

KSN pumps

End-of-Life Information

This document is intended for treatment and recycling facilities and provides information on components, materials, handling, and dismantling of the product when it reaches the end of its life, to facilitate correct and environmentally sound treatment.

Grundfos KSN pumps must be disposed of in accordance with local regulations, using authorized WEEE collectors and designated collection points. If these are not available, please contact the nearest Grundfos company or service workshop.

Safety risk

- **Safety risk related to materials used.**

The materials used in KSN pumps do not pose a risk to personnel during the disassembly process.

- **Safety related to environment**

KSN pumps contain Castrol Hyspin AWS 32 or Shell Ondina X420 type of motor oil.

The oil must be handled according to environmental regulations and its volume varies from 1.7 to 74 liters, depending on product size.

- **Safety risk related to handling the product.**

During disassembly, the following mandatory precautions apply:

- - The pump and all pump components must be thoroughly washed before disassembly. If the pump has processed liquids that are toxic or hazardous to health, it must be classified and handled as contaminated equipment.
- - Due to the weight of the pump, proper lifting equipment must be used to avoid injury or damage.

Dismantling the product

The pumps are assembled with screws and bolts, and must be disassembled using standard tools. There are no loose parts inside the motor.

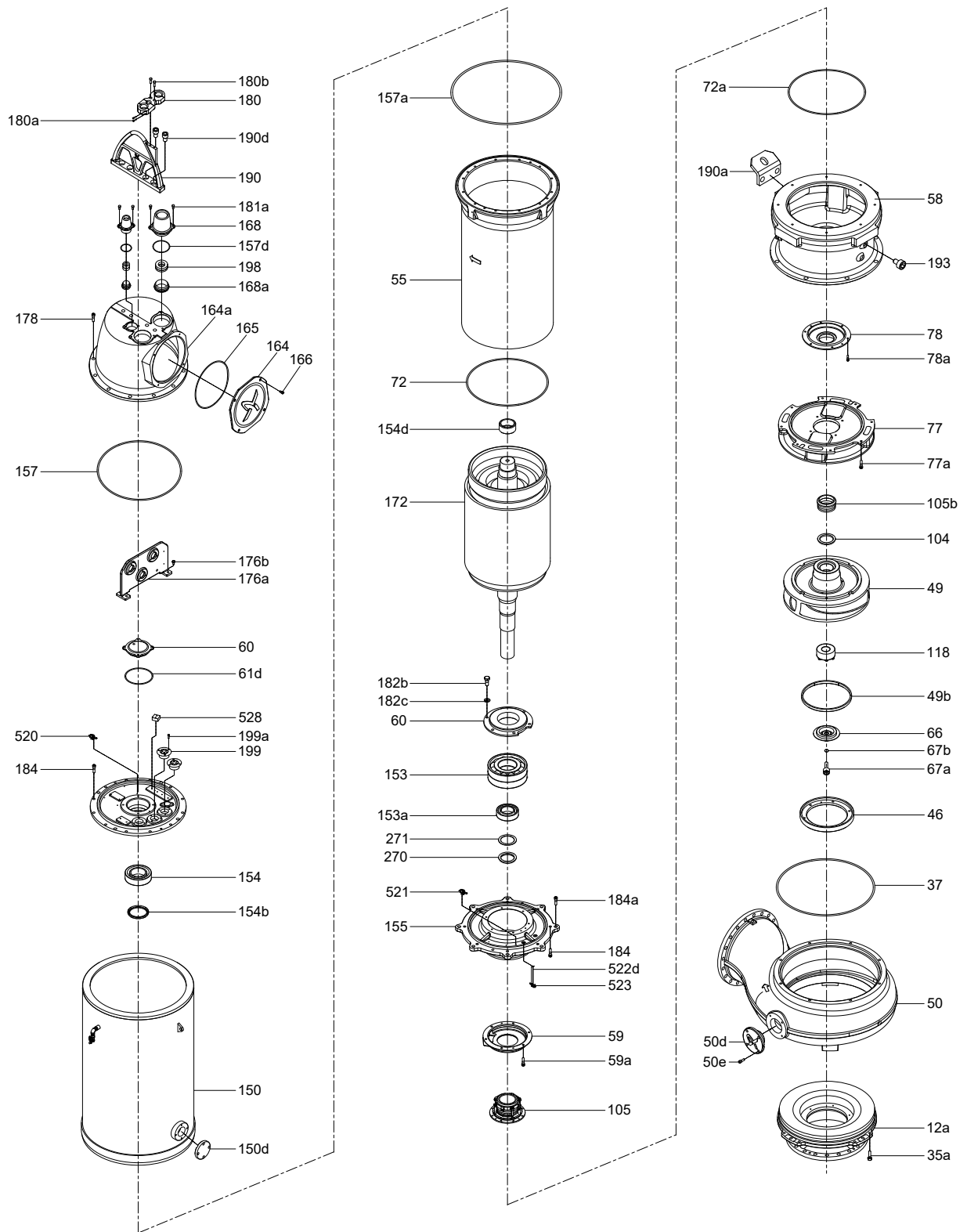
The main materials of the components are:

- Cast iron
- Steel
- Stainless steel
- Copper
- Bronze
- Brass
- Aluminum
- Polymers / Composite materials

The rubber insulation around copper wires in the power cable must be removed and disposed of in an environmentally safe manner. The stator is heat-shrink fitted into the housing and must be removed using proper heating/extraction methods.

All materials can be recycled to some extent, depending on locally available recycling capabilities.

Screws, nameplates, bearings, washers, and other hardware made of stainless steel or brass must be recycled according to local regulations.



KSN DN500-600 Exploded view with cooling jacket

TM088876

Position	Description	Material	EN standard	ASTM
12a	Suction casing	Cast iron	EN-GJL-250	A48-CL35
12c	Adjusting Screw	Stainless steel	A2-70	A276-304
26	Screw	Stainless steel	A2-70	A276-304
35a	Screw	Stainless steel	A2-70	A276-304
37	O-ring	NBR rubber		
39a	O-ring	NBR rubber		
46	Wear ring	Bronze		
46a	Screw	Stainless steel	A2-70	A276-304
48	Stator lamination			
49	Impeller	Ductile cast iron	EN-GJS-450-10	A536-65-45-12
49b	Impeller ring	Bronze		
50	Volute casing	Ductile cast iron	EN-GJS-450-10	A536-65-45-12
50d	Clean out port cover	Ductile cast iron	EN-GJS-450-10	A536-65-45-12
50e	Screw	Stainless steel	A2-70	A276-304
55	Stator housing	Cast iron	EN-GJL-250	A48-CL35
58	Bridge	Cast iron	EN-GJL-250	A48-CL35
59	Seal chamber	Cast iron	EN-GJL-250	A48-CL35
59a	Screw	Stainless steel	A2-70	A276-304
60	Bearing bracket cover	Cast iron	EN-GJL-250	A48-CL35
61c	Upper bearing bracket	Cast iron	EN-GJL-250	A48-CL35
61d	O-ring	NBR rubber		
62	Bearing cover, upper	Cast iron	EN-GJL-250	A48-CL35
66	Cap	Ductile cast iron	EN-GJS-450-10	A536-65-45-12
66c	O-ring	NBR rubber		
67a	Screw	Stainless steel	A2-70	A276-304
67b	O-ring	NBR rubber		
72	O-ring	NBR rubber		
72a	O-ring	NBR rubber		
76	Nameplate	Stainless steel		
77	Water chamber	Cast iron	EN-GJL-250	A48-CL35
77a	Screw	Stainless steel	A2-70	A276-304
78	Seal chamber, lower	Cast iron	EN-GJL-250	A48-CL35
78a	Screw	Stainless steel	A2-70	A276-304
101	Seal fixer			
104	Seal ring	Stainless steel	EN 1.4301	A276-304
105	Mechanical seal	SIC/SIC		
105b	Mechanical seal	SIC/SIC		
118	Tapered lock bushing	Steel		
150c	Cooling jacket	Steel		
150d	Cooling inspection cover	Cast iron	EN-GJL-250	A48-CL35
153	Ball bearing	Steel		
154	Ball bearing	Steel		
154b	Rib seal			
154c	O-ring	NBR rubber		
154d	Shaft sleeve	Stainless steel		
155	Lower bearing bracket	Cast iron	EN-GJL-250	A48-CL35
157	O-ring	NBR rubber		
157a	O-ring	NBR rubber		

Position	Description	Material	EN standard	ASTM
157d	O-ring	NBR rubber		
164	Junction box cover	Cast iron	EN-GJL-250	A48-CL35
164a	Motor top cover	Cast iron	EN-GJL-250	A48-CL35
165	O-ring	NBR rubber		
166	Screw	Stainless steel	A2-70	A276-304
168	Cable entry	Stainless steel	EN 1.4308	A743-CF-8
168a	Cable nut	Cast iron	EN-GJL-250	A48-CL35
172	Shaft with rotor	Stainless steel	EN 1.4006	A276-410
176a	Terminal board			
176b	Screw	Stainless steel	A2-70	A276-304
178	Screw	Stainless steel	A2-70	A276-304
180	Cable clamp	Stainless steel	EN 1.4308	A276-304
180a	Screw	Stainless steel	A2-70	A276-304
180b	Screw	Stainless steel	A2-70	A276-304
181	Cable	PNCT		
181a	Screw	Stainless steel	A2-70	A276-304
182b	Screw	Stainless steel	A2-70	A276-304
182c	Washer	Stainless steel	EN 1.4301	A276-304
183	Screw	Stainless steel	A2-70	A276-304
184	Screw	Stainless steel	A2-70	A276-304
184a	Screw	Stainless steel	A2-70	A276-304
190	Lifting bracket	Stainless steel	EN 1.4308	A743-CF-8
190a	Lifting bracket (lower)	Steel		A276-304
190b	Screw	Stainless steel	A2-70	A276-304
190d	Screw	Stainless steel	A2-70	A276-304
193	Oil plug	Stainless steel	EN 1.4301	A276-304
194	O-ring	NBR rubber		
195	Oil plug	Stainless steel	EN 1.4301	A276-304
195a	O-ring	NBR rubber		
196	Non return valve			
198	Washer/rubber seal/washer	Stainless steel/ NBR rubber		
199a	Screw	Stainless steel	A2-70	A276-304
199	cable gland	Cast iron or Stainless steel		
270	Lock nut	Steel		
271	Lock washer	Steel		
288	Bearing temperature sensor			
289	Bearing temperature sensor (lower)			
493	Screw	Stainless steel	A2-70	A276-304
520	Moisture switch, upper			
521	Moisture switch, lower			
522d	Bracket for WIO			
523	Water-in-oil sensor(option)			
528	PVS3 sensor (option)			