

## ZB-E pressurized melt pump

### ZB-E pressurized melt pump applications:

ZB-E series circular melt pump for extrusion lines is mainly used for extruder or pressurization, stabilizing flow and transportation of medium or high viscosity polymer. This series of **melt pumps for extrusion** primarily adopts electrical heating, and applies to PS, PET, PVC, PC, PA, PMMA, HDPE, LDPE, LLDPE, PP, etc.



### Technical Parameter of ZB-E melt pumps for extrusion:

- ◆ Material for [Melt Pump](#) Body: High Temperature Tool Steel
- ◆ Material for Gear: High Temperature Tool Steel or Nitrided Steel
- ◆ Material for Sliding Bearing: High Temperature Tool Steel
- ◆ Shaft Sealing: Spiral Sealing or Packing Sealing
- ◆ Heating System: Electrical Heating
- ◆ Model/Volume Range: 0.5CC - 2500CC, 0.5cm<sup>3</sup>/rev - 2500cm<sup>3</sup>/rev

### Operating Parameter of ZB-E pressurized melt pump for polymer:

- ◆ Theory: Positive Displacement [Gear Pumps](#)
- ◆ Structure: Gear Pump
- ◆ Power: Electric or Oil
- ◆ Fuel: No Need
- ◆ Pressure: High Pressure
- ◆ Volume Range: 0.5CC - 3200CC
- ◆ Viscosity: ≤40000 Pa.s
- ◆ Working Temperature: ≤400°C (750°F)
- ◆ Cleaning Temperature: ≤450°C (850°F)
- ◆ Inlet Pressure: ≤12MPa
- ◆ Outlet Pressure: 40MPa(6000psi)
- ◆ Differential Pressure: ≤25Mpa



Type	CC/Rev	Capacity (L/H)	Heating power (kw)	Dirven system (km)
ZB-0.2	0.2	0.1-0.6	0.5	0.37
ZB-1	1	0.5-3	1	0.5
ZB-2	2	1-6	1	0.75
ZB-5	5	2.5-15	1	1.1
ZB-10	10	5-30	1	1.5
ZB-20	20	10-60	2	2.2
ZB-31.5	31.5	15-90	2	3
ZB-50	50	25-150	3	4
ZB-100	100	50-300	4	5.5
ZB-150	150	75-450	5	7.5
ZB-200	200	100-600	6	11
ZB-250	250	125-750	8	15
ZB-315	315	150-900	8	18.5
ZB-500	500	250-1500	12	22
ZB-800	800	400-2400	15	30
ZB-1200	1200	600-3600	20	37
ZB-2500	2500	1300-7500	24	45

### Features of extruder pressurized melt pump:

- ◆ The steady export pressure--plastic melt pumps for extrusion can reduce the extruder output instability and pressure fluctuation caused by the extrusion machine parameters.
- ◆ Improve the product quality--pressurized extruder melt pump can minimize the dimensional tolerance of the extruded product and reduce the waste and scrape rate. Common extruder can also produce high precision products.
- ◆ Improve the output--melt pump lower the pressure requirements for the screw, change the voltage buildup way, from "screw to die-head" to "melt pump to die-head". With the characteristic of high speed extrusion and high efficiency, the production line can adjust the extruder back pressure, reduce the staying time of melt within the screw tubes. And it also can make the plasticizing process stable, reduce the melting temperature, and improve the output and quality.
- ◆ Lower energy consumption unit--some data also suggests that combine the co-rotating twin-screw extruder and plastic melt pumps into mixing extruding production line, its mixing quality and output can be large increased than separate twin-screw granulator. The energy consumption can reduce about 25% generally.
- ◆ Prolong service life--extruder pressurized melt pump can reduce the extruder screw cylinder pressure if equipped with the melt pump, it also reduces wear between screw and screw tubes to a minimum and reduce the load of thrust bearing in gear case, accordingly prolong the production line service life. And the overflow of material in production process caused by extruder venting can be readily solved.



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## Batte Main Products

### Melt Pump Series:

- ★ [ZB-B standard extrusion melt pump](#)
- ★ [ZB-C reinforced melt pump for extrusion](#)
- ★ [ZB-D gear pumps for pipeline](#)
- ★ [ZB-E pressurized melt pump](#)
- ★ [ZB-F melt pump for reactor](#)
- ★ [ZB-H high pressure extruder pump](#)
- ★ [ZB-K polymer discharge gear pump](#)
- ★ [ZB-R extrusion rubber pump](#)

- ★ [RS double shaft rubber gear pump](#)
- ★ [ZB-U spinning pump](#)
- ★ [ZB-W chemical metering melt pump](#)
- ★ [ZB-X gear metering chemical pump](#)
- ★ [New type melt pump](#)
- ★ [Melt pump spare parts](#)
- ★ [PID control system for extruder](#)
- ★ [PLC control system for extrusion line](#)
- ★ [PDF download](#)

### Screen Changer Series:

- ★ [Manual screen changer](#)
- ★ [Slide plate screen changer](#)
- ★ [Continuous piston screen changer](#)
- ★ [Continuous backflush screen changer](#)
- ★ [Automatic belt screen changer](#)
- ★ [Pelletizer filter without wire mesh](#)
- ★ [Screen changer spare parts](#)
- ★ [PDF download](#)

### Loss in Weight Feeder Series:

(For granule, sheet, powder, liquid, etc.)

- ★ [Loss in weight screw feeder](#)
- ★ [Volumetric screw feeder](#)
- ★ [Liquid polymer feed system](#)
- ★ [Multi-component gravimetric feeders](#)
- ★ [Gravimetric feeder control system](#)
- ★ [Feeding system](#)
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