



## TWO-PHASES DEIONIZERS

*DS 50 - 100 - 200*

### Technical Sheet



#### GENERAL

**DS Series** are **two-phases deionizers**, which are suited for medium/low rates. In the Culligan line, they are the smallest units capable of being regenerated on the site of installation. They are **flexible and versatile** and are often used in the small industry. The distinctive qualities of these lucky series are its simple operation and its strength.

#### FEATURES

Two programmers ensure automatic operation by controlling the two phases of regeneration and service.

The **DS Series** deionizers are equipped with a quality indicator that will activate either an alarm or set an automatic device to block product water as its quality reaches a preset conductivity level. The

resins containers are made of fibreglass. The internal hydroelectric valve components are made in plastic to guarantee their **resistance and durability**.

#### OPERATING LIMITS

Salinity (CaCO <sub>3</sub> )	500 ppm
Chlorine (Cl <sub>2</sub> )	max 0,15 ppm
Sulphurated Hydrogen (H <sub>2</sub> S)	0 ppm
Iron	0,1 ppm
Manganese	0,05 ppm
Turbidity	5 NTU
Color	5 C.U.
Feed Water Temperature	5-45 °C

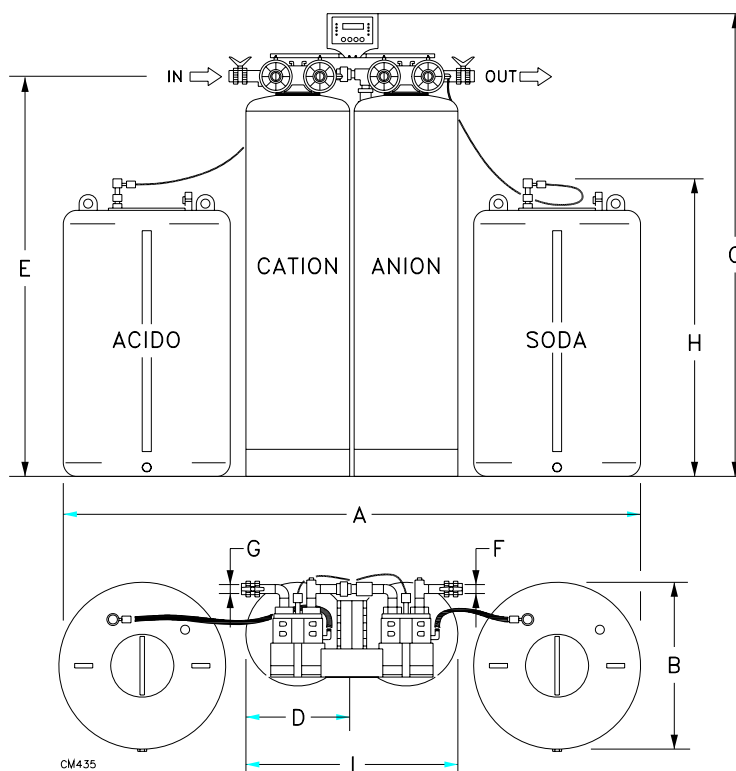
#### OPERATING DATA

Models	Capacity	Piping		Pressure	Flow Rate		Cation		Regenerant		Anion Resin		Regeneran	
	Ca CO <sub>3</sub>	IN/ OUT	Drain	max	max		Resin Cullex		HCl 33%		Cullex		NaOH 30%	
	kg	ø	mm	bar	gpm	m <sup>3</sup> /h	kg	litres	kg	litres	kg	litres	kg	litres
<b>DS 50</b>	2	1"	15	8	7	1,6	46	56	28	25	36	56	20	15
<b>DS 100</b>	4	1"	15	8	11	2,5	93	112	57	52	72	112	37	28
<b>DS 200</b>	6,5	1"	15	8	15	3,4	151	182	90	80	117	182	62	48

## REGENERATION FLOW RATES AND DURATION OF THE PHASES

Models	<b>Cation</b>													
	Backwash			Regeneration			Slow Rinse			Suction		Fast Rinse		
	gpm	l/min	min.	gpm	l/min	min.	gpm	l/min	min.	l/min	min.	l/min	min.	
<b>DS 50</b>	4,18	15,8	5	1,6	6	60	0,93	3,5	50	2,5	10	15,8	10	
<b>DS 100</b>	6,38	24	5	2,38	9	60	34	5	47	4	13	24	10	
<b>DS 200</b>	6,38	24	5	2,38	9	65	34	5	45	4	20	24	10	

Models	<b>Anion</b>													
	Backwash			Regeneration			Slow Rinse			Suction		Fast Rinse		
	gpm	l/min	min.	gpm	l/min	min.	gpm	l/min	min.	l/min	min.	l/min	min.	
<b>DS 50</b>	4,2	15,8	5	1,6	6	60	0,93	3,5	54	2,5	6	15,8	15	
<b>DS 100</b>	6,4	24	5	2,38	9	60	1,35	5	53	4	7	24	15	
<b>DS 200</b>	6,4	24	5	2,38	9	65	1,34	5	53	4	12	24	15	



Models	A	B	C*	D	E*	F	G	H	I
<b>DS 50</b>	2400	680	1600	330	1410	1"	1"	1080	1200
<b>DS 100</b>	2450	785	1850	360	1717	1"	1"	1150	1200
<b>DS 200</b>	2450	785	1850	552	1667	1"	1"	1150	1200

\* Margin  $\pm 2\%$

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