maag
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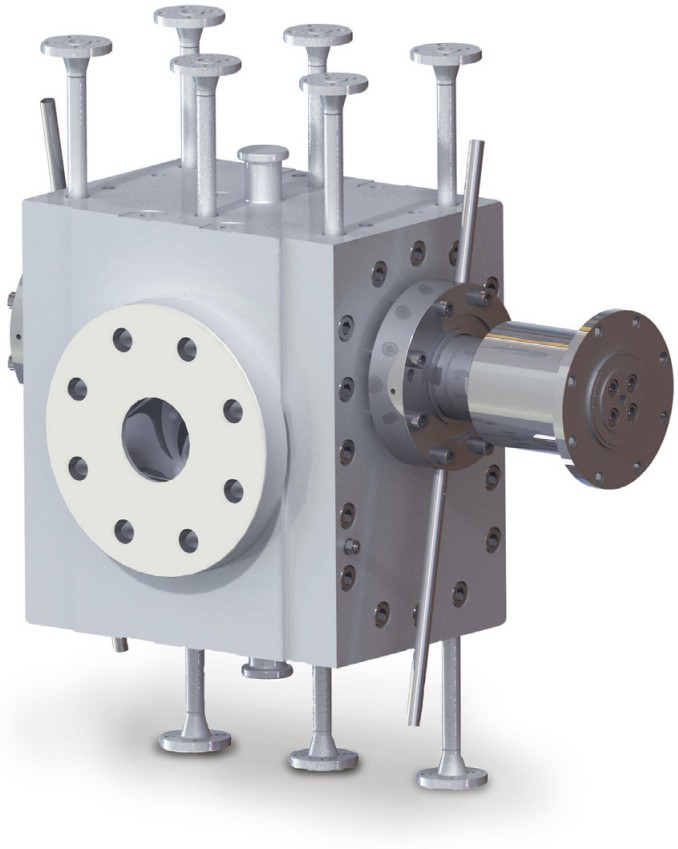
maag
pump
systems

thermorex®

Booster pump for the polymer industry



Polymer processes require pumps which well gently feed low and high viscosity plastic melt through the system. Thanks to specially designed gear teeth with low squeezing power, the maag pump systems thermorex® transfer, booster or metering gear pump is the ideal solution for such applications. The high efficiency and long service life will enhance the capacity of your production plant. thermorex® gear pumps convey plastic melts with a constant, precise flow even at highest discharge pressures.

Your benefits

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

thermorex®

Booster pump for the polymer industry

Typical pumping media

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

Technical specifications:	
Housing, cover:	Stainless steel/carbon steel
Gear shafts:	Nitrided steel/tool steel
Bearing:	Tool steel/special materials
Shaft seals:	■ viscoseal ■ Single mechanical seal, heated ■ Double mechanical seal with barrier system ■ vislip® ■ vispac®
Pump heating:	With heat transfer medium max. 350°C, at max. 25 bar
Installation:	The thermorex® gear pump can be flanged as a transfer/booster pump in the in-line or directly to mixer, kneader or extruder
Viscosity:	To 20,000 Pas
Temperature:	To 350°C
Suction side:	Pumped media flow under vacuum or at an admission pressure to 100 bar
Delivery side:	Discharge pressure to 350 bar

There are three types to choose from

- thermorex® GP for a broad application range
- thermorex® HV with 25% higher pumping volume than the GP model
- thermorex® HP for differential pressures of up to 300 bar

	thermorex® GP		thermorex® HV***		thermorex® HP***	
Pump size*	**Spec, volume [cm³/rev]**	**Capacity** [m³/day]**	**Spec, volume [cm³/rev]**	**Capacity** [m³/day]**	**Spec, volume [cm³/rev]**	**Capacity** [m³/day]**
45	47	4-12	–	–	–	–
56	93	7-21	–	–	–	–
70	177	11-35	–	–	–	–
90	373	18-62	–	–	–	–
110	720	30-106	–	–	–	–
140	1,493	52-188	–	–	–	–
180	3,207	91-342	3,990	117-439	2,494	71-266
224	6,106	146-566	7,632	183-707	4,907	117-455
250	8,601	188-742	11,009	236-927	6,881	151-594
280	12,090	242-969	15,545	302-1,211	9,673	216-865
320	17,681	318-1,299	22,102	398-1,624	13,813	254-1,039
360	25,211	413-1,715	31,513	530-2,205	19,608	367-1,524

* Larger pump 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 for your specific applications.
*** Available from size 180.

The maximum flow capacity and the maximum discharge pressure of the pump are dependant on the characteristics of the conveyed medium.

maag pump systems

Global contacts, see **www.maag.com**
Contact us at **contact@maag.com**

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