SERIES IV "Z" DOUGH PUMP

FEATURES & BENEFITS

Unparalleled Reliability
• The screw on the Series IV "Z" Dough Pump is designed for easy removal/installation and prevents foreign object damage
• Efficient design with reduced parts count virtually eliminates downtime

Improved Scaling and Make-up
• Consistent degassing and throughput is achieved by applying vacuum at the rear of the pump inlet
• Gentle, single-screw action provides greater scaling accuracy and improves machinability for all yeast-raised products

Sanitary Design
• The BISSC compliant guardless safety/minimal framework design speeds clean-up and reduces labor

• Simple, Efficient Pumping System for All Types of Dough
• Available for All Sizes and Types of Horizontal Mixers
• Lowest Cost Pump, 20+ Years of Service
SERIES IV "Z" DOUGH PUMP

MECHANICAL FEATURES

- Stainless steel pipe manifold outlet
- Stainless steel frame and hopper
- Hopper reinforcement brace on large capacity units
- Large casters for easy mobility
- Nord gearmotor with direct auger drive
- Single screw auger design with vacuum assist
- Vacuum loading system and small hopper opening that minimizes dough temperature increase
- Vertical wall hopper design prevents dough sticking in the hopper
- Direct coupled drive eliminates high maintenance pulleys and belts or sprocket chains

ELECTRICAL FEATURES

- NEMA 12 remote enclosure, ANSI 61, gray polyester powder coat finish
- Operator controls mounted in the door of the remote enclosure and include:
  - Allen Bradley Operator Interface
  - Two-button start
  - Stop
  - Emergency stop
  - MCR reset
  - Pump speed
  - Auger speed meter
  - Inverter fault indicator
  - E-stop indicator
- Inverter drive
- Allen Bradley Programmable Logic Controller
- Main breaker
- Machine mounted stainless steel junction box

MECHANICAL OPTIONS

- Level control device with mounting bracket
- Dough thermometer option
- 3" or 6" (76 or 152 mm) diameter discharge pipe in lieu of standard 4" (102 mm)*
- Stainless steel pipe systems*
- CIP "Pig" system
- Driven trolley system between two mixers
- Spare parts kit

* AMF recommends that pipe length be restricted to 10' (3048 mm) with a maximum of two elbows. Pipe lengths in excess of 10' (3048 mm) or more than two elbows will result in a significant maximum throughput reduction and have potential damaging effects to the quality of the final product. AMF recommends that dough conveyors be used where possible for optimum dough pump performance.
**ELECTRICAL OPTIONS**

- PLC other than standard
- Inverter other than standard
- PLC upgrade for conveyor control from pump
- Remote cleaning starter box
- Quick disconnect power plug assembly
- Pump mounted operator control box option
- CE electrical package
- Stainless steel remote electrical panel in lieu of painted steel

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Hopper Size*</th>
<th>Length**</th>
<th>Width**</th>
<th>Height**</th>
<th>Approximate Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZDP 8</td>
<td>800 lb. (363 kg)</td>
<td>60” (1524 mm)</td>
<td>36” (914 mm)</td>
<td>32” (813 mm)</td>
<td>1,800 lb. (816 kg)</td>
</tr>
<tr>
<td>ZDP 10</td>
<td>1,000 lb. (454 kg)</td>
<td>60” (1524 mm)</td>
<td>42” (1067 mm)</td>
<td>35” (889 mm)</td>
<td>1,900 lb. (862 kg)</td>
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<tr>
<td>ZDP 13</td>
<td>1,300 lb. (590 kg)</td>
<td>60” (1524 mm)</td>
<td>42” (1067 mm)</td>
<td>36” (914 mm)</td>
<td>2,000 lb. (907 kg)</td>
</tr>
<tr>
<td>ZDP 16</td>
<td>1,600 lb. (726 kg)</td>
<td>72” (1829 mm)</td>
<td>48” (1219 mm)</td>
<td>36.50” (927 mm)</td>
<td>2,070 lb. (939 kg)</td>
</tr>
<tr>
<td>ZDP 20</td>
<td>2,000 lb. (907 kg)</td>
<td>72” (1829 mm)</td>
<td>48” (1219 mm)</td>
<td>40” (1016 mm)</td>
<td>2,200 lb. (998 kg)</td>
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<tr>
<td>ZDP 24</td>
<td>2,400 lb. (1089 kg)</td>
<td>72” (1829 mm)</td>
<td>48” (1219 mm)</td>
<td>42.50” (1080 mm)</td>
<td>2,400 lb. (1089 kg)</td>
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<tr>
<td>ZDP 28</td>
<td>2,800 lb. (1270 kg)</td>
<td>78” (1981 mm)</td>
<td>54” (1372 mm)</td>
<td>42.50” (1080 mm)</td>
<td>2,450 lb. (1111 kg)</td>
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<tr>
<td>ZDP 32</td>
<td>3,200 lb. (1452 kg)</td>
<td>84” (2134 mm)</td>
<td>60” (1524 mm)</td>
<td>44.50” (1131 mm)</td>
<td>2,500 lb. (1134 kg)</td>
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* Hopper size calculated at 69 lb./ft*

** Electrical Requirements:**

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<th>Drive (HP)</th>
<th>Maximum Throughput*</th>
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<tr>
<td>5</td>
<td>3,000 lb./hr. (1361 kg)</td>
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<tr>
<td>7.5</td>
<td>5,000 lb./hr. (2268 kg)</td>
</tr>
<tr>
<td>10</td>
<td>6,500 lb./hr. (3175 kg)</td>
</tr>
<tr>
<td>15</td>
<td>10,000 lb./hr. (4536 kg)</td>
</tr>
<tr>
<td>20</td>
<td>13,000 lb./hr. (5670 kg)</td>
</tr>
<tr>
<td>25</td>
<td>16,500 lb./hr. (8165 kg)</td>
</tr>
<tr>
<td>30</td>
<td>20,000 lb./hr. (9072 kg)</td>
</tr>
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* May be reduced when handling unusually stiff doughs or restrictive pipe manifold systems

** AIR REQUIREMENTS:** 25 SCFM @ 87 PSIG

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**NOTES:**

- See drawing on back cover. Custom sizes available.

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**NOTES:**

- See drawing on back cover. Custom sizes available.
NOTES:
1. BDP7.5 PUMP SHOWN
2. LH PUMP SHOWN