# WATEX RCMB18X2 TECHNICAL DATA

| Technical specification | Unit | WATEX RCMB18X2 |
|---|---|---|
| Nominal flow* Qnom | m³/h | 2.6 |
| Maximum flow** Qmax | m³/h | 3.9 |
| Maximum throughput | m³/h | 7.0 |
| Rinse water volume*** | m³ | 0.82 |
| Minimum rinse flow | m³/h | 4.1 |
| Tank diameter | in | 18 |
| | m | 0.46 |
| Tank volume | l | 237 |
| Filter media per tank | l | 158 |
| Overall dimensions | | |
| Length (L) | m | 1.68 |
| Width (W) | m | 0.46 |
| Height (H) | m | 1.87 |
| Connections (inlet/outlet/drain) | in | 1¼″ / 1¼″ / 1″ |
| Clack control unit | | CI 1.25″ |
| Integrated water meter | | Yes |
| Design inlet-water quality | | Fe < 2.0 mg/l; Mn < 0.1 mg/l; $H_2S$ < 0.1 mg/l; NTU < 10 |
| Treatment | | Iron, manganese, odour, turbidity, colour |
| Tank material | | FRP (fibreglass) |
| Filter media | | Aqua Mandix, quartz sand 0.4 x 0.8 mm - 3.0 x 5.0 mm |
| Operating pressure | bar | 2-6 |
| Power supply | | 220 V, 50 Hz, single-phase |
| Power consumption | W | 3 W |

*** Backwash 8 min + downflow rinse 4 min
** Filtration velocity 12 m/h
* Filtration velocity 8 m/h

# WATEX RCMB18X2 DESCRIPTION

## APPLICATION

WATEX RCMB18X2 is intended to remove turbidity, dissolved and oxidised iron, manganese and odour from water for settlements, towns and industrial facilities. It is used primarily with groundwater or in centralised water-supply systems.

## OPERATING PRINCIPLE

The RCMB18X2 system operates by aeration and filtration. When untreated water is aerated, iron, manganese and mechanical impurities form small precipitates that can be filtered. Suspended solids are removed by the filter media in the filter. The filters are rinsed at regular intervals according to contamination and water consumption. After rinsing, the filters are ready to treat water again. The system consists of a reactor and one operating filter.

## PRESSURE TANKS

The filter pressure tanks are made of fibreglass with an internal PE lining and have a PN10 pressure rating.

## FILTER MEDIA

The water is treated using Anthracite filter media and quartz sand with different grain sizes (0.4-0.8 mm, 1-3 mm and 3-5 mm). The porous structure of Anthracite provides a large active surface and supports efficient adsorption and retention of the substances being filtered.

## CONTROL UNIT

The filter is equipped with an automatic Clack control unit that rinses the filter media and controls operation. Rinsing takes place at the set time, usually at 2.00 a.m.

## AIR SUPPLY

Water aeration requires an oil-free air compressor to supply air to the system. Air is introduced into the water before the reactor.

## SYSTEM MAINTENANCE

The filters provide good-quality water when operating personnel monitor the air supply, venting of the filters and correct operation of the rinse process. The iron-removal process uses no special reagents that require replenishment during operation.