

Vacuum Reactor Discharge Pump—— Medium And Low Pressure, Full Jacket

LK Series Polymer Melts Gear Pump

LK series melt gear pumps are suitable for the reaction transportation of high temperature and high viscosity polymer melts that require low output pressure and large flow, such as resin, chemical fiber and other industries. They are generally installed in the lower part of the reactor and used as a feed pump. This series of melt gear pumps have good self-priming performance and can be used for conveying and pressurizing polymer materials under vacuum reaction conditions.

The main materials that can be conveyed by the melt gear pump are:

Polymer melt
PET PBT PTT
PA6 PA66 PA12
PE LDPE LLDPE HDPE HMWPE
PP EVA PB
PB PS HIPS ABS SAN
PC PEK PMMA POM
TPU PLA PBS

Other stock solutions, solutions, glues, oligomers, prepolymers, etc. in the polymer material industry;

It can also be used to transport hot melt adhesives, asphalt, paints, adhesives, pharmaceuticals, food, grease, fuels, oils, dyes, coatings, lubricants, polyols and other

materials that do not contain particulate impurities.

Technical data:

Viscosity : $1\text{E-}3 \sim 30,000\text{Pa}\cdot\text{s}$ ($1 \sim 30,000,000\text{cP}$)

Suction side pressure : $(-0.05 \sim -0.09\text{MPa}) \sim 4\text{MPa}$

Discharge side pressure : $0 \sim 7\text{MPa}$

Differential pressure : 5MPa

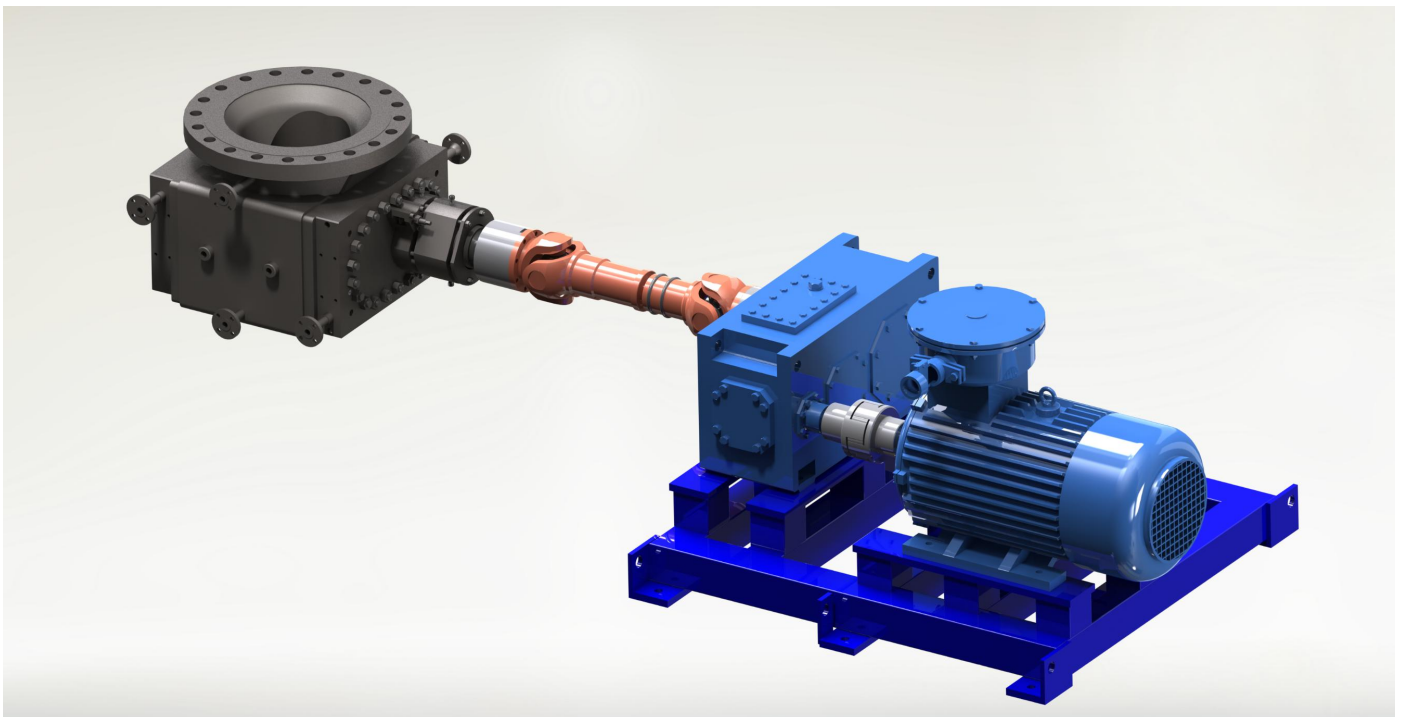
Temperature : $\leq 350^\circ\text{C}$

Heating : Fully Jacketed

HT medium pressure : $\leq 1.6\text{MPa}$

Installation method

LK series melt gear pumps are generally installed at the bottom of the reactor and are driven by a motor + reducer + universal coupling. The melt gear pump is a positive displacement forced delivery pump. The pump output flow can be adjusted by adjusting the pump speed. It is recommended Using frequency conversion speed regulation, can realize the nearly linear flow output of the gear pump.



Main structure of gear pump:

Rotor type: helical or spur gear

Heating method: Heat medium heating

Sealing structure:

- Dynamic melt seal + packing seal
- Mechanical seal
- Dynamic seal with cooling melt
- High temperature resistant packing seal

Main structural materials of melt gear pump:

Pump casing: stainless steel/alloy steel/corrosion-resistant alloy

Gear: Nitrided steel/tool steel/stainless steel + coating/corrosion resistant alloy

Bearing: tool steel/copper alloy/stainless steel + coating/corrosion resistant alloy

Pump size and Technical data

Model		cc/r	Inlet pres. Mpa	Outl et pres. MPa	Max. flow rate m³/h				Temp	
					Low viscosit y materi al	Mediu m viscosi ty materi al	High viscosit y material	Ultra high viscosit y material		
					< 50Pa.s	50~ 200Pa. s	200~ 2000Pa .s	> 2000Pa. s		
LK-355		355	Vacuu m -0.09 ~4.0	≤10. 0	2.3	1.5	0.9	0.7	≤350 ℃	
LK-500		500			3.2	2.2	1.2	0.9		
LK-750		750			4.9	3.2	1.8	1.4		
LK-1000		1000			5.4	3.8	2.2	1.9		
LK-1200		1200			6.5	4.5	2.6	2.3		
LK-1600		1600			8.6	6	3.5	3		
LK-2000		2000			10.8	7.6	4.3	3.8		
LK-2500		2500			10.8	8.1	4.7	4.1		
LK-3150		3150			13.6	10.2	6	5.1		
LK-4000		4000			13	10.8	7.6	6.5		
LK-6300		6300			20	17	10	9		
LK-8000		8000			22	17	13	12		
LK-9000		9000			24	19	15	13		
LK-1200 0		1200 0			32	26	18	16		
LK-1800 0		1800 0	49			39	27		2 4	
LK-2500 0		2500 0	68			54		38	34	
LK-3800 0		38000		103			82		57	51
LK-5400		5400	146			117		82	73	

0	0				
LK-8000 0	80000	216	173	121	108
Please consult the manufacturer for larger or smaller specifications					