Centrifugal pumps

made of Polypropylene and PVDF for transferring aggressive media like acids and alkalis

- Vertical centrifugal pumps of the series JP-820
- Horizontal centrifugal pumps of the series JP-840

High chemical and thermal resistance
**Vertical centrifugal pumps**

**JP-820**

Especially suitable for high aggressive media like acids and alkalies

These vertical centrifugal pumps are operated by a direct-drive motor (max. 3000 rpm) and have high performance data regarding flow rate (6 to 75 m³/h) and head (7,5 to 38 m). They are especially suitable for a fast transfer of chemicals when emptying containers or tanks.

Centrifugal pumps of series JP-820 will be mainly used for fixed installations while the pump column is immersed directly in the tank. The special construction of these pumps avoids the use of internal mechanical seals (that often have to be replaced) and ensures that any leakages will be collected in the tank. The open impeller allows even continuous pumping of extremely dirty liquids or media containing small solids. The maximum viscosity for these centrifugal pumps is 500 mPas (at 20 °C) and the maximum temperature of the medium 65 °C at PP or 95 °C at PVDF.

The availability of different materials of construction – depending on chemical and thermal resistance of medium or environment – guarantees an absolute reliability of operation as well as a long life time of the pump.

**Technical Data**

Executions in Polypropylene and PVDF

- Standard column lengths in 500, 800, 1000 and 1250 mm
- Flow rates from 6 to 75 m³/h
- Head from 7,5 to 38 m
- Viscosities up to 500 mPas (at 20 °C)
- Temperatures at PP max. 65 °C, at PVDF max. 95 °C
- Three-phase motor, 230/400 Volt, 50 Hz, IP55, F Class, 2-poles, 2900 rpm

**Type** | **Motor size**
--- | ---
JP-820.80 | 0,37 kW
JP-820.90 | 0,55 kW
JP-820.95 | 0,75 kW
JP-820.110 | 1,1 kW
JP-820.120 | 1,5 kW
JP-820.130 | 2,2 kW
JP-820.140 | 3,0 kW
JP-820.150 | 4,0 kW
JP-820.155 | 5,5 kW
JP-820.160 | 7,5 kW
JP-820.180 | 11,0 kW

**Pump principle**

The impeller is connected over the shaft with the direct-drive electric motor. It rotates at a preset speed and produces a centrifugal effect (suction on the inlet and discharge on the outlet).

**Advantages**

- High chemical and thermal resistance
- Robust construction
- Suitability for continuous operation
- Weldless construction and therefore absolute reliability of operation
- Applicability even with extremely dirty liquids or media containing small solids
- Removing of motor even if pump is installed
- Availability of pump also without motor
- Quick and easy maintenance like replacement of bushings
- Inexpensive spare parts

**JP-820.80**

Material of pump tube PP/PVDF

- Max. flow rate 6 m³/h
- Max. head 7,5 m
- Max. viscosity 500 mPas
- Max. diameter for solids 7 mm
- Max. temperature at PP 65 °C, at PVDF 95 °C
- Suction side G 1½” f
- Discharge side G 1” m or DN 25 Flange
- Motor power 0,37 kW
- Dimensions 300 x 220 x 419 + L mm
- Pump tube lengths 250, 500, 800 mm

f = female thread  m = male thread  L = pump tube length
## Vertical centrifugal pumps JP-820

### JP-820.90
- **Material of pump tube**: PP/PVDF
- Max. flow rate: 9 m³/h
- Max. head: 10.5 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 10 mm
- Max. temperature at PP: 65 °C, at PVDF: 95 °C
- Suction side: G 1½” f
- Discharge side: G 1” m or DN 25 Flange
- Motor power: 0.55 kW
- Dimensions: 300 x 220 x 419 + L mm
- Pump tube lengths: 250, 500, 800 mm

### JP-820.95
- **Material of pump tube**: PP/PVDF
- Max. flow rate: 16 m³/h
- Max. head: 14 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 6 mm
- Max. temperature at PP: 65 °C, at PVDF: 95 °C
- Suction side: G 2” m
- Discharge side: G 1½” m or DN 40 Flange
- Motor power: 0.75 kW
- Dimensions: 360 x 300 x 419 + L mm
- Pump tube lengths: 500, 800, 1,000, 1,250 mm

### JP-820.110
- **Material of pump tube**: PP/PVDF
- Max. flow rate: 20 m³/h
- Max. head: 15 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 6 mm
- Max. temperature at PP: 65 °C, at PVDF: 95 °C
- Suction side: G 2” m
- Discharge side: G 1½” m or DN 40 Flange
- Motor power: 1.1 kW
- Dimensions: 360 x 300 x 419 + L mm
- Pump tube lengths: 500, 800, 1,000, 1,250 mm

### JP-820.120
- **Material of pump tube**: PP/PVDF
- Max. flow rate: 25 m³/h
- Max. head: 16 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 6 mm
- Max. temperature at PP: 65 °C, at PVDF: 95 °C
- Suction side: G 2” m
- Discharge side: G 1½” m or DN 40 Flange
- Motor power: 1.5 kW
- Dimensions: 360 x 300 x 446 + L mm
- Pump tube lengths: 500, 800, 1,000, 1,250 mm

### JP-820.130
- **Material of pump tube**: PP/PVDF
- Max. flow rate: 30 m³/h
- Max. head: 20 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 6 mm
- Max. temperature at PP: 65 °C, at PVDF: 95 °C
- Suction side: G 2” m
- Discharge side: G 1½” m or DN 40 Flange
- Motor power: 2.2 kW
- Dimensions: 360 x 300 x 467 + L mm
- Pump tube lengths: 500, 800, 1,000, 1,250 mm

\[ f = \text{female thread} \quad m = \text{male thread} \quad L = \text{pump tube length} \]
Vertical centrifugal pumps JP-820

**JP-820.140**
Material of pump tube PP/PVDF
Max. flow rate 40 m³/h
Max. head 21 m
Max. viscosity 500 mPas
Max. diameter for solids 12 mm
Max. temperature at PP 65 °C, at PVDF 95 °C
Suction side G 2” m
Discharge side G 1½” m or DN 40 Flange
Motor power 3 kW
Dimensions 360 x 300 x 507 + L mm
Pump tube lengths 500, 800, 1,000, 1,250 mm

**JP-820.150**
Material of pump tube PP/PVDF
Max. flow rate 42 m³/h
Max. head 25 m
Max. viscosity 500 mPas
Max. diameter for solids 2 mm
Max. temperature at PP 65 °C, at PVDF 95 °C
Suction side G 2½” f
Discharge side G 2” m or DN 50 Flange
Motor power 4 kW
Dimensions 480 x 380 x 532 + L mm
Pump tube lengths 500, 800, 1,000, 1,250 mm

**JP-820.155**
Material of pump tube PP/PVDF
Max. flow rate 45 m³/h
Max. head 28 m
Max. viscosity 500 mPas
Max. diameter for solids 2 mm
Max. temperature at PP 65 °C, at PVDF 95 °C
Suction side G 2½” f
Discharge side G 2” m or DN 50 Flange
Motor power 5,5 kW
Dimensions 480 x 380 x 682 + L mm
Pump tube lengths 500, 800, 1,000, 1,250 mm

**JP-820.160**
Material of pump tube PP/PVDF
Max. flow rate 55 m³/h
Max. head 32 m
Max. viscosity 500 mPas
Max. diameter for solids 9 mm
Max. temperature at PP 65 °C, at PVDF 95 °C
Suction side G 2½” f
Discharge side G 2” m or DN 50 Flange
Motor power 7,5 kW
Dimensions 480 x 380 x 702 + L mm
Pump tube lengths 500, 800, 1,000, 1,250 mm

**JP-820.180**
Material of pump tube PP/PVDF
Max. flow rate 75 m³/h
Max. head 38 m
Max. viscosity 500 mPas
Max. diameter for solids 11 mm
Max. temperature at PP 65 °C, at PVDF 95 °C
Suction side G 2½” f
Discharge side G 2” m or DN 50 Flange
Motor power 11 kW
Dimensions 480 x 380 x 752 + L mm
Pump tube lengths 500, 800, 1,000, 1,250 mm

f = female thread  m = male thread  L = pump tube length
Horizontal centrifugal pumps JP-840
Especially suitable for high aggressive media like acids and alkalies

Technical data

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Three-phase motor, 230/400 Volt, 50 Hz, IP55, F Class, 2-poles, 2900 rpm

A = Electric motor  E = Discharge side
B = Inspection lantern  F = Suction side (no self priming pumps)
C = Mechanical seal  D = Impeller

TL = Lip seal
TS = Bellow-type seal

Advantages

- High chemical and thermal resistance
- Space saving and robust construction
- Suitability for continuous operation
- Weldless construction and therefore absolute reliability of operation

Sealing via lip seal or bellow type seal
Applicability even with extremely dirty liquids or media containing small solids
Quick and easy maintenance
Inexpensive spare parts

The JP-840 series offers several pump sizes with flow rates from 6 to 75 m³/h and head from 7.2 to 38 m. Their special construction with an open-impeller allows even the pumping of extremely dirty liquids or media containing small solids. The maximum viscosity for these centrifugal pumps is 500 mPas (at 20 °C) and the maximum temperature of the medium 65 °C at PP or 95 °C at PVDF.

Depending on the application there are two versions available with different internal seals (lip seal or bellow-type seal). The availability of different materials of construction – depending on chemical and thermal resistance of medium or environment – guarantees an absolute reliability of operation and a long life time of pump.

Pump principle

The impeller is connected over the shaft with the direct-drive electric motor. It rotates at a preset speed and produces a centrifugal effect (suction on the inlet and discharge on the outlet).
## Horizontal centrifugal pumps JP-840

### JP-840.80
- **Pump housing**: PP/PVDF
- **Max. flow rate**: 6 m³/h
- **Max. head**: 7,2 m
- **Max. viscosity**: 500 mPas
- **Max. diameter for solids**: 5 mm
- **Suction side**: G 1½" f or DN 40 Flange
- **Discharge side**: G 1" m or DN 25 Flange
- **Motor power**: 0,37 kW
- **Lip seal or bellow-type seal**
- **Dimensions**: 328 x 140 x 175 mm
- **Weight**: PP 8,5 kg, PVDF 9,5 kg

### JP-840.100
- **Pump housing**: PP/PVDF
- **Max. flow rate**: 9 m³/h
- **Max. head**: 10,5 m
- **Max. viscosity**: 500 mPas
- **Max. diameter for solids**: 7 mm
- **Suction side**: G 1½" f or DN 40 Flange
- **Discharge side**: G 1" m or DN 25 Flange
- **Motor power**: 0,55 kW
- **Lip seal or bellow-type seal**
- **Dimensions**: 328 x 140 x 175 mm
- **Weight**: PP 8,5 kg, PVDF 9,5 kg

### JP-840.110
- **Pump housing**: PP/PVDF
- **Max. flow rate**: 20 m³/h
- **Max. head**: 15 m
- **Max. viscosity**: 500 mPas
- **Max. diameter for solids**: 2 mm
- **Suction side**: G 2" m or DN 50 Flange
- **Discharge side**: G 1½" m or DN 40 Flange
- **Motor power**: 1,1 kW
- **Lip seal or bellow-type seal**
- **Dimensions**: 406 x 203 x 191 mm
- **Weight**: PP 16 kg, PVDF 17 kg

### JP-840.120
- **Pump housing**: PP/PVDF
- **Max. flow rate**: 25 m³/h
- **Max. head**: 16 m
- **Max. viscosity**: 500 mPas
- **Max. diameter for solids**: 6 mm
- **Suction side**: G 2" m or DN 50 Flange
- **Discharge side**: G 1½" m or DN 40 Flange
- **Motor power**: 1,5 kW
- **Lip seal or bellow-type seal**
- **Dimensions**: 426 x 203 x 210 mm
- **Weight**: PP 20 kg, PVDF 21 kg

### JP-840.130
- **Pump housing**: PP/PVDF
- **Max. flow rate**: 30 m³/h
- **Max. head**: 20 m
- **Max. viscosity**: 500 mPas
- **Max. diameter for solids**: 6 mm
- **Suction side**: G 2" m or DN 50 Flange
- **Discharge side**: G 1½" m or DN 40 Flange
- **Motor power**: 2,2 kW
- **Lip seal or bellow-type seal**
- **Dimensions**: 448 x 203 x 210 mm
- **Weight**: PP 22,5 kg, PVDF 23,5 kg

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**f = female thread  m = male thread  Max. temperature: PP 65 °C/PVDF 95 °C**
### Horizontal centrifugal pumps JP-840

#### JP-840.140
- Pump housing PP/PVDF
- Max. flow rate: 40 m³/h
- Max. head: 21 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 12 mm
- Suction side: G 2” m or DN 50 Flange
- Discharge side: G 1½” m or DN 50 Flange
- Motor power: 3 kW
- Lip seal or bellow-type seal
- Dimensions: 505 x 203 x 227 mm
- Weight: PP 29 kg, PVDF 30 kg

#### JP-840.150
- Pump housing PP/PVDF
- Max. flow rate: 42 m³/h
- Max. head: 25 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 2 mm
- Suction side: G 2½” f or DN 65 Flange
- Discharge side: G 2” m or DN 50 Flange
- Motor power: 4 kW
- Lip seal or bellow-type seal
- Dimensions: 527 x 275 x 300 mm
- Weight: PP 44 kg, PVDF 47 kg

#### JP-840.155
- Pump housing PP/PVDF
- Max. flow rate: 45 m³/h
- Max. head: 28 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 3 mm
- Suction side: G 2½” f or DN 65 Flange
- Discharge side: G 2” m or DN 50 Flange
- Motor power: 5.5 kW
- Lip seal or bellow-type seal
- Dimensions: 619 x 300 x 312 mm
- Weight: PP 60 kg, PVDF 63 kg

#### JP-840.160
- Pump housing PP/PVDF
- Max. flow rate: 55 m³/h
- Max. head: 32 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 9 mm
- Suction side: G 2½” f or DN 65 Flange
- Discharge side: G 2” m or DN 50 Flange
- Motor power: 7.5 kW
- Lip seal or bellow-type seal
- Dimensions: 645 x 300 x 310 mm
- Weight: PP 70 kg, PVDF 73 kg

#### JP-840.180
- Pump housing PP/PVDF
- Max. flow rate: 75 m³/h
- Max. head: 38 m
- Max. viscosity: 500 mPas
- Max. diameter for solids: 9 mm
- Suction side: G 2½” f or DN 65 Flange
- Discharge side: G 2” m or DN 50 Flange
- Motor power: 11 kW
- Lip seal or bellow-type seal
- Dimensions: 695 x 300 x 310 mm
- Weight: PP 96 kg, PVDF 99 kg

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**Notes:**
- f = female thread  m = male thread
- Max. temperature: PP 65 °C/PVDF 95 °C
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. Seal-less 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 fibre 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

Please contact:

**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 and pneumatic driven drum and container pumps**

**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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