

# Water purification systems



## Water purification systems, Type 1 and Type 2, Thermo Scientific Barnstead®, Smart2Pure™



**Thermo**  
SCIENTIFIC

**Molecular biology and microbiology:** cell and tissue culture, PCR\*, DNA sequencing and electrophoresis.

**Analytical chemistry:** HPLC, GC, GC-MS, ICP-MS, AA, TOC measurements and IC.

**Routine laboratory work:** preparing and diluting buffers and reagents, rinsing lab glassware, and supplying autoclaves and other small lab equipment.

- Smart2Pure™ is a compact complete system that produces 3L, 6L or 12L of ultrapure water per hour

The Smart2Pure™ system is a compact system which converts tap water into both ASTM Type 1 and Type 2 water. The Smart2Pure™ 3 and 6 feature a built in 6L reservoir to store the Type 2 water. The Smart2Pure™ 12 offers the choice of a 30L or 60L reservoir for customisable storage capacity.

### Powerful performance

- Based on your requirements, choose from capacities of 3L/hr, 6L/hr or 12L/hr

### Lasting economy

- Water purification progresses through independent cartridges with Aquastop quick connects for fast replacement
- **Module 1:** combination of pretreatment and the reverse osmosis membrane
- **Module 2:** polishing cartridge contains high quality ultrapure resin for consistent purity and long cartridge life

### Easy to operate

- Dispensing is easy and features variable speed to control flow
- The display can be tilted for optimal reading
- Optional UV bulb and UF ultrafilter to customise ultrapure water

### Placement options

- Position on laboratory bench
- Mount it on the wall

### Smart integrated 6L reservoir for the Smart2Pure™ 3 and 6

- Constructed with pigment free materials
- Conical bottom outlet allows for complete draining and efficient cleaning and disinfection

### Smart2Pure™ 12 offers reservoir options, either 30L or 60L

- Large opening for easy and effective cleaning by hand
- Sterile venting filter and reservoir overflow protect against contamination by microorganisms
- Optional CO<sub>2</sub> absorber prevents TOC value increases from drawn in CO<sub>2</sub>
- Polyethylene reservoir is opaque to light
- Recirculation pump protects the high purity water from bacterial growth during standstills and maintains the low conductivity value
- Wall mount optional for simple space savings
- Conical bottom outlet allows for complete draining and efficient cleaning and disinfection

### Technical Specification - Specific

|                      |  |                      |  |  |
|----------------------|--|----------------------|--|--|
| Alt. No              | 13012963<br>50129869                   | 13213439<br>50129872 | 13032963<br>50129870                   | 13227449<br>50129688                   |
| Rate                 | Permeate performance: 3L/hr (at 15°C)  |                      | Permeate performance: 3L/hr (at 15°C)  | Permeate performance: 3L/hr (at 15°C)  |
| Flow rate, L/min     | 1                                      | 0.6                  | 1                                      | 0.6                                    |
| Total organic carbon | Type 1: 5ppb to 10ppb                  | Type 1: 1ppb to 5ppb | Type 1: 5ppb to 10ppb                  | Type 1: 1ppb to 5ppb                   |
| Endotoxin            | -                                      | Type 1: 0.005EU/mL   | -                                      | Type 1: 0.005EU/mL                     |
| Alt. No              | 13052963<br>50129873                   | 13217449<br>50129885 | 13072963<br>50129874                   | 13237449<br>50129887                   |
| Rate                 | Permeate performance: 6L/hr (at 15°C)  |                      | Permeate performance: 6L/hr (at 15°C)  | Permeate performance: 6L/hr (at 15°C)  |
| Flow rate, L/min     | 1                                      | 0.6                  | 1                                      | 0.6                                    |
| Total organic carbon | Type 1: 5ppb to 10ppb                  | Type 1: 1ppb to 5ppb | Type 1: 5ppb to 10ppb                  | Type 1: 1ppb to 5ppb                   |
| Endotoxin            | -                                      | Type 1: 0.005EU/mL   | -                                      | Type 1: 0.005EU/mL                     |
| Alt. No              | 13092963<br>50129888                   | 13378840<br>50129890 | 13012973<br>50129889                   | 13022973<br>50129845                   |
| Rate                 | Permeate performance: 12L/hr (at 15°C) |                      | Permeate performance: 12L/hr (at 15°C) | Permeate performance: 12L/hr (at 15°C) |
| Flow rate, L/min     | 1                                      | 1                    | 0.6                                    | 0.6                                    |
| Total organic carbon | Type 1: 5ppb to 10ppb                  | Type 1: 1ppb to 5ppb | Type 1: 5ppb to 10ppb                  | Type 1: 1ppb to 5ppb                   |
| Endotoxin            | -                                      | Type 1: 0.005EU/mL   | -                                      | Type 1: 0.005EU/mL                     |