

# HLP 5SP

Cat. no: DH-0005-SP





### Technical specification:

- The device works under tap water pressure.
- Fed by tap water.
- Water purification levels:
  - sediment pre-filter 5 $\mu$ m,
  - integrated module (sediment-carbon-softening),
  - reverse osmosis,
  - demineralization on a mixed ionex resin.
  - microfiltration cascade capsule 0,45/0,2 $\mu$ m.
- Efficiency min. 5-7 dm<sup>3</sup>/h.
- Equipped with a pump 24V increasing feed water pressure.
- Demineralized water conductivity < 0,06  $\mu$ S/cm.
- Unattended and automated.
- Equipped with a pump 24V 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<sup>3</sup> pressure tank.
  2. First purity class (ISO 3696:1999, EP - with a 0,2 $\mu$ m 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<sup>3</sup>, 80 dm<sup>3</sup> 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):** 235x470x510 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  $\mu$ S/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  $\mu\text{S}/\text{cm}$
- Pressure > 3,0 bar
- Temperature: 5-40°C.
- Hardness < 250 mg  $\text{CaCO}_3/\text{dm}^3$
- Fe < 0,2 mg/ $\text{dm}^3$

**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 0,45/0,2 $\mu\text{m}$*

**Required connections:**

- cold tap water connection  $\frac{1}{2}$ " lub  $\frac{3}{4}$ "
- 230V socket,
- drain.

Models produced from April 2013 r.

model	Sediment prefilter 5 $\mu\text{m}$	Module A2	Modules 2x H7	MF capsule 0,2 $\mu\text{m}$
HLP 5SP	+	+	+	+
Lifetime	6 m-cy*	6 m-cy*	2x2000 dm <sup>3</sup> **	6 m-cy*
<b>Cataloge no.</b>	<b>EO-005-10</b>	<b>EO-MA-12</b>	<b>EJ-2000-0</b>	<b>EM-SP-20</b>

\* 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.