



## vacorex<sup>6</sup> GU/EV/EP

Extraction pump for the polymer industry



MAAG introduces the vacorex<sup>®</sup> - x<sup>6</sup> class gear pump. vacorex<sup>6</sup> fulfills ideally modern polymer production processes which require pumps that can discharge at high pressure despite very low fill level and high vacuum conditions in the reactor/devolatilization vessel.

MAAG vacorex<sup>6</sup> process a wide range of different polymer grades without affecting their quality. Reliable, requiring little maintenance and robust enough to withstand the rigors of years of operation is vacorex<sup>6</sup> gear pump the ideal solution for such applications.

### Your benefits

- **+ up to 40 %** more throughput or
- **+ 28 %** more pressure and
- **+ 11 %** more throughput compared to the classic pumps with the same pump size
- **+ 30 %** better heat transfer in the bearings
- **+ 15 %** larger inlet with optimized geometry
- **+ 8 %** better vol. efficiency
- **- 10 %** less energy consumption

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### Pumping media

- PET / PBT
- Polyamide, Polycarbonate
- Cellulose acetate, Polyacrylonitrile
- Silicone / Oil additives
- SBR Latex / Epoxy resin
- Phenolic resin, Polymethylmethacrylate
- Polystyrene (incl. ABS, EPS)
- Polysulphone
- Elastomers / Polyolefine
- And others

### Accessories

- High-precision monitoring systems for pressure and temperature

### Technical specifications:

<b>Housing, cover:</b>	Alloy- or Carbon Steel - other materials on request
<b>Gear shafts:</b>	Nitrided steel / tool steel
<b>Bearing:</b>	Tool steel / ALBr / special materials
<b>Shaft seals:</b>	<ul style="list-style-type: none"> <li>▪ Standard: vispac<sup>®</sup> with standard barrier system and adjustable throttle screw</li> <li>▪ Options: viscoseal, vispaclip, double mechanical seal with barrier system</li> </ul>
<b>Pump heating:</b>	Thermal oil or steam; design condition 25 bar / 350 °C
<b>Installation:</b>	For vertical, direct installation to vessel
<b>Viscosity:</b>	Up to 20'000 Pas - strongly depending on pump size
<b>Temperature:</b>	Up to 350 °C
<b>Suction side:</b>	Inlet pressure: up to 10 bar
<b>Flange connections:</b>	<ul style="list-style-type: none"> <li>▪ ANSI or DIN standards</li> </ul>

### Pump types

- ST: Most compact - Threaded hole at inlet flange
- LT: Optimized NPSH - Threaded hole at inlet flange
- LB: Optimized NPSH - Through boring at inlet flange
- MR: Drop In Retrofit for Gen. M - Threaded hole at inlet flange
- 5R: Drop In Retrofit for Gen. 5 - Through boring at inlet flange

Model range	vacorex <sup>6</sup> GU		vacorex <sup>6</sup> EV		vacorex <sup>6</sup> EP	
<b>Δp</b>	up to 250 bar		up to 200 bar		up to 320 bar	
<b>Discharge pressure</b>	up to 260 bar		up to 210 bar		up to 330 bar	
<b>Pump size</b>	<b>Spec.volume [cm<sup>3</sup>/rev]</b>	<b>Capacity [m<sup>3</sup>/day]</b>	<b>Spec. volume [cm<sup>3</sup>/rev]</b>	<b>Capacity [m<sup>3</sup>/day]</b>	<b>Spec. volume [cm<sup>3</sup>/rev]</b>	<b>Capacity [m<sup>3</sup>/day]</b>
100	764	33-89	977	42-119	611	26-76
125	1,550	57-158	1,930	71-198	1210	44-126
160	3,080	92-264	3,850	119-342	2,460	74-211
200	6,110	153-453	7,820	197-581	4,890	122-362
224	8,570	197-594	11,000	248-744	6,860	158-475
250	12,200	256-783	15,300	312-956	9,550	224-685
280	17,200	325-1,014	21,500	407-1,268	13,400	259-809
320	25,100	432-1,370	31,400	555-1,764	20,100	395-1,253
360	35,700	564-1,820	44,400	721-2,325	28,600	503-1,621
400	48,900	703-2,308	60,600	901-2,955	39,100	625-2,052
450	69,300	916-3,053	86,600	1,177-3,925	55,700	819-2,730
500	94,800	1,144-3,882	122,000	1,514-5,138	76,400	1,020-3,459
560	135,000	1,429-4,936	174,000	1,947-6,726	108,000	1,270-4,383

Remarks: Combination of max. temperatures, max. flow rates and max. pressure is not simultaneously possible in all cases. The indicated flow capacity range and the max. discharge pressure of the pump are strongly dependant on the characteristics of the medium to be pumped. Please contact Maag Pump Systems AG for specific applications.

