## UPML, UPMXL, SOLAR PML

## End-of-Life Information

Grundfos UPML, UPMXL and SOLAR PML circulators must be disposed of according to local regulations by using a public or private waste collection service.

## Safety Risk

- Safety related to materials used

There is no risk to people during the disassembly process posed by the materials used in the product.

## Disassembly of the Product

The main materials of the components are:

- Copper
- Cast Iron
- Aluminium
- Electronic components
- Composite materials
and can therefore be recycled to a large extent - depending on the national possibilities for recycling.

The pump is assembled by using screws and bolts and can be disassembled with standard tools. There are no loose parts inside the motor.

| Pos. no. | Designation | Material | Special disassembly considerations |
| :---: | :---: | :---: | :---: |
| 1a | Spacer | Composite PET 30 \% GF |  |
| 1b | Control box housing | Composite PET $30 \%$ GF |  |
|  | Control box bottom | Composite PPE/PS 20 \% GF |  |
|  | Control electronics | PCB with SMD components |  |
|  | Control box cooling cover | Aluminium |  |
| 1c | Heat sink with cooling pad (only UPMXL) | Aluminium |  |
| 3 | Nameplate | Composite, PA 66 |  |
| 5 | Stator housing | Aluminium |  |
| 5a | Stator | Copper wire | The stator is heat-shrink fitted into the stator housing |


|  | Stator lamination | Laminated Iron |  |
| :---: | :---: | :---: | :---: |
| 6 | Air-venting/ de-blocking screw | Brass, nickelled, Ms58 |  |
| 7 | O-ring | EPDM |  |
| 9 | Rotor can | Stainless steel |  |
| 9a | Radial bearing | Ceramics | The front-bearing is shrink fitted into the rotorcan |
| 10 | Gasket | EPDM rubber |  |
| 11 | Stop ring | PES $30 \%$ GF |  |
|  | Shaft | Ceramics |  |
|  | Rotor stack | Laminated Iron |  |
|  | Rotor magnet | NdFeB |  |
|  | Rotor cladding | Stainless steel |  |
| 12 | Thrust bearing | Carbon |  |
|  | Thrust bearing retainer | EPDM rubber |  |
| 13 | Bearing plate | Stainless steel |  |
| 15 | Split cone | Stainless steel |  |
| 16 | Impeller | Composite/ PES 30 \% GF | The impeller is shrink fitted onto the shaft |
| 17 | Neck ring | Stainless steel |  |
| 18 | Pump housing | Cast iron |  |



