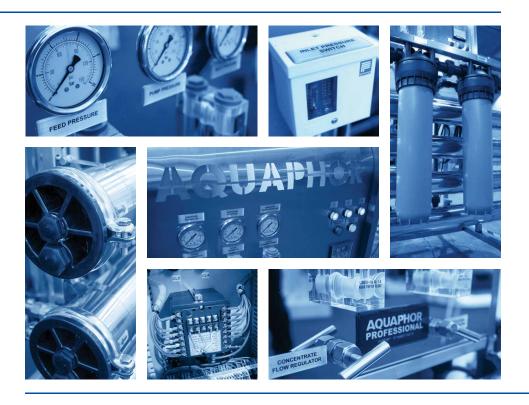
CATALOGUE





Reverse Osmosis

TABLE ON CONTENTS

Aquaphor About Aquaphor	1
Aquaphor APRO FA	3
Aquaphor APRO M	5
Aquaphor APRO LP	7
Aquaphor APRO HP	9
Aquaphor APRO HS	11
Aquaphor APRO HC	13
Aquaphor APRO CT	15
Aquaphor APRO PAP	17
Aquaphor ULTRA	19
Aquaphor Water Softeners A800 and A1000	21
Pre-filters Aquaphor GROSS	23
Containerized Water Purification System	25
Reliable UF-RO Systems for Efficient Industries and Agriculture	26
RO for The Professional-Grade Kitchen	27
Whole Home RO	28

Innovation & Mass Production

AQUAPHOR PROFESSIONAL DESIGNS AND MASS MANUFACTURES HIGH PURITY RO BASED WATER PURIFICATION SYSTEMS.

RO SYSTEMS ARE MANUFACTURED IN THE STATE OF THE ART PRODUCTION FACILITIES.



New state of the art RO assembly lines (2500 m²) were added to the RO production facilities in September, 2017.

AQUAPHOR GROUP

1990	Electrophor Inc. (NY, USA)
1992	Aquaphor (Russia)
2005	Winter Engineering/Aquaphor Professional (Israel)
2006	Zibo Aquaphor (China)
2007	Westaqua-Invest (Estonia)
2013	Aquaphor Poland (Poland)
2016	Aqua Biosan (Romania)

LIST OF CLIENTS

 $\label{eq:starsest} \begin{array}{l} \mbox{Apple}\cdot\mbox{Intel}\cdot\mbox{Ros}\mbox{Israel}\ (30\ \mbox{largest}\ \mbox{hospitals};\ \mbox{whole}\ \mbox{hospital}\ \mbox{water}\ \mbox{purification}\ \mbox{dialysis}\ \mbox{system};\ \mbox{resuscitation}\ \mbox{department}\ \mbox{}\ \mbox{Ros}\ \mbox{Ros}\ \mbox{fit}\ \mbox{Gazprom}\ \ \mbox{KFC}\ \mbox{Siemens}\ \mbox{FC}\ \mbox{Siemens}\ \mbox{FC}\ \mbox{Siemens}\ \mbox{FC}\ \mbox{Siemens}\ \mbox{FC}\ \mbox{Siemens}\ \mbox{FC}\ \mbox{Siemens}\ \mbox{Ros}\ \mbox{Ros}\ \mbox{Ros}\ \mbox{Siemens}\ \mbox{whole}\ \mbox{hospital}\ \mbox{Ros}\ \mb$

TECHNOLOGY

Patents issued: 10 – USA, 10 – China, 75 – Russia, 10 – EU and more

PATENTED

High frequency flushing

- Maximum permeate recovery and high efficiency operated are achieved by using patented high frequency flushing technology.
- High efficiency RO membranes are operated at their respective maximum capacities through their multi-year expected life cycles.
- Pretreatment
- High capacity

Mineralization

• Mg mineralization systems using magnesium corralite and MgO

UF/RO

• Winter Engineering/Aquaphor Professional manufactures UF/RO systems since inception in 2006. There are more than 200 industrial UF/RO systems operated in Israel alone.

High efficiency softeners manufactured by Aquaboss USA (JV Electrophor and Hague, Ohio)

Post & Pre filtration selective fibrous absorber

APRO series > APRO-HP APRO-LP APRO-HS APRO-FA APRO-HC APRO-M APRO-CT APRO-PAP



APRO-FA systems

THE UNIQUE FEATURES OF OUR APRO-FA SYSTEMS ALLOW A CONSISTENTLY PRODUCTION OF HIGH QUALITY WATER WITH FULLY A AUTOMATIC REMOTE CONTROL

We introduce APRO-FA — fully automatic RO product line with Integrated ABB PLC with color touch screen display and remote control kit

Fully automatic system allows to set all the required operating parameters of the reverse osmosis system, including the ratio of permeate to drain. The system automatically starts and operates at the required parameters. After reaching the operating mode, the operating system decides the need of regeneration, and other parameters required for trouble free continuous operation. It is an artificial intelligence control reverse osmosis system.

• Built and assembled in EU



reverse osmosis system APRO-FA-1000

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- Fully automatic operation
- Trouble free operation
- Equipped with an interface that allows remote access
- Automatically maintains the flow, pressure drop
- Auto cleaning
- Improved water quality
- Extended membrane life
- Space saving design
- Quiet operation
- Reduced operational costs

SYSTEM EQUIPMENT

- High rejection TFC GE Membranes
- Multi Stage Stainless steel Grundfos pump
- Stainless steel 316 needle regulation valve, feed valve and connectors
- Stainless steel 316 seamless pressure vessels
- Stainless steel Frame and equipment panel
- Actuated automatic regulation valve (made in Switzerland)
- Fully equipped electric board with pump protection
- Quality monitoring with Stainless conductivity steel probe
- Turbine flow transmitters
- High Pressure Stainless steel 316 seamless piping
- Low Pressure Shutoff
- Double BB Pre-filter

OPTIONAL FEATURES

• Grundfos DDE antiscalant dosing pumps

GRUNDFOS'N

- Supply pumps and storage vessels
- UF pre-treatment
- DI systems
- Nalco antiscalant
- Remote control kit

NALC®







Standart features APRO-FA 250–2000 LPH

MODEL	APRO FA 250	APRO FA 500	APRO FA 750	APRO FA 1000	APRO FA 1500	APRO FA 2000
Permeate Flow, LPH	250	500	750	1000	1500	2000
Membrane Quantity	1	2	3	4	6	8
Max inlet TDS, ppm	4000	4000	4000	4000	4000	4000
Flush Valve	Yes	Yes	Yes	Yes	Yes	Yes

Specification APRO-FA 250–2000 LPH

MODEL	APRO FA 250	APRO FA 500	APRO FA 750	APRO FA 1000	APRO FA 1500	APRO FA 2000
Production of clean water LPH	250	500	750	100	1 500	2 000
Reduction of salt content, %			Up to	99,7%		
System recovery, %		45-85%				
Membrane's type	2 x 4021/ 1 x 4040	2 x 4040	3 x 4040	4 x 4040	6 x 4040	8 x 4040
Power consumption, kWt/h			0.7- 1 kWt/h pe	er 1 m³ permeat		
Power supply	220 V, 50 Hz 380 V,50 Hz			380V , 50Hz		
Dimensions, mm	580/740/1400 590/800/1400	1775 / 1210 / 915 1200 / 860 / 1510				
Net weight, kg	134	210	215	220	225	240
Sizing (inlet, outlet, concentrate)	³ /4"/ ³ /4"/ ³ /4" NPT(PB)	1" / ¾" / ¾" NPT (PB)				

GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination, demineralization, reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

Materials of RO systems are **safety**, **non-toxic** and do not release to the water any dangerous substances to health or the environment.

The RO system is the most efficient and safe installation of desalination.

APRO series
APRO-HP APRO-LP APRO-HS APRO-FA APRO-HC APRO-M APRO-CT APRO-PAP



APRO-M systems

THE UNIQUE FEATURES OF OUR APRO-M SYSTEMS ALLOW A CONSISTENTLY PRODUCTION OF HIGH QUALITY WATER WITH LOW ENERGY CONSUMPTION AND SPACE SAVING

We introduce APRO-M Low energy Brackish Water RO product line

- Equipped with the highest quality components
- Robust construction and easy maintenance
- Modern design and quiet operation
- Built and assembled in EU





reverse osmosis system APRO-M-300

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- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- Reduced operational costs

SYSTEM EQUIPMENT

- Various Product Sizes 150 300 LPH
- Stainless steel Frame and equipment panel
- Multi Stage Stainless steel Grundfos pump
- Low Pressure membranes
- Stainless steel needle regulation valve
- Stainless steel pressure vessels
- Fully equipped electric board with pump protection
- MP controller for quality monitoring with Stainless steel probe
- Stainless steel panel mounted with Glycerinfilled Gauges
- Low Pressure Shutoff
- BB Pre-filter

OPTIONAL FEATURES

• Grundfos DDE antiscalant dosing pumps

GRUNDFOS X

- Supply pumps and storage vessels
- Nalco antiscalant

NALC®



90 cm



Standart features APRO-M 150–300 LPH





MODEL	APRO M 150	APRO M 300
Permeate Flow, LPH	150	300
Membrane Quantity	1	2
Membrane Size, inch	4 x 21	4 x 21
Max inlet TDS, ppm	4 000	4 000

Specification APRO-M 150–300 LPH

MODEL	APRO M 150	APRO M 300			
Production of clean water LPH	150	300			
Reduction of salt content, %	Up t	o 90			
System recovery, %	50 -	- 85			
Membrane's type	1 x 4021	2 x 4021			
Input flow of water at a pressure of 3 bar	0,4 - 0,6	0,8 - 1,1			
Power consumption, Wt	50	00			
Power supply	220V,	50 Hz			
Dimensions, mm	700 x 450 x 900				
Net weight, kg	57	70			
Sizing (inlet, outlet, concentrate)	½"/½" NPTF				

GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination, demineralization, reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

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The RO system is the most efficient and safe installation of desalination.

APRO series APRO-HP APRO-LP APRO-HS APRO-FA APRO-HC APRO-M APRO-CT APRO-PAP



APRO-LP systems

THE UNIQUE FEATURES OF OUR APRO-LP SYSTEMS ALLOW A CONSISTENTLY PRODUCTION OF HIGH QUALITY WATER WITH LOW ENERGY CONSUMPTION

We introduce APRO-LP Extreme Low energy Brackish Water RO product line

- Equipped with the highest quality components
- Robust construction and easy maintenance
- Modern design and quiet operation
- Built and assembled in EU



reverse osmosis system APRO-LP-1000

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- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- Reduced operational costs

SYSTEM EQUIPMENT

- Various Product Sizes 250 2,000 LPH
- Stainless steel Frame and equipment panel
- Multi Stage Stainless steel Grundfos pump
- Extreme Low Pressure GE membranes
- Stainless steel needle regulation valve
- Stainless steel pressure vessels
- Belimo actuated flush valve
- Fully equipped electric board with pump protection
- MP controller for quality monitoring with Stainless steel probe
- Stainless steel panel mounted with Glycerinfilled Gauges
- Low Pressure Shutoff
- Double BB Pre-filter

OPTIONAL FEATURES

- Grundfos DDE antiscalant dosing pumps
- Supply pumps and storage vessels
- Integrated ABB PLC and color touch screen display with remote control kit

GRUNDFOS X

- UF pre-treatment
- Nalco antiscalant

NALC®





Standart features APRO-LP 250–2000 LPH						
MODEL	APRO LP 250	APRO LP 500	APRO LP 750	APRO LP 1000	APRO LP 1500	APRO LP 2000
Permeate Flow, LPH	250	500	750	1 000	1 500	2 000
Membrane Quantity	1	2	3	4	6	8
Membrane Size, inch	4 x 40	4 x 40	4 x 40	4 x 40	4 x 40	4 x 40
Max inlet TDS, ppm	4 000	4 000	4 000	4 000	4 000	4 000
Flush Valve	Yes	Yes	Yes	Yes	Yes	Yes

Specification APRO-LP 250–2000 LPH

MODEL	APRO LP 250	APRO LP 500	APRO LP 750	APRO LP 1000	APRO LP 1500	APRO LP 2000	
Production of clean water LPH	250	500	750	1 000	1 500	2 000	
Reduction of salt content, %	Up to 90						
System recovery, %		50 - 85					
Membrane's type	1 x 4040	2 x 4040	3 x 4040	4 x 4040	6 x 4040	8 x 4040	
Input flow of water at a pressure of 3 bar	0,4 - 0,6	0,8 – 1,1	1,2 – 1,65	1,6 – 2,2	2,4 - 3,3	3,2 - 4,4	
Power consumption, Wt	5	00	6'	70	1200		
Power supply		220V,	50 Hz		380V,	50 Hz	
Dimensions, mm	685 x 1 3	685 x 1 375 x 520		1 260 x 1 390 x 780		770 x 830	
Net weight, kg	57	70	91	101	153	160	
Sizing (inlet, outlet, concentrate)	3/4"/3/4"/3	4" NPTF		1" 3⁄4"/3⁄	4" NPTF		

GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination, demineralization, reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

Materials of RO systems are **safety**, **non-toxic** and do not release to the water any dangerous substances to health or the environment.

The RO system is the most efficient and safe installation of desalination.

APRO series • APRO-HP APRO-LP APRO-HS APRO-FA APRO-HC APRO-M APRO-CT APRO-PAP



APRO-HP systems

THE UNIQUE FEATURES OF OUR APRO-HP SYSTEMS ALLOW A CONSISTENTLY PRODUCTION OF HIGH QUALITY WATER

We introduce APRO-HP Reverse Osmosis product line

- Equipped with the highest quality components
- Robust construction and easy maintenance
- Modern design and quiet operation
- Built and assembled in EU



reverse osmosis system APRO-HP-1000

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- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- Reduced operational costs

SYSTEM EQUIPMENT

- Various Product Sizes 250 2000 LPH
- Stainless steel Frame
- Multi Stage Stainless steel Grundfos pump
- MP controller for quality monitoring
- High rejection TFC Membranes
- Panel mounted Glycerin-filled Gauges
- Low Pressure Shutoff
- Double Pre-filter
- High Pressure Stainless steel piping
- Low Pressure PVC piping
- Belimo actuated flush valve

OPTIONAL FEATURES

- Antiscalant dosing pumps
- Supply pumps and storage vessels
- UF pre-treatment
- Polish DI tanks

NALC®

• Integrated ABB PLC and color touch screen display with remote control kit

GRUNDFOS X





(ge)

Standart features APRO-HP 250–2000 LPH







MODEL	APRO HP 250	APRO HP 375	APRO HP 500	APRO HP 750	APRO HP 1000	APRO HP 1500	APRO HP 2000
Permeate Flow, LPH	250	375	500	750	1000	1500	2000
Membrane Quantity	2	3	2	3	4	6	8
Max inlet TDS, ppm	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Flush Valve	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Specification APRO-HP 250–2000 LPH

MODEL	APRO HP 250	APRO HP 375	APRO HP 500	APRO HP 750	APRO HP 1000	APRO HP 1500	APRO HP 2000
Production of clean water LPH	250	375	500	750	100	1 500	2 000
Reduction of salt content, %		Up to 99,7%					
System recovery, %		45-85%					
Membrane's type	2 x 4021/ 1 x 4040	3 x 4021	2 x 4040	3 x 4040	4 x 4040	6 x 4040	8 x 4040
Power consumption, kWt/h			0.7- 1 k	Wt/h per 1 m³	permeat		
Power supply	220V, 50 Hz	/ 380V,50 Hz			380V , 50Hz		
Dimensions, mm		0/1400, 0/1400	1775 / 1210 / 915			1200 / 860 / 1510	
Net weight, kg	134	153	210	215	220	225	240
Sizing (inlet, outlet, concentrate)	3/4"/3/4"/3/4	' NPT(PB)	1" / ¾" / ¾" NPT (PB)				

GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination, demineralization, reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

Materials of RO systems are **safety**, **non-toxic** and do not release to the water any dangerous substances to health or the environment.

The RO system is the most efficient and safe installation of desalination.

APRO series • APRO-HP APRO-LP APRO-HS APRO-FA APRO-HC APRO-M APRO-CT APRO-PAP



APRO-HS systems

THE UNIQUE FEATURES OF OUR APRO-HS SYSTEMS ALLOW A CONSISTENTLY PRODUCTION OF HIGH QUALITY WATER, SUITABLE FOR HIGH SALINITY WATER SOURCES

We introduce APRO-HS Reverse Osmosis product line also suitable for Baltic Sea water purification

- Equipped with the highest quality components
- Robust construction and easy maintenance
- Modern design and quiet operation
- Built and assembled in EU



reverse osmosis system APRO-HS-1000

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- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- · Reduced operational costs

SYSTEM EQUIPMENT

- Various Product Sizes 300 1500 LPH
- Stainless steel Frame
- Multi Stage Stainless steel 316 Grundfos pump
- MP controller for quality monitoring
- High rejection TFC Membranes
- Panel mounted Glycerin-filled Gauges
- Low Pressure Shutoff
- Double Pre-filter
- High Pressure Stainless steel 316 piping
- Low Pressure PVC piping
- Belimo actuated flush valve
- Stainless steel 316 membrane housings

OPTIONAL FEATURES

- Antiscalant dosing pumps
- Supply pumps and storage vessels
- UF pre-treatment
- Polish DI tanks
- Integrated ABB PLC and color touch screen display with remote control kit

GRUNDFOS X

• Nalco antiscalant

NALC





Standart features APRO-HS







MODEL	APRO HS 500	APRO HS 1000	APRO HS 1500	APR0 HS 2000
Permeate Flow, LPH	300	600	1000	1500
Membrane Quantity	2	4	6	8
Max inlet TDS, ppm	10 000	10 000	10 000	10 000
Flush Valve	Yes	Yes	Yes	Yes

Specification APRO-HS

MODEL	APRO HS 500	APRO HS 1000	APRO HS 1500	APRO HS 2000			
Production of clean water LPH	300	500	1000	1500			
Reduction of salt content, %	95 - 99						
System recovery, %	25 - 85						
Membrane's type	2 x 4040	4 x 4040	6 x 4040	8 x 4040			
Power consumption, Wt		0.7-1.5 kWt/h p	er 1 m³ permeat				
Power supply		380 V,	50 Hz				
Dimensions, mm	1775 x 12	210 x 915	1200 x 80	60 x 1510			
Net weight, kg	210	220	225	240			
Sizing (inlet, outlet, concentrate)	1" / ¾" / ¾" NPT (PB)						

GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination, demineralization, reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

Materials of RO systems are **safety**, **non-toxic** and do not release to the water any dangerous substances to health or the environment.

The RO system is the most efficient and safe installation of desalination.

APRO series > APRO-HP APRO-LP APRO-HS APRO-FA APRO-FA APRO-M APRO-CT APRO-PAP



APRO-HC systems

THE UNIQUE FEATURES OF APRO-HC SERIES SYSTEMS ALLOW A CONSISTENTLY PRODUCTION OF LARGE CAPACITY OF HIGH QUALITY WATER FOR YOUR SPECIFIC APPLICATION

We introduce APRO-HC Reverse Osmosis product line for consumers with big pure water consumption

- · Equipped with the highest quality components
- Robust construction and easy maintenance
- Modern design and quiet operation
- Built and assembled in EU

BENEFITS

- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- Reduced operational costs

OPTIONAL FEATURES

- Supply pumps and storage vessels
- Integrated ABB PLC and color touch screen display with remote control kit
- UF pre-treatment
- Nalco antiscalant



reverse osmosis system APRO-HC-12000



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OI SYSTEM EQUIPMENT

Various Product Sizes
 3000-20000 LPH

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- Stainless steel frame
 and equipment panel
- Stainless steel 316 high pressure piping
- 5 micron pre filtration
- Energy saving *GE* AK-series brackish water high rejection membranes
- Multi-stage centrifugal stainless steel 316 pump
- Fully equipped electric board with pump protection and soft starter
- Clean-in-Place integrated
 system
- Grundfos DDE antiscalant dosing pumps
- 100 liter PE antiscalant tank
- FRP side port membrane housings
- Motorized feed valve, product drain valve and flush valve
- Stainless steel 316 regulation valves
- MP controller for quality monitoring
- · High pressure shutoff
- Double low pressure shutoff
- Permeate conductivity SS 316 sensor
- RAW-water pump control relay
- Permeate tank level
 monitoring
- Alarms: low inlet pressure, low feed pressure, high permeate conductivity, motor fault, high concentrate pressure

NALCO GRUNDFOS X

Standard features – APRO HC 3000-20000

MODEL	APRO HC 3000	APRO HC 6000	APRO HC 9000	APRO HC 12000	APRO HC 15000	APRO HC 20000		
Membrane Size, inch	8 x 40							
Salt rejection, %	98-99,5							
Recovery rate, %	50-95							
Membrane Quantity	3	6	9	12	15	20		
Permeate Flow, LPH	3000	6000	9000	12000	15000	20000		
Max inlet TDS, ppm	6000							
Power supply	380V, 50Hz							
Flush Valve	Yes							
Pre-Filter Quantity	3 X LD0520	4 X LD0520	7 X RO.Z 0540	14 X RO.Z 0540	14 X RO.Z 0540	14 X RO.Z 0540		
Dimensions, mm	3705 x 2115 x 1200	3705 x 2115 x 1200	3840 x 1830 x 1400	3920 x 1870 x 1400	5730 x 1870 x 1400	5730 x 1870 x 1400		





GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination, demineralization, reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

Materials of RO systems are **safety**, **non-toxic** and do not release to the water any dangerous substances to health or the environment.

The RO system is the most efficient and safe installation of desalination.

APRO series
APRO-HP APRO-LP APRO-HS APRO-FA APRO-HC APRO-M APRO-CT APRO-PAP



APRO-CT systems

THE UNIQUE FEATURES OF APRO-CT SERIES SYSTEMS ALLOW A CONSISTENTLY PRODUCTION OF LARGE CAPACITY OF HIGH QUALITY WATER FOR YOUR SPECIFIC APPLICATION

We introduce APRO-CT Reverse Osmosis product line for consumers with big pure water consumption

- · Equipped with the highest quality components
- Robust construction and easy maintenance
- Modern design and quiet operation
- Built and assembled in EU

BENEFITS

- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- Reduced operational costs

OPTIONAL FEATURES

- Supply pumps and storage vessels
- Integrated ABB PLC and color touch screen display with remote control kit
- UF pre-treatment
- Nalco antiscalant



reverse osmosis system APRO-CT 4000

OI SYSTEM EQUIPMENT

Various Product Sizes
 3000-6000 LPH

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- Stainless steel frame
 and equipment panel
- Stainless steel 316 high pressure piping
- 5 micron pre filtration
- Energy saving *GE* AK-series brackish water high rejection membranes
- Multi-stage centrifugal stainless steel 316 pump
- Fully equipped electric board with pump protection and soft starter
- Clean-in-Place integrated valves
- *Grundfos* DDE antiscalant dosing pumps
- FRP side port membrane housings
- Motorized feed valve and flush valve
- Stainless steel 316 regulation valves
- MP controller for quality monitoring
- · High pressure shutoff
- Double low pressure shutoff
- Permeate conductivity SS 316 sensor
- RAW-water pump control relay
- Permeate tank level
 monitoring
- Alarms: low inlet pressure, low feed pressure, high permeate conductivity, motor fault, high concentrate pressure

NALCO GRUNDFOS





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Standard features – APRO-CT 3000-6000

MODEL	APRO-CT 3000	APRO-CT 4000	APRO-CT 6000				
Membrane Size, inch		8 x 40					
Salt rejection, %	98-99,5						
Recovery rate, %	50-95						
Membrane Quantity	3	4	6				
Permeate Flow, LPH	3000	4000	6000				
Max inlet TDS, ppm		6000					
Power supply	380V, 50Hz						
Flush Valve	Yes						
Pre-Filter Quantity	4 X LD0520	4 X LD0520 4 X LD0520 4 X LD0					
Dimensions, mm	3640 (L) x 1465 (H) x 805 (W)	2650 (L) x 1465 (H) x 805 (W)	3640 (L) x 1465 (H) x 805 (W)				



reverse osmosis system APRO-CT 3000



reverse osmosis system APRO-CT 6000

GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination**, **demineralization**, **reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

Materials of RO systems are **safety**, **non-toxic** and do not release to the water any dangerous substances to health or the environment.

The RO system is the most efficient and safe installation of desalination.

APRO series • APRO-HP APRO-LP APRO-HS APRO-FA APRO-HC APRO-M APRO-CT APRO-PAP



APRO-PAP systems

COMPACT ALL-IN-ONE 500 L PER HOUR INCLUDING PREFILTRATION, REVERSE OSMOSIS SYSTEM, POST FILTRATION WITH MINERALIZATION, UV AND BUILT-IN 80 L PERMEATE STORAGE TANK

We introduce APRO-PAP Low energy Brackish Water RO system

- Equipped with the highest quality components
- Robust construction and easy maintenance
- Modern design and quiet operation
- Built and assembled in EU



reverse osmosis system APRO-PAP-500

O BENEFITS

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- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- Reduced operational costs
- Permeate flush

SYSTEM EQUIPMENT

- Stainless Steel UV system
- Stainless steel Frame and equipment panel
- Multi Stage Stainless steel Grundfos pump
- Low Pressure membranes
- Stainless steel needle regulation valve
- Stainless steel pressure vessels
- Fully equipped electric board with pump protection
- MP controller for quality monitoring with Stainless steel probe
- Stainless steel panel mounted with Glycerinfilled Gauges

GRUNDFOS X

- Low Pressure Shutoff
- BB Pre-filters

OPTIONAL FEATURES

• Nalco antiscalant

NALC®

Additional storage tank



Standart features APRO-PAP 500 LPH

MODEL	APRO P&P 500 LPH			
Permeate Flow, LPH	500			
Membrane Quantity	2			
Membrane Size, inch	4 x 40			
Max inlet TDS, ppm	4 000			

Specification APRO-PAP 500 LPH

MODEL	APRO P&P 500 LPH			
Production of clean water LPH	500			
Reduction of salt content, %	Up to 90			
System recovery, %	50 - 85			
Membrane's type	2 x 4040			
Input flow of water at a pressure of 3 bar	0,8 – 1,1			
Power consumption, Wt	550			
Power supply	220V, 50Hz			
Dimensions, mm	800 x 800 1300			
Net weight, kg	107			
Sizing (inlet, outlet, concentrate)	½"/½"/½" NPTF			

GENERAL INFORMATION

The **reverse osmosis system of Aquaphor** (RO system) manufactured by "Westaqua-Invest OÜ" (Estonia, EU). The RO system is designed to **reduce the total salt content** by reverse osmosis (**desalination, demineralization, reduction of conductivity**) water from municipal and local water supply systems (brackish water) under the correspondence of the requirements established by the demands.

Materials of RO systems are **safety, non-toxic** and do not release to the water any dangerous substances to health or the environment.

The RO system is the most efficient and safe installation of desalination.





ULTRAFILTRATION SYSTEM 🕨 ULTRA 1.6 / 3.2

Aquaphor ULTRA

THE AQUAPHOR ULTRAFILTRATION SYSTEM ULTRA IS DESIGNED TO REMOVE MECHANICAL IMPURITIES (BIGGER THAN 0.01 MICRON) SUCH AS: COLLOIDAL PARTICLES: BACTERIA; VIRUSES; ORGANIC MACROMOLECULES FROM MUNICIPAL AND LOCAL WATER SUPPLY SYSTEMS (ARTESIAN WELLS, ETC) PROVIDED THEY MEET THE ESTABLISHED REQUIREMENTS.

Water filtration system Aquaphor Ultra is manufactured by JSC Aquaboss (St. Petersburg, Russia) by the order of Aquaphor Corp. (St. Petersburg, Russia).

Filtration system utilizes economically beneficial, environmentally friendly and efficient purification technology to remove submicron impurities from water by ultra filtration. This technology implements the so called hollow fiber as the basic working element. It is technologically possible to produce fiber with pores up to 0.005 micron.



Aquaphor ULTRA 3.2

SYSTEM

The Aquaphor Ultra filtration system based on hollow fiber membranes can ensure Dead-end ultra filtration process, i.e. filtration through fiber with alternate direct and back flushing cycles that substantially reduces water consumption. Water is filtered perpendicularly to the hollow fiber surface and this reduces a risk to clog the hollow fiber.

AOUAPHO

)FESSIONA

TECHNIQUE

Ulta filtration technique ensures a physical barrier against microbes and suspended particles to get pure drinking water. In additional, ultra filtration is utilized in pretreatment of water from bare sources, of sea water as well as of water that underwent biological treatment before RO systems and other membrane water purifiers (for instance, electro dialysis plants).

APPLICATION

- Water pre-filtration before desalting unit.
- Ultrafiltration system can replace coagulation and mechanical filtration, this improves the quality of the treated water, reduce membranes and ion-exchange resin pollution, and significantly increase their lifetime.
- Final ultra-clean municipal water filtration in the cottages, apartments, manufacturing, restaurants, hotels
- Reagent free disinfection with simultaneous removal of turbidity and color of borehole, wells, river and lake water and water containing high molecular organics.
- Cleaning of water in swimming pools without chemicals.
- It eliminates the costly and cumbersome purification filters.
- Bleaching and disinfection of drinking water while preserving the natural mineral background. This is so essential for the production of bottled water.





Technical specifications

MODEL	ULTRA 1.6	RA 1.6 ULTRA 3.2		
Total membrane area, m2	10	20		
Initial capacity (0.1 Mpa, 25°C), m3/hour	1.6	3.2		
Number of units	2 4			
Rated capacity (0.1 Mpa, 25°C), m3/hour	0.6 - 1.0	1.2 - 2.0		
Port sizes (inlet/ outlet/ drain)	G 3/4"	G 3/4"		
Overall dimensions	1300 x 430 x 410	1300 x 430 x 410		
Weight, kg	12	31		
Max. working temperatue, °C	45			
Membrane material	PS			
Material of the membrane unit housing and pipelines	PVC			
Membrane pore sizes, kDa (micron) PVC	67 (less than 0.01)			
Max. size of particles that can be contained in water fed to the ultra filtration system (for models with 0X index (microns)	200			
Membrane unit size, mm	90 x 1000 (DN20)			
Power supply, VAC, VDC	220; 12			
Power consumption, Wt	6			

WATER SOFTENERS > A800 / A1000



Aquaphor A800 and A1000

THE WHOLE-HOUSE WATER TREATMENT SYSTEM

Aquaphor Models 800 and 1000 have fully automatic processor control and demonstrate exceptional salt efficiency and high iron removal. Systems employ innovative Dual Core Valves that increase regeneration. Efficient and durable softener tank contain extra fine mesh, tightly compacted, chlorine resistant ion-exchange resin.



water softeners Aquaphor Models A800 and A1000

- Aquaphor 1000 contains 28 liters of ion-exchange resin
- Aquaphor 800 contains 23 liters of ion-exchange resin

BENEFITS

- Innovative two-cylinder head valve regulates water flow in and out of the softener tank.
 It has fewer parts, shorter and wider fluid pathways, selflocking/self- pressurising mechanism.
- Removal of high concentration of Fe (up to 15 ppm).
- 10-year warranty.
- Made in the USA.
- NSF certification pending.
- Very low salt consumption.
- Fast IER regeneration.
- Easy installation and set-up. Minimum maintenance requirements.

ADVANTAGES

- Simultaneous removal of iron, manganese and hardness.
- Reliable fittings of stainless steel and the drain hose in the set.
- Reliability and durability of all over the pressure range from 1.5 to 7 atm.





Water Conditioner Performance & Specifications

SPECIFICATION			A800	A1000		
Maximum Capacity, grains			24 000	31 800		
Maximum Compensated Hardness, gpg (mg/L)			70 (1 200)	90 (1 540)		
Maximum Ferrous Iron Reduction, p	pm ¹		10	10		
Minimum pH, standard units			7	7		
Water & Ambient Temperature Minir	mum-Maximum, °F (°C)	40°-120° (4°-49°)	40°-120° (4°-49°)		
Water Pressure Minimum - Maximu	m, psi (bar)		20 (1,4) - 100 (7)	20 (1,4) - 100 (7)		
Maximum Flow Rate to Drain During Regeneration ² gpm (L/min)			2,0 (7,6)	2,0 (7,6)		
Service Flow Rate (@15 psi (1.0 bar)) drop, gpm (L/min) ³			5,5 (20,8)	5,5 (20,8)		
Pressure Drop @ 5.5 gpm (22.7 L/m	in), psi (bar)		15 (1)	15 (1)		
Salt Used lb (kg)	Water Used Gallons (Liters)		A800 Grains (Grams) removed	A1000 Grains (Grams) removed		
1.6 (0.7)	14 (53)		6,651 (431)	6,891 (446)		
8 (3.6)	23.5 (89)		22,552 (1461)	24,620 (1595)		
15 (16.8)	35 (132)		25,076 (1625)	31,807 (2061)		
Controller Type			Metered	Metered		
Electrical Rating			12VAC, 50/60 Hz, 0.015 kW-hr	12VAC, 50/60 Hz, 0.015 kW-hr		
Plumbing Connections (NPT)			1 inch male (MNPT)	1 inch male (MNPT)		
Minimum Drain Line ID, inch (cm)			5/8 inch (1.6)	5/8 inch (1.6)		
Media Tank Size - (ID x Height), inch	(cm)		10.5 x 23 (26.7 x 58.4)	10.5 x 26 (26.7 x 66)		
Height, inches (cm)			27.8 (70.6)	31.3 (79.5)		
Footprint, inches (cm)			15.9 x 19.1 (40.4 x 48.5)	15.9 x 19.1 (40.4 x 48.5)		
Shipping Weight - approx., lb (kg)			95 (43)	105 (48)		
		Media Type	/ Amount			
Fine Mesh Resin			0.8 cu.ft. (23L)	1.0 cu.ft. (28L)		

For All Models:

Use clean white pellet, cube-style, or solar salt. Drain Line (Minimum I.D.) 5/8 inch (1.6 cm) Brine & Rinse total - 0.75 gpm (2.8 L/min) Brine Draw - 0.25 gpm (0.9 L/min) Rinse - 0.5 gpm (1.9 L/min) ¹ Iron reduction to 0.3 ppm or less. Iron reduction claims limited to 5 ppm in the state of Wisconsin.

² Rate of flow must be verified at the end of the drain line.

³ For the purposes of plumbing appliance sizing, only the rated service flow rate and corresponding pressure loss may be used. Prolonged operation of a water softener at flow rates exceeding the tested service flow rate of 5.5 gpm (20.8 L/min) may compromise performance. Intermittent flow rate must not exceed 9.3 gpm (35.2 L/min).

System conforms to NSF/ANSI 44 for the specific performance claims as verified and substantiated by test data.

- 1. The compact housing type "Cabinet".
- 2. Highly dispersed high-capacity sorbent provides high performance and total removal of iron, manganese and hardness.
- 3. The patented proprietary valve provides an uninterrupted filter operations during its lifetime.
- 4. Controller with a big informative screen.



- The patented reticulated flow distributor dispatches the flow of treated water throughout the sorbent volume.
- 6. The cover slider for easy access to the salt tank and filter ensure compactness.
- 7. The bypass valve in the set.
- 8. Extremely reliable tank from strong glass-filled plastic.

PRE-FILTERS > GROSS 10" / 20"



Pre-filters Aquaphor GROSS

AQUAPHOR PRE-FILTERS ARE THE CORNERSTONE OF ALL WATER PURIFICATION. BEFORE AQUAPHOR FILTERS CAN PROTECT YOU, YOU MUST PROTECT THEM.

GROSS is a pre-filter housing for cold water. Effectively removing sand, rust, silt and other impurities, GROSS simplifies the work of the drinking water filter, protects appliances from damage, and makes showering and bathing more enjoyable.

Made of glass-fiber reinforced plastic, GROSS has high pressure resistance and a convenient swivel bracket. It can be equipped with Big Blue 20" (508 mm) replacement module. Filter module replacement process is greatly simplified by the quick release mount.



pre-filters Aquaphor GROSS 10" and 20"

FUNCTION

Made from high-quality Noryl plastic, AQUAPHOR pre-filters can work in a wide range of temperatures and withstand enormous pressure. Despite all this power, they are very compact in size.

Pre-filters remove large insoluble impurities from tap water, including sand, rust and silt. They extend the life cycle of AQUAPHOR filters as well as of your appliances, plumbing, and pipes for cold and hot water by protecting them from dirt and mechanical damage.

ADVANTAGES

- Heavy-duty glass fiber filled polymer housing
- Resistance to high temperatures
- Excellent resistance to water hammers
- The quick-release "American" mount does not require tools for module replacement
- Set of ³/₄-inch metal fittings for easy connection
- The convenient bracket allows changing the direction of water entry and exit with a single motion
- Easy to changeable filter cartriges

BENEFITS

- High hydrophilicity resulting in high flow and low pressure drop in the filter
- High dirt holding capacity due to 100% usage of the filter volume
- AQUALEN fibers significantly decrease level of heavy metals and iron





Specification and Performance

MODEL	SIZE	NOMINAL PARTICLE RATING	DP & FLOW RATE	CHLORINE TASTE & ODOR REDUCTION	VOC REDUCION	LEAD REDUCION
B510-12 DFS╬ AQ∭CFB∰	100 mm x 254 mm	5 microns	0,2 bar & 7,5 Lpm	24 000 L	NA	NA
В520-12 dfs ╬ аq∭∫ сfв⊛	100 mm x 508 mm	5 microns	0,2 bar & 15 Lpm	48 000 L	NA	NA

Replacement Filters

B510-12 GROSS 10"

Filter life: 30,000 L Capacity: 10 L per min

Gross 10 replacement filter for cold water purification in the entire home. Its unique structure and design allow the module to remove sediments, chlorine, heavy metals and other impurities from the water.



B520-12GROSS 20"

Filter life: 60,000 L Capacity: 20 L per min Gross 20 replacement filter for cold water purification in the entire home. Its unique structure and design allow the module to remove sediments, chlorine, heavy metals and other impurities from the water.



Dynamic Fixation of Silver

DFS technology is the original method of applying silver in its most active ionic form to Aqualen fibers.



Aqualen ™

Aqualen is a unique fibrous chelating ion-exchange sorbent. Aqualen irreversibly binds heavy metal ions. It has superior adsorption capacity. Aqualen sorption surface area is 33 times larger than that of the conventional ion-exchange sorbents. It is equally effective in water of any hardness.

CFB 🏶

CarbFiber Block

CarbFiber Block (CFB) is a manufacturing technology of water filtration media with different degrees of porosity and is designed for water of any pollution level.



Containerized water purification system

FULL CONTAINERIZED WATER TREATMENT SYSTEMS FOR VARIOUS APPLICATIONS

High-end technology, Full redundancy, Water and Electricity economical design, High purity permeate, easy to install and operate — Plug and Play.







KEY FEATURES

- Intelligent automatic operation.
- Automatic Cleaning In Place program.
- The containerized systems can be suited to almost any water inlet quality , with many permeate quality options.
- The containerized systems allow a complete unit for water production at almost any required capacities.

THE CONTAINER INCLUDES:

- Full dosing stations
- Ultra Filtration pre-treatment systems
- Reverse Osmosis systems Double pass
- Fully analytical controllers and process
- EDI polisher units
- Mixed bed resin tanks
- Main control and power cabinets



NALC®







Reliable UF-RO systems for efficient industries and agriculture

SOPHISTICATED PROCESS DESIGN INCORPORATES AN ULTRAFILTRATION PRETREATMENT STAGE WITH A RO SYSTEM AS A SINGLE SKID "PLUG & PLAY" UNIT



The ultrafiltration pretreatment stage increases the RO system efficiency and permeate water quality in terms of microbiological contaminant removal ensuring constant high-quality product water supply to the client.

The UF microbiological removal capabilities ensure that the RO feed water is sanitized and that fact reduce the possibility of contamination formation on the RO membrane surface.

KEY FEATURES

- Improved water quality
- Extended membrane life
- Low maintenance operation
- Space saving design
- Quiet operation
- Reduced operational costs



UF-R0 system



PROFESSIONAL WATER PURIFYING TECHNOLOGY FOR THE PROFESSIONAL-GRADE KITCHEN

There are many ingredients that make a great restaurant — excellent food, quality kitchen equipment, good drinks, quick and pleasant service and spotless glassware, just to name a few. Surprising as it may sound, many of these things are largely influenced by the quality of the water used in your professional kitchen.

OUR WATER TREATMENT SYSTEMS WILL ALLOW YOU TO ACHIEVE THE BEST RESULTS WHILE CUTTING DOWN ON MANY UNNECESSARY EXPENSES



reverse osmosis system APRO-M-300

We proudly present our APRO systems — the heart-and-soul of quality water purification in your professional kitchen

- Manufactured using the highest quality components
- · A design that blends perfectly into any professional kitchen interior
- Very compact
- Low noise level
- Made and engineered in Estonia

A cost-effective solution for professional kitchens

Complex approach

Most manufacturers of professional kitchen equipment can provide you with some water-treatment options for their appliances. We, on the other hand, offer you an **all-in-one** water filtration solution that can be connected to all of your kitchen and bar equipment including:

- Coffee-machines
- Convection ovens
- Dishwashing machines
- Bar glass washers
- Ice machines
- · Boilers and water heaters
- And many more

Central water treatment technology allows you to avoid dealing with numerous service contracts and cartridges replacements for different water purifying products. In addition to that, you will no longer have to worry about using third-party solutions, in case a manufacturer insists on using "recommended" water treatment filters with their kitchen equipment (the ones usually specified in the warranty).

This will extend the life expectancy of all of your water-using kitchen appliances.





HIGHEST QUALITY FOR REASONABLE PRICE

APRO series



WHOLE HOME RO

WHOLE HOME RO IS A KEY FOR CLEANLINESS, COMFORT AND ENVIRONMENTAL FRIENDLINESS



reverse osmosis system APRO-PAP: plug-&-play RO-system with integrated UV and storage tank

KEY FEATURES

- Patented, fully automatic
- Compact all in one system including prefiltration, post-filtration with the mineralization and UV
- High water recovery
- Built-in high efficiency prefiltration and auto-clean
- Inlet water concentration: iron up to 20 mg/L, hardness up to 25 mg-eqv/L
- Novel automatic antiscalant dosing
- 500 (optionally up to 2000 L) per hour
- Built-in 80 L (up to 150 L) permeate storage tank









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Aquaphor Profesional offers a wide range of solutions for com-mercial water treatment applications. As a Joint Venture of Winter Engineering Ltd (Israel) and Aquaphor Corporation (Estonia), it combines expertise in the production of high quality RO systems of the former with technology and mass manufacturing capabilities of the latter.

We provide expertise and solutions for medical, pharmaceutical, electronics, food and other commercial applications. Aquaphor Professional's product lines include RO systems. Ultrafiltration, and Water Softeners.