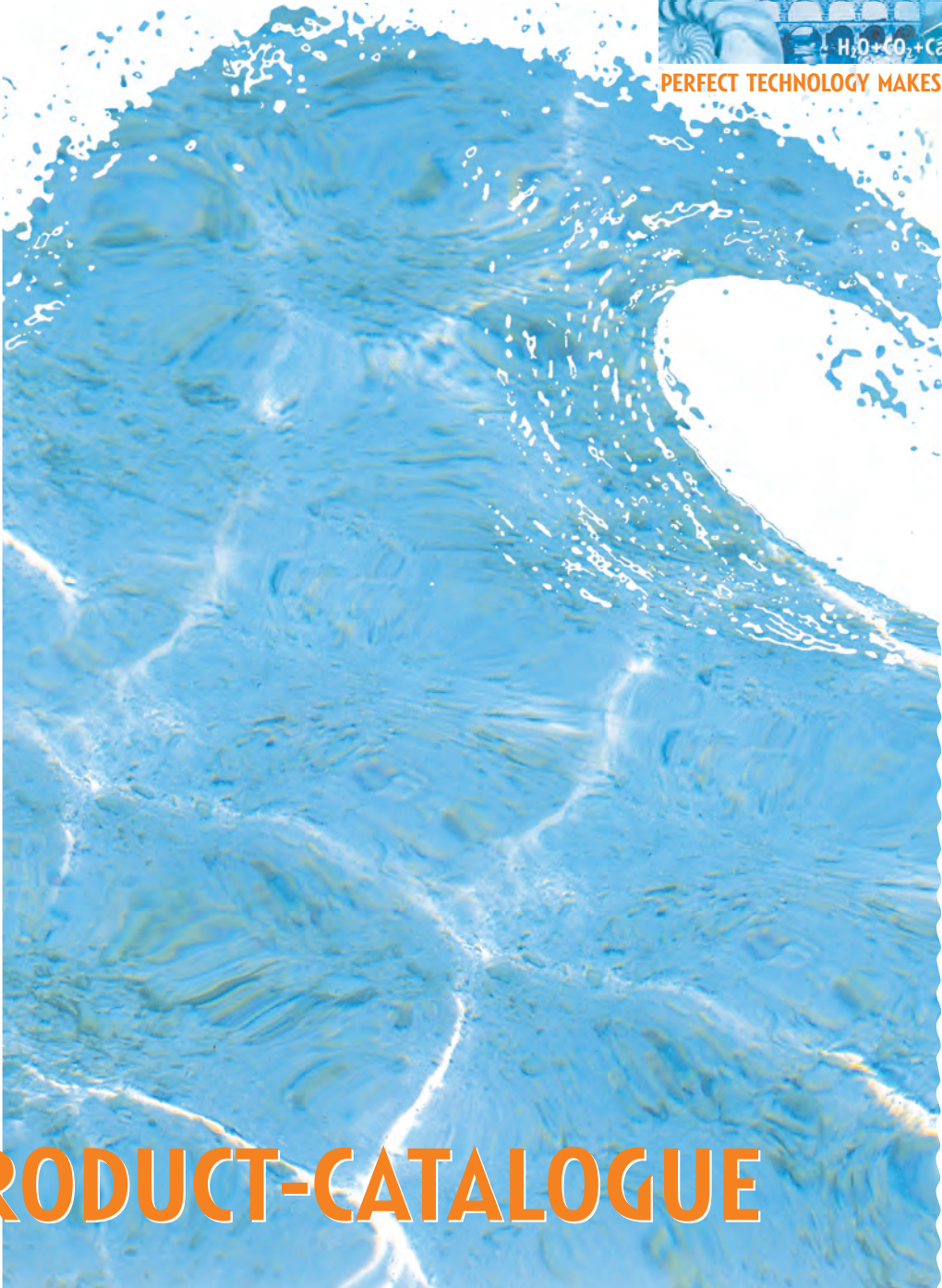




PERFECT TECHNOLOGY MAKES THE DIFFERENCE



PRODUCT-CATALOGUE



JUDO WATER CULTURE AT ITS BEST

JUDO - FASCINATION FUTURE

Striving for best water for Humankind and Technics is at the origin of a Technology developed and perfected by JUDO: The Water Treatment.

Founded by Chief Engineer Julius Dopslaff for over seventy years, JUDO has always been committed to offer new perspectives to match customers needs and create more ingenious ideas from simple filtration to highly developed water treatments.

In the mean time, the second generation has taken over the management of this family business.

Today Hartmut Dopslaff and his son Carsten Dopslaff share the responsibilities of managing the company.

JUDO discovers and develops new technologies, brings them to market, increases the product performance, gives new ideas to Water Culture. Our product meet the most discerning demands expected of safety and hygiene

standards for water technology.

This new product catalogue covers not only an overview of Domestic Water Technology but also a large part of the industrial area.

Our service team is as your disposal to provide you with the best possible assistance to your inquiries - Project are conducted by qualified consulting and detailed offers respectively to customers requirements.

Beyond our distribution and service network in Germany, we collaborate throughout the world with well known trading partners who benefit from JUDO's many years of experience and the quality of our technology.

You can trust in both the immense potential and capabilities of JUDO and the quality of our products.

Your JUDO Water Treatment Company.

Chief executive officer
Hartmut J. Dopslaff

Chief executive officer
Carsten H. Dopslaff



**QUALITY
MADE IN GERMANY**



JUDO Headquarter Winnenden, Germany



JUDO Production Waldrems, Germany



JUDO France, Strasbourg



JUDO BeNeLux, Brussels



JUDO Austria, Stockerau

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Conversions

1 yd	1 yard = 3 feet	0,9144 m	1 psi	1 pound per square inch	0,06896 bar
1 ft (')	1 foot = 12 inches	0,3048 m	1 US gallon		3,78 l
1 in (")	1 inch = Zoll	25,4 mm	1 Imp. gallon	1 gallon = 8 pint (pt)	4,546 l
1 oz	1 ounce	28,35 g	°F	°F = (x-32) x 0,556 °C	
1 lb	1 pound = 16 ounces	453,6 g			

Hardness units	1 meq/l	1 °d / German	1 °f / France	1 °e / Great Britain	1 ppm / US	1 mmol/l
1 meq/l	1,0	2,8	5,0	3,5	50,0	0,50
1 °d	0,375	1,0	1,78	1,25	17,8	0,18
1 °f	0,2	0,56	1,0	0,7	10,0	0,10
1 °e	0,286	0,8	1,43	1,0	14,3	0,14
1 ppm	0,02	0,056	0,1	0,07	1,0	0,01
1 mmol/l	2,0	5,60	10,0	7,02	100	1,0

Pressure	Pa (N/m ²)	bar	at	Torr	atm
1 Pa = 1 N/m ²	1	10 ⁻⁵	1,020 x 10 ⁻⁵	0,750 x 10 ⁻²	0,987 x 10 ⁻⁵
1 bar	10 ⁵	1	1,020 x 10 ⁻⁶	0,750 x 10 ⁻³	0,987 x 10 ⁻⁶
1 at = 1 kp/cm ²	0,981 x 10 ⁵	0,981	1	735,6	0,9678
1 Torr	133,3	1,333 x 10 ⁻³	1,360 x 10 ⁻³	1	1,316 x 10 ⁻³
1 atm	1,013 x 10 ⁵	1,033	1,033	760	1

JUDO PROTECTIVE FILTERS - SETTING STANDARDS IN WATER TREATMENT

Every year thousands of pipe bursts occur in non-protected water pipes. The reason for this are foreign particles, contained in water. Without a protective

filter dangerous electrochemical elements emerge in the water. These ones lead to corrosion, to grains of rust, pitting and last not least to pipe bursts.



Norms - A Challenge for the Filter

Norm „Technical Rules for the Drinking Water Installations“ DIN 1988, part II

Occasionally little solid particles, as for example rust particles and grains of sand are flushed into the domestic installations. Such particles can cause corrosion damages, induced by foreign substances in the form of pitting and shallow pit formation in the

pipings. In the course of time they can clog shower heads or air bubblers or disturb the function of the fittings. Filters prevent such occurrences to a large extent, in the case of an appropriate mesh width, according to DIN 19632.

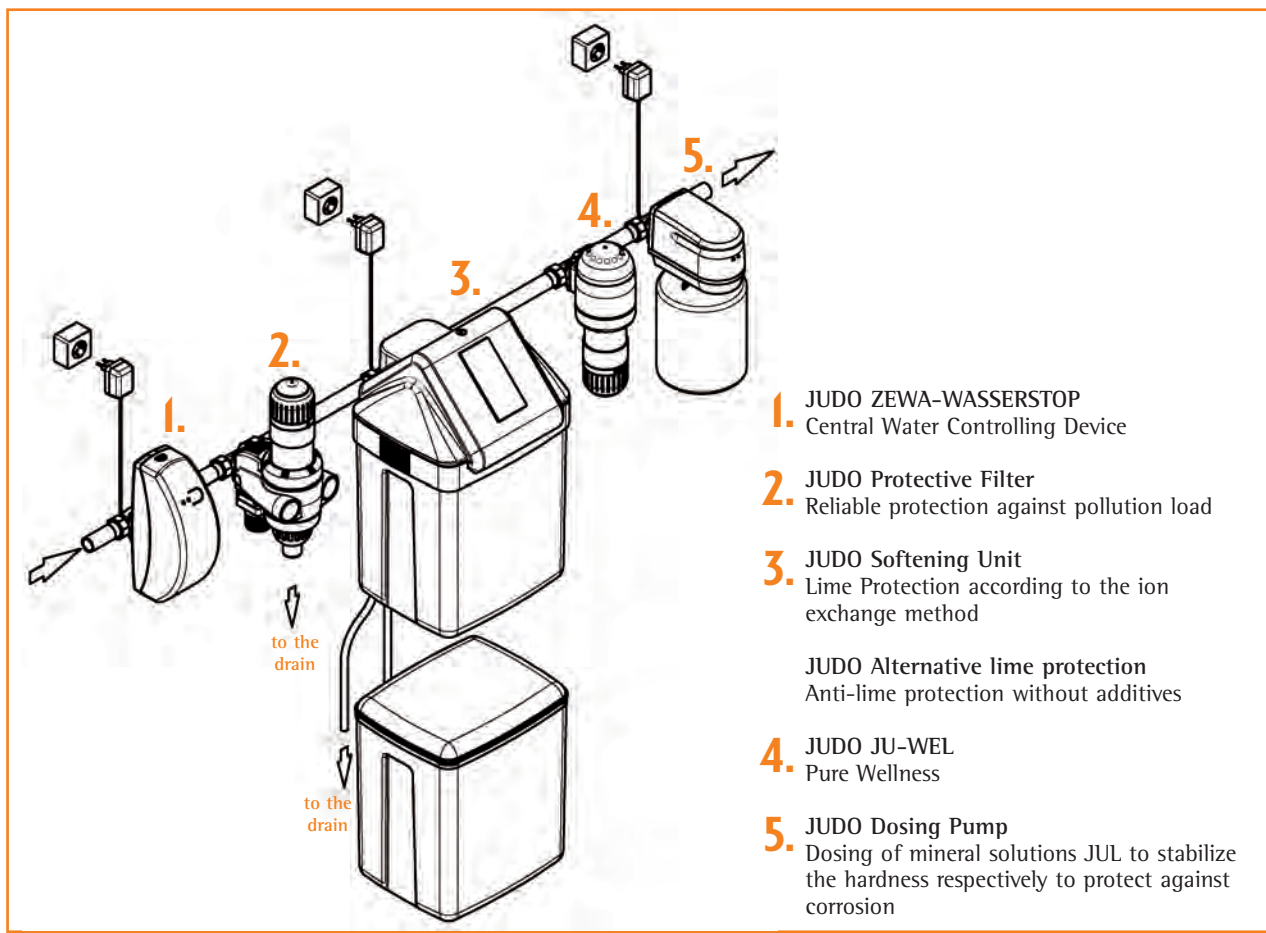
It is strongly recommended to install a filter to your drinking water installation right after the water meter.

* Depending on the nominal size of the protective filter

	Anti-germ Class	LongLife Class	JRSF - The Classic
Reliable protection against pollution load	●	●	●
Protection against pitting due to foreign particles	●	●	●
Prophylactic anti-germ-protection	●		
Patented ceramic-valve technique		●	
Housing made of high-quality grey cast iron` *			●
Available as:			
Backwash Protective Filter	●	●	●
Automatic Backwash Protective Filter	●	●	●
Domestic Water Unit	●	●	
Hot Water Design (Water temperature maximum 85 °C)			●
Optional Leakage Protection	PRO-SAFE	ECO-SAFE	ZEWA Water Stop
In the nominal sizes:	3/4" - DN 200	3/4" - 2"	1" - DN 200

Installation scheme

JUDO Protective Filter



Example of an Installation scheme



JUDO Anti-Germ Protection Product

Backwash Protective Filters



Type JPF+ 3/4" - 1 1/4"

JUDO Backwash Protective Filter PROFI-PLUS 3/4" - 2"

Type JPF+ 3/4" - 2" with memory electronic for 3/4" - 1 1/4" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Filter housing of high-quality plastics, PN 16, built-in rotary-flange with patented brass-bayonet-joint, threaded connection according to DIN 2999, filter

screen made of stainless steel, silver coated, for anti-germ protection, inferior/superior mesh size 0,095/0,125 mm, hand wheel (with memory electronic from 3/4" - 1 1/4") flushing by means of the point rotation system with simultaneous cleaning of the inspection glass, calendar indication of the backwashing (3/4" - 1 1/4").

Type	JPF+	JPF+	JPF+	JPF+	JPF+
Pipe connection	3/4" *	1"	1 1/4"	1 1/2" ***	2" ***
Water Flow Rate up to m ³ /h	4,0	4,5	5,5	16	17
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2	0,2	0,2
Installation Length mm	180	195	230	252	280
Mesh Size mm	0,1	0,1	0,1	0,1	0,1
Order - Number	8010072	8010073	8010074	8107012	8107013

On request also available with mesh sizes 0,03/0,32 and 0,5 mm.

* 3/4" QUICKSET-E with JPF+ 1"

** Released for 1" - 1 1/4"

*** Not displayed



Type JPF DN 80

JUDO Backwash Protective Filter PROFI DN 65 - 200

Type JPF DN 65 - 200 according to DIN 13443-1 for water up to 30 °C

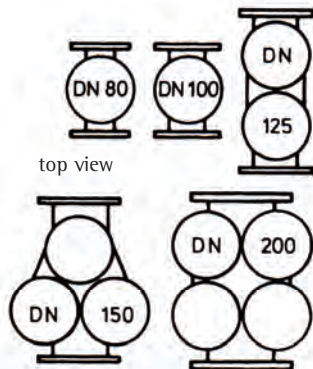
Scope of Supply: High Quality cast-iron housing, PN 10*, corrosion resistant lining, inside and outside (Rilsan), filter screen of stainless steel, silver coated for the prophylac-

tic anti-germ protection, inferior/superior mesh size 0,095/0,125 mm, equipped with large hand wheel for the backwashing by means of the point rotation system with simultaneous cleaning of the inspection class, with connection for differential pressure gauge 1/4".

Type	JPF	JPF	JPF
Pipe connection	DN 65	DN 80	DN 100
Water Flow Rate up to m ³ /h	27	50	70
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2
Installation Length mm	240	320	320
Mesh Size mm	0,1	0,1	0,1
Order - Number	8107014	8010033	8010034

On request also available with mesh sizes 0,03/0,32 and 0,5 mm.

* JPF DN 65: PN 16



Type	JPF	JPF	JPF
Pipe connection	DN 125	DN 150	DN 200
Water Flow Rate up to m ³ /h	100	150	200
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2
Installation Length mm	560	560	600
Mesh Size mm	0,1	0,1	0,1
Order - Number	8010035	8010036	8010037

On request also available with mesh sizes 0,03/0,32 and 0,5 mm.

JUDO Anti-Germ Protection Product

Automatic Backwash Protective Filters



Type JPF+ -A/T 3/4" - 1 1/4"

JUDO Automatic Backwash Protective Filter PROFIMAT-PLUS 3/4" - 2"

Type JPF+ -A 3/4" - 2" according to DIN 13443-1 for water up to 30 °C, maximum operating pressure 10 bar

Scope of Supply: same as type JPF+, however, with automatic backwashing, to set the operating and backwash intervals, by means of synchronous motor, power supply unit 230 V/50 Hz, electronic control, with operating and fault indication, by means of light-emitting diode and buzzer.

Triggering of the automatic backwashing optionally:

Time control „T“ for JPF+ -A/T 3/4" - 2" by means of a program connector, hour, day, week and month can be selected, manual trigger via key.

Differential pressure control „TP“ for JPF+ -A/TP 3/4" - 2" same as valid for T-Control, equipped, however, with differential pressure switch (adjustable differential pressure up to 1 bar) for the triggering of the backwashing.

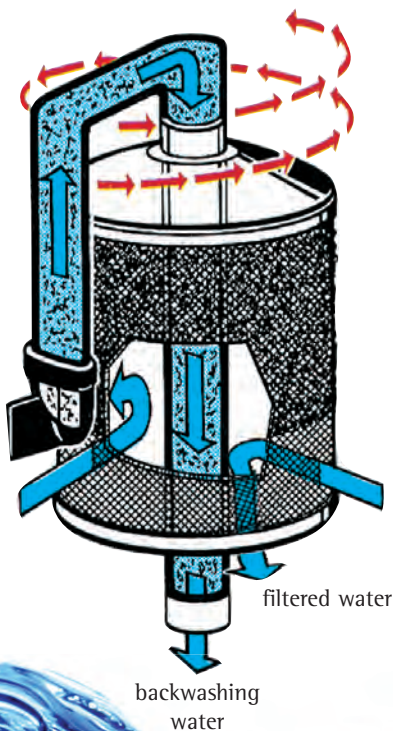
Type	JPF+ -A	JPF+ -A	JPF+ -A	JPF+ -A	JPF+ -A
Pipe connection	3/4" *	1"	1 1/4"	1 1/2"	2"
Water Flow Rate up to m ³ /h **	4,0	4,5	5,5	16	17
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2	0,2	0,2
Installation Length mm	180	195	230	252	280
Mesh Size mm	0,1	0,1	0,1	0,1	0,1
Order - Number „T“	8020104	8020105	8020106	8307012	8307013
Order - Number „TP“	8020107	8020108	8020109	8020069	8020073

On request also available with mesh sizes 0,03/0,32 and 0,5 mm. Potential free contact on request.

* 3/4" QUICKSET-E with JPF+ -A 1"

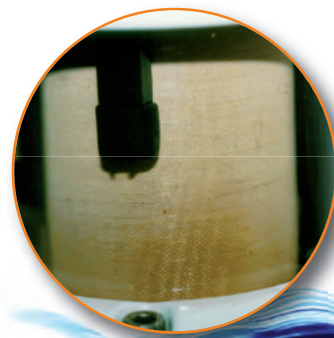
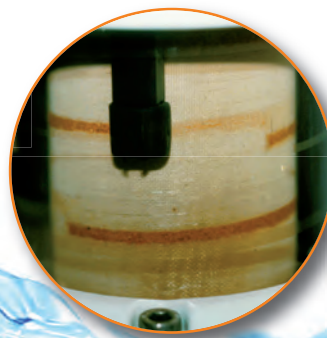
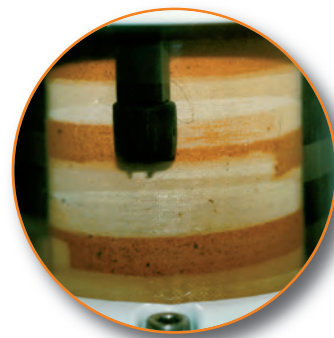
** Specification to water flow rate are for drinking water. If water is too polluted (sediments) a larger dimension has to be chosen. Only by trained personal.

*** Released for 1" - 1 1/4"



JUDO Point-Rotation-System

The patented point-rotation-system guarantees optimum sieve cleaning



JUDO Anti-Germ Protection Product

Automatic Backwash Protective Filters



Type JPF-A/TP DN 65

JUDO Automatic Backwash Protective Filter PROFIMAT DN 65 - 200

Type JPF-A DN 65 - 200 according to DIN 13443-1 for water up to 30 °C, maximal operating pressure 10 bar

Scope of Supply: same as type JPF+, however, with automatic backwashing, to set the operating and backwash intervals, by means of synchronous motor, power supply unit 230 V/50 Hz, electronic control, with operating and fault indication, by means of light-emitting diode and buzzer.

Triggering of the automatic backwashing optionally:

Time control „T“ by means of a program connector hour, day, week and month can be selected, manual trigger via key.

Differential pressure control „TP“ for JPF-A/TP 3/4" - DN 100 same as T-Control, equipped, however, with differential pressure switch (adjustable differential pressure up to 1 bar) for the triggering of the backwashing.

for JPF-A/TP DN 125 - 200 with separate control box, time- and differential pressure-dependent by means of additional differential pressure gauge with adjustable differential pressure up to 2 bar. Potential free contact for faulty indication.



Type JPF-A/TP DN 200

Type	JPF-A	JPF-A	JPF-A
Pipe connection	DN 65	DN 80	DN 100
Water Flow Rate up to m ³ /h **	27	50	70
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2
Installation Length mm	240	320	320
Mesh Size mm	0,1	0,1	0,1
Order - Number „T“	8307014	8020033	8020034
Order - Number „TP“	8020038	8020039	8020040

Type	JPF-A	JPF-A	JPF-A
Pipe connection	DN 125	DN 150	DN 200
Water Flow Rate up to m ³ /h **	100	150	200
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2
Installation Length mm	560	560	600
Mesh Size mm	0,1	0,1	0,1
Order - Number „TP“	8020035	8020036	8020037

On request also available with mesh sizes 0,03/0,32 and 0,5 mm. Potential free contact on request.

** Specification to water flow rate are for drinking water. If water is too polluted (sediments) a larger dimension has to be chosen. Only by trained personal.

JUDO Anti-Germ Protection Product

Domestic Water Units



Type JPM 3/4" - 1 1/4"

JUDO Domestic Water Unit PROMI 3/4" - 2"

Backwash Protective Filter with PROFI-PLUS Technology, pressure-reducer and backflow preventer

Type 3/4" - 2" with memory electronic for 3/4" - 1 1/4" for water up to 30 °C

Scope of Supply: Housing of high quality plastic PN 16, built-in rotary-flange with patented brass bayonet-joint with threaded connection: JPM 1 1/2" - 2", housing of grey cast iron, corrosion resistant plastic lining inside and outside (Rilsan) threaded connection according to DIN 2999, backflow preventer, filter screen made of stainless steel,

silver coated for prophylactic germ protection, inferior/superior mesh width 0,095/0,125 mm, entry- and exit pressure gauge, filter insert backflushable, large handwheel (3/4" - 1 1/4" with memory electronic) for the backwashing with simultaneous cleaning of the inspection glass by means of the point rotation system, calendar indication of the backwashing (JPM 3/4" - 1 1/4"), pressure reducer - exit pressure of 4 bar factory-adjusted, adjustment range of the exit pressure from 1,5 to 6 bar, tested for noise insulation according to protection group 1 without requirements.

Type	JPM	JPM	JPM	JPM	JPM
Pipe connection	3/4" *	1"	1 1/4"	1 1/2" **	2" **
Water Flow Rate up to m ³ /h	3,3	4,5	5,5	13	15
Installation Length mm	180	195	230	252	280
Mesh Size mm	0,1	0,1	0,1	0,1	0,1
Order - Number	8170200	8170201	8170202	8150107	8150108

On request also available with mesh sizes 0,03/0,32 and 0,5 mm.

* 3/4" QUICKSET-E with JPM 1"

** Without picture



Type JSP 3/4" - 1 1/4"

JUDO Domestic Water Unit SPÜLI-PLUS 3/4" - 1 1/4"

Backwash Protective Filter with prophylactic germ protection, pressure-reducer and backflow preventer

Type 3/4" - 1 1/4" for water up to 30 °C

Scope of Supply: Housing of high quality plastic PN 16, built-in rotary-flange with patented brass bayonet-joint with threaded connection according to DIN 2999, backflow preventer, filter cloth made of stainless steel silver coated, for the prophylactic germ protection, inferior/superior mesh size 0,095/

0,125 mm, hand wheel for the backwashing of the filter screen with simultaneous cleaning of the filter hood, pressure reducer with - exit pressure of 4 bar factory-adjusted, adjustment range of the exit pressure from 1,5 to 6 bar, tested for noise insulation according to protection group 1 without requirements, beautifully shaped cover of the pressure reducer and of the filter hood, for the protection from ultra-violet radiation, integrated calendar indication of the backwashing.

Type	JSP	JSP	JSP
Pipe connection	3/4" *	1"	1 1/4"
Water Flow Rate up to m ³ /h	3,3	4,5	5,5
Installation Length mm	180	195	230
Mesh Size mm	0,1	0,1	0,1
Order - Number	8160100	8160101	8160102



JUDO LongLife Class

Domestic Water Units



Type JUKO-LF 3/4" - 1 1/4"

JUDO Domestic Water Unit JUKO-LongLife 3/4" - 2"

Backwash Protective Filter with Pressure Reducer, Type JUKO-LF 3/4" - 2" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Housing made of high-quality plastic PN 16, built-in rotary-flange with patented brass bayonet connector, threaded connection according to DIN 2999, filter cloth made of stainless steel, inferior/superior mesh width 0,095/0,125 mm, equipped with large handwheel for the back-

washing with simultaneous cleaning of the inspection glass, with integrated air gap and patented ceramic flush valve with hose connection. Pressure reducer with factory-adjusted exit pressure of 4 bar, adjustment range of the exit pressure from 1,5 to 6 bar tested for noise insulation according to protection group 1 without requirements, integrated calendar indication of the backwashing.

Type	JUKO-LF	JUKO-LF	JUKO-LF	JUKO-LF	JUKO-LF
Pipe connection	3/4"	1"	1 1/4"	1 1/2" *	2" *
Water Flow Rate up to m ³ /h	3,3	4,5	5,5	9,1	14
Installation Length mm	180	195	230	301	335
Mesh Size mm	0,1	0,1	0,1	0,1	0,1
Order - Number	8170250	8170251	8170252	8170215	8170216

Packing unit 12 pieces.

* With backflow preventer



Type JUKO-LF-A 3/4" - 1 1/4"

JUDO Automatic Domestic Water Unit JUKOMAT-LongLife 3/4" - 2"

Automatic Backwash Protective Filter with Pressure Reducer, Type JUKO-LF-A 3/4" - 2" according to DIN 13443-1, for water up to 30 °C

Scope of Supply: same as type JUKO-LF 3/4" - 2", however, additionally equipped with timer controlled automatic backwashing: Per backwashing, a triple cleaning of the screen surface is effected. The adjustment of the backwash interval can be selected in advance

(1 day, 1 week, 1 month or 2 months). Before the triggering of the start-up it is to be checked, if the buffer battery has enough capacity reserve, to bring to its end the backwashing, in case of a breakdown of the power supply system. Only then the backwashing is effected. A buffer battery (included in the extent of supply) ensures, that a backwashing, that already has started can be completed, even, if power breakdown takes place.

Type	JUKO LF-A	JUKO LF-A	JUKO LF-A	JUKO LF-A	JUKO LF-A
Pipe connection	3/4"	1"	1 1/4"	1 1/2" *	2" *
Water Flow Rate up to m ³ /h	3,3	4,5	5,5	9,1	14
Installation Length mm	180	195	230	301	335
Mesh Size mm	0,1	0,1	0,1	0,1	0,1
Order - Number	8170238	8170239	8170240	8170241	8170242

Packing unit 12 pieces.

* With backflow preventer

JUDO LongLife Class

Backwash Protective Filters



Type JSY-LF 3/4" - 1 1/4"

JUDO Backwash Protective Filter SPEEDY-LongLife 3/4" - 2"

Type JSY-LF 3/4" - 2" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Filter hood, made of high-quality plastic PN 16, filter housing, made of brass, with screwing, threaded connection according to DIN 2999, filter cloth made of stainless steel, inferior/superior mesh width

0,095/0,125 mm, equipped with large handwheel for the backwashing with simultaneous cleaning of the inspection glass, with integrated air gap and patented ceramic flush valve with hose connection, covering hood with integrated calendar indication of the backwashing.

Type	JSY-LF	JSY-LF	JSY-LF	JSY-LF	JSY-LF
Pipe connection	3/4"	1"	1 1/4"	1 1/2"	2"
Water Flow Rate up to m ³ /h	3,3	4,5	5,5	13,0	17,0
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2	0,2	0,2
Installation Length mm	180	195	230	252	280
Mesh Size mm	0,1	0,1	0,1	0,1	0,1
Order - Number	8070568	8070569	8070570	8070558	8070559

Packing unit 12 pieces.



Type JSY-LF-A 3/4" - 1 1/4"

JUDO Automatic Backwash Protective Filter SPEEDYMAT-LongLife 3/4" - 2"

Type JSY-LF-A 3/4" - 2" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: same as type JSY-LF 3/4" - 2", however, equipped additionally with timer controlled automatic backwashing: Per backwashing, a triple cleaning of the sieve surface is effected. The adjustment of the backwash interval can be selected in advance (1 day, 1 week, 1 month or 2 months). Before

triggering of the start-up it is to be checked, if the buffer battery has enough capacity reserve, to bring to its end the backwashing, in case of a breakdown of the power supply system. Only then a backwashing is effected. A buffer battery (included in the extent of supply) ensures, that a backwashing, that already has started can be completed, even, if power breakdown takes place.

Type	JSY-LF	JSY-LF	JSY-LF	JSY-LF	JSY-LF
Pipe connection	3/4"	1"	1 1/4"	1 1/2"	2"
Water Flow Rate up to m ³ /h	3,3	4,5	5,5	13,0	17,0
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2	0,2	0,2
Installation Length mm	180	195	230	252	280
Mesh Size mm	0,1	0,1	0,1	0,1	0,1
Order - Number	8070571	8070572	8070573	8070566	8070567

Packing unit 12 pieces.



JUDO Leakage Protection

JUDO PRO-SAFE and ECO-SAFE



**Fast,
simple and
ingenious!**

Demages that run into the Billions

Water flowing everywhere in your home, water-soaked clothing and furniture, reducing persons to nervous wrecks. Once more a pipe burst took place, a tub over-flow occurred, the user has forgotten to close a water tap properly...

In Germany alone, the tap water damages amount to more than EUR 1.5 billion within a year. The costs of water losses going unnoticed due to leaky fittings have also to be added.



Model JPS
(Scope of supply without filter and JQE)

JUDO Leakage Protection PRO-SAFE

Model JPS
for water up to 30 °C
(DVGW Certification-applied)

Scope of Supply: Housing made of high quality plastic, PN 16. The PRO-SAFE can easily be flanged between the connection piece JQE and the PROFI, PROMI or SPÜLL. Servo-motor to turn off water flow if the fol-

lowing criteria are exceeded: Total water quantity, Maximal water flow, draw-off time and vacation switching. Electronic control with clearly arranged light-emitting diode indication.

Open-/closed key, indication of the cause of the switch-off, the stand-by mode and the power supply unit 230V/50 Hz.

Type	JPS
To be combined with	PROFI, PROMI und SPÜLL
Connection piece JQE	3/4" - 1 1/4"
Water flow up to m ³ /h	4,0
Pressure loss bar	0,5
Face-to-face depth mm	75
Order - Number	8140011



Model JES
(Scope of supply without filter and JQE)

JUDO Leakage Protection ECO-SAFE

Model JES
for water up to 30 °C
(DVGW Certification-applied)

Scope of Supply: Housing made of high quality plastic, PN 16. The ECO-SAFE can easily be flanged between the connection piece JQE and the JUKO-LF or SPEEDY-LF. Servo-motor to turn off water flow if the fol-

lowing criteria are exceeded: Total water quantity, Maximal water flow, draw-off time and vacation switching. Electronic control with clearly arranged light-emitting diode indication.

Open-/closed key, indication of the cause of the switch-off, the stand-by mode and the power supply unit 230 V/50 Hz.

Type	JES
To be combined with	LongLife-Class
Connection piece JQE	3/4" - 1 1/4"
Water flow up to m ³ /h	4,0
Pressure loss bar	0,5
Face-to-face depth mm	75
Order - Number	8140010



JUDO Protective-Filter

Domestic Water Unit



Type GUBI-E 3/4" - 1 1/4"

JUDO Domestic Water Unit GUBI-E and JUKO 3/4" - 1 1/4"

Type GUBI-E 3/4" - 1 1/4" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Housing of high quality plastic PN 16, built-in rotary-flange with patented brass bayonet-joint with screw connection, threaded connection according to DIN 2999, filter screen made of stainless steel, inferior/superior mesh width 0,095/0,125 mm, equipped with large handwheel for the backwashing with simultaneous cleaning of the inspection glass, flush valve with hose connection. Pressure

gauge, pressure reducer with factory adjusted exit pressure of 4 bar, adjustment range of exit pressure from 1,5 - 6 bar, tested for noise insulation, according to protection group 1, without requirements, integrated calendar indication of the backwashing.

Type JUKO 3/4" - 1 1/4" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: same as type GUBI-E 3/4" - 1 1/4"

Pipe connection	3/4"	1"	1 1/4"
Water Flow Rate up to m ³ /h	3,3	4,5	5,5
Installation Length mm	180	195	230
Mesh Size mm	0,1	0,1	0,1
Type GUBI-E			
Order - Number	8171001	8171002	8171003
Type JUKO			
Order - Number	8170112	8170113	8170114

JUDO Protective-Filter

Backwash Protective Filter



Type FILLY 3/4" - 1 1/4"

JUDO Backwash Protective Filter FILLY and SPEEDY 3/4" - 1 1/4"

Type FILLY 3/4" - 1 1/4" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Filter hood, made of high-quality plastic PN 16, filter housing, made of brass, with screwing, threaded connection according to DIN 2999, filter screen made of stainless steel, inferior/superior mesh width 0,095/0,125 mm, equipped with large handwheel for the backwashing with simul-

taneous cleaning of the inspection glass. Covering hood with integrated calendar indication of the backwashing.

Type SPEEDY 3/4" - 1 1/4" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: same as type FILLY 3/4" - 1 1/4"

Pipe connection	3/4"	1"	1 1/4"
Water Flow Rate up to m ³ /h	3,3	4,5	5,5
Installation Length mm	180	195	230
Mesh Size mm	0,1	0,1	0,1
Type FILLY			
Order - Number	8070602	8070603	8070604
Type SPEEDY			
Order - Number	8070500	8070501	8070502

JUDO Filter

Backwash Protective Filter



Type JJF 3/4" - 1 1/4"

JUDO Backwash Protective Filter JUNIOR 3/4" - 1 1/4"

Type JJF 3/4" - 1 1/4" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Filter housing made of high-quality plastic PN 16, built-in rotary-flange with patented brass bayonet-joint,

threaded connection according to DIN 2999, filter insert of stainless steel, inferior/upper mesh size 0,095/0,125 mm, equipped with large handwheel for backwashing with simultaneous cleaning of the inspection glass, connection, flush valve with hose screwing.

Type	JJF	JJF	JJF
Pipe connection	3/4"	1"	1 1/4"
Water Flow Rate up to m ³ /h	3,3	4,5	5,2
Pressure Loss after Backwashing/bar	0,2	0,2	0,2
Installation Length mm	90	90	110
Mesh Size mm	0,1	0,1	0,1
Order - Number	8070012	8106150	8106151

Packing unit 12 pieces.

JUDO Filter

Protective Filter



Type MHF 3/4" - 1 1/4" male thread

JUDO Protective Filter HELVETIA 3/4" - 1 1/4"

Type MHF 1/2" - 1 1/4" male thread
Type MHF 3/4" - 1" female thread
according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Filter hood, made of high-quality plastic PN 16, with filter housing, made of brass, threaded connection, according to DIN 2999, filter insert of stainless steel, covering hood with integrated installation wrench for the changing of the filter insert.

Type	MHF	MHF	MHF	MHF
Pipe connection	1/2"	3/4"	1"	1 1/4"
Water Flow Rate up to m ³ /h	2,0	3,3	4,5	5,2
Pressure Loss in Clean Condition/bar	0,2	0,2	0,2	0,2
Installation Length Female Thread mm	-	90	90	110
Installation Length Male Thread mm	180	180	195	230
Mesh Size mm	0,1	0,1	0,1	0,1
Order - Number	Female Thread	-	8080015	8080010
Order - Number	Male Thread	8080018	8080019	8080020
			8080020	8080021

Packing unit 12 pieces.

Filter Inserts	Order - Number
Filter Inserts EHF 100	8080030

Suitable for all sizes. Packing Unit 2 pieces.



JUDO JRSF - The Classic

Backwash Protective Filters



Type JRSF 1" - 2"

JUDO Backwash Protective Filter JRSF 1" - 2"

Type JRSF 1" - 2" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: High quality cast-iron housing PN 10, corrosion resistant lining inside and outside (Rilsan), filter screen made of stainless steel, inspection glasses on both

sides, 2 filter chambers each one equipped with one permanent filter each, inferior/superior mesh size 0,095/0,125 mm, multi-way valve with handwheel for the setting of the operating and backwash-positions, flush valve.

Type	JRSF	JRSF	JRSF	JRSF
Pipe connection	1"	1 1/4"	1 1/2"	2"
Water Flow Rate up to m ³ /h	5	6	14	15
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2	0,2
Installation Length mm	189	189	233	233
Mesh Size mm	0,1	0,1	0,1	0,1
Order - Number	8101010	8101011	8101012	8101013

On request, depending on the field of application, also available with mesh sizes 0,03/0,05/0,32/0,5 and 1,0 mm. Silicone-free type on request. Concerning JRSF Backwash Protective Filters the flow pressure after the filter has to be minimum 1,5 bar.



Type JRSF DN 65 - 100

JUDO Backwash Protective Filter JRSF DN 65 - 100

Type JRSF DN 65 - 100 according to DIN 13443-1 for water up to 30 °C

Scope of Supply: High quality cast-iron housing with flanges, PN 10, corrosion resistant lining inside and outside (Rilsan), filter screen made of stainless steel, inspection glasses on both sides, 2 filter chambers each one equip-

ped with one permanent filter insert, inferior/superior mesh size 0,095/0,125 mm, multi-way valve with hand lever for the setting of the operating- and backwashing positions, flush valve with connection for differential pressure gauge 1/4".

Type	JRSF	JRSF	JRSF
Pipe connection	DN 65	DN 80	DN 100
Water Flow Rate up to m ³ /h	33	38	58
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2
Installation Length mm	370	370	414
Mesh Size mm	0,1	0,1	0,1
Order - Number	8102021	8102022	8102023

On request, depending on the field of application, also available with mesh sizes 0,03/0,05/0,32/0,5 and 1,0 mm. Silicone-free type on request. Concerning JRSF Backwash Protective Filters the flow pressure after the filter has to be minimum 1,5 bar.

JUDO JRSF - The Classic

Backwash Protective Filters



Type JRSF DN 125 - 200

JUDO Backwash Protective Filter JRSF DN 125 - 200

Type JRSF DN 125 - 200 according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Housing, made of welded steel, PN 10, with flanges, corrosion resistant lining inside and outside (Rilsan), sight glasses on both sides, 2 filter chambers each one

equipped with one permanent filter insert, mesh size 0,1 mm, filter and supporting insert, made of stainless steel, by-pass flaps with hand lever for the setting of the operating- and backwash-positions, flush-valves, connection for differential pressure gauge 1/4".

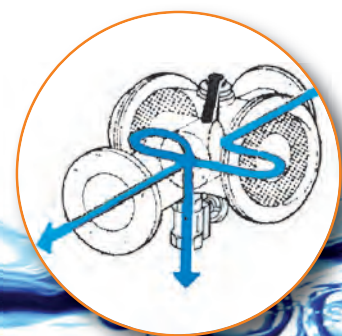
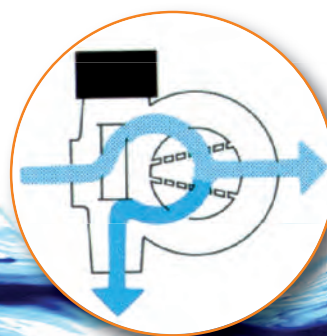
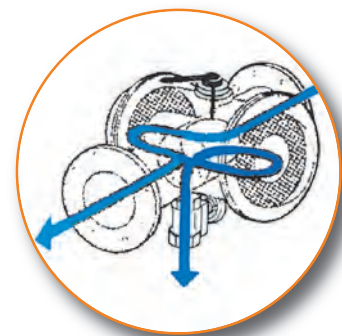
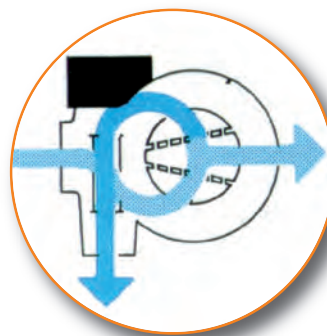
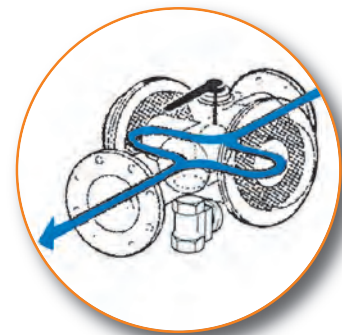
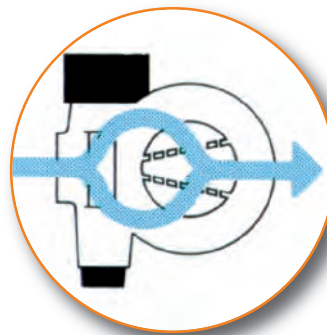
Type	JRSF	JRSF	JRSF
Pipe connection	DN 125	DN 150	DN 200
Water Flow Rate up to m ³ /h	75	110	170
Pressure Loss after the Backwashing/bar	0,10	0,10	0,10
Installation Length mm	440	500	620
Mesh Size mm	0,1	0,1	0,1
Order - Number	8103035	8103036	8103037

On request, depending on the field of application, also available with mesh sizes 0,03/0,05/0,32/0,5 and 1,0 mm. Silicone-free type on request. Concerning JRSF Backwash Protective Filters the flow pressure after the filter has to be minimum 1,5 bar.

JUDO JRSF Backwash System

The Advantages:

- ◆ Special stainless steel sieves
- ◆ Water supply not interrupted during the backwashing
- ◆ Manual or automatic backwashing



JUDO JRSF - The Classic

Automatic Backwash Protective Filters



Type JRSF-A/TP 1" - 2"

JUDO Automatic Backwash Protective Filter JRSF-A 1" - 2"

Type JRSF-A 1" - 2" according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Same as type JRSF 1" - 2", however, equipped with automatic electric backwashing control panel (230 V/50 Hz) for the setting of the operating and backwashing positions, automatic triggering of the backwashing.

Type of Control:

„TP“-Control: Differential pressure control with time priority switching, differential pressure switch adjustable up to 0,6 bar.

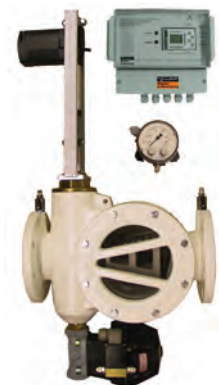
Potential free contact included.

Type	JRSF-A	JRSF-A	JRSF-A	JRSF-A
Pipe connection	1"	1 1/4"	1 1/2"	2"
Water Flow Rate up to m ³ /h	5	6	14	15
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2	0,2
Installation Length mm	189	189	233	233
Mesh Size mm	0,1	0,1	0,1	0,1
Order - Number	„TP“	8501010	8501011	8501012
			8501013	

Silicone-free version is available on request. On request also available with special mesh sizes.

Required on site for all JRSF automatic backwash protective filters:

- Control water or control air minimum 4 bar (lower pressures on request)
- The flow pressure after the filter has to be minimum 1,5 bar



Type JRSF-A/TP DN 65 - 100

JUDO Automatic Backwash Protective Filter JRSF-A DN 65 - 100

Type JRSF-A DN 65 - 100 according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Same as type JRSF DN 65 - 100, however, equipped with automatic electric backwashing control panel (230 V/50 Hz) for the setting of the operating and backwashing positions, separately controlled, driven release valve (function: shut under spring pressure) with mounted pilot valve,

control medium air or water, automatic triggering of the backwashing, optionally:

Timer controlled „T“
Differential pressure controlled „TP“
Differential pressure control „TP“ with time priority switching, differential pressure gauge adjustable up to 1,6 bar.

Potential free contact included.

Type	JRSF-A	JRSF-A	JRSF-A
Pipe connection	DN 65	DN 80	DN 100
Water Flow Rate up to m ³ /h	33	38	58
Pressure Loss after the Backwashing/bar	0,2	0,2	0,2
Installation Length mm	370	370	414
Mesh Size mm	0,1	0,1	0,1
Order - Number	„T“	8302021	8302022
Order - Number	„TP“	8502021	8502022
			8502023

Silicone-free version is available on request. On request also available with special mesh sizes.

Required on site for all JRSF automatic backwash protective filters:

- Control water or air pressure minimum 4 bar (lower pressures on request)
- The flow pressure after the filter has to be minimum 1,5 bar

JUDO JRSF - The Classic

Automatic Backwash Protective Filters



Type JRSF-A DN 200

JUDO Automatic Backwash Protective Filter JRSF-A DN 125 - 200

Type JRSF-A DN 125 - 200 according to DIN 13443-1 for water up to 30 °C

Scope of Supply: Same as type JRSF DN 65 - 100, however, equipped with automatic electric backwashing control panel (230 V/50 Hz) for the setting of the operating and backwashing positions, driven release valve (function: closed under elastic force) with mounted pilot valve, control medium air or

water, automatic triggering of the backwashing, optionally:

Timer controlled „T“
Differential pressure controlled „TP“
Differential pressure control „TP“ with time priority switching, differential pressure gauge adjustable up to 1,6 bar.

Potential free contact included.

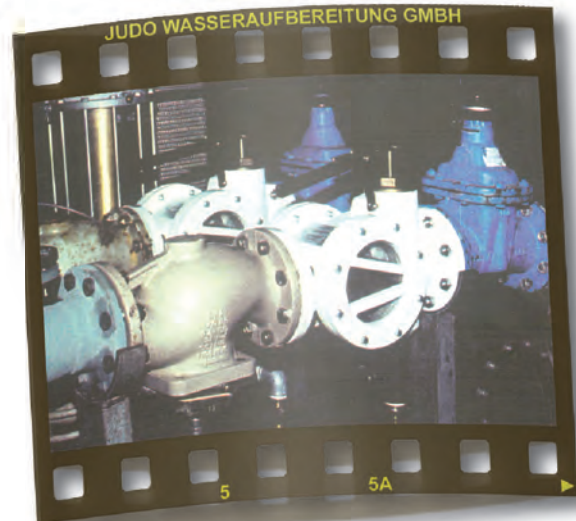
Type	JRSF-A	JRSF-A	JRSF-A
Pipe connection	DN 125	DN 150	DN 200
Water Flow Rate up to m ³ /h	75	110	170
Pressure Loss after the Backwashing/bar	0,10	0,10	0,10
Installation Length mm	440	500	620
Mesh Size mm	0,1	0,1	0,1
Order - Number „T“	8303035	8303036	8303037
Order - Number „TP“	8503035	8503036	8503037

Silicone-free version is available on request. On request also available with special mesh sizes.

- Required on site for all JRSF automatic backwash protective filters:
- Control water or control air minimum 4 bar (lower pressures on request)
 - The flow pressure after the filter has to be minimum 1,5 bar



Olympic City
Sydney, Australia



University
Bayreuth, Germany



JUDO Hot water Backwash Protective Filters

JUDO Hot water Backwash Protective Filter FILLY-HW 3/4" - 1 1/4"



Type FILLY-HW 3/4" - 1 1/4"

Type FILLY-HW 3/4" - 1 1/4" according to DIN 13443-1 for water up to 70 °C

Scope of Supply: Filter hood, made of high-quality plastic PN 10, filter housing, made of brass, with screwing, threaded connection according to DIN 2999, filter screen made of

stainless steel, inferior/superior mesh width 0,095/0,125 mm, equipped with large handwheel for the backwashing with simultaneous cleaning of the inspection glass. Covering hood with integrated calendar indication of the backwashing.

Type	FILLY-HW	FILLY-HW	FILLY-HW
Pipe connection	3/4"	1"	1 1/4"
Water Flow Rate up to m ³ /h	3,3	4,5	5,5
Installation Length mm	180	195	230
Mesh Size mm	0,1	0,1	0,1
Order - Number	8070636	8070637	8070638



Type JRSF-HW 1" - 2"

JUDO Hot water Backwash Protective Filter JRSF-HW 1" - 2"

Type JRSF-HW 1" - 2" for water up to 85 °C

Scope of Supply: Housing, resistant to hot water, made of high-quality cast iron, PN 10, corrosion resistant lining inside and outside (Rilsan), without sight glasses, 2 filter cham-

bers each one equipped with one permanent filter insert, mesh size 0,32 mm, filter and supporting insert made of stainless steel, multi-way valve with hand wheel for the setting of the operating and backwash-positions, flush valve.

Type	JRSF-HW	JRSF-HW	JRSF-HW	JRSF-HW
Pipe connection	1"	1 1/4"	1 1/2"	2"
Water Flow Rate up to m ³ /h	5	6	14	15
Flow pressure minimum bar	1,0	1,0	1,0	1,0
Differential pressure maximum bar	2,0	2,0	2,0	2,0
Operating temperature maximum °C	85	85	85	85
Mesh Size mm	0,32	0,32	0,32	0,32
Order - Number	8101030	8101031	8101032	8101033

On request also available with mesh sizes 0,5 and 1,0 mm. Automatic design on request.

JUDO Hot water Backwash Protective Filters



Type JRSF-HW DN 65 - 100

JUDO Hot water Backwash Protective Filter JRSF-HW DN 65 - 100

Type JRSF-HW DN 65 - 100
for water up to 85 °C

Scope of Supply: Housing, resistant to hot water, made of high-quality cast iron, PN 10, corrosion resistant lining inside and outside (Rilsan), without sight glasses, 2 filter cham-

bers each one equipped with one permanent filter insert, mesh size 0,32 mm, filter and supporting insert made of stainless steel, multi-way valve with hand wheel for the setting of the operating and backwash-positions, flush valve, connection for differential pressure gauge.

Type	JRSF-HW	JRSF-HW	JRSF-HW
Pipe connection	DN 65	DN 80	DN 100
Water Flow Rate up to m ³ /h	33	38	58
Flow pressure minimum bar	1,0	1,0	1,0
Differential pressure maximum bar	2,0	2,0	2,0
Operating temperature maximum °C	85	85	85
Mesh Size mm	0,32	0,32	0,32
Order - Number	8102031	8102032	8102033

On request also available with mesh sizes 0,5 and 1,0 mm. Automatic design on request.



Type JRSF-HW DN 125 - 200

JUDO Hot water Backwash Protective Filter JRSF-HW DN 125 - 200

Type JRSF-HW DN 125 - 200
for water up to 75 °C

Scope of Supply: Housing, made of welded steel, PN 10, with flanges, corrosion resistant lining inside and outside (Rilsan), sight glasses on both sides, 2 filter chambers each

equipped with one permanent filter insert, mesh size 0,32 mm, filter and supporting insert made of stainless steel, reversing flaps with hand lever for the setting of the operating and backwash-positions, flush valve, connection for differential pressure gauge.

Type	JRSF-HW	JRSF-HW	JRSF-HW
Pipe connection	DN 125	DN 150	DN 200
Water Flow Rate up to m ³ /h	75	110	170
Flow pressure minimum bar	1,0	1,0	1,0
Differential pressure maximum bar	2,0	2,0	2,0
Operating temperature maximum °C	75	75	75
Mesh Size mm	0,32	0,32	0,32
Order - Number	8103041	8103042	8103043

On request also available with mesh sizes 0,5 and 1,0 mm. Automatic design on request.



JUDO FIMAT

Backwash Protective Filter for industrial water and service water use



Type JFXL-TP 1 1/2" - 2"

JUDO Backwash Protective Filter FIMAT 1 1/2" - 2"

Type JFXL 1 1/2" - 2" for water up to 30 °C

For the filtration of solid fine-grained impurities in drinking water and service water systems with an increased solids content.

Scope of Supply: Housing made of high quality grey cast iron, PN 10, corrosion resistant lining inside and outside (Rilsan), built-in rotary flange with threaded connection, filter cloth made of stainless steel, mesh size 0,1 mm, backwashing by means of the point rotation system with simultaneous cleaning of the inspection glass. Equipped with automatic backwashing for the triggering of the

operating and backwash positions, power supply unit 230 V/50 Hz, electronic control with operating and trouble indication by means of light emitting diodes and buzzer, automatic triggering of the backwashing, optionally:

„T“-Control

By means of a program connector, hour, day, week and month selectable, manual triggering possible.

„TP“-Control

Same as „T“-control, equipped, however, with differential pressure switch (adjustable differential pressure up to 1 bar) for the triggering of the backwashing.

Type	JFXL	JFXL	
Pipe connection	1 1/2"	2"	
Water Flow Rate up to m ³ /h * drinking water	20	20	Recommended mesh size: 0,1 mm
Installation Length mm	252	280	
Standard Mesh Size mm	0,1	0,1	
Order - Number	Manual	8010085	8010089
Order - Number	„T“	8020099	8020100
Order - Number	„TP“	8020101	8020102

* In case of increased dirt accumulation contact trained personal, please



JUDO Centrifugal Separator

For the precipitation of solid particles in drinking- and service-water

JUDO Centrifugal Separator JZA 20 - 80



Type JZA 20 - 80

Type JZA 20 - 80

For the precipitation of solid particles in drinking- and service-water, the centrifugal separators use the density difference between the substances to be separated and the water to be purified. Therefore they act ideally as a pre-treatment, before the backwash protective filters to prolong the retention time and the backwashing intervals. The best separating results can be found in the range between 70 to 100% of the maximal flow rate and a continuous flow rate.

Advantages of the centrifugal separators:

- ◆ No moving wearing parts
- ◆ No interruption times
- ◆ Little space required
- ◆ Periodical desludging of the separated substances
- ◆ No sieves or similar filter material required
- ◆ No maintenance or backwashing cycles
- ◆ Simple integration into existing tubes

Scope of Supply: The centrifugal separator itself is to be considered as a compact closed function unit with lateral intake and overhead discharge outlet. Material steel ST 37, varnished, PN 10.

Upon request design in stainless steel and higher performance.

Type	JZA 20	JZA 25	JZA 32	JZA 40	JZA 50	JZA 65	JZA 80
Water Flow Rate m ³ /h *	2 - 5	4 - 8	6 - 12	9 - 17	14 - 24	21 - 35	33 - 65
Pressure Loss bar	0,3 - 0,9	0,3 - 0,9	0,3 - 0,9	0,3 - 0,9	0,3 - 0,9	0,3 - 0,9	0,3 - 0,9
Pipe connection	3/4" AG	1" AG	1 1/4" AG	1 1/2" AG	2" AG	DN 65	DN 80
Flushing connection	3/4" AG	3/4" AG	3/4" AG	3/4" AG	3/4" AG	3/4" AG	3/4" AG
Order - Number	8360446	8360447	8360448	8360449	8360450	8360451	8360452

* Larger pipe connections upon request

Flushing Units

For a time controlled flushing of the sedimentation chamber, consisting of a solenoid valve, normally closed, with mounted timer, 230 V/ 50 Hz, opening time 0 - 30 sec., 3/4"

Type JAE 20

Order - Number

8360457

Type JAE M 20 Manual Flushing Valve 3/4"

Order - Number

8361010

JZA 125
made of stainless steel



JUDO PURE@TAP POINT OF USE (POU) WATER TREATMENT

Drinking water is our food-number one and as such enjoyable when it's crystal clear, fresh, neutral in taste and reduced from the entire content of bacte-

rias. If such water is not at your reach, JUDO has a brand new solution: The PURE@TAP Filtration System from JUDO. Drinking water from this water

station is a real delight. This brilliant idea combines Filter + Filter + Silver. Those 3 elements provide a healthy water.

Activated Carbon Filtration (Type AC)

A high quality Activated Carbon block Filter (approx. filtration efficiency 10 μ) removes particles such as: rust, dirt, chlorine, pesticide, lead and unwanted odour or taste from your drinking water source.

Micro Filtration (Type MF)

Micro filtration cartridge with filtration efficiency 0,2 μ . Stops bacteria such as, Legionella, Cysts and Cryptosporidium.

JUDO LEGIOLAX (Type JLX)

The JUDO LEGIOLAX tube insert with anti-germs silver surface inhibits bacterial growth in the faucet line.

The Advantages of the PURE@TAP:

- ◆ Filtration without chemical additives
- ◆ Ameliorates sensibly the flavour
- ◆ Eliminates unpleasing odour
- ◆ Retains harmful materials, bacteria, and germs up to 99,99 %
- ◆ The minerals are maintained in the water
- ◆ Easy installation under sink
- ◆ Filter replacement only every six months
- ◆ Space saving design
- ◆ Materials suitable for drinking water
- ◆ Long-lasting stable metal housing (PN 10)
- ◆ No power connection required
- ◆ Made in Germany



JUDO PURE@TAP

For the purification of drinking water, under the sink installation



Type PURE@TAP-ACMF

JUDO PURE@TAP

Type PURE@TAP-AC

Scope of Supply: Consisting of one well designed transparent filter housing with connection flange made of brass, carbon-block-filter cartridge, JUDO LEGIOLAX antimicrobial silver coated tube insert, lead free faucet for top mount installation, wall clip for filter housing, t-junction with closing valve and tubing.

Type PURE@TAP-ACMF

Scope of Supply: Consisting of two directly connected and well designed transparent filter housings with connection flange made of brass, carbon-block-filter cartridge, high area micro filtration cartridge, JUDO LEGIOLAX antimicrobial silver coated tube insert, lead free faucet for top mount installation, wall clip for filter housing, T-junction with closing valve and tubing.

Type	PURE@TAP-AC	PURE@TAP-ACMF
Nominal water flow rate l/h	200	200
Approx. daily consumption l/day	20	20
Pipe connection	1/2"	1/2"
Filtration efficiency AC-filtration μ	< 10	< 10
Filtration efficiency Micro-filtration μ		< 0,2
Working pressure min. bar	2	2
Working pressure max. bar	10	10
Temperature max. °C	30	30
Recommended cartridge replacing interval months *	6	6
Measurements (wall mounted parts)		
Width mm	120	240
Length mm	95	95
Height mm	230	230
Order - Number	8115011	8115010

* The replacement of the cartridge after six month is based on a consumption of 20 litres per day

Replacement cartridges		
JFK-AKB 10-4 Carbon-Block-Cartridge	Order - Number	8115016
JFK-MF 02-4 Micro-Filtration-Cartridge	Order - Number	8115017

Rejection features of the PURE@TAP:

- ◆ **Bacterias** (E. coli, Ent. faecalis, Staphyl. aureus, Staphyl. haemolyticus, Enterobacter cloacae, Pseudom. aeruginosa, Bacillus subtilis) over 98 %
- ◆ **Micro organism** (Entam. coli, Giardia Lamblia, Ascaris suum, Cryptospor. parvum, Schistosoma mansoni) over 98 %
- ◆ **Chlorine, Chloroform, Lindane, DDT and Atrazine** over 98 %
- ◆ **Pharmaceutical removal** (Clofibrinsäure, Carbamazepin, Ibuprofen, Diclofenac, Ketoprofen, Propiphenazon) over 98 %
- ◆ **Polar pesticides** (Bentazon, 2,4 D, MCPA, p.P'-DDA, Dichlorprop., Mecoprop.) over 98 %
- ◆ **Lead and Cooper** over 90 %



JUDO CEFI Water Filter

JUDO Water Filter CEFI

Type CEFI

Scope of Supply: Filter vessel made of plastic, with ceramic filter cartridge and inlying activated carbon unit, single stand-alone device.



Type CEFI



Type Ceramic cartridge

Type	CEFI
Connection to tap mm	M 22x1 or tube 9x6
Water Flow Rate l/min	3,8
Water Flow Rate at 3 bar l/min	3,3
Flow pressure min/max bar	1/5
Total capacity per filter cartridge l	2.200
Renewal interval months	4 - 6
Effective filter value µm	0,9
pH-range	5,5 - 9,5
Order - Number	8045010

Ceramic cartridge
(replacement every 4 - 6 months, respectively maximum 2.200 l total capacity)

Order - Number 8100014

JUDO Water Filter CEFI-UT

Type CEFI-UT

Scope of Supply: Filter vessel made of plastic with ceramic cartridge and inlying activated carbon unit, connecting angle valve, hoses and single stand-alone device.



Type CEFI-UT

Type	CEFI-UT
Pipe connection	3/4" female or tube 6x4 mm
Water Flow Rate l/min	3,8
Water Flow Rate at 3 bar l/min	3,3
Flow pressure min/max bar	1/5
Total capacity per filter cartridge l	2.200
Renewal interval months	4 - 6
Effective filter value µm	0,9
pH-range	5,5 - 9,5
Order - Number	8045011

Ceramic cartridge
(replacement every 4 - 6 months, respectively maximum 2.200 l total capacity)

Order - Number 8100014

JUDO Activated Carbon Filter



Type JAKF

JUDO Activated Carbon Filter JAKF 1"

Type JAKF R 1"

Scope of Supply: Filter vessel made of plastic with activated carbon filter candle.

Type	JAKF
Pipe connection	1"
Water Flow Rate m ³ /h	1
Nominal pressure bar	10
Water temperature maximum	30
Order - Number	8115001
Activated carbon filter candle JFK AK 5 - 10" Length 10", filter fineness 5 µm	
Order - Number	8714599

JUDO Ultra-Filtration

For Point of Entry (POE) Elimination of Germs and Turbidity-Reduction



Type JUF 900

JUDO Ultra-Filtration System JUF 900

Type JUF 900

Scope of Supply: Prefabricated unit, ready for operation, internal hydraulic piping, and electric wiring, stainless steel frame for the housing of the following devices: an Ultra

Filtration Unit consisting of fine filter, electric switchboard for the completely automatic regulation (SPS) concerning the operating, backwashing and chemical cleaning on site, all the required fuses, switches included, integrated switching unit.

Type	JUF 900
Peak flow rate m ³ /h	3,6
Continuous water flow m ³ /h	0,9
Maximum operating pressure bar	5
Minimum operating pressure bar	3,5
Minimum operating pressure in case of present compressed air bar	2
Maximum operating temperature °C	40
Order - Number	8470043

JUDO Bed-Filtration - Being up to All the Dodges

The modular use of different pre- and post-treatment steps make possible the production of drinking water and service water of the most different origin, for example surface water contaminated by suspended matters, heavily polluted well water, brackish water, and seawater.

In combination with flocculation, sedimentation, filtration, and sterilization as well as the most up to date ion exchange – and membrane methods JUDO produces a made-to-measure water quality.



Well water untreated

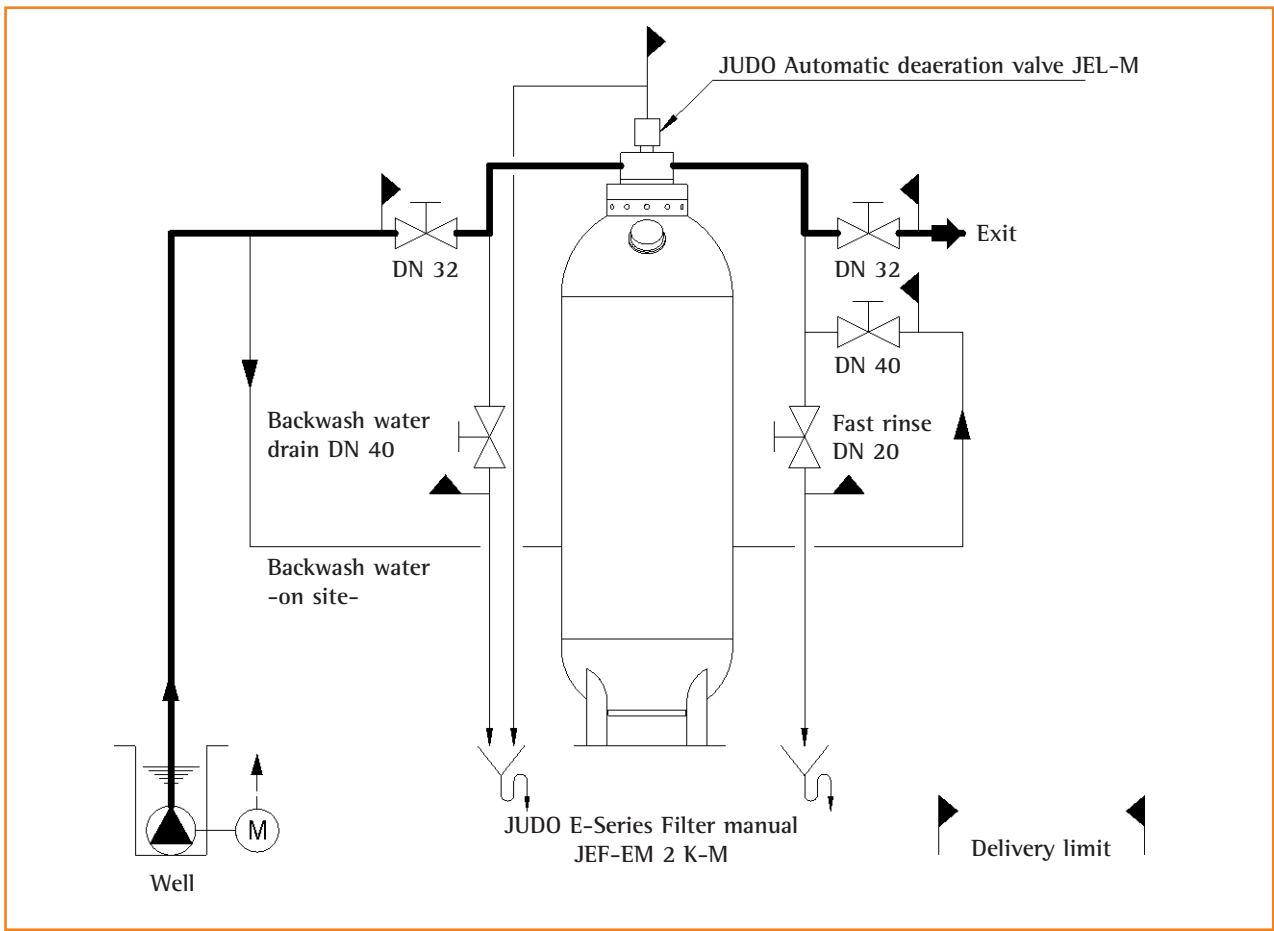


Well water treated

	Type JEF-MF	Type JEF-S	Type JEF-AK	Type JEF-EM
Elimination of fine to very fine impurities, that lead to a turbidity of the water, and depending on its intrinsic coloration to a discoloration.	●			
Binds excess carbon dioxide that corrodes the installations and tubes and leads to serious damages.		●		
Eliminates organic impurities, that lead to an impairment of the water concerning its odor and taste.			●	
Combines deferrization and simultaneous demanganization of the water.				●
Available as:				
Automatic Version	●	●	●	●
Manual Version	●	●	●	●

Installation scheme

JUDO E-Series Filter



Example of an Installation scheme



JUDO E-Series Filters

Perfect Well Water Treatment



Type JEF automatic

JUDO E-Series Filters JEF-MF, -S, -AK and -EM

Scope of Supply: Filter vessel made of fiber glass reinforced polyester, with nozzle distributor, upper and lower nozzle, different filter layers, filter filling depends on the particular purpose and on the quality of the water.

Type JEF K-A: Design with central control valve for an automatic (time-controlled) backwashing.

Type JEF K-M: Design with individual valves, to be operated manually, for the operating and the backwashing.

JEF-MF Cleaning and Decolorizing

Type JEF	Automatic			Manual
	MF 2 K-A	MF 3 K-A	MF 6 K-A	MF 6 K-M
Water Flow Rate max. m ³ /h	2	3	6	6
Water Flow Rate normal m ³ /h	1	1,5	3	3
Pipe connection DN	25	25	40	32
Rinsing capacity m ³ /h	2	3,5	7,5	7,5
Approximate rinsing volume m ³ *	0,34	0,59	1,25	1,25
Required space length x width x height mm	380 x 650 x 2100	480 x 650 x 2400	680 x 850 x 2500	680 x 850 x 2500
Operating pressure min./max. bar	3/6	3/6	3/6	3/6
Operating temperature °C	30	30	30	30
Order - Number	8120094	8120095	8120096	8360463

* Depending on the pollution



Type JEF manual

JEF-S Partial Deacidification

Type JEF	Automatic			Manual
	S 2 K-A	S 3 K-A	S 6 K-A	S 6 K-M
Water Flow Rate max. m ³ /h	2	3	6	6
Water Flow Rate normal m ³ /h	1	1,5	3	3
Pipe connection DN	25	25	40	32
Rinsing capacity m ³ /h	2	3,5	7,5	7,5
Approximate rinsing volume m ³	0,34	0,59	1,25	1,25
Required space length x width x height mm	380 x 650 x 2100	480 x 650 x 2400	680 x 850 x 2500	680 x 850 x 2500
Operating pressure min./max. bar	3/6	3/6	3/6	3/6
Operating temperature °C	30	30	30	30
Order - Number	8120097	8120098	8120099	8360464

JEF-AK Taste and Odor Improvement

Type JEF	Automatic			Manual
	AK 2 K-A	AK 3 K-A	AK 6 K-A	AK 6 K-M
Water Flow Rate max. m ³ /h	2	3	6	6
Water Flow Rate normal m ³ /h	1	1,5	3	3
Pipe connection DN	25	25	40	32
Rinsing capacity m ³ /h	2	3,5	7,5	7,5
Approximate rinsing volume m ³	0,34	0,59	1,25	1,25
Required space length x width x height mm	380 x 650 x 2100	480 x 650 x 2400	680 x 850 x 2500	680 x 850 x 2500
Operating pressure min./max. bar	3/6	3/6	3/6	3/6
Operating temperature °C	30	30	30	30
Order - Number	8120100	8120101	8120102	8360460

JUDO E-Series Filters

Perfect Well Water Treatment



Type JEF automatic



Type JEF manual

JEF-EM Catalytic Removal of Iron and Manganese

Type JEF	Automatic		Manual	
	EM 2 K-A *	EM 4 K-A *	EM 2 K-M *	EM 4 K-M *
Water Flow Rate max. m ³ /h	2	4	2	4
Water Flow Rate normal m ³ /h	1,5	3	1,5	3
Pipe connection DN	25	40	25	32
Rinsing capacity m ³ /h	2,5	5,5	2,5	5,5
Approximate rinsing volume m ³ *	0,5	1,0	0,5	1,0
Required space length x width x height mm	1100 x 650 x 2400	1500 x 850 x 2500	1100 x 650 x 2400	680 x 850 x 2500
Operating pressure min./max. bar	3/6	3/6	3/6	3/6
Operating temperature °C	30	30	30	30
Order - Number	8120104	8120105	8360465	8360462

* Potassium permanganate dosage required for the continuous regeneration, for example JWD-KH 10-50

Requirement for the reduction of manganese:

Ammonium content < 0,3 mg/l, for the removal of iron and manganese, oxygen content > 4 mg/l

Accessoires for JUDO E-Series Filters

Description	Type	Order-Number
JUDO Automatic deaeration valve R 1/2" for the automatic deaeration of the filter unit, required in case of oxidation with air.	JEL-M	8721227
JUDO Manual deaeration valve R 1/2" for the manual deaeration of the filter unit.		8360010
JUDO Oxidator for the intense mixing and aeration, in order to transform dissolved iron into a filterable form, and for the oxygenation of oxygen-poor waters. Consisting of: compressor, safety group included, with pressure vessel, check valve, gauge, regulating valve, safety valve, mixing device, integrated in a plastic fitting, connection DN 50. Technical Data: air capacity 1 m ³ /h, maximal working pressure 10 bar, motor 1,1 kW, 230/400 V, 50 Hz, IP 54.	JO 2	8360459

Dosing Pumps for the Permanganate Dosage

Description	Type	Order-Number
JUDO WADOS Dosing Pump with injection valve for cold water and hand mixer (concerning its technical details, refer to page 32 please)	JWD-KH 10-50	8425562
JUDO WADOS Dosing Pump with injection valve for cold water and electric mixer (concerning its technical details, refer to page 32 please)	JWD-KE 10-50	8330051

* Recommended accessory: timer switch JZS U/E, see page 41, please

Operational materials for JUDO E-Series Filter

Description	Type	Order-Number
JUDO Potassium permanganate as an organic pulverulent, oxidant for the treatment of drinking water and service water, packing unit à 5 kg.		8839106
JUDO Deacidification material to refill periodically the used filter media, as porous calcium carbonate, packing unit à 50 kg.	JUDOFILT-CA	8360067

* Only when shipped together with E-Series-Filter units these working materials will be sent free of freight charges

JUDO Water Stop

Central Water Control Device



JUDO Water Stop JZW 3/4" - 1 1/4"



Type JZW 3/4" - 1 1/4"

Type JZW 3/4" - 1 1/4" for water up to 30 °C

Scope of Supply: Housing made of high quality plastic, PN 16, built-in rotary flange equipped with patented bayonet-joint with threaded connection, according to DIN 2999, motor valve for the stopping of the water flow, on condition that the following criterions are exceeded: total water quantity, maximal water flow, removal time and holiday program.

Electronic control, with light emitting diode-indicator, Open-Close push button, indication of the deactivation cause, stand-by-function, connection clamp for the remote control, and power supply unit, input 230 V/50 Hz.

Technical innovations [prospectively available in July 2008]: battery backup, annunciator relay provides indication of switch status of the water stop and malfunction messages, RS 232-interface, terminal clamp to operate the remote control appliance.

Type	JZW	JZW	JZW
Pipe connection	3/4"	1"	1 1/4"
Water flow rate up to m ³ /h	4,0	5,0	6,0
Pressure loss bar	0,5	0,6	0,7
Installation Length mm	180	195	230
Order - Number	8140001	8140002	8140003

JUDO Safety Fittings

Pipe Disconnecter



Type JZW 3/4" - 1 1/4"

JUDO Pipe Disconnecter JRT-BA 3/4" - DN 100

Type JRT-BA 3/4" - DN 100 for water up to 60 °C

The design BA is alternatively admitted for installation class 1 and 2. The disconnecter functions according to the three-chamber-technique, for the back-up fill danger class 4 (DIN 1988).

Attention: according to the construction type, the initial pressure loss of the BA-pipe disconnecters is 0,6 bar.

Scope of Supply: Pipe disconnecter tested in accordance with DIN-DVGW, housing made of red brass, for units starting with DN 65, made of coated grey-cast iron, back flow preventer made of plastic, membrane and seals made of EPDM, with connection piece for the function check, clamping fixture for the HT - pipe connection and connection joints with female thread (from DN 65 upward, flange design without counterflange), pressure step PN 10, up to 60 °C.

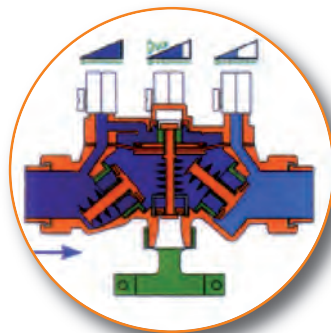
Type	JRT-BA 3/4"	JRT-BA 1"	JRT-BA 1 1/4"	JRT-BA 1 1/2"	JRT-BA 2"	JRT-BA DN 65	JRT-BA DN 80	JRT-BA DN 100
KVs-Value m ³ /h	4,9	7,0	7,1	30,4	34,0	36,4	80	150
Installation Length mm	210	216	278	287	297	226	440	530
Order - Number	8380003	8380004	8380018	8380006	8380007	8380008	8380009	8380010

For the protection of the pipe disconnecter a JUDO Protective Filter or a mud flap is required. For its maintenance, shutoff possibilities have to be planned before and behind it.

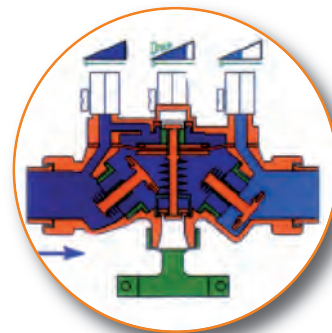
Larger pipe connections and silicone-free versions on request.

JUDO Pipe Disconnecter

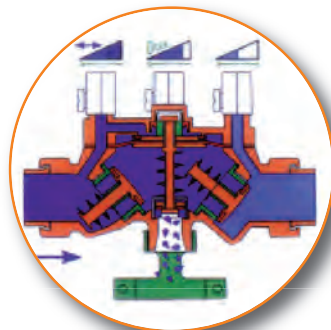
Function



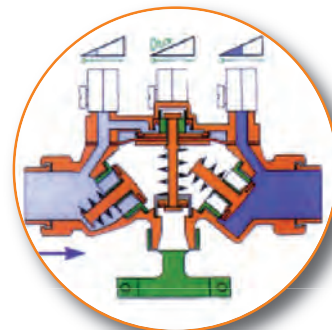
Position without water consumption



Position at water consumption



Position in case of variation of pressure



Position at pressure drop



JUDO Dosing Technique

The Reliable Addition of Active Agents

Through the addition of dosing agents the quality of the available water can be effected on. It is, for example, possible to stabilize hardeners, to develop protective layers, furthermore to bind carbon dioxide and oxygen in the boiler water, as well as to eliminate germs and to avoid algae growth.



Before:
Pitting, rust and brown water



Afterwards:
Formation of a protective layer and clear water

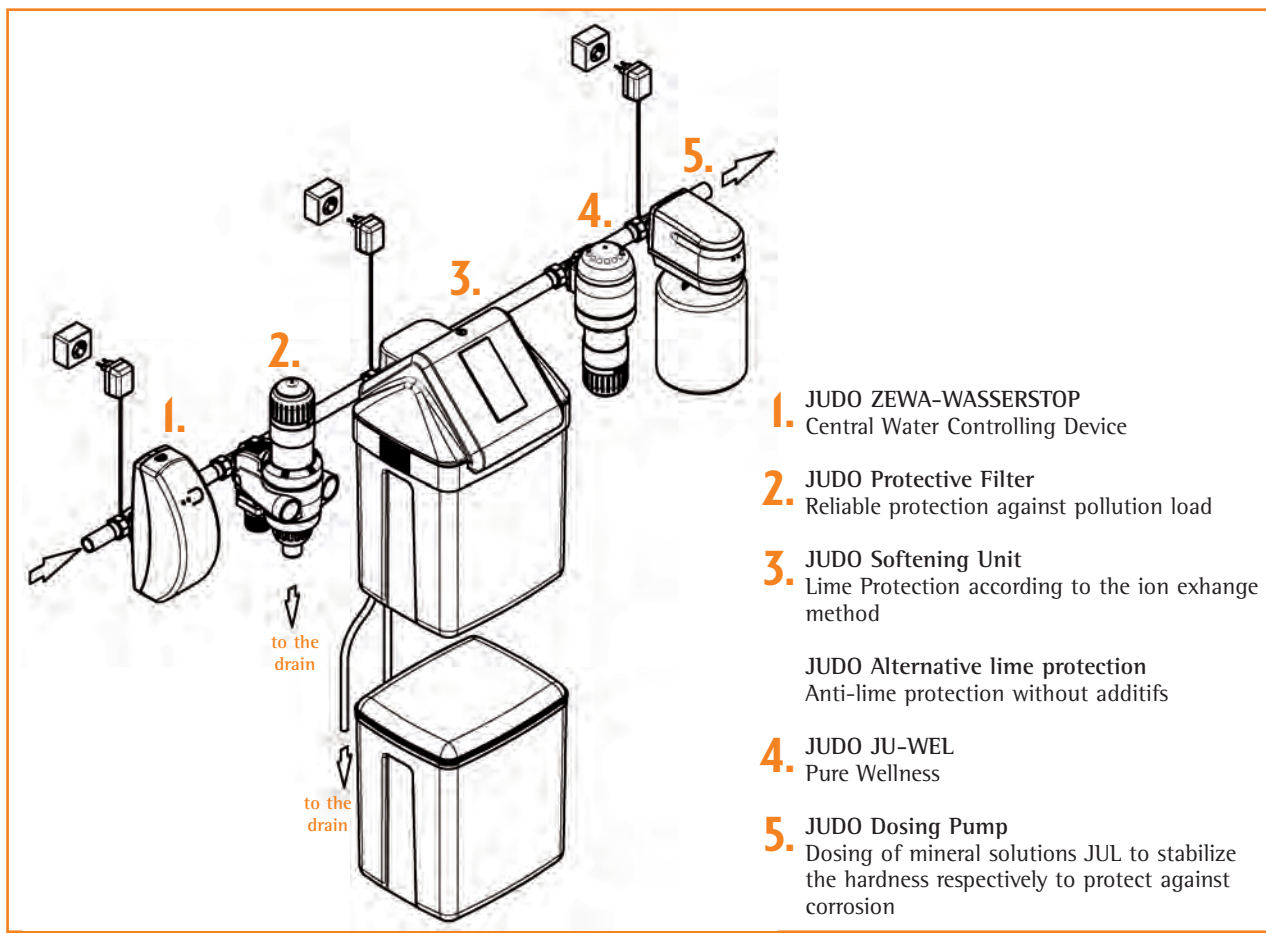
	JULIA Dosing Pumps	JULIA-Industrial	WADOS Dosing Pumps	UNIDOS Dosing Pumps
Use in the Domestic Water Treatment for the dosing of JUL-mineral solutions to stabilize the hardness respectively to protect against corrosion.	●			
For the conditioning of:				
<ul style="list-style-type: none"> Hot water boiler and high-temperature water boilers Steam boiler Cooling- and air conditioning systems Industrial Requirements 		●	●	●

Available:

In water-meter controlled design	●	●	●	
With universal external control		●		●

Installation scheme

JUDO Dosing Pump



Example of an Installation scheme



JUDO JULIA Dosing Pumps

The Safe Protection against Corrosion and Lime Deposits



Type JJP 4



Type JJP 10

JUDO Dosing Pump JULIA

Type JJP for Mineral Solutions JUL for the Treatment of Drinking Water according to DIN 19635

Scope of Supply: Self-deaerating piston dosing pump (PN 10) with low-wear electro synchronous motor drive, dosing volume adjustable, contact-free electronic proportional control device with operating and trouble indication. Empty alarm indicated by a light-emitting diode and buzzer, dry run protecti-

on, water meter with HALL effect sensor, with integrated injection valve and dosing hose, connecting cable- and plug power supply unit. Built-in rotary flange with patented bayonet connector, with screw connection and mounting lid. For the installation into cold water conduits.

Operating pressure maximum 10 bar,
Operating temperature maximum 30 °C,
Power Supply 230 V/50 Hz.

Type	JJP 3 **	JJP 4 **	JJP 10	JJP 25	JJP 60
Working range according to DIN 19635 lower/upper work limits m ³ /h	0,02 - 4	0,02 - 4	0,07 - 11	0,08 - 25	0,08 - 25
Suitable for a maximum water flow m ³ a month *	30	60	200	400	1.000
Pipe connection	1"	1"	1 1/4"	1 1/2"	2"
Pressure Loss at the upper work limit bar	0,7	0,7	0,8	0,7	0,7
Container Capacity l	3	6	25	25	60
Metering Volume per fill m ³ water	24 - 40	48 - 80	200 - 330	200 - 330	480 - 880
Installation Length mm	195	195	230	252	280
Order - Number	8309070	8309071	8309072	8309073	8309074

* If there are no consumption data available, a water consumption of 10 m³ as per month and accommodation unit can be calculated according to the DVGW data sheet W504, passage 4,22. The water consumption of one person amounts to 3,5 - 7 m³ a month depending on the equipment of the flat.

** With empty container

*** In combination with JUL-H

Surcharge for potential free contact for the indications „trouble“ and „empty“ (not retrofittable) on request.

JUDO Mineral Solutions JUL

The Safe Protection against Corrosion and Lime Deposits



Type Mineral tablets



Type Solution device



Type JUL, 60 litres

JUDO Mineral Tablets for the producing of mineral solution JUL

No voluminous packing material. The packaging consists mainly of ecologically compatible cardboard. The plastic share could be reduced by more than 96 %.

Cardboard tube for		3 litre	6 litre	25 litre
Quantity minimum piece		4	2	1
Order - Number	JUL-W	8600017	8600018	8600011
Order - Number	JUL-H	8600019	8600020	8600008

Solution device for the producing of the mineral solution				Order - Number	8130100
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JUDO Mineral Solutions JUL

For drinking water according to the water quality regulations for the treatment of drinking water.

Dosing:
approximately 75 - 125 ml/m³

Mineral solutions JUL for the prevention against water- and electrochemical corrosions and scale.

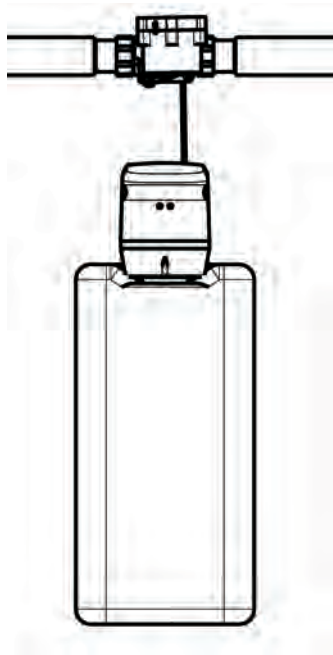
Litre		3	6	25	60
Quantity of the cans per packing unit		4	2	1	1
Order - Number	Type SW	8600021	8600022	8840104	8840107
Order - Number	Type W	8600024	8600025	8840114	8840117
Order - Number	Type H	8600027	8600028	8840134	8840137
Order - Number	Type C	8600030	8600031	8600003	8600002

- Type SW: for galvanised pipes and aggressive waters in the hardness range 1
- Type W: for galvanised pipes in the hardness range 1 + 2 and behind softeners
- Type W: for mixed installations (galvanised/copper) behind softeners
- Type H: for the hardness stabilization in the hardness range 3 + 4
- Type C: for copper pipes after softeners



JUDO Industrial Dosing Pumps JULIA

for new tasks concerning Cooling water/Boiler water Conditioning



Type JJWT 10 K

JUDO JULIA JJWD and JJWT Dosing Pump Units

Type JJWD, JJWT

For the quantity-proportional dosing of non-outgassing chemical solutions.

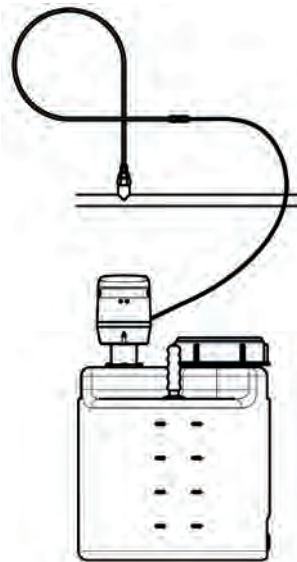
Scope of Supply: self-venting piston dosing pump, equipped with synchronous motor, dosing volume stepwise adjustable. Chemical solution and storage tank, made of plastic, with hand mixer, contact water meter with integrated cold water injection valve and dosing hose [2 metres]/diameter [4 mm], suction lance with dry-run protection, built-in rotary flange [JQE], with bayonet connec-

tor and screw connection for the installation into the cold water line, cable and plug-in power supply [internal low voltage], dosing- and trouble indication, potential free general fault signal [empty signal, respectively pump fault, JULIA signal communication cable is required], power supply [230 V/ 50 Hz].

Type JJWT: as before, however, without dosing tank, for the direct taking from the [25 l] transport vessel.

KH: cold water injection valve, hand mixer
K: cold water injection valve

Type	JJWD 10-40 KH	JJWT 10 K
Peak flow maximum Qmax m ³ /h	10	10
Pressure loss at a maximum flow of bar	0,9	0,9
Permanent flow Qn m ³ /h	6	6
Pressure loss at permanent flow Qn bar	0,35	0,35
Flow Qmin l/h	70	70
Pipe connection	1¼"	1¼"
Dosing Pump, type	1,1-10	1,1-10
Maximum counter pressure bar	10	10
Dosing tank, volume litres	40	-
For transport vessel litres	-	25
Order - Number	8330114	8330115



Type JJUD 1,1-40 HH

JUDO JULIA JJUD and JJUT Dosing Pump Units

Type JJUD, JJUT

For the dosing of non-aggressive, and non-outgassing chemical solutions.

Scope of Supply: self-venting piston dosing pump, equipped with synchronous motor, dosing volume stepwise adjustable. External activation via voltage supply. Chemical solution and storage tank. Made of plastic with hand mixer, hot water injection valve [1/2"], cooling zone with dosing hose of 2 metres length, suction lance with dry-run protecti-

on, cable and plug-in power supply [internal low voltage], dosing- and trouble indication, potential free general fault signal [empty signal, respectively pump fault, JULIA signal communication cable is required], power supply [230 V/50 Hz].

Type JJUT: as before, however, without dosing tank, for the direct taking from the [25 l] transport vessel.

HH: hot water injection valve, hand mixer
H: hot water injection valve

Type	JJUD 1,1-40 HH	JJUT 1,1 H
Maximum dosing capacity l/h	1,1	1,1
Dosing pump, type	1,1-10	1,1-10
Maximum counter pressure bar	10	10
Dosing tank volume litres	40	-
For transport vessel litres	-	25
Order - Number	8330112	8330113

JUDO Industrial Dosing Pumps JULIA

for New Tasks concerning the Cooling water/Boiler water Conditioning

Accessories

JULIA Signal communication cable for potentialfree outlet	Order - 8340067 Number:
JULIA Coupling set for the extension of the dosing hose	Order - 8340068 Number:
Dosing Hose, Type JDS-T 4/2 (Teflon), coupling set required	Order - 8340069 Number:



JUDO WADOS Dosing Pump Units

Watermeter controlled Dosing Pump Units



Type JWT-K

JUDO Dosing Pump Units JWT 5 - 100

Type JWT 5 - 100

For the dosing of non-outgassing chemical solutions in proportion to quantity, taken directly from the transport vessel, control effectuated by means of contact water meter.

Scope of Supply: Membrane dosing pump, self-priming system, dosing volume stepwise

adjustable, contact water meter, vessel suction piece with dry-run protection, injection valve R 1/2" with 2 m dosing hose and fixing bracket.

Operating temperature maximum 35 °C
Power supply 230 V/50 Hz

Type JWT		5	10	20	30	100
Pressure Loss at normal flow bar		0,15	0,25	0,20	0,20	0,10
Water flow rate	Qn m ³ /h	2,5	6	10	15	40
	Qmax m ³ /h	5	12	20	30	110
	Qmin m ³ /h	0,03	0,07	0,10	0,10	0,275
Impulse repetition l		0,5	1	2	3	5
Pipe connection		3/4"	1"	1 1/2"	DN 50	DN 80
Dosing Pump, type		1,6 - 10	1,6 - 10	6,0 - 8	6,0 - 8	9,0 - 6
Maximum counter pressure bar		10	10	8	8	6
JWT-K	Complete unit with injection valve / cold water					
Order - Number		8425500	8425501	8425502	8425503	8425505
JWT-H	Complete unit with injection valve / hot water					
Order - Number		8330037	8330038	8330039	8330040	8330041

All dosing pumps with built-in dry run protection.

Exit for potential-free indication „empty“ signal (communication cable Order - Number 8340027 required).

JUDO Safety Tub JSW 1 for the housing of the complete JUT- or JWT dosing unit, transport vessel included, stable and solid design up to 60 litres, dimensions 650 x 470 x 300 mm.

Order - Number 8690026



Type JWD-KH

JUDO Dosing Pump Units JWD 5-50 to 100-200

Type JWD 5-50 to 100-200

For the dosing of non-outgassing chemical solutions in proportion to quantity.

Scope of Supply: Membrane dosing pump, self-priming system, dosing volume stepwise adjustable, contact water meter, chemical-

solution- and storage-tank, made of polyethylene with handmixer, dry-run protection, dosing pump mounted on the tank, injection valve R 1/2", internal casing with all the required fittings, as well as a dosing hose of 2 m length.

Operating temperature maximum 35 °C
Power supply 230 V/50 Hz

Type JWD		5-50	10-50	20-100	30-100	100-200
Pressure Loss at normal flow bar		0,15	0,25	0,20	0,20	0,10
Water flow rate	Qn m ³ /h	2,5	6	10	15	40
	Qmax m ³ /h	5	12	20	30	110
	Qmin m ³ /h	0,03	0,07	0,10	0,10	0,275
Impulse repetition l		0,5	1	2	3	5
Pipe connection		3/4"	1"	1 1/2"	DN 50	DN 80
Dosing Pump, type		1,6 - 10	1,6 - 10	6,0 - 8	6,0 - 8	9,0 - 6
Maximum counter pressure bar		10	10	8	8	6
Tank capacity l		50	50	100	100	200
JWD-KH	Complete unit with injection valve / cold water, with handmixer					
Order - Number		8425561	8425562	8425565	8425566	8425567
JWD-HH	Complete unit with injection valve / hot water, with handmixer					
Order - Number		8330042	8330043	8330046	8330047	8330048

All dosing pumps with built-in dry run protection.

Exit for potential-free indication „empty“ signal (communication cable Order - Number 8340027 required).

JUDO Dosing Pump Units

For the Chlorine Dosing



Type JUD-C

JUDO Dosing Pump Units for the Chlorine Dosing

Type JWD-C 5-50 to 10-50

For the quantity-proportional dosing of chlorine solutions.

Version: self-venting dosing pump with innovative double dosing head and compact calibration device, dosing volume stepwise adjustable, chemical-solution and storage tank, made of plastic with hand mixer, contact water meter, cold water injection valve 1/2", 2 metres dosing hose, suction line with dry-run protection, potential free trouble signal / empty signal [empty signal cable required], power supply connection [230 V] [50 Hz] via protected contact plug.

Type JUD-C 1,0-50

For the Dosing of Chlorine Solutions.

Version: self-venting dosing pump with innovative double dosing head and compact calibration device, dosing volume stepwise adjustable, activation via voltage supply or contact input, chemical-solution and storage tank, made of plastic with hand mixer, cold water injection valve 1/2", and 2 metres dosing hose, suction line with dry-run protection, potential free trouble signal / empty signal [empty signal cable required], power supply connection [230 V] [50 Hz] via protected contact plug.

Type	JWD-C 5-50	JWD-C 10-50
Pressure loss at nominal bar	0,15	0,25
Water flow rate	Qn m ³ /h Qmax m ³ /h Qmin m ³ /h	6 12 0,07
Pulse sequence litres	0,5	1
Pipe connection	3/4"	1"
Dosing Pump, type	1,0-10 DK	1,0-10 DK
Maximum counter pressure bar	10	10
Dosing tank volume litres	50	50
Order - Number	8330075	8330111

Type	JUD-C 1,0-50
Maximum flow rate m ³ /h	1,0
Maximum counter pressure bar	10
Injectionvalve connection	1/2"
Dosing Pump, type	1,0-10 DK
Dosing tank volume litres	50
Order - Number	8330074

Liquid chlorine, type JFC-20	Order -	8822101
Inorganic, liquid chlorine product according to DIN EN 901, active chlorine content, approximately 15 %, in one-way can, 20 litres trading unit.	Number:	

JUDO UNIDOS Dosing Pump Units

Universal External Control Dosing Pump Units

CE



Type JUT-K

JUDO Dosing Pump Units JUT 1,6 - 9

Type JUT 1,6 - 9

For the dosing of non-outgasing chemical solutions.

Scope of Supply: Membrane dosing pump, self-priming system, dosing capacity to be adjustable stepwise (stroke length and fre-

quency) with dry-run protection, injection valve R 1/2", dosing hose 2 m, and fixing bracket. For the direct taking from the transport vessel of non-outgasing solutions by means of a suction lance.

Operating temperature maximum 35 °C
Power supply 230 V/50 Hz

Type JUT	1,6	6	9
Capacity of the dosing pump maximum l/h against maximum bar	1,6 10	6 8	9 6
Dosing Pump, type	1,6 - 10	6,0 - 8	9,0 - 6
JUT-K Complete device with injection valve / cold water			
Order - Number	8425568	8425572	8425575
JUT-H Complete device with injection valve / hot water			
Order - Number	8330010	8330011	8330012

All dosing pumps with built-in dry run protection.
Exit for potential-free indication „empty“ (Signal communication cable Order - Number 8340027 required).

CE



Type JUD-KH

JUDO Dosing Pump Units JUD 1,6-50 to 9-200

Type JUD 1,6-50 to 9-200

For the dosing of non-outgasing chemical solutions.

Scope of Supply: Membrane dosing pump, self-priming system, dosing capacity to be adjustable stepwise (stroke length and fre-

quency), chemical solution and storage-tank (vessel), made of plastic, dry-run protection, dosing pump mounted on the tank, internally cased with all required fittings, as well as dosing hose of 2 m.

Operating temperature maximum 35 °C
Power supply 230 V/50 Hz

Type JUD	1,6 - 50	6 - 100	9 - 200
Capacity of the dosing pump maximum l/h against maximum bar	1,6 10	6 8	9 6
Dosing Pump, type	1,6 - 10	6,0 - 8	9,0 - 6
Tank capacity l	50	100	200
JUD-KH Complete device with injection valve / cold water, with handmixer			
Order - Number	8425580	8425573	8425578
JUD-HH Complete device with injection valve / hot water, with handmixer			
Order - Number	8330013	8330016	8330019

All dosing pumps with built-in dry run protection.
Exit for potential-free indication „empty“ (Signal communication cable Order - Number 8340027 required).

JUDO Dosing Pump Units

Accessories



Type JZS U/E



Type Control signal transmission cable

Accessories for the JUDO Dosing Pump Units

Description	Type	Order-Number
JUDO Timer for the Automatic switching on and switching off of: UNIDOS dosing pump units, electro-mixer. Electronical digital timer switch with LCD-indication, day's program, week's program, connection 230 V/ 50 Hz.	JZS U/E	8340020
JUDO Safety container for the up-taking of transport tanks (up to 100 l), solid design, 120 x 80 cm.	JSW 2	8690018
JUDO Empty Indication Transmission Cable Length 2 m, for the potential-free indication „empty“ (for example connection to the ZLT).		8340027
JUDO Control Signal Transmission Cable Length 1,5 m, for the external control of the UNIDOS Dosing Pump (for example contact watermeter) or approach via bleed-off JKAA-MV for dosing pump type 1,6 - 10, 6,0 - 8 and 9,0 - 6.		8340028
JUDO Dosing Hose (Teflon) PN 10	JDS-T 6/4 *	8725106
JUDO Dosing Hose (PVC) PN 10	JDS-T 12/6 *	8395011

* For the pump types: JDS-T 6/4 for 1,6 - 10
JDS-T 12/6 for 9,0 - 6



Drinking Water Hygiene in the Field of Building Services Engineering

Modern drinking water systems are complex, far branched out and should provide at each time in each place drinking water according to the high requirements of the drinking water regulations (TrinkWV 2001).

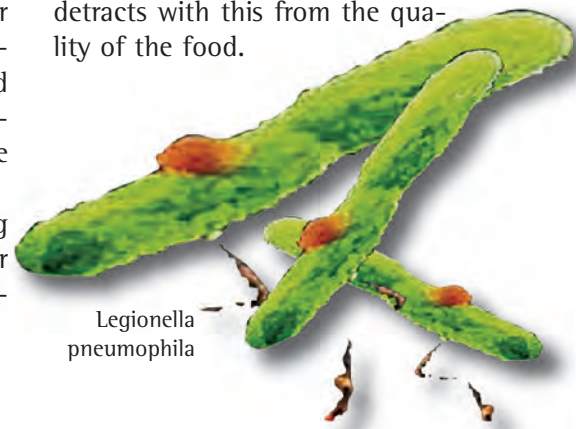
Drinking water, however, like each food, is subjected to an „aging” and keeps its outstanding quality, given by nature,

and handed over by the water companies, only partially.

Too many influences, as for example the route of transportation, the material selection, and the stagnation in the water distributing system reduce the impeccable water composition.

The microbiology, surrounding us, and that is so necessary for all the vital functions, contribu-

tes its part, to increase within a relatively short period, and it detracts with this from the quality of the food.



Legionella pneumophila

Step by Step to an Optimal Hygiene

Target-orientated Provision concerning New Installations:

- ◆ Choice of suitable materials according to DIN EN 12502
- ◆ Installation - according to DIN 1988, part 7, independent of the pipe material - of JUDO Backwash protective filters with prophylactic germ protection, by means of the unique silver sieve
- ◆ DVGW W551: Warm water circulation with permanent temperature > 60 °C (drop of temperature in the back-flow maximum 5 °C)
- ◆ DVGW W551: Alternative decentralized warm water production in case of line contents from the heater of the tap < 3 litre
- ◆ DVGW W291: minimized germ development through:
 - ◆ Prevention of corrosion by means of the dosing of mineral solutions JUL
 - ◆ Prevention of scale with aid of JUDO dosing units, by means of alternative lime protection or by the proved softener technology

An installation-technical sanitation concerning old facilities:

- ◆ Separation of old death strands, canvas-buckets...
- ◆ Optimisation of the hydraulic and thermic flow, for example by mounting a warm water circulation according to DVGW W551 with hydraulic alignment valves
- ◆ Reducing of the hot water tank contents

Germ-technical Sanitation concerning old facilities:

- ◆ Condition disinfection by means of JLS-DUO, according to DVGW W291
- ◆ Object: Fight against already developed bio films
- ◆ Best effectiveness with chlorine dioxide, production according to the two-component-system JLS-DUO JUDO
- ◆ Uncomplicated application by means of the MECHADOS dosing pump
- ◆ Controlling of the disinfection procedure by means of test strips JUDO
- ◆ Bacteriological final test for the proof of a hygienically impeccable installation

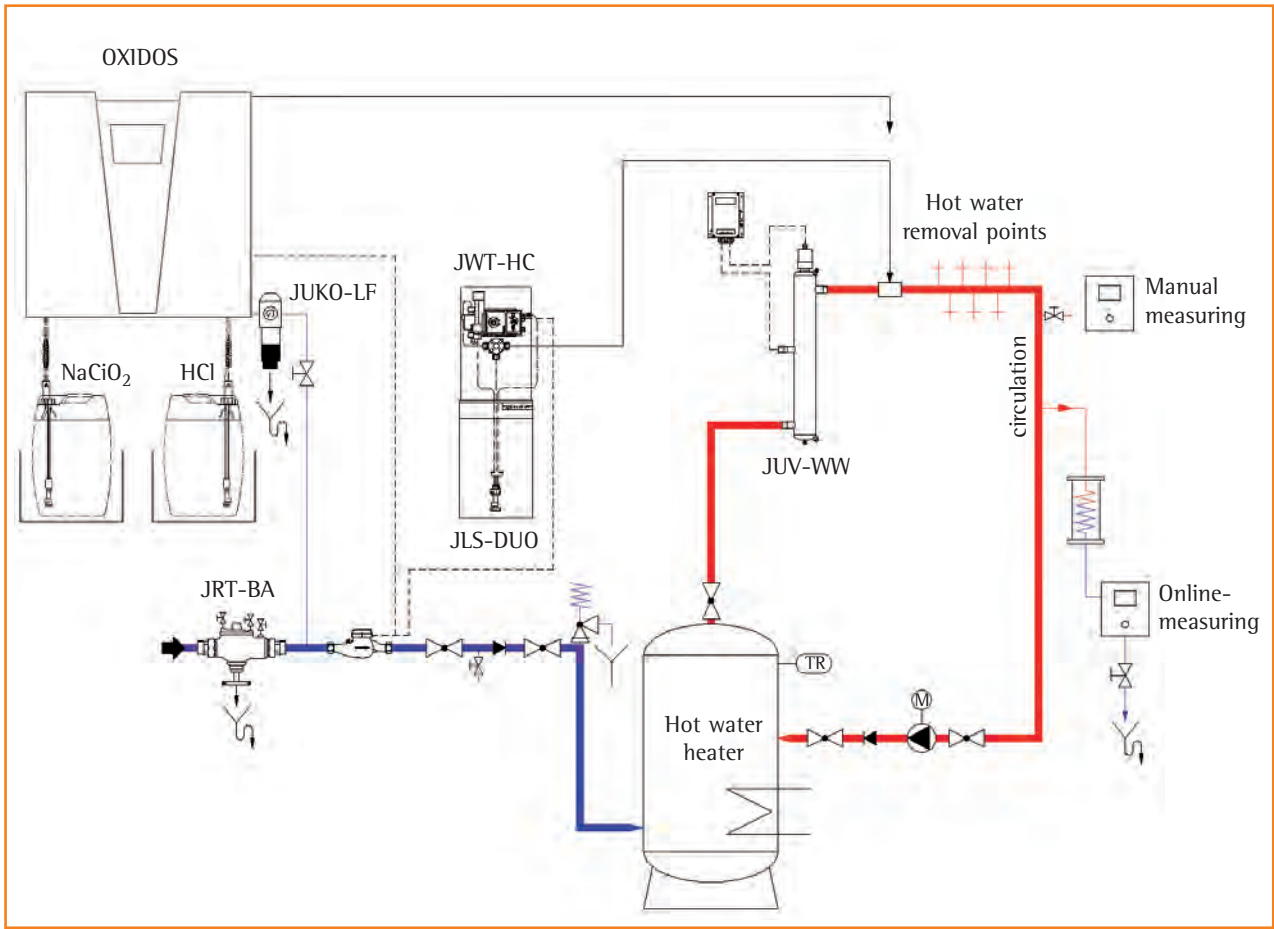
Constant Germ Protection Prophylaxis in conformity with the Drinking Water Regulation:

- ◆ Dosing Pump Units JWT-HC for a dosing of JLS-DUO in proportion to quantity
- ◆ JUDO OXIDOS Compact unit for the producing and the dosing of chlorine dioxide in proportion to quantity
- ◆ Proof of the effective chlorine dioxide concentration by means of the photometer JUDO or online-analytics JUDO
- ◆ UV Sterilization Units for the support of the germ reduction in hot water circulation systems with small and varying taking out (for example gymnasiums)

Operational Conditions:

- ◆ Avoiding Stagnation by the regular water removal
- ◆ Hygiene plan according to VDI 6023
- ◆ Microbiological analysis

Drinking Water Hygiene can be planned with JUDO Equipment Technology



Example of an Installation scheme



JUDO Disinfection on site

For the uncomplicated applying of a postrinse disinfection

JUDO Dosing Pump Unit MECHADOS

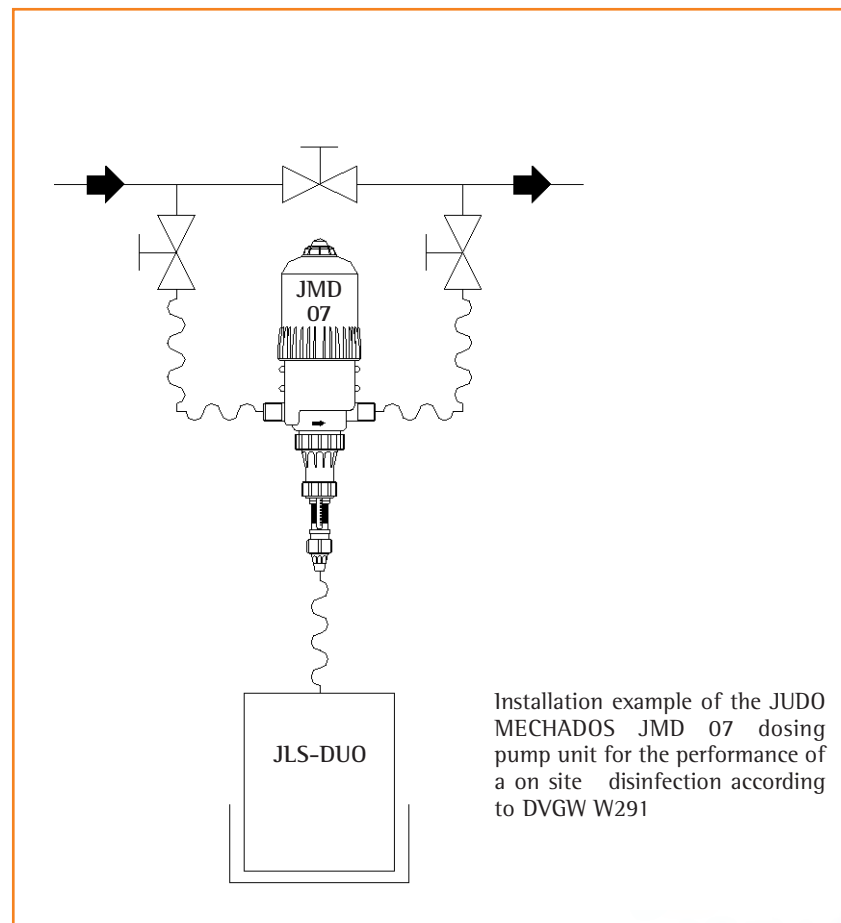


Type JMD 07

For the realization of a on site disinfection according to working sheet DVGW W291.

Scope of Supply: Mechanical dosing pump unit for the addition of minimum 7 l/m³ JUDO JLS-DUO in proportion to quantity when performing the on site disinfection according to working sheet DVGW W291. Proportional zero current dosing pump without power connection. Complete unit, resistant to chlorine dioxide, with suction hose.

Type	JMD 07
Pipe connection	3/4"
Water flow rate m ³ /h	0,01 - 2,5
Dosing capacity	in % in l/m ³
	0,2 - 1,6 2 - 16
Operating pressure maximum bar	6
Pressure loss at maximum water flow rate bar	1,4
Order - Number	8330100



Installation example of the JUDO MECHADOS JMD 07 dosing pump unit for the performance of a on site disinfection according to DVGW W291

Example of an Installation scheme

Constant Germ Protection Prevention

In accordance with the Drinking Water Regulation

CE



Type JCED

JUDO Chlorine Dioxide Production - and Dosing Unit OXIDOS

Type JCED 5 - 100 HC

Compact Unit for the production of chlorine dioxide solution, ready for dosing, in accordance with the chlorite hydrochloric acid procedure referring to DVGW W224 in proportion to quantity-dosing in warm water systems included.

Scope of Supply: Compact unit for the treatment of chlorine dioxide solutions consisting of sodium chlorite and diluted hydrochloric acid, storage canister with integrated level control, precise dosing technology, optimal component mixture and complete chemical reaction, as well as state-of-the-art control

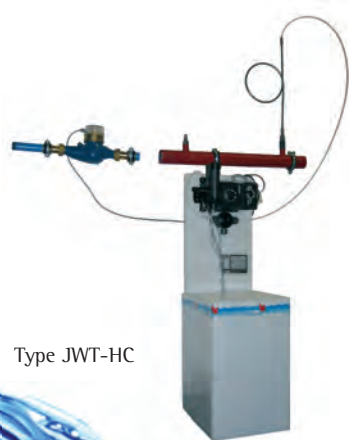
electronics, the whole system is atmospherically closed via the absorption unit, all operating and control tools are on the front of the device, sensitive and maintenance-relevant parts are easily accessibly arranged on the backside. Dosing-off unit by means of installed membrane dosing pump, self-priming, dosing volume adjustable stepwise, contact water meter, injection valve R 1/2", made of PVDF with dosing hose 2 m length (PTFE), power supply 230 V/50 Hz.

Exit for potential-free indication „empty“, completely pre-mounted total unit with integrated safety-tub for a protected set-up at the place of the dosing, optionally on-line measurement technique available.

Type JCED		5 HC	10 HC	20 HC	30 HC	100 HC
Water flow rate	Qn m ³ /h	2,5	6	10	15	40
	Qmax m ³ /h	5	12	20	30	100
	Qmin m ³ /h	0,03	0,07	0,1	0,2	0,275
Pressure Loss at normal flow bar		0,15	0,25	0,2	0,2	0,1
Impulse repetition l		0,5	1,0	2,0	3,0	6,0
Pipe connection		3/4"	1"	1 1/2"	DN 50	DN 80
Dosing Pump, type		1,6 - 10	1,6 - 10	6,0 - 8	6,0 - 8	6,0 - 8
Maximum counter pressure bar		10	10	8	8	8
Maximum operating temperature °C		85	85	85	85	85
Maximum capacity g ClO ₂ /h		5	5	5	5	5
Order - Number		8330102	8330103	8330104	8330105	8330106

Working materials (base materials for the production of chlorine dioxide)	Order-Number
JUDO Hydrochloric acid 9 % Can with 25 kg in transport packing unit (red)	8610031
JUDO Sodium chlorite 7,5 % Can with 25 kg in transport packing unit (blue)	8610032

CE



Type JWT-HC

JUDO Chlorine Dioxide Dosing Unit WADOS-T HC

Type JWT-HC 5 - 30

For the dosing of JLS-DUO JUDO in proportion to quantity, direct from the transport canister. Control effecteduated by means of contact water meter.

Scope of Supply: Plastic frame with integrated protection tub for the housing of the following components: Membrane Dosing

Pump with self-ventilating innovative and patented double dosing head, with compact calibration device, self-priming, dosing volume adjustable step-by-step, contact water meter, vessel suction-piece with dry-run protection, injection valve R 1/2", made of PVDF with dosing hose 2 m (PTFE), power supply 230 V/50 Hz. Exit for the potential-free indication „empty“ (Signal communication cable required).

Type JWT-HC		5	10	20	30
Water flow rate	Qn m ³ /h	2,5	6	10	15
	Qmax m ³ /h	5	12	20	30
	Qmin m ³ /h	0,03	0,07	0,1	0,2
Pressure Loss at normal flow bar		0,15	0,25	0,2	0,2
Pulse repetition l		0,5	1,0	2,0	3,0
Pipe connection		3/4"	1"	1 1/2"	DN 50
Dosing Pump, type		1,0 - 10 DK	1,0 - 10 DK	1,0 - 10 DK	1,6 - 10 DK
Maximum counter pressure bar		10	10	10	10
Overall-length water meter mm		288	378	438	270
Weight kg		9	13	15	23
Order - Number		8330085	8330086	8330087	8330088

JUDO JLS-DUO

For the Disinfection of Drinking Water and Service Water

- ♦ Versatile-acting disinfectant in accordance with the requirements of the drinking water regulation, the EN 12671 as well as the DVGW W224, W291
- ♦ Excellent bactericide, sporicidal, viricidal and algicide quality (for example concerning E.coli)
- ♦ Stronger sterilizing effect and quicker disinfecting effect in comparison with the conventional chlorine products
- ♦ The disinfecting impact is to the greatest possible extent independent from the pH-value. Therefore a constant disinfection is guaranteed
- ♦ Long-lasting bacteriological effect
- ♦ Fighting the „Biofilm“ on the internal surface of the tube, and of the vessel
- ♦ No formation of dangerous break-down products, as for example chloramines, tri-halogen-methane chlorophenols
- ♦ Olfactory- and gustatory-substances are completely changed, respectively, the don't even develop

Preparation of JUDO JLS-DUO



Type JLS-DUO

JUDO Protection against the bacteria Legionella JLS-DUO

JLS-DUO JUDO, liquid chlorine dioxide-solution as a two-components-system, for the disinfection of drinking- and service-water without its being affected by odor, without formations of chloramines, for odourless and tasteless water. A strong oxidation potential causes an ameliorated germicidal velocity and

outstanding water qualities. For the automatic addition by means of the dosing units JUDO JWT-HC with self-ventilating double dosing head or the dosing pump unit JUDO MECHADOS for the carrying out of a disinfection on site.

Type	JLS-DUO 5	JLS-DUO 10	JLS-DUO 25
Shipping units in litres	5	10	25
Water needs up to m ³ /month	75	150	375
Order - Number	8680001	8680002	8680003

When effecting a postrinse disinfection we recommend to using 7 litres JLS-DUO per m³ system content

JUDO Chlorine Dioxide Testing Units

For the Determination of Chlorine dioxide



Type JPHM

JUDO Chlorine Dioxide Testing Units

Description	Type	Order-Number
JUDO Photometer Manual device for the opto-electronical determination of chlorine dioxide and other water parameters	JPHM	8690039
JUDO Reagents set for JPHM Regents Set chlorine dioxide		8690040
Additional reagent chlorine dioxide (required, in case of free chlorine)		8690041
JUDO Peroxide test strips For the determination of chlorine dioxide at high concentrations during the disinfection on site, measuring range 0,5 - 25 mg/l	JPTS	8690035
JUDO Chlorine dioxide measuring instruments for the measurement of chlorine dioxide in accordance with the DPD method		8690047

JUDO LEGIOLAX

Fights Bacteria Legionella in the Shower Hose

If it is question of infections of the respiratory system, the bacterium Legionella is especially feared. It causes heavy lung illnesses, as for example the „Legionnaires' disease“, that partially can run deadly. According to the infection protection law an illness is compulsorily notifiable. JUDO LEGIOLAX delivers minute quantities of silver to the water, in the shower hose, and thus fights Micro organismus, as the

bacterium Legionella, other bacteria, viruses, germs and fungal populations.

Its effectiveness was tested by the Institute Gockel and Weisedel.

The result: Significant growth inhibition of the bacterium Legionella pneumophila compared with the control, effectuated (hand shower hose without silvered wire spiral) during stagnation in the micro-biological test.



JUDO LEGIOLAX

Type JLX

Scope of Supply: Hand shower hose insert

For the fighting of Bacteria Legionella in the hand shower hose.



Type	JLX
Length mm	800 - 1.750 *
Diameter mm	4
Packing unit pieces	10
Order - Number	8230001

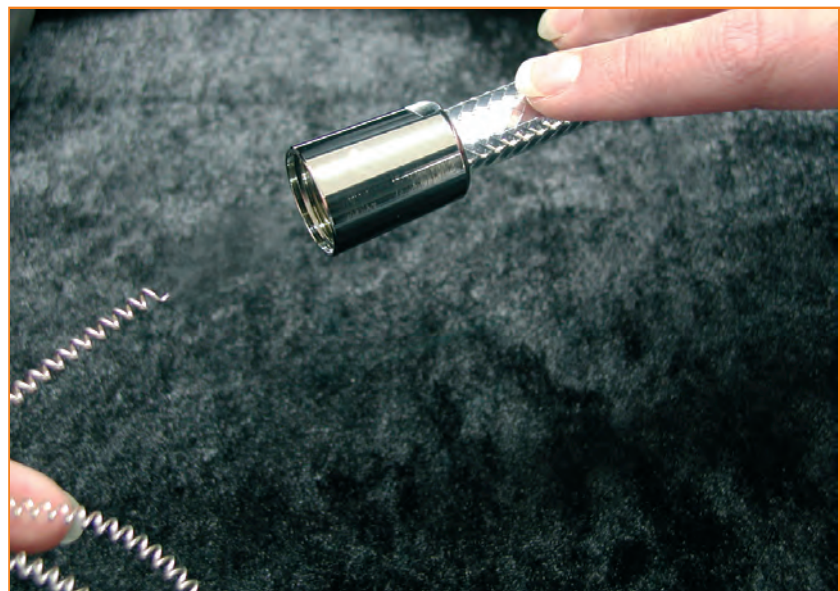
* Can be adapted on each hose length

Easy Installation - effective prevention

Easy to install:

Unscrew the hand shower hose, extend the LEGIOLAX, to the required hose length, insert the LEGIOLAX in the shower hose, screw on the shower hose once again, ready!

Once installed, the spiral works for three years.



JUDO UV-Sterilization

For the Sterilization of Drinking- and Service Water

Within the drinking water field the use of UV-units, tested in accordance with DVGW requirements, equipped with solenoid shut-off valve, is regulated!

To ensure a trouble-free operation, we recommend the mounting of an additional flushing valve.



Type JUV-WW

Please note:

In Germany already existing installations without DVGW test-mark have to be certified afterwards or to be replaced till 1st January, 2007.

Indication:

A water analysis and water sample is necessary for the transmission-measurement. Bacteriological tests are to be conducted by appropriate institutes. Only by trained personal!

Type JUV 40 - 130 WW With DVGW test-mark

Scope of Supply: Stainless steel reactor with high-performance ultra-violet radiator, calibrated measuring device with indication in W/m², and norm-signal exit, removable radiator protective tube, SOFTSTART ignition

system, digital operating hours meter and switching impuls counter, cleaning and collective fault indication, flush-respectively drain connection, switch contact for solenoid shut-off valve (solenoid valves are not included in the scope of supply).
Power supply 230 V/50 Hz.

Type	JUV 40 WW	JUV 80 WW	JUV 130 WW
Flow rate cold water 5 - 15 °C m ³ /h *	3,7	8,1	12,5
Flow rate hot water up to 60 °C m ³ /h *	3,0	6,5	10
Pipe connection	1 1/2"	DN 65	DN 80
Wattage of the radiator	90	120	193
Number of the radiators	1	1	1
Operating temperature °C	5 - 60	5 - 60	5 - 60
Order - Number	8350050	8350051	8350052

* Relating to 400 J/m² UV-dosage at 96 % UV-transmission after a 1 centimetre layer. In the case of divergent water flow values, other water qualities, changes will arise (expert service required).



Type JUV-I/IS

Type JUV 10 - 100 I/IS Industrial Version, Biodosimetrically tested.

Scope of Supply: Stainless steel reactor with high-performance ultra-violet radiator, removable radiator protective tube, indication of the change of the radiator with trip meter,

acoustical trouble signal, and visual alarm display for optional solenoid shut-off valve (solenoid valves aren't included in the scope of supply).
Power supply 230 V/50 Hz.

IS-version: UV-sensor and control unit with digital indication included.

Type	JUV 10	JUV 20	JUV 35	JUV 70	JUV 100
Flow rate at 400 J/m ² UV-Dose m ³ /h *	0,7	1,7	2,9	5,1	7,5
Flow rate at 300 J/m ² UV-Dose m ³ /h *	0,9	2,2	3,8	6,8	10
Flow rate at 250 J/m ² UV-Dose m ³ /h *	1,0	2,6	4,6	8,2	12,3
Pipe connection	1/2"	3/4"	3/4"	1"	1 1/2"
Wattage of the radiator	16,5	40	40	84	84
Number of the radiators	1	1	1	1	1
Operating temperature °C	5 - 40	5 - 40	5 - 40	5 - 40	5 - 40
Order - Number „I“	8350058	8350059	8350060	8350061	8350062
Order - Number „IS“	8350053	8350054	8350055	8350056	8350057

* Relating to 15 °C, 96 % UV-transmission after a 1 centimetre layer. At divergent water flow values/ rates, higher temperatures and other water qualities, changes will arise (expert service required).

JUDO UV-Sterilization

Accessories

Accessories for the JUDO UV-Sterilization Units

Description	Type	Order-Number
JUDO Reserve radiators		
for JUV 10 I/IS		8351010
for JUV 20 I/IS and JUV 35 I/IS		8351011
for JUV 70 I/IS and JUV 100 I/IS		8351012
for JUV 40 WW		8351005
for JUV 80 WW		8351006
for JUV 130 WW		8351007
JUDO Temperature Control by means of flush valve		
with time control, 230 V/50 Hz	JEM-AT 3/8"	8351008
with temperature control, 230 V/50 Hz	JEM-ATE 3/8"	8351009
JUDO Solenoid shut-off valve	JEM 3/4"	8735113
with automatic blocking of the piping by means of UV-control	JEM 1"	8735114
(concerning design JUV-WW), made of brass, mode of action normally	JEM 1 1/4"	8735115
closed, pressure range 0,5 - 10 bar, medium neutral, voltage 230 V/50 Hz,	JEM 1 1/2"	8735116
protection class IP 54, ED 100 %.	JEM 2"	8735117
JUDO Connector cable		8351013
for the connection of an electro-magnetic shut-off valve to the		
JUV 10 - 100 I/IS		
JUDO Cleaning concentrate		8721216
in the case of limy deposits, 2x 1 litres trading unit		



JUDO FILSTAB, FILDOS and FILWEL

Backwash protective filter with treating unit



Type JFB

JUDO FILSTAB

Type JFB

Backwash protective filter with treating unit, combination consisting of backwash protective filter and water treatment unit to be used in drinking water. Via a sieve filtration coarse-

se- and fine- grained particles are eliminated in the water, varying with variation of its mesh size. Simultaneously via a special water treatment unit the affinity of the water to generate calcium deposits is reduced.

Type	JFB	JFB	JFB
Pipe connection/female connection	3/4"	1"	1 1/4"
Water flow rate m ³ /h	2,0	2,7	3,0
Built-in length mm	90	90	110
Mesh size mm	0,1	0,1	0,1
Max. Operation Pressure bar	10	10	10
Max. Operating Temperature °C	30	30	30
Order - Number	8215010	8215011	8215012

* When a pressure loss of 0,5 bar occurs in clean condition

JUDO FILDOS

Type JFD

Backwash protective filter with metering device, combination consisting of backwash protective filter and metering device, to be used in drinking water. Via a sieve filtration coarse- and fine- grained particles are elimi-

nated in the water , varying with variation of its mesh size. Simultaneously via a special metering device, filled with high-quality Poly-Phosphate crystals, the water hardness is reliably stabilized, and the building-up of a protection layer in the pipeline is supported.

Type	JFD	JFD	JFD
Pipe connection/female connection	3/4"	1"	1 1/4"
Water flow rate m ³ /h	2,0	2,7	3,0
Built-in length mm	90	90	110
Mesh size mm	0,1	0,1	0,1
Max. Operation Pressure bar	10	10	10
Max. Operating Temperature °C	30	30	30
Order - Number	8215013	8215014	8215015

* When a pressure loss of 0,5 bar occurs in clean condition

Poly-Phosphate replacement filling	Order - Number	8215019
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JUDO FILWEL

Type JFW

Backwash protective filter with Je-welize-device , combination consisting of backwash protective filter and Je-welize-device to be used in drinking water. Via a sieve filtration coarse- and fine- grained particles are elimi-

nated in the water , varying with variation of its mesh size. Simultaneously the water is je-welized, and as a result the positive properties of the Precious Stone-mixture consisting of rock crystal, rose quartz and amethyst are transmitted to the drinking water.

Type	JFW	JFW	JFW
Pipe connection/female connection	3/4"	1"	1 1/4"
Water flow rate m ³ /h	2,0	2,7	3,0
Built-in length mm	90	90	110
Mesh size mm	0,1	0,1	0,1
Backwash volume-stream l/s	0,3	0,3	0,3
Max. Operation Pressure bar	10	10	10
Max. Operating Temperature °C	30	30	30
Order - Number	8215016	8215017	8215018

* When a pressure loss of 0,5 bar occurs in clean condition

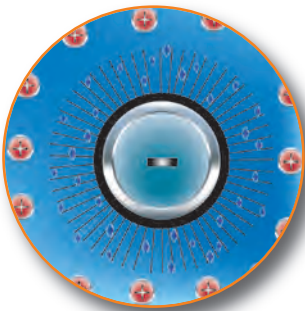
Worldwide unique: Anti-Lime-Protection and Hygiene Protection without Cartridge Replacement



for anti-lime-protection
DVGW-W510



Only the patented BIOSTAT-COMBIMAT has the Singular Four-stage System



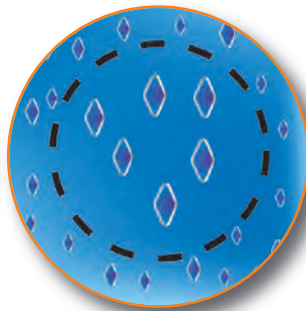
stage one: DVGW certified Lime Treatment

The BIOSTAT-COMBIMAT creates seed-crystals from water. These microscopically small calcium carbonate crystals are held in suspension and flow with the water into the domestic installations.

There surplus calcium carbonate settles preferably on these crystals, and not on the surface of heating coils or in the pipes.

Advantage: Due to the fact that no dosing of substances to the water is effected, and not any substances are withdrawn, the drinking water quality, especially valuable minerals, persist.

The control of the lime treatment happens completely automatically. A micro-processor with water meter considers the water quality and the water flow. This ensures a constantly effective water treatment.



stage two: Optimization through Selection

During stage two of the four-stage system the seed-crystals are selected.

This selection operation ensures that only the "best ones" can leave the treatment chamber, to achieve thus an optimum effect.



stage three: Fully-automatic Cleaning

During Stage three a patented cathode is employed. Wipers relieve it, from time to time, fully-automatically, from adherent lime scale. These lime particles are collected in the treatment chamber and, are also, after that, automatically flushed out into the discharge line. Contrary to the customary methods, by means of the patented JUDO-system, the treatment chamber can be protected durably, against calcification and blocking. Furthermore the used material is treated carefully by not undergoing a pole-reversal of the electrodes. The fully-automatic cleaning of the treatment chamber, without a pole-reversal, permits therefore a durable operating without cartridge replacement.



stage four: Hygiene by means of Active Oxygen

In parallel to the lime protection the BIOSTAT-COMBIMAT fights germs and herewith the danger of the germ proliferation [applied for a patent]. The centrepiece of the hygiene unit are the special hygiene anode and the intelligent control unit. As soon as water flows active oxygen is produced at this anode without addition of chemicals.

JUDO BIOSTAT-COMBIMAT

The New Generation

Requirement for Hygiene:
Clean pipe lines:

All the important hygiene-guidelines require clean and smooth inside surfaces of the tubes, because their condition is of importance for the colonisation with micro-organisms.

Lime scale in piping installations reduces their cross-section and at the same time, with their rugged surface, they form an ideal breeding-ground for germs.

The new BIOSTAT-COMBIMAT is true to its name. Due to its innovative method, it forms the basis for hygiene in the drinking water installation.

Only the market leader can offer these advantages:

- ◆ Lime protection, DVGW tested and certified
- ◆ Stops lime scale in accordance with a patented method
- ◆ Fights germs by means of active oxygen
- ◆ No hygiene critical cartridge replacement
- ◆ Blocking-free effect unit
- ◆ Continuous water supply
- ◆ Fully-automatic operating
- ◆ Time-saving installation with aid of the patented JUDO QUICKSET-E by the specialist plumber
- ◆ High-class silver design



Type BST-CA

JUDO Anti-Lime protection- and Hygiene Unit BIOSTAT-COMBIMAT

Type BST-CA 15 - 25
for water up to 30 °C

Scope of supply: beautifully shaped and stable housing, PN 10, integrated water meter, electrolytically working and patented seed-crystal generator, with microprocessor-regulated current. Power supply unit, tested in accordance with VDE, hygiene unit with lime protection- and hygiene-anode against the

bacterium Legionella, with two variable-speed motors for the automatic cleaning of the cathode and the derivation of the surplus lime into the discharge line. Service- and functions-indication by means of light-emitting diodes, built-in rotary flange with patented bayonet-connector with screw connection and mounting lid, power supply unit [230 V/50 Hz].

Type	BST-CA type 15	BST-CA type 25
Pipe connection	¾"	1"
Nominal flow rate m³/h	1,5	2,5
Max. quantity of accommodation units	1	2
Pressure loss at nominal flow rate bar	0,2	0,4
Nominal pressure PN 10 bar	10	10
Max. temperature of the water °C	30	30
Power supply V/Hz	230/50	230/50
Max. power consumption watts **	20	25
Width mm	330	330
Height mm	855	855
Depth to pipe centre mm	240	243
Depth to pipe centre with JQX mm	305	308
Order - Number	8210411	8210412

* Valid for anti-lime protection in accordance with DVGW W 510
*** Only during water removal

JUDO BIOSTAT - Tested Anti-lime Protection For Industrial Tasks



The advantages:

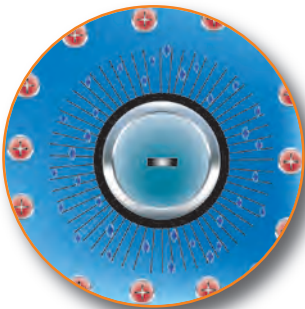
- ◆ DVGW-tested single components
 - ◆ Installation of a pipe disconnector is not necessary
 - ◆ Stops lime scale according to the three-stage system
 - ◆ Time- and money-saving maintenance
- Due to the possibility to lock up particular sectors an almost 100% operating is ensured also when maintenance takes place.



applied for a patent

type TGA

JUDO BIOSTAT: Anti-lime Protection according to the Three-stage-system



stage one:

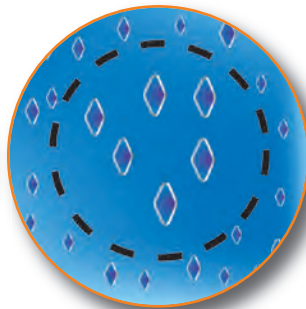
DVGW certified Lime Treatment

The BIOSTAT creates seed-crystals from water. These microscopically small calcium carbonate crystals are held in suspension and flow with the water into the domestic installations.

There surplus calcium carbonate settles preferably on these crystals, and not on the surface of heating coils or in the pipes.

Advantage: Due to the fact that no dosing of substances to the water is effected, and not any substances are withdrawn, the drinking water quality, especially valuable minerals, persist.

The control of the lime treatment happens completely automatically. A micro-processor with water meter considers the water quality and the water flow. This ensures a constantly effective water treatment.



stage two:

Optimization through Selection

During stage two of the three-stage system the seed-crystals are selected.

This selection operation ensures that only the "best ones" can leave the treatment chamber, to achieve thus an optimum effect.



stage three:

Fully-automatic Cleaning

During Stage three a patented cathode is employed. Wipers relieve it, from time to time, fully-automatically, from adherent lime scale. These lime particles are collected in the treatment chamber and, are also, after that, automatically flushed out into the discharge line. Contrary to the customary methods, by means of the patented JUDO-system, the treatment chamber can be protected durably against calcification and blocking. The used material is treated carefully by not undergoing a pole-reversal of the electrodes.

JUDO BIOSTAT 2050 - 2200

Anti-Lime protection Concerning Housing Areas, Trade and Industry



type TGA

applied for
a patent



Type BST 2200

JUDO Anti-Lime Protection Unit for Building Engineering BIOSTAT 2050 - 2200

Type BST 2050 - 2200
for water up to 30 °C

Lime Protection with DVGW-tested single devices.

Expert service required!

Design: Modular designed compact unit, independent single devices with DVGW-tested technique, individually lockable for maintenance purposes, integrated water meter electrolytically working and patented seed-crystal generator with microprocessor-regulated current.

Automatic determination and indication of the flushing point as well as of the replacement interval for the anti-lime protection unit. Service- and functions indication by means of light-emitting diodes. Equipped with electric motors for the automatic cleaning of the cathode and the derivation of the surplus lime into the discharge line. VDE-tested power supply unit, complete with internal device pipelining.

Type	BST 2050	BST 2100	BST 2150	BST 2200
Pipe connection	DN 40	DN 65	DN 65	DN 65
Nominal flow rate m ³ /h	5	10	15	20
Max. numbers of accommodation units	12	45	65	90
Pressure loss at nominal flow rate bar	0,5	0,8	0,8	0,8
Nominal pressure bar	10	10	10	10
Maximum temperature of the water °C	30	30	30	30
Power supply V/Hz	230/50	230/50	230/50	230/50
Maximum average daily consumption m ³	1,6	3,2	4,8	6,4
Capacity of the protection unit m ³	1.600	3.200	4.800	6.400
Number of the protection units	2	4	6	8
Maximum power consumption watts *	50	100	150	200
Length mm	700	860	1.220	1.580
Width mm	420	890	890	890
Height mm	550	1.220	1.220	1.220
Order - Number	8210350	8210351	8210352	8210353

* only during water removal

Anti-lime protection unit for BST 2050 - 2200
Replacement by the JUDO customer service or a trained plumber

Order - 2210372
Number:

The Classic Softening

Softening in Accordance with the Ion Exchange Method

Important Information

DVGW-tested Softening Units

The DIN-standard 1988, part 2, writes relating to drinking water: Chapter 8: Due to the advancing technization of the households, drinking water is also used increasingly for technical purposes. In these circumstances a drinking water treatment can be useful. For that, filters, dosing devices and softening units are applied. In order that they work according to their function and without disadvantageous side effects, ...only devices with DIN-DVGW test mark may be installed, if additional safety fittings in accordance with the DIN-standard DIN 1988, part 4 shall be abandoned.

Chapter 8.3.3: Only softening units with DIN-DVGW test mark may be installed; in accordance with the DIN-standard DIN 1988, part 4 for these units no additional safety devices are required.

Relating to technical water: DIN 1988, part 4, table 1, number 10: For softening units without DVGW test mark a pipe disconnecter, installation style 1, has to be designed.



DVGW-tested softening units	●	●	
Softening in accordance with the ion exchange method	●	●	●
Integrated disinfection device	●	●	optional
Wonderfully soft water	●	●	●

Available as:

Quantity-controlled design with compulsive regeneration	●	●	●
Time-controlled design			●

Capacity:

Short-run peak-flow	to 3,5 m³/h	to 20 m³/h	to 40 m³/h
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The Classic Softening Method

Softening according to the ion exchange method



Type JBQ-S

JUDO Softening Unit BIOQUELL-SOFT

Type JBQ-S
according to DIN 19636

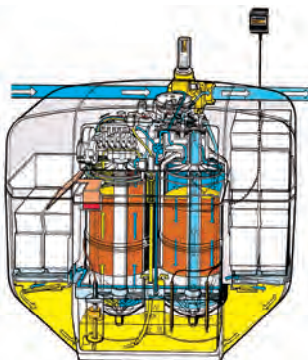
Scope of Supply: water softening unit for the domestic water technique as a duplex aggregate, consisting of: two glass fibre-reinforced filter tanks, filter fillings consisting of high-quality monospheric ion exchange resin,

food grade approved, control, water-meter controlled, installed disinfection device with platinized titanium electrodes, salt-solution- and storage tank, built-in rotary flange with patented bayonet connector included with screwed connection and mounting lid as well as wall mounting. Power supply 230 V/50 Hz.

Type	JBQ-S
Nominal flow rate m ³ /h	2
Short-run peak flow maximum m ³ /h	3,5
Pipe connection	1"
Installation length mm	195
Pressure loss at nominal flow and softening from 20 °dH to 8 °dH bar	0,4
Salt storage tank content kg	40
Salt consumption per m ³ softening from 20 °dH to 8 °dH kg	0,32
Operating pressure maximum bar	7
Minimal flow pressure at nominal flow rate bar	2
Operating temperature maximum °C	30
Order - Number	8200047



Type JBQ-K



JUDO Softening Unit BIOQUELL-K

Type JBQ-K
according to DIN 19636

Scope of Supply: stable, beautifully shaped compact model for the mounting on the wall. Salt solution tank, ideal for the up-taking of block salt. Technical description as for type JBQ-S, however, without bayonet.

Type	JBQ-K
Nominal flow rate m ³ /h	2
Short-run peak flow maximum m ³ /h	3,5
Pipe connection	1"
Installation length mm	195
Pressure loss at nominal flow and softening from 20 °dH to 8 °dH bar	0,4
Salt solution and storage tank content kg	40
Salt consumption per m ³ softening from 20 °dH to 8 °dH kg	0,32
Operating pressure maximum bar	7
Minimal flow pressure at nominal flow rate bar	2
Operating temperature maximum °C	30
Order - Number	8200004

The Classic Softening Method

Softening according to the ion exchange method



Type JBQ-M

JUDO Softening Unit BIOQUELL-M

Type JBQ-M
according to DIN 19636

Scope of Supply: Stable and beautifully shaped compact device with mounted duplex aggregate consisting of: two fibre-reinforced filter tanks, filter fillings, consisting of high-

quality monospheric ion exchange resin, food grade approved, water-meter controlled, mounted disinfection device, salt-solution- and storage tank for the up-taking of block salt. Built-in rotary flange with patented bayonet connector with screwed connection and mounting lid. Power supply 230 V/50 Hz.

Type	JBQ-M
Nominal flow rate m ³ /h	1
Peak flow maximum m ³ /h	1,5
Pipe connection	3/4"
Installation length mm	180
Pressure loss at nominal flow and softening from 20 °dH to 8 °dH bar	0,4
Salt solution and storage tank content kg	20
Salt consumption per m ³ softening from 20 °dH to 8 °dH kg	0,32
Operating pressure maximum bar	7
Minimal flow pressure at nominal flow rate bar	2
Operating temperature maximum °C	30
Order - Number	8433662



Type Block salt

Accessories

Description	Type	Order-Number
Panel for the wall mounting of the BIOQUELL-SOFT brine container, made of galvanized steel, complete with fixing material		8733066
Panel for the wall mounting of the BIOQUELL-MINI		8733068
QUICKSET-X bypass valve for the installing between QUICKSET-E and JBQ softening unit or BIOSTAT	JQX	8735210
Device for the testing of hardness, in order to determinate the total hardness		8742120
Regenerating salt in tablets 25 kg each, minimum order quantity 4x 25 kg (1 packing unit)		8839101
Regenerating block salt, 4x 2,3 kg		8620002



The Classic Softening Method

Softening according to the ion exchange method



Type Aqua-Dania

JUDO Softening Unit Aqua-Dania

Type Aqua-Dania

Scope of Supply: Prefabricated duplex softening unit with operating and installation manual as well as rotary flange with 1" male thread for the mounting of flexible hoses.

Type	Aqua-Dania
Nominal flow rate m ³ /h	2
Short-run maximum peak flow m ³ /h	3,5
Pipe connection	1"
Salt storage tank content block / tablet salt kg	45/35
Salt consumption per regeneration g	400
Operating pressure maximum bar	7
Minimum flow pressure at nominal flow rate bar	2
Operating temperature maximum °C	30
Order - Number	8200019



Type JQS-U

JUDO Softening Units QUICK-SOFT UNO and QUICK-SOFT DUO

Type JQS-U and JQS-D

Scope of Supply: Water softening unit for the domestic water technique as a single aggregate (JQS-U) or duplex aggregate (JQS-D) consisting of: one (JQS-U) or two (JQS-D) glass fibre reinforced filter tank, fil-

ter fillings consisting of high-quality monospheric ion exchange resin, food grade approved, water-meter controlled, integrated disinfection device with platinum covered titanium electrodes, salt solution and storage tank, built-in rotary flange with patented bayonet connector and fittings included.

Type	JQS-U	JQS-D
Nominal flow rate m ³ /h	1,2	1,7
Short-run maximum peak flow m ³ /h	2,0	3,5
Pipe connection	1"	1"
Installation length mm	195	195
Pressure loss at nominal flow rate and softening from 20 °dH to 8 °dH bar	0,7	0,5
Salt storage tank content kg	50	50
Salt consumption per m ³ softening from 20 °dH to 8 °dH	0,44	0,44
Operating pressure maximum bar	8	8
Minimum flow pressure at nominal flow rate bar	2	2
Regeneration duration minutes	9	15
Order - Number	8200319	8200320

The Classic Softening Method

Softening according to the ion exchange method

CE



Type JM-DY

JUDO Softening Unit JUDOMAT DY

Type DY

Scope of Supply: Stable, beautifully shaped compact unit with built-in duplex aggregate, consisting of: two glass fibre reinforced filter vessels, filter fillings of high-quality mono-spheric ion-exchange resin, food grade

approved, water-meter controlled, salt tank for the uptaking of block salt. Built-in rotary flange with fittings and mounting lid. Power supply 230 V/50 Hz. Without force regeneration and disinfection device.

Type	DY
Nominal flow rate m ³ /h	1
Short-run maximum peak flow m ³ /h	1,5
Pipe connection	3/4"
Installation length mm	180
Pressure loss at nominal flow rate and softening from 20 °dH to 8 °dH bar	0,4
Salt storage tank content kg	20
Salt consumption per m ³ softening from 20 °dH to 8 °dH	0,32
Operating pressure maximum bar	7
Minimum flow pressure at nominal flow rate bar	2
Operating temperature °C	30
Order - Number	8433663

JUDO Quality Standards

Pressure and Function Tests

Function test of JBQ-K Softening Units



Glass-fibre-reinforced filter tank resistant to high pressure



The Classic Softening Method

Softening according to the ion exchange method



Type JM 30 KB



Type JM 100 KB

JUDO Compact Softening Units JM 30 - 100 KB

Type JM 30 - 100 M-KB

Scope of Supply: Well designed compact softener with built-in GRP-vessel with down tube and plastic filter nozzles, filling of high quality monosphere ion-exchange resin, central control valve for automatic regeneration, built-in blending device, microprocessor control with LCD-display, built-in salt storage and brine solution tank with filtration tissue, suitable for salt tablets and fine salts, brine valve and suction line, 230 V/50 Hz adapter.

**Water-meter controlled single-unit
JM 30 - 100 M-KB**

Water-meter controlled regeneration, forced regeneration interval possible; (Option: resin chlorination device combined with no salt detector JCLE 3, potential free faulty contact JSMP 2).

Type	JM 30 M-KB	JM 45 M-KB	JM 60 M-KB	JM 100 M-KB
Maximum water flow rate m ³ /h	1	1,5	2	3
Pipe connection	1"	1"	1"	1"
Exchange capacity at optimal salt setting °dH x m ³	30	45	60	100
Salt consumption at optimal salt setting kg/regeneration	2	3	4	6
Salt storage volume l	21	21	50	50
Measurement	width mm	390	390	390
	length mm	655	655	655
	height mm	625	625	1085
Order - Number	8390112	8390113	8390114	8390115

Accessories

Description	Type	Order-Number
By-pass valve (installed)		8395023
Internal by-pass valve		8395021
Connection		1610483
Cloth for fine salt		1610582
JUDO Disinfection and no salt detector device According to NaCl electrolysis method, combined with no salt alarm displayed at the control panel, for JM 30 - 60 K.	JCLE 3	8395017
JUDO Faulty indication	JSMP 2	8390075

JUDO CONTISOFT

DVGW-tested softening unit for technical building installations

Tested, stagnation-free technique from the inventor of the first DVGW-tested softening unit.

Experience is not to be replaced by anything. Already in 1983, JUDO launched the first water softening unit with DVGW test mark.

The preliminary culmination concerning the softener development at JUDO is the new JUDO CONTISOFT.

As first softener unit it offers stagnation-free operation-flows.

The most Important Advantages on One Sight:

- **DIN-DVGW certificated device-technique**
The installation of a pipe disconnecteur is not necessary.
- **Continuous device conception**
From domestic technique to technical building installations
- **The first softening unit for the building engineering with stagnation-free operation flows**
Parallel operating modes ensure the equal perfusion of all components.
- **The performance data are in accordance with DIN 19636**
Economical salt setting and minimum pressure loss.
- **Hygiene optimised dispatch- and installation conditions**
Delivery of complete devices, filled and ready for use
- **Integrated device disinfection performance**
Even during salt deficiency, and every 96 hours at the latest, independent of the quantity of water removal.
- **Wear-free ceramic disc-technology**
Device-control, thousandfold approved with lifelong „programming“, without data loss.
- **Fast-regeneration within sensational fifteen minutes**
The entire unit can be regenerated completely within a quarter of an hour.
- **Time priority switching**
Becomes active, if, within four days, no regeneration is triggered by means of the water meter.
- **Time- and money-saving maintenance**
Due to the possibility, to lock individual sectors, an almost one hundred percent operating is also possible when under maintenance.



type
JCS-2 P



Type JCS 15
applied for a patent

JUDO Softening Units CONTISOFT

Type JCS 5 - 20
In accordance with DIN 19636
For water up to 30 °C

Softening Unit with DVGW – certificated single devices.

Scope of Supply: unit, consisting of fibre glass reinforced individually lockable filter tanks, filter fillings of high performance monospheric ion exchange resin in foodstuff quality for the optimum density of discharge and minimization of pressure loss and use of regenerants, equipped with quantity-depen-

ding control, thousandfold approved wear-free ceramic disc-technology for a lifelong programming of the operation-flows, control electronics with LED-indication of all the service- and regeneration statuses, as well as manual triggering of the regeneration, compulsive regeneration, after 96 hours at the latest and the hygienising of the unit by means of a built-in disinfection-device with platinised Titanium anodes, power supply unit 230 V/50 Hz, separate salt solution- and storage tank with continuous brine storage, complete with internal device pipelining and residual hardness blend-device.

Type		JCS 5	JCS 10	JCS 15	JCS 20	
Nominal flow rate from 20 °dH to 8 °dH in accordance with DIN 19636	m ³ /h	5,0	10,0	15,0	20,0	
Nominal flow from 20 °dH to 0,5 °dH	m ³ /h	3,0	6,0	9,0	12,0	
Max. numbers of accommodation units		15	30	100	200	
Pipe connection		1½"	DN 65	DN 65	DN 65	
Pressure loss at nominal flow and hardness of 20 °dH, residual hardness of 8 °dH	bar	0,8	0,8	0,8	0,8	
Nominal pressure	bar	10	10	10	10	
Nominal capacity	Mol	1,8	3,6	5,4	7,2	
Salt storage tank, content	kg	80	160	240	320	
Salt consumption per regeneration	kg	0,40	0,80	1,20	1,60	
Sewage per regeneration at 4 bar	litres	48	96	192	288	
Max. operating pressure	bar	8	8	8	8	
Min. flow pressure at nominal flow	bar	2	2	2	2	
Max. operating temperature	°C	30	30	30	30	
Operating weight with complete salt filling	kg	125	260	330	490	
Shipping weight	kg	50	120	180	280	
Required space						
	Length	mm	581	1.276	1.276	1.276
	Width	mm	1.039	790	1.210	1.620
	Height	mm	500	1.200	1.200	1.200
Order - Number		8200340	8200341	8200342	8200343	

On request also available with potential free contacts for the remote transmission of trouble indication.

The Classic Softening Method

Softening according to the ion exchange method



Type JM 2 - 3 Z-E and WZ-E

JUDO Softening Units JUDOMAT 2 - 6

Single units / time controlled:
JM 2 - 4 Z-E

Scope of Supply: One ion exchange resin tank, made of glass fibre reinforced polyester with plastic nozzles, control valve for automatic timer controlled regeneration, filter filling consisting of high-performance ion exchange resin, suitable for use with food-stuffs. Salt solution and storage tank with cover, made of high impact-resistant plastic, intermediate support, brine valve and suction line.

Single units / water-meter controlled:
JM 2 - 6 WZ-E

Scope of Supply: Same as time-controlled single-unit, however, with water-meter controlled automatic regeneration, and contact water meter for the determination of the moment of the regeneration.

Type	JM 2	JM 3	JM 4	JM 6
Maximum water flow rate m ³ /h	2	3	4	6
Pipe connection	1"	1"	1"	1"
Capacity at optimal salt setting °dH x m ³	60	100	200	300
Salt consumption kg/regeneration	3,3	5,5	11	16,5
Capacity at economical salt setting °dH x m ³	45	75	150	225
Salt consumption kg/regeneration	1,8	3	6	9
Salt solution and storage tank content l	78	78	200	300
Length mm	800	800	1.350	1.350
Depth mm	1.000	1.000	1.000	1.000
Height mm	1.110	1.110	1.135	1.580
Single units / time controlled	JM 2 Z-E	JM 3 Z-E	JM 4 Z-E	
Order - Number	8390055	8390056	8390057	
Single units / quantity controlled	JM 2 WZ-E	JM 3 WZ-E	JM 4 WZ-E	JM 6 WZ-E
Order - Number	8390059	8390060	8390061	8390062



Type JM 2 - 3 WZ-D

Duplex units / water-meter controlled:
JM 2 - 3 WZ-D

For a continuous soft water removal without interruption for example before the Reverse-Osmosis-installations.

Scope of Supply: same as water-meter controlled single unit, however, equipped with two ion exchange resin tanks, salt solution and storage tank, internal connecting piping and automatic switching over to the filter, being in reserve (alternate operating).

Type	JM 2 WZ-D	JM 3 WZ-D
Temporary peak flow rate m ³ /h	2	3
Maximum continuous flow rate		
Residual hardness < 0,1 °dH at 20 °dH raw water hardness m ³ /h **	1,5	2,5
Maximum continuous water flow blending to 8 °dH at 20 °dH raw water hardness * m ³ /h **	2,5	4,2
Pipe connection	1"	1"
Salt solution and storage tank content l	2 x 78	2 x 78
Order - Number	8390130	8390131

Operating pressure min/max 3/6 bar, power supply 230 V/50 Hz
Capacity and salt consumption same as valid for mono unit.

* External blending valve required
** At optimal salt setting

The Classic Softening Method

Softening according to the ion exchange method



Type JM 2 - 3 WZ-P

Parallel units / water-meter controlled:
JM 2 - 6 WZ-P

Field of application mainly in the Sanitary Technique (Partial softening with short-run peak consumption).

Scope of Supply: same as for the water-meter controlled duplex units, however, both tanks operating in parallel, with contact water meters and two salt solution- and storage-tanks.

Type	JM 2 WZ-P	JM 3 WZ-P	JM 4 WZ-P	JM 6 WZ-P
Temporary peak flow rate m ³ /h	4	6	8	12
Maximum continuous flow rate				
Residual hardness < 0,1 °dH at 20 °dH raw water hardness m ³ /h **	1,5	2,5	4	5
Maximum continuous water flow blending to 8 °dH at 20 °dH raw water hardness * m ³ /h **	2,5	4,2	6,6	8,3
Pipe connection	1"	1"	1 1/2"	1 1/2"
Salt solution and storage tank content l	2 x 78	2 x 78	2x 200	2x 300
Order - Number	8390067	8390068	8390069	8390070

Operating pressure min/max 3/6 bar, power supply 230 V/50 Hz
Capacity and salt consumption same as valid for mono unit.

* External blending valve required
** At optimal salt setting



Type JM-DX 60

JUDO Softening Unit JUDOMAT DX 60

Type JM-DX 60

For the softening of clear drinking water, iron-free, and manganese-free. As a Duplex unit with automatic switching-over to the filter, being in reserve (alternate operation).

Scope of Supply: Filter tanks, made of fibre glass reinforced Polyester, filter fillings of high performance ion exchange resin suitable for use with foodstuffs. Central control valve with water-meter controlled, salt solution- and storage tank with lid, made of high-impact-resistant plastics. Integrated Blending device, built-in rotary flange (JQE), single-lever by-pass valve (JQX) and potential-free contact (for remote transmission) for trouble indication, power supply 230 V/50 Hz.

Type	JM-DX 60
Continuous water flow * at a residual hardness of < 0,1 °dH at 20 °dH raw water hardness m ³ /h	0,6
Short-run peak flow rate m ³ /h	1,2
Pipe connection	1"
Operating pressure min/max bar	3/6
Salt consumption kg/regeneration	0,4
Salt storage kg	40
Order - Number	8390025

At a raw water percentage of more than 40 % a blending device is required
* External blending valve required



The Classic Softening Method

Softening according to the ion exchange method



Type JM 6 D

JUDO Softening Units JUDOMAT 2 - 10 D

Type JM 2 - 10 D

For the softening of clear, colourless, iron-free and manganese-free water. As a Duplex unit with internal connecting piping and automatic switching-over of the unit.

Scope of Supply: Two filter tanks, made of fibreglass reinforced Polyester, filter fillings of high performance ion exchange resin suitable for use with foodstuffs. Central control valve water-meter controlled, salt solution- and storage-tank with lid, made of high-impact-resistant plastic, power supply 230 V/50 Hz.

Type	JM 2 D	JM 3 D	JM 4 D	JM 6 D	JM 10 D
Continuous water flow rate at residual hardness < 0,1 °dH m ³ /h *	2,0	3,0	4,0	6,0	10,0
Continuous water flow rate, when blended to 8 °dH * residual hardness m ³ /h **	1,5	2,5	4,0	10,0	16,7
Pipe connection	1"	1"	1"	1 1/2"	1 1/2"
Nominal capacity at complete salt-setting °dH x m ³	60	100	200	300	500
Salt consumption at complete salt-setting kg	3,3	5,5	11	16,5	27,5
Nominal capacity at economical salt-setting °dH x m ³	45	75	150	225	375
Salt consumption at economical salt-setting kg	1,8	3,0	6,0	9,0	15,0
Required space					
length	1.100	1.100	1.650	2.200	2.600
width	1.000	1.000	950	1.100	1.300
height	1.100	1.100	1.150	1.850	1.550
Salt solution- and storage-tank content l	78	78	200	300	500
Order - Number	8390127	8390128	8390129	8390036	8390037

* Relating to 20 °dH raw water hardness and complete salt-setting, operating pressure min./max. 3/6 bar

** External blending valve required



Type JM 60 Z-HW

JUDO Hot Water Softening Units JUDOMAT 60 - 200 Z-HW

Type JM 60 - 200 Z-HW

Single unit for the softening of clear, colourless, iron-free and manganese-free high-temperature water up to 70 °C.

Scope of Supply: Vessel made of stainless steel, filling of high-performance ion-exchange resin suitable for use with foodstuffs. Central control valve for an automatic time-controlled regeneration, salt solution- and storage tank with lid, made of high-impact-resistant plastic, power supply 230 V/50 Hz.

Type	JM 60 Z-HW	JM 200 Z-HW
Capacity °dH x m ³	60	200
Water flow rate normal/maximum m ³ /h	1,5 - 2,1	2,3 - 3,5
Pipe connection	1"	1"
Salt solution- and storage-tank l	100	100
Salt consumption kg/regeneration	3,5	12
Order - Number	8334550	8334551

The Classic Softening Method

Softening according to the ion exchange method



Type JM-DX 1000 E

JUDO Softening Units JUDOMAT DX 1000 - 2000

Single units / water-meter controlled:
JM-DX 1000 - 2000 E

Scope of Supply: One ion exchange resin tank, made of glass fibre reinforced Polyester with plastic nozzles, central control valve for an automatic regeneration, contact water

meter, filter filling consisting of high performance ion exchange resin suitable for use with foodstuffs, salt solution- and storage tank with lid, made of high-impact-resistant plastics, intermediate support, brine valve, suction line.

Type	JM-DX 1000 E	JM-DX 1500 E	JM-DX 2000 E
Maximum water flow rate m ³ /h	10	15	20
Pipe connection	DN 40	DN 50	DN 65
Capacity at economical salt setting °dH x m ³	450	590	1.110
Salt consumption kg/regeneration	20	26	49,5
Salt solution tank content l	500	500	800
Approximate diameter mm	855	855	1.105
Approximate height mm	1.170	1.170	1.120
Order - Number	8530015	8530016	8530017



Type JM-DX 2000 D

Duplex units / water-meter controlled:
JM-DX 1000 - 2000 D

For continuous soft water removal without interruption (alternate operation).

Scope of Supply: Same as water-meter controlled single unit, however, equipped with two ion exchange resin tanks, internal connecting piping and automatic switching over to the filter, being in reserve.

Type	JM-DX 1000 D	JM-DX 1500 D	JM-DX 2000 D
Maximum water flow rate m ³ /h	10	15	20
Maximum continuous flow rate at 20 °dH - Residual hardness < 0,1 °dH m ³ /h	7	9	17
- when blended to 8 °dH * m ³ /h	12	15	28
Salt solution tank content l	2 x 500	2 x 500	2 x 800
Order - Number	8530018	8530019	8530014

* External blending valve required



Type JM-DX 2000 P

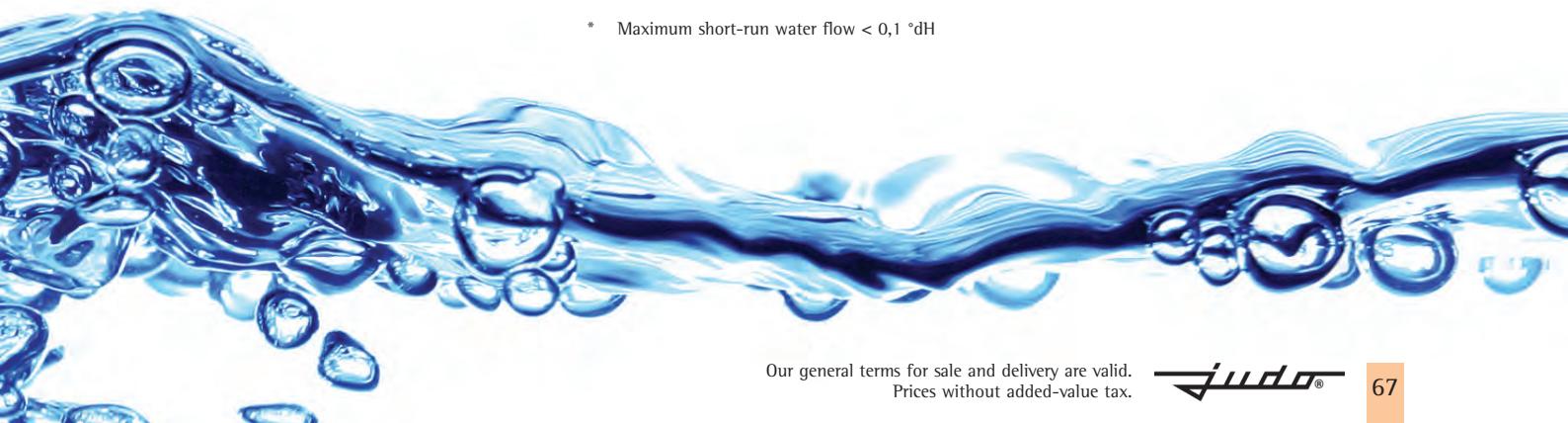
Parallel units / water-meter controlled:
JM-DX 1000 - 2000 P

Application principally in the Sanitary Technique (partial softening with short-run peak consumption).

Scope of Supply: Same as for quantity controlled duplex units, however, both tanks operating in parallel, with two contact water meters and two salt solution and storage tanks.

Type	JM-DX 1000 P	JM-DX 1500 P	JM-DX 2000 P
Maximum water flow rate m ³ /h *	20	30	40
Pipe connection	DN 65	DN 80	DN 100
Salt solution tank content l	2 x 500	2 x 500	2 x 800
Order - Number	8530020	8530021	8530022

* Maximum short-run water flow < 0,1 °dH



The Classic Softening Method

Softening according to the ion exchange method



Type JM-DX 1000 - 2000 T

Triplex units / water-meter controlled:
JM-DX 1000 - 2000 T

Application for continuous soft water removal with high removal performance.

Scope of Supply: Same as for water-meter controlled duplex units, however, with three tanks, two of them operating in parallel, one in state of regeneration, respectively stand-by, equipped with three contact water meters, and three salt solution and storage tanks, potential-free contact for remote control included.

Type	JM-DX 1000 T	JM-DX 1500 T	JM-DX 2000 T
Maximum water flow rate m ³ /h	20	30	40
Maximum continuous flow rate at 20 °dH - residual hardness < 0,1 °dH m ³ /h - when blended to 8 °dH * m ³ /h	14 24	18 30	34 56
Pipe connection	DN 65	DN 80	DN 100
Salt solution tank content l	3 x 500	3 x 500	3 x 800
Order - Number	8530023	8530024	8530025

Capacity and consumption same as for mono unit
* External blending valve required

Nitrate Reduction

Removes in a reliable manner nitrate from the drinking water



Type JDN 2

JUDO Nitrate Reduction Unit DENITRATOR

Type JDN 2 - 4

Scope of Supply: Nitrate Removal Unit for the Domestic Water Technique, as a duplex aggregate, consisting of: two glass fibre reinforced filter tanks, filter fillings of nitrate specific high-performance ion exchange resin, quantity-controlled. The program flow can

be read on a clearly arranged scale, integrated disinfection device, two-section salt solution and storage tank, QUICKSET-E (built-in rotary flange with mounting lid) included as well as wall bracket.

For the design a water analysis or a water sample is required. Only by trained personal!

Type	JDN 2	JDN 4
Nominal water flow rate m ³ /h	2	4
Short-run peak water flow m ³ /h	2,4	4,8
Pipe connection	1"	1 1/2"
Pressure loss at nominal water flow rate bar	0,7	0,7
Salt solution tank kg	40	80
Salt consumption kg/regeneration	0,4	0,8
Maximum operating pressure bar	6	6
Minimum flow pressure at nominal water flow bar	3	3
Operating temperature °C	30	30
Order - Number	8400002	8400004

* 2 x JDN 2 in a tandem combination

JUDO QUICKSET-X Single-lever by-pass valve	Order - Number	8735210
JUDO Nitrate test strips Contents per a package: 25 pieces	Order - Number	8742150

The Classic Softening Method

Accessories



Type JAV 1"

Direct Connection Set 1" with Blending Device

Description	Type	Order-Number
JUDO Automatic Blending Device 1" with two shut-off valves, hydraulic control, mixed water flow rate 0,1 - 4 m ³ /h	JAV 1"	8735101
S-connection for JAV 1" for the installation without the flexible hoses		8395014
JUDO Set of flexible hoses 1" (2 pieces) DVGW-tested, PN 10, Length 500 mm	JAS 1" 500 Set	8735181

Connector to JUDO QUICKSET-E System 1 1/4"

Description	Type	Order-Number
JUDO QUICKSET-U quick assembly set for softening units with 1" connection, JQE 1 1/4" and single lever by-pass valve included	JQU 1 1/4"	8735179
JUDO Set of flexible hoses 1" (2 pieces) DVGW-tested, PN 10, Length 500 mm	JAS 1" 500 Set	8735181



Type JAV 1 1/2"

Direct Connection Set 1 1/2" with Blending Device

Description	Type	Order-Number
JUDO Automatic Blending Device 1 1/2" with two shut-off valves, hydraulic control, mixed water flow rate 0,2 - 10 m ³ /h	JAV 1 1/2"	8735178
JUDO Set of flexible hoses 1 1/2" (2 pieces) DVGW-tested, PN 10, Length 500 mm	JAS 1 1/2" 500 Set	8735182



Type JAV 2"

Automatic Blending Devices

Description	Type	Order-Number
JUDO Automatic Blending Device 1" with two shut-off valves, hydraulic control, mixed water flow rate 0,1 - 4 m ³ /h	JAV 1"	8735101
S-connection for JAV 1" for the installation without the flexible hoses		8395014
JUDO Automatic Blending Device 1 1/4" hard water flow rate 0,2 - 8 m ³ /h	JAV 1 1/4"	8735202
JUDO Automatic Blending Device 1 1/2" with two check valves/shut-off valves, hydraulic control, mixed water flow rate 0,2 - 10 m ³ /h	JAV 1 1/2"	8735178
JUDO Automatic Blending Device 2" hard water flow rate 5 - 15 m ³ /h	JAV 2"	8735102

Project Softening Unit JM-DX 5000 D



The Classic Softening Method

Accessories for JUDOMAT Softening Units



Type JT-BOB 2000

Analytical Devices

Description	Type	Order-Number
JUDO Residual hardness control for the controlling of the residual hardness behind JUDOMAT softening units, device equipped with hoses and shut-off valves 3/4" by-pass valve with measuring water connections, optical signal in case of a hardness breakthrough and potential-free exit, manual pump, replacement cartridge, power supply 230 V/50 Hz.	JRÜ	8735175
JUDO Testomat 2000 online analysis unit for the discontinuous control of the water hardness. Ideally suited as a control device for the control of the water quality of water treatment installations. Relay contacts, for example, when exceeding the limit value (optional: recorder output), LCD-text-indication for self-explanatory menu-driven user-interface. Programmable hardness unit, programmable measuring interval, adjustable, time-, quantity- and capacity-dependent, two measuring stations possible, power supply 230 V/50 Hz.	JT-BOB 2000	8390071
As described above, however, reduced design, only one measuring station possible, without possibility to connect a flush valve.	JT-BOB ECO	8690045
JUDO Testomat indicator (necessary equipment) Analysis range 0,25 - 2,5 °dH, 500 ml Analysis range 1,0 - 10 °dH, 500 ml	JTL 2025 JTL 2100	8390073 8390074
JUDO Flow rate controller for the circuit of a Testomat with zero-run	JDF	8735111
JUDO Small hooter 95 phone with warning light, 230 V/50 Hz	JH 95	8735166
JUDO Pre-switching device for small hooter with alarm delete key and control lamp, 230 V/50 Hz	JHVL	8735167

JUDO Faulty Indications for JUDOMAT Softener Units

Faulty Indications	Type	Order-Number
for JUDOMAT 6 - 10 D Softening Units	JSMP 1	8390044
for JUDOMAT 2 - 3 Z-E Softening Units	JSMP 2	8390075
for JUDOMAT 4 Z-E Softening Unit	JSMP 3	8390078
for JUDOMAT 2 - 6 WZ-E Softening Units	JSMP 4	8390079
for JUDOMAT 2 - 3 WZ-D Softening Units	JSMP 5	8390080
for JUDOMAT 2 - 6 WZ-P and JUDOMAT 4 - 6 WZ-D Softening Units	JSMP 6	8390081
for JUDOMAT DX 1000 - 2000 E and D Softening Units	JSMP 7	8390076



Type JCLE

Accessories

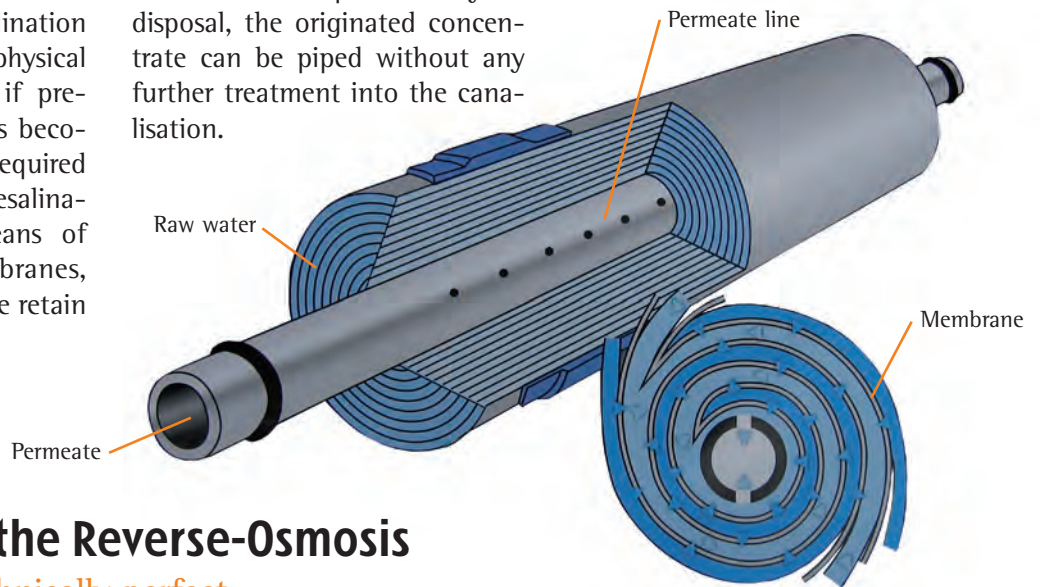
Description	Type	Order-Number
JUDO Recirculation device to avoid the counter-ion effect concerning JUDOMAT DX 1000 - 2000	JUW 2	8735213
JUDO Disinfection device according to the NaCl electrolysis method, 230 V/50 Hz for JUDOMAT 2 - 4 Z-E, JUDOMAT 2 - 6 WZ-E, JUDOMAT DX 1000 - 2000 E and JUDOMAT 6 - 10 D	JCLE	8390038
JUDO Disinfection device according to the NaCl electrolysis method, 230 V/50 Hz for JUDOMAT 2 - 6 WZ-D, JUDOMAT 2 - 6 WZ-P, JUDOMAT DX 1000 - 2000 D and JUDOMAT DX 1000 - 2000 P	JCLE 2	8390092
JUDO Salt deficiency indication 230 V/50 Hz (not retrofittable)	JSMA	8390002
JUDO Measuring Instrument for the determination of the total hardness by means of the complexometric titration	Type A	8742119
JUDO Regenerating salt in form of tablets 25 kg, minimum order quantity 4x 25 kg (1 packing unit)		8839101
JUDO Automatic by-pass valve 1" for softeners, hard water flow maximum 10 m³/h to cover peak consumption		8395010

JUDO Reverse Osmosis

Innovative and Economical

The reverse osmosis method is a proved, to be a friendly environmental use device. Concerning its a reasonable way for the removal of dissolved salts from natural waters. The desalination takes place in a purely physical way, so that chemicals, if pre- and post treatments steps become necessary, are only required in small quantities. The desalination is achieved by means of semi-permeable membranes, that, due to their structure retain

almost completely dissolved salts, but also organic substances, TOC (Total organic carbon), bacteria and virus. The produced clean water is permanently at disposal, the originated concentrate can be piped without any further treatment into the canalisation.



The Method of the Reverse-Osmosis

Economical and technically perfect

If salty water and pure water are separated by a semi-permeable membrane, the salty water will be deluted according to the law of nature of the osmosis by the suction of pure water, that penetrates the separation membrane.

This procedure causes an increase of the volume of the brine and consequently a pressure difference arising between the solution and the water, that is generally known as the "osmotic" pressure. If artificially a

higher pressure than the osmotic one is put on the brine a reversal of the procedure arises: Water is pressed through the membrane in reversed direction, through which the dissolved parts are left as a residue.

ONLINE-DESALINATOR



JOS 4 - 360 G



Project systems



Desalination according to the Reverse-Osmosis-Method

Clean water quantity

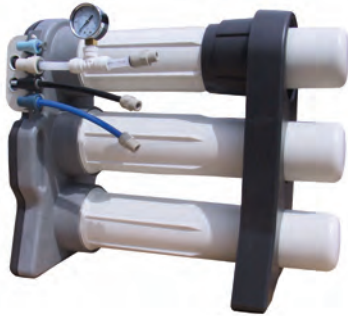
max. 100 l/h

170 l/h - 16 m³/h

According to the requirements

JUDO ONLINE-DESALINATOR

For the desalination of iron- and manganese-free drinking water



Type JOS 2 F-0

JUDO ONLINE-DESALINATOR JOS 2 F-0

Type JOS 2 F-0

For the desalination of iron- and manganese-free drinking water with the pressure of the water pipe (minimum 3 bar) without pre-treatment up to a water hardness of maximum 20 °dH. Above 10 °dH a softening installation is recommended. It is possible to install the unit in front of a pressureless temporary storage tank and with JUDO boosting installation, or to integrate it directly into the

pipng, respectively to connect it to a faucet. In that case neither an additional temporary storage nor a boosting pump aren't required **.

Scope of Supply: Compact unit, consisting of activated carbon pre-filter, one set reverse-osmosis membranes, one raw water shut-off valve, connection hoses made of PE, one set of adapter fittings from the hose to the male thread, one drain fitting.

Type	JOS 2 F-0
Permeate in the case of free drain l/h *	80 - 100
Permeate m ³ /day	1,9 - 2,4
Raw water l/h	240 - 300
Raw water recovery max. %	33
System pressure min/max bar	3/6
Max. static altitude for consumption above the unit m **	5
Raw water connection	1/2"
Permeate connection	3/8"
Drain connection	3/8"
Order - Number	8470034

* Indication of capacity at 4,5 bar pre-pressure, stated data differ according to the water composition and the water temperature.

** The raw water output is reduced due to hydraulic losses and static altitude differences. In case of a counter-pressure of more than 1,5 bar, no water will be produced any longer.

JUDO Replacement Filter Cartridge JFK-AK 10-17" (standard version)		
(recommended replacement every three months)	Order - Number	8471042
JUDO Replacement Filter Cartridge JFK-PP 10-17"		
for water consumption of more than 75 litres/day	Order - Number	8471052
JUDO Replacement Membrane		
(2 pieces required)	Order - Number	8471043

JUDO Reverse-Osmosis Unit

Innovative and Economical



Type JOS 7 G-K

JUDO Reverse Osmosis Units JOS 4 - 7 G and G-K

Type JOS 4 - 7 G-K

Scope of Supply: Prefabricated unit, ready for operation, in an open frame internal hydraulic piping and electric wiring, as well as softening duplex unit JM-DX 60, cartridge filter, automatic solenoid valve/raw water, noise reduced rotary pump, spirally-wound Polyamide modules, flow meter for permeate, brine and recirculate, conductivity meter,

automatic brine displacement, automatic control off all the important operating data as the excess pressure, the conductivity, and the minimum flow rate, switch cabinet IP 54, power supply 230 V/50 Hz.

Type JOS 4 - 7 G

Scope of Supply: Same as JOS 4 - 7 G-K, however, without softening unit JM-DX 60.

Type	JOS 4 G	JOS 7 G	JOS 4 G-K	JOS 7 G-K
Permeate per hour offline l/h	190	320	190	320
Permeate per hour online l/h **	150	255	150	255
Permeate per day m ³ /day	4,56	7,68	4,56	7,68
Raw water per hour l/h	271	457	271	457
Recovery %	77	77	77	77
Salt consumption kg/regeneration	-	-	0,4	0,4
Working pressure maximum bar	16	16	16	16
System pressure min/max bar	3/7	3/7	3/7	3/7
Raw water connection	DN 20	DN 20	DN 20	DN 20
Order - Number	8471009	8471010	8471021	8471022

Technical Data: TOS 500 mg/l, raw water temperature 12 °C, silt density index < 3, fouling-index 15 %, system salt rejection capacity > 98 %.

Important: In the case of raw water conditions that differ from the design data, changed performance values have to be taken into consideration (expert service is required).



Type JOS 16 G

JUDO Reverse Osmosis Units JOS 16 - 380 G

Type JOS 16 - 380 G

Scope of Supply: Prefabricated unit, ready for operation, in an open frame, internal hydraulic piping, and electric wiring, cartridge filter, automatic solenoid valve, high pressure multi stage centrifugal pump made of

stainless steel, spirally-wound polyamide modules, flow meter for permeate, brine, recirculate, conductivity indication, automatic control of all the important operating data as the excess pressure, the conductivity, and the minimum flow rate, switch cabinet IP 54, power supply 400 V/50 Hz.

Type	JOS 16 G	JOS 20 G	JOS 30 G	JOS 50 G	JOS 65 G
Permeate per hour l/h	800	1.100	1.600	2.500	3.750
Permeate per day m ³ /day	19,2	26,4	38,4	60	90
Raw water per hour l/h	1.070	1.467	2.133	3.333	5.000
Recovery %	75	75	75	75	75
Motor output (400 V/50 Hz) kW	2,2	2,2	2,2	5,5	5,5
Working pressure maximum bar	16	16	16	16	16
System pressure min/max bar	4/6	4/6	4/6	4/6	4/6
Raw water connection	DN 20	DN 20	DN 20	DN 25	DN 25
Order - Number	8471011	8471012	8471013	8471014	8471015

Type	JOS 100 G	JOS 145 G	JOS 190 G	JOS 240 G	JOS 380 G
Permeate per hour m ³ /h *	5	6,25	8,75	10	16
Permeate per day m ³ /day	120	150	210	240	384
Raw water per hour m ³ /h	6,67	8,33	11,67	13,3	21,3
Recovery %	75	75	75	75	75
Motor power/output (400 V/50 Hz) kW	5,5	7,5	7,5	11	18,5
Working pressure maximum bar	16	16	16	16	16
System pressure min/max bar	4/6	4/6	4/6	4/6	4/6
Raw water connection	DN 32	DN 40	DN 40	DN 50	DN 65
Order - Number	8471016	8471017	8471018	8471019	8471020

* Performance figures after 3 years

Larger units on request

Our general terms for sale and delivery are valid.
Prices without added-value tax.



JUDO Online-Reverse-Osmosis Unit

For the delivery of desalinated water without additional booster

The production and delivery of desalinated water, directly to the consumer, without any additional boosting unit, becomes possible by means of the JUDO reverse-osmosis-units. Under the condition of a water consumption, being constant for the most part, the JUDO reverse-osmosis-

online accessories complete our standard reverse-osmosis-units, type JOS 4 – 7 G and G–K, to get an “Online“-version and covers by means of a pressure storage smaller peak flows. The capacity of the reverse-osmosis is reduced, concerning the Online-version.



Type JOS 4 G-K
with online-equipment

JUDO Online-Reverse-Osmosis Equipment JROZ 3 - 20

Type JROZ 3 - 20

For the completing of prefabricated JUDO Reverse-Osmosis-Units for the “Online“-Service.

Scope of Supply: Control unit for the demand inquiry: reverse-osmosis, quality flushing of the permeate, as well as internal circulation of permeate and concentrate, with solenoid valve, minimum/maximum pressure switch and pressure storage with media-touched parts (stainless steel), pressure hose for the connection to the feed pressure storage.

Type	JROZ 3	JROZ 5	JROZ 8	JROZ 14	JROZ 20
Storage content l	35	50	80	140	200
Raw water connection	3/4"	1"	1"	1"	1"
Order - Number	8471034	8471035	8471036	8471037	8471038

For the correct projecting of the minimum vessel size it is recommended to contact JUDO specialists.

JUDO Electro-Deionisation

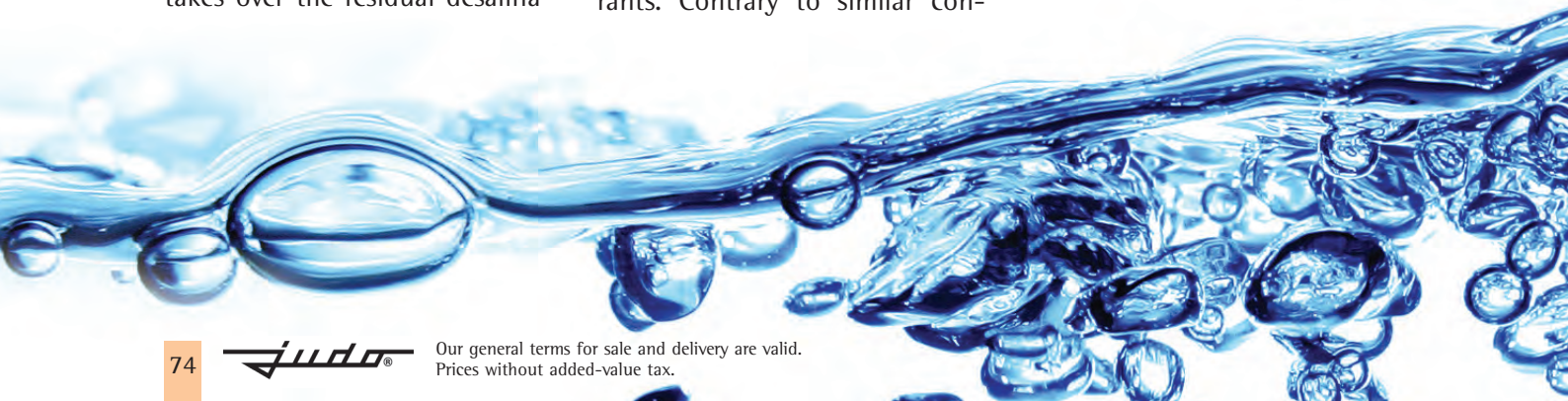
Continuous Water Treatment in Ultra-pure Water Quality

JUDO CONTIPURE – the economical production of desalinated water by means of especially simply designed units. Complete abandonment of acid and caustic soda, as well as of a waste water treatment is not necessary.

Function: At a first step (pre-treatment) the water to be treated is softened, and, by means of a Reverse-Osmosis-Unit, desalinated at more than 98%. A high-performance electro-desalination cell, that is fed by the permeate of the reverse-osmosis-step, takes over the residual desalina-

tion. Through the innovative configuration of chambers, that are alternately packed with cation exchange resin and anion exchange resin, and that by separated selective membranes and electrodes of a direct current voltage, completely desalinated water is produced at a minimal electrical expenditure of energy. In addition, at the same time, CO₂, SiO₂ and TOC are removed. The ion exchange resin is permanently regenerated in the electric field without the use of regenerants. Contrary to similar con-

structed electro-desalination cells and conventional mixed-bed units for complete desalination a contamination microbial growth of the resin reduced due to the direct contact of the special electrodes with the ion exchange resin. A residual conductivity of < 1,3 µS/cm is ensured. Normally residual conductivities of < 0,1 µS/cm are attained.



JUDO Electro-Deionisation

Continuous Water Treatment in pure Water Quality



JUDO Electro-Deionisation CONTIPURE 300 - 1500



Type CONTIPURE

Type CONTIPURE 300 - 1500

Scope of Supply: Prefabricated electro desalination unit, ready for operation, in an open frame, internal hydraulic piping and electric wiring for the residual desalination of a hardness-free RO-permeate, consisting of: electro desalination cell with chambers, packed with

high-performance ion exchange resin, separated by ion-selective exchanger-membranes, special electrodes, brine flow restrictor, direct current source, cell flushing device, automatic control of all the relevant operating data such as conductivity, flow, working voltage, electrical control of the complete JUDO CONTIPURE-unit.

Type	CONTIPURE 300	CONTIPURE 900	CONTIPURE 1500
Product flow l/h *	100 - 300	300 - 900	700 - 1500
Brine %	5 - 10	5 - 10	5 - 10
Electrodes flushing water %	1 - 5 (min. 15 l/h)	1 - 5 (min. 15 l/h)	1 - 5 (min. 15 l/h)
Residual conductivity µS/cm	< 0,1	< 0,1	< 0,1
Inlet connection mm	20	25	25
Outlet connection mm	20	25	25
Brine connection mm	10	10	10
Voltage supply V/Hz	230/50	230/50	230/50
Power consumption maximum W	360	480	750
Dimensions L x W x H mm	650 x 500 x 1380	650 x 500 x 1380	650 x 500 x 1380
Dilution-performance in relation to the JUDO Reverse-Osmosis-Units JOS **			
JOS 4 G	l/h	150	-
JOS 7 G	l/h	255	-
JOS 16 G	l/h	-	650
JOS 20 G	l/h	-	900
JOS 30 G	l/h	-	1.300
JOS 50 G	l/h	-	1.500
Order - Number	8540030	8540031	8540032

* Projecting of the pre-treatment (reverse-osmosis and softening) takes place in dependence of the dilution-performance and the raw water quality.
** Other capacities and larger units on request.

Project Unit with reverse-osmosis and CONTIPURE



JUDO Reverse-Osmosis

Accessories



Type JRB

JUDO Permeate Storage Tank JRB 1000 - 4000

Type JRB 1000 - 4000

Scope of Supply: Pressure less plastic tank with two external level switches minimum/maximum for the control of the JUDO reverse-osmosis-unit, two level switches as a dry-run protection for the booster pump, overflow aeration/ventilation, material PE, black.

Type		JRB 1000	JRB 1500	JRB 2000	JRB 3000	JRB 4000
Content m ³ *		1	1,5	2	3	4
Dimensions	Length mm	1400	1540	2070	2230	2430
	Width mm	720	720	720	985	1000
	Height mm	1400	1640	1690	1650	1950
Order - Number		8714560	8714561	8714562	8714563	8714564

* Circular tank/enlargement tank, larger tanks on request

JUDO Permeate Storage Tank

equipped with mechanical level control for JUDO ONLINE-DESALINATOR JOS 2 F-0

200 litre, diametre 560 mm, height 1000 mm

Order - Number 8714530

500 litre, diametre 815 mm, height 1125 mm

Order - Number 8714531

Accessories

Description	Type	Order-Number
JUDO Permeate blending device up to 750 l/h not desalinated water	JPV 1	8470041
JUDO Safety valve overflow valve for the installing into the permeate line, PVC		8714557
JUDO Activated carbon filter cartridge length 10", 5 µm	JFK AK 5 - 10"	8714599
JUDO Poly-Propylene filtering cartridge length 10", 5 µm	JFK PP 5 - 10"	8714597
JUDO Activated carbon filtering cartridge length 20", 5 µm	JFK AK 5 - 20"	8470025
JUDO Steril air-filter cartridge for the sterile aeration and ventilating of JRB 1000 - 4000		8471045
JUDO Sterile air-filter housing for membrane filter cartridge as sterile aeration and ventilating device		8471046
JUDO Air-closing device for JRB 1000 - 4000 (in connection with JUDO Sterile air-filter cartridge)		8471047

JUDO Reverse-Osmosis

Accessories



Type JD 1 C 2-60

JUDO Pressure Boosting Units JD 1 Q and JD 1 C

Type JD 1 Q 3-45

Scope of Supply: Multi stage, self-priming centrifugal pump, membrane pressure vessel, control and dry-run protection integrated, check valve, indication of operation and failure. Start of the pump flow-dependent in case of open faucet, or at a pressure of less than 2 bar. Stop of the pump flow-dependent when faucet is closed. All the parts being in contact with water, made of materials resistant to corrosion, ready for connection - Schuko connector.

Type JD 1 C 2-60 and 4-60

Scope of Supply: Centrifugal pump with motor as block-aggregate, pump housing, shaft and impeller made of stainless shaft steel, maintenance-free mechanical seal, 18 litre membrane pressure vessel with pressure control, internal wiring and piping, ready for operation, mounted on a base plate.

Type	JD 1 Q 3-45	JD 1 C 2-60	JD 1 C 4-60
Pumping capacity m ³ /h	1,2 - 4,2	1,0 - 3,0	2,0 - 5,5
Head bar	4,0 - 1,5 *	5,2 - 3,5	4,7 - 3,0
Power supply V/50 Hz	230	400	400
Motor power kW	1,0	1,0	1,0
Rotational speed rotations/minute	2850	2850	2850
Pipe connection	1"	1"	1"
Order - Number	8470042	8470021	8470022

Duplex pressure boosters upon request.

* The pump triggers only at a pressure of less than 2 bar

JUDO Mixed-bed Water Demineralizer



Type JP d

JUDO Mixed-bed Water Demineralizer JP 10 and JP d 17 - 100

Type JP 10

Pressure less version for the desalinating of clear iron- and manganese-free drinking water at a maximum operating pressure of 0,3 bar (free drain).

Scope of Supply: Pressureless plastic vessel filled with high performance mixed-bed ion exchange resin, as well as equipped with all the required connectors, feeder and discharge hose, conductivity measuring device for the control of the quality of the permeate included. After the depletion of the capacity of the cartridges, these ones are to be sent to the concerned regeneration station in order to have them regenerated. For the bridging of the time-gap of the external regeneration a

replacement cartridge, type JEP of the same capacity is necessary. The conductance measuring device with potential-free limit contact on request.

Type JEP 10

Scope of Supply: Same as above, however without conductivity measuring device and connecting hoses.

Type JP d 17 - 100

Scope of Supply: Same as above, however, stainless steel vessel, resistant to pressure, pressure loss approximately 1,8 bar.

Type JEP d 17 - 100

Scope of Supply: Same as above, however, without conductivity measuring device and connecting hoses.

Type	Connections Permeate/ Raw Water	Capacity * °dH x m ³	Output ** max. l/h	Dimensions Ø x H mm	Order - Number	Replacement cartridge	Order - Number
JP 10	3/4"	10,0	250	215 x 565	8440002	JEP 10	8440006
JP d 17	3/4"	20,0	300	237 x 640	8440009	JEP d 17	8440013
JP d 26	3/4"	40,0	1.000	237 x 860	8440010	JEP d 26	8440014
JP d 46	3/4"	60,0	1.200	237 x 1310	8440011	JEP d 46	8440015
JP d 100	1"	130,0	2.500	363 x 1100	8440012	JEP d 100	8440016

* Capacity at 20 µS/cm, relating to the anionic hardness

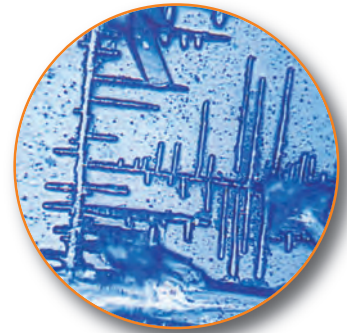
** Pre-pressure > 4 bar

The Healing Power of Precious Stones suitable for Drinking, for Having a Shower, or a Bath

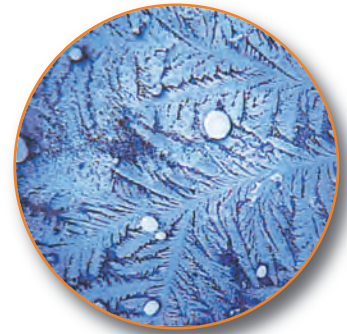
With the innovation of the JU-WEL, JUDO realized the dream of many people of tap-water, immediately at their disposal, energy-rich, and in source-water quality. The JU-WEL method, unique throughout the world has been applied for a patent.

The idea of the JU-WEL is based on an age-old knowledge concerning the healing powers of precious stones as well as on recent Clusters-researches. JU-WEL devices enable to ener-

gize the drinking-water of the domestic water pipes. The mechanism of action: Water circulates around precious stones as for example the Amethyst, Rock Crystal, and Rose Quartz. The structures of the water are opened through swirl mixings (the quality of tap water changes to source-water quality), and the characteristic information, respectively the energy of the precious stones is thus transferred to the water.



Drinking water



JU-WELized Drinking water

The Advantages:

- ◆ JU-WELization by means of precious stones
- ◆ Precious stones with certificate of genuineness
- ◆ More vital energy, fitness, well-being...
- ◆ Harmonizing when suffering from stress, restlessness, insomnia
- ◆ Natural energetic enhancement
- ◆ Re-vitalization through light loader

	JU-WEL Trio	JU-WEL Amethyst	JU-WEL Compact	JU-WEL Vario
Precious stones with quality certificate	●	●	●	●
Weekly automatic re-vitalization of the precious stones	●	●	●	
Filling consisting of amethyst	●			
Filling consisting of amethyst, rock crystal and rose quartz		●	●	
Filling consisting of amethyst (with exchange flacons, more stones on request)				●
Available pipe connections:	3/4"- 1 1/4"	3/4"- 1 1/4"	1/4"	M 24x1

JUDO JU-WEL

Pure Wellness through JU-WELized Water



Type JUW-A

JUDO JU-WEL Amethyst

Central JU-WELizing Device
Type JUW-A 3/4" - 1 1/4" for water up to 30 °C

Scope of Supply: Beautifully shaped housing, made of high-quality plastic (PN 10), equipped with inspection glass and light protection. Filling consisting of energetically enhanced Amethyst precious stones for the JU-WELization of the drinking water, with mounted light loader for the re-vitalization of the jewels, threaded connection according

to DIN 2999, built-in rotary flange with patented brass bayonet-connector with fittings.

Type JUW-A 3/4" - 1 1/4" with JQR for water up to 30 °C

Scope of Supply: Same as above, however, without built-in rotary flange, equipped instead with serial extension QUICKSET, for the retrofitting on the JUDO protective filter (JPF+, JPM, JSP, JUKO-LF).

Type	JUW-A	JUW-A	JUW-A
Pipe connection	3/4"	1"	1 1/4"
Water flow rate m ³ /h	3,3	4,5	5,5
Pressure loss bar	0,35	0,35	0,35
Installation length mm	180	195	230
Order - Number	8012501	8012502	8012503

Type JUW-A with JQR, however, without JQE Order - Number 8012505



Type JUW-T

JUDO JU-WEL Trio

Central JU-WELizing Device with a triple precious stone mixture
Type JUW-T 3/4" - 1 1/4" for water up to 30 °C

Scope of Supply: Beautifully shaped housing, made of high-quality plastic (PN 10), equipped with inspection glass and light protection. Filling consisting of energetically enhanced Amethyst, Rose Quartz and Rock Crystal precious stones for the JU-WELization of the drinking water, with mounted light loader for the re-vitalization of the jewels,

threaded connection according to DIN 2999, built-in rotary flange with patented brass bayonet-connector with fittings.

Type JUW-T 3/4" - 1 1/4" with JQR for water up to 30 °C

Scope of Supply: Same as above, however, without built-in rotary flange, equipped instead with serial extension QUICKSET, for the retrofitting on the JUDO protective filter (JPF+, JPM, JSP, JUKO-LF).

Type	JUW-T	JUW-T	JUW-T
Pipe connection	3/4"	1"	1 1/4"
Water flow rate m ³ /h	3,3	4,5	5,5
Pressure loss bar	0,35	0,35	0,35
Installation length mm	180	195	230
Order - Number	8270030	8270031	8270032

Type JUW-T with JQR, however, without JQE Order - Number 8270033



JUDO JU-WEL

Pure Wellness through JU-WELized Water



Type JUW-CO

JUDO JU-WEL Compact

JU-WEL Water Device for under-table installation with a triple precious stone filling, type JUW-CO 1/4" for water up to 30 °C

Scope of Supply: Beautifully shaped housing, made of high-quality plastic (PN 10), equipped with inspection glass, filling consisting of energetically enhanced Amethyst-

Rose Quartz and Rock-Crystal precious stones for the JU-WELization of the drinking water, with mounted light-loader for the re-vitalization of the precious stones. Wall mounting under the sink or the washstand after the angle valve for cold water with union nut 3/8" for the installation into the feed line leading to the outlet fitting.

Type	JUW-CO
Pipe connection	1/4"
Water flow rate m ³ /h	0,5
Pressure loss bar	0,35
Installation length mm	98
Order - Number	8012515



Type JUW-V

JUDO JU-WEL Vario

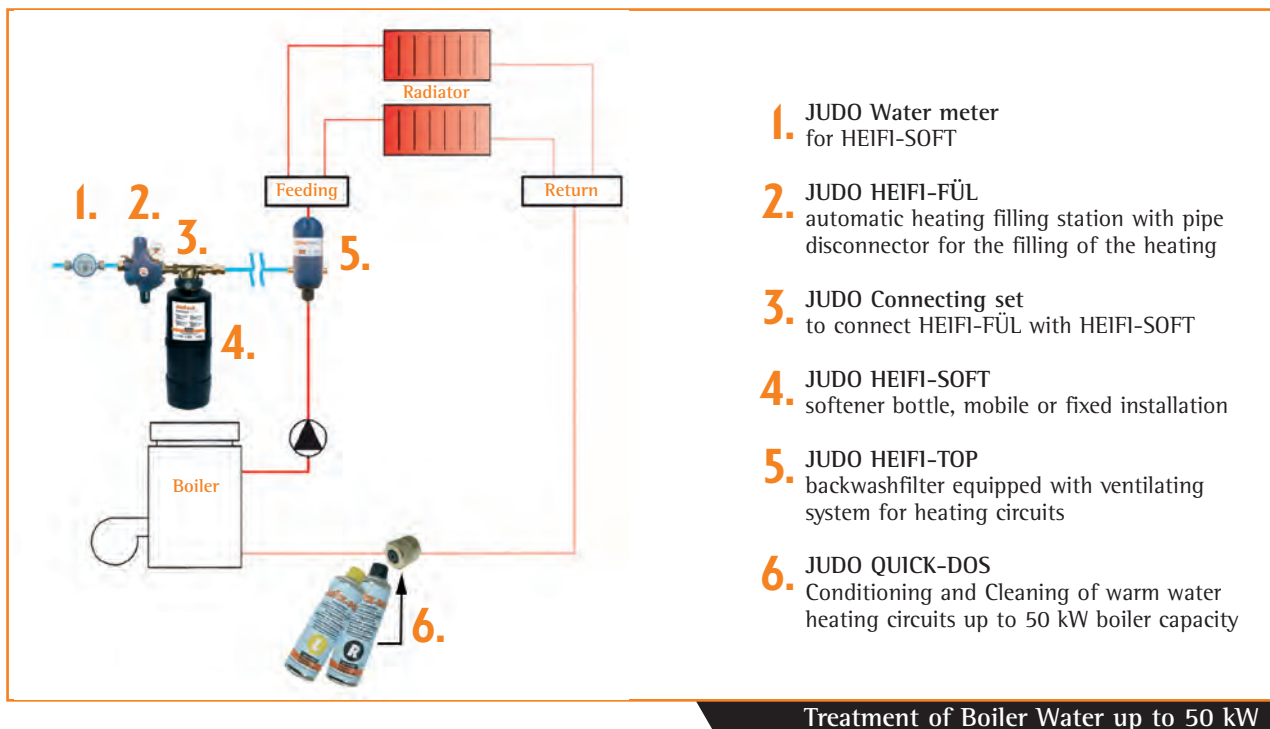
JU-WEL Water Device with exchange flacons for the outlet fitting, type JUW-V for water up to 50 °C

Scope of Supply: Beautifully shaped chromium plated adaptor for threaded connector M 24x1 and two exchange flacons, type A. Filling consisting of energetically enhanced Amethyst precious stones for the JU-WELization of the drinking water.

Type	JUW-V
Pipe connection	M 24x1
Water flow rate m ³ /h	0,4
Installation length mm	55
Order - Number	8012516

JU-WEL Vario Adaptor	Order - Number	8275001
JU-WEL Vario Exchange-Flacon-Set	Order - Number	8275002

VDI 2035 - New Demands on Heating Systems



Anti-Lime Protection in the Boiler Water

An improved use of energy and more compact heating transfer surfaces as well as higher hot water temperatures in order to reduce the risk of the bacteria Legionella lead to augmented damages caused by lime deposits in the heating installations. That is why apart from the new VDI

2035 also the guaranty conditions of the boiler manufacturers (for example concerning thermae fixed on the wall) require maximum limits concerning the water hardness.

With the JUDO HEIFI-SOFT you'll get a system, suited for mobile or stationary use for an

optimal water hardness concerning one-family houses and multiple dwelling units.

For advanced requirements of the VDI 2035 concerning larger installations, the complete JUDO product range for the classic boiler water conditioning is at your disposal.

Corrosion Protection in the Heating Circuit

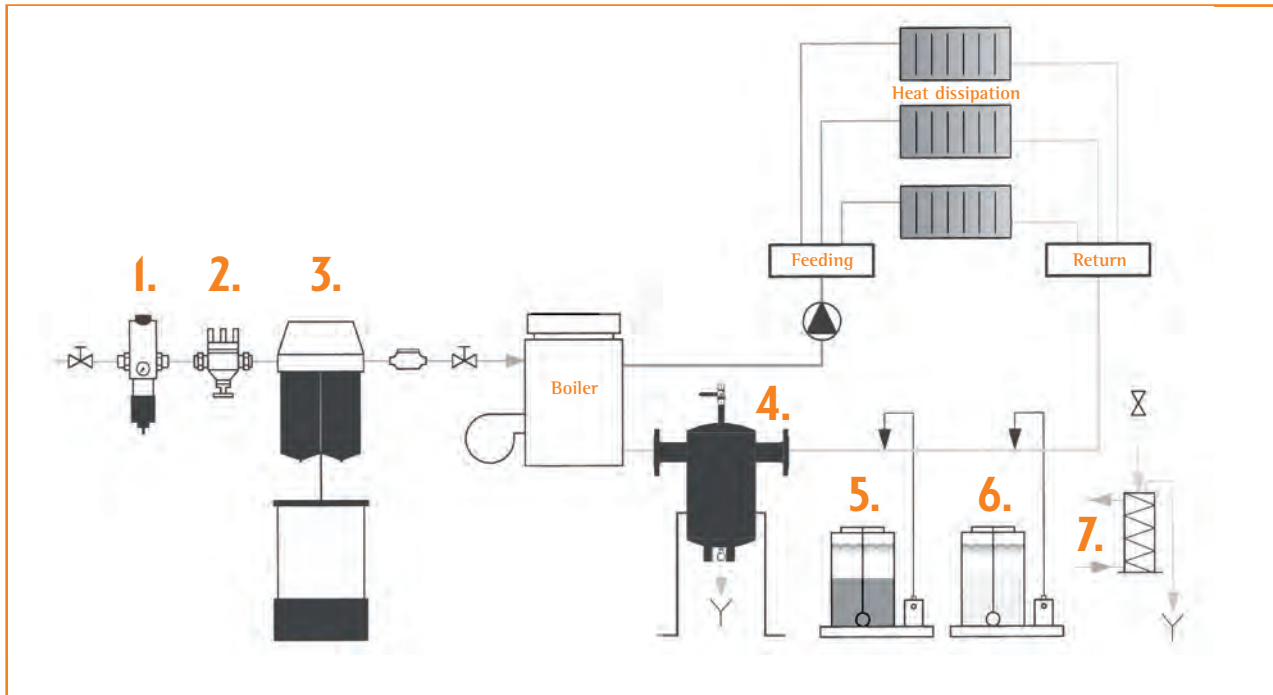
Even smallest quantities of oxygen together with high water temperatures lead obligatorily to corrosion in heating installations.

JUDO offers, depending on the boiler performance, individually co-ordinated protective measu-

res in accordance with VDI 2035. For a one family-house and multiple dwelling units QUICKDOS-L, QUICKDOS-R and HEIFI-TOP are the perfect team for the cleaning and the corrosion prevention in heating installations.

For advanced requirements of the VDI 2035 concerning larger installations, the complete JUDO product range for the classic boiler water conditioning is at your disposal.

Water Treatment for Warm Water Heating Systems according to VDI 2035



Water Treatment for Warm Water Heating Systems according to VDI 2035

Total Heating Capacity	Sum / alkaline earths	Total hardness
> 50 to ≤ 200 kW	≤ 2,0 mmol/l	≤ 11,2 °dH
> 200 to ≤ 600 kW	≤ 1,5 mmol/l	≤ 8,4 °dH
> 600 kW	≤ 0,02 mmol/l	≤ 0,11 °dH

Lime Protection in the filling and the make-up water:

- 1.** JUDO Backwash Protective Filter according to DIN 1988 and DIN 19632 as well as pressure reducer in accordance with EN 1567 see page 6 - 11
- 2.** JUDO Pipe Disconnect see page 33
- 3.** JUDO Mobile Heating Filling Unit see page 83

JUDOMAT Softening Units
see page 58 - 68

Corrosion Protection in the heating water:

- 4.** JUDO FERROCLEAN for the separation of iron sludge see page 89
- 5.** JUDO UNIDOS Dosing Pump Unit for the addition of JHL 2 see page 42
- 6.** JUDO UNIDOS Dosing Pump Unit for the addition of JNS see page 42

JUDO Dosing Agent JHL 2 *
for alkalisng of boiler water and the oxygen binding capacity
see page 93

JUDO Dosing Agent JNS
for the oxygen binding
see page 94

Analytcs:

- 7.** JUDO Sampling Cooler for the correct sampling of boiler feed water see page 98

JUDO Analysis Bag / Cabinet
see page 98

Please check regularly the ph-value in the heating-system independent of the applied water treatment.



Lime Protection in the Fill- and the Make-Up-Water

according to VDI 2035



Type JHF-S
with accessories

JUDO Mobile Softener Tank HEIFI-SOFT

Type JHF-S according to VDI 2035 for water up to 30 °C

Softener tank for the filling/refilling* of the heating with soft water.

Scope of Supply: Mobile filter vessel, made of fiber glass reinforced polypropylene with

blending device for the adjustment of the product water hardness, two flexible filling hoses made of plastic. Filter filling consisting of high performance ion exchange resin (food grade), built-in rotary flange with threaded connection, weight only approximately 12 kg.

Type	JHF-S
Pipe connection	1/2"
Nominal flow rate m ³ /h	1
Pressure loss at nominal flow bar	0,2
Capacity new/regenerated °dH x m ³	19,6/14,6
Maximum operating pressure bar	6
Maximum operating temperature °C	30
Installation length mm	175
Width mm	173
Height mm	514
Depth to the pipe center mm	86
Order - Number	8068501

* In combination with filling device HEIFI-FÜL respectively filter-filling combination HEIFI-KOM

JUDO Transport box for JHF-S	Order - Number	8068505
JUDO Water meter for JHF-S	Order - Number	8068504
JUDO Connecting set for the connection of JHF-S with JHF-F	Order - Number	8068506

CE



Type JHF-SR

JUDO HEIFI-SOFT Regeneration Unit

Type JHF-SR for water up to 30 °C

For the regeneration of depleted HEIFI-SOFT softener.

Scope of Supply: Regeneration control unit with salt-solution and storage tank. Regeneration control by means of hard wearing ceramic disks. Two connecting hoses for JHF-S. Built-in rotary flange with patented brass bayonet connector and mounting lid. Power supply 230 V/50 Hz.

Type	JHF-SR
Pipe connection	1"
Maximum operating pressure bar	6
Salt consumption kg/regeneration	0,8
Salt storage tank content kg	40
Order - Number	8068001

CE



Type JMHB 1

JUDO Mobile Heating Filling Unit JMHB 1 and 2

Type JMHB 1 and 2

Scope of Supply: JUDO Mobile heating filling unit consisting of: JUDO HELVETIA-protective filter, JUDO Pipe disconnector, JUDOMAT Softening unit regeneration stati-

on included as well as a JUDO WADOS-T dosing pump unit, completely pre-fabricated as a ready-to-install functional unit.

Type JMHB 2: without dosing unit

Type	JMHB 1	JMHB 2
Pipe connection	1"	1"
Operating pressure min/max bar	2/8	2/8
Capacity at complete salt setting °dH x m ³	100	100
Salt consumption kg/regeneration	5	5
Order - Number	8390087	8390088

Filling with partially-/completely softened Water

fixed installation, concerning heating systems smaller than 50 kW



Heat exchanger is calcified

The JUDO HEIFI-RESOFT fixed installation softener unit [JHRS 8700], consists of a softening cartridge with integrated blending device and the tried- and proved JUDO QUICKSET-connection technique to incorporate the unit firmly into the filling line.

The capacity is designed to execute a typical installation with a 15 kW heating performance. Related to a

raw water hardness of 20 °dH it supplies sufficient partially softened water [8° dH], covering up to three system fillings. When the cartridge is used up, it can be disposed of with the domestic waste. The used cartridge, if, as an example, larger heating contents are required, can easily be replaced - simply a new replacement cartridge has to be mounted [JHRS-E 8700].



Type JHRS 8700

JUDO HEIFI-RESOFT

Type JHRS 8700

Fixed installation unit to effect partial-/ complete softening of the fill-and make-up water of warm water heating systems.

Scope of supply: an exchanger vessel, made of plastics, with integrated blending device, filled with high performance cation-exchange resin, mounted in connection-ready state onto the built-in rotary flange with patented bayonet connection, shut-off ball valve, positioned exit-sided as well as entry-sided water meter to register the fill water quantity. All the materials are suited to be used in softened water, the hardness measuring instrument included.

Type	JHRS 8700	
Pipe connection		¾"
Max. fill capacity	l/h	400
Capacity when 20° dH to 0° dH	l	435
Capacity when 20° dH blended to 8 °dH	l	725
Max. operating pressure	bar	6
Max. operating temperature	°C	30
Face-to-face length	mm	205
Face-to-face depth (to pipe-center)	mm	45
Overall height	mm	741
Order - Number		8068510

Replacement Cartridge

Replacement cartridge model JHRS-E 8700 made of fibre-glass reinforced plastics with integrated blending device, filled with high-performance cation-exchange resin.

Order - Nr. 8068511

A Salt-poor Heating Filling

fixed installation, concerning heating systems smaller than 50 kW

Renowned Boiler and Water Heater Manufacturers expressively recommend the so-called „salt-poor“ operation mode concerning a part of their product range. The filling of heating systems with salt-poor water [conductivity up to 100 µS/cm] reduces not only the danger of performance decreasing effects of lime deposits, but also represents an optimal corrosion protection. The low electrolyte content diminishes the rapidity of corrosion decisively, also without using additive chemicals.

A hyper-alkalinisation, that can occur when filling with partially-/completely-softened water, is avoided. It is of particular importance when aluminium alloys are used in heat exchangers, a usage that nowadays is particularly wide-spread in the condensing appliance technology.

The JUDO HEIFI-REPURE desalination unit [JHRP 8000] a fixed-installation-design application, consists of a desalinating cartridge and the tried- and proved JUDO QUICK-SET –connection technique incor-

porate the unit firmly into the filling-line.

The capacity is designed to execute a typical installation with a 15 kW heating performance.

When the raw water hardness is 20° dH, it supplies sufficient salt-poor water to effectuate the first filling and an additional filling through a back-feed performance or maintenance. If the cartridge is used up it can be disposed of with the domestic waste. It is replaced with a new replacement cartridge [JHRP-E 8000] to be connected.



Type JHRP 8000

JUDO HEIFI-REPURE

Type JHRP 8000

Fixed installation unit to effect desalination of the fill- and make-up water of warm water heating systems.

Scope of supply: An exchanger vessel, filled with a high performance mixed bed ion exchange resin, assembled in connection-ready state onto the built-in rotary state with patented bayonet connection, shut-off ball valve, positioned exit-sided, as well as entry-sided water-meter to register the fill water quantity. All the materials are suited to be used in desalinated water.

Type	JHRP 8000	
Pipe connection		¾"
Max. fill capacity	l/h	600
Capacity when 20° dH to 0° dH	l	400
Max. operating pressure	bar	6
Max. operating temperature	°C	30
Face-to-face length	mm	205
Face-to-face depth (to pipe-center)	mm	87
Overall height	mm	545
Order - Number	8068512	

Replacement Cartridge

Replacement cartridge model JHRP-E 8000 made of fibre-glass reinforced plastics, filled with high performance mixed bed ion exchange resin.

Order - Nr. 8068513

* As a calculation base serves the total hardness of the untreated raw water. Indication of the fill-capacity up to 100 µS/cm.

Recommended accessories:

JUDO HEIFI-FÜL, Order-Number 8060040, automatic heating refill unit with integrated system separation BA. Measuring instruments to determine the conductivity.

Corrosion Protection for Heating Systems

according to VDI 2035



Type JQD-L and JQD-R

JUDO QUICK-DOS

Type JQD-L and JQD-R

Quick and simple conditioning by means of QUICK-DOS L and R in the practical 400 ml can. The dosing of the heating installation is effected by means of the adapter JUDO QUICK-AN.

Type JQD-AN

Adapter with female thread 3/4" for the connection with KFE-tap for the filling of the installation with JUDO QUICK-DOS.

Dosing Agent	JQD-L	JQD-R *
Content 400 ml, sufficient approximately for system content 1	80	80
Shipping unit pieces	carton 9x 400 ml	carton 9x 400 ml
Order - Number	8838185	8838186

* Approximately 4 weeks after addition JQD-R the system has to be flushed carefully - it can be that a multiple application with JQD-R becomes necessary. In the case of a clean system the refilling and addition of JQD-L is effected.

JQD-AN (shipping unit 5 pieces)	Order - Number	8838188
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JUDO THERMODOS

Type JTH-L and JTH-R

For the conditioning and cleaning of hot water heating circuits with a heat output below 100 kW.

Type JTH-L: for the conditioning of heating water, hardness stabilizing, dispersing and film forming. Addition of approximately 1 l per 200 l system content.

Type JTH-R: for the cleaning of older hot water heating circuits. Addition of approximately 1 l per 200 l system content.



Type JTH-L and JTH-R

Dosing Agent	JTH-L	JTH-R *
Can size l	1	1
Shipping unit pieces	carton 6x 1 l	carton 6x 1 l
Order - Number	8650011	8650010

* Approximately 4 weeks after addition JTH-R the system has to be flushed carefully - it can be that a multiple application with JTH-R becomes necessary. In the case of a clean system the refilling and addition of JTH-L is effected.

JUDO THERMODOS Dosing Unit

Type JTH-D

For the simple and safe addition of JTH-L and JTH-R dosing solutions.

Scope of supply: 5 l plastic vessel, resistant to pressure up to 3 bar, certified by TÜV with pressure pump, safety valve, combined shut-off/non-return valve, connection hose with 1/2" swivel nut.

JTH-D	Order - Number	8125501
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JUDO Molybdene Test Kit

Type JTH-ML for JQD-L and JTH-L

Required Molybdene content, minimum 220 ml/l.

JTH-ML	Order - Number	8742170
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Type JTH-D

Water Treatment for Heating Systems

according to VDI 2035

JUDO Backwash Filter with Deaeration System HEIFI-TOP



Type JHF-T

Type JHF-T 3/4" - 2"

Scope of Supply: Housing made of brass, integrated newly-developed sludge- and micro-air-bubbles catch system, equipped with circular brush, made of stainless steel wire, integrated high-quality rapid air-vent,

large handwheel with spherical valve for the operation of the backwashing with simultaneous mechanical cleaning of the brush body, built-in rotary flange, made of brass with patented threaded bayonet connection, threaded connection according to DIN 2999, thermal insulation.

Type	JHF-T	JHF-T	JHF-T	JHF-T	JHF-T
Pipe connection	3/4" *	1"	1 1/4"	1 1/2" **	2" **
Nominal flow rate m ³ /h	2	3	4	6	8
Pressure loss at nominal flow (at 80 °C) bar	0,02	0,06	0,10	0,06	0,10
Up to a heat capacity of kW	40	60	100	150	200
Max. temperature of the feed water °C	90	90	90	90	90
Operating pressure maximum bar	10	10	10	10	10
Installation length mm	180	195	230	252	280
Order - Number	8060030	8060031	8060032	8060033	8060034

* JHF-T 1" with QUICKSET-E 3/4"

** 2x JHF-T 1" or 1 1/4" with parallel built-in rotary flange

JUDO Backwash Filter with Deaeration System HEIFI-VENT



Type JHF

Type JHF 3/4" - 2"

Scope of Supply: Housing made of red brass, integrated effective sludge- and micro-air-bubbles catch system, equipped with circular brush, made of stainless steel wire, mounted high-quality rapid air-vent device, large

handwheel with spherical valve for the operation of the backwashing with simultaneous mechanical cleaning of the brush body, built-in rotary flange, made of brass with patented threaded bayonet connection, threaded connection according to DIN 2999, thermal insulation.

Type	JHF	JHF	JHF	JHF	JHF
Pipe connection	3/4" *	1"	1 1/4"	1 1/2" **	2" **
Nominal flow rate m ³ /h	2	3	4	6	8
Pressure loss at nominal flow (at 80 °C) bar	0,01	0,02	0,04	0,02	0,04
Up to a heat capacity of kW	40	60	100	150	200
Max. temperature of the feed water °C	90	90	90	90	90
Operating pressure maximum bar	10	10	10	10	10
Installation length mm	180	195	230	252	280
Order - Number	8060009	8060010	8060011	8060012	8060013

* JHF 1" with QUICKSET-E 3/4"

** 2x JHF 1" or 1 1/4" with parallel built-in rotary flange

Water Treatment for Hot Water Heating Systems

according to VDI 2035



Type JHF-F

JUDO Automatic Heating-Refill Unit HEIFI-FÜL

Type JHF-F 3/4"

According to DIN/EN 1717 not any longer permitted in the future: the temporary connecting of the heating circuit to the drinking water system. That can be helped by means of the refill unit JUDO HEIFI-FÜL. Furthermore it admits the backwashing of the HEIFI-VENT and the HEIFI-TOP with fresh water (HEIFI-KOM).

Scope of Supply: The HEIFI-FÜL Refill-unit consists of a spheric valve, pressure reducer, manometer and pipe disconnecter, type BA. With the aid of the mounted pressure reducer the pressure will be kept constant, and in the case of falling pressure an automatic refilling will take place. Ideal in connection with the heating backwash-filter HEIFI-TOP, respectively HEIFI-VENT, the backwashing is then effected with fresh water.

Type	JHF-F
Pipe connection	3/4"
Nominal water flow rate m ³ /h	2
Refill-capacity litres/minute	12
Maximum operating temperature °C	65
Maximum heating water temperature °C	90
Order - Number	8060040

JUDO HEIFI-KOM

Type JHF-K 1" - 1 1/4"

Ideally suited for the compact mounting of the HEIFI-TOP and HEIFI-FÜL units.

Scope of Supply: JUDO HEIFI-TOP, JUDO HEIFI-FÜL and combi-connector flange.



Type JHF-K Front



Type JHF-K Back

Type	JHF-K	JHF-K
Connection heating circuit	1"	1 1/4"
Connection drinking water system	3/4"	3/4"
Order - Number	8060051	8060052

Sludge Removal

Innovative and highly-efficient protection of components

In closed Heating- and Cooling-Systems deposits, consisting of iron sludge cause system failures and great cost concerning maintenance and sanitation.

The JUDO FERROCLEAN-sludge separators complete our HEIFI-TOP-series above DN 50.

They solve this problem, by the accretion of iron sludge (magnetite) to high-performance magnets. This sludge, after the deactivating of the magnets, can be easily removed by flushing it out. An integrated magnesium-

protection anode binds abundant oxygen on the spot (no deposit effect). The cleaning can take place either by system-water or external water supply, via the integrated raw water connection, at best by means of the heating-refill unit HEIFI-FÜL.

The mounting is effected preferably directly before the components to be protected (for example before the boiler, the heat exchanger, and the refrigerating machine).



Contaminated circulation water



After the introducing of the magnet the whole sludge is bound within a very short space of time, and can be flushed out

JUDO Sludge Separator FERROCLEAN DN 65 - 200

FERROCLEAN Sludge Separator, can be flushed out easily, inclusive magnesium anode for the oxygen removal.

Scope of Supply: A steel vessel, welded with flanges and steel outriggers, 1 set high-performance magnets, magnesium anode, raw water connection 3/4", discharge valve 1".

Type JFS-H: hot water version up to 130 °C, isolable.

Type JFS-K: for cold water of more than 6 °C, high-performance magnets, in a special condensation water protected design.



Type JFS-H with insulation

Type	Water flow rate m ³ /h	Nominal diameter mm	Pressure loss mbar	Installation length mm	Order - Number
JFS-H DN 65	12	65	1,2	535	8055050
JFS-K DN 65	12	65	1,2	535	8055056
JFS-H DN 80	17	80	1,8	545	8055051
JFS-K DN 80	17	80	1,8	545	8055057
JFS-H DN 100	30	100	2,2	545	8055052
JFS-K DN 100	30	100	2,2	545	8055058
JFS-H DN 125	50	125	3,2	555	8055053
JFS-K DN 125	50	125	3,2	555	8055059
JFS-H DN 150	80	150	4	555	8055054
JFS-K DN 150	80	150	4	555	8055060
JFS-H DN 200	130	200	5	575	8055055
JFS-K DN 200	130	200	5	575	8055061

Please note: For the correct cleaning, in the case of a system-integrated backwashing, minimum one shut-off valve is required, to be mounted in flow direction after the separator. Concerning the cleaning with fresh water via the integrated raw water connection, requirements as per follows: two shut-off valves, before and behind the separator as well as a pipe disconnector in the fresh water feed line. For that we recommend the application of our refill-unit HEIFI-FÜL with integrated pipe disconnector up to risk classification level 4, Order - Number 8060040 (see page 84). If necessary, a by-pass for the interruption-free service has to be installed.

Accessories and Operating Material

Description	Order - Number
Insulation for JFS-H DN 65	8055066
Insulation for JFS-H DN 80	8055065
Insulation for JFS-H DN 100	8055064
Insulation for JFS-H DN 125	8055063
Insulation for JFS-H DN 150	8055062
Insulation for JFS-H DN 200	8055067
Magnesium Anode	8430229

Water Treatment for Air Conditioning Technique

Problem Solutions according to VDI 3803 as well as VDI 6022

Also in the case of correctly treated feed water the circulation water requires a specific treatment, to avoid problems as incrustations, corrosion and contaminations. To answer these purposes, JUDO has developed the KLIWAMAT-System, where

several assemblies are mounted in one compact unit, that is easy to install. It is suited superbly for the supplementary mounting:

The following methods are integrated to this purpose in the JUDO KLIWAMAT-compact system:

- ◆ System independent centrifugal pump
- ◆ Regulation of the salt content by means of conductivity controlled bleed-off
- ◆ Anti-bacteria treatment by means of UV-sterilization
- ◆ Filtration via automatic backwash filter as option

CE



Type JKWA-M **

JUDO KLIWAMAT

Type JKWA-M 2 - 6

For the sterilization of circulation water, and the controlling of the salt content concerning air conditioning units.

Scope of Supply: Compact, steel frame equipped with the following components: centrifugal pump as circulation pump, JUDO UV-sterilization with UV-intensity control, JUDO circuit bleed-off automatic, regulation spherical valve, and pressure control.

Type	JKWA-M 2	JKWA-M 4	JKWA-M 6
Capacity of circulating water m ³ /h *	2,1	4,2	6,1
Adequate for system volume l	up to 420	up to 840	up to 1200
Pipe connection	1"	1 1/4"	1 1/2"
Power input W	450	690	550
Power supply V/Hz	230/50	230/50	230/50
Dimensions	Width mm	600	600
	Depth mm	750	750
	Height mm	1500	1500
Order - Number	8350014	8350015	8350016

* Larger units on request

** Automatic backwash protective filter optionally

CE



Type JKAA-MV

JUDO Circuit Bleed-Off-Unit

Type JKAA-MV

For the automatic control and bleed-off, when attaining a pre-selected conductivity value in cooling- and air conditioning systems. Locking of the bleed-off included in case of intermittent biocide dosing.

Scope of Supply: Bleed-off control on a microprocessor basis with conductivity measurement device with measurement cell, regulation valve, Return-spring motorized bleed-off valve, internal PVC-connector line, internal wiring included, completely pre-installed on a mounting plate.

Type	JKAA-MV
Pipe connection	DN 20
Pipe connection bleed-off valve	DN 25
Conductivity measuring device switchable to µS/cm	5 - 5000
Power supply V/Hz	230/50
Pressure range bar	0 - 10
Order - Number	8460012

* With JUDO UNIDOS-dosing pump unit and control signal transfer cable, see page 40 and 41

JUDO Chemicals and Filter Materials

JUDO Boiler Water Chemical Treatment

Carbonate hardness, dissolved oxygen and low pH-values in the drinking water lead to scale formation and corrosion in the boiler. This causes a reduced performance and partially considerable damages in the heating system. The arising costs for unproper functioning bear no relation to correct functioning water treatment. Beside the apparative treatment of the fresh water, the chemical treatment of the boiler feed water plays the decisive role. That one is applied for the alkalisng (rising of the pH-value), oxygen binding and residual hardness precipitation. In smaller hot water heating

installations also special inhibitors are utilized, that prevent a corrosion effect in another way, for example by forming a protective film on metallic surfaces.

For proper applications and dosing quantities please contact our JUDO service team. Within the range of the hot water heating installations up to 100 °C, will be referred to VDI 2035 concerning the determination of the design of the boiler water treatment. Above 100 °C the VdTÜV- or TRD guide lines become valid. We will be pleased to carry through the adequate computerized design concepts for you.

Heater flange displaying attack by lime and corrosion



JUDO Air- and Cooling Water Chemical Treatment

Again and again deposits of limescale, corrosion, microbiological-, and algae- growth cause considerable damages at machines, cooling- and air conditioning installations or lead to unhygienic operating conditions. To avoid the mentioned damages, JUDO offers, in addition to the apparative treatment of the refill water, that often is indispensable due to economical reasons (for example softening or desalination) as well as the circuit bleed-off via bleed-off automatic devices, diverse conditioning agents with especially composed active agents. The target mostly is the stabilization

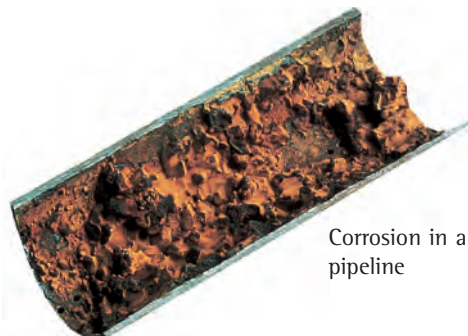
of the residual hardness, the corrosion inhibition and the dispergating in the circuit water. But also the sterilization by means of biocides becomes regularly necessary with open cooling-systems.

For proper applications and dosing quantities please contact our JUDO service team. In the field of the open cooling circuits and the air washers (spray humidifiers) it has been referred to the VDI 3803 concerning the design concepts of the water treatment. We will be pleased to carry through the adequate computerized design concepts for you.

Lime deposits in a pipeline



Corrosion in a pipeline



JUDO Chemicals

For the Boiler Water Treatment



Type JTH-L, 25 litres



Type JTH-R, 25 litres



Type JH 1, 10 kg

JUDO Dosing Agent JTH-L

Field of application: Principally Warm Water Heating Installations
Mode of action: Corrosion inhibition, protective film formation
Concentration: Minimum 1 l per 200 l system volume
Proof: Minimum 220 mg/l molybdene (measuring instrument JTH-ML)

JTH-L fluid product, ready for dosing

Combination product in liquid form on the basis of molybdene, organic acids and non-ferrous inhibitors

Can size	Packing unit	Order - Number
5 l *	1 piece	8838180
25 l *	1 piece	8838175
Test kit: JTH-ML		8742170

* Smaller can sizes, see page 82, please

JUDO Dosing Agent JTH-R

Field of application: Principally Warm Water Heating Installations
Mode of action: Cleaning of older heating circuits. It can be possible that the treatment has to be effected several times. Approximately 4 weeks after the addition of JTH-R the system will be flushed, refilled and conditioned with JTH-L.
Concentration: Minimum 1 l per 200 l system volume

JTH-R fluid product, ready for dosing

Combination product in liquid form: cleans gently, retaining the properties of the metal

Can size	Packing unit	Order - Number
5 l *	1 piece	8838178
25 l *	1 piece	8838176

* Smaller can sizes, see page 82, please

JUDO Dosing Agent JH 1

Please note: Don't apply in case of aluminium materials

Field of application: Principally Warm Water Heating Installations above 100 kW heating output (VDI 2035)
Mode of action: Alkalisng, oxygen binding in the boiler feed water and residual hardness precipitation
Concentration: Approximately 100 - 150 ml per m³ system volume, respectively refeeding water
Preparation: As a 10% solution with softened water
Proof: Approximately 5 - 10 mg/l phosphate the boiler regulations have to be taken into consideration
 Approximately 5 - 10 mg/l over plus of sulphite, boiler regulations have to taken into consideration (sampling cooler necessary)
 Approximately 5 - 20 mg/l over plus of sulphite concerning hot water heatings (VDI 2035, sampling cooler necessary)

JH 1 product in powder form

Combination of alkaline phosphate and an oxygen binding agent.

Can size	Order - Number
10 kg	8838150
Test kit: Sulphite *	8742134
Test kit: Phosphate	8742136

* Sampling cooler required

JUDO Chemicals

For the Boiler Water Treatment



Type JHL 2, 25 litres



Type JHL 3, 25 litres

JUDO Dosing Agent JHL 2 Please note: Don't apply in case of aluminium materials

- Field of application:** Principally Warm Water Heating Installations above 100 kW heating output (VDI 2035)
- Mode of action:** Alkalisng, oxygen binding in the boiler feeding water and residual hardness precipitation
- Concentration:** Approximately 100 - 150 ml per m³ system volume, respectively refeeding water
- Proof:** Approximately 5 - 10 mg/l phosphate the boiler regulations have to be taken into consideration
Approximately 5 - 10 mg/l over plus of sulphite, boiler regulations have to taken into consideration (sampling cooler required)
Approximately 5 - 20 mg/l over plus of sulphite concerning hot water heatings (VDI 2035, sampling cooler)

JHL 2 fluid product, ready for dosing

Combination of alkaline phosphate and an oxygen binding agent, not being vapourized. Food grade.

Can size	Order - Number
25 l	8838152
60 l	8838153
Test kit: Sulphite *	8742134
Test kit: Phosphate	8742136

* Sampling cooler required

JUDO Dosing Agent JHL 3 Please note: Don't apply in case of aluminium materials

- Field of application:** Principally Hot Water Heating Installations above 100 °C
- Mode of action:** Alkalisng, oxygen binding in the boiler feeding water and residual hardness precipitation
- Concentration:** Approximately 100 - 150 ml per m³ feed water
- Proof:** Approximately 5 - 10 mg/l phosphate the boiler regulations have to be taken into consideration, absence of oxygen *

JHL 3 fluid product, ready for dosing

Combination of alkaline phosphate and an oxygen binding agent, which has only slight effect on the salt content. Food grade.

Can size	Order - Number
25 l	8838154
60 l	8838155
Test kit: Oxygen	8742172
Test kit: Phosphate	8742136

* Sampling cooler required

JUDO Dosing Agent JH 4

- Field of application:** Steam boiler installation
- Mode of action:** Reduction of the alcalinity and the residual hardness precipitation
- Making-up:** As a 10% solution, with softened water
- Dosing:** Approximately 100 - 200 ml per m³ refeeding water
- Proof:** Approximately 5 - 10 mg/l phosphate the boiler regulations have to be taken into consideration

JH 4 product in powder form

Consisting of a mixture of phosphates

Can size	Order - Number
10 kg	8838164
25 kg	8838165
Test kit: Phosphate	8742136

JUDO Chemicals

For the Boiler Water Treatment

JUDO Dosing Agent JH 5

Please note: Don't apply in case of aluminium materials

Field of application:	Principally boiler installations above 100 °C
Mode of action:	Alkalisating and residual hardness precipitation
Making-up:	As a 10% solution, with softened water
Dosing:	Approximately 100 - 200 ml per m ³ feed water
Proof:	Approximately 5 - 10 mg/l phosphate (the boiler regulations have to be taken into consideration)

JH 5 product in powder form
Consisting of a mixture of alkali phosphates

Can size	Order - Number
10 kg	8838158
25 kg	8838159
Test kit: Phosphate	8742136



Type JNS, 10 kg

JUDO Dosing Agent JNS

Field of application:	Boiler installations
Mode of action:	Oxygen binding in the boiler water
Making-up:	As a 10% solution, with softened water
Dosing:	Approximately 80 ml per gramme oxygen as per m ³ feed water
Proof:	Approximately 5 - 10 mg/l overplus of sulphite, boiler regulations have to taken into consideration * Approximately 5 - 20 mg/l overplus of sulphite concerning hot water heatings (VDI 2035) *

JNS product in powder form
Consisting of an oxygen binding agent, being not vapourized. Food grade.

Can size	Order - Number
10 kg	8838162
25 kg	8838166
Test kit: Sulphite	8742134

* Sampling cooler required



Type JHL 10, 25 litres

JUDO Dosing Agent JHL 10

Field of application:	Steam boiler installations
Mode of action:	Oxygen binding in the boiler water
Dosing:	Approximately 60 ml per gramme oxygen per m ³ feed water
Proof:	Absence of oxygen (sampling cooler required)

JHL 10 fluid product, ready for dosing
Consisting of an oxygen binding agent, that does not influence on the salt content.

Can size	Order - Number
25 l	8838156
60 l	8838157
Test kit: Oxygen	8742172

JUDO Chemicals

For the Air- and Cooling Water Treatment



Type JKL 25, 60 litres

JUDO Dosing Agent JKL 25

Field of application: Open cooling circuits and air washers (spray-humidifiers)
Effect: Hardness stabilization, corrosion inhibition and dispersion
Dosing: Approximately 125 - 250 ml as per m³ feed water
Proof: Approximately 0,5 - 5 mg/l phosphate in the circuit water, only to be proved in the laboratory

JKL 25 fluid product, ready for dosing Combination, consisting of organic phosphorous compounds with polycarboxylates.	
Can size	Order - Number
25 l	8839121
60 l	8839122



Type JKL 30, 25 litres

JUDO Dosing Agent JKL 30

Field of application: Open cooling circuits
Effect: Biocide for the quick destroying of the biologic burden
Dosing: Approximately 1 l as per m³ system volume as shock dosing after the optical control of the cooling tower
Please note: According to appendix 31 RABwVwV no bleed-of must not be conducted for approximately six hours after its adding

JKL 30 fluid product, ready for dosing Based on quaternary atomic compounds.	
Can size	Order - Number
25 l	8839123
60 l	8839124



Type JKL 35, 25 litres

JUDO Dosing Agent JKL 35

Field of application: Air washers / spray humidifiers
Effect: Biocide, hardness stabilization, corrosion inhibition and dispersion
Dosing: Approximately 200 - 500 ml as per m³ feed water
Proof: Approximately 1,0 - 1,6 mg/l phosphate in the circuit water (product guidelines are to be observed)

JKL 35 fluid product, ready for dosing Combination, consisting of biocides and weak organic acids.	
Can size	Order - Number
25 l	8839160
60 l	8839161



Type JKL 40, 25 litres

JUDO Dosing Agent JKL 40

Field of application: Closed and semi-open cooling circuits
Effect: Corrosion inhibition, hardness stabilization and dispersion
Dosing: Approximately 700 - 2500 ml per m³ system volume respectively refill water
Proof: Minimum 250 mg/l molybdate (test kit JTH-ML) in the circuit water

JKL 40 fluid product, ready for dosing Combination based on molybdate, low molecular phosphoncarboxylates, polyelectrolytes and non-ferrous metal inhibitors	
Can size	Order - Number
25 l	8660001
60 l	8660002
Test kit: JTH-ML	8742170



JUDO Chemicals / Filter Materials

Chemicals and Filter Materials

Description	Type	Unit	Order-Number
Polyaluminiumchloride, as an inorganic flocking agent, ready for dosing, active substance Al_2O_3 as approximately 10 percent by weight for the precipitation and flocculation concerning the industrial water- and swimming pool water treatment, filled in one way canister	PAC	35 kg	8610010
Potassium permanganate as inorganic oxidizing agent, in powder form for the drinking water- and industrial water treatment, filled in sacks		5 kg	8839106
Inorganic fluid chlorine compound according to DIN 19608, active chlorine content approximately 15 %, filled in one-way canisters	JFC 20	20 l	8822101
Polymeric fluid product for the hardness stabilization concerning reverse-osmosis units, filled in one-way canisters	JOSL-S2	25 kg	8839114
Quartz grit: Mono-crystalline, fire-dried quart gravel for the single layer filtration and the multi media filtration, packed in plastics sacks 25 kg each.			
JUDOFILT Granulation 5,6 - 8 mm (supporting layer 1) (bulk density 1,55; 25 kg = approximately 16 l)	JUDOFILT	kg *	8360066
JUDOFILT Granulation 3,15 - 5,6 mm (supporting layer 1) (bulk density 1,55; 25 kg = approximately 16 l)	JUDOFILT	kg *	8731010
JUDOFILT Granulation 1 - 2 mm (supporting layer 2 or single layer-filter material) (bulk density 1,55; 25 kg = approximately 16 l)	JUDOFILT	kg *	8731009
JUDOFILT Granulation 0,71 - 1,25 mm (filter layer in case of multi layer-filtration) (bulk density 1,55; 25 kg = approximately 16 l)	JUDOFILT	kg *	8731018
JUDOFILT Granulation 0,4 - 0,8 mm (filter layer in case of multi layer-filtration) (bulk density 1,58; 25 kg = approximately 16 l)	JUDOFILT	kg *	8731007
Broken anthracite coal for multi-layer filtration, packed in plastic bags per 50 l. JUDO HA1, granulation 1: 0,8 - 1,6 mm (filter layer only in combination with quartz gravel, granulation 0,4 - 0,8 mm); (bulk density 0,70; 50 l = 35 kg)	Anthrasit (N)	l	8735174
Catalytic filter material packed in plastic bags of 28 l each, granulation 0,25 - 1 mm (for deferrization/demanganization); (bulk density 0,6; 28 l = approximately 17 kg)	JUDOFILT KAT	28 l	8630003
Porous calcium carbonate - filter material, packed in plastic bags of 50 kg each, granulation 0,5 - 2,5 mm (filter layer for the deacidification); (bulk density 1,0; 50 kg = approximately 50 l)	JUDOFILT CA	kg	8360067
Highly activated granulated carbon with high abrasion resistance for the adsorption of organic substances in water for the catalytic dechlorination and deozoneation, packed in plastic bags of 22 kg each, granulation 1 - 3 mm (bulk density 0,470; 22 kg = 47,7 l)	Activated carbon	kg	8360068
Strongly acidic cation exchange resin on polystyrene basis with sulphonic acid groups, high chemical resistance and mechanical strength, used as sodium exchanger with softening units or as hydrogen exchanger in complete desalination units (bulk density 0,85 - 0,9; 50 l = maximum approximately 45 kg) packed in 25 l sacks each	Cation exchange resin	l	8731020
Strongly basic anion exchange resin, high mechanical resistance, for use in complete desalination plants packed in sacks of 50 l each (bulk density 0,7 - 0,75; 50 l = maximum approximately 38 kg)	Anion exchange resin	l	8731019

* Larger quantities (above one ton) on request



Type JSW 1



JUDO Chemical Protective Equipment

Scope of supply: Visor, rubber apron (acid- and basic-resistant), one pair of rubber gloves, KLC 4031 set of warning signs "Chemicals" in accordance with GUV 8.15.

Chemical Protective Equipment	Order - Number	8510170
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JUDO Safety Tubs

Description	Type	Order-Number
JUDO Safety Tub JSW 1 for the housing of the complete JUT- or JWT - dosing unit with transport canister, solid design up to 60 l, measurements 650 x 470 x 300 mm.	JSW 1	8690026
JUDO Safety Tub JSW 2 for the housing of the transport cans, solid design, measurements 120 x 80 cm.	JSW 2	8690018
JUDO Safety Tub JSW 3 for the housing of the solution- and storage tank, approximately 100 l.	JSW 3	8690043

JUDO Test Kits

Description	Type	Order-Number
Testing of the water hardness by means of the complexometric titration till the change of colour occurs. Measure range 0 - 30 °dH Refill package: Titration Solution, type A Indicator	Total hardness type A	8742119 8742121 8742122
Sufficient for approximately 100 analyses at a mean total hardness of 15 °dH.		
Testing of water hardness by means of the complexometric titration till the change of colour occurs. Measure range 0 - 2 °dH Refill package: Titration solution, type B Indicator	Total hardness type B	8690013 8690014 8742122
Sufficient for approximately 100 analyses at a mean total hardness of 1 °dH.		
Testing of the carbonate hardness, respectively of the m-value by means of the titration till the change of colour occurs. Refill package: Titration Solution, type C Indicator	Carbonate hardness, type C	8742123 8742125 8742126
Sufficient for approximately 100 analyses at a mean carbonate hardness of 10 °dkH		
Test sticks for the testing of the nitrate content in the water (in the box 25 pieces)	Nitrate	8742150
Colour comparison test kit concerning the concentration range 0 - 1,0 mg/l Fe, 100 analyses Refill package: 1 set of reagents, sufficient for approximately 100 analyses	Iron	8742138 8742139
Colour comparison test kit concerning the concentration range 0,03 - 0,5 mg/l Mn, 100 analyses Refill package: 1 set of reagents, sufficient for approximately 220 analyses	Manganese	8690008 8690009
Colour comparison test kit for the control of the chlorine value in drinking- and industrial waters relating to a concentration of 0 - 1 mg/l Refill package: Package for approximately 120 analyses	Chlorine DPD	8742142 8742143
Test sticks for the control of the pH-value in drinking and industrial waters, 100 pieces pack (pH 6,5 - 10,0)	pH-Value	8742130
Test sticks for the testing of the concentration of the JUDO long-term conditioner, type JTH-L and JKL 40 (package content 100 pieces)	JTH-ML	8742170
Colour comparison test kit for the range of concentration 0 - 10 mg phosphate Refill package: set of reagents phosphate, sufficient for approximately 100 analyses	Phosphate	8742136 8742137
Colour comparison test kit for the range of concentration 0 - 20 mg sulphite Refill package: set of reagents sulphite, sufficient for approximately 150 analyses	Sulphite	8742134 8742135
Test kit for the testing of the residual oxygen content in the boiler water or the condensate. Range of concentration 0 - 10 mg oxygen	Oxygen	8742172
Testing of the p- and m- value by means of the titration till the change of the colour occurs. Refill package: Titration solution, type C Indicator C Indicator P	p- and m- Value	8742124 8742125 8742126 8742127
pH-indication sticks concerning the range from 7,5 - 14	pH-Value	8742132
Testing of the total number of germs. As a disinfection control on surfaces and in fluids, package containing 10 measuring tubules (durability approximately 3 months)	JKB	8690034
For the testing of the chlorine dioxide in case of high concentrations during the postrinse disinfection, measuring range 0,5 - 25 mg/l	JPTS	8690035
Set of reagents chlorine dioxide		8690040
Additive reagent chlorine dioxide for approximately 150 analyses (in the presence of free chlorine)		8690041
For the testing of chlorine dioxide according to the DPD-method		8690047



JUDO Analysis Equipment



Type JPK 3

JUDO Sampling Water Cooler

Type JPK 1 and JPK 3

For the removal and the cooling of hot water samples, in order to attain precise results when conducting the analysis of the water.

Scope of Supply: vessel, made of steel, welded, PN 10, with all the necessary connectors, with built-in cooling-coil of stainless steel as well as all the required shut-off devices and regulators, pivotable bracket, made of steel, for the sampler, made of glass.

Type JPK 3: same as JPK 1, however, with transparent plastic housing and QUICKSET-E.

JPK 1	Order - Number	8728165
JPK 3	Order - Number	8460050

JUDO Boiler Water Journal

Boiler Water Journal for the registration of the measured values	Order - Number	8690010
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Type Analysis cabinet

JUDO Analysis Cabinets

Description	Type	Order-Number
JUDO Analysis cabinet for the boiler water analysis Type B, equipped with measuring devices (burettes) and reagents (an exactly composed titrator solution) for the determination of the pH-value, total hardness (B), carbonate hardness, p- and m-value, phosphate, density (according to Dr. Ammer) with sulphite test kit.	Analysis cabinet type B	8742181
JUDO Analysis cabinet for the boiler water analysis Type C, same as type B, however, with oxygen test kit.	Analysis cabinet type C	8742182
JUDO Basic analysis cabinet for the individual equipping with JUDO measuring instruments, width 500 mm, height 575 mm, depth 330 mm.	Basic analysis cabinet	8742183



Type Analysis bag

JUDO Analysis Kit for Boiler Water

Description	Type	Order-Number
JUDO Analysis Bag Type B, consisting of one solid and beautifully styled polypropylene bag, colour black. Measurements: 320 x 220 x 75 mm and the colour comparison instruments for total hardness (B), phosphate, sulphite as well as pH-value indication sticks 7,5 - 14.	Analysis bag type B	8690004
JUDO Analysis Bag Type C, consisting of one solid and beautifully styled polypropylene bag, colour black. Measurements: 320 x 220 x 75 mm and the colour comparison instruments for total hardness (B), phosphate, oxygen as well as pH-value indication sticks 7,5 - 14.	Analysis bag type C	8690005

CE



Type JPHM

JUDO Photometer for Chlorine and Chlorine Dioxide

Description	Type	Order-Number
JUDO Photometer manual device for the opto-electronical determination of chlorine dioxide and other water parameters	JPHM	8690039
JUDO Reagents set for JPHM Reagents set chlorine dioxide		8690040
JUDO Additif reagent chlorine dioxide (in the case of free chlorine dioxide required)		8690041

JUDO Testers

Description	Type	Order-Number
pH-value range 0 - 14	JPpH	8690001
Buffer Solution pH 7 for the calibration for JPpH, 100 ml		8721098
Redox-Value range 0 - 1000 mV	JP-Redox	8690002
Conductivity range 0 - 100 µS/cm *	JPLF	8690003
Conductivity range 0 - 3999 µS/cm *	JPLF 4000	8690030

* Other measuring ranges on request

JUDO QUICKSET

Mounting Accessories



Type JQE

JUDO QUICKSET-E

Type JQE 3/4" - 2" female thread
Type JQE 1/2" - 2" male thread with screw connection

Built-in rotary flange for the rough mounting of JUKO-LF, PROF1+, PROFIMAT+, JSP, JPM, JBQ, JJP, BST 2000, BST-C/-CA, JU-WEL.

Design with female thread	Installation length mm	Order - Number
JQE 3/4"	90	8250010
JQE 1"	90	8308011
JQE 1 1/4"	110	8735211
JQE 1 1/2"	136	8735203
JQE 2"	142	8735204

Design with male thread	Installation length mm	Order - Number
JQE 1/2" with screw connection	180	8250014
JQE 3/4" with screw connection	180	8250015
JQE 1" with screw connection	195	8250016
JQE 1 1/4" with screw connection	230	8250017
JQE 1 1/2" with screw connection	252	8250032
JQE 2" with screw connection *	280	8250033
JQE1" 28 mm with screw connection passage on the viega-sanpress-system	184	8250071

* Suited for hot water up to 90 °C and for the rough mounting JHF/JHF-T 1 1/2" and 2"



Type JQR

JUDO QUICKSET-Series

Type JQR
for JUDO QUICKSET-E 3/4" - 1 1/4"

The JUDO QUICKSET-Series with patented bayonet connector is used when space problems don't make possible the installation of

a second quick-mounting set QUICKSET-E, respectively when an additional JUDO Water treatment device shall be installed into an existing water pipe (series connection). Pressure loss at 5 m³/h - 0,06 bar, PN 16.

QUICKSET-Series JQR	Order - Number	8250041
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Type JQX

JUDO QUICKSET-X

QUICKSET-X by pass valve	Order - Number	8735210
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Kitchen



Production



Swimming pool



Heating



Dish washer



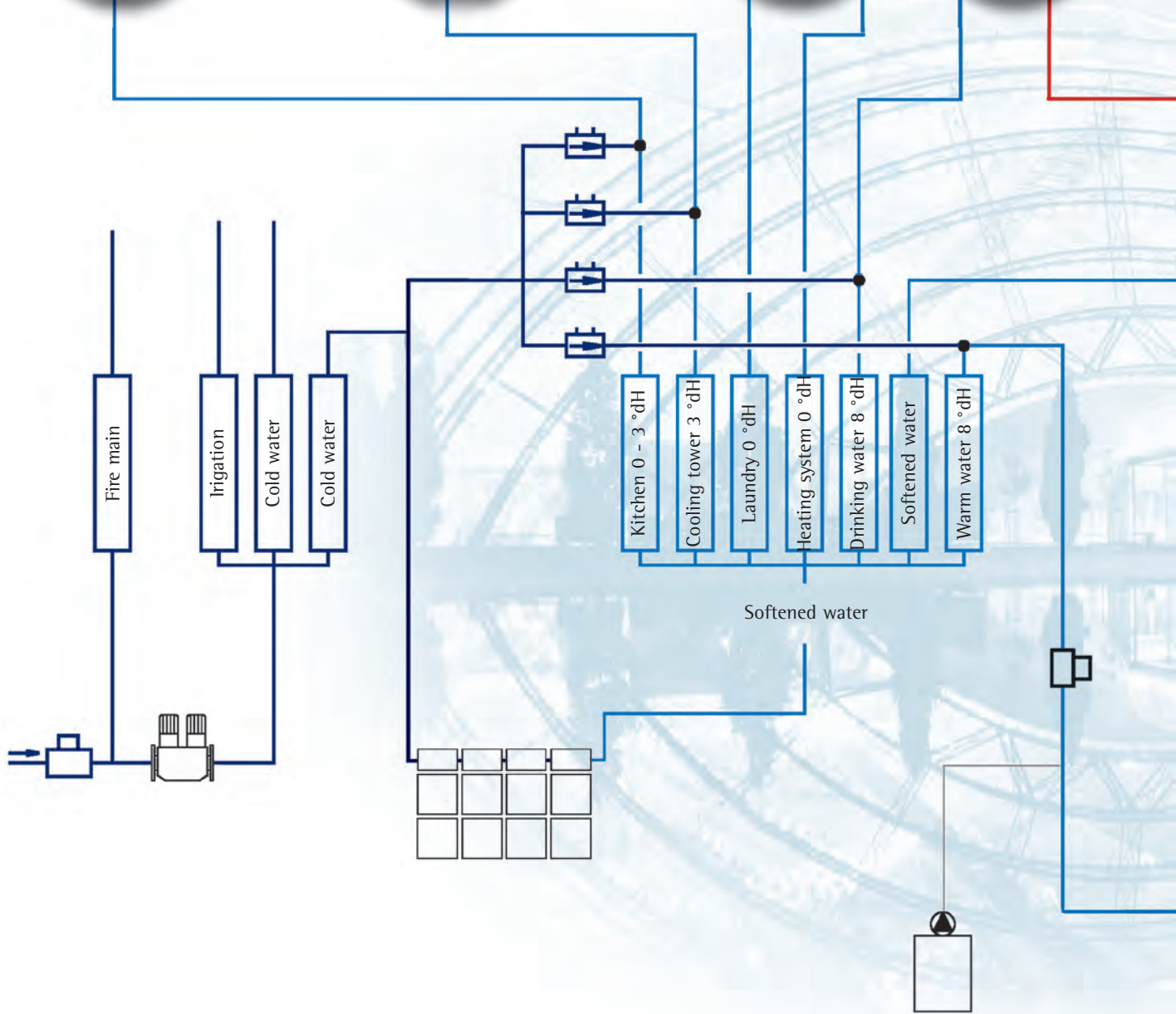
Cooling tower



Laundry



Bath



JUDO Backwash-Protective-Filter

JUDO CONTISOFT Softening Unit

JUDO Dosing Pump Unit



Our general terms for sale and delivery are valid. Prices without added-value tax.

Laboratory



Dish washer



Trick fountains



Air conditioning



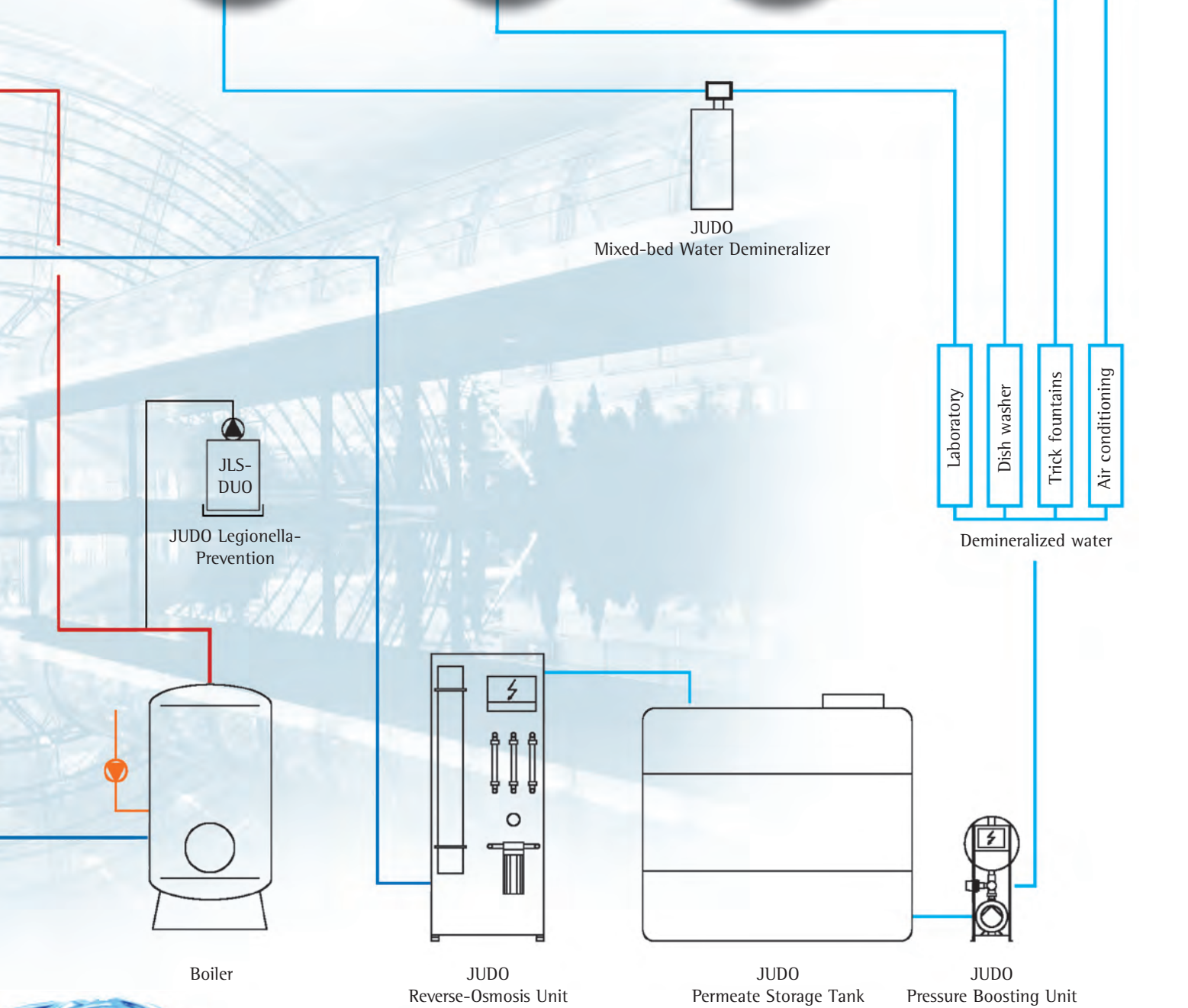
R&D



Car wash plant



Steam boiler



Our general terms for sale and delivery are valid.
Prices without added-value tax.



PERFECT TECHNOLOGY MAKES THE DIFFERENCE



Sea water desalination 500 m³/day



Reverse-osmosis



Water works 5.000 m³/day



Purification of surface water



Reverse-osmosis 3.000 m³/day



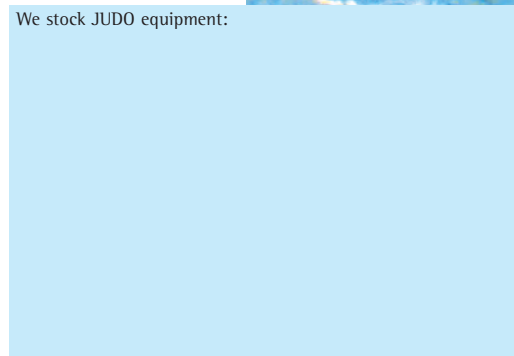
Decarbonization and softening by ion-exchange



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E-Mail: info@judo.eu · www.judo.eu

* 14 Cent/min. aus dem dt. Festnetz/Mobilfunk abweichend

We stock JUDO equipment:



We reserve the right to make technical changes.