

# **Drum Pumps**

# DRUM AND CONTAINER PUMPS WITH ELECTRIC OR AIR OPERATED MOTORS

PUMP TUBE SELECTION GUIDE

### **Polypropylene Pump Tube:**

For aggressive media such as acids, alkalis and detergents. Maximum operating temperature 50°C.

### **PVDF Pump Tube:**

For highly aggressive media such as chlorine bleach, chromic acid, hydrochloric acid, nitric acid and sulfuric acid > 90%. Maximum operating temperature 90°C.

### Aluminium Pump Tube:

For mineral oil products such as diesel, heating oil, hydraulic oils, gear oils, engine oils, mineral oils and motor oils up to 1,000 mPas.

## Stainless Steel 316 Ti Pump Tube:

For neutral, mild aggressive media and specifically for low flammable media and food.

### Please consult us on chemical resistance.

•The flow rate of the pump initially depends on the speed of the motor and then the power of the motor.

• Explosion proof drum pumps with the necessary accessories are available for use with flammable media and in hazardous environments.

ATEX approval is needed for electric and air operated engines and pumps tubes of conductive stainless steel.

\*A potential equalization is mandatory when pumping flammable media.

# **OVERVIEW OF DRUM PUMP MOTOR ADVANTAGES**

- Universal electric motors of 230volts, 115volts and 24volts with different performance and protection classes.
- Air operated motors of up to maximum 6 bar operating pressure.
- Pump tubes made of polypropylene, PVDF, aluminum or stainless steel 1.4571.
- JESSBERGER universal motors work on all pump tubes outside hazardous environment; are lightweight, handy and powerful devices for almost all thin fluid and low viscous media.
- Both non-stationary and stationary applicable pump motors are particularly suitable for intermittent operations.
- The sophisticated and technically clear structure of the drum pump ensures a rational and safe use.
- Quick disconnection of the drive from pump tube through a few rotations enable the combination of an engine with various pump tubes for different media.
- Wide ranges of accessories, such as drum and threaded adapters, media resistant hoses, nozzles, wall hanger or flow meter are available on request.
- Easy disassembling and quick cleaning of the pump tubes.



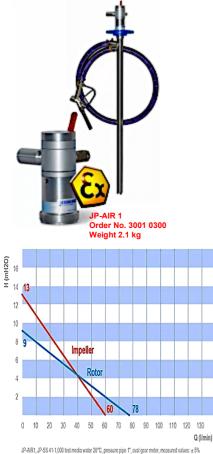
man



controlled electronically via a knob on the handle. This enables the adjustment of the flow



# **EXPLOSION PROOF AIR OPERATED MOTORS FOR DRUM PUMPS**



### MOTOR (WITHOUT PUMP TUBE)

ATX 2014/34/EC Meet Ex 2 GD c IIC T6 (80°C) explosion protection Certified IBEX U05 ATEX B007 X 300W at 6 bar operating pressure Air consumption under load 13 L/sec

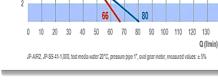
### Operating data JP-AIR 1

Flow rate (with hose and oval gear meter)	Ø 41 mm up to 78 L/min (Rotor) Ø 41 mm up to 60 L/min (Impeller)
Head	Ø 41 mm up to 9 m (Rotor) Ø 41 mm up to 13 m (Impeller)
Viscosity	up to 400 mPas
Density	up to 1.3
Flash point (media)	below 55°C

\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm$  5%.

This air operated motor comes with a silencer and a ball valve at the air inlet for controlling the compressed air and thereby the motor speed.





Rotor

#### MOTOR (WITHOUT PUMP TUBE)

H (mH2O)

16 15

14

12

10

8

6

4

10

ATX 2014/34/EC Meet Ex 2 GD c IIC T6 (80°C) explosion protection Certified IBEX U05 ATEX B007 X

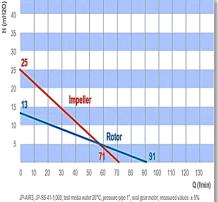
600W at 6 bar operating pressure Air consumption under load 15 L/sec

Operating data JP-AIF Flow rate (with hose and oval gear meter)	R 1 Ø 41 mm up to 80 L/min (Rotor) Ø 41 mm up to 66 L/min (Impeller)	
Head	Ø 41 mm up to 10 m (Rotor) Ø 41 mm up to 15 m (Impeller)	
Viscosity	up to 600 mPas	
Density	up to 1.5	
Flash point (media)	below 55°C	
* Test media water @ 2000, pressure pine 1" aval appr		

 $^{\star}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ± 5%.

This air operated motor comes with a silencer and a ball valve at the air inlet for controlling the compressed air and thereby the motor speed.





### MOTOR (WITHOUT PUMP TUBE)

ATX 2014/34/EC Meet Ex 2 GD c IIC T6 (80°C) explosion protection Certified IBEX U05 ATEX B007 X 400W at 6 bar operating pressure Air consumption under load 12 L/sec

### Operating data JP-AIR 1

Flow rate (with hose and oval gear meter)	Ø 41 mm up to 91 L/min (Rotor) Ø 41 mm up to 71 L/min (Impeller)
Head	Ø 41 mm up to 13 m (Rotor) Ø 41 mm up to 25 m (Impeller)
Viscosity	up to 600 mPas
Density	up to 1.5
Flash point (media)	below 55°C

\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm$  5%.

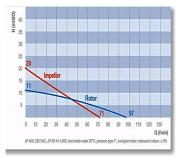
This air operated motor comes with 2 silencers and a ball valve at the air inlet for controlling the compressed air and thereby the motor speed.

## **\*NOTE:**

# Pump Tube Used With The Motor Has To Meet ATEX 2014/34/EC Approval

# **EXPLOSION PROOF** ELECTRIC OPERATED UNIVERSAL MOTORS FOR DRUM PUMPS





#### MOTOR (WITHOUT PUMP TUBE) ATX 100a (94/9/EC) Meet class II 2G Ex de IIA T6. IP54 Certified ZELM 09 ATEX 0425 X

Operating data JP-400 Flow rate (with hose and oval gear meter) Ø 41 mm up to 97 L/min (Rotor) Ø 41 mm up to 71 L/min (Impeller)

Head Ø 41 mm up to 11 m (Rotor) Ø 41 mm up to 20 m (Impeller)

Viscosity Up to 600 mPas

Density Up to 1.5

Flash point (media) Below 55°C

 $^{\ast}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm 5\%.$ 

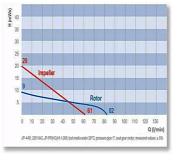
Pump Version

Without LVR 230V, 50Hz, 550W Order No. 1400 2300

With LVR 230V, 50Hz, 550W Order No. 1400 2301

LVR (Low Voltage Release)





MOTOR (WITHOUT PUMP TUBE) Meet class II 2G Ex db. IIC T6 Gb. IP55 Certified Bureau Veritas 17 ATEX 1 088 X And IECEx EPS 17.0045 X

Operating data JP-440 Flow rate (with hose and oval gear meter) Ø 41 mm up to 82 L/min (Rotor) Ø 41 mm up to 61 L/min (Impeller)

Head Ø 41 mm up to 9 m (Rotor) Ø 41 mm up to 20 m (Impeller)

Viscosity Up to 400 mPas

Density Up to 1.3

Flash point (media) Below 55°C

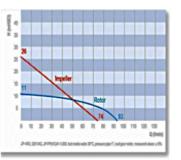
\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

Pump Version Without LVR 115V, 60Hz, 460W Order No. 1440 1150 Without LVR 230V, 50Hz, 55W Order No. 1400 2300

With LVR 115V, 60Hz, 460W Order No. 1440 1151 With LVR 230V, 50Hz, 55W Order No. 1440 2301

LVR (Low Voltage Release)





MOTOR (WITHOUT PUMP TUBE) Meet class II 2G Ex db. IIC T6 Gb. IP55 Certified Bureau Veritas 17 ATEX 1 088 X and IECEx EPS 17.0045 X

Operating data JP-460

Flow rate (with hose and oval gear meter) Ø 41 mm up to 93 L/min (Rotor) Ø 41 mm up to 74 L/min (Impeller)

Head Ø 41 mm up to 11 m (Rotor) Ø 41 mm up to 26 m (Impeller)

Viscosity Up to 600 mPas

Density Up to 1.5

Flash point (media) Below 55°C

 $^{\ast}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm 5\%.$ 

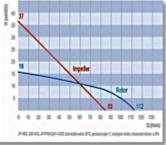
### Pump Version

Without LVR 115V, 60Hz, 640W Order No. 1460 1150 Without LVR 230V, 50Hz, 640W Order No. 1460 2300

With LVR 115V, 60Hz, 640W Order No. 1460 1151 With LVR 230V, 50Hz, 640W Order No. 1460 2301

LVR (Low Voltage Release)





#### MOTOR (WITHOUT PUMP TUBE) Meet class II 2G Ex db. IIC T6 Gb. IP55 Certified Bureau Veritas 17 ATEX 1 088 X and IECEx EPS 17.0045 X

Operating data JP-480

Flow rate (with hose and oval gear meter) Ø 41 mm up to 112 L/min (Rotor) Ø 41 mm up to 83 L/min (Impeller)

Head Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller)

Viscosity Up to 1000 mPas

Density Up to 1.9

Flash point (media) Below 55°C

 $^{\star}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm 5\%.$ 

### Pump Version

Without LVR 115V, 60Hz, 825W Order No. 1480 1150 Without LVR 230V, 50Hz, 825W Order No. 1480 2300

With LVR 115V, 60Hz, 825W Order No. 1480 1151 With LVR 230V, 50Hz, 825W Order No. 1480 2301

LVR (Low Voltage Release)

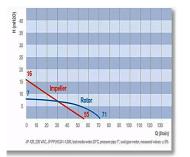
# \*NOTE:

# Pump Tube Used With The Motor Has To Meet ATEX 2014/34/EC Approval

# NON-EXPLOSION PROOF ELECTRIC OPERATED UNIVERSAL MOTORS FOR DRUM PUMPS



Weight 2 kg



### MOTOR (WITHOUT PUMP TUBE) ELECTRONIC SPEED CONTROL (Optional)

Operating data JP-120 Flow rate (with hose and oval gear meter) Ø 41 mm up to 71 L/min (Rotor) Ø 41 mm up to 55 L/min (Impeller)

Head Ø 41 mm up to 7 m (Rotor) Ø 41 mm up to 16 m (Impeller)

Viscosity Up to 200 mPas

Density Up to 1.2

 $^{\star}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm 5\%.$ 

#### **Pump Version**

Without LVR 115V, 60Hz, 250W, IP 24 Order No. 1120 1150 Without LVR 230V, 50Hz, 250W, IP 24 Order No. 1120 2300

With LVR 115V, 60Hz, 250W, IP 24 Order No. 1120 1151 With LVR 230V, 50Hz, 250W, IP 24 Order No. 1120 2301

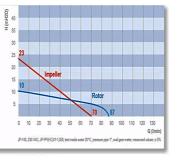
Without LVR + SC 115V, 60Hz, 250W, IP24 Order No. 1120 1152 Without LVR + SC 230V, 50Hz, 250W, IP 24 Order No. 1120 2302

With LVR + SC 115V, 60Hz, 250W, IP 24 Order No. 1120 1153 With LVR + SC 230V, 50Hz, 250W, IP 24 Order No. 1120 2303

LVR (Low Voltage Release)



Weight 2.3 kg



### MOTOR (WITHOUT PUMP TUBE) ELECTRONIC SPEED CONTROL (Optional)

Operating data JP-140 Flow rate (with hose and oval gear meter) Ø 41 mm up to 87 L/min (Rotor) Ø 41 mm up to 70 L/min (Impeller)

Head Ø 41 mm up to 10 m (Rotor) Ø 41 mm up to 23 m (Impeller)

Viscosity Up to 400 mPas

Density Up to 1.3

\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

#### Pump Version

Without LVR 115V, 60Hz, 450W, IP 24 Order No. 1140 1150 Without LVR 230V, 50Hz, 450W, IP 24 Order No. 1140 2300

With LVR 115V, 60Hz, 450W, IP 24 Order No. 1140 1151 With LVR 230V, 50Hz, 450W, IP 24 Order No. 1120 2301

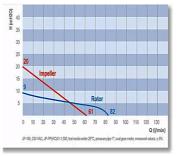
Without LVR + SC 115V, 60Hz, 450W, IP 24 Order No. 1140 1152 Without LVR + SC 230V, 50Hz, 450W, IP 24 Order No. 1140 2302

With LVR + SC 115V, 60Hz, 450W, IP 24 Order No. 1140 1153 With LVR + SC 230V, 50Hz, 450W, IP 24 Order No. 1140 2303

LVR (Low Voltage Release)



Weight 2.9 kg



### MOTOR (WITHOUT PUMP TUBE) ELECTRONIC SPEED CONTROL (Optional)

Operating data JP-160 Flow rate (with hose and oval gear meter) Ø 41 mm up to 82 L/min (Rotor) Ø 41 mm up to 61 L/min (Impeller)

Head Ø 41 mm up to 9 m (Rotor) Ø 41 mm up to 20 m (Impeller)

Viscosity Up to 400 mPas

Density Up to 1.3

 $^{\ast}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm 5\%.$ 

Pump Version Without LVR 115V, 60Hz, 460W, IP 24 Order No. 1160 1150 Without LVR 230V, 50Hz, 460W, IP 24 Order No. 1160 2300

With LVR 115V, 60Hz, 460W, IP 24 Order No. 1160 1151 With LVR 230V, 50Hz, 460W, IP 24 Order No. 1160 2301

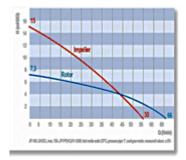
Without LVR + SC 115V, 60Hz, 460W, IP 24 Order No. 1160 1152 Without LVR + SC 230V, 50Hz, 460W, IP 24 Order No. 1160 2302

With LVR + SC 115V, 60Hz, 460W, IP 24 Order No. 1160 1153 With LVR + SC 230V, 50Hz, 460W, IP 24 Order No. 1160 2303

LVR (Low Voltage Release)



Weight 2.9 kg



### MOTOR (WITHOUT PUMP TUBE)

Operating data JP-164 Flow rate (with hose and oval gear meter) Ø 41 mm up to 66 L/min (Rotor) Ø 41 mm up to 55 L/min (Impeller)

Head Ø 41 mm up to 7.5 m (Rotor) Ø 41 mm up to 15 m (Impeller)

Viscosity Up to 300 mPas

Density Up to 1.3

\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

### Pump Version

24V DC, 400W Order No. 1164 0240

# NON-EXPLOSION PROOF ELECTRIC OPERATED UNIVERSAL MOTORS FOR DRUM PUMPS



#### MOTOR (WITHOUT PUMP TUBE) ELECTRONIC SPEED CONTROL (Optional)

Operating data JP-180 Flow rate (with hose and oval gear meter) Ø 41 mm up to 93 L/min (Rotor) Ø 41 mm up to 74 L/min (Impeller)

Head Ø 41 mm up to 11 m (Rotor) Ø 41 mm up to 26 m (Impeller)

Viscosity Up to 600 mPas

Density Up to 1.5

 $^{\star}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm 5\%.$ 

### Pump Version

Without LVR 115V, 60Hz, 640W, IP 24 Order No. 1180 1150 Without LVR 230V, 50Hz, 640W, IP 24 Order No. 1180 2300

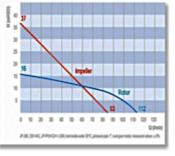
With LVR 115V, 60Hz, 640W, IP 24 Order No. 1180 1151 With LVR 230V, 50Hz, 640W, IP 24 Order No. 1180 2301

Without LVR + SC 115V, 60Hz, 640W, IP24 Order No. 1180 1152 Without LVR + SC 230V, 50Hz, 460W, IP 24 Order No. 1180 2302

With LVR + SC 115V, 60Hz, 460W, IP 24 Order No. 1180 1153 With LVR + SC 230V, 50Hz, 460W, IP 24 Order No. 1180 2303

LVR (Low Voltage Release)





### MOTOR (WITHOUT PUMP TUBE) ELECTRONIC SPEED CONTROL (Optional)

Operating data JP-280 Flow rate (with hose and oval gear meter) Ø 41 mm up to 112 L/min (Rotor) Ø 41 mm up to 83 L/min (Impeller)

Head Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller)

Viscosity Up to 1,000 mPas

Density Up to 1.9

 $^{\ast}$  Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values  $\pm 5\%.$ 

### Pump Version

Without LVR 115V, 60Hz, 825W, IP 24 Order No. 1280 1150 Without LVR 230V, 50Hz, 825W, IP 24 Order No. 1280 2300

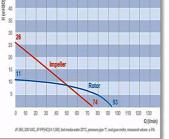
With NSP 115V, 60Hz, 825W, IP 24 Order No. 1280 1151 With NSP 230V, 50Hz, 825W, IP 24 Order No. 1280 2301

Without LVR + SC 115V, 60Hz, 825W, IP24 Order No. 1280 1152 Without LVR + SC 230V, 50Hz, 825W, IP 24 Order No. 1280 2302

With LVR + SC 115V, 60Hz, 825W, IP 24 Order No. 1280 1153 With LVR + SC 230V, 50Hz, 825W, IP 24 Order No. 1280 2303

LVR (Low Voltage Release)





#### MOTOR (WITHOUT PUMP TUBE) ELECTRONIC SPEED CONTROL (Optional)

Operating data JP-360 Flow rate (with hose and oval gear meter) Ø 41 mm up to 93 L/min (Rotor) Ø 41 mm up to 74 L/min (Impeller)

Head Ø 41 mm up to 11 m (Rotor) Ø 41 mm up to 26 m (Impeller)

Viscosity Up to 600 mPas

Density Up to 1.5

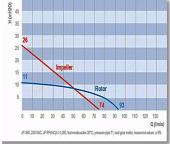
\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

#### Pump Version Without LVR + SC 230V, 50Hz, 640W, IP 24 Order No. 1360 2302

With LVR + SC 115V, 60Hz, 640W, IP 24 Order No. 1360 2303

LVR (Low Voltage Release)





#### MOTOR (WITHOUT PUMP TUBE) ELECTRONIC SPEED CONTROL (Optional)

Operating data JP-380 Flow rate (with hose and oval gear meter) Ø 41 mm up to 83 L/min (Rotor) Ø 41 mm up to 83 L/min (Impeller)

Head Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller)

Viscosity Up to 1,000 mPas

Density Up to 1.9

\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

#### **Pump Version**

Without LVR + SC 230V, 50Hz, 825W, IP 24 Order No. 1380 2302

With LVR + SC 230V, 50Hz, 825W, IP 24 Order No. 1380 2303

LVR (Low Voltage Release)

# PUMP TUBES FOR PUMPING



Drive Shaft: (SS) Stainless Steel 316 Ti Or

(HC) Hastelloy 2,4610



#### POLYPROPYLENE (PP) PUMP TUBE Ø 41 mm

#### Properties of Polypropylene (PP) Pump Tube

- Operating temperature up to 50° C.
- · For aggressive and hardly flammable media such as cleaning agents, acids and alkalis.
- · Hose connection 1" standard (3/4" and 11/4" optional)

### Polypropylene Pump Tube + Stainless Steel (SS) Drive Shaft

Shaft length 700 mm + Rotor Order No. 2641 0070 Shaft length 700 mm + Impeller Order No. 2641 0071

Shaft length 1.000 mm + Rotor Order No. 2641 0100 Shaft length 1,000 mm + Impeller Order No. 2641 0101

Shaft length 1,200 mm + Rotor Order No. 2641 0120 Shaft length 1,200 mm + Impeller Order No. 2641 0121

Shaft length 1,500 mm + Rotor Order No. 2641 0150 Shaft length 1,500 mm + Impeller Order No. 2641 0151

Shaft length 1,800 mm + Rotor Order No. 2641 0180 Shaft length 1,800 mm + Impelle Order No. 2641 0181

### Pump Tube + Hastellov (HC) Drive Shaft Shaft length 700 mm + Rotor

Order No. 2141 0070 Shaft length 700 mm + Impeller Order No. 2141 0071

Shaft length 1,000 mm + Rotor Order No. 2141 0100 Shaft length 1,000 mm + Impeller Order No. 2141 0101

Shaft length 1,200 mm + Rotor Order No. 2141 0120 Shaft length 1,200 mm + Impeller Order No. 2141 0121

Shaft length 1,500 mm + Rotor Order No. 2141 0150 Shaft length 1,500 mm Order No. 2141 0151

Shaft length 1,800 mm + Rotor Order No. 2141 0180 Shaft length 1,800 mm + Impeller Order No. 2141 0181

Custom Tube Length: 200 mm up to 3,000 mm

### Chemicals Compatible:

Formic acid (50%) • Ammonia Boric acid • Distilled water • Fertilizer solutions • Iron II and III chloride • Acetic acid (80%) • Photo developer • Fruit acids • Potassium hydroxide solution • Phosphoric acid • Hydrochloric acid Sulfuric acid (90%) • Hydrogen peroxide • Citric acid etc.



#### Aluminum (Alu) PUMP TUBE Ø 41 mm

#### Properties of Aluminum (Alu) Pump Tube Operating temperature up to 90° C.

- · Suitable for neutral and hardly flammable media especially suitable for mineral oils
- products up to 1,000mPas. · Hose connection 1" standard (3/4" and 11/4" optional)

### Aluminum Pump Tube + Stainless Steel (SS)

**Drive Shaft** Shaft length 700 mm + Rotor Order No. 2441 0070 Shaft length 700 mm + Impeller Order No. 2441 0071

Shaft length 1,000 mm + Rotor Order No. 2441 0100 Shaft length 1,000 mm

Order No. 2441 0101 Shaft length 1,200 mm + Rotor Order No. 2441 0120 Shaft length 1,200 mm + Impeller Order No. 2441 0121

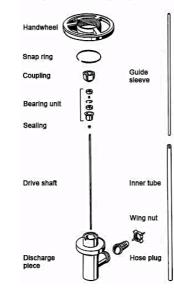
Shaft length 1,500 mm + Rotor Order No. 2441 0150 Shaft length 1,500 mm Order No. 2441 0151 + Impeller

Custom Tube Length: 200 mm up to 3,000 mm

### Chemicals Compatible:

Drilling emulsions • Diesel • Liquid Soap Liquid wax • Transmission oils • Fuel oils • Hydraulic oils • Machine oils • Mineral oils and Motor oils.

#### Pump tube for drum pumps



Polyvinylidene-fluoride (PVDF) Tube For aggressive concentrated acids and alkalis

### Drive Shaft: (HC) Hastellov 2.4610



#### POLYVINYLIDENE-FLUORIDE (PVDF) PUMP TUBE Ø 41 mm

#### Properties of Polyvinylidene-fluoride (PVDF) Pump Tube

- Operating temperature up to 90° C. · For aggressive and highly concentrated acids and alkalis.
- Hose connection 1" standard (3/4" and 11/4" optional)

### Polyvinylidene-fluoride Pump Tube +

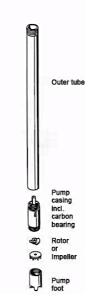
Hastelloy (HC) Drive Shaft Shaft length 700 mm + Rotor Order No. 2341 0070

Shaft length 700 mm + Impeller Order No. 2341 0071

Order No. 2341 0100 Shaft length 1,000 mm + Impelle

Shaft length 1,200 mm + Rotor Order No. 2341 0120 Shaft length 1,200 mm + Impeller

Shaft length 1.500 mm + Rotor Order No. 2641 0150 + Impelle





# STAINLESS STEEL (SS) PUMP TUBE

### Properties of Stainless steel (SS) Pump Tube

- · Operating temperature outside EX-areas of up to 90°C (with PTFE rotor) and 120° C (with stainless steel rotor).
- · For all neutral, low viscous media such as organic or inorganic diluted acids and alkalis.
- · ATEX compliant pump tubes are specifically used for pumping highly combustible media such as solvents or gasoline and for use in explosive environments.
- · Suitable for flammable media up to temperature class 4 and use in Ex-zone 0
- · Certified to ZELM 09 ATEX 0424X.
- · Hose connection 1" standard (3/4" and 11/4" optional)

#### Polypropylene Pump Tube + Stainless Steel (SS) Drive Shaft

Shaft length 700 mm + Rotor Order No. 2241 0070 Shaft length 700 mm + Impeller Order No. 2441 0071

Shaft length 1,000 mm + Rotor Order No. 2441 0100

Shaft length 1,000 mm + Impeller Order No 2441 0101

Shaft length 1,200 mm + Rotor Order No. 2441 0120 Shaft length 1.200 mm + Impeller

Order No. 2441 0121 Shaft length 1.500 mm + Rotor Order No. 2441 0150 + Impeller

Shaft length 1,500 mm Order No. 2441 0151 Shaft length 1,800 mm + Rotor

Order No. 2441 0180 + Impeller Shaft length 1,800 mm Order No. 2441 0181

Shaft length 2,100 mm + Rotor Order No. 2441 0210

Shaft length 2,100 mm + Impeller Order No. 2441 0211

Shaft length 2,400 mm + Rotor Order No. 2441 0240 Shaft length 2,400 mm + Impeller

Order No. 2441 0241 Shaft length 2,700 mm + Rotor Order No. 2441 0270

Shaft length 2,700 mm + Impeller Order No. 2441 0271

Shaft length 3,000 mm + Rotor Order No. 2441 030 Shaft length 3,000 mm + Impeller

Order No. 2441 0301

Stainless Steel Rotor Order No. 2710

Stainless Steel Impeller Order No. 2725

### **Chemicals Compatible:**

Acetone • Alcohol • Ammonia • Gasoline • Flammable solvents • Potassium hydroxide solution • Nitro varnishes • Perchlorethylene • Phosphoric acid • Sulfuric acid (up to 7.5% and over 90%) • Trichloroethylene • Toluene.

In addition it is suitable for transferring thin fluid food such as fruit juices, milk, edible oils and all other media mentioned in aluminum pump tube.

Shaft length 1,000 mm + Rotor Order No. 2341 0101 Order No. 2341 0121

Shaft length 1,500 mm Order No. 2341 0151

**Custom Tube Length:** 200 mm up to 3,000 mm

Hydrobromic acid • Chloric acid • Chromic acid • Hydrofluoride acid • Sodium

· All media mentioned in polypropylene pump tube

Chemicals Compatible:

hypochlorite • Nitric acid and Sulfuric acid up to 90°C.

# PUMP TUBES FOR PUMPING AND MIXING



#### POLYPROPYLENE (PP) PUMP TUBE Ø 41 mm

### Properties of Polypropylene (PP) Pump Tube

- Operating temperature up to 50° C. · For aggressive and hardly flammable media
- such as cleaning agents, acids and alkalis.
- Hose connection 1" standard (3/4" and 11/4" optional).
- · 1000 mm PP suction tube for mixing and transferring media out of 200 litres drum.
- 1200 mm PP suction tube circulating media in containers and emptying the containers.
- Recommended motors: JP-180, JP-280, JP-360, JP-380 and all air operated motors

#### Polypropylene Suction Tubes Order No. Order No. 2141 0102 1000 mm 1200 mm Order No. 2141 0122

#### Chemicals Compatible:

Formic acid (50%) • Ammonia Boric acid • Distilled water • Fertilizer solutions • Iron II and III chloride • Acetic acid (80%) • Photo developer • Fruit acids • Potassium hydroxide solution • Phosphoric acid • Hydrochloric acid • Sulfuric acid (90%) • Hydrogen peroxide • Citric acid etc...



#### STAINLESS STEEL (SS) PUMP TUBE Ø 41 mm

### Properties of Stainless steel (SS) Pump Tube · Operating temperature outside EX-areas of up

- to 90°C. · Suitable for flammable media up to
- temperature class 4 and use in Ex-zone 0. Certified to ZELM 09 ATEX 0424X
- · Hose connection 1" standard
- (3/4" and 11/4" optional)
- 1000 mm PP suction tube for mixing and transferring media out of 200 litres drum.
- 1200 mm PP suction tube circulating media in containers and emptying the containers.
- Recommended motors: JP-180, JP-280, JP-360, JP-380 and all air operated motors.

#### Polypropylene Suction Tubes Order No. Order No. 2141 0102 1000 mm 1200 mm Order No. 2141 0122

### Chemicals Compatible:

- Acetone Alcohol Ammonia Gasoline Flammable solvents • Potassium hydroxide solution • Nitro varnishes • Perchlorethylene • Phosphoric acid • Sulfuric acid (up to 7.5% and over 90%) • Trichloroethylene • Toluene.
- · In addition it is suitable for transferring thin fluid food such as fruit juices, milk, edible oils and all other media mentioned in aluminum pump tube.

# **PUMP TUBE FOR COMPLETE EMPTYING**



- Suitable for pumping thin fluid to middle viscous media that are neutral. slightly aggressive, dangerous and economical valuable liquids to near empty of 0.1 litre.
- The black handle below the pump wheel can be closed, to prevent the medium from flowing out of the hose or from the suction tube back into the drum after the motor is switched off.
- · The mechanical seal used in the housing prevents the pumped medium from flowing into the inner tube.
- · After use, the pump must be completely flushed and cleaned with medium up to 90°C with PTFE rotor.
- 1000 mm stainless steel tube is for emptying 200L drums and 1200
- mm stainless steel tube is for emptying containers.

Stainless Steel Tube With Mechanical	Seal Order No
Length of Tube	Order No.
1000 mm	2841 0100
1200 mm	2841 0120

**PUMP TUBE WITH MECHANICAL SEAL** ALERT !!! DO NOT RUN DRY



Stainless Steel (SS) Tube With Mechanical Se

For Use In Pumping Crystallized Or Sticky Media

Drive Shaft:

(SS) Stainless Steel 316 Ti



For sticky, crystallizing and heavily polluted media or when containers are pre-pressurized, pump tubes with mechanical seal are preferred as no media is allowed to flow into the inner tube. These tubes are not supposed to run dry.

Certified to ZELM 09 ATEX 0424X Ex II 1/2 G c IIB T4.

Application Note:

- Suitable for pumping thin fluid to middle viscous media that are neutral, slightly aggressive or flammable.
- The use of mechanical seal is mandatory for pumping sticky. crystallizing and heavily soil or solid media that sealless pump tubes with carbon bearing are not suitable.
- · The mechanical seal used in the housing prevents the pumped medium from flowing into the inner tube.
- After use, the pump must be completely flushed and cleaned with medium up to 90°C with PTFE rotor.

Stainless Steel Tube With Mechanical Seal Order No.:

Length of Tube	Order No.
700 mm	2741 0070
1000 mm	2741 0100
1200 mm	2741 0120
1500 mm	2741 0150
1800 mm	2741 0180
2100 mm	2741 0210
2400 mm	2741 0240
2700 mm	2741 0270
3000 mm	2741 0300

# DRUM PUMP SET COMPLETE WITH MATCHING ACCESSORIES

The Drum Pump Set is supply with matching Electric or Air operated motor, a suitable pump tube for your application and a 2 metres media proof hose



#### Drum Pump set with non-explosion proof motor for acids and alkalis

JP-140 Universal motor, 230V, 50Hz, 450W, class IP 24, double insulated category II, overload protection switch with low voltage release, thermo protection, 5 mts. Cable and plug.

Pump tube PP •1000 mm, O.D. 41mm •Drive shaft Hastelloy 2.4610 Connection thread G 1¼" •Hose connection 1" (DN25)

- Other parts •2 mts. PVC hose 1" (DN25)
- •2 Stainless steel hose clamps
- •1 Polypropylene nozzle 1'

### •Operating data JP-140

- •Flow rate (with hose and oval gear meter) •Ø 41 mm up to 87 L/min (Rotor) •Ø 41 mm up to 70 L/min (Impeller)
- •Head: Ø 41 mm up to 10 m (Rotor) Ø 41 mm up to 23 m (Impeller)
- •Viscosity: Up to 400 mPas

#### •Density: Up to 1.3

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

## Order No. 1141 4110



#### Drum Pump set with non-explosion proof motor for acids and alkalis

#### JP-160 Universal motor, 230V, 50Hz, 460W, class IP 24, double insulated category II, overload protection switch with low voltage release, 5 mts. Cable and plug.

Pump tube PP •1000 mm or 1200mm, O.D. 41mm •Drive shaft Hastelloy 2.4610 •Connection thread G 11/4" Hose connection 1" (DN25)

Other parts •2 mts. PVC hose 1" (DN25) •2 Stainless steel hose clamps

### •1 Polypropylene nozzle 1" •Operating data JP-160

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 82 L/min (Rotor) •Ø 41 mm up to 61 L/min (Impeller)

•Head: Ø 41 mm up to 9 m (Rotor) Ø 41 mm up to 20 m (Impeller)

### ·Viscosity: Up to 400 mPas

•Density: Up to 1.3

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

1161 4112

#### Order No. 1000 mm 1161 4110

1200 mm

### Drum Pump set with non-explosion proof motor for acids and alkalis

JP-180 Universal motor, 230V or 115V, 50/60Hz 640W class IP 24 double insulated category II, overload protection switch with low voltage release, 5 mts. Cable and plug.

#### Pump tube PP

•1000 mm or 1200mm, O.D. 41mm •Drive shaft Hastelloy 2.4610 Connection thread G 1¼" •Hose connection 1" (DN25)

Other parts •2 mts. PVC hose 1" (DN25)

- •2 Stainless steel hose clamps
- •1 Polypropylene nozzle 1"

#### •Operating data JP-180

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 93 L/min (Rotor) •Ø 41 mm up to 74 L/min (Impeller)

•Head: Ø 41 mm up to 11 m (Rotor) Ø 41 mm up to 26 m (Impeller)

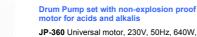
•Viscosity: Up to 600 mPas

#### •Density: Up to 1.5

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

Order No. 1000 mm pump tube 1181 4110 230V 1182 4110 115V Order No. 1200 mm pump tube

2301/ 1181 4112 1182 4112 115V



class IP 55, protection class I, overload protection switch with low voltage release, integrated speed control, 5 mts. Cable and plug.

#### Pump tube

•1000 mm or 1200mm polypropylene, O.D. 41mm

•Drive shaft Hastelloy 2.4610 •Connection thread G 11/4"

•Hose connection 1" (DN25)

### Other parts

•2 mts. PVC hose 1" (DN25) •2 Stainless steel hose clamps •1 Polypropylene nozzle 1'

#### •Operating data JP-360

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 93 L/min (Rotor) •Ø 41 mm up to 74 L/min (Impeller)

## •Head: Ø 41 mm up to 11 m (Rotor)

Ø 41 mm up to 26 m (Impeller)

### ·Viscosity: Up to 600 mPas

#### •Density: Up to 1.5

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%

Order No 1000 mm 1363 4110 1200 mm 1363 4112



### Drum Pump set with non-explosion proof motor for neutral and aggressive medi

JP-380 Universal motor, 230V, 50Hz, 825W. class IP 55, protection class I, overload protection switch with low voltage release, 5 mts. Cable and plug.

#### Pump tube PVDF

•1000 mm or 1200 mm, O.D. 41mm •Drive shaft Hastelloy 2.4610 Connection thread G 1¼" Hose connection 1" (DN25)

#### Other parts

•2 mts. PVC hose 1" (DN25) •2 Stainless steel hose clamps 1 PVDE nozzle 1"

#### Operating data JP-380

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 112 L/min (Rotor) •Ø 41 mm up to 83 L/min (Impeller)

•Head: Ø 41 mm up to 16 m (Rotor)

Ø 41 mm up to 37 m (Impeller) •Viscosity: Up to 1000 mPas

## •Density: Up to 1.9

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

Order No. 1383 4110 000 mm 1200 mm 1383 4112





#### Drum Pump set with non-explosion proof motor for media with higher viscosity

JP-280 Universal motor, 230V or 115V, 50/60Hz, 640W, class IP 24, double insulated category II, overload protection switch with low voltage release, 5 mts. Cable and plug.

### Pump tube PP

•1000 mm or 1200mm polypropylene, O.D. 41mm

•Drive shaft Hastelloy 2.4610 •Connection thread G 11/4" •Hose connection 1" (DN25)

Other parts

- •2 mts PVC hose 1" (DN25)
- •2 Stainless steel hose clamps •1 Polypropylene nozzle 1'

### •Operating data JP-280

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 112 L/min (Rotor) •Ø 41 mm up to 83 L/min (Impeller)

#### •Head: Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller)

•Viscosity: Up to 1000 mPas

### •Density: Up to 1.9

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%

Order No. 1000 mm pump tube 230V 1281 4110 1282 4110 115V

Order No. 1200 mm pump tube 230V 1281 4120 115V 1282 4120

Drum Pump set with non-explosion proof motor for highly concentrated acids and alkalis

### JP-280 Universal motor, 230V or 115V,

50/60Hz, 825W, class IP 24, double insulated category II, overload protection switch with low voltage release, 5 mts. Cable and plug.

### Pump tube PVDF

•1000 mm or 1200mm, O.D. 41mm •Drive shaft Hastelloy 2.4610 •Connection thread G 11/4"

•Hose connection 1" (DN25)

### Other parts

•2 mts. PVC hose 1" (DN25) •2 Stainless steel hose clamps

### 1 PVDF nozzle 1"

 Operating data JP-280 •Flow rate (with hose and oval gear meter) •Ø 41 mm up to 112 L/min (Rotor) •Ø 41 mm up to 83 L/min (Impeller)

•Head: Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller)

•Viscosity: Up to 1000 mPas

#### •Density: Up to 1.9

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

Order No. 1000 mm pump tube 230V 1281 4112 115V 1282 4112

Order No. 1200 mm pump tube 230V 1281 4122 115V 1282 4122



#### Drum Pump set with non-explosion proof motor for mineral oil products such as oils, diesel and antifreeze

JP-280 Universal motor 230V or 115V 50/60Hz, 825W, class IP 24, double insulated category II, overload protection switch with low voltage release, 5 mts. Cable and plug.

### Pump tube Aluminum

•1000 mm, O.D. 41mm Drive shaft Stainless steel Connection thread G 1¼" Hose connection 1" (DN25)

### Other parts

•2 mts. Mineral oil hose 1" (DN25)

•2 Stainless steel hose clamps

# •1 Aluminum nozzle 1

•Operating data JP-280

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 112 L/min (Rotor) •Ø 41 mm up to 83 L/min (Impeller)

•Head: Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller)

·Viscosity: Up to 1000 mPas

### •Density: Up to 1.9

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%. Order No

230V	1281 4111
15V	1282 4111

## Drum Pump set with non-explosion proof motor for mineral oil products such as oils, diesel and antifreeze

JP-280 Universal motor, 230V or 115V, 50/60Hz, 825W, class IP 24, double insulated category II, overload protection switch with low voltage release, 5 mts. Cable and plug.

### Pump tube Stainless steel 316Ti

•1000 mm, O.D. 41mm •Drive shaft Stainless steel Connection thread G 1¼" Hose connection 1" (DN25)

Other parts

•2 mts. Mineral oil hose 1" (DN25) ·2 Stainless steel hose clamps •1 Polypropylene nozzle 1"

#### Operating data JP-280

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 112 L/min (Rotor) •Ø 41 mm up to 83 L/min (Impeller)

•Head: Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller) •Viscosity: Up to 1000 mPas

•Density: Up to 1.9 •\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

Order No. 230V 115V

1281 4113 1282 4113





# Drum Pump set with explosion proof electric motor for flammable media

JP-400 Electric motor, 230V, 50/60Hz, 550W, protection class II 2G Ex de IIA T6. IP54, double insulated protection class II overload protection switch with integrated low voltage release, integrated spec control, 5 mts. Cable. Optional Ex-p Certificate number ZELM 09 ATEX 0425 X

Pump tube Stainless steel 316Ti

•1000 mm or 1200mm, O.D. 41mm Connection thread G 1¼" Hose connection 1"

Certificate number ZELM 09 ATEX 0424 X Other parts

•2 mts. Multi purpose hose 1" (DN25)

- 2 Stainless steel hose connectors 1 Brass nickel plated nozzle
- 1 Bonding ground set

## •Operating data JP-400

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 97 L/min (Rotor) •Ø 41 mm up to 71 L/min (Impeller)

•Head: Ø 41 mm up to 11 m (Rotor) Ø 41 mm up to 20 m (Impeller)

### •Viscosity: Up to 600 mPas

•Density: Up to 1.5

\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%

Order No. 1000 mm 1402 4110 1200 mm 1402 4120

### Drum Pump set with explosion proof air operated motor for flammable media

JP-AIR 1 300W at maximum 6 bar. Motor with brass ball valve and muffler for compressed air control, this regulates the motor speed and varies the pumping capacity, Ex II 2 GD c IIC (8 Certificate number IBEx U05 ATEX B007 X

Pump tube Stainless steel 316Ti •1000 mm or 1200mm, O.D. 41mm

 Connection thread G 1¼" Certificate number ZELM 09 ATEX 0424 X

Other parts

- 2 mts. Multi purpose hose 1" (DN25) 2 Stainless steel hose connectors, clamps made of aluminum
- 1 Brass nickel plated nozzle
- 1 Bonding ground set
- Operating data JP-AIR 1

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 78 L/min (Rotor •Ø 41 mm up to 60 L/min (Impeller)

- ·Head: Ø 41 mm up to 9 m (Rotor) Ø 41 mm up to 13 m (Impeller)
- •Viscosity: Up to 400 mPas

### •Density: Up to 1.3

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%

Order No. 1000 mm 3012 4110 1200 mm 3012 4120

#### Drum Pump set with explosion proof electric motor for flammable media

JP-440 Electric motor, 230V, 50/60Hz, 460W, protection class II 2G Ex db IIC T6 Gb, IP55, double insulated protection class II. overload protection switch with integrat low voltage release, integrated speed control, 5 mts. Cable. Optional Ex-plug. EC type examination certificate Bureau VERITAS EPS 17 ATEX 1 088 X Certificate of conformity IECEx EPS 17.0045X

- Pump tube Stainless steel 316Ti •1000 mm, O.D. 41mm
- Connection thread G 1¼
- Hose connection 1" •Certificate number ZELM 09 ATEX 0424
- Other parts
- 2 mts. Multi purpose hose 1" (DN25)
- •2 Stainless steel hose connectors
- •1 Brass nickel plated nozzle
- •1 Bonding ground set

### •Operating data JP-440 •Flow rate (with hose and oval gear meter)

- •Ø 41 mm up to 82 L/min (Rotor) •Ø 41 mm up to 61 L/min (Impeller)
- •Head: Ø 41 mm up to 9 m (Rotor)
  - Ø 41 mm up to 20 m (Impeller)
- •Viscosity: Up to 400 mPas

#### •Density: Up to 1.3

•\* Test media water @ 20°C, pressure pipe

1", oval gear meter, measured values ±5%.

Order No. 1000 mm 1442 4110

made of aluminum

•1 Bonding ground set

•1 Brass nickel plated nozzle

•Operating data JP-AIR 2

•Viscosity: Up to 600 mPas

•Density: Up to 1.5

Order No

1000 mm

•Ø 41 mm up to 80 L/min (Rotor)

•Ø 41 mm up to 66 L/min (Impeller)

•Head: Ø 41 mm up to 10 m (Rotor)

•Flow rate (with hose and oval gear meter)

Ø 41 mm up to 15 m (Impeller)

•\* Test media water @ 20°C, pressure pipe

1", oval gear meter, measured values ±5

3022 4110

# Drum Pump set with explosion proof electric motor for flammable media

JP-480 Electric motor, 230V, 50/60Hz, 460W, protection class II 2G Ex db IIC T6 Gb, IP55, overload protection with integrated low voltage release, integrated speed control, 5 mts. Cable. Optional Ex-plug. EC type examination certificate Bureau VERITAS FPS 17 ATEX 1 088 X Certificate of conformity IECEx EPS 17.0045X

#### Pump tube Stainless steel 316Ti

•1200 mm, O.D. 41mm

Connection thread G 1¼"

- Hose connection 1" •Certificate number ZELM 09 ATEX 0424 X
- Other parts
- 2 mts. Multi purpose hose 1" (DN25)
- 2 Stainless steel hose connectors •1 Brass nickel plated nozzle
- •1 Bonding ground set

### •Operating data JP-480

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 112 L/min (Rotor) Ø 41 mm up to 83 L/min (Impeller)

- •Head: Ø 41 mm up to 16 m (Rotor) Ø 41 mm up to 37 m (Impeller)
- •Viscosity: Up to 1000 mPas

•Density: Up to 1.9

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

Order No. 1200 mm 1402 4110

### Drum Pump set with explosion proof air operated motor for flammable media

JP-AIR 3 400W at maximum 6 bar operating pressure. Motor with brass ball valve and muffler for compressed air control, this regulates the motor speed and varies the pumping capacity, Ex II 2 GD c IIC (80°C) X. Certificate number IBEx U05 ATEX B007 X

### Pump tube Stainless steel 316Ti

•1000 mm, O.D. 41mm •Connection thread G 11/4"

•Certificate number ZELM 09 ATEX 0424 X

- Other parts
- 2 mts. Multi purpose hose 1" (DN25) •2 Stainless steel hose connectors, clamps
- made of aluminum •1 Brass nickel plated nozzle

# 1 Bonding ground set

Operating data JP-AIR 3

•Flow rate (with hose and oval gear meter) •Ø 41 mm up to 91 L/min (Rotor) •Ø 41 mm up to 71 L/min (Impeller)

•Head: Ø 41 mm up to 13 m (Rotor) Ø 41 mm up to 25 m (Impeller)

·Viscosity: Up to 600 mPas

•Density: Up to 1.5

•\* Test media water @ 20°C, pressure pipe 1", oval gear meter, measured values ±5%.

Order No. 1000 mm 3032 4110









# SMALL FILLING PLANT FILLING MADE EASY

### FOR ACIDIC AND BASIC SOLUTIONS

This filling system was specially designed for use with Jessberger pumps and is possible to use with other made pumps. It is fitted with a weighing scale to ensure a clean accurate and safe filling even with faming media.

The filling, chemical or packaging industries would prefer to fill thin liquid to slightly viscous media at the push of a button to manually fill small canisters from barrels as quickly as possible with near precise accuracy.

### Advantages

- For quick and easy filling of empty or partially filled containers, inclusive of foaming media.
- The filling is control by the weighing scale up to 30 kg with accuracy to +/- 20grams.
- The required volumes are preset at the evaluation unit. With indexing system or with stop for the containers.
- The filling tube is manually inserted into the container (No automatic mode).
- The filling process does not begin until the pump tubes are in position.
  The plant is made of stainless steel.
- Electronics components conform to IP67.
- Easy to operate.

This filling plant was designed for ease of use and is suitable for transferring acidic or basic media from large containers into canisters of 10L, 15L or 25L.

A database can be programmed by weight for respective customers based on the history of the containers and media being filled for the respective customers and in accordance to their required media to be filled. The programmed data can detect whether the container is empty or whether there are residues in the containers.

The adjustable stop is installed to position the different container sizes under the filling tube; the tube height can be adjusted. A check valve is installed to prevent delayed dripping of the medium.

On request, an index system can be installed to ensure the correct container is filled with respective medium. Already existing system like safety or own developments can be used as an index system.

It can be integrated with an existing industrial control system, with process control combined with conveyors or existing plant parts.

All components of the filling plant that come into contact with the medium are made of V4A stainless steel. The control box, weighing platform and evaluation unit are protected against the ingression of moisture and water with the protection class of IP65. The total weight of the system is 45 kg.

The filling system can be used for dosing precisely a wide range of media. However, no liquids should be filled with a flame point below  $55^{\circ}$ C or where stainless steel V4A is not resistant.

# FILLING PLANT FOR DRUM PUMPS

### MADE OF STAINLESS STEEL 316TI FOR VARIOUS MEDIA

In autumn 2014, Jessberger launched a semi-automatic filling plant made of stainless steel 316Ti, that can combined with Jessberger's own electric or air operated drum and container pumps or vertical and horizontal eccentric screw pumps. It is designed for the accurate filling of cans and drums.

These comprehensive solutions make it possible for manufacturers' of chemicals or high-risk materials locations to fill 30 kg containers automatically to almost the last gram by pressing a button.

Jessberger's own technician at our headquarters in Ottobrunn did the construction of this filling and dosing systems for the drum pump area and the programming of the control system.

### Advantages

- This semi-automatic filling plant made of stainless steel 316Ti is suitable for filling different media from drums or IBC containers into smaller packages.
- Filling is control by a weighing scale. After required quantity is set on the evaluation unit the filling
  process can be started. The filling process will stop automatically when the set quantity is attained.
- Fast filling on the push of the button and quick continuity.
- Adjustable to different container sizes.
- · Flexible design and expandable due to its modular design
- Universal use with all suitable pumps.

# **ACCESSORIES FOR DRUM AND CONTAINER PUMPS**



### Polypropylene Nozzle

Housing and internal parts are made of polypropylene; valve seat and O-rings are made of FKM or EPDM, spring of Hastelloy 2.4610 and rotatable connections. Flow rate: 80 L/minute

Viscosity: 800 mPas Operating pressure: 3 bar Weight: 210 grams.

<b>J</b>	
Seal	Order No.
FKM 1/2"	9101
FKM ¾"	9102
FKM 1"	9103
FKM IG 1"	1168 + 9120
EPDM 1/2"	9104
EPDM ¾"	9105
EPDM 1"	9106
EPDM IG 1"	1168 + 9121



### **PVDF Nozzle**

Housing and internal parts are made of polypropylene; valve seat and O-rings are made of FKM or EPDM, spring of Hastelloy 2.4610 and rotatable connections. Flow rate: 80 L/minute

Viscosity: 800 mPas Operating pressure: 3 bar Weight: 230 grams

Order No.
9107
9108
9109
1169 + 9122
9110
9111
9112
1169 + 9123
9113
9114
9115
1169 + 9116



### Automatic Nozzle Of Stainless Steel For AdBlue, with a Ø 19 mm outlet spout and swivel hose connection

Housing and internal parts are made of stainless steel; valve seat and O-rings are made of FKM, spring of stainless steel Flow rate: 80 L/minute Viscosity: Low

Operating pressure: 3.4 bar	
Seal	Order No.
FKM 3/4"	9124
FKM 1"	9125



### Manual Polypropylene Nozzle for AdBlue, with Ø 19 mm stainless steel outlet spout

Housing and internal parts are made of white polypropylene; valve seat and Orings are made of FKM, spring made of stainless steel.

Flow rate: 100 L/minute Viscosity: 800 mPas Operating pressure: 2 bar

Seal FKM ¾ FKM 1"

Order No. 9115 9115b



### Stainless Steel 316Ti Nozzle, PTFE seals and rotatable hose connection

Housing and internal parts are made of stainless steel and seals are made of PTFE. For use in chemical, pharmaceutical and food industries.

Flow rate: 80 L/minute Viscosity: 750 mPas Operating pressure: 4 bar Temperature: Maximum 80°C Weight: 1 kg

DN	Order No.
1"	9013
AG 1"	9013a

Manual Polypropylene Nozzle with Ø 25 mm outlet spout Housing and internal parts are made of white polypropylene; valve seat and Orings are made of NBR, spring made of stainless steel.

Flow rate: 100 L/minute Viscosity: 800 mPas Operating pressure: 2 bar

Seal Order No. NBR 34' 9117 9118 NBR 1"



### Nickel-plated Brass Nozzle, PTFE seals and rotatable hose connection

Housing and internal parts are made of nickel-plated brass and seals are made of PTFE

For filling and transferring of neutral and aggressive media and liquids and in the fields of pharmaceutical and food industries. Flow rate: 80 L/minute

Viscosity: 750 mPas Operating pressure: 4 bar Weight: 1 kg

Various connection options (Hose connection thread) er No.

DN	Orde
3/4"	9041
1"	9042
11⁄4"	9043
AG ¾'	9044
AG 1"	9045
AG 1¼"	9046



### FM120 ELECTRONIC FLOW METER Housing is made of either PP or PVDF, outer thread G 1" with FKM seal.

Measuring principle: Turbine meter Viscosity: 20 mPas Flow rate: 20 - 120 L/minute

# Versions:

### FM 120 Standard version

FM 120 M01, is the standard version with quantity preset and switch output open drain, including 1 mt. cable with three-pole diode plug for controlling the pump or for opening and closing of the magnetic valve. This counter can be combined with either a special pump motor, or the remote switch (see below Order No. 9028). FM 120 I, is the standard version with pulse output,

including 1 mt. three-wire cable without a plug. Quadrature signal, open drain.

Version	Order No.
FM 120 PP	9020
FM 120 PP M01	9020a
FM 120 PP I	9020b
FM 120 PVDF	9021
FM 120 PVDF M01	9021a
FM 120 PVDF I	9021b

Electronic kit for quantity preset, for installation in the motor handle or in the plug housing. Order No. 9027 Electronic kit

Remote switch in the plug housing, for controlling a pump or a magnetic valve with integrated electronics. Remote switch Order No. 9028

### Polypropylene Fittings for FM 120 PP

	Order No.
Counter – Pump tube	1111
(IG 1" to IG 1 ¼")	
+ 1 seal of PTFE Ø 30 mm	2194
+ 1 seal of PTFE Ø 40 mm	2195
Counter – PP nozzle	1109
(IG 1" to IG 1")	
+ 2 seals of PTFE Ø 30 mm	2194
Hose connector	1107
(IG 1" to hose connector 1")	
+ 1 seal of PTFE Ø 30 mm	2194
PVDF Fittings for FM 120 PVDF	
	Order No.
Counter – Pump tube	1112
(IG 1" to IG 1 ¼")	
+ 1 seal of PTFE Ø 30 mm	2194
1 1 and of DTEE (1 40 mm	2105





### SAFETY CLAMP MADE OF TOOL STEEL For securing of barrel pump in open containers and drums. Order No.: 9005



### ELECTRONIC FLOW METER MADE OF STAINLESS STEEL

1" female thread on both sides, ATEX.

Electronic turbine wheel flow meter, reset-table display for subset, flow volume in L/min, non-resettable total amount. Flow rate: 19L - 190 L/minute

Service life of battery: approximately 2,000 hours. Accuracy: ± 1% Materials: Stainless steel housing, all parts coming into

contact with medium are made of stainless steel, PVDF, ferrite, wolfram carbide, ceramic and rubber.

### Electronic flowmeter Order No. 9008

Connection part stainless steel 316Ti male thread 1" suitable for electronic flowmeter 9008 to connect a 1' hose directly with flowmeter. Order No. 9009



#### **MECHANICAL FLOW METER K33 / K44** Made of aluminum / plastic, 1" female thread on both sides

Suitable for lubricants, heating oil / diesel, anti- freeze liquid (concentrated) and vegetable oils (different flow meters to be used)

Calibration: 20 - 120 L/min, 10 bar Viscosity: 30 - 2000 mPas

Version	Order No.
3 digits display	9035
5 digits display	9036



### **BOUNDING GROUND SET**

Set of 4 cables	
1 Ground cable 0.5 mt.	
1 Ground cable 1 mt.	
1 Ground cable 2 mts.	
1 Ground cable 3 mts.	

Order No. 9003 9003/1 9003/2 9003/3 9003/4



### ELECTRONIC FLOW METER

Uncalibrated oval year meter made of	aiuminum.
Version	Order No.
Oil, female thread 3/4"	9037
6 – 60 L/min, 70 bar	
Diesel, female thread 1"	9038
10 – 100 L/min, 30 bar	
Oil/diesel, female thread 11/2"	9039
50 – 150 L/min, 20 bar	
<b>Reduction unit in Stainless</b>	steel
Connect	Order No.
1" to 3/4" IG female thread	9201
1 <sup>1</sup> / <sub>4</sub> " to 1" IG female thread	9202

$1\frac{1}{2}$ " to 1" IG female thread	9203	
Double nipple in stainless steel		
Connect	Order No.	
3/4" to 3/4" IG female thread	9204	
1" to 1" IG female thread	9205	
1" x ¾" IG female thread	9206	
1¼" to 1" IG female thread	9207	
1 <sup>1</sup> / <sub>2</sub> " to 1" IG female thread	9208	



### **EXPLOSION PROOF PLUG -EXPLOSION PROOF SOCKET**

Ex de IIC 16, protection	n class IP 65, 16 amper
CEE Round Plug	Order No.
3-pole	5055
5-pole	5056
CEE Round Socket	Order No.
3-pole	5057
5-pole	5058



**EMISSION PROOF DRUM ADAPTER** 

For 41 mm diameter pump tube, FKM seals prevent emission of harmful gases and vapours out of the drum. A valve equalizes a vacuum in the drum.

Material	Order No.
Polypropylene	9024
Brass	9025
Stainless steel 316Ti	9026

### **PVC HOSE**

Crystal clear with fabric limning; suitable for non flammable, neutral and aggressive media. Operating pressure: 10 bar

Operating Temperature: -35°C to + 60°C пΝ Order No

DN	Order No.
3/4"	9050
1"	9051
1¼"	9052
11⁄2"	9053



### **DISCHARGE ARC**

For transferring and filling liquids directly into other vessel. They are available in PP, aluminum and stainless steel 316Ti and can be connected directly at the discharge side

or a drum via a wing hut.	
Material	Order No.
PP	9072
Aluminum	9073
Stainless steel 316Ti	9074



### WALL HANGER FOR LABORATORY PUMP

For secure storage of barrel pump when not in operation and for protection against damage Order No.: 9006



STRAINER for protection of the barrel pump when abrasive particles are present. Polypropylene Size of slots 1.5 x 12 mm, tube Ø 40, 41 or 42 mm.

Stainless steel 316Ti Size of slots 1.5 x 20 mm, tube Ø 41

Material Order No. Polypropylene 9011 Stainless steel 316Ti 9012



#### MINERAL OIL HOSE 1/2" PN 10 with fabric lining 3/4" PN 10 with fabric lining 1" PN 10 with fabric lining 1¼" PN 16 TW-hose 11/2"PN 16 TW-hose DN Order No 1⁄2" 9065a 3/4" 9065 1" 9066 1¼" 9067 **1½**" 9068



STAINLESS STEEL HOSE CONNECTORS Clamps made of aluminum (connection to pump tube female thread 11/4" and connection to nozzle 1" female). Order No. 2 pcs 9010



STAINLESS STEEL HOSE CLAMP For secure fixing of hose at hose barb. DN Order No. 34", 1", 114" 9004



POLYPROPYLENE CLAMPING FLANGE For IBC container (to fix pump with Ø 40/41 mm), Ø 140 mm, 4 holes, screw hole circle 115 mm.

Order No.: 9070



BARREL ADAPTER For secure fixing of drum pump in bunghole of a G 2" drum

The barrel adapters with 2" thread fit in 60 L and 200 L  $\,$ drums. For use with plastic drums or plastic containers they can be combined with the thread adapters.

Polypropylene Ø 41 mm Stainless steel Ø 41 mm Order No.: 9001 Order No.: 9002

# LACTERUS SMOOTHFLEX. WP

### **BUTYL FOOD GRADE RUBBER HOSE**

Suitable for animal and vegetable fat and oils, milk products, mineral water, fruit juice and alcohol up to 92%. o

Operating temperature: Up to 120°C	
DN	Order No.
3/4"	9069a
1"	9069
1¼"	9069b
11/2"	9069c



### CONDUCTIVE UNIVERSAL CHEMICAL AND SOLVENT HOSE

Inner wall homogeneous, smooth, conductive PE-X (knitted polyethylene). Suitable for many alkalis, acids, acetates, aldehydes, amines, esters, ethers and ketones; not suitable for carbonic gassy products and their derivate, as well as for oils and gasoline.

DN	Order No.
3/4"	9055
1"	9056
1¼"	9057
1½"	9058



### CONDUCTIVE MULTI PURPOSE **CHEMICAL HOSE**

Inner wall homogeneous, smooth, conductive EPDM. Suitable for almost all chemicals. Not suitable for oleum, bromic, and chlorsulfuron acids.

Operating pressure	: 10 bar	
Operating temperature: -25°C to 90°C		
DN	Order No.	
3/4"	9060	
1"	9061	
1" FDA	9061b	
1¼"	9062	
11/2"	9063	



SCREW CAP FOR IBC With Ø 41 mm PP barrel adapter Order No. 9005 Screw cap . Barrel adapter PP 9001