

## SE1.50.80.22.2.50E.B

Grundfos pump 96047985



Thank you for your interest in our products. Please contact us for more information, or visit our website

<https://www.lenntech.com/grundfos/SE100/96047985/SE1-50-80-22-2-50E-B.html>

[info@lenntech.com](mailto:info@lenntech.com)

tel. +31 152 610 900

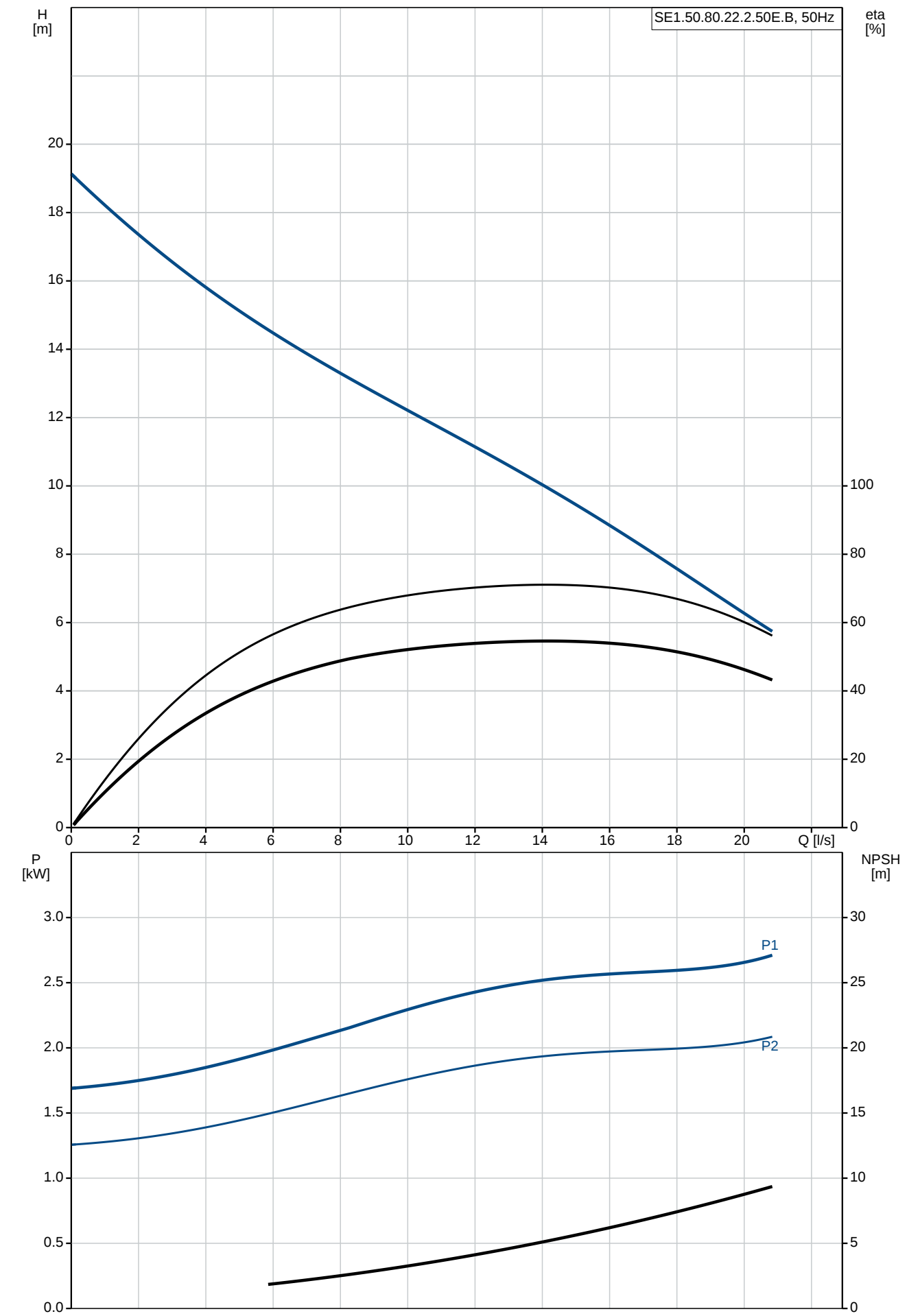
fax. +31 152 616 289

| Position | Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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|          | 1    | <p><b>SE1.50.80.22.2.50E.B</b></p>  <p><b>Note! Product picture may differ from actual product</b></p> <p>Product No.: On request</p> <p>Non-self-priming, single-stage, centrifugal pump designed for handling wastewater, process water and unscreened raw sewage.</p> <p>The pump is designed for intermittent and continuous operation. The liquidless and maintenance free cooling system ensures that the pump can be used for submerged or dry installation. The revolutionary S-tube® impeller provides free spherical passage of solids up to 50 mm and is suitable for wastewater with a dry matter content of up to 3 %.</p> <p>A unique stainless-steel clamp assembling system enables quick and easy disassembly of the pump from the motor unit for service and inspection. No special tools are required. Pipework connection is via a DIN flange.</p> <p><b>Further product details</b></p> <p>Typical application is transfer of liquid, such as:</p> <ul style="list-style-type: none"> <li>- large quantities of drainage and surface water</li> <li>- domestic wastewater with discharge from toilets</li> <li>- wastewater from commercial buildings without discharge from toilets</li> <li>- sludge-containing industrial wastewater.</li> </ul> <p>The pump is ideal for pumping of the above liquids from for instance:</p> <ul style="list-style-type: none"> <li>- municipal network pumping stations</li> <li>- public buildings</li> <li>- blocks of flats</li> <li>- factories/industry.</li> </ul> <p>The pump is suitable for both temporary and permanent installation either as free-standing on ring stand, on base stand, on brackets or on an auto-coupling system.</p> <p><b>Pump</b></p> <p>The pump is fitted with an easy-to-clean stainless-steel motor sleeve (EN 1.4301) that is extremely robust and impact-resistant. Pump housing and impeller is made of cast iron (EN-GJL-250).</p> <p>The S-tube® impeller is providing free spherical passage through the impeller and pump housing and creates a natural extension of the pipework connected to the pump. The S-tube® impeller is a wet-balanced and tube-shaped channel impeller placed in a pump housing that matches the smooth tube shape leaving no obstructions or dead zones.</p> <p>The key to the S-tube® design is simplicity, with no cutting or moving functions that can get worn over time, thereby ensuring constant, superior efficiency. The simple design means lower life cycle costs because abrasive wear is reduced and there are fewer clogging incidents.</p>  |

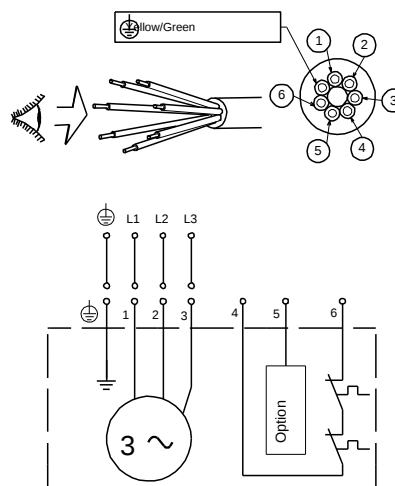
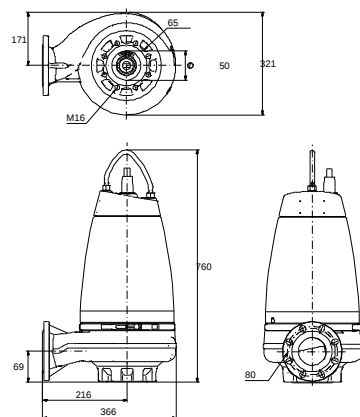
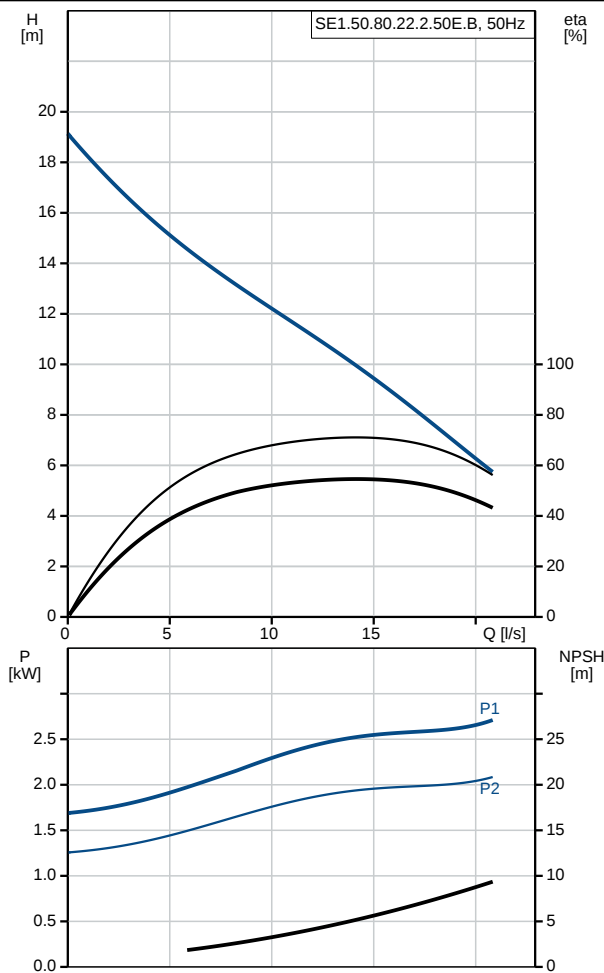
| Position                    | Qty.                        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
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|                             |                             | <p>The shaft seal consists of two mechanical seals that ensure a reliable sealing between the pumped liquid and motor. The shaft seals are incorporated in a single-unit cartridge shaft seal system that is easy to replace in the field without use of special tools.</p> <p>The combination of the primary and secondary seals in a cartridge shaft seal system results in a shorter assembly length compared to conventional shaft seals.</p> <ul style="list-style-type: none"><li>- Primary seal: Silicon carbide/silicon carbide (SiC/SiC)</li><li>- Secondary seal: Carbon/Ceramics</li></ul> <p>The shaft seal is bidirectional, meaning it operates correctly in case of backflow through the pump.</p> <div></div> <p>The pump is approved according to EN12050-2.</p> <p><b>Motor</b></p> <p>The motor is a watertight, totally encapsulated motor supplied with a 10 m power cable. The stainless steel plug is fastened with a union nut. This nut and the O-rings provide sealing against ingress of the liquid.</p> <p>The plug is polyurethane-embedded, ensuring a watertight and durable seal around the leads of the cable. This prevents the ingress of water into the motor through the cable in case of cable breakage or adverse handling in connection with installation or service.</p> <p>A compact motor construction with a short shaft reduces vibrations, resulting in an increased efficiency and lifetime of the shaft seal and ball bearings.</p> <p>The motor features built-in thermal protection to protect the motor against overheating and ensure the reliability.</p> <p>A solid-block stator housing with built-in cooling conduits, efficiently transfers excess heat to the pumped liquid via a solid cast intermediate cooling flange, that is in direct contact with the pumped liquid. This allows for continuous operation even in a dry installation. An extremely robust impact-resistant stainless-steel jacket with an easy-to-clean smooth surface is fitted on the top of the solid-block stator housing.</p> <p>The pump is designed for speed-controlled operation to keep the energy consumption at a minimum. To avoid the risk of sedimentation in the pipes, we recommend that you operate the speed-controlled pump within a speed range of 30 % to 100 % and at a flow rate above 1 m/s.</p> <p><b>Controls:</b></p> <table><tr><td>Moisture sensor:</td><td>without moisture sensors</td></tr><tr><td>Water-in-oil sensor:</td><td>without water-in-oil sensor</td></tr><tr><td>Temp. sensor:</td><td>N</td></tr></table> <p><b>Liquid:</b></p> <table><tr><td>Liquid temperature range:</td><td>0 .. 40 °C</td></tr><tr><td>Density:</td><td>998.2 kg/m³</td></tr></table> <p><b>Technical:</b></p> <table><tr><td>Type of impeller:</td><td>S-TUBE</td></tr><tr><td>Maximum particle size:</td><td>50 mm</td></tr><tr><td>Primary shaft seal:</td><td>SIC/SIC</td></tr><tr><td>Secondary shaft seal:</td><td>CARBON/CERAMICS</td></tr><tr><td>Max. hydraulic efficiency:</td><td>66 %</td></tr><tr><td>Approvals on nameplate:</td><td>EN12050-2</td></tr><tr><td>Curve tolerance:</td><td>ISO9906:2012 3B2</td></tr></table> <p><b>Materials:</b></p> <table><tr><td>Pump housing:</td><td>EN 1561 EN-GJL-250</td></tr><tr><td>Impeller:</td><td>Cast iron</td></tr></table> <p><b>Installation:</b></p> <table><tr><td>Maximum operating pressure:</td><td>6 bar</td></tr><tr><td>Flange standard:</td><td>DIN</td></tr><tr><td>Pump outlet:</td><td>DN 80</td></tr><tr><td>Pressure rating:</td><td>PN 10</td></tr><tr><td>Maximum installation depth:</td><td>20 m</td></tr></table> | Moisture sensor: | without moisture sensors | Water-in-oil sensor: | without water-in-oil sensor | Temp. sensor: | N | Liquid temperature range: | 0 .. 40 °C | Density: | 998.2 kg/m³ | Type of impeller: | S-TUBE | Maximum particle size: | 50 mm | Primary shaft seal: | SIC/SIC | Secondary shaft seal: | CARBON/CERAMICS | Max. hydraulic efficiency: | 66 % | Approvals on nameplate: | EN12050-2 | Curve tolerance: | ISO9906:2012 3B2 | Pump housing: | EN 1561 EN-GJL-250 | Impeller: | Cast iron | Maximum operating pressure: | 6 bar | Flange standard: | DIN | Pump outlet: | DN 80 | Pressure rating: | PN 10 | Maximum installation depth: | 20 m |
| Moisture sensor:            | without moisture sensors    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Water-in-oil sensor:        | without water-in-oil sensor |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Temp. sensor:               | N                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Liquid temperature range:   | 0 .. 40 °C                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Density:                    | 998.2 kg/m³                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Type of impeller:           | S-TUBE                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Maximum particle size:      | 50 mm                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Primary shaft seal:         | SIC/SIC                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Secondary shaft seal:       | CARBON/CERAMICS             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Max. hydraulic efficiency:  | 66 %                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Approvals on nameplate:     | EN12050-2                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Curve tolerance:            | ISO9906:2012 3B2            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Pump housing:               | EN 1561 EN-GJL-250          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Impeller:                   | Cast iron                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Maximum operating pressure: | 6 bar                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Flange standard:            | DIN                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Pump outlet:                | DN 80                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Pressure rating:            | PN 10                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |
| Maximum installation depth: | 20 m                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                          |                      |                             |               |   |                           |            |          |             |                   |        |                        |       |                     |         |                       |                 |                            |      |                         |           |                  |                  |               |                    |           |           |                             |       |                  |     |              |       |                  |       |                             |      |

| Position | Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|          |      | <b>Electrical data:</b><br>Power input - P1: 2.8 kW<br>Rated power - P2: 2.2 kW<br>Mains frequency: 50 Hz<br>Rated voltage: 3 x 220-240 V<br>Voltage tolerance: +6/-10 %<br>Max starts per. hour: 20<br>Rated current: 8.9-8.7 A<br>Rated current at 3/4 load: 6.6 A<br>Rated current at 1/2 load: 5.2 A<br>Starting current: 64 A<br>Rated current at no load: 3.5 A<br>Cos phi - power factor: 0.86<br>Cos phi - p.f. at no load: 0.21<br>Cos phi - p.f. at 3/4 load: 0.81<br>Cos phi - p.f. at 1/2 load: 0.72<br>Rated speed: 2895 rpm<br>Locked-rotor torque: 18 Nm<br>Breakdown torque: 23 Nm<br>Moment of inertia: 0.0095 kg m <sup>2</sup><br>Motor efficiency at full load: 77 %<br>Motor efficiency at 3/4 load: 76.6 %<br>Motor efficiency at 1/2 load: 73.5 %<br>Number of poles: 2<br>Start. method: direct-on-line<br>Enclosure class (IEC 34-5): IP68<br>Insulation class (IEC 85): F<br>Explosion proof: no<br>Length of cable: 10 m<br>Cable type: LYNIFLEX<br>Type of cable plug: NO PLUG<br><br><b>Others:</b><br>Net weight: 87 kg |

On request SE1.50.80.22.2.50E.B 50 Hz

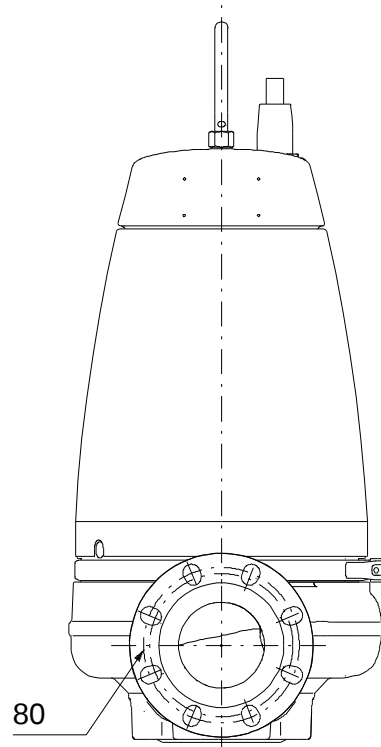
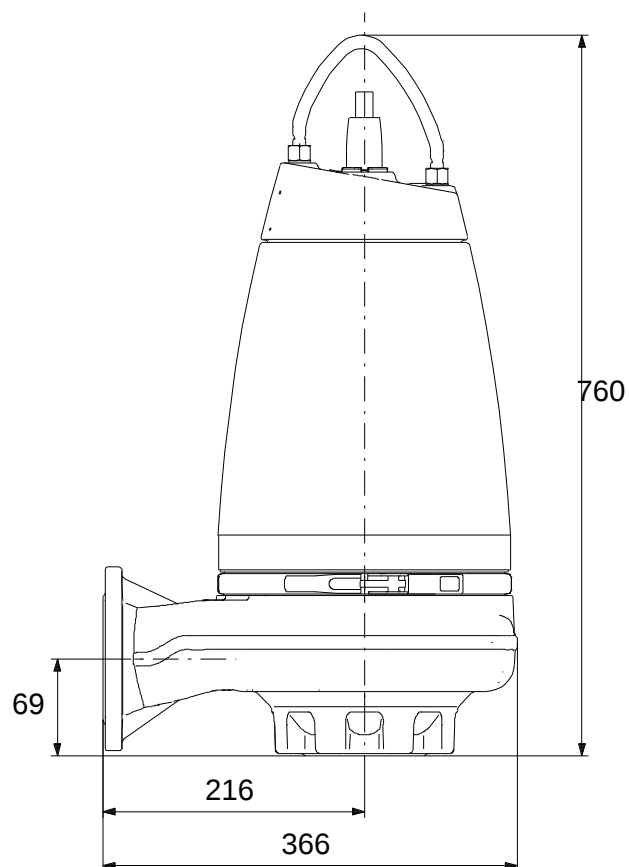
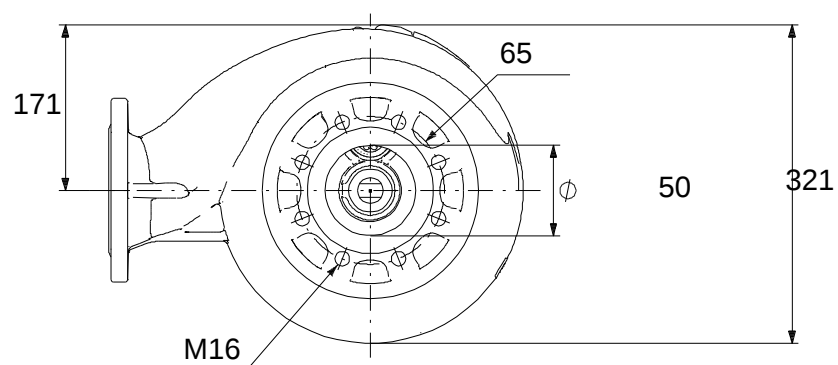


| Description                    | Value                    |
|--------------------------------|--------------------------|
| <b>General information:</b>    |                          |
| Product name:                  | SE1.50.80.22.2.50E.B     |
| Product No:                    | On request               |
| EAN number:                    | On request               |
| <b>Technical:</b>              |                          |
| Max flow:                      | 20.8 l/s                 |
| Head max:                      | 18.1 m                   |
| Type of impeller:              | S-TUBE                   |
| Maximum particle size:         | 50 mm                    |
| Primary shaft seal:            | SIC/SIC                  |
| Secondary shaft seal:          | CARBON/CERAMICS          |
| Max. hydraulic efficiency:     | 66 %                     |
| Approvals on nameplate:        | EN12050-2                |
| Curve tolerance:               | ISO9906:2012 3B2         |
| Cooling jacket:                | with cooling jacket      |
| <b>Materials:</b>              |                          |
| Pump housing:                  | EN 1561 EN-GJL-250       |
| Impeller:                      | Cast iron                |
| <b>Installation:</b>           |                          |
| Maximum operating pressure:    | 6 bar                    |
| Flange standard:               | DIN                      |
| Pump outlet:                   | DN 80                    |
| Pressure rating:               | PN 10                    |
| Maximum installation depth:    | 20 m                     |
| Inst dry/wet:                  | DRY/SUBMERGED            |
| Installation:                  | horizontal or vertical   |
| <b>Liquid:</b>                 |                          |
| Liquid temperature range:      | 0 .. 40 °C               |
| Density:                       | 998.2 kg/m <sup>3</sup>  |
| <b>Electrical data:</b>        |                          |
| Power input - P1:              | 2.8 kW                   |
| Rated power - P2:              | 2.2 kW                   |
| Mains frequency:               | 50 Hz                    |
| Rated voltage:                 | 3 x 220-240 V            |
| Voltage tolerance:             | +6/-10 %                 |
| Max starts per. hour:          | 20                       |
| Rated current:                 | 8.9-8.7 A                |
| Rated current at 3/4 load:     | 6.6 A                    |
| Rated current at 1/2 load:     | 5.2 A                    |
| Starting current:              | 64 A                     |
| Rated current at no load:      | 3.5 A                    |
| Cos phi - power factor:        | 0.86                     |
| Cos phi - p.f. at no load:     | 0.21                     |
| Cos phi - p.f. at 3/4 load:    | 0.81                     |
| Cos phi - p.f. at 1/2 load:    | 0.72                     |
| Rated speed:                   | 2895 rpm                 |
| Locked-rotor torque:           | 18 Nm                    |
| Breakdown torque:              | 23 Nm                    |
| Moment of inertia:             | 0.0095 kg m <sup>2</sup> |
| Motor efficiency at full load: | 77 %                     |
| Motor efficiency at 3/4 load:  | 76.6 %                   |
| Motor efficiency at 1/2 load:  | 73.5 %                   |
| Number of poles:               | 2                        |
| Start. method:                 | direct-on-line           |
| Enclosure class (IEC 34-5):    | IP68                     |
| Insulation class (IEC 85):     | F                        |
| Explosion proof:               | no                       |
| Motor protec:                  | THERMAL SWITCH           |
| Thermal protec:                | internal                 |
| Length of cable:               | 10 m                     |
| Cable type:                    | LYNIFLEX                 |
| Type of cable plug:            | NO PLUG                  |
| <b>Controls:</b>               |                          |
| Control box:                   | not included             |



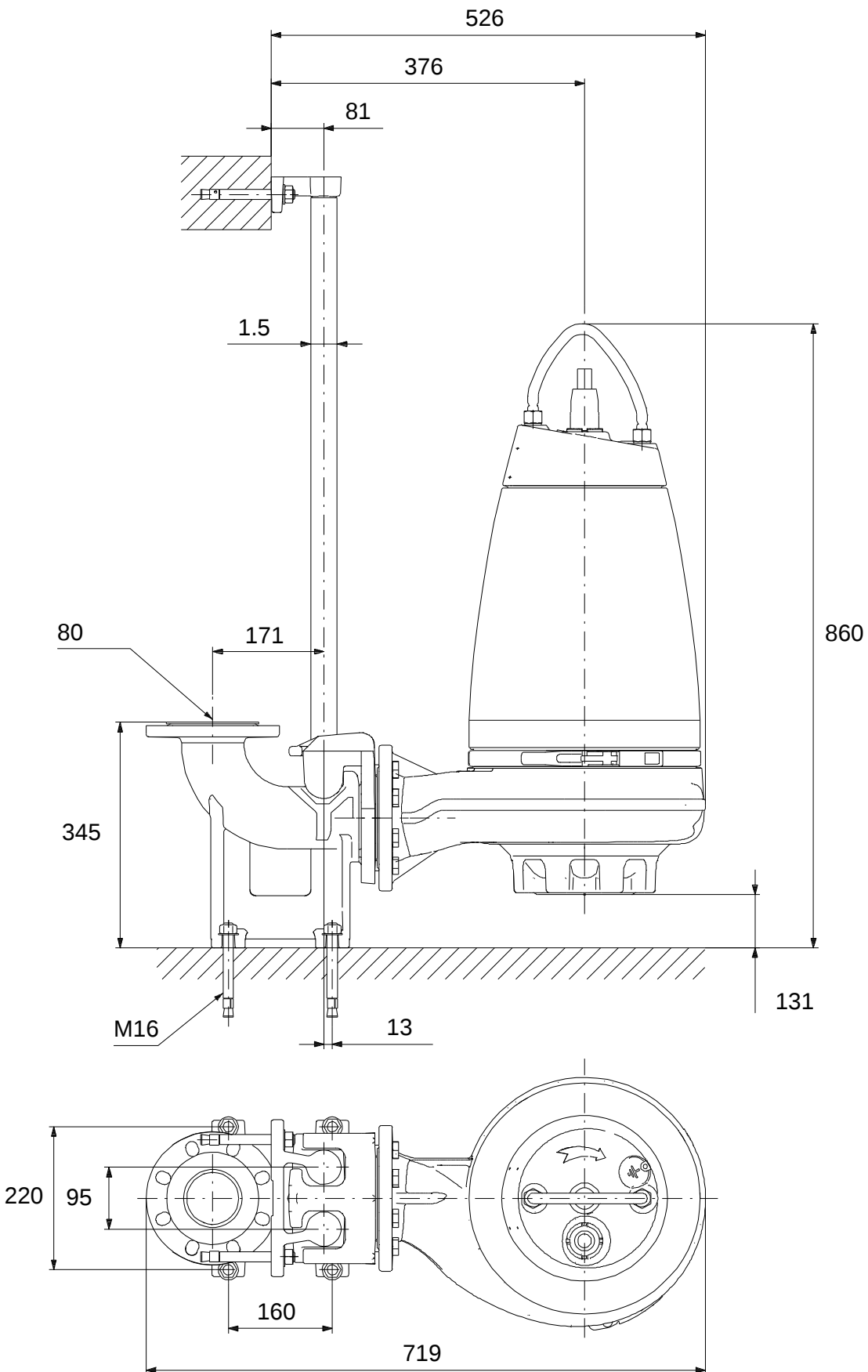
| Description          | Value                       |
|----------------------|-----------------------------|
| Moisture sensor:     | without moisture sensors    |
| Water-in-oil sensor: | without water-in-oil sensor |
| Temp. sensor:        | N                           |
| <b>Others:</b>       |                             |
| Net weight:          | 87 kg                       |

# On request SE1.50.80.22.2.50E.B 50 Hz



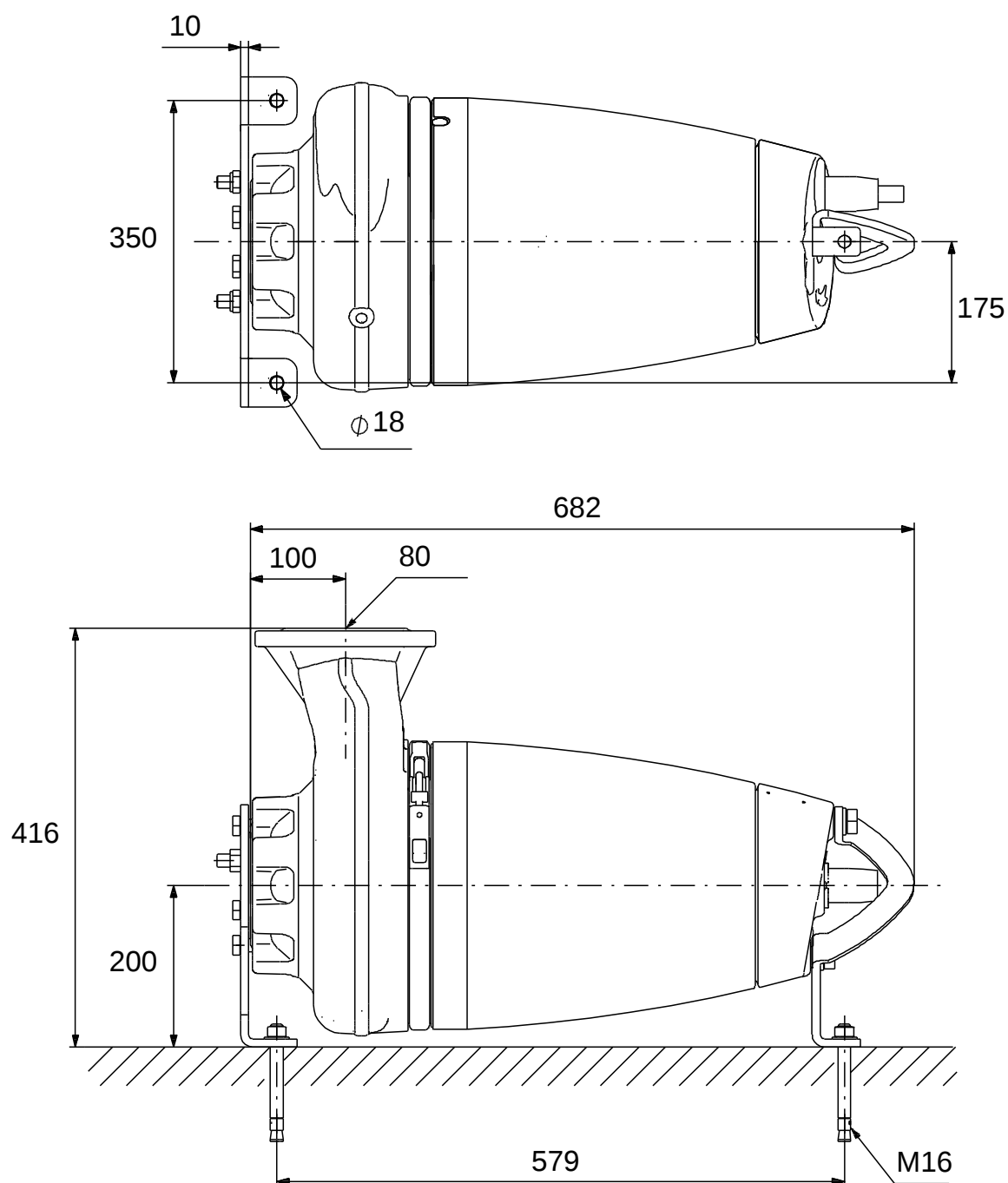
Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

**On request SE1.50.80.22.2.50E.B 50 Hz**



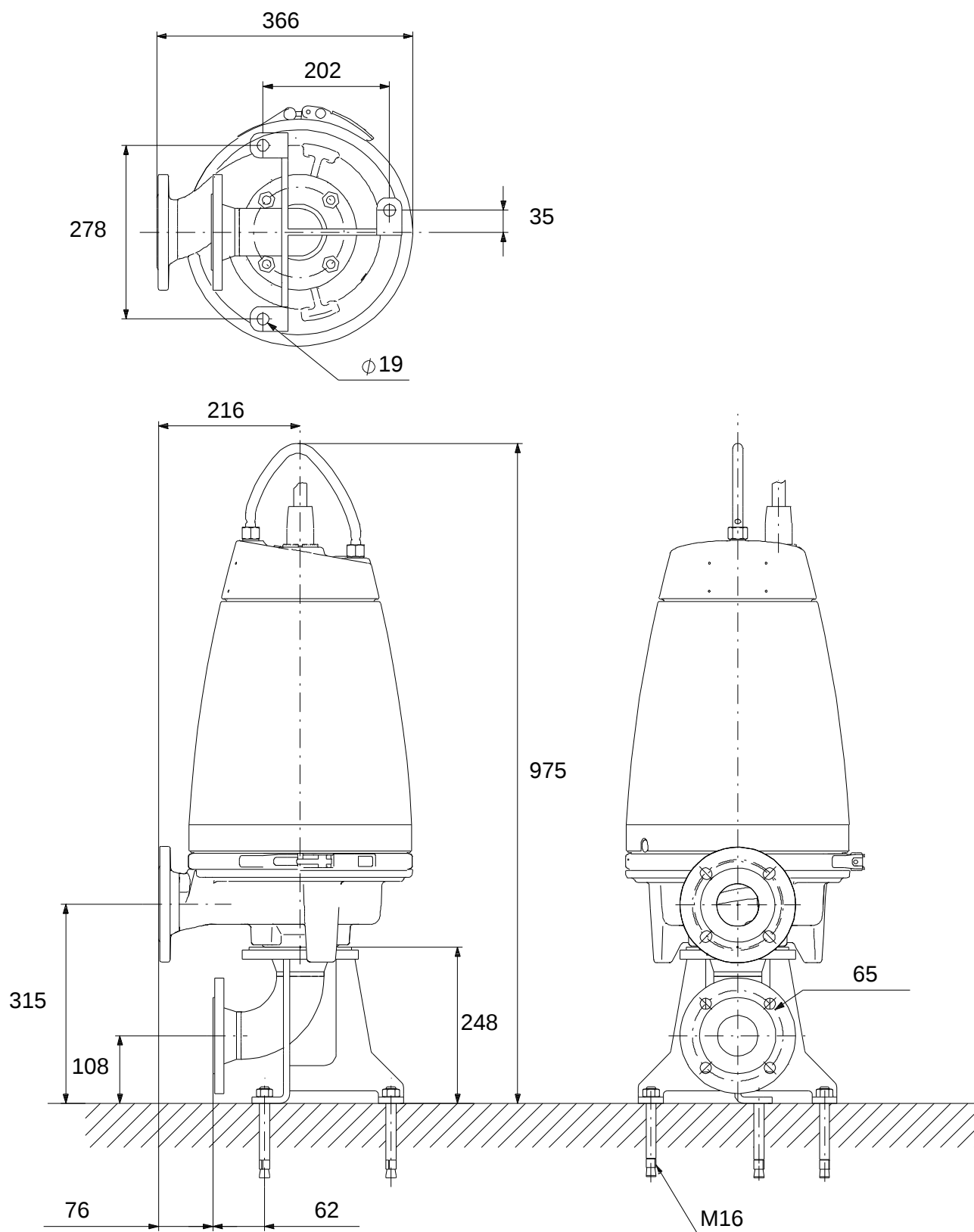
Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

# On request SE1.50.80.22.2.50E.B 50 Hz



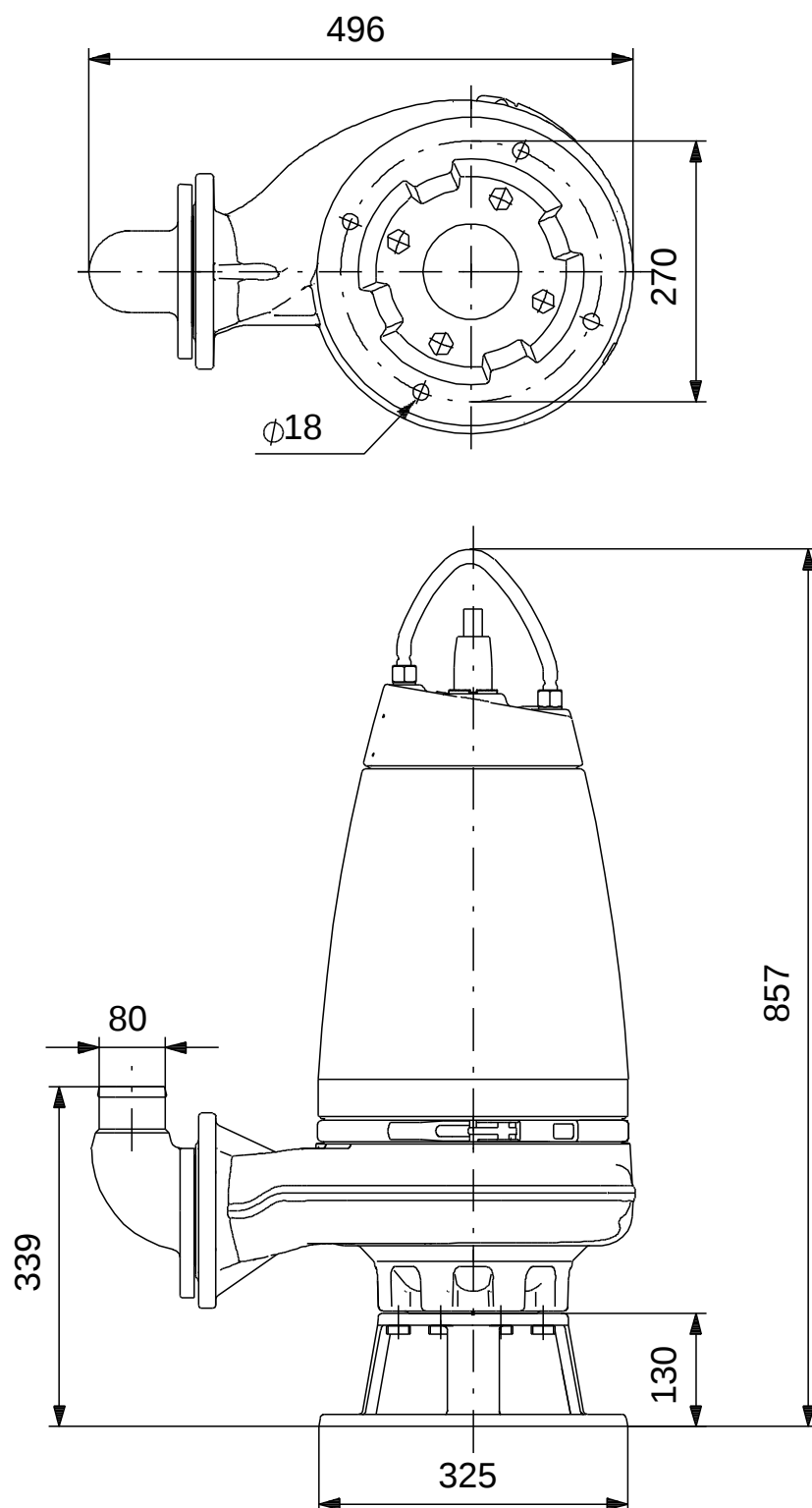
Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

# On request SE1.50.80.22.2.50E.B 50 Hz



Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

On request SE1.50.80.22.2.50E.B 50 Hz



Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

## Exploded view



Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

# Exploded view ( TM057026 for MGE model H/I )



**Parts list SE1.50.80.22.2.50E.B, Product No. On request**  
**Valid from 10.12.2012 (1250)**

| Pos   | Description                 | Annotation | Données de classification | Référence | Quantité | Unité |
|-------|-----------------------------|------------|---------------------------|-----------|----------|-------|
|       | Clamp                       |            |                           |           | 2        | pcs   |
|       | Pin connector               |            |                           |           | 1        | pcs   |
|       | Earth connector             |            |                           |           | 1        | pcs   |
|       | Thermotransfer foil         |            |                           |           | 0        | M     |
|       | Thermotransfer foil         |            |                           |           | 0        | M     |
|       | Hex head bolt               |            |                           |           | 4        | pcs   |
| 6a    | Pin                         |            |                           |           | 1        | pcs   |
| 7a    | Rivet                       |            |                           |           | 4        | pcs   |
| 9a    | Parallel key                |            | Dimension: 5X5X16         |           | 1        | pcs   |
| 37    | O-ring                      |            | Diameter: 250             |           | 1        | pcs   |
|       |                             |            | Material type: NBR70      |           |          |       |
|       |                             |            | Thickness: 4              |           |          |       |
| 37a   | O-ring                      |            | Diameter: 285             |           | 2        | pcs   |
|       |                             |            | Material type: NBR70      |           |          |       |
|       |                             |            | Thickness: 4              |           |          |       |
| 37b   | O-ring                      |            | Diameter: 185             |           | 1        | pcs   |
|       |                             |            | Material type: NBR        |           |          |       |
|       |                             |            | Thickness: 4              |           |          |       |
| + 46  | Seal ring                   |            |                           |           | 1        | pcs   |
| 48    | Stator                      |            |                           |           | 1        | pcs   |
| 49    | Impeller                    |            |                           |           | 1        | pcs   |
| 49c   | Wear ring                   |            |                           |           | 1        | pcs   |
| 50    | Pump housing                |            |                           |           | 1        | pcs   |
| 55    | Stator housing              |            |                           |           | 1        | pcs   |
| 58    | Cover for oil chamber       |            |                           |           | 1        | pcs   |
| 59    | Bearing cover               |            |                           |           | 1        | pcs   |
| 60    | Bearing retainer            |            |                           |           | 1        | pcs   |
| 61    | Bearing retainer            |            |                           |           | 1        | pcs   |
| 66    | Washer                      |            | Internal diameter: 10.5   |           | 1        | pcs   |
|       |                             |            | Outer diameter: 25        |           |          |       |
|       |                             |            | Thickness: 3              |           |          |       |
| 76    | Nameplate                   |            |                           |           | 1        | pcs   |
| + 92  | Strap cpl.                  |            |                           |           | 1        | pcs   |
| 102   | Retaining ring              |            |                           |           | 1        | pcs   |
| - 105 | Shaft seal                  |            |                           |           | 1        | pcs   |
|       | Shaft seal                  |            |                           |           | 1        |       |
|       | Shaft seal                  |            |                           |           | 1        |       |
|       | Shaft seal                  |            |                           |           | 1        |       |
|       | Retaining ring              |            |                           |           | 1        |       |
|       | Shaft seal, rotating part   |            |                           |           | 1        |       |
|       | Shaft seal, rotating part   |            |                           |           | 1        |       |
|       | Shaft seal, stationary part |            |                           |           | 1        |       |
|       | Shaft seal, stationary part |            |                           |           | 1        |       |
| 106   | O-ring                      |            | Diameter: 50              |           | 2        |       |
|       |                             |            | Material type: NBR        |           |          |       |
|       |                             |            | Thickness: 3              |           |          |       |
| 107   | O-ring                      |            | Diameter: 110             |           | 1        | pcs   |
|       |                             |            | Material type: NBR70      |           |          |       |
|       |                             |            | Thickness: 3              |           |          |       |
| 108   | O-ring                      |            | Diameter: 80              |           | 1        | pcs   |
|       |                             |            | Material type: NBR70      |           |          |       |
|       |                             |            | Thickness: 3              |           |          |       |
| 109   | O-ring                      |            | Diameter: 80              |           | 1        | pcs   |
|       |                             |            | Material type: NBR70      |           |          |       |
|       |                             |            | Thickness: 3              |           |          |       |
| 150   | Motor sleeve                |            |                           |           | 1        | pcs   |
| 151   | Motor cover                 |            |                           |           | 1        | pcs   |
| 153   | Ball bearing                |            |                           |           | 1        | pcs   |
| 153b  | O-ring                      |            |                           |           | 1        | pcs   |

| Pos   | Description               | Annotation | Données de classification   | Référence | Quantité | Unité |
|-------|---------------------------|------------|-----------------------------|-----------|----------|-------|
| 154   | Ball bearing              |            | Designation: 6304.2Z.C3.SYN |           | 1        | pcs   |
| 155   | Flange                    |            |                             |           | 1        | pcs   |
| 157   | Waved washer              |            |                             |           | 1        | pcs   |
| 158   | Waved washer              |            |                             |           | 1        | pcs   |
| 159   | O-ring                    |            | Diameter: 34                |           | 1        | pcs   |
|       |                           |            | Material type: NBR70        |           |          |       |
|       |                           |            | Thickness: 4                |           |          |       |
| 172   | Shaft w/rotor             |            |                             |           | 1        | pcs   |
| 174a  | Lock washer               |            |                             |           | 1        | pcs   |
| 177   | Plug protector            |            |                             |           | 1        | pcs   |
| 177   | Hex socket head cap screw |            |                             |           | 1        | pcs   |
| - 181 | Cable cpl.                |            |                             |           | 1        | pcs   |
| 198   | O-ring                    |            | Diameter: 34.2              |           | 1        |       |
|       |                           |            | Material type: NBR          |           |          |       |
|       |                           |            | Thickness: 3                |           |          |       |
| 183   | Hex socket head cap screw |            | Length (mm): 40             |           | 1        | pcs   |
|       |                           |            | Thread: M24                 |           |          |       |
| 183a  | Washer                    |            | Internal diameter: 26       |           | 1        | pcs   |
|       |                           |            | Outer diameter: 34          |           |          |       |
|       |                           |            | Thickness: 2                |           |          |       |
| 184   | Hex socket head cap screw |            | Designation: DIN 912        |           | 6        | pcs   |
|       |                           |            | Length (mm): 40             |           |          |       |
|       |                           |            | Thread: M10                 |           |          |       |
| 184a  | Washer                    |            | Internal diameter: 10.5     |           | 6        | pcs   |
|       |                           |            | Outer diameter: 18          |           |          |       |
|       |                           |            | Thickness: 1.6              |           |          |       |
| 186   | Hex socket head cap screw |            |                             |           | 2        | pcs   |
| 187   | Hex socket head cap screw |            |                             |           | 4        | pcs   |
| 188   | Hex socket head cap screw |            |                             |           | 4        | pcs   |
| 188a  | Hex socket head cap screw |            | Designation: DIN 912        |           | 1        | pcs   |
|       |                           |            | Length (mm): 25             |           |          |       |
|       |                           |            | Thread: M10                 |           |          |       |
| 190   | Lifting bracket           |            |                             |           | 1        | pcs   |
| 190a  | Rubber bush               |            |                             |           | 2        | pcs   |
| 192   | Cooling paste             |            |                             |           | 12       | G     |
| 193   | Hex socket head cap screw |            | Designation: A2-70          |           | 2        | pcs   |
|       |                           |            | Length (mm): 20             |           |          |       |
|       |                           |            | Thread: M12                 |           |          |       |
| 193a  | Oil                       |            |                             |           | 0        | L     |
| 194   | Washer                    |            | Internal diameter: 19       |           | 2        | pcs   |
|       |                           |            | Outer diameter: 12.2        |           |          |       |
|       |                           |            | Thickness: 4.4              |           |          |       |
| 1031  | Connector pin             |            |                             |           | 6        | pcs   |

*Disclaimer: The information about the Grundfos pump in this document may be outdated.*

*Data may be subject to alterations without further notice.*

*Please contact us to verify the data above is still accurate/up-to-date.*

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