

Installation and Operating Instructions JUDO PURE@TAP ACMF

Under-sink Water filter

Language: English

Attention:

Carefully read through the installation and operating instructions and safety information before installing and putting the unit into service.

These must always be issued to the owner/user.

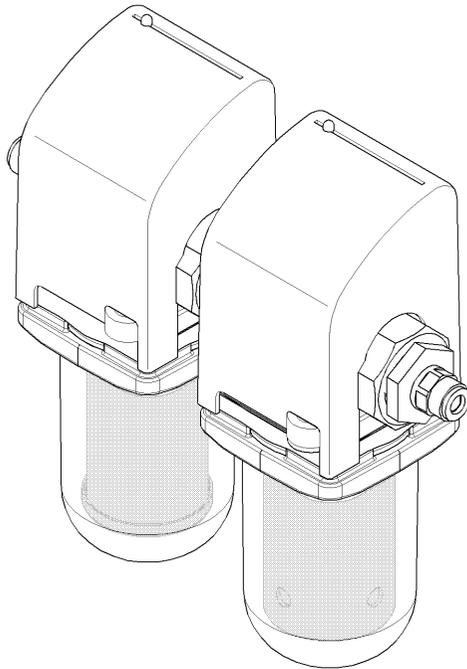


Fig.: ACMF

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Dear Customer,

We would like to thank you for your confidence in us, which you have shown by purchasing this device. The product you have purchased is an under-sink water filter developed using state of the art technology.

This under-sink water filter is suitable for use in cold drinking water up to a maximum ambient temperature of 30°C (86°F).

The under-sink water filter operates on the basis of a 3-stage function principle with silver protection.

1st stage activated carbon:

Coarse particles, chlorine, organic compounds are removed from the water.

2nd stage micro-filtration:

The 0.2 µm fine pores of the hollow fibre membrane retain reliably numerous bacteria, fungi, parasites and fine particles larger than the pore diameter.

3rd stage silver protection:

The LEGIOLAX silver coated spiral in the connection hose to the spigot additionally reduces the risk of recontamination with germs in stagnation phases.

Each unit is thoroughly checked before delivery. Should difficulties nevertheless occur, please contact the responsible customer service. See back page.

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1. About this Instruction Manual



(see chapter “Safety Indications and Dangers due to Non-compliance”)

The instruction manual must be permanently available at the place of action of the under-sink water filter.

This instruction manual shall make it easier to become acquainted with the under-sink water filter and to make use of its intended application possibilities.

The instruction manual contains important information to use the under-sink water filter in a safe, appropriate and economical way.

It contains fundamental information, which must be observed during installation, operation and maintenance. The observance of these tips helps to avoid dangers, reduce repair costs and increase the reliability and service life of the under-sink water filter.

The instruction manual must be read and used by each person entrusted with carrying out the work on the under-sink water filter, for example:

- **Installation**
- **Operation**
- **Maintenance** (servicing, inspection, repair)

Installation and maintenance may only be carried out by personnel authorized by the manufacturer, who are capable of fulfilling the instructions given in the installation and operating instructions and the country-specific regulations.

Apart from the instruction manual and the legally binding accident prevention provisions applicable in the country and place of use, the recognized specific technical regulations for safe and proper work must also be observed.

Therefore, this instruction manual must always be read by the fitter and the responsible skilled personnel/user before the installation, putting into service and maintenance.

Not only the general safety notes given in the chapter “Intended Use” are to be observed, but also the special safety notes inserted under the other main items.

1.1 Used Symbols

The safety notes contained in this instruction manual are labelled with the following symbols:

 **ATTENTION**  Notes on existing dangers

 Warning, electrical voltage.

 Tips for use and other informations.

Notes directly attached to the under-sink water filter, e.g.

- Flow direction (see Fig.1)
- Type plate
- Cleaning advice

must obligatorily be observed and kept in a fully legible condition.

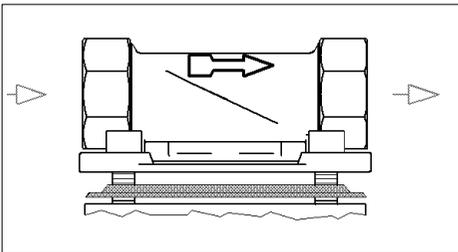


Fig. 1: Built-in rotary flange

1.2 Safety Indications and Dangers due to Non-compliance

In detail, the non-compliance with the general danger symbols can result, for example, in the following risks:

- Failure of important functions of the under-sink water filter.
- Danger to persons due to electrical and mechanical effects.
- Danger to persons and the environment due to leaks.

Refrain from any safety-critical method of practice.

Non-compliance with this instruction manual and the safety information can not only result in dangers for persons but can also harm the environment and the under-sink water filter.

1.3 Units used

In derogation of the International System of Units (SI = System International), the following units are used:

Units	Conversion
°F	°F = 9/5°C + 32
bar	1 bar = 10 ⁵ Pa = 100 kPa = 0.1 N/mm ² = 14.5 psi

2. Intended Use

The installation and operation of the under-sink water filter is subject to the always existing national regulations as they may be.

In addition to the operating instructions and the obliging regulations concerning accident prevention that is valid in the user country and the location of use, the approved specialist technical regulations concerning safe and skilled work, should also be observed.

It is absolutely essential that the manufacturer / supplier will be consulted before using water of a different quality, respectively water that contains additives.

This under-sink water filter is suitable for use in cold drinking water up to a maximum ambient temperature of 30°C (86°F).

The under-sink water filter has been developed and manufactured using state of the art technology and the approved safety regulations in Germany.

The under-sink water filter may only be used as described in the operating instructions. Any other application or application beyond that, is to be considered as not intended. Additional dangers exist in the case of not intended utilization and of non-compliance with the danger symbols and safety instructions. The manufacturer / supplier cannot be kept liable for any damages issuing from this. Solely the user bears the full risk.

The intended use also includes the observance of the operating instructions.

Before an use of the under-sink water filter beyond the application limits stated in the operating instructions the manufacturer / supplier has to be obligatorily talked with.

The under-sink water filters may only be used in a technical condition, free from defects, in accordance with the instruction, safety-conscious and danger-conscious with respect to the operating instructions!

Any functional defects are to be removed immediately!

2.1 Water Pressure

The water pressure has to be between 1 bar (14.5 psi) and 5 bar (72.5 psi).

The water pressure must not fall below 1 bar (14.5 psi) as otherwise the operation can be impaired! If the filter is not maintained regularly an elevated pressure loss can come about and this can impair the filter function.



(see chapter “Safety Indications and Dangers due to Non-compliance”)

At a **water pressure higher than 5 bar (72.5 psi)**, a pressure reducer has to be fitted **before** the under-sink water filter (see Fig.2).

In modern sanitary installations (in particular where single lever mixers are used), despite normal system pressure conditions, peak pressures of up to over 30 bars (435 psi) frequently occur. This can cause damages. The optimum operating pressure for the under-sink water filter is between 2 bars (29 psi) and 4 bars (58 psi). In this case the under-sink water filter works most economically.

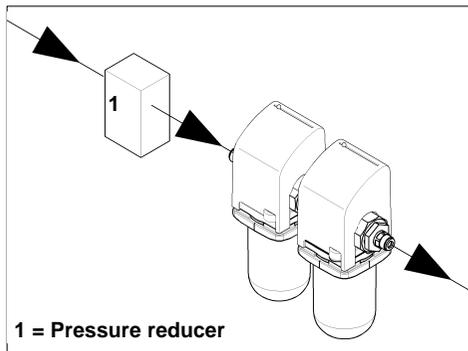


Fig. 2: Pressure reducer before the under-sink water filter.

2.2 Tip-off on special dangers

2.2.1 Electrical equipment / installations



There must not be any electrical cables and devices underneath or in the immediate vicinity of the under-sink water filter!

Electrical devices / equipment that are not splash-water proof and are situated in the direct vicinity of the under-sink water filter may be damaged by water escaping from the under-sink water filter caused as a result of the device being operated improperly. In addition short circuits may come about if these electrical devices / equipment are / is connected to the electrical power supply. At this there is the danger of electric shock for persons. Therefore all the electrical devices / equipment situated in the direct vicinity should be splash-water proof, respectively comply with the statutory requirements for wet areas (NEMA type 12 / IP44).

3. Product Indication



3.1 Intended purpose

This under-sink water filter is suitable for the use in cold drinking water up to a water temperature of maximum 30°C (86°F).



(see chapter “Safety Indications and Dangers due to Non-compliance”)

Concerning use restrictions, see chapter “Intended Use”, please.

4. Installation

4.1 General



(see chapter “Safety Indications and Dangers due to Non-compliance”)

The installation may only be effected by qualified personal.

The chapter “Intended Use” has to be observed imperatively!

For an easy operating and maintenance the indicated distances have to be kept categorically (see chapter “Installed Dimensions”).

Appropriate Mounting Place:

Concerning its mounting place the under-sink water filter is intended to be installed directly under the sink (see chapter “Modifications / Changes / Spare parts”).

The water supply has to be closed before the installation and may only be reopened after the mounting having been completely finished. In case of non-observance water damages can arise.

If the water filter hasn't been put into service for longer time, the standing water should be removed. Open the spigot and let the water run during approximately five minutes.

When installing, all the parts have to be mounted. Due to non-observance, its function can be compromised.

When installing and replacing the cartridge pay attention to scrupulous cleanliness.

Through dirt on your hands, during the installation and during the replacement of parts, bacterial impurities of the drinking water installation can be caused.

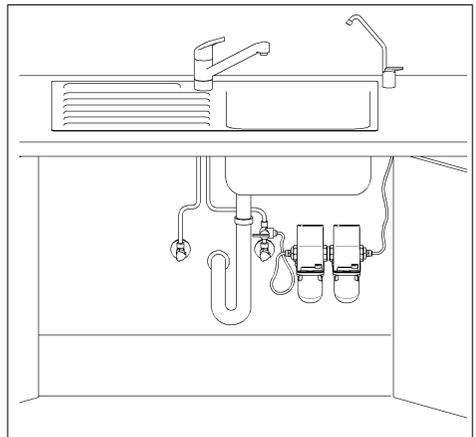


Fig. 3: Under-sink Water filter under-sink installation

4.1.1 Requirements: Mounting Place

The room where the unit is installed must be dry and frost free!

Unauthorised persons must not have access to the under-sink water filter!



(see chapter “Safety Indications and Dangers due to Non-compliance”)

The ambient temperature must not exceed 30°C (86°F)!

Do not connect to the hot water system!

The under-sink water filter should not be exposed to direct sunlight, to avoid deformations in the plastic parts.

The under-sink water filter can be installed into all drinking water conduits, usual in trade.

Before starting the mounting the water supply line has to be shut off at the corresponding water conduit. The under-sink water filter is to be installed into the cold water line before the water tap.

Pay attention to the flow direction (see Fig.4)!

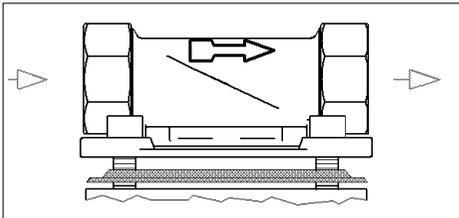


Fig. 4: Flow direction

4.1.2 Wall-Mounting Installation

There has to be enough space for the wall-mounting installation (see chapter “Installed Dimensions”). Use the enclosed drilling rig as a mounting aid.

Mount both wall brackets below the sink with the aid of the cross-head screws by twos.

The wall-mounting has to be installed in a way that the under-sink water filter is freely approachable in order to effectuate the cartridge replacement.

4.1.3 Installation of the spigot

For the fixation of the spigot and the hoses sufficient space has to be available.

Concerning the installation of the spigot a round opening of a diameter of 13 mm (0.52 inch) is required. The opening should be in the sink or in the work disk, close to the sink.



When drilling an opening into porcelain or stainless steel the necessary operations have to be observed.

Installation:

- Drilling of the opening.
- Run the spigot (1.1) with the seal ring (1.2) downwards through the opening of the sink or the work disk.
- The mounting disc (1.3) with the external buckling pointing upwards and the spacer sleeve (1.4) with the hexagon nut (1.5) have to be screwed together from the bottom.
- Tighten carefully.
- Connect Hose adaptor water tap 1/8" thread/hose (1.6) to the spigot (1.1).
- Tighten carefully.

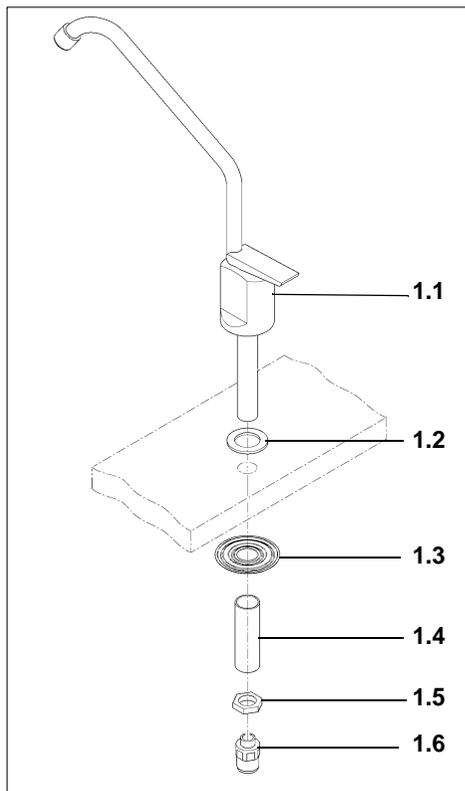


Fig. 5: Spigot with connection kit (1)

- 1.1 Spigot
- 1.2 Seal ring
- 1.3 Assembly disc
- 1.4 Spacer sleeve
- 1.5 Hexagonal nut
- 1.6 Hose adaptor water tap 1/8" thread/hose

4.1.4 Mounting of the Fresh Water Supply Line

All the lines connected with this device may only be mounted on cold water lines.

- Connect the water supply to the edge valve.
- Mount the T-piece (13) tightly on the edge valve.
- In the branching of the T-piece adaptor, closely install the spherical faucet (12) with the hose adaptor (3).

4.1.5 Installation of the Under-sink Water filter

Snap the under-sink water filter into the wall-mounting.

Pay attention to the flow direction (see Fig.6)!

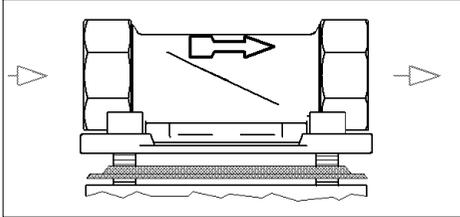


Fig. 6: Flow direction

Connect the under-sink water filter with the hoses, the spherical faucet located on the edge valve and the spigot via the hose adaptor. The hoses have accordingly to be cut short.

Insert the enclosed LEGIOLAX silver-coated spiral into the hose to the spigot. The silver-coated spiral can be pulled apart to the length of the connection hose. The silver coating reduces the risk of re-contamination by germs during the stagnation phases.

Open carefully the cold water line and the spigot (1) so that the air can escape from the system. The microfiltration module must also be vented via the bleed screw. The bleed screw must be slightly unscrewed so that the air can escape. Retighten the bleed screw (see Fig.7).

It has to be flushed till the clear water will run off.

Re-close the spigot (1).

Particles of Activated Carbon may become dislodged from the cartridge during installation. This has no bearing on the filter function and only underlines the efficiency of the cartridge type used. Should these particles prove to be an optical disturbance, please simply rinse the cartridge for a few minutes before installing the micro filtration cartridge.

Setting of the filter change indicator:

Move the indicator button on the cover to the next filter change point-in-time (filter change every 4 - 6 months at the latest).

The under-sink water filter is ready for service.

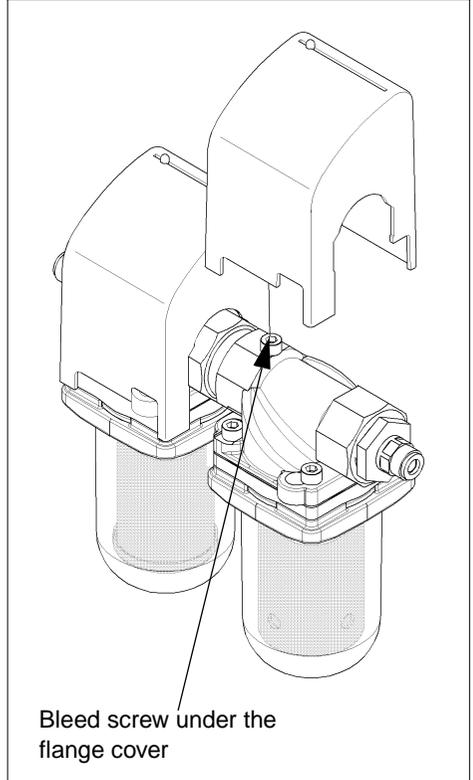


Fig. 7: Bleed screw

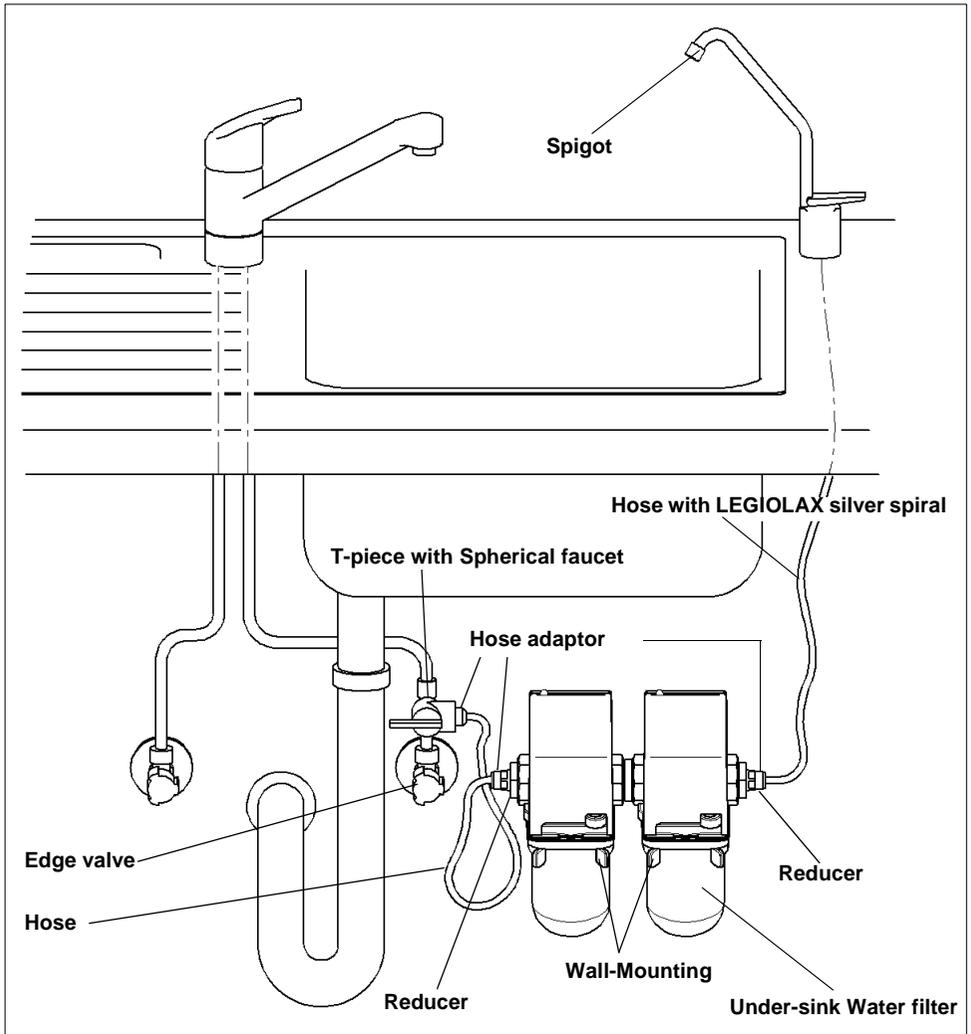


Fig. 8: Installation

5. Service



(see chapter “Safety Indications and Dangers due to Non-compliance”)

Always observe the chapter “Intended Use”!

5.1 Commissioning

Before starting up (initial putting into service or start-up after maintenance work), **fill** the under-sink water filter with water and **vent!**

To do this, after its installation the water filter is filled with water by the opening of the spigot. It must be flushed till the running water is clear (see Fig.8).

Re-close the spigot.

Check for leaks after completing the start-up and a few hours later.

5.2 Functional Description

The under-sink water filter:

- Improves the water taste.
- Removes bacteria, fungi, parasites, insecticides, herbicides, phenols, chlorine, ...
- Easy to install, child's play to use.

Water filtration in the kitchen to generate treated drinking water.

Ideally suited for the preparation of drinks and cooking water.

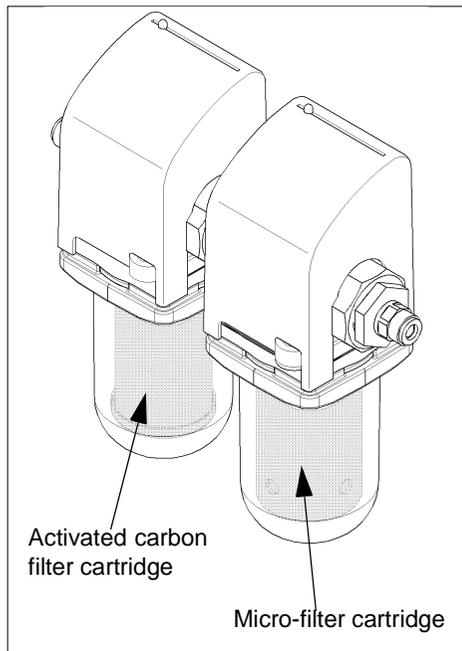


Fig. 9: Functional Description

5.3 Modifications / Changes / Spare parts



(see chapter “Safety Indications and Dangers due to Non-compliance”)

Only original spare parts are to be used!

Independent modifications and changes are prohibited for safety reasons! Those can impair the function of the under-sink water filter, they can lead to leaks and in extreme cases can make the under-sink water filter burst.

5.4 Stoppages



(see chapter “Safety Indications and Dangers due to Non-compliance”)

If an under-sink water filter is unscrewed, the chapter “Intended Use” has to be obligatorily observed!

5.5 Replacing the cartridge

- 1 Close the shut-off fittings before the under-sink water filter. Relieve the pressure via the spigot.
- 2 Remove the under-sink water filter: Press back the clamping ring of the hose adapter, remove the hoses from the hose adapter and then remove the water filter from the wall-mounting.
- 3 Remove the flange cover upward (see Fig.11).
- 4 Use an allen wrench to undo all four cheese head screws.
- 5 Turn the filter hood to the left up to the limit stop and pull off downward.
- 6 Remove and replace the used profiled flange gasket. The section of the profiled flange gasket must point towards the built-in rotary flange. Failure to observe this can lead to leaks and water escaping. This can in turn cause water damage to the house and its installations (see Fig.10).

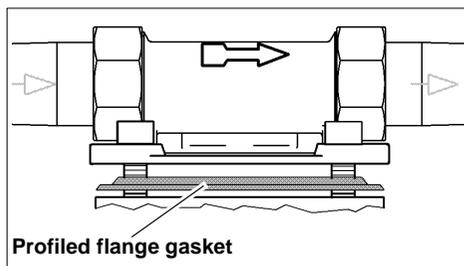


Fig. 10: Built-in rotary flange

- 7 Remove the used replacement cartridge.
- 8 Clean the seat of the cartridge in the housing using the disinfectant cloth provided.

Important: Do not touch any plastic parts, especially not the filter hood!
- 9 Insert the new replacement cartridge in the built-in rotary flange and press in up to the limit stop.
- 10 Insert the filter hood into the bayonet opening of the built-in rotary flange, turn to the right up to the limit stop.

- 11 Use a hexagon socket wrench to tighten all four cheese head screws.



Select the tightening torque (approx 4 Nm) so that the seal closes and the water filter is not damaged or stressed/distorted!

- 12 Replace the flange cover.
- 13 Install the under-sink water filter: Insert in the wall-mounting and connect the hoses with the hose adapter.
- 14 Re-open the shut-off fittings before and behind the under-sink water filter.

When starting up again, briefly open the nearest tap and undo the bleed screw to vent the under-sink water filter.



ATTENTION



Particles of Activated Carbon may become dislodged from the cartridge during installation. This has no bearing on the filter function and only underlines the efficiency of the cartridge type used. Should these particles prove to be an optical disturbance, please simply rinse the cartridge for a few minutes before installing the micro filtration cartridge. Always keep the filter elements in the following order in flow direction:

1. Activated carbon filter cartridge
2. Micro-filter cartridge!

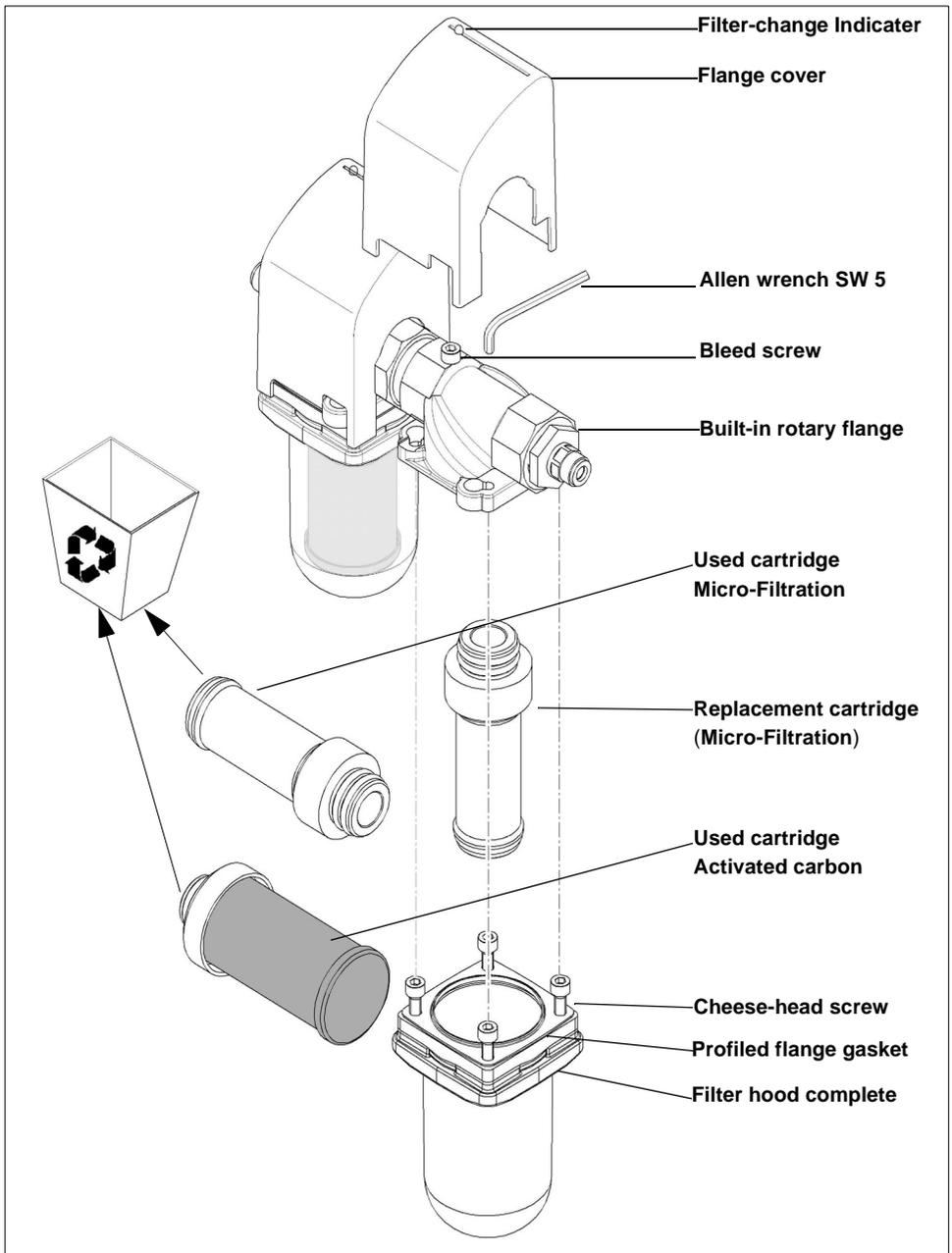


Fig. 11: Replacing the cartridge

6. Faults

Help with faults:

Fault	Cause	Remedy
Water smells unpleasantly or has become discoloured!	The under-sink water filter has not been used over a longer period.	For hygienic reasons you must let the water run for approximately 10 minutes. If then condition does not then improve the cartridge must be replaced.
Water flow rate falls!	The cartridge is clogged.	Replace the cartridge. Premature cartridge replacement is necessary if the water contains a large proportion of particles or in case of large water consumption (see chapter "Replacing the cartridge").
Leaks in the under-sink water filter!	Under-sink Water filter has been exposed to higher temperatures or solvents.	Inform the fitter or nearest customer service centre.

7. Maintenance



(see chapter "Safety Indications and Dangers due to Non-compliance")

Always observe the chapter "Intended Use"!

7.1 Cleaning



(see chapter "Safety Indications and Dangers due to Non-compliance")

Only use clear, clean drinking water to clean the housing.

Domestic all-purpose cleaners and glass cleaners can contain up to 25% solvents or alcohol (spiritus).

These kinds of cleaners must therefore not be used.

8. Warranty and Services

According to DIN 1988 Part 8, in order to obtain your legal warranty claim it is necessary for "... the filter insert to be replaced according to the manufacturer's maintenance instructions ..." (i.e. every 6 months) and "...depending on the operating conditions; however, for hygienic reasons at shorter intervals than 6 months...". Regular servicing is indispensable in order to continue to achieve a successful treatment for many years after the unit is put into service. In the building services sector this is covered by DIN 1988, Part 8..

Wherever possible, the regular servicing work and supply with consumables and wearing materials, etc. should be carried out by the specialist trade or the factory's customer service department..

In order to obtain your legal warranty claim, a visual inspection is necessary every three months, depending on water consumption.

Clean fittings are prerequisite for hygienically perfect drinking water.

Regularly clean the spigot with disinfectant!

9. Data sheet

9.1 Type

JUDO PURE@TAP under-sink water filter

Abbreviated name: ACMF

Order No.: 8115010

9.2 Technical Data

Water temperature	5 - 30°C (41 - 86°F) S
pH-area:	5.5 - 9.5
Water pressure min.	1 bar (14.5 psi)
Water pressure max.	5 bar (72.5 psi)
Replacement interval 4-6 month of the filter cartridge	

Flow rate (at 2 bar / 29 psi)	200 liter / hour (0.9 US gpm) (0.73 GB gpm)
Total capacity per filter cartridge	MF: 2000 litres ¹⁾ (525 US gal / 440 GB gal)
	AC: 2000 litres ¹⁾ (525 US gal / 440 GB gal)
Effective filter value	0,2 micron (0,0002 mm)

1) depend on waterqualiy

Bacteria removal value:

E.coli, Vibro Cholera, Shighella, Salmonella Typhi, Klebsiella Terrigena, Cryptosporidium, Giardia	> 99.99 %
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9.3 Installed Dimensions

Model	A	B	C	D
ACMF	192 mm (7.56 inch)	145 mm (5.7 inch)	72 mm (2.83 inch)	81 mm (3.19 inch)

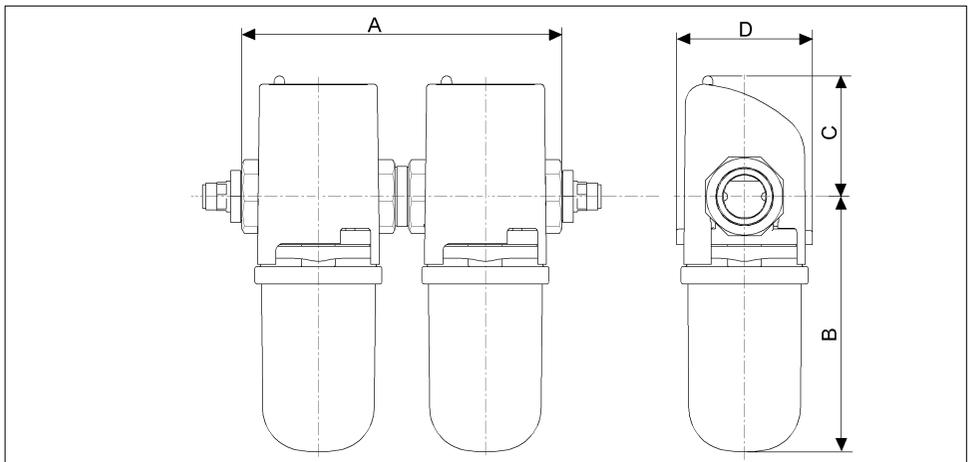
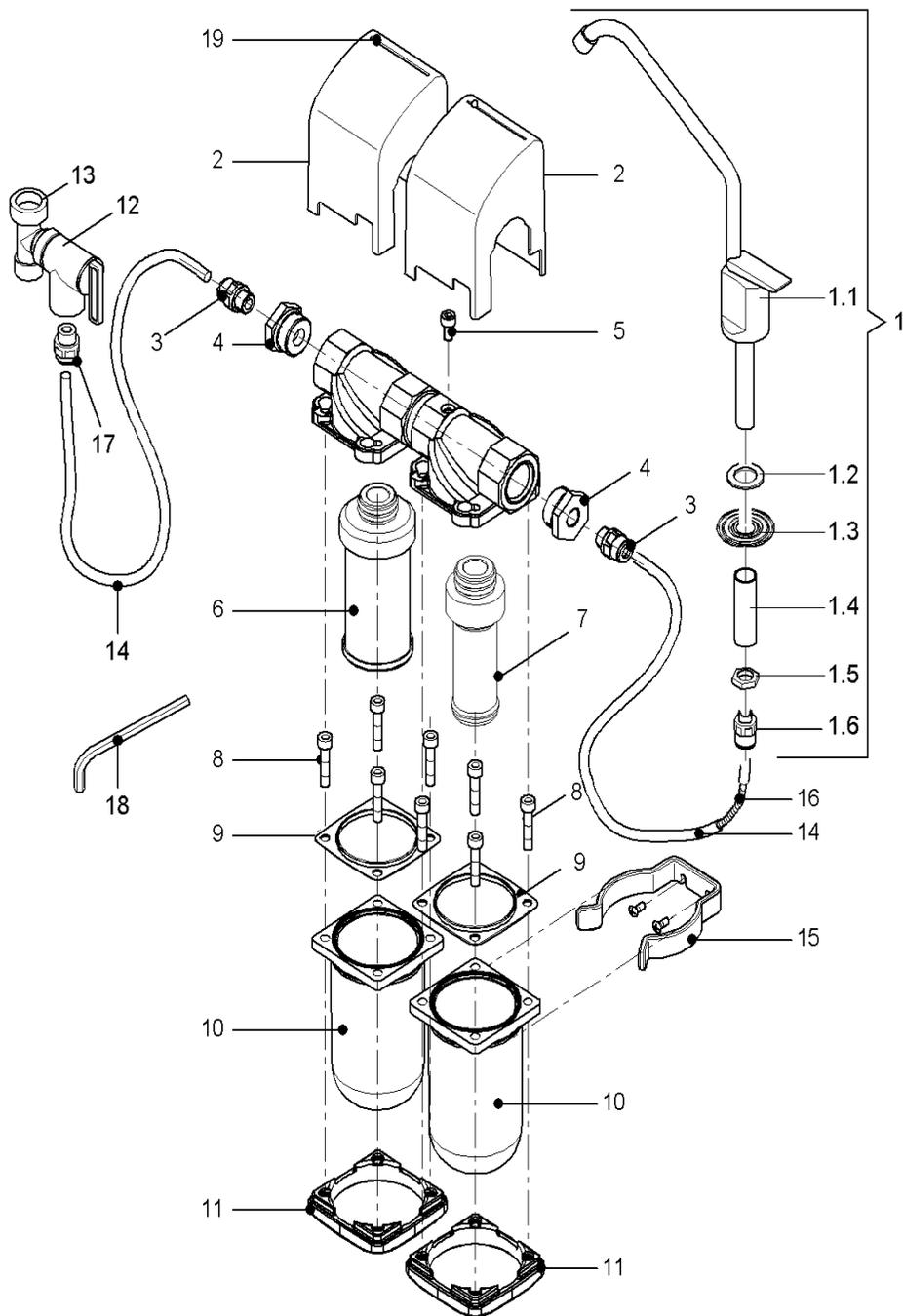


Fig. 12: Installed Dimensions

10. Spare Parts ACMF



Spare Parts List ACMF ¾"

Item	Designation (Recommended average replacement interval for wearing parts)	Piece(s)	Order No.	AU ¹⁾ / Piece
1	Spigot with connection kit	1	1980273	78
1.1	Spigot			
1.2	Seal ring			
1.3	Assembly disc			
1.4	Spacer sleeve			
1.5	Hexagonal nut			
1.6	Hose adaptor water tap 1/8" thread/hose	1	1130378	11
2	Flange cover ACMF	2	2110022	22
3	Hose adaptor ¼" thread/hose	2	1130377	11
4	Reducer ¾" AG - ¼" IG	2	1980268	4
5	Cheese-head screw	1	1650383	1
6	Replacement cartridge Activated carbon ²⁾	1	8115016	Price in accordance with current price list
7	Replacement cartridge micro-filter ²⁾	1	8115017	
8	Cheese-head screw M6x30	8	1650209	2
9	Profiled flange seal ³⁾	2	2460016	7
10	Filter hood	2	1120560	49
11	Flange	2	1420013	20
12	Spherical faucet	1	1610579	24
13	T-piece	1	1450265	13
14	Hose ⁴⁾	2	2110029	5
15	Wall-Mounting	2	2270050	32
16	LEGIOLAX silver coated spiral ⁴⁾	1	8230001	Price in accordance with current price list
17	Hose adaptor 3/8" thread/hose	1	1130376	15
18	Allen wrench SW 5			
19	Indicator Button	2	1120424	2

- 1) AU = Accounting unit
- 2) Replacement interval = 4 - 6 month
- 3) Replacement interval = 2 years
- 4) Replacement interval = 4 years

11. Customer Service



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Installed by:

JUDO PROFI-PLUS / PROMI

Backwash protective filter / Germ protection class domestic water station with point rotation system for optimum cleaning of the filter insert.

JUDO QUICKSOFT-DUO

Softener system for noticeably soft water around the clock. Environmentally friendly protection against lime-scale blockage and damage. Reduces detergent and cleaning agent consumption.

JUDO JRSF Backwashing protective filter

The classic with patented filter system. Compact, robust, tried and tested thousands of times. Numerous versions from 1" to DN 200

JUDO JU-WEL Compact

Undercounter "jewelling" unit for 1 water tap. With amethyst, rock crystal and rose quartz healing stones. Wellness pure with "jewelled" water.

JUDO BIOSTAT-COMBIMAT

The Anti-Lime Protection and Hygiene-Unit to be used in domestic water installations.

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