

# SISTEMA<sup>®</sup>

Pressure Tanks

Made in Italy



Catalogue 2021



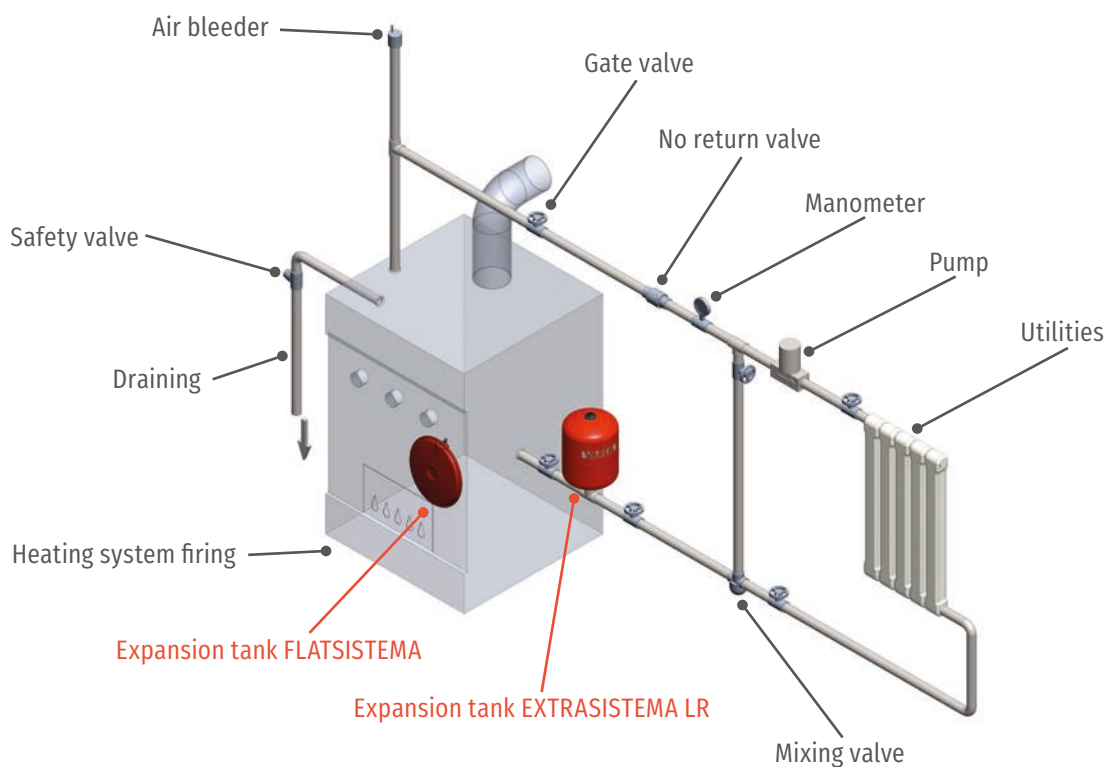
 **HEATING LINE**

The expansion vessel for heating systems makes available the volume for water dilation due to temperature increments, and keeps the system safe to dangerous pressure variations. The working of the expansion vessels is more important during system start-up, when water temperature rises very quickly.

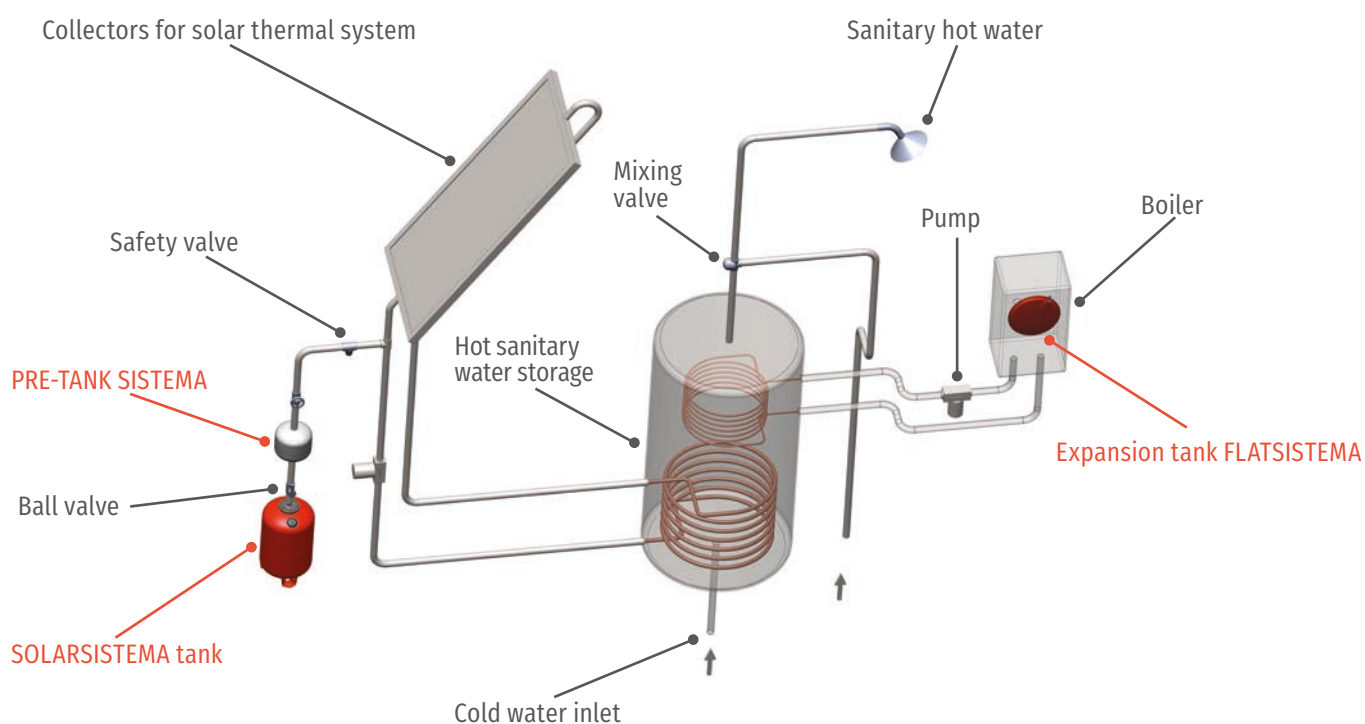


**SISTEMA®**

SCHEME OF A HEATING SYSTEM



SCHEME OF A SOLAR SYSTEM





## EXPANSION VESSELS FOR HEATING SYSTEMS

- Galvanized carbon steel flange up to 400 L, coated from 500 lt to 1000 L
- Pre charge pressure 1.5 bar
- Red color

### EXTRASISTEMA LR CE -10 +99 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
5*	6	3/4"	160x325	0.019	210
8*	6	3/4"	200x330	0.031	144
12	6	3/4"	270x310	0.024	84
18	6	3/4"	270x415	0.034	56
25	6	3/4"	290x460	0.041	63
40	5	3/4"	320x580	0.068	36

Fixed membrane, crimped flange

### STARSISTEMA 70/120 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
35	6	3/4"	320X500	0.051	42
50	6	3/4"	380X555	0.079	25
80	6	1"	450X635	0.129	20
100	6	1"	450X715	0.145	15
150	6	1"	450X950	0.192	8

Diaphragm membrane  
Side connection for 35-50 lt

### MAXISISTEMA LR CE -10 +99 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
35	5	3/4"	320X525	0.064	42
50	6	3/4"	380X620	0.104	25
60	6	1"	380X670	0.116	25
80	6	1"	450X650	0.135	20
100	6	1"	450X730	0.173	15
150	6	1"½	554X810	0.265	8
200	6	1"½	554X988	0.324	8
250	6	1"½	624X1006	0.423	6
300	6	1"½	624X1160	0.481	6
400	6	1"½	624X1520	0.77	6
500	6	1"½	790X1250	1.126	1
600	6	1"½	790X1525	1.349	1
700	6	1"½	790X1635	1.438	1
1000	6	2"	930X1913	2.2	1

Replaceable membrane, screwed flange from 50 lt

## EXPANSION VESSELS FOR SOLAR SYSTEMS

- Membrane resistant to peaks of 130°  
Pre charge pressure 2.5 bar

### SOLARSISTEMA CE -10 +130 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
5*	**	3/4"	160x325	0.020	210
8	**	3/4"	200x330	0.031	144
12	**	3/4"	270x310	0.024	84
18	**	3/4"	270x415	0.034	56
25	**	3/4"	290x460	0.041	63
40	**	3/4"	320x580	0.066	36

\*\*Configurations:

- 41. stainless steel crimped flange, fixed membrane, red color, max pressure 8 bar
- 43. stainless steel crimped flange, fixed membrane, white color, max pressure 8 bar
- 81. stainless steel screwed flange, replaceable membrane, red color, max pressure 10 bar

### SOLARSISTEMA CE -10 +130 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
50	10	3/4"	380x620	0.104	25
60	10	3/4"	380x670	0.116	25
80	10	3/4"	450x650	0.135	20
100	10	1"	450x730	0.173	15
150	10	1"½	554x810	0.265	8
200	10	1"½	554x988	0.324	8
300	10	1"½	624x1160	0.481	6
500	8	1"½	790x1250	1.126	1

Stainless steel screwed flange, replaceable membrane, red color

### SOLARSISTEMA CE for oil -10 +60°C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
5*	8	3/4"	160x325	0.020	210
8*	8	3/4"	200x330	0.031	144
12	8	3/4"	270x310	0.024	84
18	8	3/4"	270x415	0.034	56
25	8	3/4"	290x460	0.066	63

Fixed membrane, suitable for oil, max temperature 60°C

Stainless steel flange, precharge pressure 2.5 bar

2 L. available on demand

\*CE mark not applicable for 5 and 8 l tanks

### SOLARSISTEMA PRE-TANK



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
12	10	3/4"	270x320	0.032	84
18	10	3/4"	270x450	0.042	56

Steel tank with double connections (M/F) for decreasing the temperature in the solar systems



## FLAT AND OVAL EXPANSION VESSELS FOR BOILERS

- Diaphragm fix membrane
- Pre charge pressure 1 bar
- Red color

### FLATSISTEMA -10 +99 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/box
L	bar	inch	mm	m <sup>3</sup>	n.
6	3	3/4"	325x103	0.052	4
8	3	3/4"	325x128	0.060	4
10	3	3/4"	325x136	0.067	4
12	3	3/4"	325x160	0.074	4
5	3	3/8"	385x76	0.078	6
6	3	3/4"	385x86	0.078	5
7	3	3/4"	385x92	0.078	5
8	3	3/4"	385x103	0.088	5
10	3	3/4"	385x110	0.095	5
12	3	3/4"	385x142	0.092	4
14	3	3/4"	385x160	0.097	4
18	3	3/4"	385x190	0.033	1

### FLATSISTEMA -10 +99 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/box
L	bar	inch	mm	m <sup>3</sup>	n.
7	3	3/8"	203x504x66	0.08	2
8	3	3/8"	203x504x74	0.09	2
10	3	3/8"	203x504x107	0.09	1
12	3	3/4"	203x504x116	0.09	1

Connection 1/4", 3/8", 1/2", 3/4" radial or axial can be available upon request

### EXTRASISTEMA LR -10 +99 °C



#### OVAL SHAPE EXPANSION VESSELS

fix membrane tanks, galvanised steel flange

Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/box
L	bar	inch	mm	m <sup>3</sup>	n.
7.5	4	3/4"	110x493x192	0.08	144
10	4	3/4"	110x633x192	0.08	56

A large, dynamic splash of clear water on the left side of the page, with many droplets and bubbles.

## HOT POTABLE WATER MULTIFUNCTION LINE

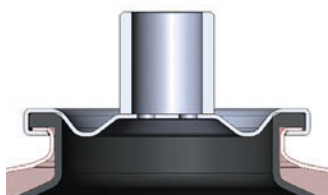
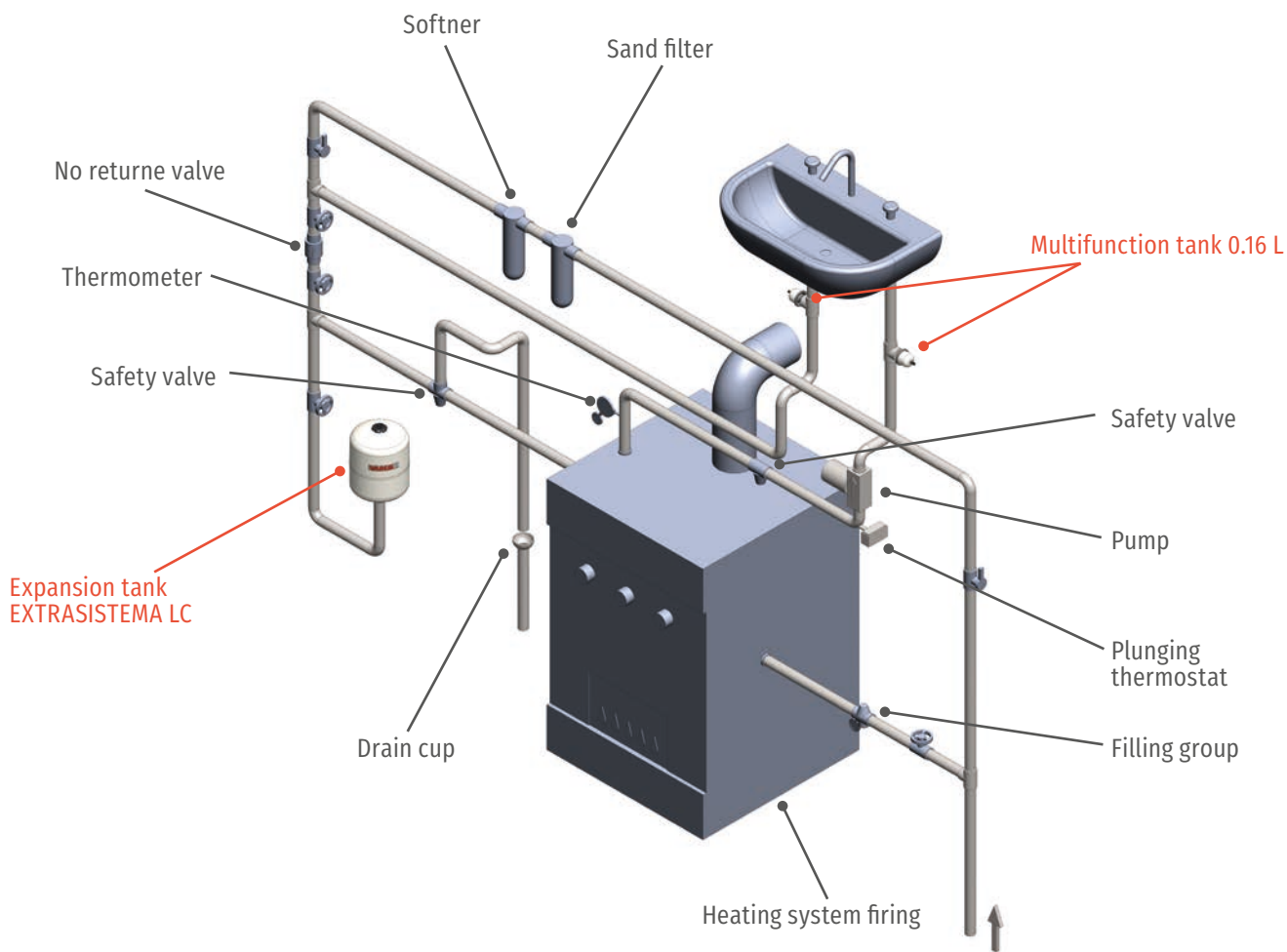
The expansion vessels of the Sistema LC Multifunction line are used in the domestic hot water systems or as water hammer arrester.

The LC expansion vessels protect the system against the thermal dilation of the water in the heating systems and against water hammer.

They work as hydraulic flywheel too. Being designed for potable water, they contain a membrane with certification of potability.



SCHEME OF UTILIZATION FOR DOMESTIC HOT WATER AND AS WATER HAMMER ARRESTER







## MULTIFUNCTION EXPANSION VESSELS

- Stainless steel steel flange
- White color (blue over 60 L)
- CE Mark (not applicable up to 5 L)

### EXTRASISTEMA LC -10 +99 °C

Use: hot and cold potable water



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
2	8	1/2"	82x120x325	0.008	210
3	8	1/2"	82x120x475	0.010	144
4	8	1/2"	82x120x652	0.010	84
2.5	10	1/2"	125x291	0.008	-
3	10	1/2"	125x348	0.010	-
4	10	1/2"	125x427	0.010	-

Fixed membrane, crimped flange  
Pre-charge pressure 3.5 bar

### EXTRASISTEMA LC CE

-10 +99 °C

Use: heating systems, boilers, pumps, hot potable water, water hammer arresting



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
0.16	15	1/2"	65x105	0.035	1480
2	10	1/2"	125x237	0.050	576
5	8	3/4"	160x325	0.020	210
8	8	3/4"	200x330	0.031	144
12	8	3/4"	270x310	0.024	84
18	8	3/4"	270x415	0.034	56
24*	8	3/4"	351x347	0.041	54
25	8	3/4"	290x460	0.044	63
40	8	3/4"	320x580	0.080	36

Fixed membrane, crimped flange  
Pre charge pressure 3.5 bar  
R1016823S4000000: 10 pieces in one cartonbox  
R1002823S4000000: 6 pieces in one cartonbox  
\*S2024263S4000000: bolted flange  
Replaceable membrane



### MAXISISTEMA LC CE

-10 +99 °C

Use: heating systems, boilers, pumps, hot potable water, water hammer arresting



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
50	10	1"	380x620	0.104	25
60	10	1"	380x670	0.112	20
80	10	1"	450x650	0.135	20
100	10	1"	450x730	0.173	15
150	10	1"1/2	554x810	0.265	8
200	10	1"1/2	554x988	0.324	8
250	10	1"1/2	624x1006	0.423	6
300	10	1"1/2	624x1160	0.481	6
400	10	1"1/2	624x1520	0.771	6

Replaceable membrane, screwed flange  
Pre charge pressure 2 bar



## MULTIFUNCTION EXPANSION VESSELS FOR HOT POTABLE WATER - DVGW

Membrane pressure tanks for potable water with DVGW circulating valve



### EXTRASISTEMA LC -10 +85 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
8	10	3/4"	200x337	0.031	144
12	10	3/4"	270x310	0.024	84
18	10	3/4"	270x415	0.034	56
25	10	3/4"	290x460	0.044	63

Stainless steel flange, fixed butyl membrane, blue colour RAL5010, precharge pressure 3.5 bar  
Certificate no. NW-0411CQ0098

### INTERSISTEMA LS -10 +85 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
8	10	3/4"	200x348	0.015	144
12	10	3/4"	270x308	0.024	84
18	10	3/4"	270x415	0.031	63
25	10	3/4"	290x472	0.041	63

Stainless steel flange, replaceable butyl membrane, blue colour RAL5010, precharge pressure 3.5 bar  
Certificate no. NW-0411CQ0099



DVGW approved circulating valve



**SISTEMA®**



## WATER LINE

The pressure tanks of Sistema LS line are a basic element for long lasting and efficiency of a potable water distribution system.

The pressure tank stores the pressurized water of the booster systems working as hydrodynamic flywheel during drawing.

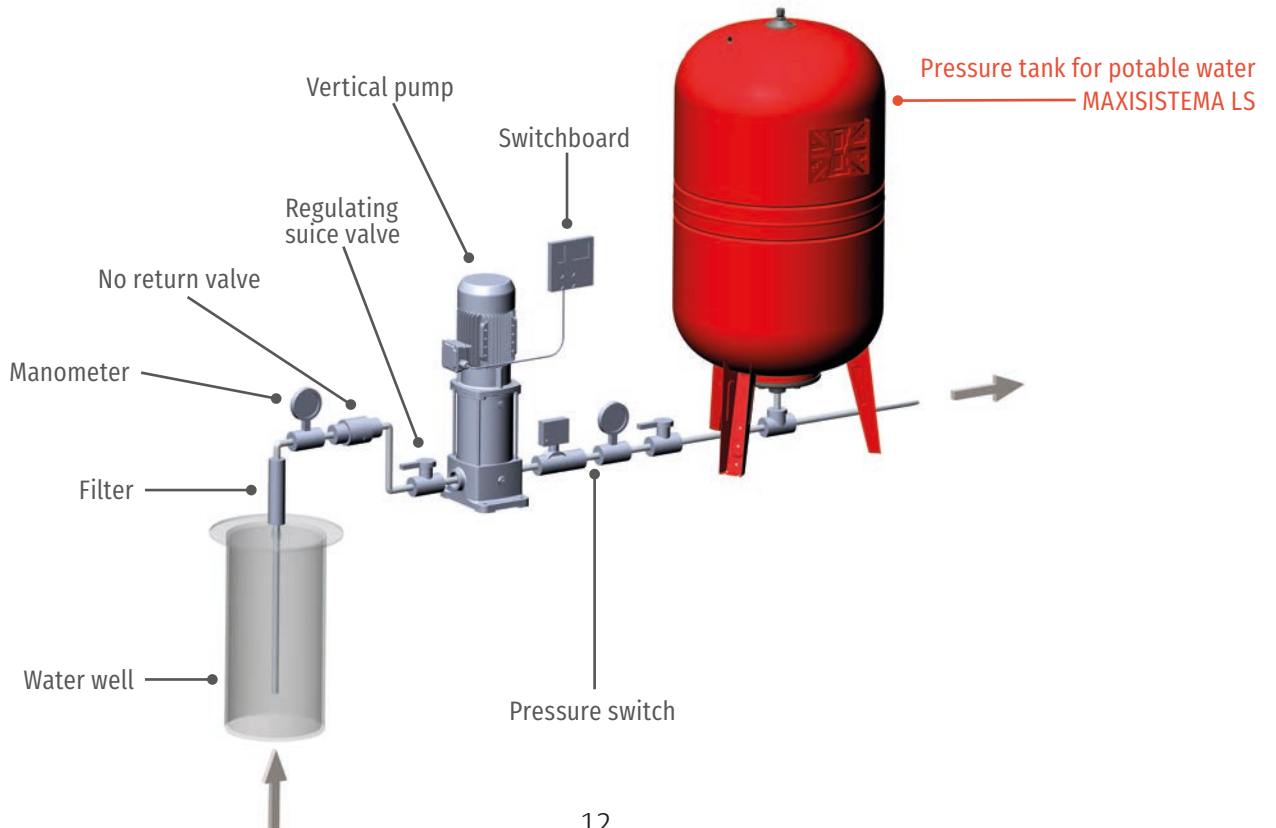
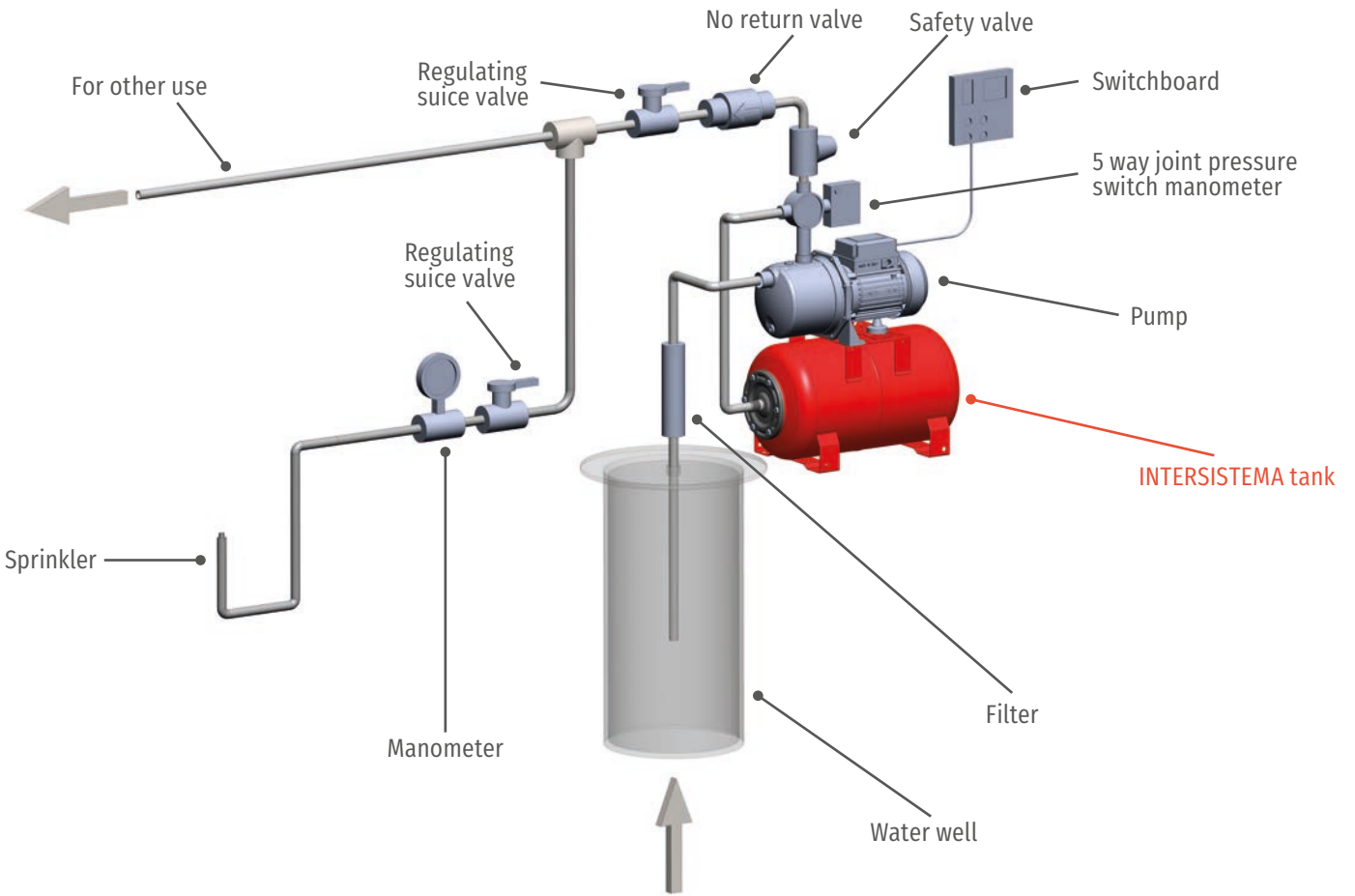
This application reduces the ON/OFF switching frequency of the booster system.

A pressure switch adjusts the internal pressure and activates the pump only if the water pressure in the tank is lower than the minimum required.

Switching on, the pump loads the storage tank again.



SCHEME OF A BOOSTER SYSTEM WITH PRESSURE TANK



## AQUASISTEMA

### PRESSURE TANKS WITH DIAPHRAGM MEMBRANE

- Maintenance free
- Butyl diaphragm
- Synthetic internal soft liner
- High resistance painting
- Stainless steel connection
- Precharge pressure 2 bar



Aquasistema line from 8 to 280 liters. The Aquasistema tanks have a diaphragm membrane for potable water and an internal protection so that they can be used as pressure tanks for water booster systems and hot potable water.



**5** WARRANTY  
YEAR

### AQUASISTEMA -10 +99 °C

Capacity	Max. pressure	Connection	Dimensions		Packaging	Qtà/pallet
L	bar	inch	mm		m <sup>3</sup>	n.
VERTICAL						
8	8	1"	200	300	0.016	144
19	10	3/4"	250	450	0.024	70
19	10	1"	250	450	0.024	70
19	16	1"	250	450	0.024	70
24	10	3/4"	290	460	0.040	63
24	10	1"	290	460	0.040	63
40	10	3/4"	380	360	0.062	36
40	10	1"	380	460	0.066	36
60	10	1"	380	780	0.131	15
100	10	1"	450	840	0.200	15
140	10	1"	450	1070	0.340	8
200	10	1"	554	1150	0.407	8
280	10	1"	624	1250	0.596	6
HORIZONTAL						
20	10	1"	280	490	0.038	56
60	10	1"	430	670	0.131	20
100	10	1"	485	760	0.200	15



## WATER LINE VERTICAL

- Vertical multifunction water tanks
- Replaceable membrane
- Available with galvanised or painted flange
- Red color (blue colour available on demand)
- Pre-charge pressure 2 bar

### INTERSISTEMA LS CE -10 +99 °C IDROSISTEMA CE



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
5	8	1"	160x332	0.010	210
8	8	1"	200x348	0.015	144
12	8	1"	270x308	0.024	84
19	8	1"	270x415	0.031	63
20	8	1"	250x500	0.038	56
24	8	1"	351X358	0.045	54
24	8	1"	351x358	0.045	54
25	8	1"	290x472	0.041	63
40	8	1"	320x595	0.066	36

AVAILABLE WITH S/S FLANGE ON DEMAND BLUE COLOR UPON REQUEST

\* Available version in white color, s/s flange and 3.5 bar pre-charge

\* Connection 3/4" available upon request

### MAXISISTEMA LS CE



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
50	10	1"	379x759	0.126	15
60	10	1"	379x825	0.131	15
80	10	1"	450x789	0.170	15
100	10	1"	450x910	0.200	15
150	10	1"1/2	554x1040	0.340	8
200	10	1"1/2	554x1250	0.407	8
300	10	1"1/2	624x1370	0.596	6
500	10	1"1/2	790x1460	0.900	1
750	10	1"1/2	786x1925	1.300	1
1000	10	2"	945x1912	1.900	1
1500	10	2"	1150X2080	3.020	1
2000	10	2"	1280x2080	3.720	1
3000	10	2"1/2 F	1250x2710	4.500	1

AVAILABLE WITH S/S FLANGE ON DEMAND BLUE COLOR UPON REQUEST

\* Available not CE marked

\*\* Not CE marked

## WATER LINE HORIZONTAL/HIGH PRESSURE

- Horizontal multifunction water tanks
- Replaceable membrane
- Available with galvanised or painted flange
- Red color (blue colour available on demand)
- Pre-charge pressure 2 bar

-10 +99 °C

MAXISISTEMA LS CE  
INTERSISTEMA



### HORIZONTAL

Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
19	8	1"	300x418	0.031	63
20	10	1"	274x497	0.038	56
40	10	1"	352x595	0.066	36
50	10	1"	410x610	0.126	25
60	10	1"	410x670	0.131	20
80	10	1"	479x637	0.170	20
100	10	1"	485x756	0.200	15
150	10	1"1/2	602x825	0.372	8
200	10	1"1/2	602x1038	0.407	8
300	10	1"1/2	654x1188	0.596	6

AVAILABLE WITH S/S FLANGE ON DEMAND

\* 1.5 bar pre charge pressure

Up to 40 lt connection 3/4" upon request

PLUSSISTEMA -10 +99 °C



### HIGH PRESSURE

CE marked

Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
8	16	1"	200x320	0.015	144
20	16	1"	250x509	0.038	56
50	16	1"	379x759	0.128	15
80	16	1"	450x789	0.170	15
100	16	1"	450x910	0.200	15
200	16	1"1/2	554x1250	0.407	8
300	14	1"1/2	624x1370	0.596	6
500	12	1"1/2	790x1460	0.900	1

not CE marked

300	16	1"1/2	624x1370	0.596	6
500	16	1"1/2	790x1460	0.900	1
750	16	1"1/2	790x1925	1.300	1
1000	16	2"	945x1912	1.900	1

AVAILABLE WITH S/S FLANGE ON DEMAND

25 bar upon request

## WATER LINE S/STEEL - GALVANIZED

- Stainless steel tanks AISI304 with replaceable membrane
- Galvanized tanks with replaceable membrane
- Pre-charge pressure 2 bar

### INOXSISTEMA LS CE -10 +99 °C



Capacity L	Max. pressure bar	Connection inch	Dimensions mm	Packaging m <sup>3</sup>	Qty/pallet n.
STAINLESS STEEL VERTICAL					
1	8	1/2"	114x188	0.003	
2	8	1/2"	135x225	0.005	
8	8	3/4"	200x340	0.023	
20	8	1"	260x492	0.040	56
50	8	1"	365x863	0.131	15
100	8	1"	480x925	0.240	15
200	8	1"1/2	540x1280	0.400	8
300	8	1"1/2	635x1385	0.600	6
500	8	1"1/2	780x1450	0.900	1

### INOXSISTEMA LS CE -10 +99 °C



Capacity L	Max. pressure bar	Connection inch	Dimensions mm	Packaging m <sup>3</sup>	Qty/pallet n.
STAINLESS STEEL HORIZONTAL					
20	8	1"	274x497	0.040	56
50	8	1"	365x655	0.104	25
100	8	1"	480x745	0.200	15
200	8	1"1/2	540x1095	0.400	8

### ZINCSISTEMA LS CE -10 +99 °C



Capacity L	Max. pressure bar	Connection inch	Dimensions mm	Packaging m <sup>3</sup>	Qty/pallet n.
GALVANIZED VERTICAL					
60	10	1"	379x825	0.131	15
100	10	1"	450x910	0.200	15
200	10	1"1/2	554x1250	0.407	8
300	10	1"1/2	624x1370	0.596	6
500	10	1"1/2	790x1460	0.900	1



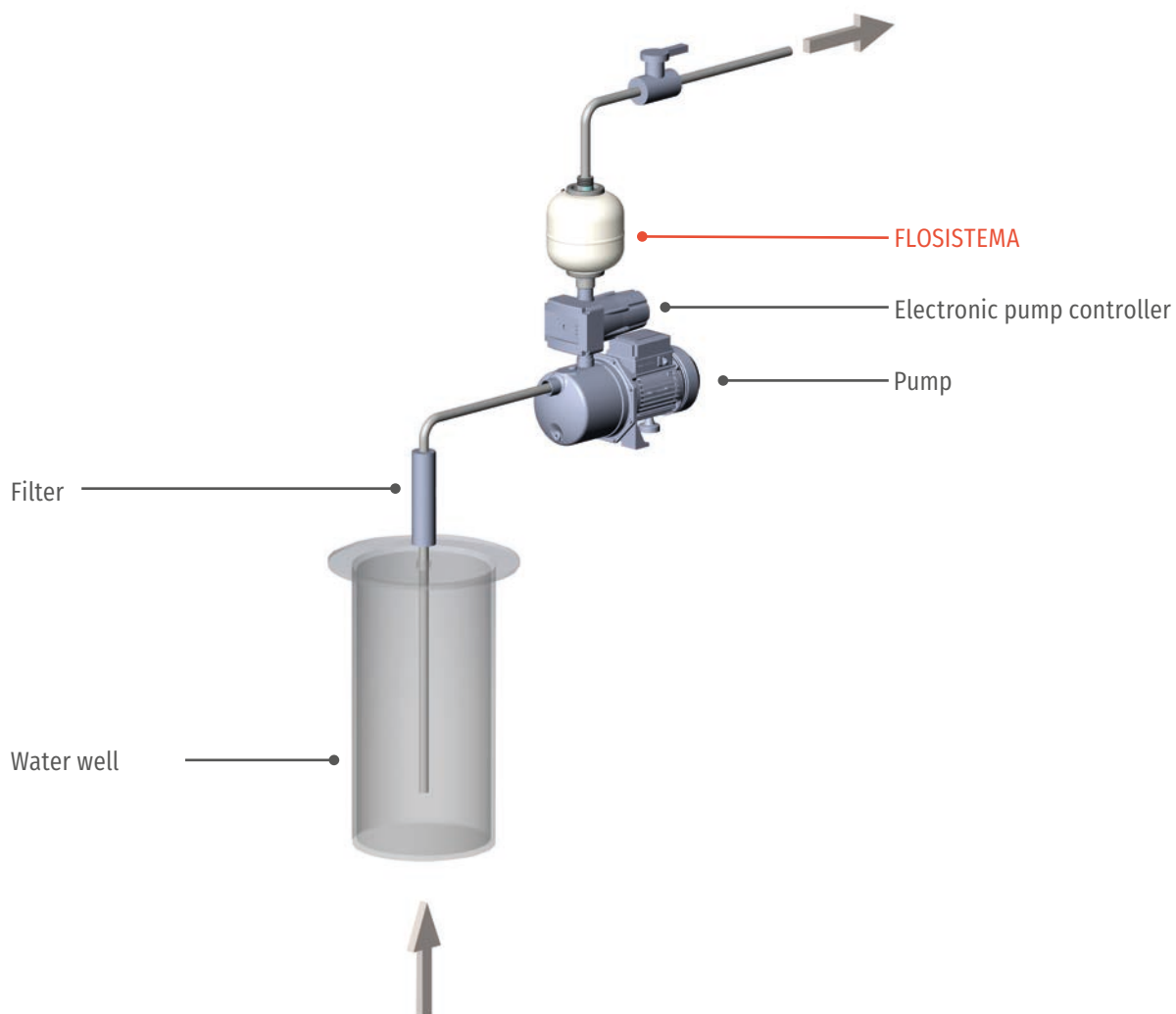
## FLOSISTEMA

- Flow through tank
- Perforated through pipe
- Double hole membrane
- Male/female double inlet
- Max pressure 10 bar
- Precharge pressure 1.5 bar

### FLOSISTEMA -10 +99 °C



Capacity	Max. pressure	Connection	Dimensions	Packaging	Qty/pallet
L	bar	inch	mm	m <sup>3</sup>	n.
FOR ELECTRONIC PUMP CONTROLLER					
3	10	1" M - 1" F	170x265	0.008	-
8	10	1" M - 1" F	230x385	1.008	-





 SPARE PARTS AND  
ACCESSORIES



## Spare membranes

	Tank capacity
	5
	8
	12
	19
	20
	20 Plussistema + Inoxsistema
	24
	25
	40
	50
	60
	80
	100 sp. PA + Inoxsistema
	150
	200
	250
	300
	400
	500
	700
	750
	1000
	1500
	2000
	3000

The membranes are made on synthetic rubber.  
 The membranes for water booster systems are potable water-proof certified.  
 The membranes for Solarsistema can resist up to 130° for short periods with solutions of water and glycol.



[www.sistema-pumps.com](http://www.sistema-pumps.com)