

# Reverse Osmosis System

## The WERNER reverse osmosis systems for all demands

Newest technologies integrated in design – the WERNER reverse osmosis system

The compact units with two or three purification steps produce economically demineralized water direct from tap water without any pretreatment for all lab requirements. Systems with flow rates from 3 up to 90 l/h are able to cover demands up to 2000 l per day. The demineralized water is suitable for nearly all lab requirements as dishwashers, autoclaves, glass cleaning, simple analytics or pretreatment for ultra pure water systems.

Beside the integrated pre filter (3 µm absolut) and high efficient TFC membranes a third purification step can be integrated:

- Post demineralization with Aquadem® cartridges
- Electrodeionization with EDI systems

Using this technologies the purified water quality will be highly increased by dramatical reduced running costs even for higher demands of pure water.

## Reverse osmosis system, the extendable system

As a single, individual extendable system the Werner RO 10...40 can be extended at any time to meet increased pure water demands, e.g. from 200 l to 1000 l/day without any problems.

- Integrated pre filter, automatic flush system and reliable stainless steel pressure vessels
- Optional available as a modul which fits into lab furnitures; control panel for front view
- Two integrated conductivity meters for monitoring the whole system

- Optional available with integrated EDI modul for conductivities down to 0.055 – 0.2 µS/cm (PLUS Systems)
- RS 232 and centronics port allows a system monitoring according to GLP

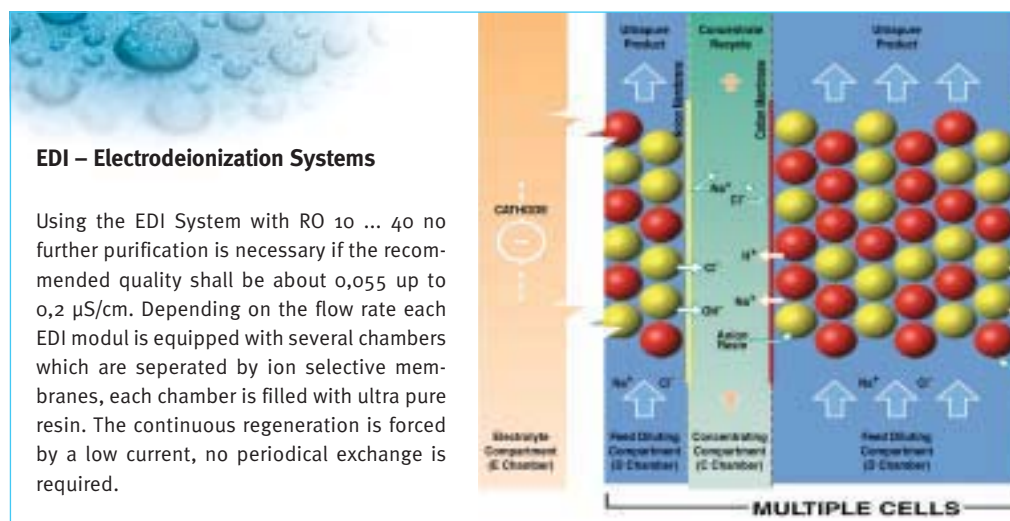


RO 10...40

Technical data	RO 10	RO 20	RO 30	RO 40
Product flow (l/h at 10 °C)	10	20	30	40
Feedwater requirements (l/h)	40	80	100	120
Weight (kg)	30	30	32	32
Feedwater quality	tap water, according to WHO			
Feedwater connection	each tap (3/8" tubing)			
Product/brine connection	8 mm tubing			
Rejection	> 97 % Ions, > 99 % microorganism, pyrogens			
Typ. conductivity RO 10 ... 40	5 – 20 µS/cm			
Typ. conductivity PLUS systems	< 0.2 µS/cm			
Electrical	230 – 240 V, 50 Hz			
Power consumption	300 W			
Dimensions H x W x D (mm)	600 x 500 x 295			
Order no.	1981-001	1981-002	1981-003	1984-004

### Accessories

Base with built-in storage tank, post-deionization cartridges, booster pump, pure water tanks with complete drainage, extension sets for increasing the capacity are all available on request.



### EDI – Electrodeionization Systems

Using the EDI System with RO 10 ... 40 no further purification is necessary if the recommended quality shall be about 0,055 up to 0,2 µS/cm. Depending on the flow rate each EDI modul is equipped with several chambers which are separated by ion selective membranes, each chamber is filled with ultra pure resin. The continuous regeneration is forced by a low current, no periodical exchange is required.

## ReversinO, the comfortable mini system for all minor demands

ReversinO, the compact unit can be installed and start up within half an hour; more installations in the lab are not necessary. The system is the perfect choice for smaller demands and economical production. ReversinO will be direct connected to the tap water, no pretreatment is necessary. The system is equipped with an activated carbon pre filter, flush system and state of the art TFC membranes for long operation time. The integrated post demineralization cartridge ensures a product quality less than 1 µS/cm.



Technical data	ReversinO 3 Plus	ReversinO 6 Plus
Feed water quality	tap water, according to WHO	
Min feed pressure	2 bar	2 bar
Max. feed pressure	8 bar	8 bar
Feedwater requirement	12 l/h	24 l/h
Product flow	2 l/h (2 bar, 10° C) 6 l/h (8 bar, 10° C)	4 l/h (2 bar, 10° C) 12 l/h (8 bar, 10° C)
Typ. conductivity	< 1 µS/cm	< 1 µS/cm
Weight (kg)	11.5	12.0
Electrical	230 – 240 V, 50 Hz	230 – 240 V, 50 Hz
Dimensions H x W x D (mm)	700 x 370 x 250	700 x 370 x 250
Order no.	1981-040	1981-041



## MobilRO, the movable solution for highest product quality

The MobilRO system can be set- and start up within a few minutes – MobilRO offers the complete purification as a compact unit.

- Pre filter 3 µm, activated carbon filter
- Reverse osmosis 30, 60 or 90 l/h (extendable)
- TFC membranes in stainless steel pressure vessels, microprocessor control with RS 232 interface, two conductivity meters
- Storage tank 40 l with sterile vent
- Booster pump 5 l/min at 2 bar
- Aquadem® mixed bed cartridge for post demineralization, UV disinfection at 125 mJ/cm<sup>2</sup> made of stainless steel
- Final filtration 0.2 µm

Technical data	MobilRO 30	MobilRO 60	MobilRO 90
Feed water quality	tap water, according to WHO		
Product flow at 10 °C	30 l/h	60 l/h	90 l/h
Max. product flow	5 l/min		
Product quality	according to ASTM/CAP/NCCLS Type II		
Typ. conductivity	< 0.1 µS/cm		
Bacteria	< 100 cfu/ml		
Particles	< 0.2 µm		
Dimensions H x W x D	1150 x 650 x 605 mm		
Electrical	230 – 240 V, 50 Hz; 400 Watt		
Order no.	1981-030	1981-031	1981-032

