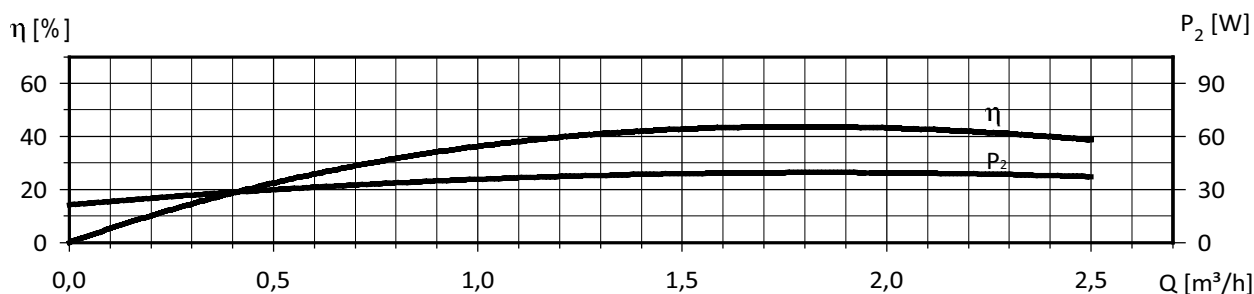
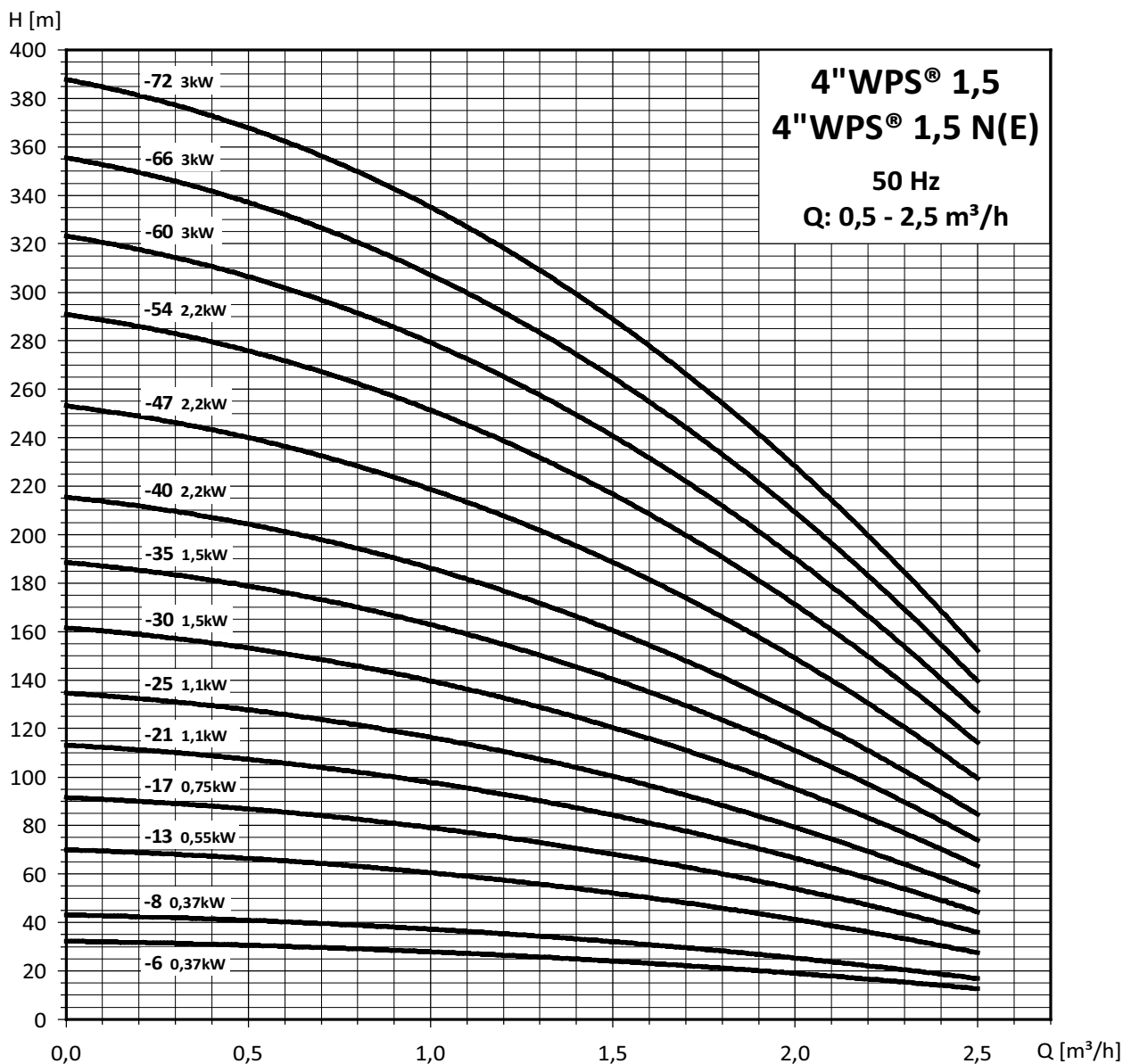




## Performance Curves

### Performance Curves 4"WPS® 1,5, 4"WPS® 1,5 N(E)

4"WPS®





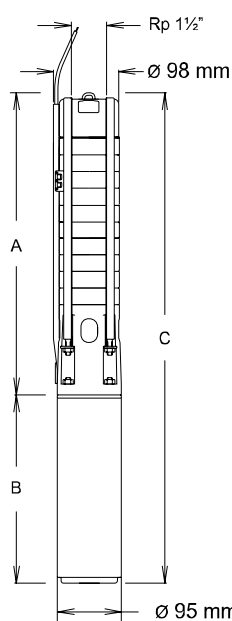
## Technical Data

### Selection Chart 4"WPS® 1,5, 4"WPS® 1,5 N(E)

| Pump Type    | Flow [m³/h] |     |     |     |     | Max. Head [m]<br>at 0 m³/h | Full load current |        |
|--------------|-------------|-----|-----|-----|-----|----------------------------|-------------------|--------|
|              | 0,5         | 1   | 1,5 | 2   | 2,5 |                            | 1x230V            | 3x400V |
| 4"WPS®1,5-6  | 31          | 28  | 24  | 19  | 12  | 32                         | 3,2               | 0,9    |
| 4"WPS®1,5-8  | 41          | 37  | 32  | 25  | 16  | 43                         | 3,6               | 1,1    |
| 4"WPS®1,5-13 | 66          | 60  | 52  | 40  | 26  | 70                         | 5,7               | 1,5    |
| 4"WPS®1,5-17 | 86          | 79  | 68  | 52  | 34  | 91                         | 6,9               | 2      |
| 4"WPS®1,5-21 | 107         | 97  | 83  | 65  | 42  | 113                        | 8                 | 2,8    |
| 4"WPS®1,5-25 | 127         | 116 | 99  | 77  | 50  | 134                        | 8,9               | 3      |
| 4"WPS®1,5-30 | 153         | 139 | 119 | 93  | 60  | 161                        | 9,5               | 3,3    |
| 4"WPS®1,5-35 | 178         | 162 | 139 | 108 | 70  | 188                        | 11,1              | 3,8    |
| 4"WPS®1,5-40 | 203         | 185 | 159 | 123 | 81  | 215                        | 12,1              | 5,1    |
| 4"WPS®1,5-47 | 239         | 217 | 187 | 145 | 95  | 253                        | 14,5              | 5,4    |
| 4"WPS®1,5-54 | 275         | 250 | 215 | 167 | 109 | 290                        | 15,9              | 5,6    |
| 4"WPS®1,5-60 | 305         | 278 | 238 | 185 | 121 | 323                        |                   | 6,8    |
| 4"WPS®1,5-66 | 336         | 305 | 262 | 204 | 133 | 355                        |                   | 7,2    |
| 4"WPS®1,5-72 | 366         | 333 | 286 | 222 | 145 | 387                        |                   | 7,5    |

4"WPS®

### Dimensions and Weights 4"WPS® 1,5, 4"WPS® 1,5 N(E)



| Pump Type     | Pump Power P <sub>2</sub> |      | A<br>[mm] | B<br>[mm] | C<br>[mm] | Weight [kg] |             |
|---------------|---------------------------|------|-----------|-----------|-----------|-------------|-------------|
|               | [kW]                      | [HP] |           |           |           | Pump End    | Electropump |
| 4"WPS® 1,5-6  | 0,37                      | 0,5  | 349       | 223       | 572       | 3,8         | 11,1        |
| 4"WPS® 1,5-8  | 0,37                      | 0,5  | 397       | 223       | 620       | 4,4         | 11,7        |
| 4"WPS® 1,5-13 | 0,55                      | 0,75 | 517       | 242       | 759       | 6,0         | 14,3        |
| 4"WPS® 1,5-17 | 0,75                      | 1    | 623       | 271       | 894       | 7,4         | 17,0        |
| 4"WPS® 1,5-21 | 1,1                       | 1,5  | 711       | 299       | 1010      | 8,7         | 19,5        |
| 4"WPS® 1,5-25 | 1,1                       | 1,5  | 807       | 299       | 1106      | 10,0        | 20,8        |
| 4"WPS® 1,5-30 | 1,5                       | 2    | 928       | 327       | 1255      | 11,6        | 23,7        |
| 4"WPS® 1,5-35 | 1,5                       | 2    | 1048      | 327       | 1375      | 13,3        | 25,4        |
| 4"WPS® 1,5-40 | 2,2                       | 3    | 1169      | 356       | 1525      | 14,6        | 28,1        |
| 4"WPS® 1,5-47 | 2,2                       | 3    | 1338      | 356       | 1694      | 16,9        | 29,5        |
| 4"WPS® 1,5-54 | 2,2                       | 3    | 1506      | 356       | 1862      | 19,1        | 32,6        |
| 4"WPS® 1,5-60 | 3                         | 4    | 1651      | 423       | 2074      | 21,0        | 37,0        |
| 4"WPS® 1,5-66 | 3                         | 4    | 1796      | 423       | 2219      | 22,9        | 38,9        |
| 4"WPS® 1,5-72 | 3                         | 4    | 1941      | 423       | 2364      | 24,9        | 40,9        |



## General Data

### Features and benefits for 4"WPS®-CP

#### Dry-running protection

4"WPS®-CP pumps are protected against dry running. The 4"WPS®-CP controller is equipped with a flow sensor that at all times measures the pumped flow. As soon as this flow drops under a minimum value ( $Q_{min}$  is about  $0,1\text{m}^3/\text{h}$ ), the pump will be stopped. Simultaneously, also the absorbed power of the motor is measured. A minimum value of this power ensures cut-out of the pump. Both these measurements ensure in case of lack of water in the borehole, a shutdown of the pump and thus preventing a burnout of the motor.

#### High pump efficiency and Wear resistance

The 4"WPS®-CP pumps are entirely made of stainless steel and ensure a high efficiency meaning low energy consumption and therefore low energy costs.

Due to its stainless steel construction in combination with the high performance NBR seals and bearings, the 4"WPS®-CP pumps ensure high wear resistance to sand for long product life.

#### Excellent starting capabilities

The integrated electronic unit of the 4"WPS®-CP controller features soft starting. A soft start reduces the starting current and gives the pump a smooth and steady acceleration.

A soft starter minimizes the risk of wear of the pump and prevents overloading of the supply during start-up. The high starting reliability also applies in case of low voltage supply.

#### Overvoltage and undervoltage protection

Overvoltage and undervoltage may occur in case of unstable voltage supply.

The 4"WPS®-CP pump will be cut out if voltage falls below 185V or rises above 260V. The motor will restart automatically when the voltage is reestablished within the permissible voltage range.

Therefore no extra protection relay is needed.

#### Overload protection

Exposure of the pump to heavy load causes the current consumption to rise. When the maximum allowed current is exceeded, the pump will be stopped.

Also a locked rotor will automatically be detected and the power supply cut out. Consequently, no extra motor protection is needed.

#### Overtemperature protection

The electronic unit of the 4"WPS®-CP controller has a built-in temperature sensor.

The 4"WPS®-CP controller will cut out the pump when the temperature of the fluid rises over its limit of  $55^\circ\text{C}$ .

The error code 'Inverter Error' will be mentioned on the display of the controller. When the temperature has dropped to  $45^\circ\text{C}$ , the motor is automatically restarted.

#### Variable speed

The 4"WPS®-CP controller enables continuously variable speed control within the 3000 and 5350 rpm. The pump can operate in any duty point in the range between the 3000 and 5350 rpm performance curves of the pump. Consequently, the pump performance can be adapted to any specific requirement.

On the basis of a required head the speed of the motor is calculated.

#### Auxiliary contact for Second set-pressure or Remote on/off switch

The 4"WPS-CP controller is standard equipped with an auxiliary contact that can be activated by changing a specific parameter in the programming of the 4"WPS®-CP controller. The auxiliary contact can be used as a remote on/off switch (f.e. only run the pump when the irrigation is running, extra protection of the pump against dry running in a tank or cistern with a float switch, ...) or to create a second constant pressure level (f.e. higher pressure level when the irrigation system runs, lower pressure level to back-wash a water treatment system, ...)

4"WPS®

**Well Pumps S.A.** est spécialisée dans la fabrication des pompes immergées de 3" à 8" en acier inoxydable. Tous les composants internes et externes de la pompe sont fabriqués entièrement en inox (plaques d'inox pressées à froid).

- Tous les joints sont fait d'un NBR spécial contenant du caoutchouc afin d'assurer une excellente résistance à l'usure et à l'abrasion provoquées par le sable en suspension dans l'eau du puits.

