# Drum and container pumps

- With electric or air operated motor
- Pump tubes, depending on medium: Polypropylene (for acids and alkalies), PVDF (for highly aggressive media), Aluminium (for mineral oil products), Stainless steel 316Ti (for flammable media and food)
- Comprehensive range of accessories like adapters, flowmeters, hoses and nozzles











ATEX 2014/34/EC



Proofed Quality

# Decades of experience in barrel pump business

The family-run company JESSBERGER headquartered in Ottobrunn near Munich is manufacturer of electric and pneumatic driven drum and container pumps, vertical and horizontal eccentric screw pumps, dosing pumps for high viscous media, hand operated pumps and a comprehensive range of accessories like flowmeters, nozzles, etc.

Air operated diaphragm pumps, horizontal

centrifugal pumps (also available as magnetically coupled sealless centrifugal pumps) and vertical centrifugal pumps complete the delivery program beside further industrial pumps.

Due to long time employees and the firm owners the company can look back on a long and substantial experience in pump business. Although the name JESSBERGER exists as a firm name in drum pump business only since beginning 2003 the company has developed within a short time to a real alternative. The intention was to set new standards in price at

The good reputation of JESSBERGER in drum pump business is a result of a personal, expert advice through our employees, a maximum flexibility in all areas of the company and a direct contact to the customers.

The company owners have set themselves the goal of having a very close and personal contact to their customers – not only by exhibiting on many trade shows each year. Furthermore they want to demonstrate their flexibility that is based on a clear arranged company structure at delivery times and special customers' requests.

Qualified partners in Germany, Europe and all over the world complete this concept and guarantee a nearly optimized customer support.

The company leadership and the technical management attach the greatest importance to a strict quality control. The complete pro-





- Owner operated family company
- Decades of experience in drum pump business
- Quality made in Germany
- Optimal price/performance ratio
- Personal and expert advice, the best possible customer service
- Maximum flexibility in all company divisions
- Certified acc. to ISO 9001:2015 and ATEX 2014/34/EC

coexisting highest quality - what was succeeded impressively.

Since March 2008 the pump manufacturer has its new head office in Ottobrunn. In February 2018, the available industrial area more than doubled due to the acquisition of the neighboring building. More than 900 sqm production/stock and 700 sqm office will ensure a further sustained economic growth and the possibility to fullfill special customers' requests. The construction and production of the eccentric screw pumps occurs at a second facility in Upper Bavaria.

duction and assembling area is organized in accordance to the quality management system DIN EN ISO 9001:2015 and for the Stainless steel pump tubes, the electric Ex-motors JP-400, 440, 460, 480, the air operated motors JP-AIR 1, JP-AIR 2 and JP-AIR 3 and some eccentric screw pumps in accordance to ATEX 2014/34/EC (explosion prevention and protection).

Annual external and internal inspection audits assure the compliance with these regulations and ensure the high quality standards. This pronounced awareness of quality and the experience for decades in drum pump business guarantee a high quality of the pumps at a very attractive price.

Convince yourself of the advantages of JESSBERGER and the quality made in Germany.



# The various pump tube materials and their applications range in the overview

# Pump tubes made of Polypropylene (PP)

are suitable for neutral, aggressive and hardly combustible liquids. They are used specifically for pumping aggressive chemicals such as acids, alkalies or detergents.

**Drive shaft:** Stainless steel 316Ti or Hastelloy 2.4610

Media temperature: max. 50 °C

Media: Formic acid (50%), ammonia, boric acid, distilled water, liquid fertilizers, ferric-II and III-chloride, acetic acid (80%), photo developers, fruit acids, potassium hydroxide, copper chloride, lactic acid, sodium hydroxide, phosphoric acid, hydrochloric acid, sulfuric acid (up to 90%), hydrogen peroxide, citric acid and many other media.

# Pump tubes made of Stainless steel 316Ti (SS)

are used for all neutral, lightly aggressive liquids such as diluted acids, alkalies or detergents and thin fluid food. In addition the pump tubes provide a special safety for conveying or transferring flammable liquids of different hazard classes (up to temperature class 4) in the Ex zone 0 and when pumping low-viscous neutral or lightly aggressive media in Ex zones 1 and 2.

**Drive shaft:** Stainless steel 316Ti **Media temperature:** 

max. 90 °C (with PTFE rotor), max. 120 °C (with rotor made of Stainless steel solid material)

Media: Acetone, alcohol, ammonia, gasoline, flammable solvents, potassium hydroxide, sodium hydroxide nitrocellulose lacquers, perchlorethylene, phosphoric acid, sulfuric acid (up to 7.5% and over 90%), trichlorethylene, toluene.

In addition the Stainless steel pump tubes are suitable for pumping thin fluid food such as fruit juices, milk, edible oils and for all media that are mentioned at Aluminium tubes.

We will be pleased to advice you regarding chemical resistance.

Please ask us.

# Pump tubes made of Polyvinylidenfluorid (PVDF)

are especially suitable for highly aggressive liquids such as concentrated acids and bases.

**Drive shaft:** Hastelloy 2.4610 **Media temperature:** max. 90 °C **Media:** Hydrobromic acid, perchloric acid,

chromic acid, hydrofluoric acid, sodium hypochlorite, nitric acid and sulfuric acid (> 90%).

Also all media that are listed at the pump tubes made of Polypropylene can be handled.

# Pump tubes made of Aluminium (ALU)

are suitable for neutral and hardly combustible liquids. With these pump tubes particularly mineral oil products up to a maximum viscosity of 1.000 mPas will be transferred.

Drive shaft: Stainless steel 316Ti Media temperature: max. 90 °C Media: Drilling emulsions, diesel, liquid wax, liquid soap, gear oils, heating oil, hydraulic oils, machine oils, mineral oils and motor oils.









Model	Electric laboratory pump JP-120/140 with laboratory
	pump tube (25-32 mm)

Light, handy electric laboratory pump suitable for pumping small quantities of acids, alkalies and many other thin-fluid, non flammable media from small-opening vessels.

Air operated laboratory pump JP-Air 1 with laboratory pump tube (25-32 mm) Electric drum pump JP-120/140 with pump tube (41 mm)

Light, handy pneumatic laboratory pump suitable for pumping small quantities of acids, alkalies and many other thin-fluid, non flammable media from small-opening

The light, handy and powerful drum pump is suitable for many thin-fluid liquids, neutral, aggressive and non flammable media.

#### Electric universal motor **Motor** JP-120/140

Protection type IP 24, double insulated, protection class II, overcurrent circuit switch with low voltage release, thermal protection, 5 m cable with plug. Speed control as an option

Air operated motor JP-Air 1

With silencer and brass ball valve for dosing the compressed air. This controls the motor speed and varies the flow rate.

Electric universal motor JP-120/140

Protection type IP 24, double insulated, protection class II, overcurrent circuit switch with low voltage release, thermal protection, 5 m cable with plug. Speed control as an option.

Performance

**Technical** 

details

**Description** 

JP-120: 250 W JP-140: 450 W

300 W at max. 6 bar operating pressure

JP-120: 250 W JP-140: 450 W

Voltage/Power

230 or 115 V, 50/60 Hz

Laboratory pump tube

Compressed air (air consumption 13 l/sec. under load)

PP/PVDF/Stainless steel (no ATEX)

230 or 115 V, 50/60 Hz

Pump tube 41 mm

#### **Pump tube** Material \* \* \*

## PP/PVDF/Stainless steel 700/1.000/1.200 mm

Special lengths on request

700/1.000/1.200 mm Special lengths on request

Laboratory pump tube

700-3.000 mm Plastic up to 2.000 mm Special lengths on request

Pump tube diameter

Pump tube length\*\*

PP: 25, 28, 32 mm/PVDF: 32 mm/ Stainless steel: 28, 32 mm PP 25: 1/2", PP 28/32: 3/4",

PP: 25, 28, 32 mm/PVDF: 32 mm/ Stainless steel: 28, 32 mm

41 mm

Hose connection

Flow rate\*

PVDF 32: 3/4", SS 28: 3/4", SS 32: 1"

PP 25: 1/2", PP 28/32: 3/4", PVDF 32: 3/4", SS 28: 3/4", SS 32: 1"

1" (as standard, other sizes on request)

PP/PVDF/Aluminium/Stainless steel

Ø 25 mm up to 20 l/min (Rotor)

Ø 28 mm up to 35 l/min (Rotor) Ø 32 mm up to 40 l/min (Rotor) Ø 25 mm up to 23 l/min (Rotor)

Ø 28 mm up to 40 l/min (Rotor)

Ø 32 mm up to 49 l/min (Rotor)

Ø 25 mm up to 18 l/min (Rotor) Ø 28 mm up to 33 l/min (Rotor) Ø 32 mm up to 42 l/min (Rotor) up to 71 I/min (Rotor) up to 55 I/min (Impeller)

up to 87 I/min (Rotor) up to 70 I/min (Impeller)

#### JP-120:

Ø 25 mm up to 5 m (Rotor) Ø 28 mm up to 7 m (Rotor) Ø 32 mm up to 7 m (Rotor) JP-140:

Ø 25 mm up to 7 m (Rotor) Ø 28 mm up to 9 m (Rotor) Ø 32 mm up to 10 m (Rotor) Ø 25 mm up to 5 m (Rotor) Ø 28 mm up to 6 m (Rotor) Ø 32 mm up to 8 m (Rotor) JP-120: up to 7 m (Rotor) up to 16 m (Impeller) JP-140:

up to 10 m (Rotor) up to 23 m (Impeller)

Viscosity/ Density'

Head\*

JP-120: up to 200 mPas/1,2 JP-140: up to 400 mPas/1,3

up to 400 mPas/1,3

JP-120: up to 200 mPas/1,2 JP-140: up to 400 mPas/1,3









#### **Electric drum pump** JP-160/180/280 with pump tube (41 mm)

Handy, robust drum pump with high performance for pumping thin-fluid (JP-160) to medium viscous, neutral, aggressive and non flammable media.

#### **Electric drum pump** JP-164 (24 Volt, DC) with pump tube (41 mm)

The drum pump is a compactly built, not explosion-proof pump that has proven itself for lightly viscous media as diesel in agricultural field and at fire brigades for foaming

#### Electric drum pump JP-360/380 with pump tube (41 mm)

Robust drum pump with powerful motor for pumping thin-fluid to medium viscous, neutral, aggressive and non flammable media.

## Electric drum pump Pump tube (41 mm)

Robust, explosion-proof drum pump with powerful motor for transferring high flammable media and for use in potential explosive environments.

#### Electric universal motor JP-160/180/280

Protection type IP 24, double insulated, protection class II, overcurrent circuit switch with low voltage release, 5 m cable with plua.

Speed control as an option.

JP-160: 460 W JP-180: 640 W JP-280: 825 W

JP-160: 230 V, 50/60 Hz JP-180: 230 or 115 V, 50/60 Hz JP-280: 230 or 115 V, 50/60 Hz

#### Electric universal motor JP-164

Protection type IP 24, double insulated, protection class II, overload protection, 5 m cable with battery clamps.

#### Electric universal motor JP-360/380

Protection type IP 55, with integrated low voltage release and integrated speed control, 5 m cable with plug.

Protection type II 2G Ex de IIA T6, IP 54, double insulated, protection class II, overload protection switch with integrated low voltage release, 5 m cable without plug. Optional with Ex-plug.

400 W

24 V DC

JP-380: 825 W

230 V, 50/60 Hz

JP-360: 640 W

550 W

230 V, 50/60 Hz

#### Pump tube 41 mm

PP/PVDF/Aluminium/Stainless steel 700-3.000 mm

Plastic up to 2.000 mm Special lengths on request

1" (as standard, other sizes on request)

#### Pump tube 41 mm

700-3.000 mm

PP/PVDF/Aluminium/Stainless steel

Plastic up to 2.000 mm Special lengths on request

41 mm

1" (as standard, other sizes on request)

#### Pump tube 41 mm

PP/PVDF/Aluminium/Stainless steel

700-3.000 mm Plastic up to 2.000 mm Special lengths on request

41 mm

1" (as standard, other sizes on request)

#### Pump tube 41 mm

Stainless steel

700-3.000 mm Special lengths on request

41 mm

1" (as standard, other sizes on request)

41 mm

up to 82 I/min (Rotor) up to 61 I/min (Impeller)

up to 93 I/min (Rotor) up to 74 I/min (Impeller)

up to 112 I/min (Rotor) up to 83 I/min (Impeller)

up to 66 I/min (Rotor) up to 55 I/min (Impeller)

up to 93 I/min (Rotor) up to 74 I/min (Impeller)

up to 112 I/min (Rotor) up to 83 I/min (Impeller) up to 97 I/min (Rotor) up to 71 I/min (Impeller)

#### JP-160:

up to 9 m (Rotor) up to 20 m (Impeller) JP-180:

up to 11 m (Rotor) up to 26 m (Impeller) JP-280:

up to 37 m (Impeller)

up to 16 m (Rotor)

JP-160: up to 400 mPas/1,3 180: up to 600 mPas/1,5 JP-280: up to 1.000 mPas/1,9

up to 300 mPas/1,3

up to 7,5 m (Rotor)

up to 15 m (Impeller)

#### **JP-360:** up to 11 m (Rotor)

up to 26 m (Impeller) JP-380: up to 16 m (Rotor)

up to 37 m (Impeller)

JP-360: up to 600 mPas/1,5 JP-380: up to 1.000 mPas/1,9 up to 11 m (Rotor) up to 20 m (Impeller)

up to 600 mPas/1,5

# Electric drum pumps and air operated pumps

#### Electric drum pump JP-440/460/480 with pump tube (41 mm)

Robust, explosion-proof drum pump with powerful motor for transferring high flammable media and for use in potential explosive environments.

#### Electric universal motor JP-440/460/480

Protection type II 2G Ex db IIC T6 Gb, IP 55, with integrated low voltage release, 5 m cable without plug. Optional with Ex-plug.

JP-440: 400 W JP-460: 640 W JP-480: 825 W

230 or 115 V, 50/60 Hz

#### Pump tube 41 mm

Stainless steel

700-3.000 mm Special lengths on request

Ø 41 mm

1" (as standard, other sizes on request)

JP-440:

up to 82 I/min (Rotor) up to 61 I/min (Impeller)

up to 93 I/min (Rotor) up to 74 I/min (Impeller)

up to 112 I/min (Rotor) up to 83 I/min (Impeller)

JP-440:

up to 9 m (Rotor) up to 20 m (Impeller) JP-460:

up to 11 m (Rotor) up to 26 m (Impeller) **JP-480** 

up to 16 m (Rotor) up to 37 m (Impeller)

JP-440: up to 400 mPas/1.3 460: up to 600 mPas/1,5 JP-480: up to 1.000 mPas/1,9

Air operated drum pump pump tube (41 mm)

Light and powerful air operated pump for different thin-fluid and medium viscous media. The air operated motors and Stainless steel pump tubes offer high safety at flammable media.

Max. 6 bar operating pressure, Ex 2GD c IIC T6 (80 °C) X, with silencer and brass ball valve for dosing the compressed air. This controls the motor speed and varies the flow rate.

300 W at max. 6 bar operating pressure

Compressed air (air consumption 13 l/sec. under load)

#### Pump tube 41 mm

Stainless steel, at PP, PVDF, ALU pump tubes no Ex protection

700-3.000 mm Special lengths on request

Ø 41 mm

1" (as standard, other sizes on request)

up to 78 I/min (Rotor)

up to 60 I/min (Impeller)

up to 9 m (Rotor)

up to 13 m (Impeller)

up to 400 mPas/1,3

## Air operated drum pump pump tube (41 mm)

Light and powerful air operated pump for different thin-fluid and medium viscous media. The air operated motors and Stainless steel pump tubes offer high safety at flammable media.

#### Air operated motor JP-Air 2

Max. 6 bar operating pressure, Ex 2 GD c IIC T6 (80 °C) X. Motor with silencer. The speed can be regulated at customer site via a ball valve. At the motor handle is an on/off button that can be fixed through a rotational movement.

600 W at max. 6 bar operating pressure

Compressed air (air consumption 15 l/sec. under load)

#### Pump tube 41 mm

Stainless steel, at PP, PVDF, ALU pump tubes no Ex protection

700-3.000 mm Special lengths on request

Ø 41 mm

1" (as standard, other sizes on request)

up to 80 I/min (Rotor) up to 66 I/min (Impeller)

up to 10 m (Rotor)

up to 15 m (Impeller)

# pump tube (41 mm)

Air operated drum pump

Light and powerful air operated pump for different thin-fluid and medium viscous media. The air operated motors and Stainless steel pump tubes offer high safety at flammable media.

## JP-Air 3

Max. 6 bar operating pressure, Ex 2 GD c IIC T6 (80 °C) X, motor with Stainless steel housing and a ball valve at the air inlet for dosing the compressed air. This controls the motor speed and varies the flow rate.

400 W at max. 6 bar operating pressure

Compressed air (air consumption 12 l/sec. under load)

#### Pump tube 41 mm

Stainless steel, at PP, PVDF, ALU pump tubes no Ex protection

700-3.000 mm Special lengths on request

Ø 41 mm

1" (as standard, other sizes on request)

up to 91 I/min (Rotor) up to 71 I/min (Impeller)

up to 13 m (Rotor) up to 25 m (Impeller)

up to 600 mPas/1,5 up to 600 mPas/1,5



#### **Adapters**

















Drum adapters made of Polypropylene or Stainless steel (with male thread connection 2", suitable for 60 and 200 liter steel drums)

Emission proof drum adapters (with male thread connection 2", FKM-seals prevent emission of harmful gases and vapours out of drums and containers. A vacuum in drum is equalized by a valve.)

#### **Thread adapters**

for equalization of different threads at plastic canisters and plastic drums

#### Safety clamp

made of tool steel for fixing a drum pump in open containers or drums

#### **IBC** adapters

for openings with a diameter of 150 or 225 mm

#### Hoses













#### **PVC** hose

Conductive universal chemical- and solvent hose, made of EPDM

Conductive multi purpose chemical hose, made of PE

PTFE hoses, mineral oil hoses, food hoses

Special hoses on request

**Hose connectors** 

#### Hand nozzles



Hand nozzles made of Polypropylene, PVDF, Aluminium, Brass nickel plated or Stainless steel for a safe filling and dosing Automatic nozzles for diesel, gasoline or AdBlue

#### Further range of accessories













Strainers made of PVDF, Polypropylene and Stainless steel

**Discharge arcs** 

Wall hanger

Bonding ground set (necessary if pumping flammable media)

Special plugs and sockets

Maintenance units for air motors and air driven pumps

are lightweight and handy devices for almost all low-viscous media.

JP-03 pump made of PP, shaft made of tool steel, seals made of NBR, suitable for oils, diesel, alcohol up to 50%, anti freezing liquid (diluted), water, etc.

JP-04 pump and shaft made of PP, seals depending on medium: FKM (acids), EPDM (alkalies), NBR (oils) and Fluoropolymer (low-viscous food).

JP-05 pump made of Stainless steel 316Ti, seals made of PTFE, suitable for flammable media like solvents and lowviscous food.

JP-07 pump made of PP, internal parts also made of Stainless steel, seals depending on medium: FKM (lightly acids), EPDM (alkalies) and NBR (mineral oil products).

Air-operated diaphragm pumps

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 from 5 l/min up to 1.050 l/min.



Sealless magnetic driven pumps

Various sizes, state-of-the-art construction, sealless and environmentally friendly, suitable for a variety of uses. Smooth and quiet operation, long operating time, easy to maintain.



Vertical centrifugal pumps

Executions in Polypropylene and PVDF

Horizontal centrifugal pumps

Executions in Polypropylene and PVDF



 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 316Ti, stators are available in NBR, NBR light, FKM, EPDM, EPDM light or PTFE.



JP-04

JP-03

JP-05

JP-07

Mixers and agitators

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

Dosing pumps

Diaphragm or plunger metering pump.



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.

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

PVC hoses, conductive universal-chemical and solvent hoses made of EPDM, conductive multipurpose-chemical hoses made of PE, PTFE hoses, mineral oil hoses, food hoses, special hoses on request.

Please require detailed information about the individual product groups of the JESSBERGER

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



Low-viscous up to lightly viscous media can be filled fast and exact enough out of drum and containers in manually supplied bottles and canisters at the push of a button.



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