

# WEL ECO 6-250

Diesel - Qmax 340 m<sup>3</sup>/h (1,500 USgpm) - Hmax 27,5 m (90 ft)



## WEL ECO - Wellpoint centrifugal pumps

The system consists of a self-priming centrifugal pump and a Simplex 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. The WEL ECO is capable of drawing significant quantities of air and maintaining a wellpoint system under vacuum, or draining an excavation, thanks to the semi-open impeller which also makes it 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 WEL ECO 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 "dry" priming

Up to a height of 7,5 m (24.6 ft)

### High resistance

To abrasive liquids and turbid sandy waters

### Semi-open impeller

Solids handling up to 76 mm (3")

### Rotary vane vacuum pump

Lubricated with oil recovery system and coalescing filters: no contamination of the environment

### Wear plates

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

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## Performance curves

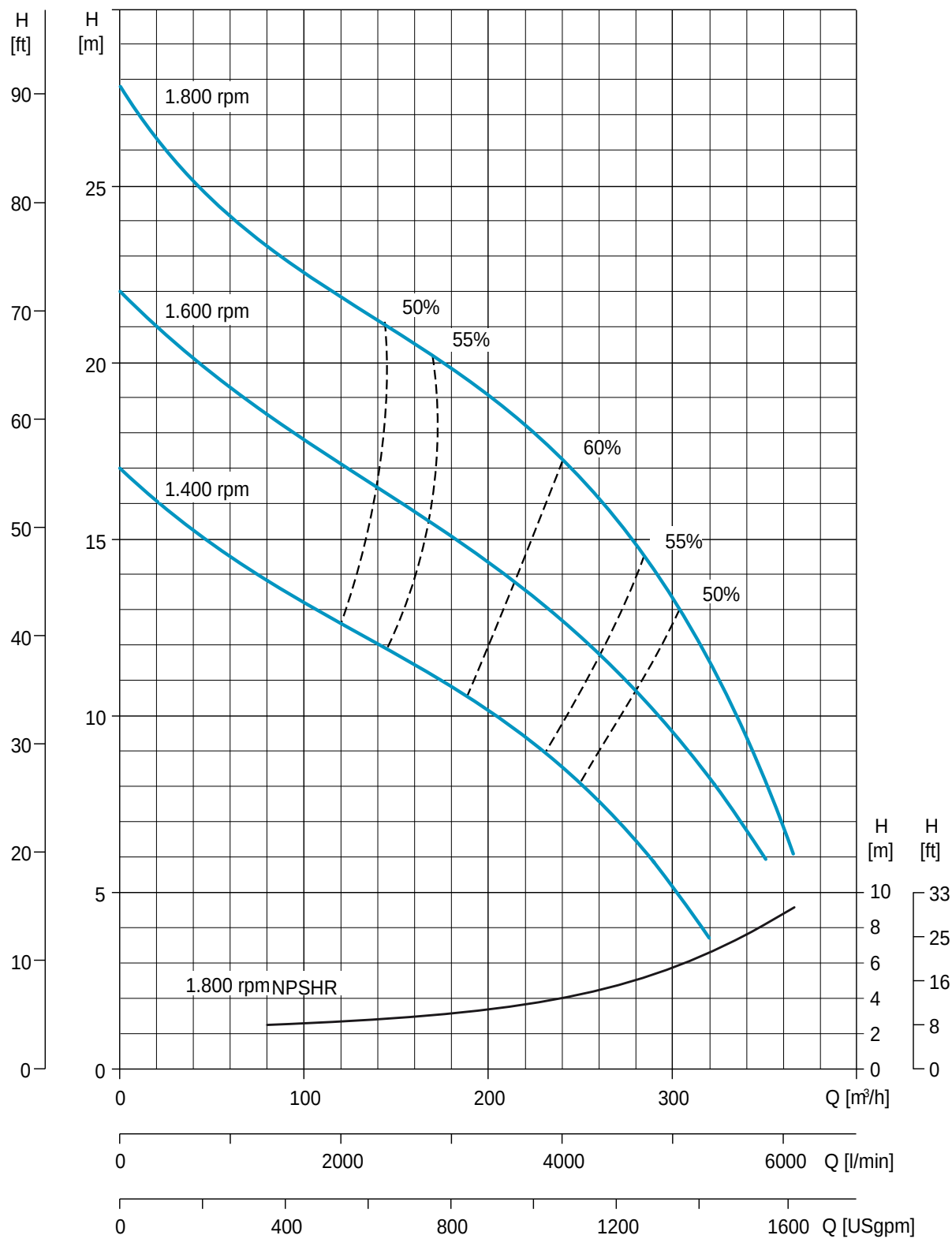
Test according to UNI EN ISO 9906 standard - level 2

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

Spherical solids handling: D.76 mm (3")

Priming time: 20 s from 1,5 m (4.9 ft)

Max absorbed power: 19,0 kW - 25.5 HP (1.800 rpm)



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## Technical data

### Pump

| Model            | WEL ECO 6-250                                     |                                   |
|------------------|---------------------------------------------------|-----------------------------------|
| Q <sub>max</sub> | 340 m <sup>3</sup> /h - 5.670 l/min (1,500 USgpm) |                                   |
| H <sub>max</sub> | 27,5 m (90 ft)                                    |                                   |
| Q max eff.       | 240 m <sup>3</sup> /h - 4.000 l/min (1,100 USgpm) |                                   |
| Eff. max         | 62 %                                              |                                   |
| 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                               |
| Casing           | EN-GJL-200 cast iron                              | EN-GJL-200 cast iron              |
| Impeller         | EN-GJS-400 ductile iron                           | CF8M stainless steel              |
| Wear plates      | EN-GJL-200 rubber lined cast iron                 | CF8M stainless steel              |
| Number of plates | 2                                                 | 2                                 |
| Shaft            | 39NiCrMo3 steel                                   | SAF 2205 stainless steel          |
| Flushing         | Yes                                               | Yes                               |
| Mechanical seal  | Silicon carbide / Silicon carbide                 | Silicon carbide / Silicon carbide |
| Elastomers       | NBR                                               | VITON                             |

### Priming system

| Vacuum pump          | V04                             |
|----------------------|---------------------------------|
| Vacuum pump type     | rotary vane                     |
| Nominal air capacity | 75 m <sup>3</sup> /h (44.1 cfm) |
| Max vacuum           | 0,9 bar                         |
| Separator type       | Simplex                         |
| Separator material   | EN-GJL-200 cast iron            |
| Drives               | Link belt                       |

### Engines

| Make                | Kohler                                       |      |      |      | Deutz                                        |      |      |      |
|---------------------|----------------------------------------------|------|------|------|----------------------------------------------|------|------|------|
| Model               | KDI 1903M (KL10)                             |      |      |      | D2011L03I (ZD35)                             |      |      |      |
| Type                | Diesel direct injection, aspirated           |      |      |      | Diesel direct injection, aspirated           |      |      |      |
| Displacement        | 1.861 cm <sup>3</sup> (114 in <sup>3</sup> ) |      |      |      | 2.330 cm <sup>3</sup> (142 in <sup>3</sup> ) |      |      |      |
| No. cylinders       | 3                                            |      |      |      | 3                                            |      |      |      |
| Cooling             | Liquid with radiator                         |      |      |      | Air                                          |      |      |      |
| Rpm type            | Variable                                     |      |      |      | Variable                                     |      |      |      |
| Standard speed      | 1.800 rpm                                    |      |      |      | 1.800 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 | 1200                                         | 1400 | 1600 | 1800 |
| Consumption [l/h]   | 3,5                                          | 4,4  | 5,1  | 5,4  | 3,4                                          | 4,2  | 5    | 5,6  |
| Power [kW]          | 13,5                                         | 17,6 | 20,3 | 21,6 | 13,5                                         | 16,7 | 19,8 | 22,1 |
| Power [HP]          | 18.1                                         | 23.6 | 27.2 | 29   | 18.1                                         | 22.4 | 26.6 | 29.6 |

### 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                      | - low oil pressure                                |
|       | - water overheating                     | - engine overheating                              |
|       | - lack of battery charging              | - lack of battery charging                        |
|       | (engine failure alarms with LED lights) |                                                   |
|       | Throttle rod                            | Throttle rod                                      |

# WEL ECO 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<br>12 V - 100 Ah - 400 A                                                                                                                                                                           |
| Tank           | 300 l (79.3 USG)                                                                                                                                                                                                                      |
| Locking keys   | Fuel cap                                                                                                                                                                                                                              |

SKID02 WEL ECO 6-250



|                |                                         |
|----------------|-----------------------------------------|
| Dimensions     | 1070 x 2220 x 1670 mm<br>42 x 87 x 66 " |
| H suction port | 0,96 m (3.1 ft)                         |
| Weight (KL10)  | 1150 kg (2,540 lb)                      |
| Weight (ZD35)  | 1160 kg (2,560 lb)                      |

TRAILER WEL ECO 6-250



|                |                                         |
|----------------|-----------------------------------------|
| Dimensions     | 1410 x 2330 x 1880 mm<br>56 x 92 x 74 " |
| H suction port | 1,17 m (3.8 ft)                         |
| Weight (KL10)  | 1120 kg (2,470 lb)                      |
| Weight (ZD35)  | 1130 kg (2,490 lb)                      |