Centrifugal pump LE/ZA

Type LE: The flow optimised impeller and volute allow a very silent, gentle and efficient handling of the liquids. The dead space free and hygienic design guarantees fast cleaning and complete draining.

Type ZA: The centrifugal pump ZA can be used to convey fluid media with viscosities up to 500 mPa s without any danger of clogging. Different impeller versions guarantee an optimum adaption to the pumped media which makes this pump type an ideal all-rounder.

Food industry
Liquid egg, vinegar, concentrates, flavourings, vitamins, milk, cream, curd, buttermilk, sauces, cooking oil, sugar solutions, brine, spices, fatty acids, CIP, yoghurt, whey, fats, cocoa butter, liquid malt etc.

Beverage industry
Mineral water, syrup, spirits, fruit juices (including fruit juices with pulp), wine, beer, brewer’s yeast, lemon juice, alcohol, liqueur, CIP, vegetable juices, iced tea etc.

Pharmaceuticals/cosmetics
Perfumes, emulsions, alcohols, herbal extracts, flavourings, WFI/PUW/HPW, CIP/SIP, colourants, infusion solutions, applications in bio-technology etc.

Chemicals/industry
Lyes, acids, milk of lime, alcohols, methanol, ethanol, solvents, hydrogen peroxide, DI water, urea, glycol solutions, various applications in reverse osmosis processes, biodiesel, waste water with particles, condensates, liquid-deicing salt etc.
The pump types for pure and solids-laden liquids

Features:
- Flow optimised volute casing and impeller designs with high efficiencies,
- Dead space free design (hygienic design),
- Very silent operation,
- Modular design and low maintenance costs,
- Sturdy design comprising high-quality Cr-Ni-Mo stainless steel 1.4435 (316L) with electropolished surfaces,
- Pumping of solids-laden media with no risk of clogging,
- Ideal for fast temperature changes thanks to sturdy design,
- The robust design allows the handling of abrasive and corrosive media,
- All common shaft sealing systems (e.g. mechanical seals) available.

Optional forms:
- ATEX
  for zones 1, 2, 21, 22
- Pharma design
  for maximum safety, reliability and hygiene
  (surface roughness down to Ra < 0.4 μm)
- Magnetic coupling
  hermetically sealed design LEM for
  crystallising, toxic, flammable and
  environmentally hazardous liquids
- Vertical option
  for easy draining
- Bearing housing option
  for special requirements
- Inducer
  for low NPSH\(_\text{r}\) values (< 1 m)
- Mobile
  version with sturdy trolley

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow rate Q [m(^3)/h]</td>
<td>max. 240</td>
</tr>
<tr>
<td>Delivery head H [m]</td>
<td>up to 110</td>
</tr>
<tr>
<td>Temperature range [°C]</td>
<td>minus 30 to 120, max. 145 [SIP]</td>
</tr>
<tr>
<td>Viscosity [mPa s]</td>
<td>up to 500</td>
</tr>
<tr>
<td>Nominal pressure</td>
<td>max. PN10 to PN100 (type LEH/ZAH)</td>
</tr>
</tbody>
</table>

---

Sawa Pumpentechnik AG | Taastrasse 40 | Postfach 244 | CH-9113 Degersheim
Tel. +41 71 372 08 08 | info@sawa.ch | www.sawa.ch