HLP 20SP

Cat. no: DH-0020-SP

LIGHTWATER
ultrapure

Technical specification:
- The device works under tap water pressure.
- Fed by tap water.
- Water purification levels:
    • sediment pre-filter 5µm,
    • integrated module (sediment-carbon-softening),
    • reverse osmosis,
    • demineralization on a mixed ionex resin,
    • microfiltration cascade capsule 0,45/0,2µm.
- Efficiency min. 20-22 dm^3/h.
- Demineralized water conductivity < 0,06 µS/cm.
- Unattended and automated.
- Equipped with a pump increasing feed water pressure.
- Two independ water intake points:
    1. Second purity class (ISO 3696:1999, ASTM, CLSI) - nozzle reach min. 2 m, equipped with a 10 dm^3 pressure tank.
    2. First purity class (ISO 3696:1999, EP - with a 0,2µm microfiltration capsule).
- The possibility of installing additional water intake point for general-purpose water (third class (ISO 3696:1999)).
- Mobile, adjustable inox arm holding water collection points – available adjustment ranges: up/down, front/back, left/right.
- Optional replacement with a bigger tank (40 dm^3, 80 dm^3 and more).
- Automated system shutdown when the tank is full.
- Optional connection to an autoclave, washer machine etc.
- Maintenance procedures may be performed by the user (easy replacement of disposables).
- Fed by cold water: 5-40°C.
- Power supply: 230V/50Hz.
- Can be installed by the user.
- Acid-proof stainless steel (inox) housing.

Dimensions (SxGxW): 235x470x570 mm
Tank 10l: height: 390 mm, diameter: 250 mm

Functions monitoring the device:
• The device is equipped with a microprocessor control and measurement system that includes:
    - LCD display screen 2x16 characters
    - conductometer measuring conductivity and temperature of purified water (measured in µS/cm or MOhm),
    - reading values compensated and uncompensated thermally,
    - timer displaying current date and time,
    - alarm informing about necessity to replace sediment filter and module A,
    - alarm informing about necessity to replace ionex resins,
    - alarm informing about necessity to replace microfiltration capsule,
    - menu in English, Russian, Spanish or German,
    - maintenance deadlines preview,
    - built-in RS 232 connector for personal computers,
    - individual adjustment of maintenance frequency and alarm levels.
• Software.
• Built-in manometer measuring feed water pressure.

Functions protecting the device:
• Pomp shutdown when:
    - feed water pressure is too low (lack of feed water) – low pressure sensor,
    - the tank is full – high pressure sensor.

Feed water parameters:

- Conductivity < 1200 µS/cm
- Pressure > 3,0 bar
- Temperature: 5-40°C
- Hardness < 250 mg $CaCO_3/dm^3$
- Fe < 0,2 mg/dm^3

Usage:

Obtained water may be used for instrumental analyses AAS, ICP/MS*, IC, HPLC*, GC, bacteria cultures*, biochemical analyses* and for general-purpose research.

**point with microfiltration cascade capsule 0,45/0,2µm*

Required connections:

- cold tap water connection ½" lub ¾",
- 230V socket,
- drain.

Models produced from April 2013 r.

model	Sediment prefilter 5µm	Module A2	Module H6	MF capsule 0,2µm
HLP20SP	+	+	+	+
Lifetime	6 months*	6 months*	5000 dm^3**	12 months*
Cataloge no.	**EO-005-10**	**EO-MA-12**	**EJ-5000-0**	**EM-SP-20**

* The life of a filter cartridge can be affected by the flow, it's characteristic as well as the level and type of the contamination.

** * Volume of the purified water depends on the quality of the feed water, the maximum amount of the dissolved salt in the feed water - 1200 mg/l.