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LABORATORY SYSTEMS

Q-FRONT

Ultrapure water systems

Adrona products Q-Front 5/10 are ultrapure water systems where water deionization and polishing are provided by one ion exchange cartridge. It simplifies servicing of the system and decreases the unit cost.

RO permeate water is stored in the tank and delivered to polishing loop by the pump.



- Includes the new flexible dispenser
- Configuration with in-line ultrafilter available



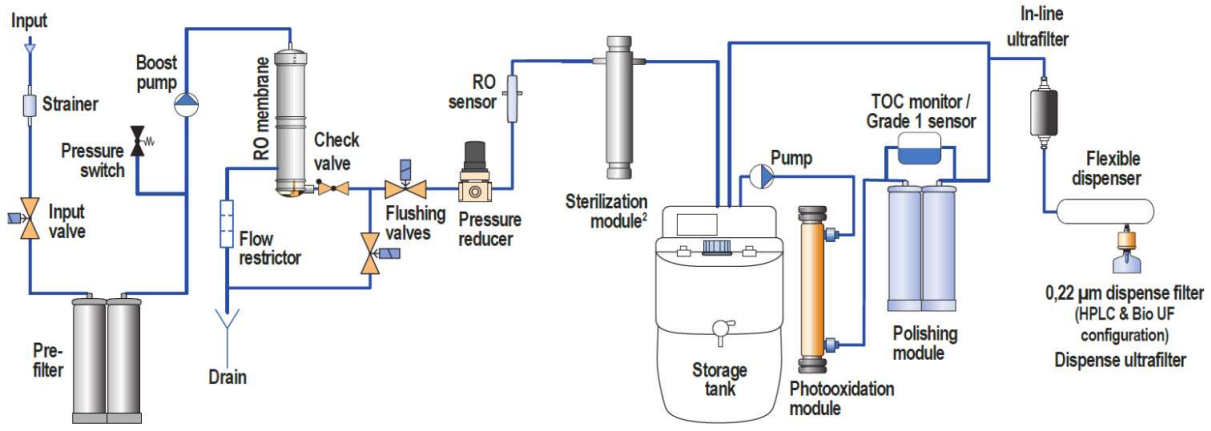
Grade1 water can be dispensed by attached dispenser, including volumetric dispensing. All-well known Grade1 systems configurations – Trace, HPLC and Bio are available.

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Water Specifications

	Q-Front system configuration			
	Trace	**HPLC**	**Bio**	**Bio UF**
Grade I water resistivity	18.2 MΩ x cm	18.2 MΩ x cm	18.2 MΩ x cm	
Grade I water conductivity	0.055 µS/ cm	0.055 µS/ cm	0.055 µS/ cm	
RO rejection rate	≥ 98%	≥ 98%	≥ 98%	
TOC	<10 ppb	<2 ppb	<2 ppb	
RNase	-	-	<0.01 ng/mL	
DNase	-	-	<4 pg/µL	
Bacteria	<0.01 CFI/mL	<0.01 CFI/mL	<0.01 CFI/mL	
Endotoxins	<0.15 EU/mL	<0.15 EU/mL	<0.001 EU/mL	
Particles >0.22 µm	<1/mL	<1/mL	<0.05/mL	
Nominal flow, pure or RO (EDI) water (to storage tank), depending on model	5/10 L/h	5/10 L/h	5/10 L/h	
Dispense rate, ultrapure water	Up to 2L/min	Up to 2L/min	Up to 2L/min	

Flow diagram



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Ordering Information

Water type	**Model**	**Part number**
BOTH: • Ultrapure (Grade 1) • RO water	Q-Front 5 Trace	QF-3101
	Q-Front 10 Trace	QF-3201
	Q-Front 5 HPLC	QF-3103
	Q-Front 10 HPLC	QF-3203
	Q-Front 5 Bio	QF-3105
	Q-Front 10 Bio	QF-3205
	Q-Front 5 Bio UF	QF-3115
	Q-Front 10 Bio UF	QF-3215

Consumables

Part number	Description	Replacement criteria	Comments
10410	Pre-filter set	Filter life is 0 (zero) or the filter is clogged	400 h filter life counter
			For all Q-Front models
10030	Polishing module	When conductivity of dispensed Grade I water is constantly >0.1 µS/cm or when Error 2 is shown	Depends on water consumption
			For "Trace", "HPLC", "Bio" configuration;
10011	Sterilization UV bulb	When required (on average every 2 years)	*For "Bio" and "Bio UF" configuration;* *For the systems equipped with 10102 UV sterilization module*
10018	UV photooxidation bulb	2 years on average	*For "HPLC" and "Bio" configuration*
10012	0.22 µm dispense microfilter	Every 6-12 months	*For "HPLC", "Trace", "Bio UF" configuration*
10120	Ultrafilter	Every 3-6 months	*For "Bio" configuration only*
11200	Replacement in-line ultrafilter	Every 6-12 months	*For "Bio UF" configuration only*

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Configurations According to Applications

	APPLICATIONS	Q-Front			
		Trace	HPLC	Bio	Bio UF
GENERAL LABORATORY APPLICATIONS	Glassware rinsing	●	●	●	●
	Laboratory washers	●	●	●	●
	Autoclaves	●	●	●	●
	Electrochemistry	●	●	●	●
	Wet chemistry	●	●	●	●
	Spectrophotometry	●	●	●	●
	Buffer and media preparation	●	●	●	●
	Reagent preparation	●	●	●	●
INORGANIC ANALYSIS METHODS	Flame atomic absorption spectrophotometry (AAS)	●	●	●	●
	Graphite automizer AAS	●	●	●	●
	Plasma mass-spectrometry (ICP-MS)	●	●	●	●
	Plasma spectrophotometry (ICP-OES)	●	●	●	●
	Ion chromatography	●	●	●	●
ORGANIC ANALYSIS METHODES	Liquid chromatography (HPLC/UHPLC)		●	●	●
	Gas chromatography		●	●	●
	TOC measurements		●	●	●
MOLECULAR BIOLOGY	Flow cytometry			●	●
	Cell and tissue culture			●	●

ISO 9001
BUREAU VERITAS Certification
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