

## viscorex<sup>®</sup>

Extraction pump  
for the polymer industry



Polymer processes require units that gently discharge low and high-viscosity plastic melts from reactors and degassing equipment. Thanks to excellent fill behaviour and short residence times, the viscorex<sup>®</sup> gear pump is the ideal solution for such applications. Its high efficiency and long service life will enhance the capacity and availability of your production line. viscorex<sup>®</sup> gear pumps efficiently convey plastic melts with a constant, precise flow.

### Your benefits

- Excellent fill behaviour due to optimized inlet geometries
- Optimized flow channels
- Gentle treatment of polymer melts thanks to special gear teeth with low squeezing power
- High overall efficiency and hence minimized friction thanks to pioneering gear and bearing technology
- Low pulsation pumping even at high differential pressures
- Compact design

### Typical pumping media

- Cellulose acetate
- Elastomers
- Epoxy resin
- Phenolic resin
- Polyacrylonitrile
- Polyamide
- Polycarbonate
- Polybutylene terephthalate
- Polyethylene terephthalate
- Polymethylmethacrylate
- Polypropylene
- Polystyrene (incl. ABS, EPS)
- Polysulphone
- Silicone
- SBR Latex
- And others

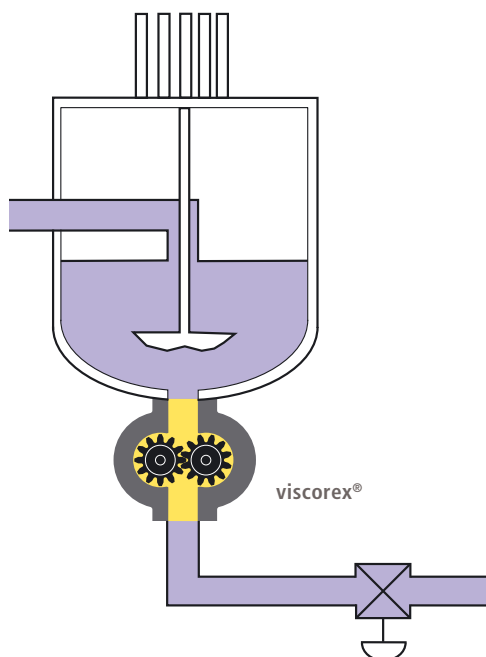
### Technical specifications:

|                        |   |
|------------------------|---|
| <b>Housing, cover:</b> | Cast steel / corrosion resistant steel  |
| <b>Gear shafts:</b>    | Nitrided steel  |
| <b>Bearing:</b>        | Tool steel / special materials  |
| <b>Shaft seals:</b>    | <ul style="list-style-type: none"> <li>■ Single mechanical seal, heated</li> <li>■ Double mechanical seal</li> <li>■ vislip®</li> <li>■ vispac®</li> <li>■ viscoseal</li> </ul> |
| <b>Pump heating:</b>   | With heat transfer medium max. 350°C, max. 12 bar for > 14" sizes (max. 7 bar for 10", 12" and 14" sizes)   |
| <b>Installation:</b>   | The vacorex® gear pump can be flanged directly under the reactor  |

### Application limits:

|                       |   |
|-----------------------|---|
| <b>Viscosity:</b>     | To 20,000 Pas   |
| <b>Temperature:</b>   | To 350°C  |
| <b>Suction side:</b>  | Pumped media flow under vacuum or at an admission pressure to 10 bar                                    |
| <b>Delivery side:</b> | Discharge pressure up to 70 bar ( <b>Higher pressure available upon request against extra charge.</b> ) |

### Typical application:



| Pump size* | Spec. volume [cm³/rev] | Capacity** [m³/day] |
|------------|------------------------|---------------------|
| 10"        | 3,170                  | 86.5-420            |
| 12"        | 5,100                  | 220-610             |
| 14"        | 7,900                  | 350-820             |
| 16"        | 13,700                 | 450-1,100           |
| 20"        | 21,400                 | 595-1,450           |
| 21"        | 29,009                 | 721-1,771           |
| 23"        | 40,267                 | 866-2,245           |
| 25"        | 54,036                 | 1,000-2,728         |
| 29"        | 65,667                 | 1,148-3,198         |
| 32"        | 89,458                 | 1,420-4,091         |
| 36"        | 132,700                | 1,882-5,584         |

\* Larger pump sizes and in between sizes are available upon request.  
Flange connections in accordance with DIN or ANSI standards.

\*\* These data are reference values for polymer processes.  
Please contact Maag Pump Systems AG for your specific applications.

**The maximum flow capacity and the maximum discharge pressure of the pump are dependant on the characteristics of the medium to be pumped.**

