



CRYSTAL EX PURE CRYSTAL EX DOUBLE FLOW CRYSTAL EX RO

FLOW DIAGRAMS

Crystal EX RO and Pure systems produce pure (Grade 2) and RO (Grade 3) water. Pure and RO water comply with the requirements of a variety of applications, including:

- many inorganic methods of analysis (e. g. flame AAS);
- wet chemistry methods;
- electrochemistry;
- labware washing, etc.

The water purification system Crystal Double Flow is specially designed for the laboratories and applications with high water consumption (30 L/day and more). The system includes a high capacity (8L) deionization module, that provides a reduction of system running costs.

DESCRIPTION

	Crystal EX RO	Crystal EX Pure	Crystal EX Double Flow
Water type	RO water	pure water (Grade 2)	pure water (Grade 2)
Application	<ul style="list-style-type: none"> • wet chemistry methods • labware washing • steam sterilizers • polishers feed 	<ul style="list-style-type: none"> • flame spectrophotometry • inorganic analytical methods • electrochemistry • buffer preparation 	<ul style="list-style-type: none"> • flame spectrophotometry • inorganic analytical methods • electrochemistry • buffer preparation
Display	Monochrome LCD display		
Conductivity sensor	•	•	•
TOC Monitor	-	-	-
Measurement validation port	-	-	-
Volumetric dispensing	-	-	-
Connection to Flow Point	-	-	-
Storage tank	required but not included		
Installation	installable on a laboratory bench		

ORDERING INFORMATION

Model	Part number
Crystal EX RO	EX-1245
Crystal EX Pure	EX-1005
Crystal EX Double Flow	EX20-1002HC
Crystal EX Pure 4	EX-1004

SPECIFICATIONS

	Crystal EX RO	Crystal EX Pure	Crystal EX Double Flow
Purified water resistivity at 25 °C		>10 MΩ x cm	>10 MΩ x cm
Purified water conductivity at 25 °C	TDS rejection rate ≥97%	<0.1 µS/cm	<0.1 µS/cm
Particles >0.22 µm	<1 per mL	<1 per mL	<1 per mL
Nominal flow, pure water (to storage tank)	10 L/h	10 L/h	20 L/h
Deionization module life (standard module)	N/A	1 m ³	N/A
Deionization module life (high capacity module)	N/A	N/A	3 m ³
Recovery	>30 %	>30 %	>30 %
Dimensions (WxDxH), cm	40x35x55	40x35x55	40x50x55
System weight, kg	10	12	26
Operation weight, kg	13	16	39
Feed water pressure	0.4 – 4 bar	0.4 – 4 bar	0.4 – 4 bar
Feed water conductivity	< 1500 µS/cm	< 1500 µS/cm	< 1500 µS/cm

CONSUMABLES

Part number	Description	Replacement criteria	Comments
10320	Replacement pre-filter	Filter life counter is zero or the filter is clogged	“RO” and “Pure” systems only
10410	Replacement pre-filter set	Filter life counter is zero or the filter is clogged	“EX Double Flow” system only
10310	Replacement deionization module	„DI Err” message is shown, or water conductivity is consistently > 0.5 µS/cm	“Pure” systems only
10113	Replacement high-capacity deionization module	„DI Err” message is shown, or water conductivity is consistently > 0.5 µS/cm	“EX Double Flow” only
10011	Replacement sterilization UV bulb	As required (on average every 2 years)	Only systems with 10102 option

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