

# Reverse Osmosis Units

## Type *Excel*



AquaCare GmbH & Co. KG  
Am Wiesenbusch 11 • D-45966 Gladbeck • Germany  
☎ 0 20 43 - 37 57 58-0 • 📠 0 20 43 - 37 57 58-90  
www.aquacare.de • info@aquacare.de

All reverse osmosis units type *Excel* of AquaCare are equipped with a mounting plate, that contains all parts. A 10'' combi filter (5 µm sediment filter and activated carbon) in a white housing (option: clear housing) eliminates all particles and oxidizing substances like chlorine and ozone. The reverse osmosis module is equipped with a low pressure high quality TFC membrane and a flushing valve to ensure best quality. Scope of delivery: 5 m PE pressure tube, tap water connector 3/4'', wrench for filter and membrane housing, mounting material, detailed instruction manual.



reverse osmosis unit *Excel*  
with clear housing and pressure gauge  
(modifications possible)

### The advantage of reverse osmosis

- Reverse osmosis is an efficient membrane filtration technique which reliably removes hardness and detrimental substances such as nitrate, silicic acid, pesticides and traces of pharmaceuticals from drinking water and effectively retains bacteria, viruses, algae, protozoa and radioactive particles.
- Easy to operate: no addition of chemicals – no electrical supply (standard types)

### The advantage of an AquaCare reverse osmosis unit at a glance

- The units are equipped with an combi filter to remove chlorine and sediments to protect the reverse osmosis membrane.
- Only the best quality polyamide / polysulfone membranes (TFC) are used: rejection 95-98%\*; 90 to 1000 liters of pure water per day\*; realistic concentrate / pure water ratio of 3:1; special types with 1:1 (50% recovery)
- The built-in flushing system considerably increases the life of the membrane.
- All tube connections with reliable and efficient AquaCare push-fit connections; complete installation material for easy assembly
- *Excel* units can be supplied with a lot of equipment.
- Made in Germany.

# Reverse Osmosis Units

## Type *Excel* 1:1

### Reverse Osmosis Units with 1:1 Technique

The *Excel* series 1:1 are reverse osmosis systems on a white mounting plate similar to the basic model of *Excel*. An additional low-voltage-pressure pump is mounted, which enables a concentrate recirculation. Therefore AquaCare is able to implement small systems with a concentrate-permeate-water ratio of 1:1 (50% recovery). A run-dry protection (at less than 1 bar) saves the booster pump against running-dry. The 1:1 systems is expandable with a reverse osmosis control (No. 600-005) and a conductivity measurement (610-010).



Reverse Osmosis Unit *Excel* 1:1 (modifications possible)

### Technical Data of *Excel* and *Excel* 1:1

	<i>Excel 90</i>	<i>Excel 240</i>	<i>Excel 660</i>	<i>Excel 180 1:1</i>	<i>Excel 360 1:1</i>	<i>Excel 1000 1:1</i>
Order number	101-009	101-024	101-060	105-018	105-036	105-100
Daily flow in l/d*	90	240	660	180	360	1000
Extendable	yes		no	no		
Feed pressure	3...8 bar			1...6 bar		
Booster pump	no			yes		
Typical operation pres.	3...8 bar (see feed pressure)			approx. 8 bar		
Rejection	95-98%					
Pre-filtration	10“ pre-filter with 5 µm sediment filter and activated carbon					
Life time pre-filters	approx. 6...12 months					
Membrane type	Low pressure spiral wound (TFC) membrane of polyamide-polysulfone					
Membrane size	1812-36	1812-100	2012-300	1812-50	2012-100	2812-300
Flushing system	manually (automatically on request)					
Water production	manually (automatically on request)					
Ratio concentrate-permeate, approx.	3:1 fixed			1:1 fixed		
Recovery, approx.	25%			50%		
max. feed hardness	20°dH			15°dH		
Weight	3.9 kg		4.8 kg	6.9 kg		
Dimensions: B×H×T	41 × 41 × 15 cm					
Electrical connection	-			230 V 50/60 Hz		
Electrical power	-			30 W		120 W

\*permeate flow ±15% at 4 bar feed pressure, 15°C and 500 mg/l total dissolved solids (TDS)

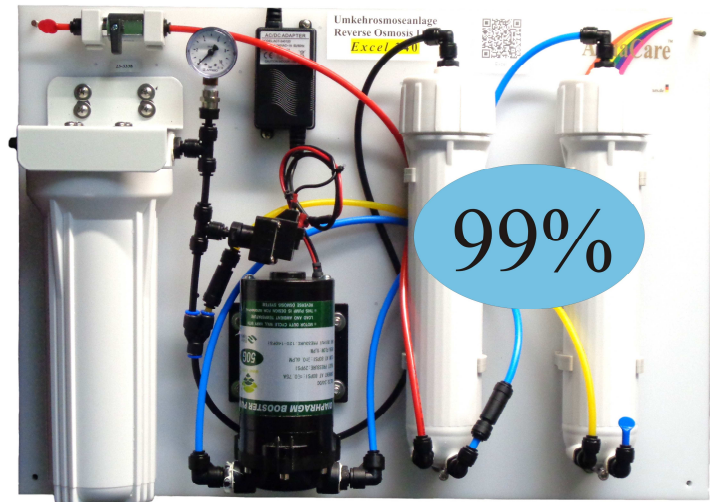
# Reverse Osmosis Units

## Type *Excel* 99%

### Reverse Osmosis Units with 99% rejection

The double-stage *Excel* series produces water with extremely low electrical conductivity. Even substances that are difficult to remove, such as silicic acid, are eliminated considerably better than with other *Excel* models. The extreme retention rate of 99% makes it possible to work without a silicic acid filter (ultrapure water filter) if the input concentrations are not too high. At very high concentrations, a downstream ultrapure water filter lasts approx. 4 times longer than with a single-stage reverse osmosis system.

The 99% systems can also be equipped with a reverse osmosis controller (order number 600-005) and a conductivity meter (610-010).



Reverse Osmosis Unit *Excel* 99% (modifications possible)

### Technische Daten der Modelle *Excel* 99%

	Excel 160 99%	Excel 480 99%
Order number	101-216	101-248
Daily flow in l/d*	160	480
Hourly flow in l/h*	7	20
Extendable	no	
Feed pressure	3...8 bar	3...6 bar
Booster pump	yes	
Rejection	99%	
Pre-filtration	10" pre-filter with 5 µm sediment filter and activated carbon	
Life time pre-filters	approx. 6...12 months	
Membrane type	Low pressure spiral wound (TFC) membrane of polyamide-polysulfone	
Membrane size	1812-100 + 1812-75	2812-300 + 1812-100
Flushing system	manually (automatically on request)	
Water production	manually (automatically on request)	
Ratio concentrate-permeate, approx.	3:1 fixed	
Recovery, approx.	25%	
max. feed hardness	20°dH	
Weight	8 kg	10 kg
Dimensions: B×H×T	41 × 58 × 15 cm	
Electrical connection	230 V 50/60 Hz	
Electrical power	30 VA	120 VA

\*Permeatleistung ±15% bei 4 bar Wasserdruck, 15°C und 500 mg/l Salzgehalt