Eccentric screw drum and container pumps

JP-700 SR (speed reducer)

**Description**

- Particularly for intermittent operation.
- For gentle and almost pulsation free transferring of low viscous to highly viscous, thixotropic, gassy, solids and fibres containing, aggressive and neutral media.
- Pump tube will be driven by electric universal or air operated motors.
- All pump parts are made of stainless steel 316 Ti.
- The stators are adapted to the medium and available in NBR, NBR light, Viton®, EPDM, PTFE.
- Flow rate 12, 25 or 50 l/min (at JP-700 DR also dosing pumps are available!).
- Discharge pressure 6 bar at the single-stage and 12 bar with the two-stage pump tubes.
- The maximum viscosity of the medium is 20,000 mPas at the SR version.
- Medium temperature up to 150 °C.
- Standard pump tube lengths are 700, 1,000 and 1,200 mm. Special lengths up to 2,000 mm on request.
- Suction tube diameter 54 mm, therefore for all 200 liter drums with a 2" bung hole.
- Easy disassembling and therefore optimal cleaning. Weight 12 kg.

**Examples of media**

**Standard version suitable for:**

- Chemical products
- Paints
- Varnishes
- Resins
- Petroleum products
- Oils
- Fats
- Latex
- Silicone compounds
- Polymers
- Cutting oils
- Refrigerant

In addition a special version for food, cosmetic and pharmaceutical products can be delivered: polished surfaces, either open or encapsulated pin joints, no dead spaces in the pump, easy disassembling and therefore easy cleaning, milk thread connection DN 11851, CIP connections as an option, stator and sealing materials in food grade FDA, also PTFE stators available.

**Drive with electric or air operated motor and planetary gearbox.**

**ATEX 100**

The JP-700 SR with PTFE stator and a special ATEX mechanical seal has a type-examination certificate and can be used for flammable liquids and in explosive environments. II ⅔ G c IIA T4

**PUMP TUBES**

- Suction tube Ø 54 mm, at discharge male thread connection G 1½"
- Optional hose connection 1", 1¼" or 1½"
- SR-Version (with planetary gear = speed reducer) ca. 700 U/min.

*suitable for 200 liter drum (other lengths on request)

**MOTORS**

- **JP-AIR2**
  - 600 W at max. 6 bar operating pressure, ATEX
  - Air operated motor, with starting button on the handle. The motor starts running and the pump is transferring media when the button is pressed.

- **JP-AIR3**
  - 400 W at max. 6 bar operating pressure, ATEX
  - Air operated motor, stainless steel housing with plug valve at air intake for compressed air control. This regulates the motor speed and varies the pumping capacity.

- **JP-180**
  - 825 W Electric motor 230/115 V, 50-60 Hz
  - Double insulated class II, splash proofing acc. IP 24, on/off switch over load protection switch

- **JP-280**
  - 825 W Electric motor 230/115 V, 50-60 Hz
  - Double insulated class II, splash proofing acc. IP 24, on/off switch over load protection switch

**Eccentric screw drum and container pumps**
The pumps of the series JP-700 DR are versatile, robust and powerful pumps. They are used for pumping thin fluid to highly viscous substances up to 100,000 mPas, preferably used stationary and in continuous operation.

All pumps that are in contact with the media are made of stainless steel 316 Ti.

The stators are available in NBR, NBR bright, Viton®, EPDM or PTFE depending on the medium.

The pump tube sealing is designed as a mechanical seal or stuffing box.

The weight of the pump depends on suction tube length and the drive 25-35 kg.

The pump is also available as a food version (see JP-700 SR version) or as a dosing pump (lower flow rate, smaller suction tube diameter).

The JP-700 DR with PTFE stator and a special ATEX mechanical seal has a type-examination certificate and can be used for flammable liquids and in explosive environments.

II ½ G c IIA T4

Drive with three-phase or air operated motor is directly coupled with flexible coupling, beared shaft ball.

ATEX 100

Drive with three-phase or air operated motor directly coupled with extended motor shaft.

Examples of media

Standard version suitable for:

- Sludges
- Pastes
- Soap
- Shampoos
- Honey
- Syrup
- Jams
- Ketchup, etc.

In addition, a special version for use in hazardous areas as well as a version for the food industry is available.

### PUMP TUBES

<table>
<thead>
<tr>
<th>Model</th>
<th>Suction tube length</th>
<th>Flow rate</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP-700,12,1 DR</td>
<td>700/1,000/1,200 mm</td>
<td>12 l/min</td>
<td>6 bar</td>
</tr>
<tr>
<td>JP-700,12,2 DR</td>
<td>800/1,100/1,300 mm</td>
<td>12 l/min</td>
<td>12 bar</td>
</tr>
<tr>
<td>JP-700,25,1 DR</td>
<td>700/1,000/1,200 mm</td>
<td>25 l/min</td>
<td>6 bar</td>
</tr>
<tr>
<td>JP-700,25,2 DR</td>
<td>800/1,100/1,300 mm</td>
<td>25 l/min</td>
<td>12 bar</td>
</tr>
<tr>
<td>JP-700,50,1 DR</td>
<td>800/1,100/1,300 mm</td>
<td>50 l/min</td>
<td>6 bar</td>
</tr>
</tbody>
</table>

### MOTORS

<table>
<thead>
<tr>
<th>Type</th>
<th>Voltage/Hz</th>
<th>Flow rate</th>
<th>Speed at high viscosity</th>
<th>Speed at abrasive media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-phase motor</td>
<td>230/400 V, 50 Hz</td>
<td>0,37–2,2 kW</td>
<td>Reduced speed for high viscosities or abrasive media</td>
<td>Optimal flow rate for requested flow rate</td>
</tr>
<tr>
<td>Three-phase gear motor</td>
<td>230/400 V, 50 Hz</td>
<td>0,37–2,2 kW</td>
<td>Reduced speed at high viscosity</td>
<td>Optimal flow rate for requested flow rate</td>
</tr>
<tr>
<td>Air operated lamellar motor</td>
<td>0,5–1,5 kW, 900 rpm at 6 bar</td>
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</tbody>
</table>

Optional hose connection 1", 1¼" or 1½"

JP-700 DR version driven by three-phase, gear-, single-phase- or air operated motors.

Wide range of accessories such as pump hanger, double-sided carrying handle, bypass or dry running protection available as an option.
Eccentric screw container pumps
JP-700.80.1, 80.2, 200.1, 200.2, 300.1 and 300.2

Description
- Gentle and nearly pulsation free pumping of low to high viscous, thixotropic, gaseous, solids and fibers containing, aggressive and neutral media.
- Suction tube and pump parts of 316 Ti, rotor made of stainless steel 316 Ti.
- Pump and motor directly coupled.
- Encapsulated pin joints or joint-free.
- Easy disassembly.
- Flow rates 80, 200 or 300 l/min.
- Discharge pressure 6 and 12 bar.
- Pump tube lengths 1,000, 1,200 und 1,500 mm (special lengths available).
- Suction tube diameter 89 mm (JP-700.80), 105 mm (JP-700.200) und 130 mm (JP-700.300).
- Various discharge connections.
- Materials of the shaft seal: mechanical seal SS / Carbon / Viton® or SiC / SiC / Viton®. O-rings made of Viton® (FKM) or FEP. Alternatively stuffing box made of PTFE.

Examples of media

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<td><strong>Chemical products:</strong></td>
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<td>Fats</td>
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<td>Cutting oils</td>
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<tr>
<td>Refrigerant</td>
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<tr>
<td><strong>Food:</strong></td>
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<tr>
<td>Fruit juices</td>
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<tr>
<td>Concentrates</td>
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<tr>
<td>Tomato paste</td>
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<tr>
<td>Syrup / Honey</td>
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Selection of stators
(valid for all pumps)
- **NBR black**, max 100 °C, suitable for oily and greasy media, alcohol and aqueous solutions.
  Not resistant to acids, alkalies and solvents.
- **NBR White** Nitrile, max 100 °C, suitable for oily and greasy media, alcohol and food.
  Not resistant to acids, alkalies and solvents.
- **Viton® (FKM)**, max 150 °C, high chemical resistance.
- **PTFE (Teflon)**, max 150°C, high chemical resistance, suitable for food, pharmaceutical and cosmetic products.
- **EPDM** max. 110 °C, good resistance to alkalies (undiluted and diluted), acids (diluted), ketones, alcohols.
  Food-safe (corresponding to BGVV recommendations and in the composition of the positive list of FDA).
  Not resistant to oils and fats when transferring milk (3.5% fat) a sufficient resistance is given.

Information needed to select the right high viscosity pump
Based on your specific applications we need:
- Specification of the liquid
- Viscosity and medium temperature
- Density
- Required flow rate
- Head including pipe losses
- Content as well as type and size of solids
- Will the pump be used mobile or stationary, vertical or horizontal?
- Operating hours per day

Driven by three-phase, gear- or air operated motors.
Special features of the food version:
Polished surfaces, easy disassembly and thus easy to clean at the discharge milk thread DIN 11851, stator and seals in food grade version according to FDA, PTFE stators also available.
Our delivery programme

**Electric and pneumatic driven drum and container pumps**

JESSBERGER pump technology with internal and external cooled electric motors or pneumatic motors (also ex-protected) in different engine-power classes. Sealless pump tubes in Polypropylene, PVDF, ALU and Stainless Steel SS 316. Pump tube lengths 700, 1,000, 1,200, 1,500 and 1,800 mm. Special lengths up to 3,000 mm on request.

**Eccentric screw pumps JP-700 for drums and containers with electric or pneumatic motor**

are suitable for transferring thin to high viscous substances (max. 100,000 mPas) and will be used particularly stationary or for continuous work. All pump parts are made of Stainless Steel SS 316, stators are available in NBR, NBR light, Viton®, Hypalon, EPDM or PTFE.

**High viscosity dosing pumps**

for thin fluid, viscous, neutral and aggressive media with or without particles.

**Horizontal eccentric screw pumps**

are suitable for liquids with low or high viscosity, whether neutral or aggressive, with or without solids or fibres particles.

**Manual hand operated drum pumps**

are lightweight, handy devices for almost any fluid liquids.

**JP-02** Telescopic suction tube made of PP, 340–900 mm for acids, alkaline solutions and chemicals (on water basis because shaft is made of Stainless Steel SS 316).

**JP-03** Telescopic suction tube made of PP, 340–900 mm for oils, diesel, alcohol (max. 50%), anti freeze liquid, soap solutions, shampoo, water, etc.

**JP-04** Telescopic suction tube made of PP, 480–950 mm, for thin fluid liquids. Particularly suitable for acids and lyes.

**JP-05** Pump tube made of Stainless Steel SS 316 with seals made of PTFE, pump tube lengths 700 or 1,000 mm. Especially suitable for flammable media like solvents.

**Electronic flowmeter No.9020**

Housing made of PP. Volume preset, signal-check for further data processing as an option. Other materials: PVDF and SS

**Air-operated diaphragm pumps JP-800**

JESSBERGER diaphragm pumps are suitable for nearly all areas of use. They are capable of pumping aggressive and flammable substances, high viscous liquids also with solids or fibre particles and media containing gas.

**Seal-less magnetic driven pumps**

Available in various sizes, state-of-the-art construction, seal-less and environmentally friendly, suitable for a variety of uses. Low noise level, long life, easy to maintain.

**Vertical centrifugal pumps serie JP-820**

Executions in Polypropylene and PVDF

**Horizontal centrifugal pumps serie JP-840**

Executions in Polypropylene and PVDF

**Mixers for drums and containers**

JESSBERGER offers solutions for almost every mixing application for drums and containers.

**Dosing pumps**

Diaphragm or plunger metering pump

**Electric diesel and heating oil pumps**

for refueling the motors of vehicles that are driven with diesel or heating oil of hazard class A III like tractors, agricultural machines and machines for construction work, trucks and motor boats.

**Hoses**

Universal- and special hoses for chemical substances, PVC-hoses, PTFE-hoses, hoses for mineral oil and solvents, tissue-reinforced or conductive, hoses for food.

Please ask for details.

Please require detailed information about the individual product groups of the JESSBERGER delivery program.

Please make a cross next to the requested products and fax or e-mail this page to us with your address.

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