

# **Herco Light Commercial RO System**

### **Unit design**

**Stainless steel** plate used as installation panel housing the instruments and controls.

**Special inlet filter** with 5 µm activated carbon filter element, **high pressure pump, high performance spirally wound modul** with PA/PS composite membranes in stainless steel pressure vessel.

**Valves and instruments** including solenoid inlet valve, feedwater

pressure switch, vibration-resistant pressure gauge for pump pressure, flow restrictor for limitation of permeate and concentrate flow rate. Solenoid valve for automatic concentraterinse.

**Microprocessor control system** as described below, connecting cable (2 m) with shockproof plug.

Unit completely wired and pre-assembled and ready for installation. Electrical equipment in accordance with VDE 0100 part 600, VDE 113 part 1.

#### \*Option:

Permeate conductivity measurement (item no 391 903)

## RO 524 microprocessor control system for

fully automated monitoring and control of the reverse osmosis unit with **two-digit alphanumeric display** of permeate conductivity\*, forced stop and full tank, **malfunction signals**: low pressure, hard water and high conductivity\*, automatic restart of operation after progressive rest period, **LEDs** for operation and disinfection, concentrate flushing each operating cycle, forced flushing after 24 h standby

#### Additional connections possible:

**Inputs** (low voltage) for level control with 1 or 2 float switches, hardness monitoring unit (the RO 524 controller includes control functions for the limitron hardness monitoring unit), shut-downs by external signal (forced stop, regeneration).

**Outputs** for softening unit (230 V / 50 Hz) and DDC (collective malfunction signal on floating change-over contact).

The units are designed for a maximum TDS of 1,000 mg/l, a water temperature of 15°C, a max. colloidal index of 3 and free permeate outlet. Under these conditions, the unit reaches design permeate flow. The permeate recovery depends on the raw water quality and the type of pre-treatment.

| Technical Data                  |        | Specification |
|---------------------------------|--------|---------------|
| Permeate flow rate              | l/h    | 130           |
| Min. salt rejection             | %      | 95            |
| Recovery                        | %      | 50            |
| Operating pressure approx.      | bar    | 10.0          |
| Membrane element/amount         |        | 4021/1        |
| Voltage                         | V/Hz   | 230/50        |
| Motor power                     | kW     | 0.4           |
| Pre-fusing                      | Α      | 16            |
| Feedwater connection            | R      | 3⁄4" AG       |
| Permeate/concentrate connection | DN     | 10            |
| Conductivity range*             | μS/cm  | 1 – 99        |
| Min./max. feedwater pressure    | bar    | 3 / 6         |
| Min./max. feedwater temperature | °C     | 5 / 35        |
| Max. ambient temperature        | °C     | 40            |
| рН                              |        | 3 – 11        |
| Height                          | mm     | 370           |
| Width                           | mm     | 800           |
| Depth                           | mm     | 370           |
| Weight approx.                  | ca. kg | 31            |
| Code no.                        |        | 381 901       |

