

R 20 UF

Catalogue no. 20DR-TOC-UF



Technical specification:

- Fed by tap water.
- Purification process stages:
 - sediment pre-filter 5µm,
 - integrated module (sediment-carbon-softening),
 - reverse osmosis,
 - demineralization on an spectrally clean ion-exchange TOC bed,
 - UV lamp 185/254 nm,
 - ultrafiltration UF,
 - microfiltration capsule 0,45/0,2µm.
- System efficiency: min. 20 dm³/h.
- Purified water conductivity < 0,055 µS/cm.
- Automated and unattended system performance.
- Water collection point – first purity class (ISO 3696:1999, EP, ASTM, FP) compliant with a microfiltration capsule 0,45/0,2µm.
- Mobile, adjustable inox arm holding water collection points – available adjustment ranges: up/down, front/back, left/right.
- The possibility of installing additional water intake point for general-purpose water (third class; ISO 3696:1999).
- Equipped with a 10 dm³ pressure tank for third class.
- Can be connected to other devices.
- Automatic shutdown when the tank is full or the filtrate valve is closed.
- Automatic ultrapure water recirculation between water collections (modes: continuous or periodic).
- Maintenance procedures may be performed by the user (easy disposable materials replacement).
- Flow rating of clear water min. 1 l/min.
- Intended to be fed by cold water: 5-40°C.
- Installation may be performed by the user.
- Acid-proof stainless steel (inox) housing.

Dimensions: 275x470x570 mm

Tank 10l: h. 390 mm, Ø 250 mm

Monitoring functions:

- The device is equipped with a microprocessor 24V automatics, that includes:
 - Color display screen with a Touch Panel function,
 - Conductometer measuring water pressure: feed, processed by reverse osmosis, and ultrapure (in µS/cm or MOhm),
 - Reading values compensated and uncompensated thermally,
 - Clock displaying date and time,
 - Actual system status information,
 - Alarm informing about necessity to replace initial cleaning modules,
 - Alarm informing about necessity to replace a UV lamp radiator,
 - Alarm informing about necessity to replace RO module,
 - Alarm informing about necessity to replace an ion-exchange module,
 - Alarm informing about necessity to replace a microfiltration capsule,
 - Alarm informing about necessity to replace an ultrafiltration module,
 - Membrane module retention level information,
 - Service dates display,
 - Tank fill level,
 - Menu in English, Russian, Germany, Spanish or Croatian on display,
 - RS 232 connector for service frequency and alarm levels adjustment,
 - USB connector for service frequency and alarm levels adjustment,
- Built-in feed water manometer.

Protection functions:

- Automatic pump shutdown when:
 - the feed water pressure is too low (lack of feed water) – low pressure sensor,
 - the tank is full – high pressure sensor.
- Thermal osmotic module performance protection, automatic system shutdown then the feed water temperature is below 4°C or above 40°C.
- Optional system shutdown if any alarm occurs.
- Optional system automatic start.
- System messages/monitoring alarms display.

Purified water parameters:

- Purified water fits the ISO 3696: 1999, EP, the ASTM, and the CLSI standards for the first purity class.
- Obtained water is microbiologically and physicochemically compliant with the FP standard for the purified production water.
- Obtained water may be used for: instrumental analyses AAS, ICP/MS, IC, HPLC, GC, bacteria cultures, biochemical analyses.

Purified water parameters:

- bacteria < 0,1 cfu/ml,
- particles > 0.2µm < 1/ml,
- conductivity < 0,055 µS/cm,
- resistance 18,2 MOhm*cm.
- endotoxins < 0,001 EU/ml,
- RNases < 0,004 ng/ml,
- DNases < 4 pg/µl.

Required connections in the installation place:

- cold tap water connection ½" or ¾",
- drainage,
- 230 V power socket.

Model	Sediment prefilter 5µm *	Module A2 *	Module H7 TOC*	Capsule microfiltration	UV lamp 185/ 254 nm**	Ultrafiltration module UF
R20 UF	+	+	+	+	+	+
Lifetime	6 months	6 months*	2000dm ³	12 months*	12 months	12 months
Cataloge no.	EO-005-10	EO-MA-12	EJ-2000-1	EM-SP-20	EUV-185-254-0	EU-HLP-01

*If feed water parameters are different (hard water) the shell live of the spare parts might be shorter!

**Lifetime 12 months or 8500 hour