

TECHNICAL DATA OF WATER SOFTENER WATEX CMS TRIPLEX

Technical parameters of equipment	Unit	Model					
		CMS 16 Triplex	CMS 18 Triplex	CMS 21 Triplex	CMS 24 Triplex	CMS 30 Triplex	CMS 36 Triplex
Flow rate* Qnom	m ³ /h	9.3	10.5	10.5	13.5	25.5	37.5
Flow rate ** Qmax	m ³ /h	13.5	13.5	13.5	13.5	34.5	57.0
Maximum flow rate	m ³ (l/s)	13.5 (3.75)	13.5 (3.75)	13.5 (3.75)	13.5 (3.75)	34.5 (9.6)	57.0 (15.8)
The amount of water between regenerations	m ³	18.9	22.7	30.3	41.0	64.0	75.0
Incoming water quality for calculation		Iron – 0,2mg/l; Water hardness – 6,0 mg-ekv/l					
Amount of water for 1 regeneration***	liters	410	500	670	900	1400	1800
Salt consumption for 1 regeneration	kg	18.8	22.5	30.0	41.5	64.0	75.0
Minimum flow rate for rinsing	m ³ /h	1.1	1.4	1.8	2.3	3.7	5.3
Salt tank size	liters	145	200	350	350	500	500
	Diameter,m	0.53	0.55	0.78	0.78	0.87	0.87
Tank size (diameter)	inches	16	18	21	24	30	36
	m	0.41	0.46	0.53	0.61	0.76	0.91
Tank volume	liters	183	237	316	415	640	850
The amount of filtering material	liters	125	150	200	275	425	550
Equipment dimensions							
Length (L)	m	1.84	2.07	2.38	2.83	3.28	3.73
Width (W)	m	0.94	1.01	1.31	1.69	1.93	2.08
Height (H)	m	1.91	1.91	2.00	2.00	2.10	2.10
Connection incoming/outgoing/drain	inches	1½"/1¼"/ 1"	1¼"/1¼"/ 1"	1¼"/1¼"/ 1"	1¼"/1¼"/ 1"	1½"/1 ½"/1¼"	2"/2"/1 ½"
Clack control valve		CI 1.25" NHVB x 3	CI 1.25" NHVB x 3	CI 1.25" NHVB x 3	CI 1.25" NHVB x 2	CI 1.5" NHVB x 2	CI 2.0" NHVB x 2
Water treatment possibilities		Hardness, iron, ammonium, turbidity					
Tank material		FRP (fiberglass)					
Filtering material		Ion exchange resins RESINEX KW-8, quartz sand 1x3mm, 3x5 mm					
Working pressure	bar	2-6					
Electric Connection		220V, 50Hz, 1 phase					
Electricity consumption	W	3 W					



* Filtration speed 25 l/h

** Filtration speed 40 l/h

*** Volume can multiply if incoming water quality changes

WATER SOFTENER WATEX CMS30 TRIPLEX DESCRIPTION

APPLICATION

WATEX CMS30 TRIPLEX series equipment is a water softening equipment for process and drinking water purposes. It is able to reduce water hardness and iron content.

FILTER PERFORMANCE

For recovery of filtering material (ion resins) reagent (NaCl or salt tablets) is used. Wastewaters produced in regeneration processes of equipment in WATEX CMS30 TRIPLEX can be directly discharged to biological wastewater treatment plant. WATEX CMS30 TRIPLEX consists of a 3 filter columns, 3 control units and 3 brine tanks. The filter columns are filled with ion exchange resin (cationic), which reduces hardness and iron concentration in water. The control units perform automatic regeneration. Brine tank is filled with a reagent (NaCl, salt tablets) for resin regeneration. Capacity of filter material is calculated according to amount of resins and raw water quality.

FILTER CONTROL

WATEX CMS30 TRIPLEX is equipped with a Clack WS CI 1.5 control units, with a built-in flow meter that performs filter material regeneration according to water consumption. Control unit saves all information in case of power failure. Equipment has many parameters that can be adjusted according to needs, such as washing time, frequency, reagent consumption, and so on. It is possible to change the water hardness.

EQUIPMENT MAINTENANCE

Although the equipment uses salt tablets for regeneration it is safe to use filtered water for drinking and other human needs. It is necessary to provide electricity connection power (one socket), sewerage drainage and incoming / outgoing water supply with minimum pressure of 2.5 bar.

RECOMMENDATIONS

Recommendation! Before selection of equipment, it is recommended to test raw water chemical composition.

Recommendation! Before the water filter, it is preferable to install mechanical filter to ensure long-term equipment service life.