## Installation and operating instructions JUDO SPEEDYMAT-LF

Automatic backwash protective filter $3 / 4$ " -2 "
Valid for: EU countries and Switzerland
Language: English


Read before use and store!
CE ()
Findro

Queries, orders, customer service
JUDO Wasseraufbereitung GmbH
Postfach 380
D-71351 Winnenden

Email: info@judo.eu•judo.eu

Office address:
JUDO Wasseraufbereitung GmbH
Hohreuschstraße 39-41
D-71364 Winnenden

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## Dear customers,

Thank you for the confidence you have shown in us by purchasing this product. You have purchased a state-of-theart device. It has been carefully checked prior to delivery. Nevertheless, if difficulties occur, please contact the closest customer service (see chapter Customer service).

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## 1 Safety

These operating instructions must always be available at the place of use of the device.

### 1.1 Intended use

The device is for the

- Filtration
of drinking water in domestic water pipingfor residential, commercial and industrial use. It removes coarse and fine-grained particles from the drinking water, which are larger or equal to the mesh size of the filter, in order to prevent
- pipe damage caused by corrosion
- malfunctions of fittings or control and regulating devices caused by foreign bodies.

The filter is suitable for use in cold drinking water up to a maximum water temperature of $30^{\circ} \mathrm{C}\left(86^{\circ} \mathrm{F}\right)$. The water to be filtered must comply with the European Drinking Water Directive.

The device can be installed in all commercially available drinking water pipes. Both installation and use of the device are subject to the applicable national regulations.

iParticles that are smaller than the mesh size of the filter supplied and materials causing cloudiness cannot be filtered out of the water.

### 1.2 Application limits

### 1.2.1 Water quality

The water to be filtered must comply with the European Drinking Water Directive. Before using the device with water that does not comply with this Directive, it is essential to consult the manufacturer.

### 1.2.2 Water pressure

## CAUTION

The water pressure must not exceed 16 bar input pressure. The device must not be installed if the mains pressure is above 16 bar (even for a short time)!

| Nominal pressure | PN 16 |
| :--- | :--- |
| Operating pressure | 1.5 bar - 16 bar |

The water pressure must not fall below 1.5 bar as otherwise backwashing can be impaired!

i
Starting at an operating pressure of 10 bar increased wear can be expected!

### 1.3 Safety instructions

### 1.3.1 Electrical danger



Risk of electric shock

No electrical wiring or equipment that is not splash-proof may run or be stored below the device. Electrical devices/ equipment located in the vicinity of the device must be splash-proof or comply with the legal regulations for wet rooms.

Only the supplied power supply unit may be used to connect the unit to the power supply. This reduces the mains voltage for operating the electronics to a harmless low voltage of 24 V .

A splash-proof socket is required for connection to the electrical grid, in accordance with the legal regulations for wet rooms.

Only low voltages can be used for the remote transmission of the fault indication via the potential-free output!

Switching voltage: maximum 24 V Amperage: maximum 1 A

### 1.3.2 Warning of property damage



WARNING
Risk of water damage or damage to property

The device may only be installed by qualified technical personnel.

The installation room must be dry and free from frost.

The ambient temperature must not exceed $30^{\circ} \mathrm{C}$ ! In higher temperatures or direct sunlight, material damage may occur up to and including breakage of device parts.

An adequately sized waste water connection (e.g. floor drain) in compliance with DIN 1986 must be provided.

In order to ensure safe drinking water hygiene, a free discharge of the waste water acc. to DIN EN 1717 must be ensured.

The pipe must be able to safely support the device (weight: see chapter 8). If necessary, the pipes must be provided with additional fastenings or support.
If no bypass valve is installed, a shutoff valve must be installed upstream of the unit in order to interrupt the water supply during installation, maintenance, repair or malfunction of the device.

A non-testable backflow prevention device, complying with the performance requirements of AS/NZS2845.1 must be installed prior to the filter.

Install the device in a vertical position $\left( \pm 5^{\circ}\right)$. Otherwise, water may escape and cause water damage.

For the installation of the device in domestic water piping, only use the sup-
plied built-in rotary flange (see chapter 3.2).

The flange surface of the rotary flange fitting must be upright!

The rotary flange fitting must be fitted so that it is free from mechanical stress or strain. Otherwise mechanical damage to the pipe or the rotary flange fitting up to and including breaks can result.

For proper sealing the profile of the profile flange seal must point towards the rotary flange fitting (see Figure 2).

Prior to plugging in the device, ensure that the wastewater connection is functional.

Only operate the device in a technically faultless condition:

- Check for damage prior to installation.
- Immediately have any malfunctions in operation rectified by qualified technical personnel.
Persons who, due to their physical, sensory or mental abilities or their inexperience or lack of knowledge, are unable to operate the device safely may not operate it without supervision or instruction from a responsible person.

Regular backwashing of the device is required to ensure safe drinking water hygiene (see chapter 4.2.1).

The mains voltage must not be interrupted (e.g. via a light switch). If the filter is not permanently supplied with power, backwashing or a warning in case of faults is not possible.

Do not use household cleaning agents to clean the outside of the device, but only use clear water to avoid embrittlement of the plastic.

The device may only be repaired by qualified technical personnel.
Only use original spare parts for repairs.

Before performing work on the device that goes beyond pure operational use, the device must be depressurised! If this is ignored, the result may be uncontrolled escape of water resulting in water damage to the building/home.

If the device is removed due to an interruption of operation:

- Protect the flange surfaces against damage to ensure proper sealing.
- Protect the device from dirt so as not to impair drinking water hygiene.
- Store the device in a frost-free place to prevent damage caused by freezing water and leakage.
Unauthorised conversions and changes are forbidden for safety reasons. These can impair the functioning of the device, leading to leaks and, in the worse case scenario, to bursting of the device.


### 1.4 Symbols used

The safety instructions contained in these operating instructions are labelled with the following symbols:

| $\mathbf{1}$ | Indication of existing dangers |
| :---: | :--- |
| $\mathbf{4}$ | Warning of electric voltage |
| $\mathbf{1}$ |  |
| $\mathbf{1}$ | User tips and other information |

Instructions attached directly to the device, e.g.:

- Direction of flow (arrow)
- Type label
- Cleaning information
must be observed and maintained in legible condition.


### 1.5 Units used

| Unit | Conversion |
| :--- | :--- |
| bar | 1 bar $=10^{5} \mathrm{~Pa}=0.1 \mathrm{~N} / \mathrm{mm}^{2}$ |
| $3 / 4 "$ | DN 20 |
| 1 " | DN 25 |
| $1 \frac{1}{4 \prime \prime}$ | DN 32 |
| $1 \frac{1}{2 \prime \prime}$ | DN 40 |
| $2 "$ | DN 50 |

## 2 Product information

### 2.1 Scope of supply

- Automatic backwash protective filter, completely preassembled
- Rotary flange fitting
- Installation and operating instructions


### 2.2 Function description

Unfiltered water flows into the device through the rotary flange fitting. The water flows from the outside to the inside through a cylindrical sieve insert. Dirt particles remain on the sieve fabric of the sieve insert. The adhering residues are visible from outside through the transparent filter bowl.

SPEEDYMAT-LF 3/4" - 11/4": The filter bowl is visible through the viewing slot of the UV protection screen. The UV protection screen can be moved downwards to check the contamination.

Subsequently the filtered water exits the device again via the rotary flange fitting.


Fig. 1: Function description
1 Rotary flange fitting
2 Filter bowl
3 UV protection screen (only JSY-LF-AT 3/4" - 1¼")
4 Automatic
5 Handwheel for backwashing actuation

### 2.3 Materials used

The materials used are resistant to the physical, chemical and corrosive loads expected to be encountered in drinking water. They meet the requirements specified in the following standards:

- DIN EN 13443-1
- DIN 19628 ("Mechanical filters in drinking water installations")

All materials are hygienically and physiologically harmless. Plastics fulfil the KTW Guideline (Guideline for the Hygienic Assessment of Organic Materials in Contact with Drinking water) of the German Federal Environmental Agency (UBA) W 270. Metallic materials fulfil the requirements of DIN 50930-6.

### 2.4 Approval marks

DIN
DVGW
cert
The device complies with the technical regulations for drinking water installation according to DIN EN 806ff. and the national supplement DIN 1988ff. as well as DIN EN 1717.

It has been tested and certified by the DVGW (Deutsche Vereinigung des Gasund Wasserfaches e. V. - Technisch-wissenschaftlicher Verein) in accordance with the requirements

- of the DIN EN 13443-1 and DIN 19628 for mechanically active filters.
The device bears the DIN-DVGW mark as proof of certification.


## 3 Installation

## CAUTION <br> The device may only be installed by qualified technical personnel.

Installation of the device upstream of the water meter is forbidden.

### 3.1 Conditions

## CAUTION

Risk of property damage or water damage!

The pipe must be able to safely support the device (weight: see chapter 8). If necessary, the pipes must be provided with additional fastenings or support.

To ensure convenient operation and maintenance of the device, always adhere to the specified clearances in chapter 3.4.1).

### 3.2 Installation of the rotary flange fitting

## CAUTION <br> The flange surface of the rotary flange fitting must be upright! <br> The rotary flange fitting must be fitted so that it is free from mechanical stress or strain. Otherwise mechanical damage to the pipe or the rotary flange fitting up to and including breaks can result.

The built-in rotary flange serves as a connecting element between the domestic water station and the device.

It consists of:

- rotary flange fitting
- profile flange seal
- two union nuts
- two pipe sockets
- two flat seals.

Attention: Install the built-in rotary flange in the flow direction! This is indicated by an arrow integral with the casting.
i
If the installation is twisted, backwashing the device is not possible.


Fig. 2: Rotary flange fitting
1 Profile flange seal
2
Flow direction arrow

## Procedure:

1. Pull the flange cover upwards (only for JSY-LF-AT 3/4" - 1¼").
2. Loosen the two union nuts of the builtin rotary flange and remove them with the pipe sockets from the built-in rotary flange fitting.
3. Fit the two pipe sockets with union nut into the pipeline.

### 3.3 Installation of the device

## CAUTION

The pipe must be able to safely support the device (weight: see chapter 8). If necessary, the pipes must be provided with additional fastenings or support.

If no bypass valve is installed, a shut-off valve must be installed upstream of the unit in order to interrupt the water supply during installation, maintenance, repair or malfunction of the device.

Install the device in a vertical position $\left( \pm 5^{\circ}\right)$. Otherwise, water may escape and cause water damage.

For the installation of the device in domestic water piping, only use the supplied built-in rotary flange (see chapter 3.2).

The flange surface of the rotary flange fitting must be upright!
For proper sealing the profile of the profile flange seal must point towards the rotary flange fitting (see Figure 2).

1. Screw the rotary flange fitting back onto the device using the four hexagon socket head screws.

Nm Select the tightening torque (about 4 Nm ) so that the seal is effective and the device is not damaged or strained!
2. Position the device with the fitted rotary flange fitting between the grommets and insert the flat gaskets on both sides.
3. Screw the device with the union nuts on both sides.
4. Place the flange cover back on.

### 3.4 Draining of the backwash water

An adequately sized waste water connection (e.g. floor drain) in compliance with DIN 1986 must be provided.

In order to ensure safe drinking water hygiene, a free discharge of the waste water acc. to DIN EN 1717 must be ensured.

Prior to plugging in the device, ensure that the wastewater connection is functional.

The drain must be large enough so that all of the waste water can be drained simultaneously.
If a waste water connection directly beneath the filter is not possible, the backwash water can be drained away via a hose or a pipe that is connected from the backwashing water valve over a few meters to the closest waste water connection. The dimensioning of this pipe must correspond to the backwashing water valve.

### 3.4.1 Drainage options for the backwash water



### 3.5 Commissioning

Prior to initial commissioning (or to commissioning after maintenance work) fill the installed device with water and vent:

1. Open the upstream shut-off valve to fill the device with water. The device is now under mains pressure.
2. Attention: Immediately plug the power supply unit in. This automatically carries out backwashing and the trapped air can escape. This prevents damage to the installation due to pressure surges.
$\rightarrow$ After backwashing, the device is vented and ready for operation.

## 4 Operation

### 4.1 Warning lights



Fig. 3: Warning lights 1 Operation (green warning light) The device is now ready for operation.
$2 \quad$ Fault (red warning light) A fault exists (see chapter 6).

### 4.2 Cleaning of the sieve insert (backwashing)

A regular cleaning process is necessary to remove the residues from the sieve fabric of the device. This process is called backwashing.

Suction pipes are provided for backwashing, which rotate around the sieve fabric of the fine filter. The backwashing valve opens on the bottom side of the device. By reversing the water flow from inside to outside, deposits on the sieve fabric are carried away and rinsed out with the backwash water. The suction pipes also clean
the inside of the transparent filter bowl with wiper lips during their movement.

The degree of contamination and cleaning process can be observed from the outside.

i
The device is backwashed with filtered water. The filtered water supply of the domestic installation remains intact during the backwashing process. No dirty water can reach the pure water side during the backwashing.

If the mains voltage fails during the backwash process, the backwash is completed using the built-in batteries. Prior to every backwashing a battery test is performed. On a missing, empty or defective battery a fault indication appears (see chapter 4.4). A backwashing is no longer possible

### 4.2.1 Backwashing interval

If cleaning is not performed soon enough, the result may be damage to the sieve insert. Large quantities of filtered particles can deform the sieve fabric and in extreme case lead to tearing of the sieve fabric. In addition, larger deposit quantities can impair the backwashing function mechanically.

According to DIN EN 13443-1 backwashing the device is required at the latest every six months.

The manufacturer requires a backwashing:

- at least every 2 months
- if the water pressure drops
- if the filter is visibly dirty

Experience has shown that new installations in the early stages of installation lead to increased dirt deposits. In this case, a
more frequent backwashing is necessary. Temporarily set a shorter time interval!

### 4.2.2 Setting the backwashing interval

A cleaning interval of 1 month is set exworks.

| Selectable time intervals: |  |
| :--- | :--- |
| 2 | Months |
| 1 | Month |
| 1 | Week |
| 1 | Day |



Fig. 4: Unplug and open cover


## Risk of electric shock!

Disconnect the power supply unit from the socket.

1. Pull the power supply unit out of the socket.
2. Remove the cover of the automatic unit by pressing and pulling on the side.
3. Select the desired time interval for the time-controlled automatic backwashing process on the control electronics of the automatic system. To do this, attach the cable lug of the short cable strand to the pin with the inscription corresponding to the desired time interval (see Figure 5).


Fig. 5: Time control

| A | 2 months |
| :--- | :--- |
| B | 1 month |
| C | 1 week |
| D | 1 day |

4. Refit the cover of the automatic unit until it audibly engages.


## CAUTION

 Escaping water!Before connecting to the power supply system, make sure that the waste water connection is functional.
5. Plug the power supply unit back into the socket. Backwashing starts immediately!
$\rightarrow$ After the backwashing process, the setting of the new backwashing interval is completed.


Fig. 6: Close cover and insert plug

### 4.2.3 Start backwashing

Backwashing is triggered in the following manner:

- automatically, after the set backwashing interval has elapsed (see chapter 4.2.2).
- by unplugging and plugging in the power supply unit (see chapter 4.2.4).


### 4.2.4 Manual backwash start

For manual activation of backwashing

1. Pull the plug of the device.
2. Wait until all warning lights are off.
3. Plug in the plug again.
$\rightarrow$ Backwashing starts automatically.

### 4.3 Conversions, changes

WARNING
Unauthorised conversions and changes are forbidden for safety reasons. These can impair the functioning of the device, leading to leaks and, in the worse case scenario, to bursting of the device.
Only the supplied power supply unit may be used to connect the unit to the power supply. This reduces the mains voltage for operating the electronics to a harmless low voltage of 24 V .

### 4.4 Battery replacement



## CAUTION

Only use 9 V block batteries of alkaline type (see battery marking).

The manufacturer recommends the use of the following batteries:

- Energizer Industrial
- Energizer High Tech
- Energizer Ultra +
- Active Energy
- Conrad Energy

A necessary battery replacement is indicated by a fault indication (see chapter 6).


Fig. 7: Battery replacement
a Connection clip
b Battery

1. Pull the power supply unit out of the socket.
2. Remove the automatic controls cover by pressing to the side and pulling.
3. Release the battery from the connection clip of the connection cable behind the electrical circuit.
4. Insert new battery into the connection clip (see Figure 7).
5. Clip the cover of the automatic controls back on so that it audibly engages.
6. Plug the power supply unit into the socket.
The electrical circuit immediately performs a battery test. After a successfully performed battery test, backwashing is automatically started.

## Dispose of used batteries according to valid regulations!

### 4.5 Maintenance, repair, spare parts

## WARNING

The device may only be repaired by qualified technical personnel.

Only use original spare parts for repairs.

Before performing work on the device that goes beyond pure operational use, the device must be depressurised! If this is ignored, the result may be uncontrolled egress of water resulting in water damage to the building/home.

### 4.6 Integration in building control systems

The device can be integrated into a building control system (e.g. EIB / KNX, LCN or LON) via the floating signal relays .

The potential-free relay is connected to a binary bus coupler.

In this way, fault messages can be forwarded to the building control system.

### 4.7 Interruption of operation

## WARNING

If the device is removed due to an interruption of operation:

- Protect the flange surfaces against damage to ensure proper sealing.
- Protect the device from dirt so as not to impair drinking water hygiene.
- Store the device in a frost-free place to prevent damage caused by freezing water and leakage.

When recommissioning the device, proceed as with a new installation.

## 5 Remote transmission of messages

The device may only be installed by qualified technical personnel.
Switching voltage: maximum 24 V
Amperage: maximum 1 A

### 5.1 Potential-free message

Devices with potential-free signal relay can transmit fault indication messages.


Fig. 8: Relay contact assignments

| Connect relay as: | Contacts |
| :--- | :--- |
| NOC | $\mathbf{a}$ and $\mathbf{b}$ |
| NCC | $\mathbf{b}$ and $\mathbf{c}$ |

In Figure 8 the contacts of the potential-free relay are marked in the currentless state.

The relay can be connected as normally closed contact or as normally open contact :

When the power supply unit is plugged in, the relay changes its switching state into "operating".

If there is a fault indication, the relay
switches to "zero-current or fault" state.

## 6 Fault

$\begin{array}{|l|l|l|}\hline \text { Fault } & \text { Possible cause } & \text { Remedy } \\ \hline \begin{array}{l}\text { Backwash water contin- } \\ \text { ues running. }\end{array} & \begin{array}{l}\text { Backwash } \\ \text { valve is not fully } \\ \text { closed. }\end{array} & \begin{array}{l}\text { Perform backwashing: } \\ \text { 1. Pull the mains plug out of the socket. } \\ \text { 2. Wait until all warning lights are off. }\end{array} \\$\cline { 2 - 2 } $\left.\begin{array}{l}\text { 3. Plug the power supply unit into the } \\ \text { socket. }\end{array} \\ \text { valve. }\end{array} \quad \begin{array}{l}\text { If the fault occurs again: Inform the installer } \\ \text { or the closest customer service point. }\end{array}\right\}$

## Troubleshooting

## 7 Servicing

### 7.1 Cleaning



CAUTION
Do not use household cleaning agents to clean the outside of the device, but only use clear water to avoid embrittlement of the plastic.

### 7.2 Warranty and maintenance

Prerequisite for obtaining the statutory warranty claim is regular backwashing (see chapter 4.2). The DIN EN 13443-1 prescribes that the backwashing must take place every six months. JUDO however recommends to comply with the information in chapter 4.2.1 Backwashing interval.

To ensure the process operates successfully as long as possible, regular inspection and routine servicing of the device are essential. Where home automation is concerned, this is governed by DIN EN 806-5.

We recommend the conclusion of a maintenance contract, which is the best way to ensure a good operating function, even beyond the warranty period. The skilled tradesmen or the factory customer service are suitable partners for regular maintenance work and the supply of consumables and wear materials as well as for possible repairs.


The maintenance sticker on the device serves as a reminder of the next maintenance date and should be marked by the installer after installation.

## 8 Technical data

Automatic backwash protective filter

JUDO SPEEDYMAT-LF JSY-LF-AT

The water to be filtered must comply with the European Drinking Water Directive.

| Information about: | $\begin{aligned} & \hline \text { JSY-LF-AT } \\ & 3 / 4 " \end{aligned}$ | $\begin{array}{\|l} \hline \text { JSY-LF-AT } \\ 1 " \end{array}$ | $\begin{array}{\|l\|} \hline \text { JSY-LF-AT } \\ 11 / 4 " \end{array}$ | $\begin{aligned} & \text { JSY-LF-AT } \\ & 11 / 2^{\prime \prime} \end{aligned}$ | $\begin{aligned} & \hline \text { JSY-LF-AT } \\ & 2 " \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pipe connection | $3 / 4$ " | 1" | 11/4" | 11/2" | 2" |
| Backwashing volume flow ${ }^{1)}$ | 0,3 L/s | 0,3 L/s | 0,3 L/s | 0,3 L/s | 0,3 L/s |
| Backwashing time | approx. $40 \mathrm{~s}$ | $\begin{aligned} & \text { approx. } \\ & 40 \text { s } \end{aligned}$ | approx. $40 \mathrm{~s}$ | approx. 40 s | approx. 40 s |
| Nominal pressure | PN 16 | PN 16 | PN 16 | PN 16 | PN 16 |
| Operating pressure | 1,5-16 bar | 1,5-16 bar | 1,5-16 bar | 1,5-16 bar | 1,5-16 bar |
| Rated flow after backwashing with 0.2 (0.4) bar pressure loss | $\begin{aligned} & 3,3(5,0) \\ & \mathrm{m}^{3} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 4,5(7,0) \\ & \mathrm{m}^{3} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 5,5(8,5) \\ & \mathrm{m}^{3} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 13,0(22,0) \\ & \mathrm{m}^{3} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 17,0(26,0) \\ & \mathrm{m}^{3} / \mathrm{h} \end{aligned}$ |
| Mesh size Sieve insert | 0.1 mm | 0.1 mm | 0.1 mm | 0.1 mm | 0.1 mm |
| Water temperature and ambient temperature | max. $30{ }^{\circ} \mathrm{C}$ | $\max .30^{\circ} \mathrm{C}$ | $\max .30{ }^{\circ} \mathrm{C}$ | $\max .30^{\circ} \mathrm{C}$ | max. $30{ }^{\circ} \mathrm{C}$ |
| Threaded connection according to | DIN EN 10226-1 |  |  |  |  |
| Power connection | 230 V AC / 50 Hz |  |  |  |  |
| Power consumption Operation | 3 W | 3 W | 3 W | 3 W | 3 W |
| Power consumption backwashing | 5 W | 5 W | 5 W | 5 W | 5 W |
| Weight | $2,5 \mathrm{~kg}$ | 2,6 kg | $3,0 \mathrm{~kg}$ | $5,9 \mathrm{~kg}$ | 6,4 kg |
| Order no. | 8070571 | 8070572 | 8070573 | 8070566 | 8070567 |

1) Applies to a fully opened backwashing valve and 2-3 bar mains pressure.

### 8.1 Installation dimensions



Fig. 9: Installation dimensions JSY-LF-AT 3/4" - 1¼"


Fig. 10: Installation dimensions JSY-LF-AT 1½" 2"

|  | JSY-LF-AT 3/4" | JSY-LF-AT 1" | JSY-LF-AT 114" | JSY-LF-AT 1½ | JSY-LF-AT 2" |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A | 180 | 195 | 230 | 252 | 280 |
| B | 160 | 160 | 160 | 165 | 165 |
| C | 122 | 122 | 117 | 33 | 40 |
| D | 311 | 311 | 316 | 382 | 390 |
| E | 108 | 108 | 108 | 108 | 108 |
| G | 50 | 50 | 50 | 50 | 50 |
| G1 | 13 | 13 | 13 | 13 |  |
| Y | Sewer connection necessary |  |  |  |  |

A Installation length
B Unit depth
C Height above the pipe middle
D Height below the pipe middle
E Installation depth up to the pipe middle
G Waste water nominal diameter
G1 Waste water nominal diameter (alternative)

### 8.2 Spare parts

## SPEEDYMAT-LF 3/4" - 11/4"



SPEEDYMAT-LF 3/4" - 1¼

| Item | Designation | Pcs | Order no. | $\begin{array}{\|r} \mathrm{AU}^{11} \mid \\ \mathrm{Pcs} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| A | Wear part set "Sieve insert 0.1 mm , suction pipe *** and seal" (comprising items 5, 6, 7) | 1 | 2990412 | 111 |
| - | Wear part set "Backwash valve und seals" **** (comprising items 5, 9, 22) | 1 | 2170561 | 73 |
| B | Spare part set "Automatic" (comprising items 16, 17, 18, 19, 20, 21) | 1 | 8170244 | 589 |
| C | Spare part set "Filter bowl cover" comprising items 13, 14, 15) | 1 | 2170573 | 117 |
| 1 | Cover | 1 |  |  |
| 2 | Flange cover JSY-LF-AT 3/4" | 1 | 2070362 | 60 |
| 2 | Flange cover JSY-LF-AT 1" | 1 | 2070363 | 60 |
| 2 | Flange cover JSY-LF-AT 11⁄4" | 1 | 2070364 | 60 |
| 3 | Display button | 1 |  |  |
| 4 | Hexagon socket head screw M6×30 (set with 4 pcs) | 1 | 2110109 | 2 |
| 5 | Profile flange seal | 1 |  |  |
| 6 | Sieve insert | 1 |  |  |
| 7 | Suction pipe | 1 |  |  |
| 8 | O-ring 18×2.5 | 2 |  |  |
| 9 | Backwash valve preassembled | 1 |  |  |
| 10 | Suction pipe bottom | 1 |  |  |
| 11 | Filter bowl + item 5, 10, 12 | 1 | 2170439 | 135 |
| 12 | Flange | 1 |  |  |
| 13 | UV protection screen | 1 |  |  |
| 14 | Filter bowl cover printed | 1 |  |  |
| 15 | Fillister head self-tapping screw 3.9x13 | 2 |  |  |
| 16 | Motor | 1 |  |  |
| 17 | Motor cover | 1 |  |  |
| 18 | Electronic control unit | 1 |  |  |
| 19 | 9 V block battery (alkaline) | 1 |  |  |
| 20 | Power supply unit | 1 |  |  |

Spare parts list $3 / 4^{\prime \prime}-1 \frac{1}{4}{ }^{\prime \prime}$

| Item | Designation | Pcs | Order <br> no. | AU <br> Pcs |
| :--- | :--- | :--- | :--- | :--- |
| 21 | Automatic housing | 1 |  |  |
| 22 | O-ring $6.07 \times 1.3$ | 1 |  |  |
| 23 | Hose connection piece pre-installed | 1 |  |  |
| 24 | Union nut | 1 |  |  |
| 25 | Handwheel | 1 |  |  |

Spare parts list $3 / 4^{\prime \prime}-1 \frac{1}{4} 4^{\prime \prime}$

1) $A U=$ Accounting unit (articles without an accounting unit are only available as part of a set)

Replacement interval:
*** $=3$ years
**** $=4$ years


## SPEEDYMAT-LF 1½-2"

| Item | Designation | Pcs | Order no. | $\mathrm{AU}^{11 /}$ Pcs |
| :---: | :---: | :---: | :---: | :---: |
| A | Wear part set "Sieve insert 0.1 mm , suction pipe" **** (comprising items 11, 13, 14) | 1 | 2170565 | 183 |
| - | Wear part set "Backwash valve und seals" *** (comprising items 2, 6, 18) | 1 | 2170563 | 76 |
| B | Spare part set "Automatic" (comprising items 12, 13, 14, 15, 16, 17) | 1 | 8170244 | 589 |
| 1 | Hexagon socket head screw $8 \times 35$ | 4 |  |  |
| 2 | Profile flange seal | 2 |  |  |
| 3 | Sieve insert | 1 |  |  |
| 4 | Suction pipe pre-installed | 1 |  |  |
| 5 | O-ring 18×2.5 | 2 |  |  |
| 6 | Backwash valve preassembled | 1 |  |  |
| 7 | Suction pipe bottom | 1 |  |  |
| 8 | Filter bowl + item 2, 7, 9 | 1 | 2170575 | 192 |
| 9 | Flange | 1 |  |  |
| 10 | Filter bowl cover JSY-LF-AT 11⁄2" | 1 | 2170236 | 39 |
| 10 | Filter bowl cover JSY-LF-AT 2" | 1 | 2170238 | 39 |
| 11 | Fillister head self-tapping screw $3.9 \times 13$ | 4 |  |  |
| 12 | Motor cover | 1 |  |  |
| 13 | Electronic control unit | 1 |  |  |
| 14 | 9 V block battery (alkaline) | 1 |  |  |
| 15 | Motor | 1 |  |  |
| 16 | Automatic housing | 1 |  |  |
| 17 | Power supply unit | 1 |  |  |
| 18 | O-ring 6.07×1.3 | 1 |  |  |
| 19 | Hose connection piece pre-installed | 1 |  |  |
| 20 | Union nut | 1 |  |  |

Spare parts list 1½-2"

| Item | Designation | Pcs | Order <br> no. | AU <br> Pcs |
| :--- | :--- | :--- | :--- | :--- |
| 21 | Handwheel | 1 |  |  |

Spare parts list 1½-2"

1) $A U=$ Accounting unit (articles without an accounting unit are only available as part of a set.)

Replacement interval: *** $=3$ years $\quad * * * *=4$ years

### 8.3 Accessories

- JUDO expansion QUICKSET JQR (order no. 8250041) for series connection of two devices, e.g. automatic domestic water station and water treatment plant
- Cable for external fault signal (order no. 2170437)


## 9 Disposal

Packaging waste is to be sent to the local recycling system.

To protect environment, old appliances and used batteries must not be disposed of with household waste. Instead, use the local collection and return points, which are committed to free and environmentally sound disposal.


## 10 EU Declaration of Conformity

|  |  | Document no. |
| :---: | :---: | :---: |
| WasserAufbereitung | EU Declaration of Conformity | $72 / 03.18$ |

Manufacturer: JUDO Wasseraufbereitung GmbH
Address: Hohreuschstraße 39-41
D-71364 Winnenden

## Product designation: <br> JUDO SPEEDYMAT-LF 3/4" - 2" <br> Automatic backwash protective filter

- EU Directive
- Harmonised standard:

Electromagnetic Compatibility (EMC)
2014/30/EU
Electromagnetic compatibility, basic stan- EN 61000-6-2 dards for interference emission and immuEN 61000-6-3

Compliance with the EMC requirements for the use of the device in domestic/commercial and industrial areas and compliance with the standards and directives listed below is hereby confirmed (CE conformity).

- Harmonised standard:
- EU Directive

Safety of transformers, power supply units and similar

Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

Issuer: JUDO Wasseraufbereitung GmbH
Town, date: $\quad$ Winnenden, March 14, 2018

Authorised signature:


This declaration confirms compliance with the above Directives, but does not include any guarantee of properties.

## 11 Customer service

| DE | JUDO Wasseraufbereitung GmbH |
| :---: | :---: |
|  | Postfach 380 - D-71351 Winnenden |
|  | Phone +49 (0)7195 / 692-0 |
|  | E-mail: info@judo.eu • judo.eu |
| AT | JUDO Wasseraufbereitung GmbH • Niederlassung Österreich |
|  | Zur Schleuse 5-A-2000 Stockerau |
|  | Phone +43 (0)22 66 / $64078 \cdot$ Fax +43 (0)22 $66 / 64079$ |
|  | E-mail: info@judo-online.at • judo-online.at |
| CH | JUDO Wasseraufbereitung AG |
|  | Industriestrasse 15•CH-4410 Liestal |
|  | Phone +41 (0)61906 $4050 \cdot$ Fax +41 (0)61 9064059 |
|  | E-mail: info@judo-online.ch • judo-online.ch |
| BENELUX | JUDO Wasseraufbereitung GmbH - Filiaal - Filiale BeNeLux |
|  | Laarbeeklaan - Av. du Laerbeek, 72 A1 • B-1090 Brussel-Bruxelles |
|  | Phone +32 (0)24 $601288 \cdot$ Fax +32 (0)24 611885 |
|  | E-mail: info.benelux@judo.eu • judo.eu |
| FR | JUDO France SARL |
|  | 76 Rue de la Plaine des Bouchers (Technosud) • F-67100 Strasbourg |
|  | Phone +33 (0)3 88659394 • Fax +33 (0)3 88659849 |
|  | E-mail : info@judo.fr • judo.fr |

Installed by:

All pictorial, dimensional and implementation information correspond to the date of going to press. We reserve the right to make changes due to technical progress and continuing development. Model and product claims cannot be lodged.

