



vacorex⁶ GU/EP/EV

Extraction pump for the polymer industry



MAAG introduces the vacorex® - x⁶ class gear pump. vacorex⁶ 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 vacore**x**⁶ 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 vacore**x**⁶ gear pump the ideal solution for such applications.

Product Quality⁶

 Protected Polymer Limited heat exposure to minimize degradation of your polymer

Production Capability⁶

- **XXL Inlet** Effective inlet geometry to maximize your feed capability
- XXL Feed Section Minimized polymer volume above pump to reduce your volatile content downstream

Power Density⁶

- Small Footprint Minimized Footprint to reduce your total cost of ownership
- Thermal Mastery Efficient temperatur managment to enhance your process security

Data and illustrations refer to the date of printing. Changes may be made without special notice. Products and processes of MAAG are protected by patents.

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Pumping media

- PET / PBT
- Polyamide, Polycarbonate
- Cellulose acetate, Polyacrylicnitrile
- 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:						
Housing, cover:	Alloy- or Carbon Steel - other materials on request					
Gear shafts:	Nitrided steel / tool steel					
Bearing:	Tool steel / ALBr / special materials					
Shaft seals:	 Standard: vispac® with standard barrier system and adjustable throttle screw Options: viscoseal, vislip®, vispaclip, double mechanical seal with barrier system 					
Pump heating:	Thermal oil or steam; design condition 25 bar / 350°C					
Installation:	For vertical, direct installation to vessel					
Viscosity:	Up to 20'000 Pas - strongly depending on pump size					
Temperature:	Up to 350 °C					
Suction side:	Inlet pressure: up to 10 bar					
Flange connections:	ANSI or DIN standards					

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	vacore x ⁵ GU		vacore x ⁶ EV		vacore x ⁶ EP		vacore x ⁶ MV	
Δp up to 250 bar		50 bar	up to 200 bar up to 210 bar		up to 320 bar up to 330 bar		up to 125 bar up to 135 bar	
Discharge pressure	up to 260 bar							
Pump size	Spec.volume [cm³/rev]	Capacity [m³/day]	Spec. volume [cm³/rev]	Capacity [m³/day]	Spec. volume [cm³/rev]	Capacity [m³/day]	Spec. volume [cm³/rev]	Capacity [m³/day]
100	764	33-89	977	42-119	611	26-76	1,530	29-260
125	1,550	57-158	1,930	71-198	1210	44-126	3,090	87-446
160	3,080	92-264	3,850	119-342	2,460	74-211	6,160	262-763
200	6,110	153-453	7,820	197-581	4,890	122-362	12,200	521-1,221
224	8,570	197-594	11,000	248-744	6,860	158-475	17,100	576-1,478
250	12,200	256-783	15,300	312-956	9,550	224-685	23,700	675-1,727
280	17,200	325-1,014	21,500	407-1,268	13,400	259-809	33,400	872-2,249
320	25,100	432-1,370	31,400	555-1,764	20,100	395-1,253	50,300	1,136-3,092
360	35,700	564-1,820	44,400	721-2,325	28,600	503-1,621	71,400	1,387-3,973
400	48,900	703-2,308	60,600	901-2,955	39,100	625-2,052	97,800	1,795-5,250
450	69,300	916-3,053	86,600	1,177-3,925	55,700	819-2,730	139,000	2,317-7,009
500	94,800	1,144-3,882	122,000	1,514-5,138	76,400	1,020-3,459	191,000	2,844-8,860
560	135,000	1,429-4,936	174,000	1,947-6,726	108,000	1,270-4,383	270,000	3,491-11,200

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.





