

TECHNICAL DATA OF WATEX RCMB IRON REMOVAL FILTERS

Technical parameters of equipment	Unit	Model				
		RCMB10	RCMB12	RCMB13	RCMB14	RCMB16
Flow rate * Q_{nom}	m ³ /h	0.4	0.6	0.7	0.8	1.1
Flow rate ** Q_{max}	m ³ /h	0.6	0.8	1.0	1.2	1.6
The amount of water for regeneration ***	m ³	0.11	0.13	0.17	0.20	0.24
Minimum flow rate for rinsing	m ³ /h	1.6	2.0	2.6	3.0	3.6
Container size (diameter)	inches	10	12	13	14	16
	m	0.25	0.30	0.33	0.37	0.41
Container volume	liters	64	85	110	145	183
The amount of filtering material	liters	43	57	73	97	122
Dimensions						
Length	m	1.06	1.21	1.29	1.37	1.53
Width	m	0.25	0.30	0.33	0.37	0.41
Height	m	1.57	1.52	1.57	1.87	2.04
Connection. in /ext/kan.	inches	1"	1"	1"	1 ¼"	1 ¼"
Filtration		Iron, manganese, turbidity, odor, colorfulness				
Container material		FRP (fiberglass)				
Filtering material		Aqua Mandix, silica (quartz) sand 1x3mm, 3x5 mm				
Operating pressure	bar	2-6				
Electric Connection		220V, 50Hz, 1 phase				
Electricity consumption	W	3 W				

* Filtration speed 8 m/h

** Filtration speed 12 m/h

*** Backwash 8 min



IRON REMOVAL FILTER WATEX RCMB DESCRIPTION

APPLICATION

WATEX RCMB series filters are designed to purify water from turbidity, colorfulness, iron, manganese and odor for villages, cities and industrial enterprises. Mainly it is used for groundwater purification.

OPERATING PRINCIPLE

RCMB filter operating principle is based on aeration and filtration. When water is aerated, iron, manganese and mechanical impurities form sediment, which can be filtered. Suspended solids are filtered through filtering material, which has been poured in to filter. Filters depending on pollution levels and water consumption have to be rinsed regularly. Filters after rinsing are regenerated and can purify water. Equipment consists from reactor, filter and compressor.

PRESSURE TANK

Pressure filter tanks are made from fiberglass with inner PE coating that can hold pressure up to PN10.

FILTER MATERIAL

For water purification filtering material Aqua Mandix and quartz sand with different grain size (0.4-0.8mm, 1-3 mm, 3-5mm) is being used. Porous structure of Aqua Mandix provides a large active surface and provides efficient adsorption and accumulation of sediment.

CONTROL UNIT

The filter is equipped with an automatic Clack control which performs filtering and rinsing sequences automatically. Usually rinsing is performed at 2:00 at night.

AIR SUPPLY

For water aeration it is necessary to install air compressor. Air is injected in the water before it enters reactor.

SYSTEM MAINTENANCE

Filters will provide with good quality water if operating personnel will ensure proper air supply, and unnecessary air removal and regular rinsing processes. Water purification system does not require specific chemical admixtures that have to be refilled.