



Model series es 195, 380, 760, 1.1, 1.5



**For many years, owners who purchased commercial *reverse osmosis* systems had to take a quick course in physics to understand their system's operation.**

Not anymore! The EuroSystem ES series commercial processor is a new generation of *reverse osmosis* for obvious reasons. Engineered into the smallest package ever, the ES series commercial processor is a high production, fully automatic, user-friendly "no buttons to push, no knobs to turn" system that is even easily expandable. This means you can start small and later increase the production capacity of the system if the demand for more pure water becomes a factor in the future.

The new EuroSystem ES series commercial processor can be used more economically than ever before to efficiently separate contaminants. Our new *TFC2™* membrane is made of an exclusive Thin-Film C2 composite that offers greater structural stability and more chemical tolerance. It operates more effectively at lower pressures, and produces more water faster than other earlier types of membrane even when installed in heavily polluted or high brackish environments. It is precisely in these types of environments that a membrane's superiority becomes more evident, and where an overall test of system integrity becomes defined. Our ES series systems are known for being small powerful systems that are able to operate in even such problematic environments.

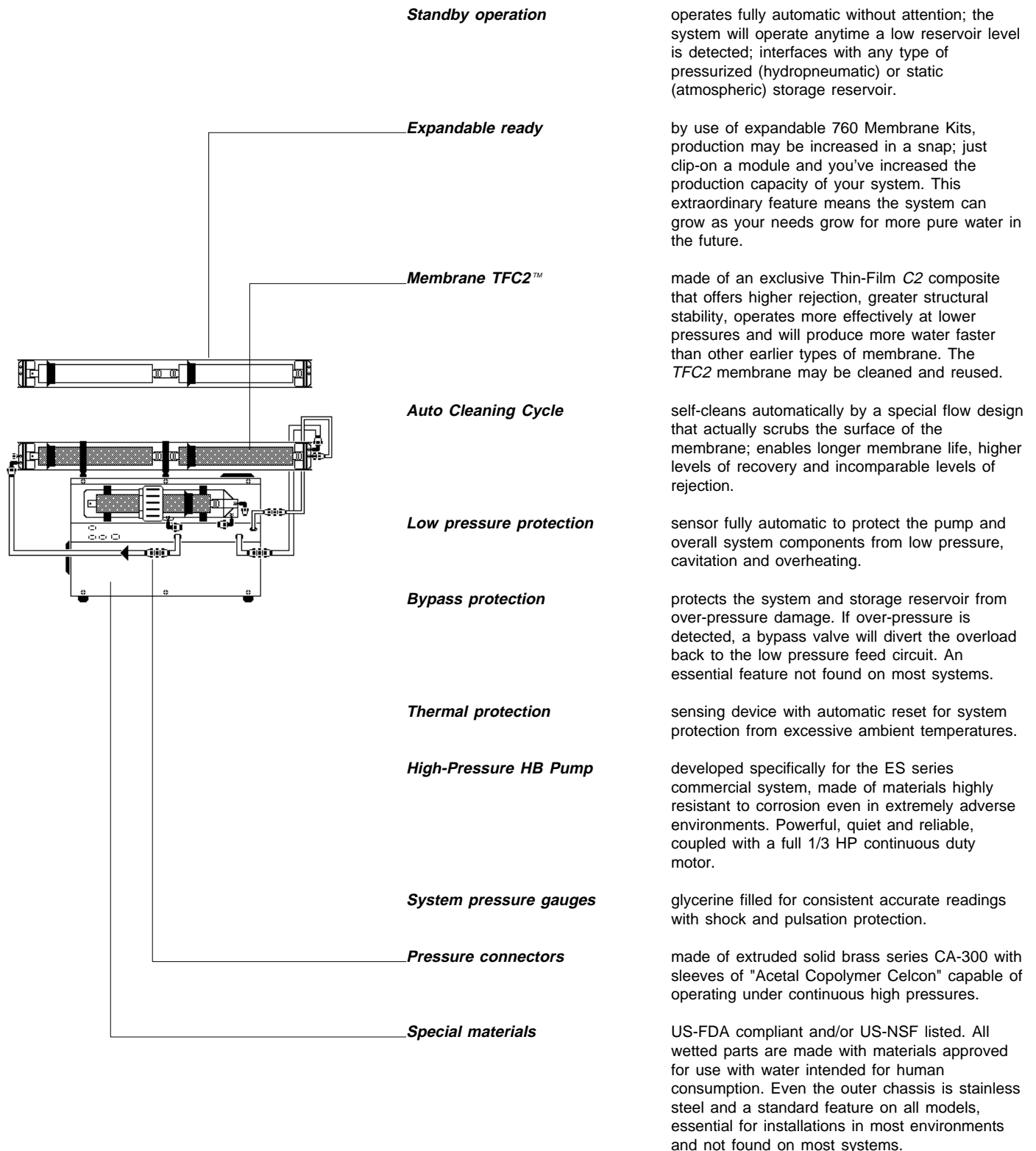
*Why reverse osmosis? Reverse osmosis is a membrane separation technology capable of removing a full range of contaminants: sodium, nitrates, toxic metals, arsenic, lead, mercury, aluminum, pesticides, herbicides, trihalomethanes, bacteria, radioactive substances and much more. Unlike conventional filters which trap and store some basic impurities, the self-cleaning design of the reverse osmosis membrane allows it to perform at optimum efficiency at all times even in the most adverse environments. Simply no other technology can remove the broad spectrum of contaminants and provide the overall water quality and taste of a reverse osmosis system.*

So throw 17 years of *reverse osmosis* experience into the package and you've defined the EuroSystem ES series commercial system. Each system is factory tested and ready to operate, and with our new little ES series package,

**"no physics course is required".**



# Features & Components



**Standby operation**

operates fully automatic without attention; the system will operate anytime a low reservoir level is detected; interfaces with any type of pressurized (hydropneumatic) or static (atmospheric) storage reservoir.

**Expandable ready**

by use of expandable 760 Membrane Kits, production may be increased in a snap; just clip-on a module and you've increased the production capacity of your system. This extraordinary feature means the system can grow as your needs grow for more pure water in the future.

**Membrane TFC2™**

made of an exclusive Thin-Film C2 composite that offers higher rejection, greater structural stability, operates more effectively at lower pressures and will produce more water faster than other earlier types of membrane. The TFC2 membrane may be cleaned and reused.

**Auto Cleaning Cycle**

self-cleans automatically by a special flow design that actually scrubs the surface of the membrane; enables longer membrane life, higher levels of recovery and incomparable levels of rejection.

**Low pressure protection**

sensor fully automatic to protect the pump and overall system components from low pressure, cavitation and overheating.

**Bypass protection**

protects the system and storage reservoir from over-pressure damage. If over-pressure is detected, a bypass valve will divert the overload back to the low pressure feed circuit. An essential feature not found on most systems.

**Thermal protection**

sensing device with automatic reset for system protection from excessive ambient temperatures.

**High-Pressure HB Pump**

developed specifically for the ES series commercial system, made of materials highly resistant to corrosion even in extremely adverse environments. Powerful, quiet and reliable, coupled with a full 1/3 HP continuous duty motor.

**System pressure gauges**

glycerine filled for consistent accurate readings with shock and pulsation protection.

**Pressure connectors**

made of extruded solid brass series CA-300 with sleeves of "Acetal Copolymer Celcon" capable of operating under continuous high pressures.

**Special materials**

US-FDA compliant and/or US-NSF listed. All wetted parts are made with materials approved for use with water intended for human consumption. Even the outer chassis is stainless steel and a standard feature on all models, essential for installations in most environments and not found on most systems.

# Technical information

Specifications

Version 4.3

Model series es 195, 380, 760, 1.1, 1.5

## Applications

recommended for drinking water in restaurants, hotels, schools, bars, food service operations including feed water for ice and coffee machines, food processing as ingredient water or rinse water, industrial applications such as green house watering systems, steam equipment, humidifiers, all types of spot-free rinsing including the electronic industry, medical and pharmaceutical laboratories or simply anywhere pure water is necessary.

## Production capacity in liters <sup>1</sup>

Day	Hour	Minute	
195.	8.13	0.14	(model 195)
380.	15.83	0.26	(model 380)
760.	31.67	0.53	(model 760)
1140.	47.50	0.79	(model 1.1)
1520.	63.33	1.06	(model 1.5) <sup>2</sup>

## Characteristics

Process	reverse osmosis	(UV optional)
Number of phases	varies, depending on configuration	
Recovery	10 to 50 % <sup>3</sup>	(adjustable)
Rejection (separation)	97 % average	(90 % nominal)
Service frequency	varies, depending on the FilterPac and filter cartridge configuration	

## Operating environment

	Parameters	
Temperature fluid	3°C min. 45°C max.	
PH continuous operation	4 min. 11 max.	
PH short term cleaning	2 min. 12 max.	(60 minutes max.)
Iron	0.10 mg /liter <sup>4</sup>	(dissolved)
Manganese	0.05 mg /liter <sup>4</sup>	
Free chlorine	1.00 mg /liter <sup>4</sup>	
Hydrogen sulfide	0.00 mg /liter	
Organics	1.00 mg /liter <sup>4</sup>	
Total hardness	360. mg /liter <sup>4</sup>	(PH 7.0)
Silt density index (SDI)	5.00 maximum	(15 minutes)
Total dissolved solids (TDS)	2500. mg /liter <sup>4</sup>	(system Version 1)
	7000. mg /liter <sup>4</sup>	(system Version 2)
Feed water flow	9500. ml /minute	(at 1.5 Kg/cm <sup>2</sup> ) <sup>5</sup>
Feed water supply pressure	1.5 min. 7.0 max. Kg/cm <sup>2</sup>	(Bar) <sup>5</sup>

## Electrical requirements

Volts /Amps	230.VAC /3.1 amp	(model type 22)
	115.VAC /6.2 amp	(model type 11)
Hertz	50 or 60 Hz.	
Phase	single phase	
Duty cycle	continuous	

## Dimensions and weight

Product weight	20.10 (kg)
Dimensions	system height 270, width 410, depth 210, (mm)

- <sup>1</sup> Based on 250.mg/liter TDS or NaCl at 25°C (77°F), feed pressure 2.5 Kg/cm<sup>2</sup> (36.PSI). Performance of the reverse osmosis membrane element is affected by net driving pressure, feed water temperature, Total Dissolved Solids (TDS) and local water chemistry. These factors must be taken into account when comparing or evaluating the performance of a membrane element or reverse osmosis system. For production capacity in gallons divide by 3.785
  - <sup>2</sup> System model 1.5 is available for environments where Total Dissolved Solids (TDS) do not exceed 1000.mg/liter.
  - <sup>3</sup> System recovery is factory pre-set; adjustments remain possible on all models. Actual recovery performance is influenced by feed water temperature, Total Dissolved Solids (TDS) and local water chemistry.
  - <sup>4</sup> Recommended for maximum life of the membrane. Pre-treatment filtration is required upstream prior to the system by using a FilterPac(s) with the appropriate cartridges. If the source is a private well, a complete water analysis should be evaluated to determine proper pre-treatment.
  - <sup>5</sup> For installations where feed water flow and/or feed water pressure is insufficient, a pump (booster) with separate reservoir is recommended upstream prior to the system.
- \* TFC2 membrane is a registered Trademark of EuroSystem USA., Carelli International Corporation USA.

# EuroSystem options

Specifications

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## Ordering information (commercial systems) <sup>7</sup>

SYSTEM 195/A/TFC	.....9001.2332
SYSTEM 195/A/TFC/B	.....9002.2332
SYSTEM 195/A/TFC/SS	.....9001.2333
SYSTEM 195/A/TFC/SS/B	.....9002.2333
SYSTEM 380/A/TFC	.....9001.2434
SYSTEM 380/A/TFC/B	.....9002.2434
SYSTEM 380/A/TFC/SS	.....9001.2435
SYSTEM 380/A/TFC/SS/B	.....9002.2435
SYSTEM 760/A/TFC	.....9101.2636
SYSTEM 760/A/TFC/B	.....9102.2636
SYSTEM 760/A/TFC/SS	.....9101.2637
SYSTEM 760/A/TFC/SS/B	.....9102.2637
SYSTEM 1.1/A/TFC	.....9201.2638
SYSTEM 1.1/A/TFC/B	.....9202.2638
SYSTEM 1.1/A/TFC/SS	.....9201.2639
SYSTEM 1.1/A/TFC/SS/B	.....9202.2639
SYSTEM 1.5/A/TFC	.....9201.2642
SYSTEM 1.5/A/TFC/B	.....9202.2642
SYSTEM 1.5/A/TFC/SS	.....9201.2643
SYSTEM 1.5/A/TFC/SS/B	.....9202.2643

## Ordering information (related products) <sup>8</sup>

FILTERPAC 2 PRE	.....9001.2017
FILTERPAC 2 CARBON	.....9001.2018
ULTRAVPAC 7.6/230 /V	.....9201.2026
ULTRAVPAC 7.6/115 /V	.....9201.2028
ULTRAV 3.8/H/230 /S	.....9201.2011
ULTRAV 3.8/H/115 /S	.....9201.2013
ULTRAV 7.6/L/230/30/V	.....9202.2016
ULTRAV 7.6/L/115/30/V	.....9202.2018
ULTRAV 7.6/H/230 /S	.....9201.2015
ULTRAV 7.6/H/115 /S	.....9201.2017
PART INSERT/FEED/4/8	.....9001.3051
PART UNION /FEED/4/6	.....9001.3052
PART EXTENSION/FAUCET	.....9001.3025
PART FILTER/TCR/10/4	.....9001.4011
PART KIT/MEMB/760/TFC	.....9131.5001
PART FAUCET/SM/CROME	.....9001.5019
PART FAUCET/LR/CROME	.....9102.5019
PART DISPENSER/17L/CH	.....9201.5022
PART RESERVOIR / 12L	.....9001.5015
PART RESERVOIR / 75L	.....9001.5036
PART RESERVOIR /150L	.....9001.5038
PART RESERVOIR /300L	.....9001.5039
TEST METER/PO/PH	.....9001.8002
TEST METER/PO/TEMP	.....9001.8003
TEST METER/PO/TDS/10	.....9001.8001
TEST METER/PO/TDS/100	.....9102.8001

systems and technology

EUROSYSTEM PRODUCTS™



Authorized Distributor :

## System options and related products

### FilterPac™

pre-treatment filtration is critical to system performance. The FilterPac provides complete system protection with a minimal frequency of maintenance. Pre-treatment and post-treatment FilterPacs are available along with a full spectrum of filter cartridge possibilities from system feed protection to pure water post-treatment.

### 760 Membrane Kit

expandable module just snaps-on, increases the production of the system in increments of 760 liters per day; designed for quick and easy installation.

### UltraV™

high performance Ultraviolet (UV) module for pure processed water made of all non-corrosive materials. Available in various sizes from as little as 3.8 liter/minute flow.

### Series SS

systems include stainless steel and nickel plated internals; recommended for fluid environments exceeding 2500.mg/liter Total Dissolved Solids.

### Reservoirs

hydropneumatic storage vessels designed specifically for pure processed water made of non-corrosive materials, quick and easy to install, available in four sizes: 12, 75, 150 or 300 liter capacities. Discharge completely in any position and serviceable by a removable water cell.

### Pure water SM Faucet

for dispensing pure processed water; incorporates two smooth handle positions: intermittent or continuous open flow, chrome plated finish, easy to install anywhere and serviceable by replaceable valve kit.

### Pure water LR Faucet

recommended for commercial applications or anywhere a faucet installation requires more distance from a sink or more area for filling large containers. Incorporates the two smooth handle positions as our SM Faucet, chrome plated finish, easy to install anywhere and serviceable by replaceable valve kit.

## Product support program

includes a full range of special products from chemical testing equipment, special tools, membrane cleaning chemicals, as well as standard service cartridges and replacement parts. If your local EuroSystem distributor is out of stock, the part can be shipped worldwide by special delivery factory direct.

<sup>7</sup> The installation and operation of our ES series commercial systems are surprisingly quick and easy. Systems are completely assembled, factory tested, and ready to operate. Systems also include an easy to understand installation/operation manual.

<sup>8</sup> Only a partial list of related products. Check with your local EuroSystem distributor for more specific details on system options and related products.

\* The ES series systems are warranted against defects in materials and workmanship for a period of one year. The membrane is covered for manufacturing defects for the period of one year on a pro-rated basis. Disposable cartridges are not warranted.