



HLP SMART



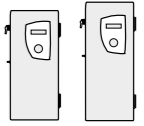
HLP 10



HLP 5



## HPLC SERIES



HLP demineralizers are powered by tap water and match requirements of an every modern laboratory, in areas of supplying with purified water for instrumental and analytical purposes. Conductivity of obtained water does not exceed 0,06  $\mu\text{S}/\text{cm}$ , so it is applicable for PN-EN ISO 3696:1999, ASTM, CLSI, FP standards. Water may also be used for AAS, ICP/MS, IC, HPLC, GC instrumental analyses depends of model. In addition, our demineralizers are equipped with a microprocessor control and measurement system.

Models 5 l/h	Dimensions [mm]	Prefilter 5 $\mu\text{m}$	Module A2	Microfiltration 0,2 $\mu\text{m}$	Pump 24V	Pump 48V	UV Lamp	Module H7	Module H7 TOC	Module H6	Module H6 TOC	Standard PN-EN 3696:1999	Catalogue no.
SMART	200x375x430	+	+	-	-	-	-	+	-	-	-	II class	DH-0004-00

Models 5 l/h	Dimensions [mm]	Prefilter 5 $\mu\text{m}$	Module A2	Microfiltration 0,2 $\mu\text{m}$	Pump 24V	Pump 48V	UV Lamp	Module H7	Module H7 TOC	Module H6	Module H6 TOC	Standard PN-EN 3696:1999	Catalogue no.
HLP 5	235x440x510	+	+	-	-	-	-	+	-	-	-	II class	DH-0005-00
HLP 5s	235x440x510	+	+	+	-	-	-	+	-	-	-	I class	DH-0005-0S
HLP 5p	235x440x510	+	+	-	+	-	-	+	-	-	-	II class	DH-0005-0P
HLP 5sp	235x440x510	+	+	+	+	-	-	+	-	-	-	I class	DH-0005-5P
HLP 5uv	235x440x510	+	+	+	+	-	+	-	+	-	-	I class	DH-0005-UV

Models 10 l/h	Dimensions [mm]	Prefilter 5 $\mu\text{m}$	Module A2	Microfiltration 0,2 $\mu\text{m}$	Pump 24V	Pump 48V	UV Lamp	Module H7	Module H7 TOC	Module H6	Module H6 TOC	Standard PN-EN 3696:1999	Catalogue no.
HLP 10	235x470x570	+	+	-	-	-	-	-	-	+	-	II class	DH-0010-00
HLP 10s	235x470x570	+	+	+	-	-	-	-	-	+	-	I class	DH-0010-0S
HLP 10p	235x470x570	+	+	-	+	-	-	-	-	+	-	II class	DH-0010-0P
HLP 10sp	235x470x570	+	+	+	+	-	-	-	-	+	-	I class	DH-0010-5P
HLP 10uv	235x470x570	+	+	+	+	-	+	-	-	-	+	I class	DH-0010-UV

Models 20 l/h	Dimensions [mm]	Prefilter 5 $\mu\text{m}$	Module A2	Microfiltration 0,2 $\mu\text{m}$	Pump 24V	Pump 48V	UV Lamp	Module H7	Module H7 TOC	Module H6	Module H6 TOC	Standard PN-EN 3696:1999	Catalogue no.
HLP 20	235x470x570	+	+	-	-	+	-	-	-	+	-	II class	DH-0020-00
HLP 20s	235x470x570	+	+	+	-	+	-	-	-	+	-	I class	DH-0020-0S
HLP 20p	235x470x570	+	+	-	-	+	-	-	-	+	-	II class	DH-0020-0P
HLP 20sp	235x470x570	+	+	+	-	+	-	-	-	+	-	I class	DH-0020-5P
HLP 20uv	235x470x570	+	+	+	-	+	+	-	-	-	+	I class	DH-0020-UV

Models 30 l/h	Dimensions [mm]	Prefilter 5 $\mu\text{m}$	Module A2	Microfiltration 0,2 $\mu\text{m}$	Pump 24V	PPump 48V	UV Lamp	Module H7	Module H7 TOC	Module H6	Module H6 TOC	Standard PN-EN 3696:1999	Catalogue no.
HLP 30	235x470x570	+	+	-	-	+	-	-	-	+	-	II class	DH-0030-00
HLP 30s	235x470x570	+	+	+	-	+	-	-	-	+	-	I class	DH-0030-0S
HLP 30p	235x470x570	+	+	-	-	+	-	-	-	+	-	II class	DH-0030-0P
HLP 30sp	235x470x570	+	+	+	-	+	-	-	-	+	-	I class	DH-0030-5P
HLP 30uv	235x470x570	+	+	+	-	+	+	-	-	-	+	I class	DH-0030-UV

Catalogue no.	EO-005-10	EO-MA-12	EM-SP-20	A-P-024	A-P-048	EUV-254-HLP	EJ-2000-0	EJ-2000-1	EJ-5000-0	EJ-5000-1		
---------------	-----------	----------	----------	---------	---------	-------------	-----------	-----------	-----------	-----------	--	--

**General information**

- Powered by: tap water.
- Efficiency: 4-30 dm<sup>3</sup>/h.
- Purified water intake speed: 1-2 l/min.
- Conductivity < 0,06 µS/cm.
- Bacteria < 1cfu/ml\*.
- Particles > 0,2µm < 1/ml\*.

**Standard:**

Water purified in this device fits the PN-EN ISO 3696:1999 standard for I\*, II, III purity class, and microbiological/ physicochemical FP requirements for purified production water\*.

**Application:**

Obtained water may be used for instrumental analyses AAS, ICP/MS, IC, HPLC\*, GC\*, bacteria cultures\*, biochemical analyses\*.

\* device equipped with a UV lamp and/or a microfiltration capsule 0,22 µm

**Technical parameters:**

- Device operates under tap water pressure.
- Water purification levels:
  - sediment filtration 5µm,
  - module A2 filtration (mechanical-carbon-softening),
  - reverse osmosis,
  - ion exchange demineralization,
  - UV lamp – 254 nm (model: HLPUV),
  - microfiltration cascade capsule 0,45/0,22 µm (models: HLPs, HLPsp, HLPUV),
- Automatic and maintenance-free.
- Equipped with a pump increasing the pressure of 24V power, with automatics (selected models).
- The water intake point (purity class: PN-EN ISO 3696:1999) equipped with a demi faucet with a minimum reach of 2mb
- Movable, regulated INOX frame strenghtening water intake points, allows to regulate the settings up/down, right/left, front/back.
- Can be connected to a dishwasher, an autoclave, analyzer etc.
- Optional UV sterilizer.
- Power supply 230V/50Hz.
- Energy consumption: 10-100W.
- Can be installed by the user.

**Functions monitoring system performance:**

- 24 V automatics with a microprocessor control and measurement system:
  - LCD display,
  - conductometer measuring conductivity and temperature of demineralized water in units µS/cm or MOhm,
  - temperature compensation,
  - clock displaying date and time,
  - system status information,
- Graphic and sound alarms:
  - when need to change an A2 module (mechanical-carbon-softening),
  - when need to change an UV lamp (in models containing a UV lamp),
  - alarm informing to replace microfiltration capsule (models with microfiltration capsule),
  - alarm informing to replace ion exchange cartridge
  - service dates view,
  - service phone number customization,
  - RS 232 connector for modification of service, frequencies and alarm levels.

- Software.
- Built-in feed water manometer.

**Functions protecting the device:**

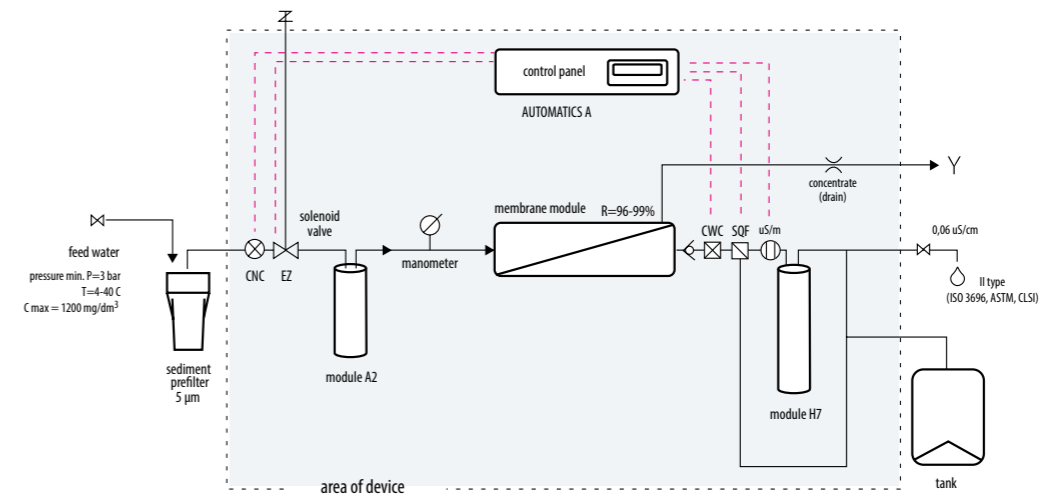
- Pump shutdown when:
  - feed water pressure is too low (lack of feed water) – low pressure sensor,
  - the tank is full – high pressure sensor.

**Feed water parameters:**

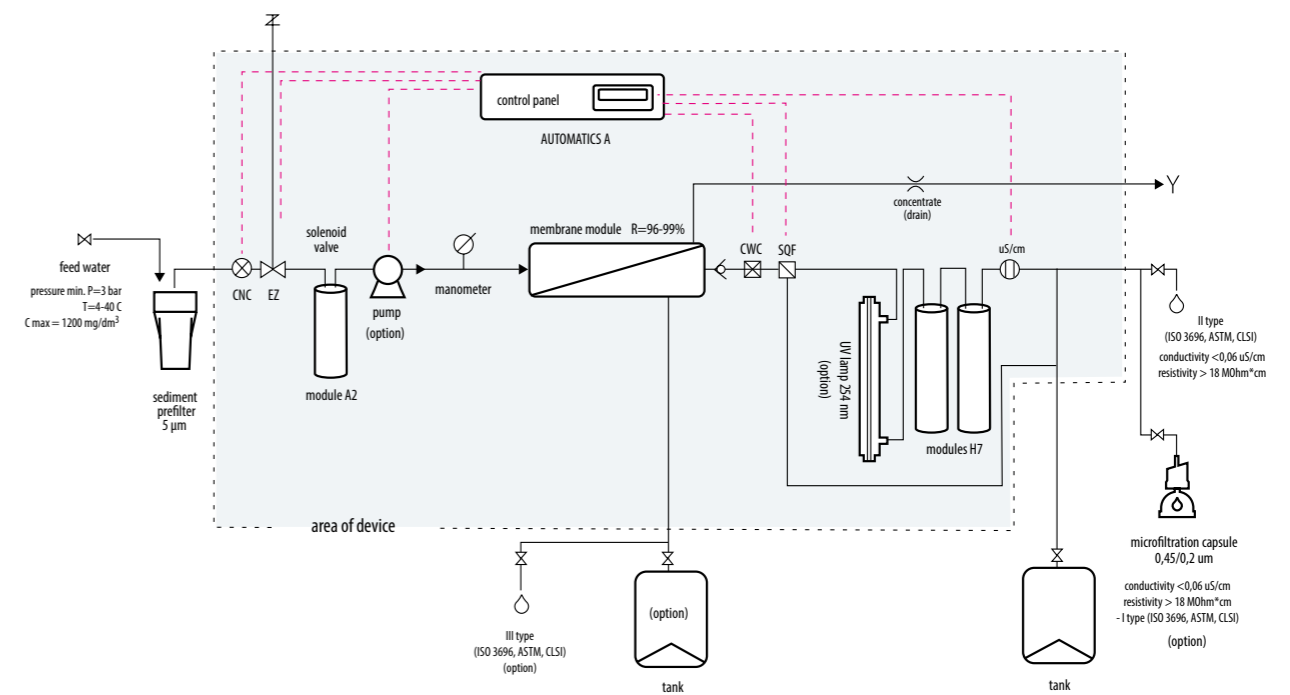
- Conductivity < 1200 µS/cm.
- Pressure > 3,0 bar.
- Temperature : 4-40°C.
- Hardness < 250 mg CaCO<sub>3</sub>/dm<sup>3</sup>
- Fe < 0,2 mg/dm<sup>3</sup>

**Installation point connections:**

- Cold tap water connection ½" or ¾".
- 230V power supply socket.
- Drain.



HLP 5



HLP 10  
HLP 20  
HLP 30

