WPL Series, Laboratory Water Purification Systems

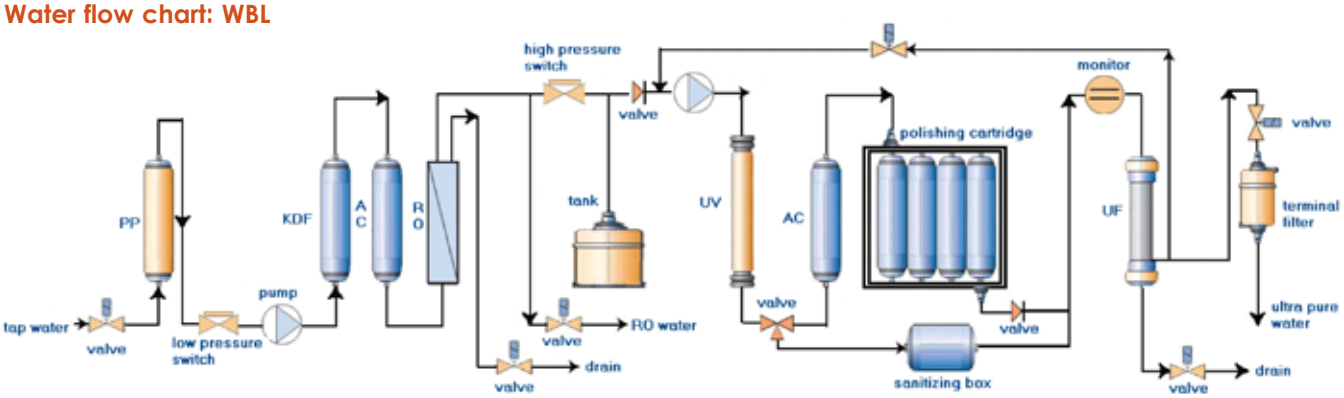
- **WPL-RO** Series deionized water system (Tap water inlet)
- **WPL-RO-S** Series ultra pure water system(Tap water inlet)
- **WPL-RO-D** Series ultra pure water system (DI water inlet).

LCD display function:

Features and Advantage:

Control System	Microprocessor control
Display System	240x128 Graphical LCD display
Quality Monitor	3-way online sensor, detecting the quality of inlet, RO outlet and ultrapure water respectively
Visual and Audio Alarm	Multiple alarm-including inlet water over standard, no water, full water, outlet water over standard, Consumable' life-span ends, malfunction auto-detect
Recirculation System	Manual and auto, freely switchable, ultra-pure water recirculation system, keeping a low polluted-level of bacteria
Safety System	With factory and clients' two password, every system setting can be protected, avoiding unauthorized operating
Filter replacement remainder	The life-span can be set and the time used and left can be displayed, replacing auto-reminding, avoiding the decline of water quality.
Sanitization system	Ultra pure water pipeline can be regularly disinfected to keep a high quality water
RO membrane flush	Automatically RO membrane flushing function, extending its life-span
"on-off duty" mode	On/off duty mode increase filter life span
Water tank	Various kind of tanks to meet different needs and assure water-supply
Machine case	Human engineering design, streamline case
Pipeline and adaptor	Pipeline with NSF authorization to assure high quality ultrapure water; new easy-inserting adaptor to make convenience of cartridge maintaining and replacing
Pretreatment cartridge	Ultra long-life pre-cartridge, 6-8 times of normal active carbon (expect PP filter), unnecessary replacement for 2 year most, reducing the working cost
RO membrane	Manufactured by DOW or FCS, realize the combination of long-life and high-quality
Ultra purification cartridge	4 cartridges of ultra purification, using famous nuclear resin to assure best quality
UV module	Double wavelength (185nm & 254nm) UV lamp, restraining bacteria's increase, reducing TOC & enhancing the applicability
UF module	MWCO 5000D PES UF module, effectively eliminating endotoxin, can be used for precise cell cultivating and IVF
Terminal Filtration	Sartorius high-speed and large flux 0.45+0.2 μm polyether alternative compound filter terminal disinfection filter, assuring the quality absolutely axenic

Water flow chart: WBL



Accessories:

Extra pretreatment
Including: microfiltration, soft water, KDF filter cartridge, dislodge granular, residual chlorine, organics, heavy metal in case of scaling, bacterial growth & hard water.

Built-in tank
It has 2 pieces of 15 Liter tank, and save more room.

Humanized tray
It's a good place for water cup.

Built-in polishing resin cartridge
The capacity is 12 Liter, ensure the resistivity is more than 10MΩ-cm, and it could produce about 20000 Liter water.

Remote water gun
You could take the water from 3 meters away, if has the water gun.

Portable resistivity meter
Measure the resistivity easily in any place.

Utilizing global high-quality parts:

- RO membrane: DOW or CSM
- Ultra purification cartridge: Rohm & hass or DOW
- UV, UF cartridge: world famous brand
- Terminal filtration: world famous brand
- Pump: world famous brand
- Water quality monitor system: world famous brand
- Other components: world famous brand.

Incorporating cutting-edge technology:

- RO Series uses the reverse osmosis technology of NASA. Desalination rate≥99%, eliminating virus rate≥99.5%
- Special circle-inside function to guarantee water quality
- II mixed beds guarantees water quality and increase the life-span of ultra purification cartridge
- Double wave length UV lamp efficiently decreases virus and TOC
- Ultra purification cartridge efficiently eliminates endotoxin
- High flux terminal filtration with pre-filtration function.

Options:

Model	Description
171-1-000010	Bottom layer
171-1-000011	10' pretreatment filter, Including 10' spun fiber filter, water softener, KDF
171-1-000012	Pure polishing resin cartridge, Capacity is 12 Liter
171-1-000013	Tank, Capacity is 15 Liter
171-1-000014	Water gun, Including PFA telescopic pipe 1/4" 3M
171-1-000015	Water gun, Including PP telescopic pipe 1/4" 3M
171-1-000016	Portable resistivity meter

WPL-RO-HP-15/30 Systems, Deionized Pure Water Systems (Tap water inlet)

Model		Reverse osmosis deionized water purification system			
		WPL-RO-15	WPL-RO-HP-15	WPL-RO-30	WPL-RO-HP-30
Flow procedure		PF+KDF+AC+RO +AC-DI	PF+KDF+AC+RO+ AC+UV+DI+TF	PF+KDF+AC+RO +AC+DI	PF+KDF+AC+RO+ AC+UV+DI+TF
Application		• ware washing • Agricultural • General biological • Aquatic products feeding • Inlet water for Ultra pure water machine • water for sterilizer/ T&H chamber • Buffer disposing • Aseptic drinking water • Physical and chemical analysis • Fine chemistry industry • Inlet water for Ultra pure water machine • GC/HPLC			
Pure water Index		High pure water resistivity:17.5-13 MΩ-cm, RO water(TDS):10-5ppm*, Heavy metal<0.1ppb, TOC<30ppb. Bacteria <1 CFU/ml(Only for UT model), Particle(>0.22μm)<1/ml(Only for UT model)			
Technical spec.	Output(25°C)	15 Liters/hour* / 30 Liters/hour*			
	Moment output	1.5 Liters/min (with pressure tank)			
	Pure water outlet	RO Water, High pure water			
	Dimension / Weight / Power	W×D×H:54×36×50cm/ 30-20 Kg/ 220V/50HZ, 120W			
Control system	Mode display	Power on, program, inlet rinse, producing, full, circle, regular outlet, disinfection, consumables replacing reminder			
	Safety	Low pressure and full water alarm, password,auto-reset, outlet forbidden if alarm or disinfection			
	System monitor	Monitoring quality of inlet water, RO water and ultrapure water, temperature, used and left time of consumables			
Water source required		Tap water; inlet TDS<200 ppm, 1-40°C, 1.0-3.5 kg/cm2 (if inlet TDS>200ppm, pretreatment is recommended)			
Purification system	Pretreatment unit	5μm spun fiber filter×+1 Long-effective KDF filter×+1 Granular active carbon filter×1			
	RO unit	100 GPD RO membrane×1 (30L model: 2×100 GPD RO membrane)			
	Subsequent unit	Post active carbon filter×1 + Mixed resin cartridge×3 {30L model: Mixed resin cartridge×4} UT model: 254nm UV cartridge×1 + 0.2μm terminal filter×1			
Standard configuration		Main body(including:1 set cartridge)+4gallon tank			

* Inlet water: TDS200ppm, 25°C, 50psi and 15% recovery rate.

** GPD=gallon per day 1gallon=3.8L.

*** The quality of inlet water will effect output's and cartridge's life.

PF: Pretreating, KDF: Kinetic degradation fluxion, AC: Active carbon, RO: Reverse osmosis, DI: Ion exchange, UV: Ultraviolet, TF: Terminal filter.

WPL-RO-UP Systems, Ultra Pure Water Systems (Tap water inlet)

Model		Standards	Eliminating endotoxin	Low TOC	Comprehensive
		WPL-RO-UP-15-S WPL-RO-UP-30-S	WPL-RO-UP-15-UF WPL-RO-UP-30-UF	WPL-RO-UP-15-UV WPL-RO-UP-30-UV	WPL-RO-UP-15-UVF WPL-RO-UP-30-UVF
Flow procedure		PF+KDF+AC+RO +AC-DI+TF	PF+KDF+AC+RO+ AC+DI+UF+TF	PF+KDF+AC+RO+ UV+AC+DI+TF	PF+KDF+AC+RO+ UV+AC+DI+UF+TF
Application		GC,HPLC,IC,ICP PCR, weather analysis Amino acid analysis Reagent preparation	Molecular biology Cell & tissue cultivation Life science,IVF electrophoresis	HPLC,IC,ICP-MS TOC & organism analyse CF-AAS,toxicology study Environmental analyse	HPLC,IC,ICP-MS,CF-AAS Physics,electrochemistry, Molecular biology, Cell cultivation
Pure water quality	Resistivity	18.2 MΩ-cm@25°C			
	Heavy metal	< 0.1ppb			
	TOC	<10 ppb		<3 ppb	
	Bacteria	<1 CFU/ml			
	Endotoxin	-	<0.001 EU/ml	-	<0.001 EU/ml
	Particle(>0.22μm)	<1 / ml			
	TDS (RO water)	5-10 ppm*			
Technical spec.	Output(25°C)	15/30 Liters/hour*			
	Moment output	1.5 Liters/min (with pressure tank) (Less output with UF/UV cartridge)			
	Pure water outlet	RO Water, Ultra pure water			
	Dimension / Weight / Power	W×D×H: 50×36× 54cm / 20-30 Kg / 220V/50HZ, 120W			
Control system	Mode display	Power on, program, inlet rinse, producing, full, circle, regular outlet, disinfection, consumables replacing reminder			
	Safety	low pressure and full water alarm, password, auto-reset, outlet forbidden when alarm or disinfection status			
	System monitor	Monitoring quality of inlet water, RO water and ultrapure water, temperature, used and left time of consumables			
Water source required		Tap water; inlet TDS<200 ppm, 1-40°C, 1.0-3.5 kg/cm2 (if inlet TDS>200ppm, pretreatment is recommended)			
Purification system	Pretreatment unit	5μm spun fiber filter×1+ Long-effective KDF filter×1+ Granular active carbon filter×1 (30L model: 10" PP filter×1+10" KDF filter×1+10"granular active carbon filter×1)			
	RO unit	100 GPD RO membrane×1 (30L model: 2×100 GPD RO membrane)			
	Subsequent unit	Post active carbon filter×1 +Ultra pure polishing resin cartridge× 0.2 +4μm terminal filter×1 UV model:+Double wavelength(254&185 nm)UV cartridge×1 UF model:+ 5000 Doulton UF cartridge×1 UVF model:+Double wavelength(254&185 nm)UV cartridge×5000+1 Doulton UF cartridge×1			
Standard configuration		Main body(including:1 set cartridge)4 gallon tank			

* Inlet water: TDS200ppm, 25°C, 50psi and 15% recovery rate.

** GPD=gallon per day 1 gallon=3.8L.

*** The quality of inlet water will effect output's and cartridge's life.

PF: Pretreating, KDF: Kinetic degradation fluxion, AC: Active carbon, RO: Reverse osmosis, DI: Ion exchange, UV: Ultraviolet (Double wavelength: 254&185nm), UF: Ultrafiltration TF: Terminal filter.

WPL-UP Systems, Ultra Pure Water Systems (Pure water inlet)

Model		Standards	Eliminating endotoxin	Low TOC	Comprehensive
		WPL-UP-S	WPL-UP-UF	WPL-UP-UV	WPL-UP-UVF
Flow procedure		AC+DI+TF	AC+DI+UF+TF	UV+AC+DI+TF	UV+AC+DI+UF+TF
Application		GC,HPLC,IC,ICP PCR, weather analysis Amino acid analysis Reagent preparation	Molecular biology Cell & tissue cultivation Life science,IVF electrophoresis	HPLC,IC,ICP-MS TOC & organism analyse CF-AAS,toxicology study Environmental analyse	HPLC,IC,ICP-MS,CF-AAS Physics,electrochemistry, Molecular biology, Cell cultivation
Pure water quality	Resistivity	Ultra pure water:18.2 MΩ-cm@25°C ;High pure water:≥3 MΩ-cm			
	Heavy metal	< 0.1ppb			
	TOC	<10 ppb		<3 ppb	
	Bacteria	<1 CFU/ml			
	Endotoxin	-	<0.001 EU/ml	-	<0.001 EU/ml
	Particle(>0.22μm)	<1 / ml			
Technical spec.	Output	1.5 Liters/min(Less output with UF/UV cartridge)			
	Pure water outlet	High pure, Ultra pure water			
	Dimension / Weight / Power	W×D×H:54×36×50cm/ 30-20 Kg/ 220V/50HZ, 120W			
Control system	Mode display	Power on, program, inlet rinse, producing, full, circle, regular outlet, disinfection, consumables replacing reminder			
	Safety	low pressure and full water alarm, password, auto-reset, outlet forbidden when alarm or disinfection			
	System monitor	Monitoring quality of inlet water, RO water and ultrapure water, temperature, used and left time of consumables			
Water source required		Ro water, distilled water, deionized water.5-45°C,1atm*			
Purification system		Post active carbon filter×+1Mixed bed resin cartridge×+1Ultra pure polishing resin cartridge× +4 0.2μm terminal filter×1 UV model:+Double wavelength(254&185 nm)UV cartridge×1 UF model:+ 5000 Doulton UF cartridge×1 UVF model:+Double wavelength(254&185 nm)UV cartridge×5000+1 Doulton UF cartridge×1			
Standard configuration		Main body(including:1 set cartridge)			

* The quality of inlet water will effect output's and cartridge's life.
AC: Active carbon, DI: Ion exchange, UV: Ultraviolet (Double wavelength: 254&185nm),
UF: Ultrafiltration TF: Terminal filter.

Consumable & accessories of WPL Series

Model	Specs	Replacement term
171-2-000030	5μm spun fiber filter	About 2-6 months
171-2-000031	Long-effective KDF filter	About 1 year
171-2-000032	Granular active carbon filter	About 6 months
171-2-000033	Post active carbon filter	About 9000 Liters water
171-2-000034	10" PP filter	About 2-6 months
171-2-000035	10" KDF filter	About 1 year
171-2-000036	10"granular active carbon filter	About 6 months
171-2-000037	100 GPD RO membrane	About 1-2 years
171-2-000038	Mixed bed resin cartridge	About 1000L water
171-2-000039	Ultra pure polishing resin cartridge	About 1000L water
171-2-000040	5000 Doulton UF cartridge	-
171-2-000041	0.2μm terminal filter	About 1 year
171-2-000042	254nm UV cartridge	-
171-2-000043	254 nm lamp	About 9000 hours
171-2-000044	Double wavelength (185&254nm)UV cartridge	-
171-2-000045	185&254 nm UV lamp	About 9000 hours