KWP non-clogging centrifugal pump

Fields of Application
For handling all kinds of pulps not liable to plait, as well as stock suspensions up to 5 % bone dry.
This pump is used in the chemical and process engineering industries, paper and pulp industries, sugar, food and beverages industries, in flue gas desulphurisation and coal upgrading and in the treatment of industrial effluents.

Design
Horizontal, radially split volute casing pump in back pull-out design, with impeller adapted to meet application requirements, single-flow, single-stage.

Special Features
- Reinforced, axially adjustable bearing assembly on all pumps
- Shaft seal: mechanical seal integrated into the casing cover, or gland packing
- Even cast iron pumps are supplied with pump internals (impeller and wear plate) made of wear-resistant ERN (nickel cast iron)

Designation
Type series
Impeller type
Discharge nozzle DN
Nominal impeller dia.
Impeller types:
K = channel-type impeller
O = open multi-vane impeller
F = free-flow impeller

Operating Data
Pump sizes DN Capacity Q up to 1300 m³/h up to 11000 m³/h
Head H up to 100 m up to 160 m
Operating pressure p up to 10 bar
Operating temperature t
for H from -10 to +120 °C
for GN, GH, GC₂ from -10 to +200 °C
for C₂ from -40 to +280 °C

Certification
Certified quality management ISO 9001.

Materials

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Material variant</th>
<th>C₂</th>
<th>GC₂</th>
<th>H</th>
<th>GH</th>
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<tr>
<td>101</td>
<td>Pump casing</td>
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1) GJL-250 to EN 1561
2) without auxiliary connection holes (pressure gauge connection and casing drain)
3) together with NORIHARD discharge cover
**Design Features**

- **Flange design in accordance with DIN/EN up to PN 16; other flange designs are possible.**

- **Shaft not in contact with the medium handled (dry shaft); therefore no special materials required.**

- **Back vanes for reduced axial thrust and shaft seal balancing.**

- **All mechanical seals integrated in the casing cover with conical seal chamber (A-type cover), therefore improved internal circulation, automatic venting and dead-end operation possible.**

- **Safe design of all pressure-retaining components due to quality casting with corrosion/wear allowance.**

- **High efficiencies in the case of channel-type impeller design; impeller with front vanes and diagonal gap.**

- **Pump casing with suction-side wear plate in wear-resistant diagonal gap design.**

- **Due to the back pull-out design, the casing may remain in the pipeline when the pump is dismantled.**

- **On request, pump casing is available with inspection hole.**

- **Jacking screws facilitate dismantling.**

- **Use of existing modular design components ensures small stock of spare parts and fast delivery.**

- **Rigid and stable support foot ensures that even in the case of high external forces the shaft is only slightly displaced in the coupling area.**

- **Cylindrical roller bearing as movable bearing permits easy assembly and compensates possible thermal expansion of the shaft.**

- **Reinforced adjustable bearing assembly.**

- **Constant-level oiler ensures constant lubrication of the bearings.**

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