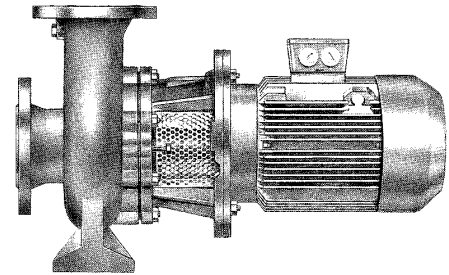


Volute Casing Centrifugal Pumps Of Block Design

Series CNB



Application

For handling non-aggressive or aggressive, cold or heated, pure or solid-suspended as well as viscous liquids in the chemical, petrochemical, in power, process, environmental, sewage, marine and offshore engineering and in surface technology.

Design / Construction / Mounting

Volute casing centrifugal pump, single entry, single stage, in block design. Hydraulic design and dimensions of casing of the standard series CNH according to DIN EN 22858 / ISO 2858.

Pump and motor shaft are rigidly coupled together. Bearing by means of the grease-lubricated groove ball bearings incorporated in the motor.

The pumps can be mounted horizontally or vertically, the arrangement with "motor downwards" is not admissible.

Performance data ③

Q up to 240 m ³ /h	P _d up to 25 bar ①②
H up to 100 m	P up to 37 kW
t up to 160 °C	DN _d from 25 to 100

- ① please take notice of the pressure/temperature limits in dependence of the material (see graphic down right).
- ② Inlet pressure plus maximum delivery head must not exceed the stated value.
- ③ The stated data are maximum values (limits). Dependent on individual design and application of the pumps, these limits can be lower. For exact data please refer to Individual documentation.

Shaft sealing

By unbalanced or single or both-side balanced single or double-acting mechanical seal or by preassembled single or double-acting mechanical seal with stationary spring section (cartridge unit).

Drive

By standard three-phase squirrel-cage induction motor with locating-type bearing.

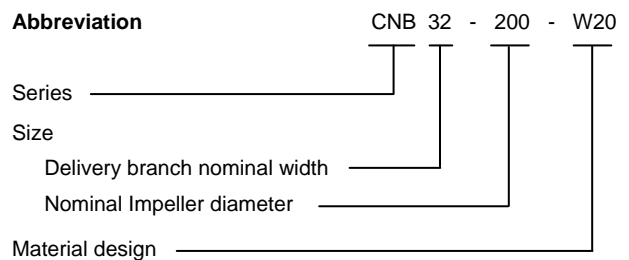
Due to the axial thrust caused by hydraulic forces, the admissible bearing load has to be checked for all pumps operating under high system pressures.

Materials

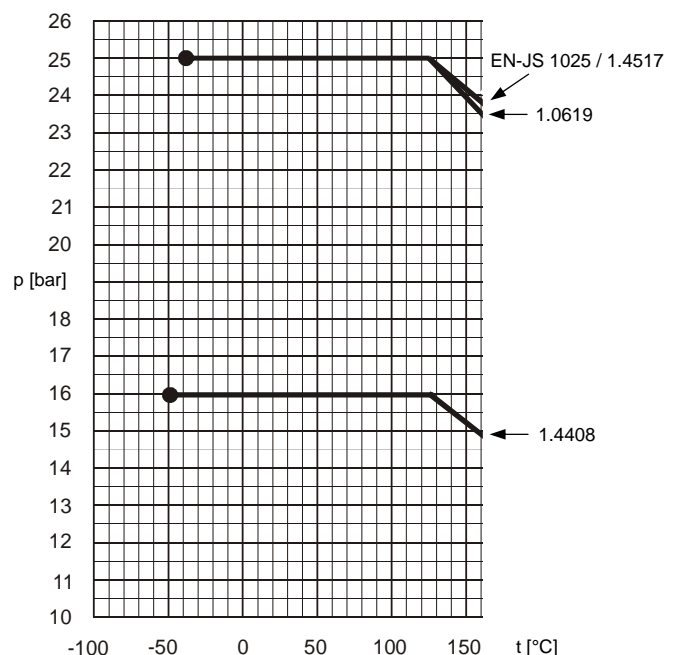
Denomination	Material design				
	W 20	W 22	W 23	W 26	W 27
Volute casing	1.4408	EN-JS 1025	1.0619	1.4517	1.4517
Casing cover	1.4408	EN-JS 1025	1.0619	1.4517	1.4517
Impeller	1.4408	EN-JL1030	EN-JL 1030	1.4408	1.4517
Pump shaft	1.4571 / 1.7139 ①				
Motor stool	EN-JL 1040				

① on pump side (in contact with liquid) 1.4571 / on motor side 1.7139

Abbreviation



Pressure and temperature limits as influenced by the casing material



The stated performance data are to be understood only as an outline of performance of our products. For exact limits of application please refer to the quotation and acceptance of order.

Pressure safe casing parts
With surcharge for corrosion.

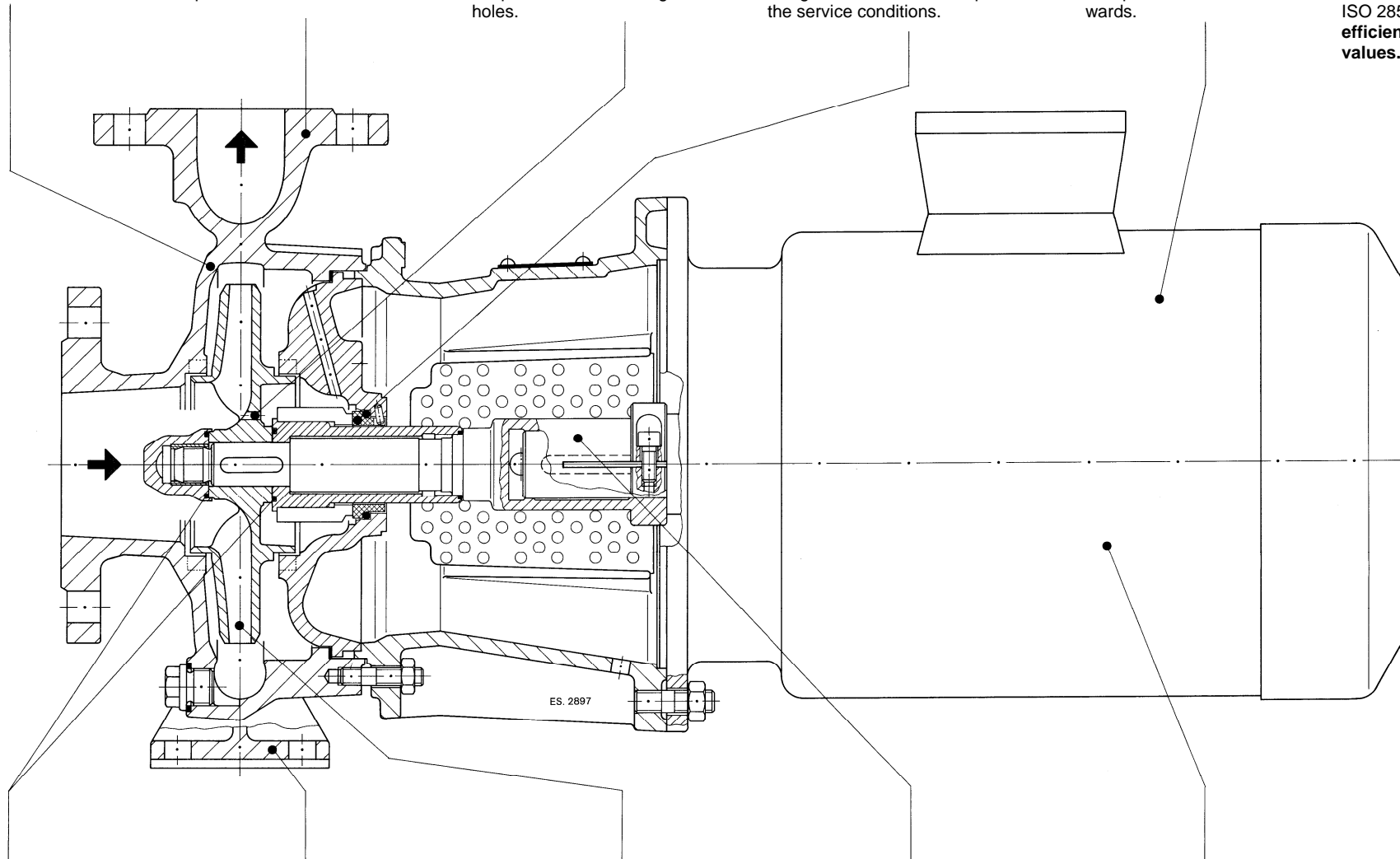
Flanges according to DIN up to PN 25, other flange designs possible

Negligible axial thrust and **good NPSH values** by fine adaptation of the balancing holes.

Mechanical seals, including **cartridge-unit**, in different designs and materials adapted to the service conditions.

Horizontal and vertical **mounting possible** with exception of motor downwards.

Optimized hydraulic parts of the basis series CNH according to DIN EN 22 858/ ISO 2858 with **very good efficiencies and NPSH values**.



Dry shaft- no contact with the liquid pumped- through seals in chambers.

Back pull-out design; when dismantling the pump the volute casing remains in the piping.

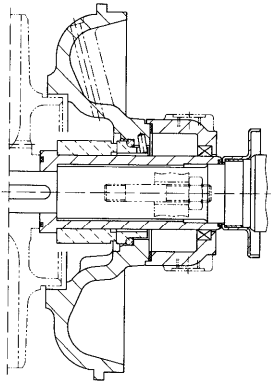
For **reduction the vibrating speed** the impeller is dynamically balanced.

Interlocking and frictional connection of pump and motor shaft through proven stub shaft design.

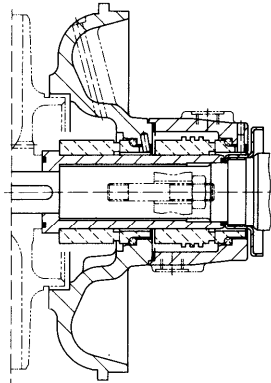
Standard motors with locating type bearing, all types of enclosure and speeds of rotation possible.

Reduced stock keeping of spare parts and short delivery times through series design according to the unit assembly system.

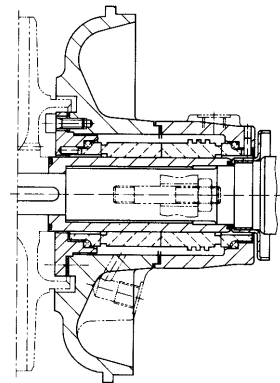
Examples of shaft seal variations



Single-acting mechanical seal with quench



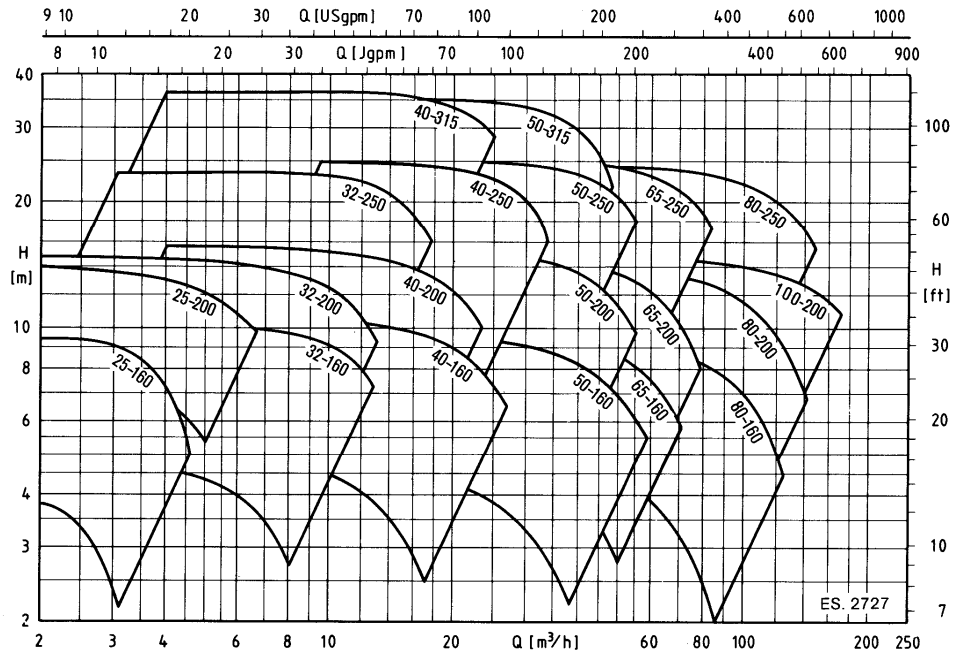
Multiple mechanical seal in tandem arrangement



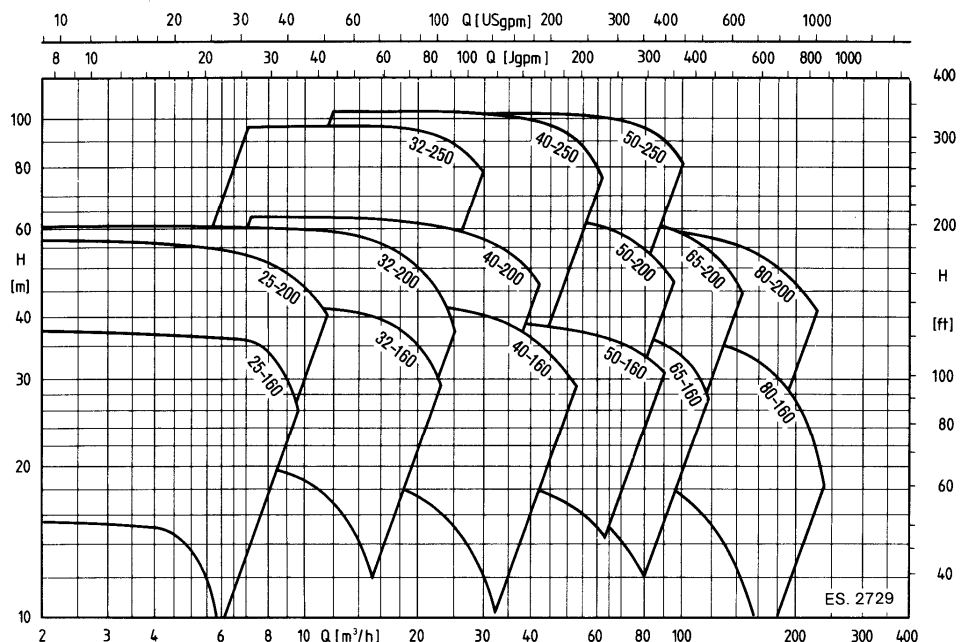
Multiple mechanical seal in back-to-back arrangement

Performance graph

$n = 1450 \text{ 1/min}$



$n = 2900 \text{ 1/min}$



For exact performance data please refer to the individual characteristics.

Subject to technical alterations.



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The stated performance data and additional all standard references are to be understood only as an outline of performance of our products. For exact limits of application please refer to the quotation and acceptance of order.