

## DATA SHEET

### HYDROSTOR™

**PRODUCT DESCRIPTION :** Semi-circular retention and infiltration chambers.

**APPLICATIONS :** Underground storage of runoff water with or without groundwater replenishment.

**MANUFACTURING STANDARDS :** ASTM F2418, ASTM F2787 et CSA B184.2.

**RAW MATERIAL :** ASTM D4101 Polypropylene

**TECHNICAL DATA :** Structural strength : CL-625 (CSA-S6), H-25 et HS-25 (AASHTO)



### CHAMBER TECHNICAL DATA

	HS31				HS75				HS180				HS290			
Length	2217	mm	87,3	in	2212	mm	87,1	in	2253	mm	88,7	in	1316	mm	51,8	in
Installed Length	2172	mm	85,5	in	2156	mm	84,9	in	2167	mm	85,3	in	1227	mm	48,3	in
Height	406	mm	16,0	in	754	mm	29,7	in	1156	mm	45,5	in	1511	mm	59,5	in
Width	864	mm	34,0	in	1295	mm	51,0	in	1976	mm	77,8	in	2553	mm	100,5	in
Volume (chamber only)	0,43	m <sup>3</sup>	15,2	ft <sup>3</sup>	1,32	m <sup>3</sup>	46,6	ft <sup>3</sup>	3,2	m <sup>3</sup>	113,6	ft <sup>3</sup>	3,10	m <sup>3</sup>	109,6	ft <sup>3</sup>
Weight	15,4	kg	34,0	lb	31,3	kg	69,0	lb	55,3	kg	122,0	lb	50,8	kg	112,0	lb

### END CAP TECHNICAL DATA

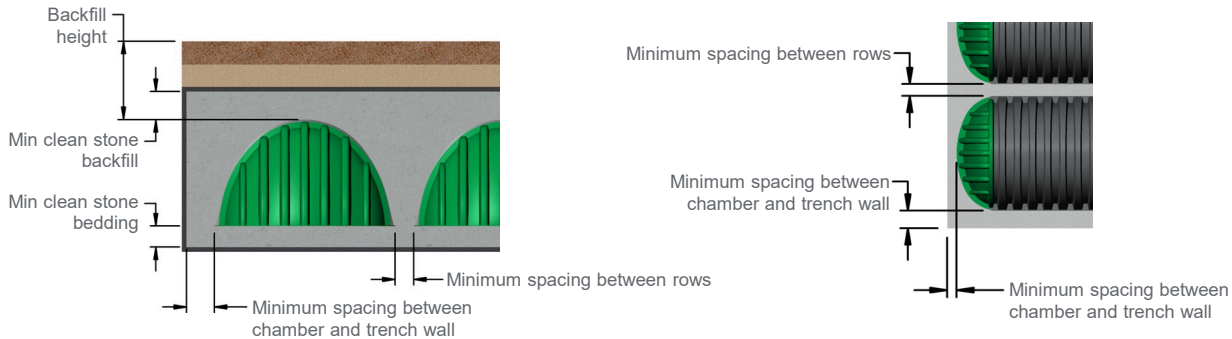
	HS31				HS75				HS180				HS290			
Length	203	mm	8,0	in	302	mm	11,9	in	610	mm	24,0	in	889	mm	35,0	in
Installed Length	175	mm	6,9	in	264	mm	10,4	in	561	mm	22,1	in	823	mm	32,4	in
Height	414	mm	16,3	in	767	mm	30,2	in	1135	mm	44,7	in	1506	mm	59,3	in
Width	864	mm	34,0	in	1295	mm	51,0	in	1994	mm	78,5	in	2388	mm	94,0	in
Volume (chamber only)	0,02	m <sup>3</sup>	0,62	ft <sup>3</sup>	0,10	m <sup>3</sup>	3,42	ft <sup>3</sup>	0,4	m <sup>3</sup>	15,3	ft <sup>3</sup>	1,12	m <sup>3</sup>	39,6	ft <sup>3</sup>
Weight	1,7	kg	3,8	lb	5,99	kg	13,2	lb	23,59	kg	52,0	lb	36,24	kg	79,9	lb
Maximum connection diameter	300	mm	12	in	600	mm	24	in	750	mm	30	in	1050	mm	42	in

Note : Values in the tables are approximate and may change without notice.

# DATA SHEET

## HYDROSTOR™ (CONT'D)

### SYSTEM TECHNICAL DATA



	HS31				HS75				HS180				HS290			
Min backfill height <sup>(1)(2)</sup>	457	mm	18,0	in	457	mm	18,0	in	457	mm	18,0	in	610	mm	24,0	in
Max backfill height <sup>(2)</sup>	2,44	m	8,0	ft	2,44	m	8,0	ft	2,44	m	8,0	ft	2,438	m	8,0	ft
Min clean stone bedding <sup>(3)</sup>	152	mm	6,0	in	152	mm	6,0	in	229	mm	9,0	in	229	mm	9,0	in
Min clean stone backfill	152	mm	6,0	in	152	mm	6,0	in	305	mm	12,0	in	305	mm	12,0	in
Minimum spacing between rows	152	mm	6,0	in	152	mm	6,0	in	127	mm	5,0	in	216	mm	8,5	in
Minimum spacing between chamber and trench wall	305	mm	12,0	in	305	mm	12,0	in	305	mm	12,0	in	305	mm	12,0	in
Minimum spacing between end cap and trench wall	305	mm	12,0	in	305	mm	12,0	in	152	mm	6,0	in	305	mm	12,0	in
Min. retention volume <sup>(4)</sup>   Chamber	0,88	m <sup>3</sup>	31,2	ft <sup>3</sup>	2,12	m <sup>3</sup>	75,0	ft <sup>3</sup>	5,0	m <sup>3</sup>	176,0	ft <sup>3</sup>	4,66	m <sup>3</sup>	164,5	ft <sup>3</sup>
Min. retention volume <sup>(4)</sup>   End cap	0,15	m <sup>3</sup>	5,19	ft <sup>3</sup>	0,41	m <sup>3</sup>	14,5	ft <sup>3</sup>	1,3	m <sup>3</sup>	44,8	ft <sup>3</sup>	3,24	m <sup>3</sup>	114,46	ft <sup>3</sup>

Note 1: Traffic (load CL-625, H-25 or HS-25) is allowed if the height between the top of the chambers and the final elevation reaches this value at least.

Note 2: For values below the minimum or above the maximum, please contact your Soleno representative.

Note 3: The minimum seat is indicated to obtain a functional retention system. The design engineer is responsible for ensuring the stability of the foundation. In addition, for value below the minimum, please contact your Soleno representative.

Note 4: The minimum retention volumes are calculated with 40% void porcentage in the stone.

**APPLICATIONS :** Retention system  
Detention system

**OPTIONS :** Pretreatment unit (recommended)      Diffusor and/or collector  
Sediment row      Flow regulator  
Inspection port      Control and/or bypass manholes

**INSTALLATION :** Visit the [soleno.com](http://soleno.com) to consult the installation guide.

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