Ultrapure Water Systems, Purelab flex 3 and 4

ELGA

Compact, bench mounting water systems which can produce Type I ultrapure water for HPLC, GFAAS (graphite furnace atomic absorption spectrophotometry), ion chromatography, inductively coupled plasma atomic emission or plasma mass spectrometry and life science applications. Alternatively, Type III reverse osmosis water is available for less demanding applications such as autoclave feed, steam generators and hydroponics.

- Designed for use with pre-purified or mains feedwater
- Incorporates reverse osmosis prefilter cartridge, photo-oxidation module with UV lamp to destroy micro-organisms and break down trace organic compounds to assist in the reduction of Total Organic Carbon (TOC), microfiltration and purification modules including deionisation and organic compound absorption
- Continuous recirculation eliminates static water zones, maintaining water quality and inhibiting microbial growth
- Manual dispensing unit on supported flex with display of purity, TOC and dispensing rate
- USB interface with data output for system performance validation
- Accessories include wall mounting kit, foot pedal control switch, leak sensor, sanitisation cartridge, biofilter which reduces DNase, RNase and bacteria from the output water, and 'Point-of-use' filter which provides conformance to international standards CLSI, CLRW, ISO 3696 Grade I, 2 and 3, ASTM, D1193-06, USP, EP and JP

Model, Purelab -	flex 3	flex 4
Feed Water		
Quality	Potable water of <2000µS/cm*	Pre-purified and filtered water of <30µS/cm
Hardness, ppm $CaCO_3$	<350	Minimal
Free chlorine, ppm CL_2	<0.5	<0.05
Chlorine, ppm CL_2	<0.2	<0.05
Total chlorine, ppm CL_2	<0.5	<0.05
Silica, ppm SiO_2	<30	<2
Carbon dioxide, ppm	<30	<30
Fouling index	<10	<1
TOC	<2ppm	<50ppb
Iron/manganese	<0.05ppm	N/A
Particulates	0.2µm prefilter recommended for non-RO feeds	N/A
Drain (gravity fall with air gap L/hr)	>90	>70
Pressure min/max. psi	30/90**	1/90

*Purification pack life may vary with feed waters >1400µS/cm

**Boost pump required if feed water pressure <60psi - *details on request*

Treated Water		
Daily volume, litres	<10	<10
Flow rate litres/min	≤2	≤2
Quality		
Inorganics (resistivity at 25°C) MΩ-cm	18.2	18.2
Organics (TOC)	<5ppb	<5ppb†
Internal reservoir	Type III/RO water — both models††	
Bacteria, typical		
with point-of-use filter†††	<1 CFU/10ml — both models	
with biofilter†††	<1 CFU/10ml — both models	
Endotoxins with biofilter	<0.001 EU/ml — both models	
DNase with biofilter†††	<20pg/ml — both models	
RNase with biofilter†††	<0.02ng/ml — both models	

†Dependent on feed water

††Better than/equal to Type III reverse osmosis water

†††Accessory filters

Specifications (both models)

Overall H x W x D	900 (1020***) x 236 x 470
Weight, full, kg	23
Supply requirements	100-240V 50/60Hz single phase, 100W

***With dispense flex extended

As described. For 100-240V 50/60Hz single phase supplies and feed water quality as indicated. Require, but are not supplied with DB304-59 for operation.

DB300-40 Purelab flex 3 for potable feed water
DB300-45 Purelab flex 4 for pre-purified/filtered feed water

Accessories

DB304-44 Foot switch
DB304-46 Wall mount kit
DB304-50 Point-of-use filter

DB304-53 Biofilter
DB304-56 Sanitisation filter
DB304-59 Purification filter

Spares

DB304-65 UV lamp
DB304-67 Reverse Osmosis (RO) module for flex 3 only
DB304-69 Composite air vent filter

DB300