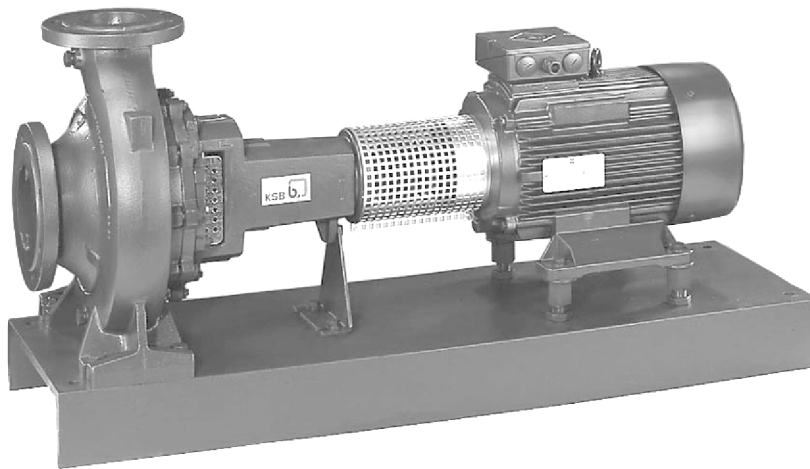


Standardized Pumps



Fields of Application

- Water supply
- Fire-fighting systems
- Sprinkling
- Irrigation
- Drainage
- Heating
- Air-conditioning systems
- Drinking water
- Service water
- Hot water
- Cooling water
- Swimming pool water
- Sea water
- Fire-fighting water
- Brackish water
- Condensate
- Brine
- Oils
- Cleaning agents

Fluid

Pure liquids not chemically or mechanically aggressive to the pump materials.

Operating Data

Q up to 1900 m³/h, (528 l/s)
H up to 102 m
t -30 °C to +140 °C
p₂ up to 16 bar ¹⁾

¹⁾ see pressure/temperature limits given on page 5 of type series booklet 1211.5/9-10.

Design

Horizontal volute casing pump, single-stage (pump size 125-200/2 two-stage), with power ratings and main dimensions to EN 733 up to DN 200 / extension Etanorm-R, with bearing bracket, in back pull-out design.

Shaft with replaceable shaft sleeve/shaft protecting sleeve in the shaft seal area.

Volute casing and impeller with replaceable wear rings.

Volute casing with integrally cast pump feet.

Bearings

Deep-groove ball bearings, grease-lubricated.

Shaft Seal

Mechanical seal to EN 12756 (Standard for Etanorm, for Etanorm-R as option) or gland packing.

Designation

EN(-R) 40 - 160 43 (6238) G 10 ^{*)}

Type series Etanorm _____
Pump size, e.g. _____
Actual impeller diameter - 100 mm, e.g. 143 mm
= (angular reduction of impeller vanes)
e.g. actual diameter 162/138 mm = _____
Casing material, e.g. JL 1040 ²⁾ _____
Shaft seal, e.g. mechanical seal Q₁ Q₁ X4GG _____

²⁾ to EN 1561 = GJL-250
^{*)} for Etanorm only

Accessories

Drive

Surface-cooled KSB-IEC three-phase squirrel cage motor

Winding: up to 2.2 kW: 220-240 V/380-420 V
3 kW and above: 380-420 V/660-725 V

Design: IMB 3

Enclosure: IP 55

Thermal class: F with temperature sensors: 3 PTC resistors

Operating mode: continuous operation S1

or

surface-cooled three-phase squirrel cage motor as described above, but West European brand to KSB's choice.

Coupling

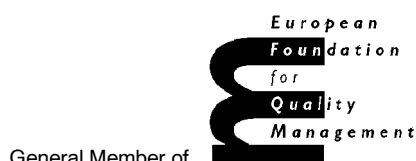
Flexible coupling with/without spacer sleeve

Contact Guard

Coupling guard as per EN 294.

Baseplate

Sectional steel / folded steel plate, fabricated sectional steel for the complete unit (pump and motor) in torsion-resistant design



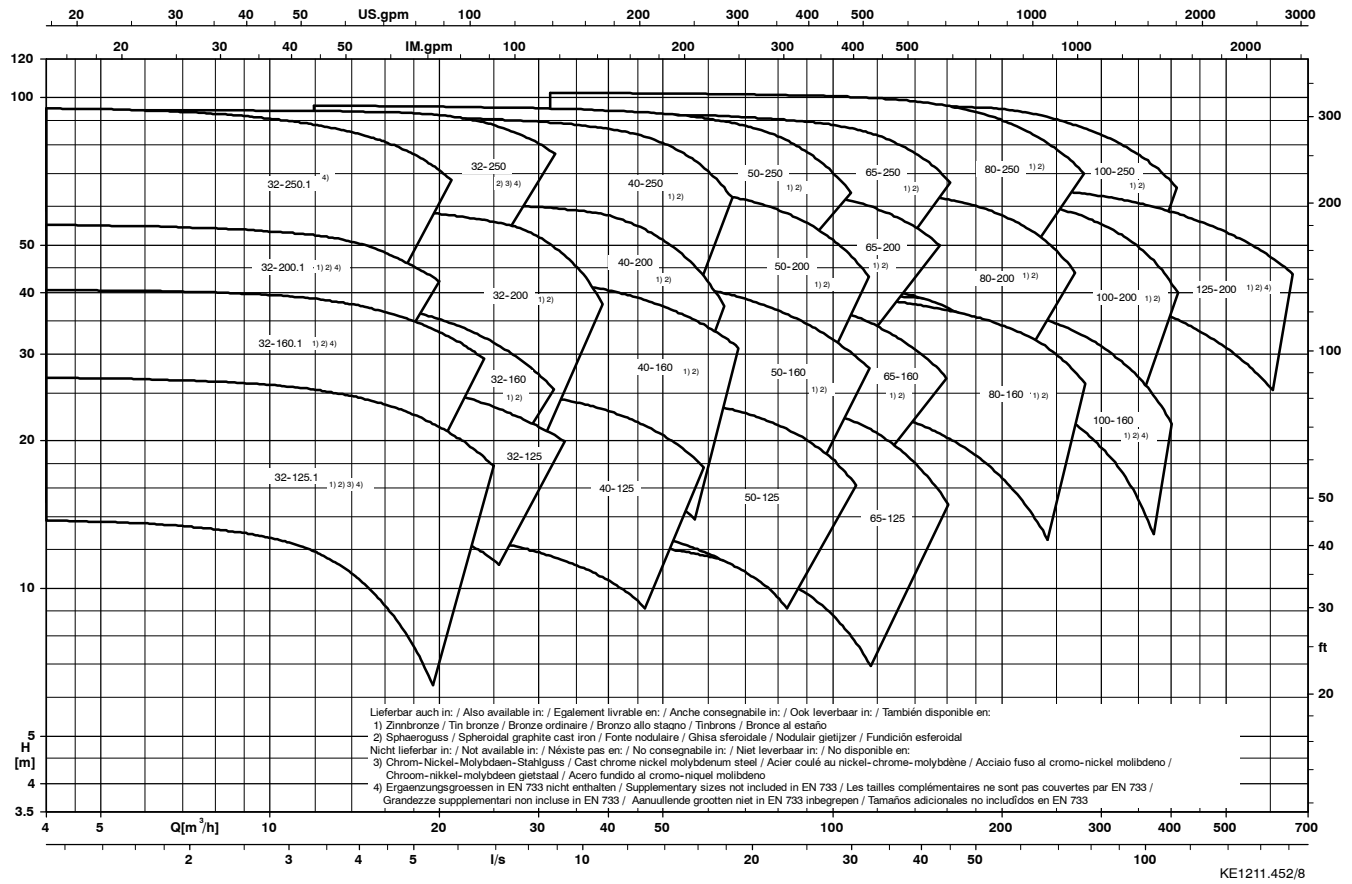
General Member of



Selection charts

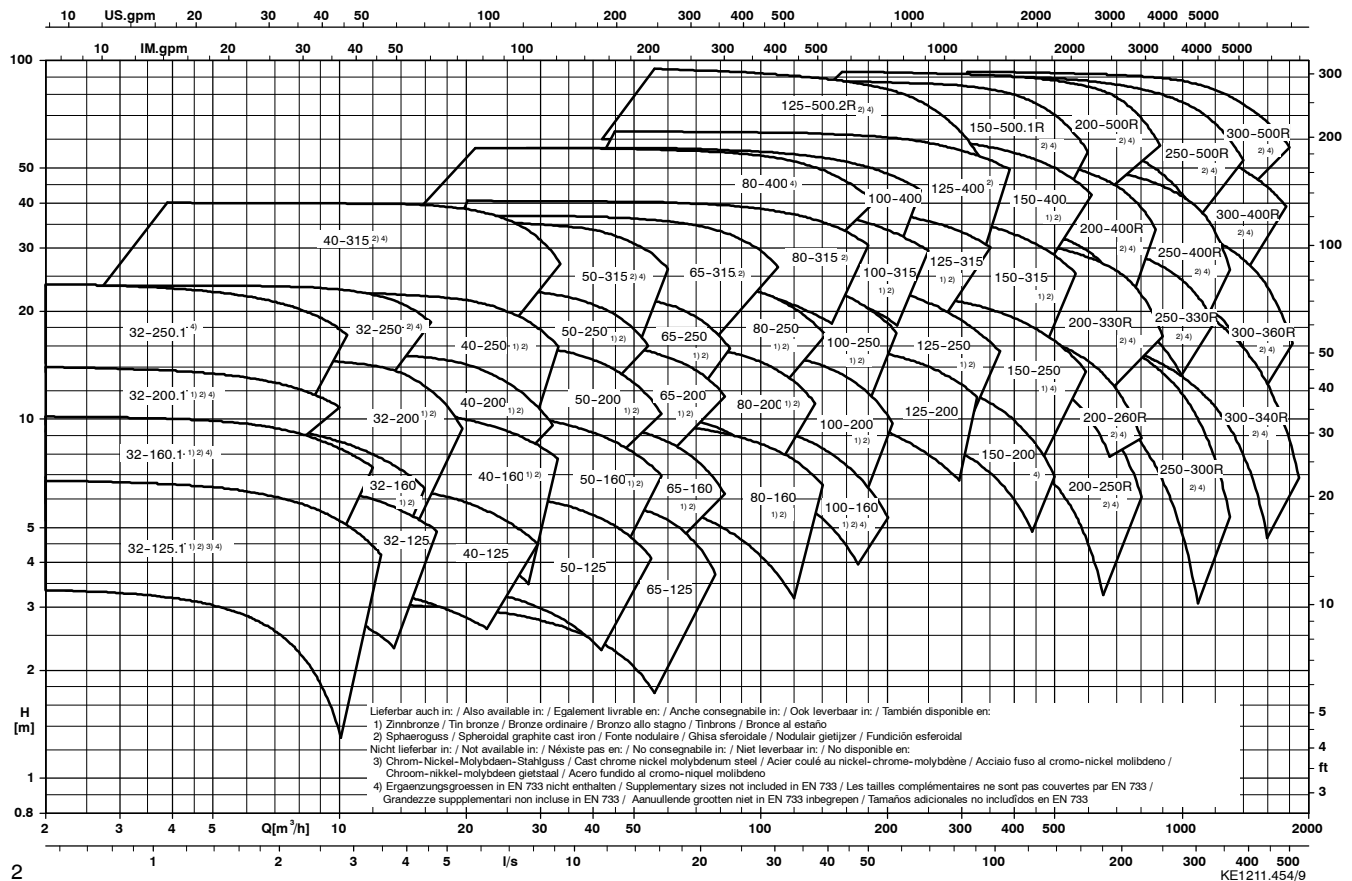
Etanorm

n = 2900 1/min



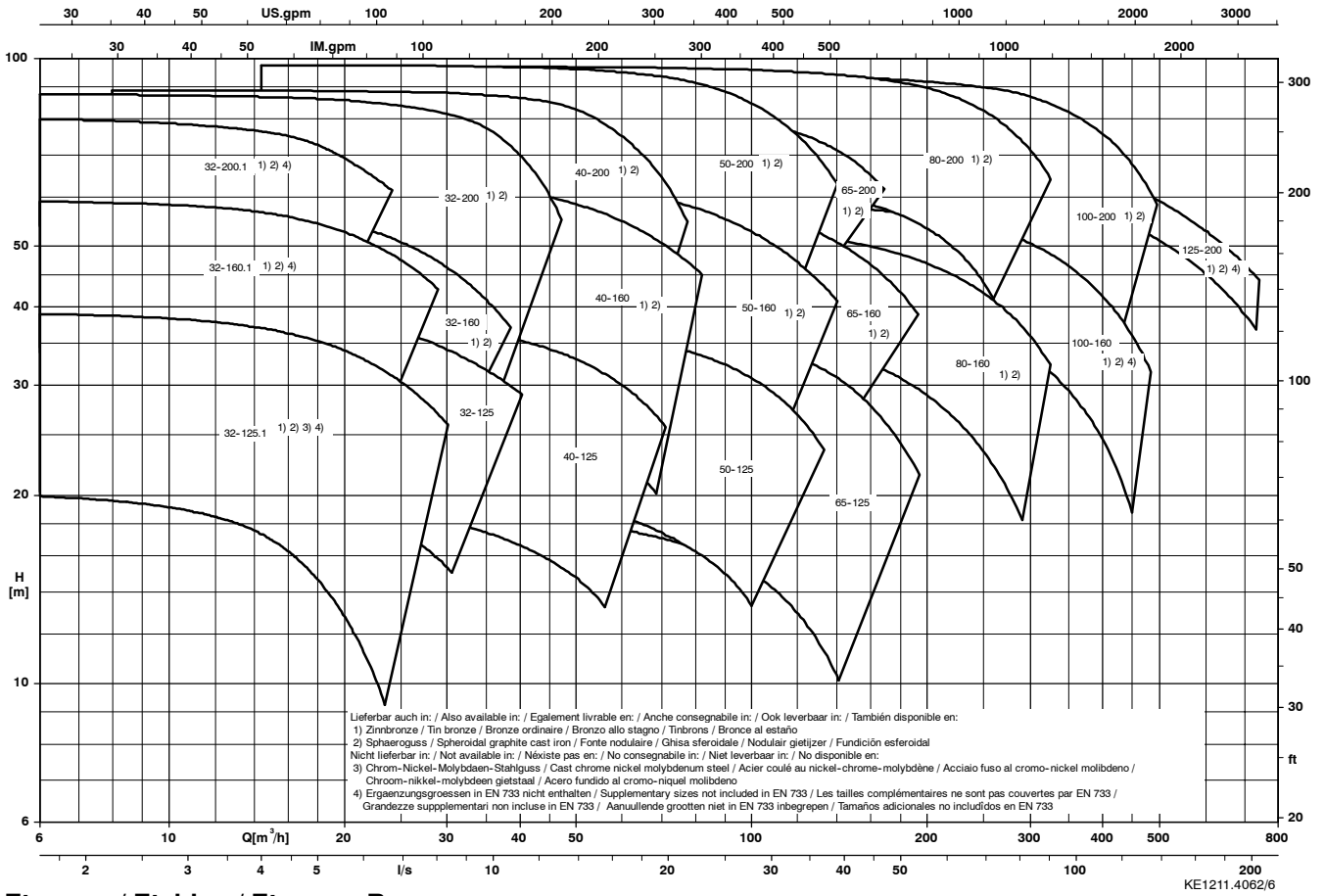
Etanorm / Etanorm-R

n = 1450 1/min



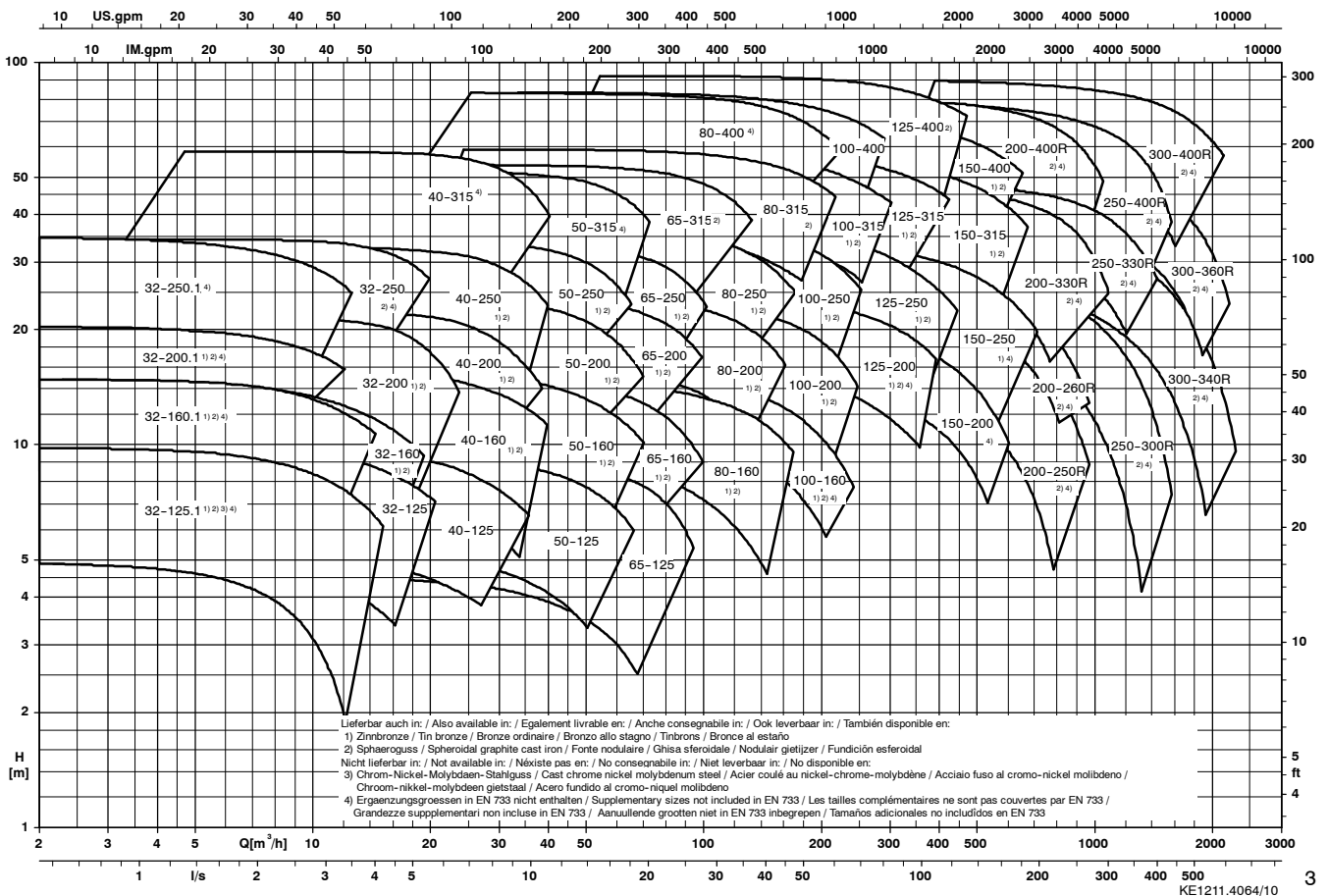
Etanorm

n = 3500 1/min



Etanorm / Etabloc / Etanorm-R

n = 1750 1/min



Materials

	Etanorm G / Etanorm-RG	Etanorm-R GC1	Etanorm M	Etanorm-RM	Etanorm B
Volute casing	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾		Tin bronze CC 480 K-GS ³⁾
Discharge cover	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾		Tin bronze CC 480 K-GS ³⁾
Impeller	Grey cast iron JL 1040 ¹⁾	1.4408	Tin bronze CC 480 K-GS ³⁾		Tin bronze CC 480 K-GS ³⁾
Spaltringe	Grey cast iron GG	1.4408	Grey cast iron/Bleibronze GG/G-CuPb10Sn		Leaded bronze CC 495 K-GS ³⁾
Shaft	Tempering steel C45		Tempering steel C45		Chrome nickel molybdenum steel 1.4462
Shaft sleeve	Chrome nickel molybdenum steel 1.4571	1.4122	Chrome nickel molybdenum steel 1.4571	1.4122	Chrome nickel molybdenum steel 1.4571
Shaft protection sleeve	Chrome nickel molybdenum steel 1.4122		Chrome nickel molybdenum steel 1.4122		Chrome nickel molybdenum steel 1.4571
Bearing bracket	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾

	Etanorm S	Etanorm-RS	Etanorm C
Volute casing	Sphäroguss JS 1025 ²⁾		Cast chrome nickel molybdenum steel 1.4408
Discharge cover	Sphäroguss JS 1025 ²⁾		Cast chrome nickel molybdenum steel 1.4408
Impeller	Grey cast iron JL 1040 ¹⁾		Cast chrome nickel molybdenum steel 1.4408
Spaltringe	Grey cast iron GG		Cast chrome nickel molybdenum steel 1.4408
Shaft	Tepering steel C45		Chrome nickel molybdenum steel 1.4462
Shaft sleeve	Chrome nickel molybdenum steel 1.4571	1.4122	Chrome nickel molybdenum steel 1.4571
Shaft protection sleeve	Chrome nickel molybdenum steel 1.4122		Chrome nickel molybdenum steel 1.4571
Bearing bracket	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾

1) to EN 1561 = GJL-250
 2) to EN 1563 = GJS-400-18-LT
 3) to EN 1982

Benefits at a Glance

Large material selection
 Grey cast iron, tin bronze, nodular cast iron, cast chrome nickel molybdenum steel

Pressure jacket designed for 16 bar to guarantee high operating reliability

Connecting dimensions and power ratings to EN 733 (Etanorm)

Wear rings service-friendly

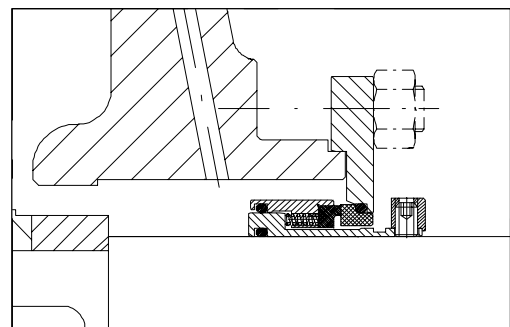
Suction geometry designed for max. suction capacity (NPSH) and optimal cavitation behaviour

Impeller with optimized hydraulics, excellent efficiencies and fine graduation of the QH-performance chart

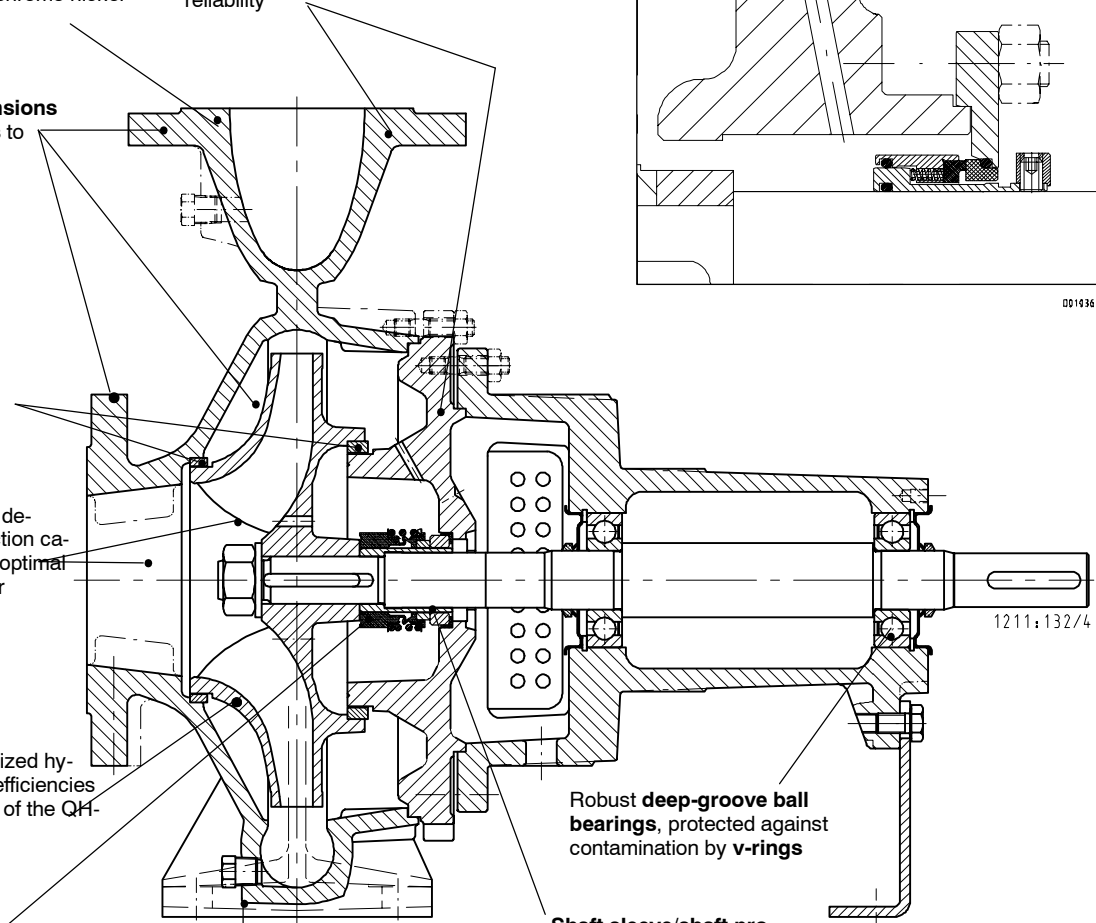
Mechanical seal or gland packing, uncooled

Back pull-out design: easy dismantling, the casing may remain in the pipeline when the pump is dismantled

Type: Etanorm-R



001936



Robust deep-groove ball bearings, protected against contamination by v-rings

Shaft sleeve/shaft protecting sleeve prevents wear on the shaft

Subject to technical modification without prior notice.

01.06.2003

1211.1/14-10

