

Fields of application:

- Cutting and conveying of aluminium and similar materials
- Oil, emulsions, non-aggressive media
- Conveying temperature 0 to 80°C

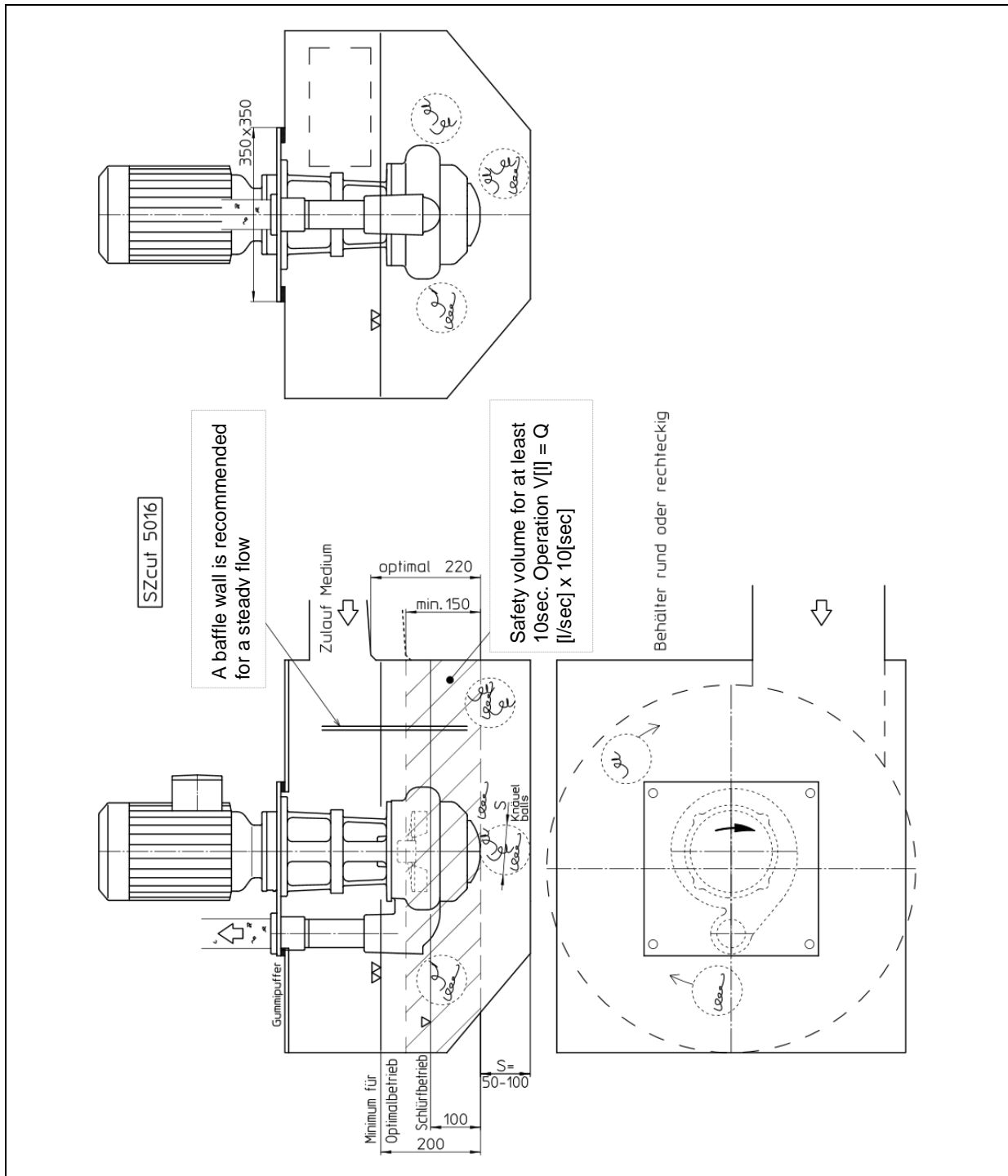
Information on use of the pump:

- This pump is a single-stage centrifugal pump of compact block form with attached cutter
- The attached cutter is mounted on the extended pump shaft, and is used to break up the chip balls and chop the chips
- The pumps must be securely mounted
- Chip content: up to max. 2% w/w in coolant
- Flow velocity in the pressure pipe min. 2 m/s
 - D40->Qmin.150l/min
 - D50->Qmin.250l/min
 - D65->Qmin.400l/min
 - D80->Qmin.600l/min
- Avoid bends in the pipework, use large pipe elbows
- The pump should be allowed to convey for approx. 2 minutes before switching off
- The pump has a maintenance-free slide bearing of silicon carbide (SiC).
- Only the characteristics for SZcut should be used for the design
- The pump is not suitable for operation against closed slide valves
 - Caution! Rotating cutter blades and cutting edges; the pump must be securely mounted. Install the pump so that rotating parts under the tank cover cannot be touched!
 - Work may only be carried out after the pump has come to a standstill and complete removal from the system. Risk of injury!
 - Foreign matter such as broken drills, indexable tips, etc., that drop down under the pump (SZcut) must be removed from the tank.
 - For chipbreaking there is a high noise level.

SZcut:

- Installation only in vertical position as an immersion pump for tank installation
- Observe safety distances from tank bottom and walls and the angle of the side walls; see suggestion for tank geometry
- Chip balls max. 100 mm in diameter The chips should be transported directly to the pump
- The pump must be operated continuously; with intermittent operation, undesirable excessive wear and backflow of chips into the inside of the pump can occur.

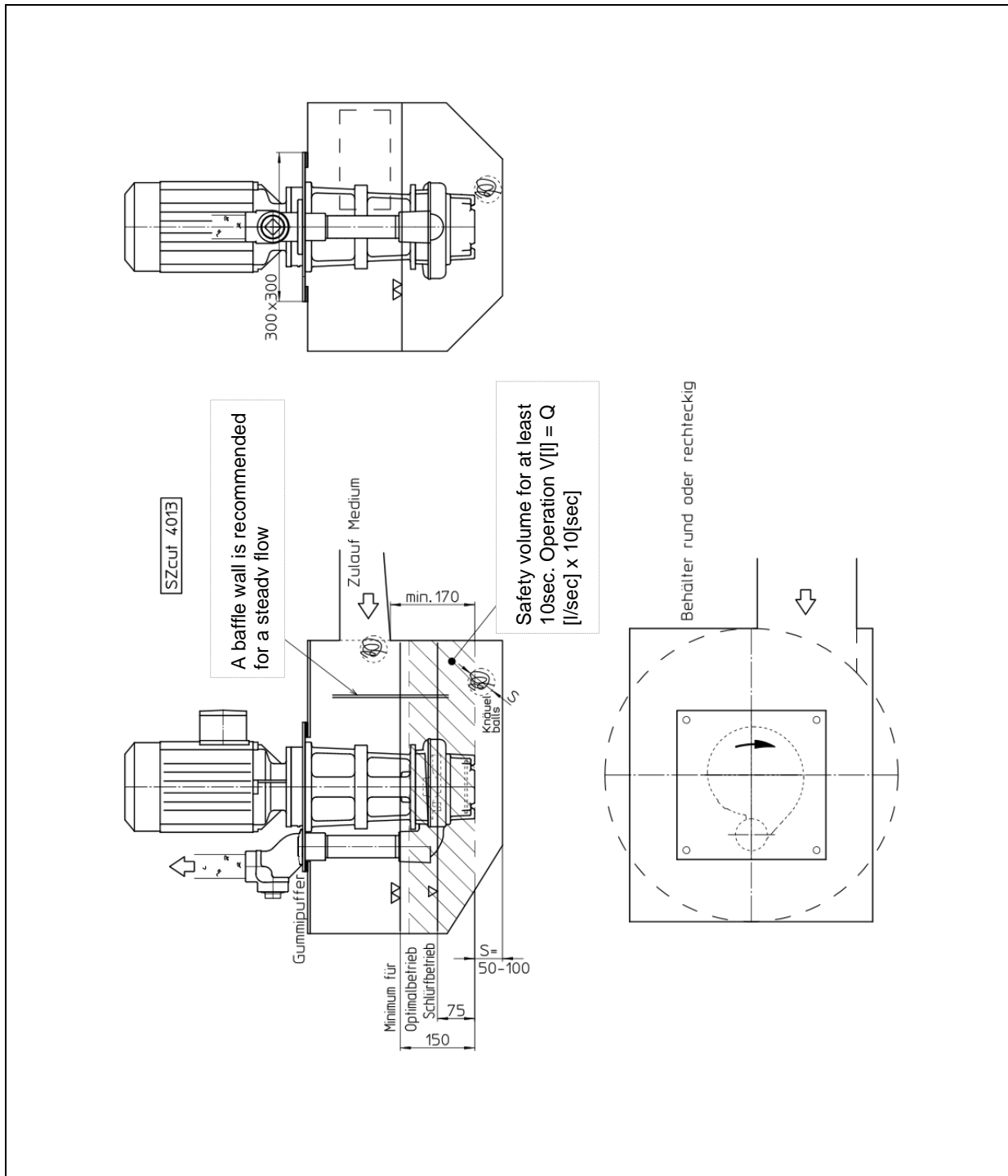
1. Pump Type SZcut 5016



Important:

- Use only a sufficiently large tank with a side wall angle of at least 40° for the direct feed of the chips under the pump
- Maintain a safety distance of min. 50 mm from the bottom and min. 150 mm from the walls of the tank
- Position the inlet into the tank above the pump housing
- Allow the pump to run continuously
- Optimum chip conveying is only possible when the impeller is under the liquid
- In "slurping" mode, chip conveying is reduced and large amounts of air are transported. During starting of the pump, the impeller must always be in the medium
- Remove foreign matter such as broken tools from the tank immediately! The blades could be damaged and would have to be replaced

2. Pump Type SZcut 4013



Important:

- Use only a sufficiently large tank with a side wall angle of at least 40° for the direct feed of the chips under the pump
- Maintain a safety distance of min. 50 mm from the bottom and min. 150 mm from the walls of the tank
- Position the inlet into the tank above the pump housing
- Allow the pump to run continuously
- Optimum chip conveying is only possible when the impeller is under the liquid
- In "slurping" mode, chip conveying is reduced and large amounts of air are transported. During starting of the pump, the impeller must always be in the medium
- Remove foreign matter such as broken tools from the tank immediately! The blades could be damaged and would have to be replaced

Spare Parts List for **SZcut 5016 + 4013**

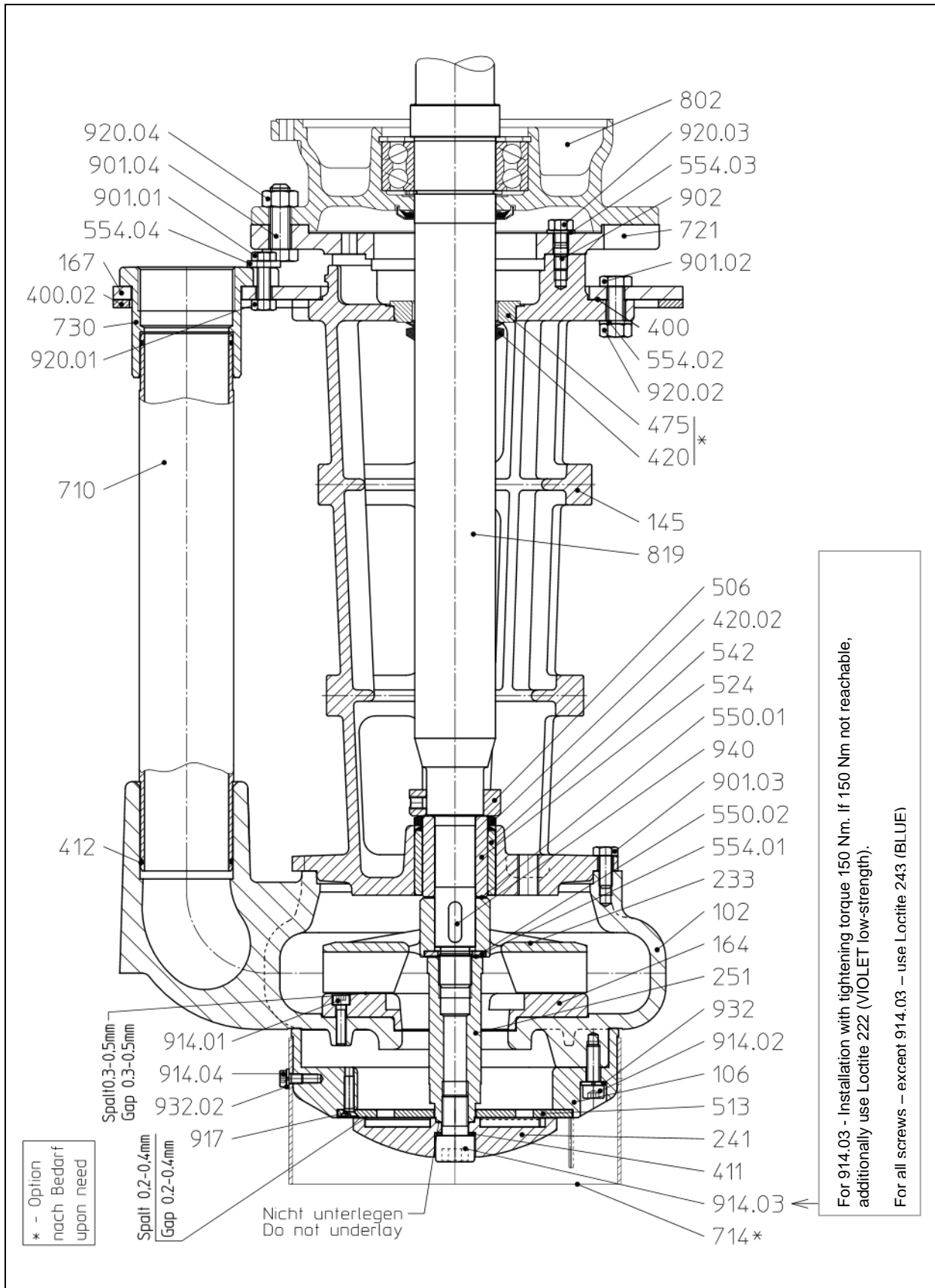
Part numbers for DIN 24 250

Item	Name	Pieces
102	Spiral housing (SZcut)	1x
106	Intake housing	1x
145	Connector	1x
164	Wear plate	1x
167	Cover plate	1x
231	Suction impeller	1x
233	Impeller open	1x
241	Cutter wheel cpl.	1x
251	Impeller hub	1x
400	Gasket to 145	1x
400.02	Gasket to 167 (rubber buffer)	1x
411	CU Ring to 914.03	1x
412	O-Ring to 710	2x
420	Shaft seal ring to 475	1x
420.02	Shaft seal ring to 542	1x
475	Counter ring	1x
506	Set collar with threaded pin	1x
506.02	Set collar to 102	1x
513	Insert ring	1x
524	Shaft sleeve	1x
542	Throttling bush	1x
550.01	Shim to 233	6x
550.02	Shim to 251	2x
550.03	Shim to 231	2x
554.01	Washer to 233	1x
554.02	Washer to 901.02	4x
554.03	Washer to 902	4x
554.04	Washer to 901.01	2x
561	Locking pin to 513	1x
710	Pressure pipe	1x
714	Protective pipe	1x
721	Transition piece	1x
730	Pipe connector	1x
802	Block motor	1x
819	Motor shaft	1x
901.01	Hexagon head bolt to 730	2x
901.02	Hexagon head bolt to 167	4x
901.03	Hexagon head bolt to 102	4x
901.04	Hexagon head bolt to 721	4x
902	Grub screw to 145	4x
914.01	Hex. socket head cap screw to 164	3x
914.02	Hex. socket head cap screw to 106	4x
914.03	Hex. socket head cap screw to 241	1x
914.04	Hex. socket head cap screw to 714	4x
914.05	Hex. socket head cap screw to 730	2x
916	Plug to 730	1x
917	Grub screw to 513	4x
920.01	Hex. nut to 901.01	2x
920.02	Hex. nut to 901.02	4x
920.03	Hex. nut to 902	4x
920.04	Hex. nut to 901.04	4x

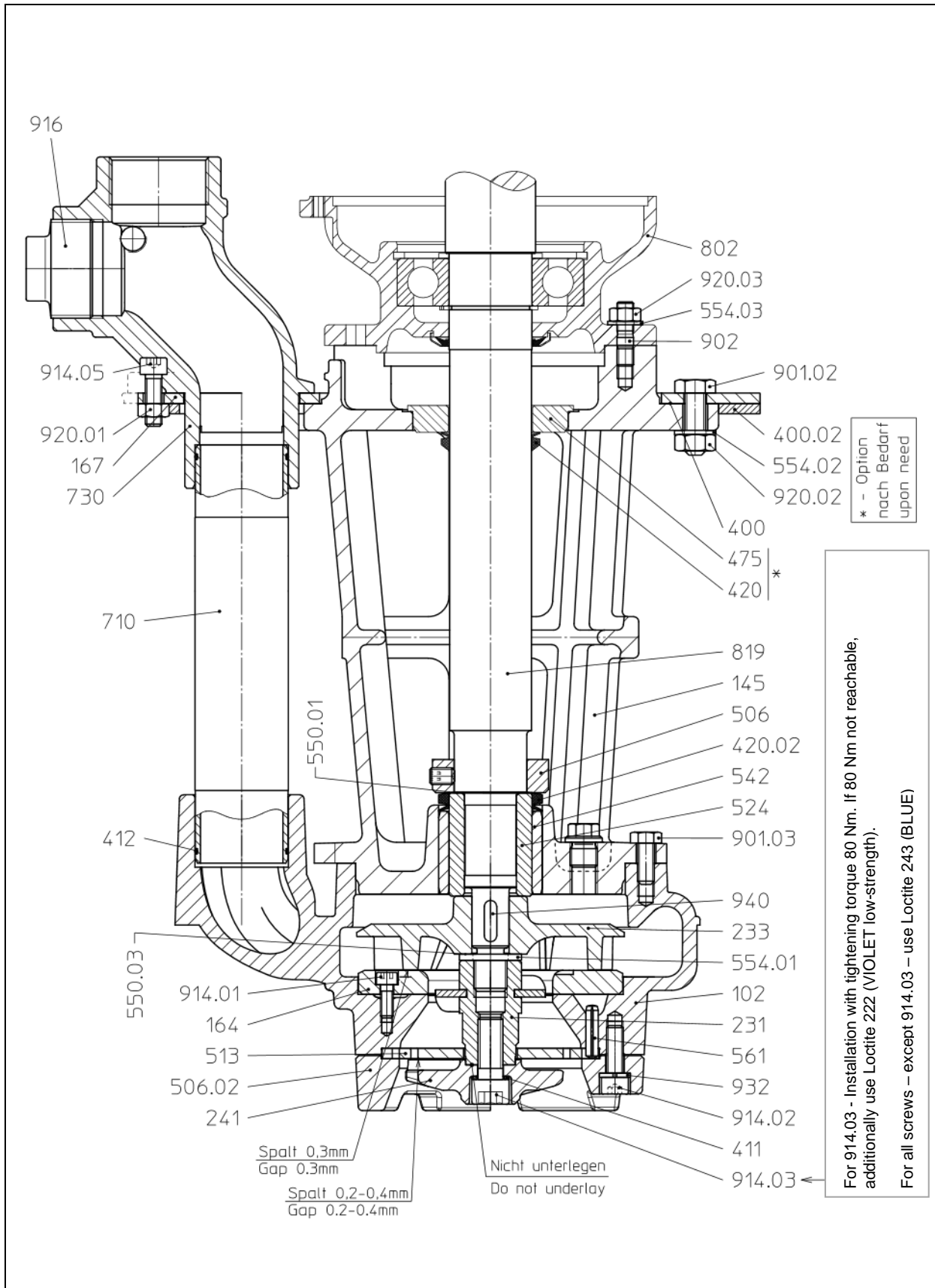
Item	Name	Pieces
932	Spring ring to 914.02	4x
932.02	Spring ring to 914.04	4x
940	Key	1x

Not all parts are installed in every pump

Spare Parts Drawing **SZcut 5016**



Spare Parts Drawing **SZcut 4013**



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