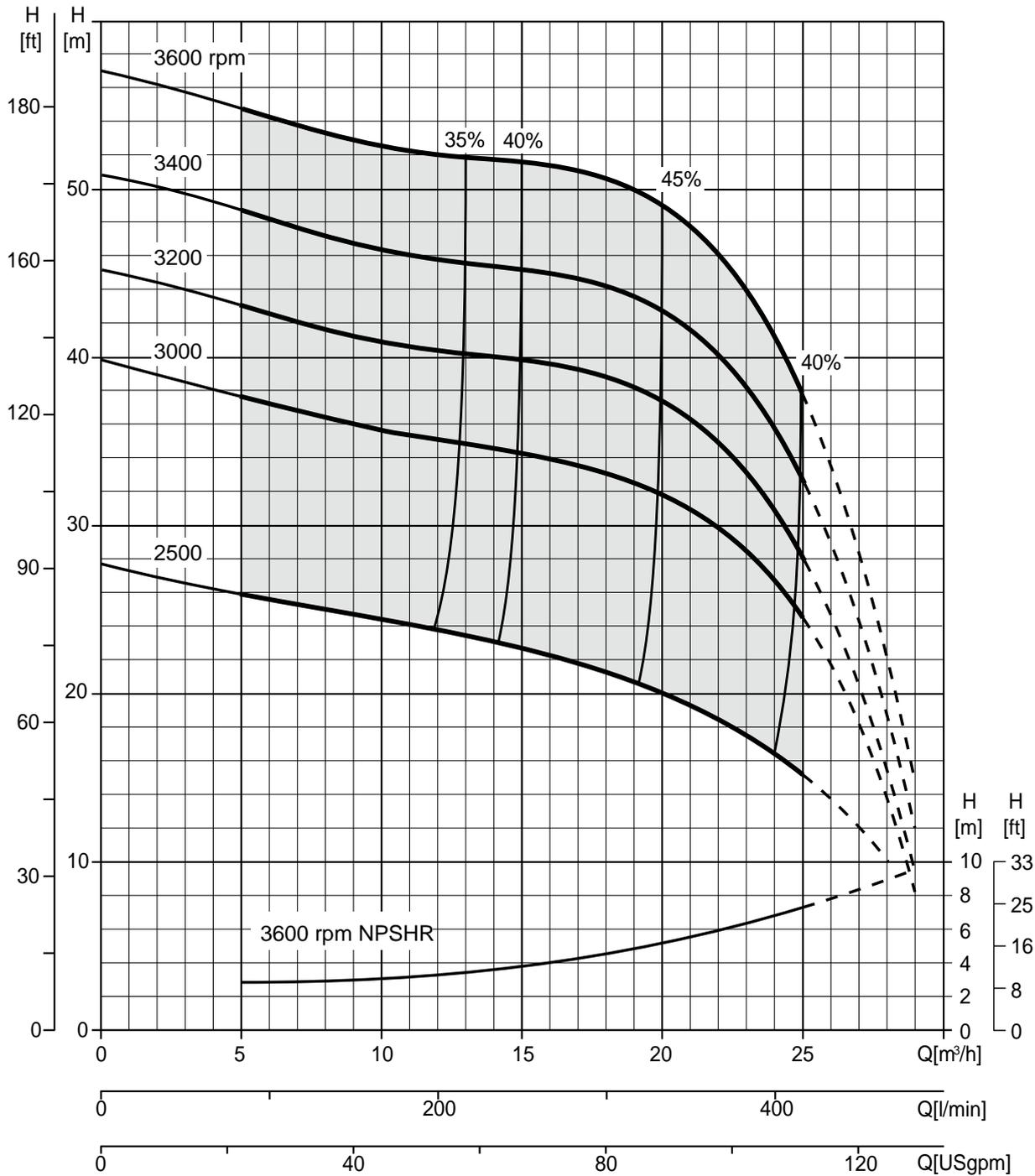
Spherical solids handling: D.11 mm (0.4")

Priming time: 27 s from 1,5 m (4.9 ft)

Max absorbed power: 6,4 kW - 8.6 HP (3.600 rpm)



Recommended operating range



VAR 1-180

Technical data

Pump

Model	VAR 1-180
Qmax	29 m ³ /h - 480 l/min (100 USgpm)
Hmax	57 m (187 ft)
Q max eff.	20 m ³ /h - 330 l/min (100 USgpm)
Eff. max	45 %
Suction port	threaded - 1 1/2" BSP
Delivery port	threaded - 1 1/2" BSP
Impeller type	Semi-Open, 4 vane
Solids handling	11 mm (0.4 ")
Material	G10
Casing	EN-GJL-200 cast iron
Impeller	EN-GJS-500 ductile iron
Wear plates	EN-GJL-200 rubber lined cast iron
Number of plates	1
Shaft	C45 steel
Mechanical seal	Silicon carbide / Silicon carbide
Elastomers	NBR

Engines

Make	Kohler					Kohler				
Model	15LD440 (LD10)					15LD440 (LD11)				
Type	Diesel direct injection, aspirated					Diesel direct injection, aspirated				
Displacement	442 cm ³ (27 in ³)					442 cm ³ (27 in ³)				
No. cylinders	1					1				
Cooling	Air					Air				
Rpm type	Variable					Variable				
Standard speed	3.600 rpm					3.600 rpm				
EU emissions	N/Em					N/Em				
US emissions	EPA Tier I					EPA Tier I				
Starting	Recoil					Electric				
Starting voltage						12 V				
Oil change interval	250 h					250 h				
Market	UE					UE				
Speed [rpm]	2500	3000	3200	3400	3600	2500	3000	3200	3400	3600
Consumption [l/h]	1,5	1,7	1,8	1,9	2	1,5	1,7	1,8	1,9	2
Power [kW]	5,5	6,2	6,4	6,6	6,7	5,5	6,2	6,4	6,6	6,7
Power [HP]	7.4	8.3	8.6	8.9	9	7.4	8.3	8.6	8.9	9

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Arrangements

Technical data	
Material	S275JR EN 10025-2 carbon steel
Coatings	Bicomponent, average thickness of 80 µm
Color	Yellow and grey Atlas Copco (standard)
Features	Galvanised steel frame: chassis, lifting bar, adjustable handle, support foot. Tractor tires.
Tank	5 l (1.3 USG)

VAR 1-180 D TROLLEY - R



Dimensions	610 x 765 x 980 mm 24 x 30 x 39 "
H suction port	0,55 m (1.8 ft)
Weight (LD10)	120 kg (260 lb)

VAR 1-180 D TROLLEY - E



Dimensions	610 x 945 x 980 mm 24 x 37 x 39 "
H suction port	0,55 m (1.8 ft)
Weight (LD11)	130 kg (290 lb)