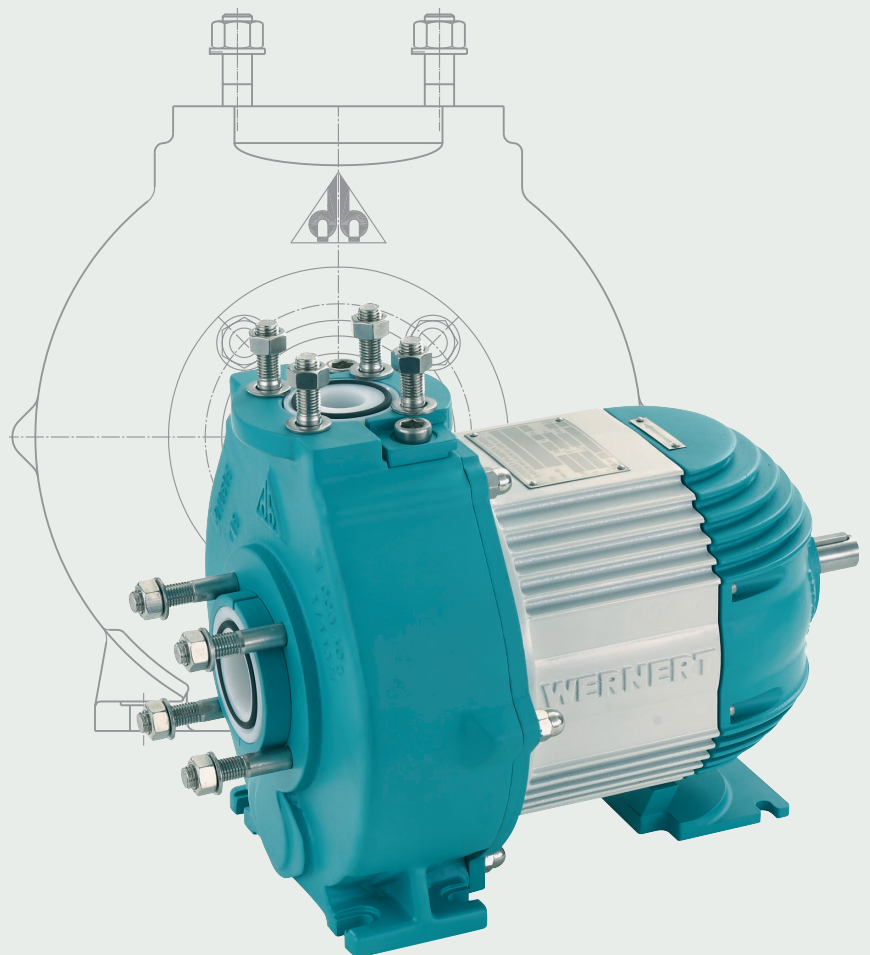


Standard plastic pump
with magnetic coupling
for use in the
chemical industry

MONSUN

ISO 2858/DIN EN 22858



WERNERT-PUMPEN



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Directive 94/9/EG (ATEX)

The Danger

Intermittent flow, e.g. after emptying a tank, can be dangerous for the bearings of common magnetic coupled pumps: The remaining liquid is evacuated outwards as in a centrifuge, resulting in the inner bearings running dry. Often this can result in complete pump destruction.

The Solution

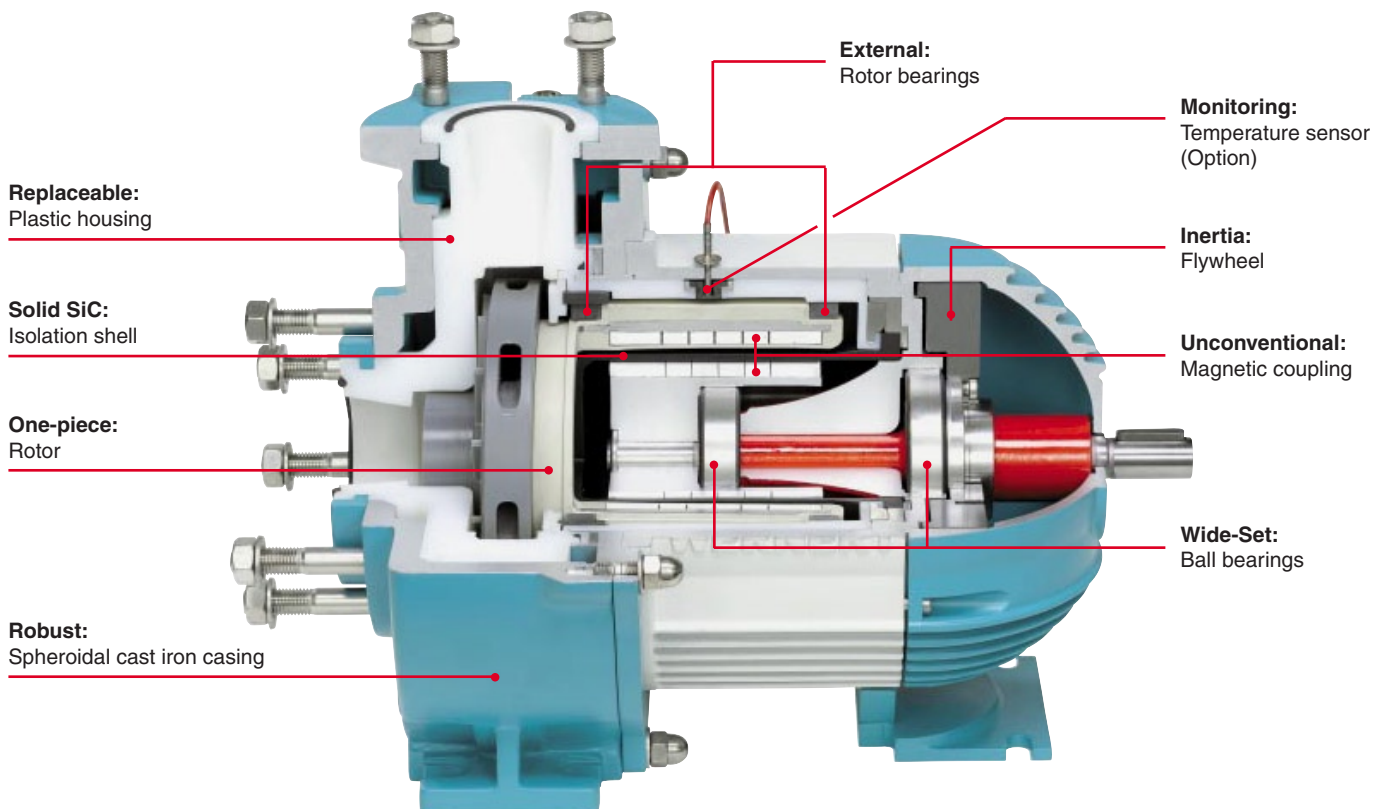
The MONSUN rotor bearings are located at the outermost radius. In cases of intermittent flow, the bearings always possess enough remaining liquid for emergency lubrication. The pump will not be destroyed and is able to run smoothly. The heating of the remaining liquid can be monitored and the pump stopped in an orderly fashion.

Concept

MONSUN – a hermetic tight magnetic coupled pump, which easily handles corrosive and dangerous liquids.

Features:

- Corrosion-resistant materials
- Simple construction
- Minimum number of static seals
- Tolerant to wrong operation
- Condition monitoring



Subject to technical alterations.

Magnetic rotor

The central component is the magnetic rotor with its fluid lubricated bearings located at the casing wall, forming one unit with the impeller and containing no static seal. Hence, common inner shafts, sleeves, separation walls and even the axial bearings which are required on typical magnetic drive pumps can be removed. The axial position as well as the propulsion of the rotor is taken over by a new kind of magnetic coupling with a rotating force of 80 Nm. A brilliant solution!

Isolation shell

An isolation shell of silicon carbide closes the pumps inner area hermetically from the environment and separates both halves of the rotating magnetic coupling. Eddy current losses are not generated.

Bearings

Even for closed-coupled versions, the magnetic driver is supported in greased-for-lifetime roller bearings. Locating the isolation shells opening to the electrical driver's side allows a broad bearing centre distance. An additional flywheel prevents the magnetic coupling's tear-off during start-up of the machine.

The closed coupled version is constructed in such a way that the motors shaft is coupled to the magnetic driver within the pump. This allows easy assembly and disassembly of the electrical driver, without the need for de-coupling of the magnetic drive.

Versions

The design version is indicated with two letters following the size designation, e.g. **MONSUN 32-200 NP**

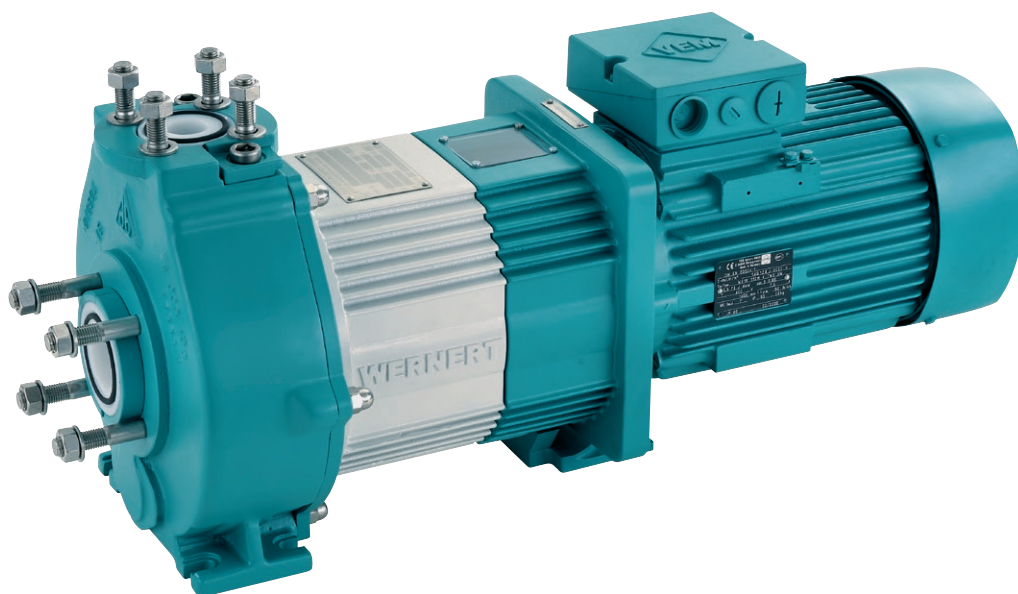
NP = Standard pump from UHMW-PE

NT = Standard pump from PTFE/PFA

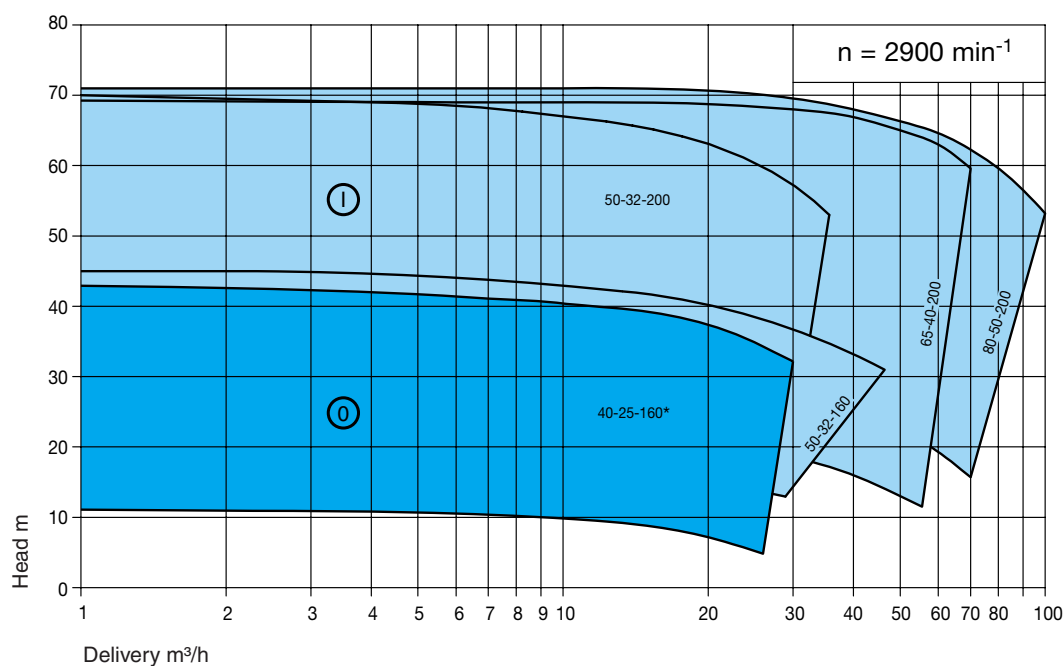
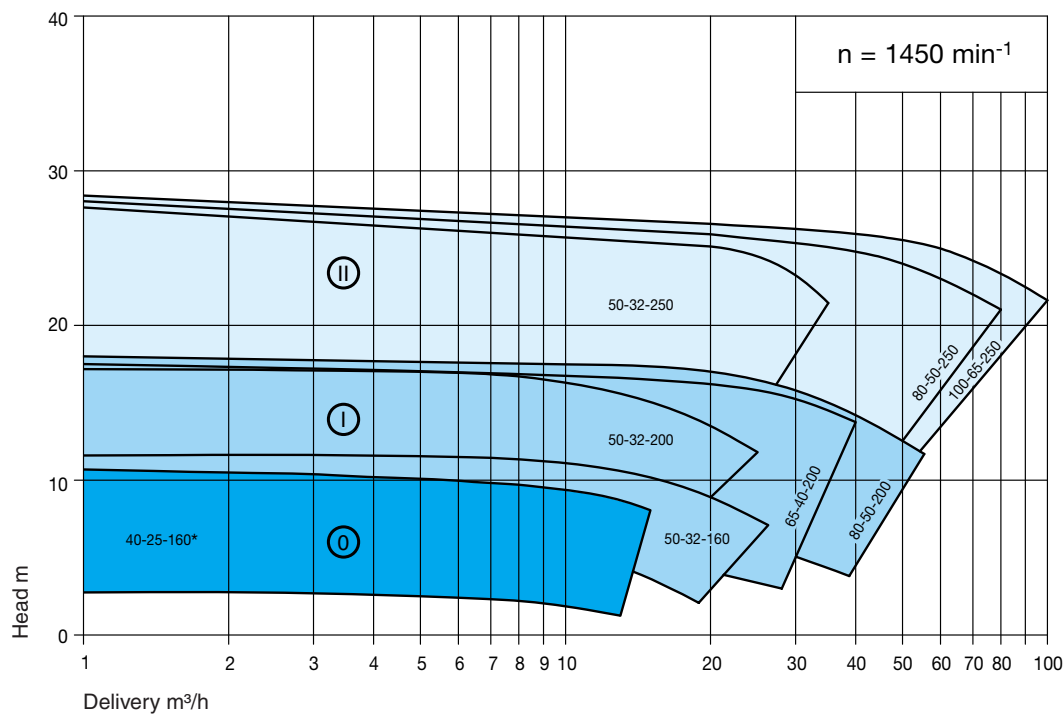
FP = Closed-cpld. pump from UHMW-PE

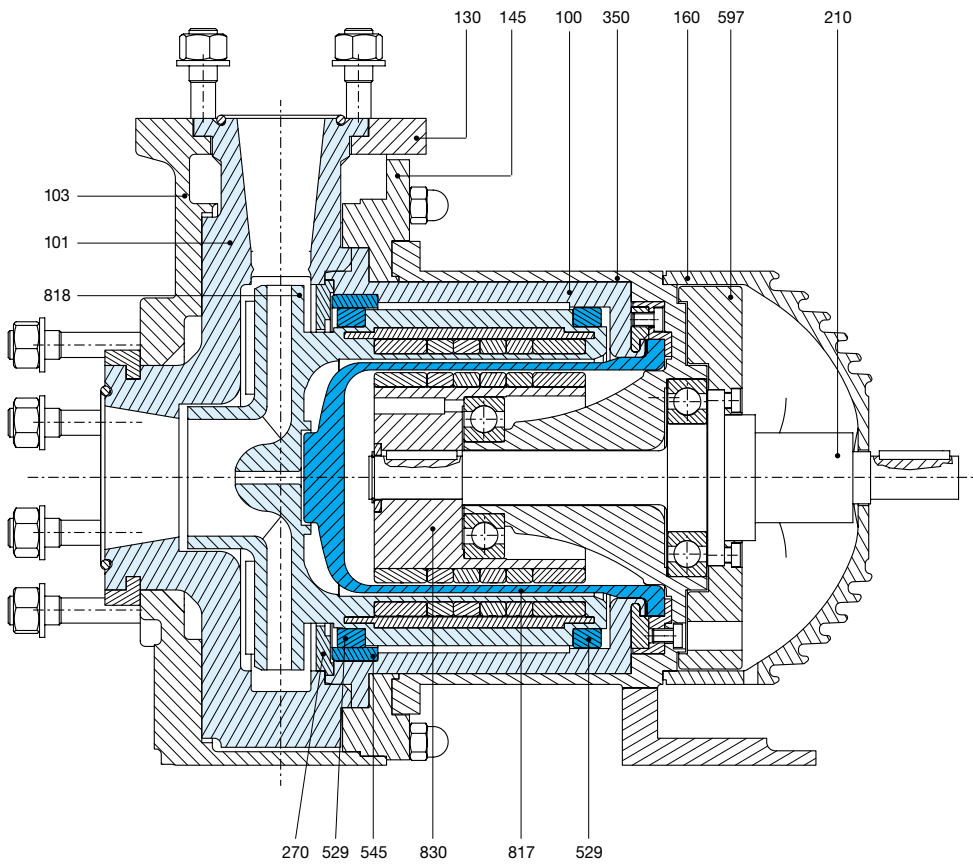
FT = Closed-cpld. pump PTFE/PFA

The temperature limits of the available materials is dependant upon the pumped liquid and range between -40 °C and +165 °C.



Version as closed-coupled pump





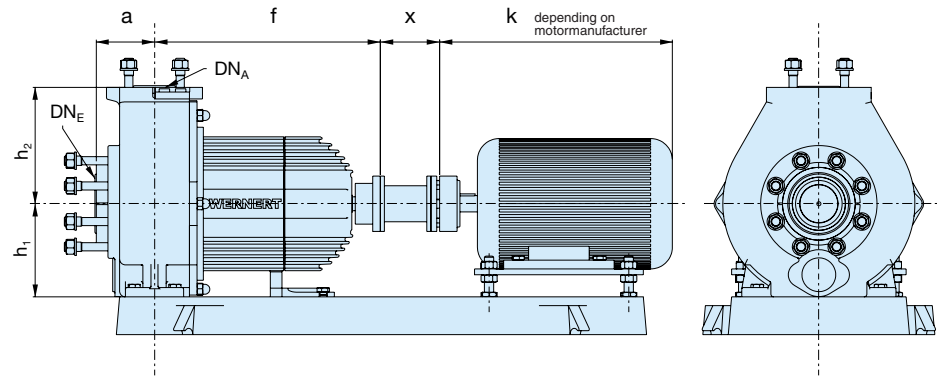
Part No.	Name
100	Casing
101	Pump casing
103	Annular casing
130	Part of the casing
145	Connecting piece
160	Cover
210	Shaft
270	Deflector
350	Bearing housing
529	Bearing sleeve
545	Bearing bush
597	Flywheel
817	Isolation shell
818	Rotor with impeller
830	Driver

Only order spares according to the relevant parts list!

Dimension table

	Flanges							
	PN 16							
	DN _E	DN _A	a	f	h ₁	h ₂	x	
40-25-160*	40	25	80	385	132	160	100	
50-32-160	50	32	80	385	132	160	100	
50-32-200	50	32	80	385	160	180	100	
50-32-250	50	32	100	500	180	225	100	
65-40-200	65	40	100	385	160	180	100	
80-50-200	80	50	100	385	160	200	100	
80-50-250	80	50	125	500	180	225	100	
100-65-250	100	65	125	500	200	250	140	

* Transnorm pump Dimensions in mm



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