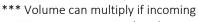


WATER SOFTENING EQUIPMENT WATEX CMS DUPLEX TECHNICAL DATA

Equipment technical parameters Unit CMS 24 DUPLEX DUPLEX DUPLEX CMS 30 DUPLEX DUPLEX Flow rate* Qnom m³/h 9.0 17.0 25.0 Flow rate** Qmax m³/h 9.0 23.0 38.0 Maximum flow rate m³/h 9.0 23.0 38.0 One filter tank capacity between regenerations m³/h 9.0 23.0 38.0 Incoming water quality for calculation Iron – 0,2mg/l; Hardness – 6,0 mg-ekv/l 41.0 64.0 75.0 Amount of water for 1 regeneration*** liter 900 1400 1800 Salt consumption for 1 regeneration kg 41.5 64.0 75.0 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Pressure tank size (diameter) m 0.61 0.76 0.91 Pressure tank volume liter 215 640 850 Elletrie; material volume liter 275 425 550 <t< th=""><th></th><th rowspan="2">Unit</th><th colspan="3">Model</th></t<>		Unit	Model		
Flow rate** Qmax m³/h 9.0 23.0 38.0 Maximum flow rate m³/h 9.0 23.0 38.0 Maximum flow rate m³/h 9.0 23.0 38.0 One filter tank capacity between regenerations m³ 41.0 64.0 75.0 Incoming water quality for calculation Iron − 0,2mg/l; Hardness − 6,0 mg-ekv/l Amount of water for 1 regeneration*** liter 900 1400 1800 Salt consumption for 1 regeneration kg 41.5 64.0 75.0 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Pressure tank size (diameter) m 0.61 0.76 0.91 Pressure tank volume liter 415 640 850 Filtering material volume liter 275 425 550 Equipment dimensions Lenght (L) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve m 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve Teach material FRP Filtering material FRP Filtering material Electric connection Electric connection Electric connection Data to the product of the	Equipment technical parameters				
Maximum flow rate m³/h 9.0 23.0 38.0 One filter tank capacity between regenerations m³ 41.0 64.0 75.0 Incoming water quality for calculation Iron − 0,2mg/l; Hardness − 6,0 mg-ekv/l Amount of water for 1 regeneration*** liter 900 1400 1800 Salt consumption for 1 regeneration kg 41.5 64.0 75.0 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Pressure tank size (diameter) m 0.61 0.76 0.91 Pressure tank volume liter 415 640 850 Filtering material volume liter 275 425 550 Equipment dimensions 1 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1½"/1½"/1½"/1½"/1½"/1½"/1½"		m³/h	9.0	17.0	25.0
One filter tank capacity between regenerations m³ 41.0 64.0 75.0 Incoming water quality for calculation Iron − 0,2mg/l; Hardness − 6,0 mg-ekv/l Amount of water for 1 regeneration*** liter 900 1400 1800 Salt consumption for 1 regeneration kg 41.5 64.0 75.0 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 1.0 64.0 850 Pressure tank volume liter 415 640 850 Equipment dimensions m	Flow rate** Qmax	m³/h	9.0	23.0	38.0
regenerations H.1.0 64.0 75.0 Incoming water quality for calculation Iron −0,2mg/l; Hardness −6,0 mg-ekv/l Amount of water for 1 regeneration*** liter 900 1400 1800 Salt consumption for 1 regeneration kg 41.5 64.0 75.0 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Minimum flow rate for rinsing inches 24 30 36 Pressure tank volume liter 415 640 850 Eleght (L) m 2.86	Maximum flow rate	m³/h	9.0	23.0	38.0
Amount of water for 1 regeneration*** liter 900 1400 1800 Salt consumption for 1 regeneration kg 41.5 64.0 75.0 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Pressure tank size (diameter) inches 24 30 36 Pressure tank volume liter 415 640 850 Filtering material volume liter 275 425 550 Equipment dimensions 50 3.54 3.84 Width (U) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½"/1½" 2"/2"/1½" Clack control valve CI 1.25" CI 1.5" CI 2.0" NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP <t< td=""><td></td><td>m³</td><td>41.0</td><td>64.0</td><td>75.0</td></t<>		m³	41.0	64.0	75.0
Salt consumption for 1 regeneration kg 41.5 64.0 75.0 Minimum flow rate for rinsing m³/h 2.3 3.7 5.3 Pressure tank size (diameter) inches 24 30 36 Pressure tank volume liter 415 640 850 Filtering material volume liter 275 425 550 Equipment dimensions 550 3.54 3.84 Width (W) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve Cl 1.25" Cl 1.5" Cl 2.0" NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP Filtering material lon exchange resins Resinse KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure<	Incoming water quality for calculation		Iron – 0,2mg/l; Hardness – 6,0 mg-ekv/l		
Minimum flow rate for rinsing m³/h (minimum flow rate for rinsing) m³/h (minimum flow rate for rinsing) m³/h (minimum flow rate for rinsing) standard (minim	Amount of water for 1 regeneration***	liter	900	1400	1800
Pressure tank size (diameter) inches 24 30 36 m 0.61 0.76 0.91 Pressure tank volume liter 415 640 850 Filtering material volume liter 275 425 550 Equipment dimensions 550 425 550 Lenght (L) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve Cl 1.25" Cl 1.5" Cl 1.5" Cl 2.0" NHVB x 2 NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity FRP Filtering material In exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Salt consumption for 1 regeneration	kg	41.5	64.0	75.0
Pressure tank size (diameter) m 0.61 0.76 0.91 Pressure tank volume liter 415 640 850 Filtering material volume liter 275 425 550 Equipment dimensions Equipment dimensions Lenght (L) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve CI 1.25" CI 1.5" CI 2.0" NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP Filtering material Jon exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Minimum flow rate for rinsing	m³/h	2.3	3.7	5.3
Pressure tank volume liter 415 640 850 Filtering material volume liter 275 425 550 Equipment dimensions Europht (L) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve CI 1.25" CI 1.5" CI 2.0" NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP Filtering material Ion exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Pressure tank size (diameter)	inches	24	30	36
Filtering material volume liter 275 425 550 Equipment dimensions Lenght (L) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve CI 1.25" CI 1.5" CI 2.0" NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP Filtering material lon exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase		m	0.61	0.76	0.91
Equipment dimensions Lenght (L) m 2.86 3.54 3.84 Width (W) m 0.77 0.92 1.07 Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1½"/1½"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve CI 1.25" CI 1.5" CI 2.0" NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP Filtering material lon exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Pressure tank volume	liter	415	640	850
Lenght (L)m2.863.543.84Width (W)m0.770.921.07Height (H)m2.102.202.20Connection incoming/outgoing/draininches1¼"/1¼"/1"1½"/1½"/1½"2"/2"/1½"Clack control valveCl 1.25"Cl 1.5"Cl 2.0"NHVB x 2NHVB x 2NHVB x 2Water treatment possibilitiesHardness, Iron, Ammonium, TurbidityPressure tank materialFRPFiltering materialIon exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mmWorking pressurebar2-6Electric connection220V, 50Hz, 1 phase	Filtering material volume	liter	275	425	550
Width (W)m0.770.921.07Height (H)m2.102.202.20Connection incoming/outgoing/draininches1¼"/1¼"/1"1½"/1½"/1½"2"/2"/1½"Clack control valveCl 1.25"Cl 1.5"Cl 2.0"NHVB x 2NHVB x 2NHVB x 2Water treatment possibilitiesHardness, Iron, Ammonium, TurbidityPressure tank materialFRPFiltering materiallon exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mmWorking pressurebar2-6Electric connection220V, 50Hz, 1 phase	Equipment dimensions				
Height (H) m 2.10 2.20 2.20 Connection incoming/outgoing/drain inches 1¼"/1¼"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve CI 1.25" NHVB x 2 Water treatment possibilities FRP Filtering material FRP Ion exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Lenght (L)	m	2.86	3.54	3.84
Connection incoming/outgoing/drain inches 1¼"/1¼"/1" 1½"/1½"/1½" 2"/2"/1½" Clack control valve CI 1.25" CI 1.5" CI 2.0" NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP Filtering material lon exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Width (W)	m	0.77	0.92	1.07
Cl 1.25" Cl 1.5" Cl 2.0" NHVB x 2 NHVB x 2 NHVB x 2 Water treatment possibilities Pressure tank material FIltering material Working pressure bar Cl 1.25" Cl 1.5" Cl 2.0" NHVB x 2 NHVB x 2 NHVB x 2 NHVB x 2 NHVB x 2 N	Height (H)	m	2.10	2.20	2.20
Water treatment possibilities Hardness, Iron, Ammonium, Turbidity Pressure tank material FRP Filtering material lon exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Connection incoming/outgoing/drain	inches	1¼"/1¼"/1"	1 ½"/1 ½"/1¼"	2"/ 2"/1 ½"
Water treatment possibilities Pressure tank material Filtering material Working pressure bar Electric connection NHVB x 2 N	Clack control valve		CI 1.25"	CI 1.5"	CI 2.0"
Pressure tank material FRP Ion exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase					
Filtering material Ion exchange resins Resinex KW-8, quartz sand 1x3 mm, 3x5 mm Working pressure bar Electric connection Din exchange resins Resinex KW-8, quartz sand 2x3 mm, 3x5 mm 2-6 Electric connection 220V, 50Hz, 1 phase	Water treatment possibilities		Hardness, Iron, Ammonium, Turbidity		
Working pressure bar 2-6 Electric connection 220V, 50Hz, 1 phase	Pressure tank material				
Electric connection 220V, 50Hz, 1 phase	Filtering material				
	Working pressure	bar	2-6		
Electric consumption W 3 W	Electric connection		2	220V, 50Hz, 1 phase	2
	Electric consumption	W	3 W		

^{*} Filtration speed 25 BV/h

^{**} Filtration speed 40 BV/h







WATER SOFTENING FILTER WATEX CMS DUPLEX DESCRIPTION

APPLICATION

WATEX CMS DUPLEX series water softeners are continuous water softening equipment, which is mainly used in production plants, where it is necessary to ensure constant water hardness and iron content for a long period of time.

FILTER PERFORMANCE

During the operation of the filters, deposits accumulate in the filter material (ion exchange resin) over time. A reagent - salt - is used to restore the filter material. Although the equipment uses reagents, the rinsing water can be fed into biological treatment plants. The unit consists of 2 filter columns, 2 control units and 2 salt tanks. The filter column is filled with ion exchange resin, which ensures a decrease in water hardness and a decrease in iron concentration. The control valve automatically performs filter regeneration. The salt tank contains crushed salt tablets, which are used in regeneration processes. The capacity of the filters between the regeneration capacities is calculated based on the amount of resin in them and the quality of the incoming water.

FILTER CONTROL

WATEX CMS DUPLEX units are equipped with Clack WS CI control valves, which have a built-in flow meter and which regenerates the filters based on the amount of water consumed. Accounting for water consumption reduces the amount of salt needed. The water softener can be equipped with a bypass for easy and efficient maintenance. The control unit saves all information even in the event of a power failure. It is possible to set a number of parameters for the device depending on the needs and wishes of consumers. Regeneration time, frequency, reagent consumption, water hardness and other parameters can be adjusted. 2 control units ensure constant water quality - both filter columns operate simultaneously when one filter column is rinsed the other continues to operate providing consumers with purified water. Half of the filter flow is provided during filter rinsing.

EQUIPMENT OPERATION

Although salt tablets are used for regeneration, the water can be safely used for drinking and other human needs. The water softening equipment requires electricity and sewerage connection, inlet water pressure with a 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.