

Rack conveyor dishwasher

■ WD-151E/421E



Wexiödisk 

BECAUSE WE DO CARE



Our history – cleaning up!

Wexiödisk started up in 1972

Wexiödisk is a Swedish company founded in 1972, which ever since it opened for business has focused on offering the institutional catering sector the very best in dishwashers. The extraordinarily high quality and new innovations soon meant successful sales results, even outside Sweden.

Quality

The ambition for all our customers to be satisfied has been our ethos right from the very beginning. So we have focused on being able to provide reliable machines with low operating costs and a good working environment rather than a low purchase price, i.e. an early focus on Life Cycle Cost. Excellent cleaning results have always been seen as a matter of course.

Partners

We have selected our partners for the distribution, sales and service of our products with great care. We are in close contact with them, provide product support and training and ensure that we meet the customer's expectations together. Today Wexiödisk is the market leader in Scandinavia with a distribution network covering not only Europe but also, for example, Japan and Australia. In recent years Wexiödisk has also won several prestigious contracts within flight catering, which is a customer group with extremely high requirements.

Products

We will continue to invest significantly in product development in order to maintain and develop customer value via a technologically advanced and competitive range of products. To assist us we have well-trained staff and hi-tech facilities. A complete production line, from plate-working to trial runs and equipped with automatic workshop machinery and robots, ensures top quality and availability.

Thinking about the environment

Dishwashers consume large amounts of energy, water and chemicals. So in recent years, Wexiödisk has concentrated more on the environment, which has led to the development of several new and unique products. ICS+ and DUPLUS are the names of two patented principles that exceptionally reduced environmental impact and considerably lower operating costs.

Everyday life

Wexiödisk is based in Växjö in the south of Sweden. We have a working space of approx. 11,000 m² at our disposal and we have about 175 people working for us.

Our ambition

Every installation must result in a good reference!



■ One of the most efficient rack conveyor dishwashers on the market

- **User-friendly**
 - Ergonomically designed to provide a good working environment
- **Low operating costs and a reduced environmental impact**
 - Low water and energy consumption. Only 1.8 litres of rinsing water per basket, regardless of whether or not the machine is operating at full capacity
- **Excellent wash results**
 - Long washing zones with powerful pumps
- **Monitoring system that provides information about the machine's various functions**
 - Control panel which displays all the necessary information in text form
- **Long service life and easy servicing**
 - Made entirely of stainless steel, easy access for servicing



User-friendly

During the development of the machines, the emphasis is on ergonomics and ensuring a good working environment. Large, easily opened doors make the inside of the machine easy to access and the washing arms are straightforward to clean. The efficient filters in the washing zones are simple to remove for cleaning. Effective sound and heat isolation helps to provide a good working environment in the dishwashing room. The dishwasher's automatic start/stop function is controlled by the baskets fed into the machine.

Flexible feed rate

By selecting manual operation on the control panel, the operator can specify the contact time for every basket. Each basket remains in the chemical washing zone until the next basket enters the zone.

Reduced use of rinsing water

The majority of rack conveyor dishwashers have at least two programmes or speeds, one slow and one fast. When operating at the slow speed, the dishwasher can use up to double the amount of energy, water and chemicals. Wexiödisk's rack conveyor dishwashers have a flexible feed rate and use only 1.8 litres of rinsing water per basket, regardless of whether or not the machine is operating at full capacity.

High levels of hygiene with the HACCP function

Using the HACCP (Hazard Analysis Critical Control Point) system it is possible to designate a number of critical control points for monitoring from a hygiene perspective. The critical control points form part of the machine's control and alarm system for temperature and water flow, which can be displayed on the control panel.

Comprehensive range of accessories

A selection of accessories is available for our rack conveyor dishwashers to meet every customer's needs. These include:

- Pre-wash zone
- WD-PRM60/90 pre-wash machine
- Different drying zone options
- A web tool with HACCP documentation
- Roller tables for the loading and unloading sides of the dishwasher

"The display on the control panel shows easy-to-understand information in text form"





The water is sprayed from above and below, effectively covering the whole basket. The large washing compartment is easy to clean.



The dishwashers have large, efficient filters and filter baskets that are easy to access. The large filter baskets do not need to be emptied very often.



The doors can be removed with one simple movement, which makes cleaning easier.



The dishwasher's high ground clearance makes it easy to keep the floor clean. The drain pipe is located in the dishwasher's frame, which also helps with floor cleaning.



The most efficient heat recovery system on the market which is also easy to clean. Regular cleaning will ensure high levels of heat recovery now and in the future.



All the water connections are on top of the dishwasher, which means that it has a smooth back panel. Since all the servicing work can be done from the front, the machine can be positioned right up against a wall, which frees up vital space in the dishwashing room.



A double final rinse is standard on all machines, which keeps water consumption to a minimum.



All the tanks can be emptied by pressing a lever. The bottom seals and level pipes are closed automatically when the machine is about to fill.



Self-emptying pumps in the washing and rinsing zones improve hygiene levels.



Identical washing arms. All the washing arms in the machine are the same and, therefore, they cannot be mixed up. The clip on the side makes it easy to remove each arm for cleaning.



Detergent dispensing system. The dishwasher has the necessary fittings for a detergent and drying agent dispenser.



The electrical system is easy to service. The electric cabinet is located at a comfortable working height and all the components are clearly labelled. The system is carefully designed with a logical layout.

"The flexible feed rate allows the operator to choose the contact time for each basket, depending on how dirty the dishes are. The direction of the jets of water constantly changes to produce perfect cleaning results"



Models

Pre-wash without intermediate rinse 1

In the pre-wash, the dishes are sprayed with a weak solution of detergent and water at a temperature of 40°C. Surplus water from the final rinse and chemical wash is reused in this zone.

Pre-wash with intermediate rinse 2

Pre-wash zone with intermediate rinse that rinses off the dirty washing water from the dishes before the baskets leave the zone. As a result, the water used in the chemical wash does not become as dirty. Therefore, the dishwasher can be operated for a longer period without changing the water in the chemical wash tank. This reduces the amount of water and detergent used.

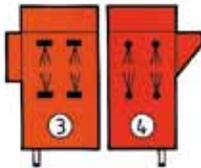
Chemical wash 3

During the chemical wash, the dishes are washed with water at a temperature of 60°C. The water must be above 50°C to dissolve grease effectively and detergent works best at around 60°C.

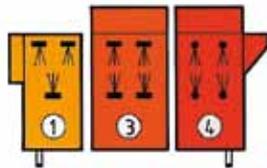
Double final rinse 4

The double final rinse gives the best possible rinse results and also reduces the amount of water used in the final rinse. Dishes are first rinsed with recycled water and then with fresh water at a temperature of 85°C. Around 25% of the surplus water from the zone is reused in the chemical wash tank. The remaining 75% goes to the pre-wash (WD-211E) and to the intermediate rinse (WD-241E-421E).

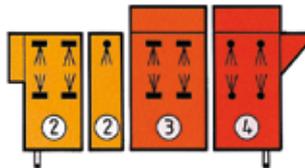
WD-151E



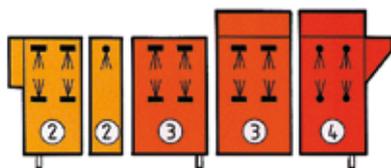
WD-211E



WD-241E



WD-331E



WD-421E



Zone	Zone length in mm
WD-151E	
Loading hood	170
3 Chemical wash	900
4 Double final rinse	585
Total length	1655 *
WD-211E	
Loading hood	170
1 Pre-wash without intermediate rinse	600
3 Chemical wash	900
4 Double final rinse	585
Total length	2255 *
WD-241E	
Loading hood	170
2 Pre-wash with intermediate rinse	900
3 Chemical wash	900
4 Double final rinse	585
Total length	2555 *
WD-331E	
Loading hood	170
2 Pre-wash with intermediate rinse	900
3 Chemical wash	1800
4 Double final rinse	585
Total length	3455 *
WD-421E	
Loading hood	170
2 Pre-wash with intermediate rinse	900
3 Chemical wash	2700
4 Double final rinse	585
Total length	4355 *

* Installation dimensions at bench height. The steam hood over the unloading area adds a further 280 mm. (see the dimension drawing)

Insulation reduces noise levels

Wexiödisk's rack conveyor dishwashers are made entirely of stainless steel. They come with heat and noise insulation as standard. The dishwashers are designed with double steel panels and to reduce noise levels even further, all the panels are fitted with noise insulating material.

Heat recovery system

The hot, water-saturated air (11) produced by the machine is sucked through the condensing battery (8) where its energy is transferred to the incoming cold water (6). The cooled air is then blown out into the room (5).

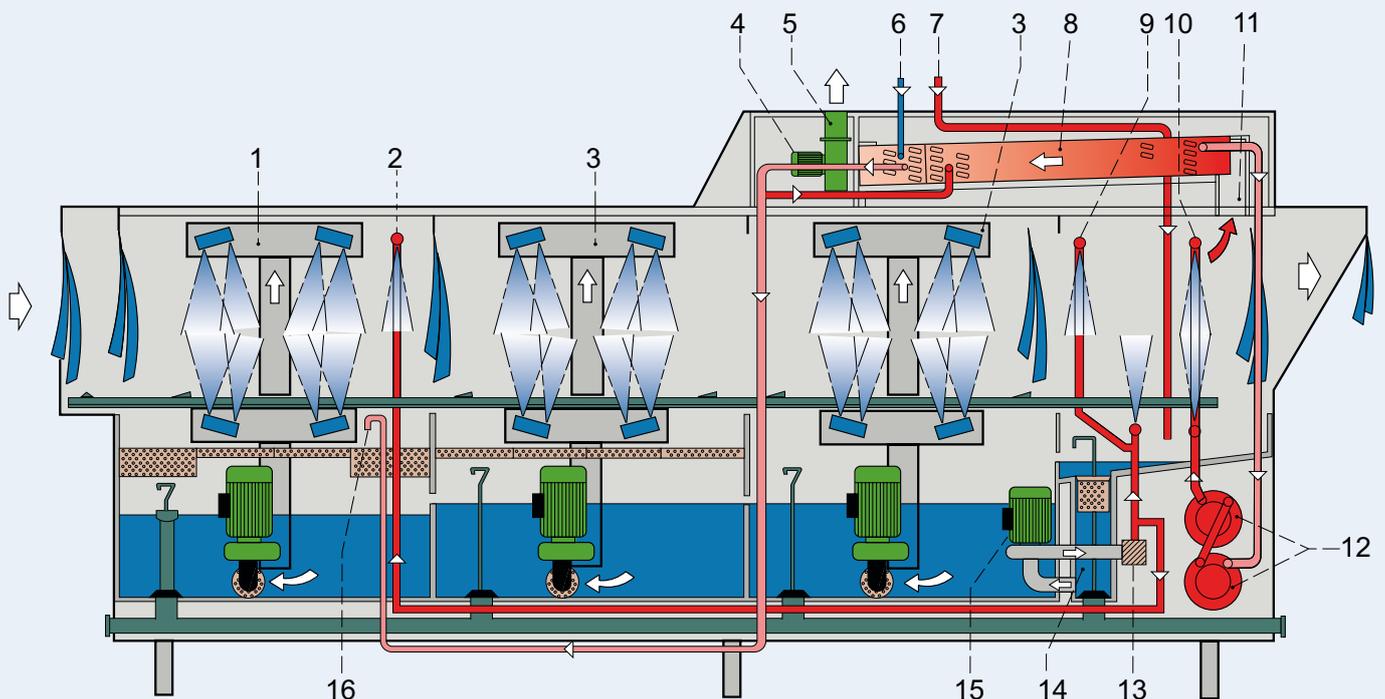
The incoming cold water is heated to around 50°C in the condensing battery. The water then flows through the two booster heaters (12) which raise its temperature to around 85°C. After this, it is used in the final rinse (10).

The hot water from the final rinse (10) is collected in a tank (14). The pump (15) pumps some of the water to the recirculating final rinse (9) and some to the intermediate rinse (2).

Results

Approximately 19kW of energy is recovered.

The dishwasher does not need a ventilation connection.

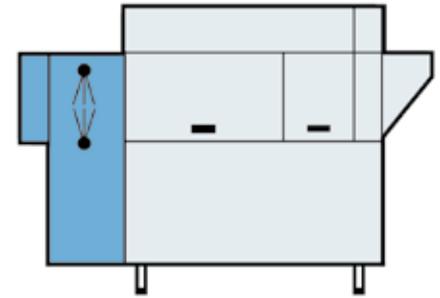


- | | |
|----------------------------------|---------------------------------------------------------------|
| 1. Wash ramp, pre-wash zone | 9. Rinse ramp for recirculating final rinse |
| 2. Intermediate rinse ramp | 10. Final rinse ramp |
| 3. Wash ramp, chemical wash zone | 11. Air intake to condensing battery |
| 4. Condensing fan | 12. Booster heater |
| 5. Exhaust from condensing fan | 13. Filter for recirculating final rinse |
| 6. Cold water | 14. Tank for recirculating final rinse |
| 7. Hot water | 15. Pump for recirculating final rinse and intermediate rinse |
| 8. Condensing battery | 16. Cold water for cooling pre-wash zone |

Pre-wash and drying zones

Pre-wash zone

If a pre-wash zone is connected to the dishwasher, no more manual washing of dishes is needed. The pre-wash zone saves both water and effort. In the pre-wash zone designed for use with the WD-151E, the dirty items are first sprayed with cold water from above and below and then with recirculated final rinse water from below. A pre-wash zone that reuses the pre-wash water is available for the WD-211E-421E dishwashers. The filter drawer is pulled out from the front and can be emptied without stopping the dishwasher.



Pre-wash zone

Pre-wash zone* WD-211E-421E	Part no.	Zone length mm
Loading direction R-L	3-4030SH	400
Loading direction L-R	3-4030SV	400

* For part no. for WD-151E, see price list

Drying zones

Our dishwashers can be equipped with T60, T80, T60F or T120 drying zones. A powerful fan blows warm air over the washed items. The drying zones are primarily for use with items such as plastic trays which do not accumulate large amounts of heat. The distribution regulator on the fan targets the warm air effectively to keep energy costs low. Part of the energy is used by a condensing battery which heats up the incoming cold water. The T60, T80 and T60F have a heat output of 3 kW, while the figure for the T120 is 2x3 kW. The T80 is intended for use with dishwashers which have a motor-powered turn track.



Drying zone WD-T60



Drying zone hood WD-T80 for turn track



Drying zone WD-T120



Drying zone hood WD-T60F, free-standing

Part	Part no. R-L	Part no. L-R	Power (kW)	Main fuse 400V 3N~(A)	Installed length (mm)
Drying zone WD-T60 + WD-151E	3-4021H + 3-0151H	3-4021V + 3-0151V	35,9	63	600 + 1655
Drying zone WD-T60 + WD-211E	3-4021H + 3-0211H	3-4021V + 3-0211V	43,4	80	600 + 2255
Drying zone WD-T60 + WD-241E	3-4021H + 3-0241H	3-4021V + 3-0241V	43,4	80	600 + 2555
Drying zone WD-T60 + WD-311E	3-4021H + 3-0311H	3-4021V + 3-0311V	50,9	80	600 + 3455
Drying zone WD-T60 + WD-421E	3-4021H + 3-0421H	3-4021V + 3-0421V	61,4	100	600 + 4355
Drying zone WD-T120 + WD-151E	3-4027H + 3-0151H	3-4027V + 3-0151V	39,2	63	1200 + 1655
Drying zone WD-T120 + WD-211E	3-4027H + 3-0211H	3-4027V + 3-0211V	46,7	80	1200 + 2255
Drying zone WD-T120 + WD-241E	3-4027H + 3-0241H	3-4027V + 3-0241V	46,7	80	1200 + 2555
Drying zone WD-T120 + WD-311E	3-4027H + 3-0311H	3-4027V + 3-0311V	54,2	80	1200 + 3455
Drying zone WD-T120 + WD-421E	3-4027H + 3-0421H	3-4027V + 3-0421V	64,7	100	1200 + 4355
Drying zone hood WD-T80 for turn track + WD-151E	3-4023H + 3-0151H	3-4023V + 3-0151V	35,9	63	820 + 1655
Drying zone hood WD-T80 for turn track + WD-211E	3-4023H + 3-0211H	3-4023V + 3-0211V	43,4	80	820 + 2255
Drying zone hood WD-T80 for turn track + WD-241E	3-4023H + 3-0241H	3-4023V + 3-0241V	43,4	80	820 + 2555
Drying zone hood WD-T80 for turn track + WD-311E	3-4023H + 3-0311H	3-4023V + 3-0311V	50,9	80	820 + 3455
Drying zone hood WD-T80 for turn track + WD-421E	3-4023H + 3-0421H	3-4023V + 3-0421V	61,4	100	820 + 4355
Drying zone hood WD-T60F free-standing + WD-151E	3-4025H + 3-0151H	3-4025V + 3-0151V	35,9	63	600
Drying zone hood WD-T60F free-standing + WD-211E	3-4025H + 3-0211H	3-4025V + 3-0211V	43,4	80	600
Drying zone hood WD-T60F free-standing + WD-241E	3-4025H + 3-0241H	3-4025V + 3-0241V	43,4	80	600
Drying zone hood WD-T60F free-standing + WD-311E	3-4025H + 3-0311H	3-4025V + 3-0311V	50,9	80	600
Drying zone hood WD-T60F free-standing + WD-421E	3-4025H + 3-0421H	3-4025V + 3-0421V	61,4	100	600

Accessories

Corner loading unit

The corner loading unit is ideal for loading dishwashers in smaller spaces. It is connected to the machine's feeder and does not require an extra motor. Corner loading units are available for both right and left-loading machines. The frame is made from stainless steel and fitted with adjustable feet. Standard length 630 mm. Special lengths 630 - 2785 mm.



WD-C 90/180

90° or 180° motor-powered turn track

Motor-powered turn track made entirely from stainless steel. Frame made from 30x30 mm square stainless steel tubing with adjustable feet. Suitable for all 50x50 cm washing baskets. The baskets are loaded using a plastic drive chain. Equipped with an emergency stop. The turn track is connected to the machine's unloading side, either directly to the machine or to a straight section placed between the machine and the track. The turn track can also be placed on the loading side.

WD-BF 90/180

90° or 180° bar-fed turn track

The turn track is made from stainless steel and fitted with plastic stopper hooks. It is driven by the machine's feeder via a feeder bar. No additional motor is needed. The frame is made from square tubing and fitted with adjustable plastic feet. The turn track is connected to the machine's unloading side, either directly to the machine or to a straight section placed between the machine and the track.

Turn track length: 780 mm

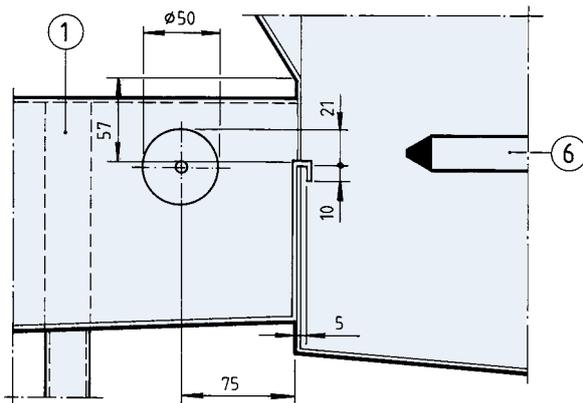
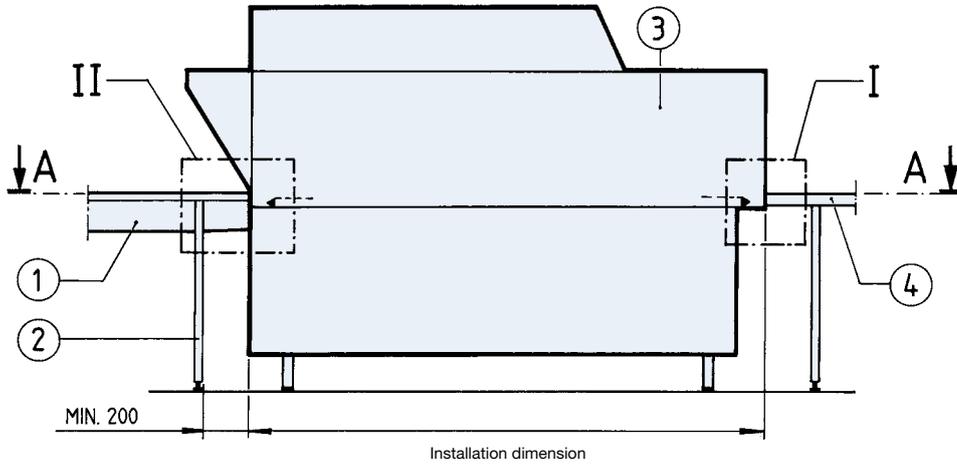
Straight section length: 260 - 2750 mm



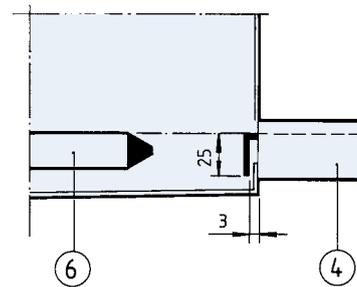
Roller table

The roller table is designed to be connected directly to a dishwasher or a turn track. The table is made entirely of stainless steel and has a frame made of sturdy square tubing. It has a sloping base and a drain connection which can be connected to the floor drain or the turn track. The baskets are moved on durable plastic rollers with robust bearings. The table is available in a fixed version or a pivoting version with locking castors. It can also be fitted with different types of shelves and, if necessary, a limit switch. For more information on lengths and designs, see the price list.

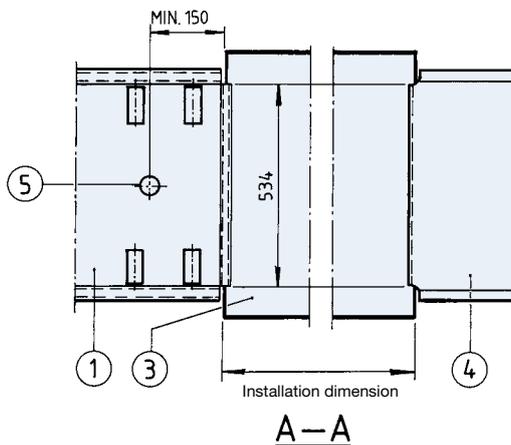
■ Connection to roller table or bench



Connection to roller table (II)



Connection to bench (I)

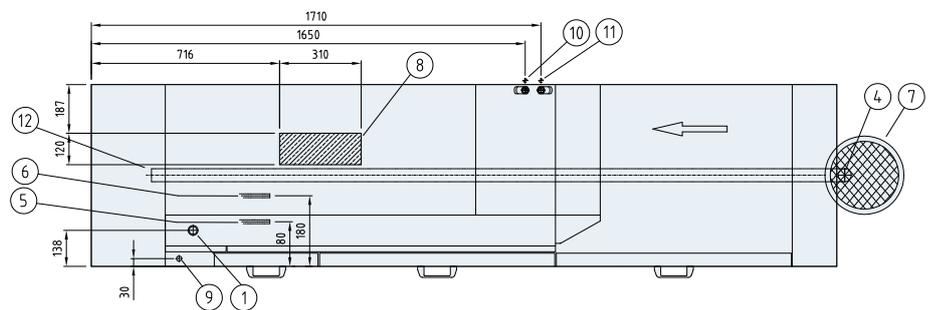
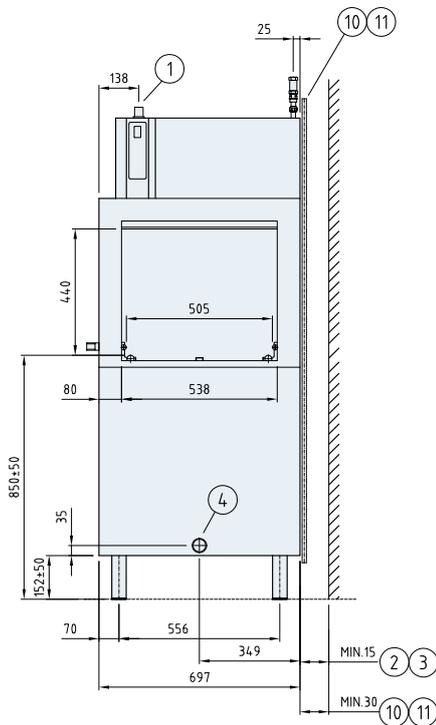
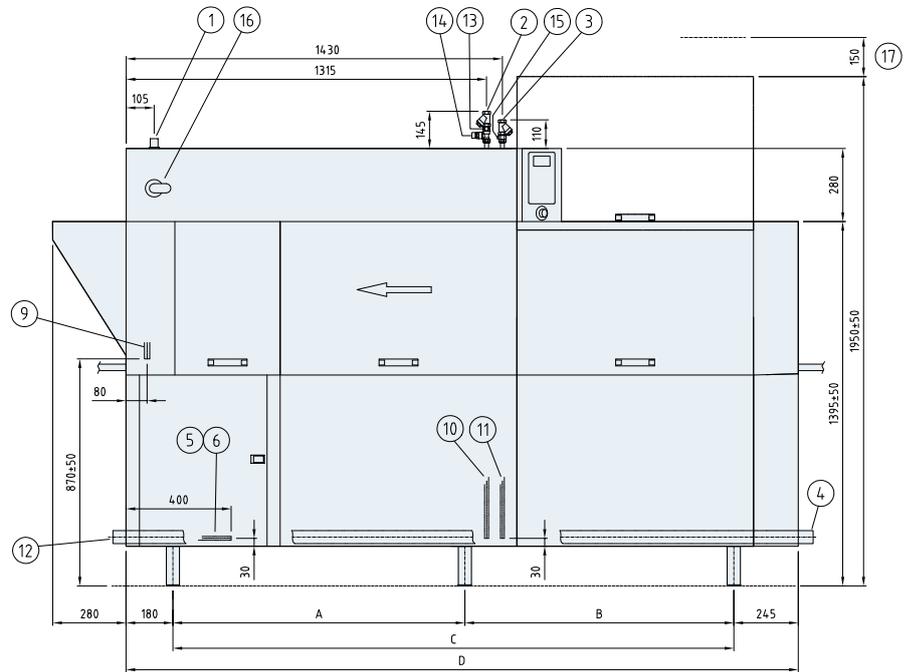


- 1. Roller table
- 2. Leg
- 3. Dishwasher
- 4. Bench
- 5. Drain
- 6. Loading cradle

Dimension drawings

Rack conveyor dishwasher

1. Electrical connection
2. Cold water connection/filter
3. Hot water connection/filter
4. Drain connection
5. Steam connection
6. Condensation connection
7. Floor drain
8. Exhaust steam, condensing battery
9. Alternative electrical connection
10. Alternative cold water connection
11. Alternative hot water connection
12. Alternative drain connection
13. Non-return valve
14. Vacuum valve
15. Water outlet for detergent dispenser
16. Main switch
17. Servicing area



Dimension table

	WD-151E	WD-211E	WD-241E	WD-331E	WD-421E
A	--	--	--	1360	2260
B	--	--	--	1670	1670
C	1230	1830	2130	3030	3930
D*	1655	2255	2555	3455	4355

* Installation dimensions at bench height

Technical data for WD-151E/421E

Capacity and operating data	WD-151E	WD-211E	WD-241E	WD-331E	WD-421E
Capacity normal wash (baskets/h)	70-150*	100-200*	110-210*	150-230*	150-230*
Capacity according to DIN 10510 (baskets/h)	80	120	140	190	245
Cold water consumption, final rinse normal (litres/basket)	1.8	1.8	1.8	1.8	1.8
Energy consumption (% of connected power)	70-90%	70-90%	70-90%	70-90%	70-90%
Steam consumption** (kg/h)	50	60	60	70	75
Environmental temperature at 20°C room temperature (°C)	35	35	35	35	35
Sound level*** (dB(A))	68	68	68	68	68

* Maximum capacity 240 baskets/h.

** For steam-heated dishwasher

*** Measured 1 metre from the side of the machine

Technical data	WD-151E	WD-211E	WD-241E	WD-331E	WD-421E
Pump, pre-wash (kW)	-	1.5	1.5	1.5	1.5
Pump, chemical wash 1 (kW)	1.5	1.5	1.5	1.5	1.5
Pump, chemical wash 2 (kW)	-	-	-	1.5	1.5
Pump, chemical wash 3 (kW)	-	-	-	-	1.5
Pump, recirculating final rinse (kW)	0.11	0.11	0.11	0.11	0.11
Fan, heat recovery (kW)	0.12	0.12	0.12	0.12	0.12
Motor, feeder (kW)	0.12	0.12	0.12	0.12	0.12
Booster heater 1 (kW)	9	12	12	12	12
Booster heater 2 (kW)	9	12	12	12	12
Heater, chemical wash 1 (kW)	12	12	12	9	9
Heater, chemical wash 2 (kW)	-	-	-	9	9
Heater, chemical wash 3 (kW)	-	-	-	-	9
Heat recovery unit, cooling area (m ²)	25	25	25	25	25
Fan heat recovery, capacity (m ³ /h)	100	100	100	100	100
Tank volume, pre-wash tank (litres)	-	51	77	77	77
Tank volume, wash tank 1 (litres)	100	100	100	100	100
Tank volume, wash tank 2 (litres)	-	-	-	100	100
Tank volume, wash tank 3 (litres)	-	-	-	-	100
Tank volume, final rinse tank (litres)	6	6	6	6	6
Weight, dishwasher in operation (kg)	490	625	655	900	1020
Degree of protection (IP)	55	55	55	55	55

Connection, electrically heated dishwasher	WD-151E	WD-211E	WD-241E	WD-331E	WD-421E
Total connected power (kW)	32.6	40.1	40.1	47.6	58.1
Main fuse 400V 3N~(A)*	50	63	63	80	100
Max. connection area 400V 3N~(L1-L3, N, PE) Cu (mm ²)	35	35	35	35	35

* Other voltages on request

Connection, steam-heated dishwasher 150-250 kPa*	WD-151E	WD-211E	WD-241E	WD-331E	WD-421E
Total connected power (kW)	1.85	3.4	3.4	4.85	6.0
Main fuse 400V 3N~(A)	16	20	20	20	20
Max. connection area 400V 3N~(L1-L3, N, PE) Cu (mm ²)	25	25	25	25	25
Steam connection (internal thread)	R ¾"	R ¾"	R ¾"	R 1"	R 1"
Condensation connection (internal thread)	R ½"				

* Other pressures on request.

Connection, water, drain and ventilation	WD-151E	WD-211E	WD-241E	WD-331E	WD-421E
Water quality, hardness (°dH)	2-7	2-7	2-7	2-7	2-7
Hot water connection 50-70°C (internal thread)	R ½"				
Cold water connection 5-12°C (internal thread)	R ½"				
Drain connection, PP pipe (ø mm)	50	50	50	50	50
Water capacity, pressure (kPa)	250-600	250-600	250-600	250-600	250-600
Water capacity, flow (litres/min)	11	11	11	11	11
Floor drain, capacity (litres/sec)	3	3	3	3	3
Ventilation, dishwasher (m³/h)	1000	1200	1200	1400	1600

Size and weight for transport, standard dishwasher*	WD-151E	WD-211E	WD-241E	WD-331E	WD-421E
Size** (LxWxH (m))	2.1x0.8x2.0	2.7x0.8x2.0	3.0x0.8x2.0	3.9x0.8x2.0	4.8x0.8x2.0
Weight** (kg)	400	510	550	680	790

* Normal delivery in 1 piece, If necessary the machine can be further dismantled

** Packaging included

Accessories	Part no.	Length mm	Width mm	Height mm	Connection
WD-C 90, motor-powered turn track 90° R-L	3-4556H	780	780	870 +/- 25 mm	230/400V, 3N~ 50Hz, 0.12kW
WD-C 90, motor-powered turn track 90° L-R	3-4556V	780	780	870 +/- 25 mm	230/400V, 3N~ 50Hz, 0.12kW
WD-C 180, motor-powered turn track 180° R-L	3-4556H	780	1320	870 +/- 25 mm	230/400V, 3N~ 50Hz, 0.12kW
WD-C 180, motor-powered turn track 180° L-R	3-4557V	780	1320	870 +/- 25 mm	230/400V, 3N~ 50Hz, 0.12kW

BECAUSE WE DO CARE

Telephone: +46 470 77 12 00
Fax: +46 470 237 52
Address: Mårdvägen 4
SE-352 45 Växjö
SWEDEN
E-mail: wexiodisk@wexiodisk.com

Wexiödisk 

www.wexiodisk.com