



PANEL-MOUNTED DOSING SYSTEM - OPERATION AND MAINTENANCE

A-LEGIO SENSE



FOR OTHER LANGUAGES:





FILTRATION - DOSING - DETERGENT & HYGIENE - POOL EQUIPMENT



DECLARATION OF CONFORMITY

Company:	AQUA S.p.A.
Address:	Via T. Crotti, 1 - 42018 - San Martino in Rio (RE)

Hereby declares that the products named:

• A-LEGIO SENSE

Responds to the principal features of the following European Directives:

- **2014/30/CE of 26/02/2014** - *Harmonization of the laws of the Member States relating to electromagnetic compatibility – EMC Directive*
- **2014/35/CE of 26/02/2014** - *Harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits – Low Voltage Directive*
- **2011/65/UE of 08/06/2011 with subsequent update 2015/863 of 31/03/2015** - *ROHS III Directives*
- **2012/19/UE of 04/07/2012** - *WEEE Directives for electrical and electronic waste*

This declaration is issued under the responsibility of Aqua S.p.A.

San Martino in Rio (RE) - 08 settembre 2020

Da
Davide Vezzani
Certification Manager - Aqua S.p.A.

AQUA S.p.A.

Società soggetta a direzione e coordinamento di Finanza Cooperativa S.c.p.a. - Cap. Soc. € 10.052.488,00 - Sottoscritto e Versato
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1. DESCRIPTION

The A-LEGIO SENSE panel has been designed to control the proliferation of legionella and other hydrodiffused pathogens through an ON / OFF or proportional dosage of sodium hypochlorite or chlorine dioxide at the same time as a dosage of an anticorrosive conditioner.

In general, it is composed of:

- 1 AE-START + CL instrument for the measurement of free chlorine;
- 1 pump HC151 + (PImA model) to dose an inhibitor (anticorrosive) product controlled by a pulse-emitting counter;
- 1 pump HC151 + (PimA model) with automatic air purge to dose a disinfectant product (sodium hypochlorite, etc.) controlled by the AE-START + CL instrument;
- 1 membrane amperometric probe for the determination of free chlorine;
- 1 modular HT probe holder, proximity sensor and flow regulator;
- 1 HT prefilter.

For the pump managed by the chlorine measuring instrument, the dosage mode set in the factory is the proportional one: the dosage is proportional to two mA values (4mA and 20mA).

1.1 PANEL COMPOSITION

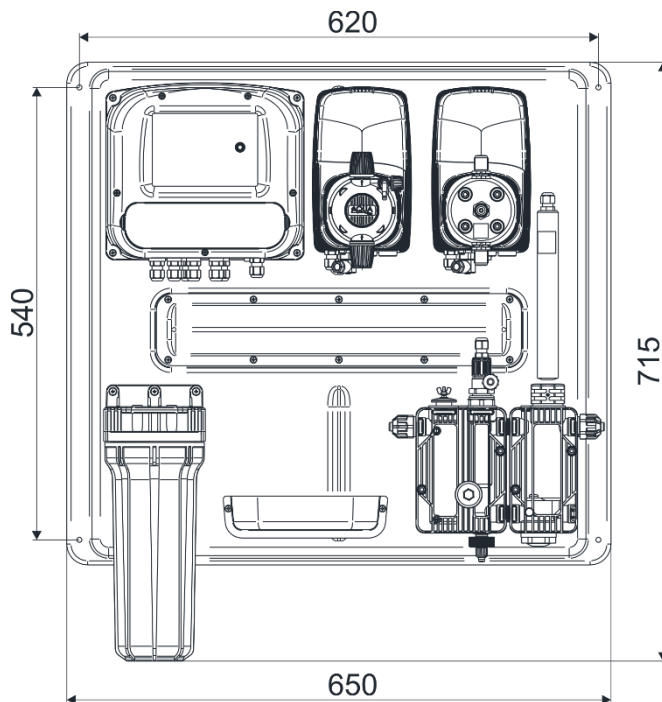
- Panel
- Membrane chlorine probe 0-5ppm
- n. 1 temperature probe (optional)
- HT water filter 9"3/4 complete of AC-HT cartridge 80 micron, 10x14 tube fittings
- Roll of PVC tube 10X14 (4m)
- Controller, pump and panel programming manuals
- n.2 PVDF injection valve
- n.2 PVDF foot filter
- Roll of PE tube for delivery (4 m)
- Roll of PVC tube for suction (4 m)
- Roll of PVC tube for air bleed (4 m)

1.2 TECHNICAL SPECIFICATIONS

Supply:	110-240VAC – 50/ 60Hz
Panel dimensions:	L 650 x H 600 x D 250 mm
Max power:	60 W (with pumps in "C" curve)

1.3 OVERALL DIMENSIONS

NB: although devices may be arranged differently on the panel depending on the model selected, the panel's overall dimensions do not change.



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1.4 HYDRAULIC SPECIFICATIONS PUMP HC151+

Please refer to the HC151+ pump manual.

1.5 FUNCTIONAL CHARACTERISTICS OF THE AE-START+ INSTRUMENT

Please refer to the AE-START+ instrument manual.

1.6 HC151+ PUMP CONNECTIONS

Please refer to the HC151+ pump manual.

1.7 AE-START+ INSTRUMENT CONNECTIONS

Please refer to the AE-START+ instrument manual.

1.8 COMPLETE MANUALS

The complete manuals are available on:



HC151+ PI-MA



AE-START+



CAUTION: Always disconnect the electrical power supply before servicing the device.

2. PROGRAMMING THE PANEL

After installing and connecting all the required probes and devices for the purchased panel, follow the programming instructions set out in the pump and instrument manuals.

A list summarising the operations to follow for each panel is provided below.

2.1 HC151+ PUMP MENUS AND PROGRAMMING

Please refer to the HC151+ pump manual.

2.2 AE-START+ INSTRUMENT MENUS AND PROGRAMMING

Please refer to the AE-START+ instrument manual.

3. PROBE INSTALLATION AND MAINTENANCE

3.1 CL(J) 4-20 mA PROBE

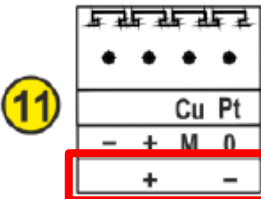
1. Take the CL(J) probe out of the package and unscrew the membrane cap on the lower part of the probe:



2. Lower the rubber ring on the membrane cap before filling it with the electrolyte gel provided in the package:



3. Immerse the probe in the cap, being careful to prevent any excess electrolyte from spilling over (if so, rinse).
4. Unscrew the top part of the probe and connect the bipolar cable to the probe and the instrument's CL terminal box:

11 	Sonda Pt-Cu: filo blu (Cu) filo marrone (Pt)
	Sonda Cloro 4 fili: filo marrone (--) filo verde (+) filo bianco (M) filo giallo (0)
	Sonda Cloro 4-20mA: filo blu (--) filo marrone (+)



5. Screw the top part back in place and insert the probe in the proper probe holder.



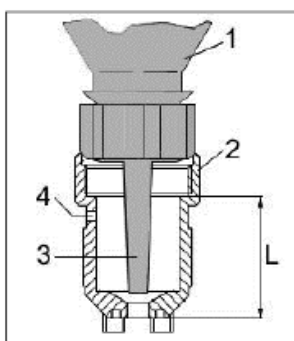
6. Secure the probe in place on the probe holder:



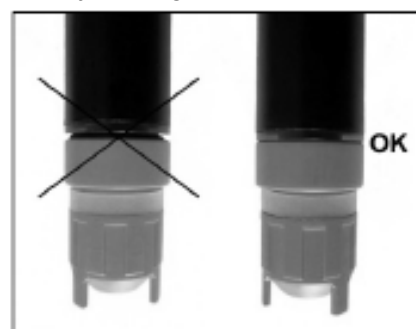
3.2 CL(J) PROBE with mV signal

To fit the CL(J-mV) probe to the modular probe holder, follow the instructions provided for the CL(J) 4-20mA probe; to prepare the probe for use, proceed as follows:

- Remove the protective cap and unscrew the membrane cap from the cell body.
- Open the electrolyte bottle, screw the nozzle in place and allow any excess air to come out.
- Fill the membrane cap with electrolyte to the level as shown (see figure); avoid the formation of air bubbles as much as you can.
- Eliminate any air bubbles by gently tapping the cap over a flat surface. Position the cell vertically on the filled membrane cap and screw the cap by hand until flush; proceed slowly to avoid damaging the membrane and be careful not to cover the breather hole with your fingers, because excess electrolyte should be free to flow out.
- Remove the electrolyte coming out with a damp cloth or rinse with water.



1. Electrolyte bottle
2. Membrane cap
3. Nozzle
4. Breather hole
- L. Electrolyte fill level



To perform the electrical connections, follow the diagram provided in the instrument's manual.

	Sonda Pt-Cu: filo blu (Cu) filo marrone (Pt)
	Sonda Cloro 4 fili: filo marrone (--) filo verde (+) filo bianco (M) filo giallo (0)
	Sonda Cloro 4-20mA: filo blu (--) filo marrone (+)

3.3 CLEANING THE PROBE HOLDER FILTER

- 1) Close the valve.
- 2) Remove the fork.
- 3) Extract the filter.
- 4) Pull the filter out and clean it with water.
- 5) Unscrew the breather plug and the cap.
- 6) Allow water to run through the probe holder until free of debris and dirt.
- 7) Fit everything back in place.



1



2



3



4



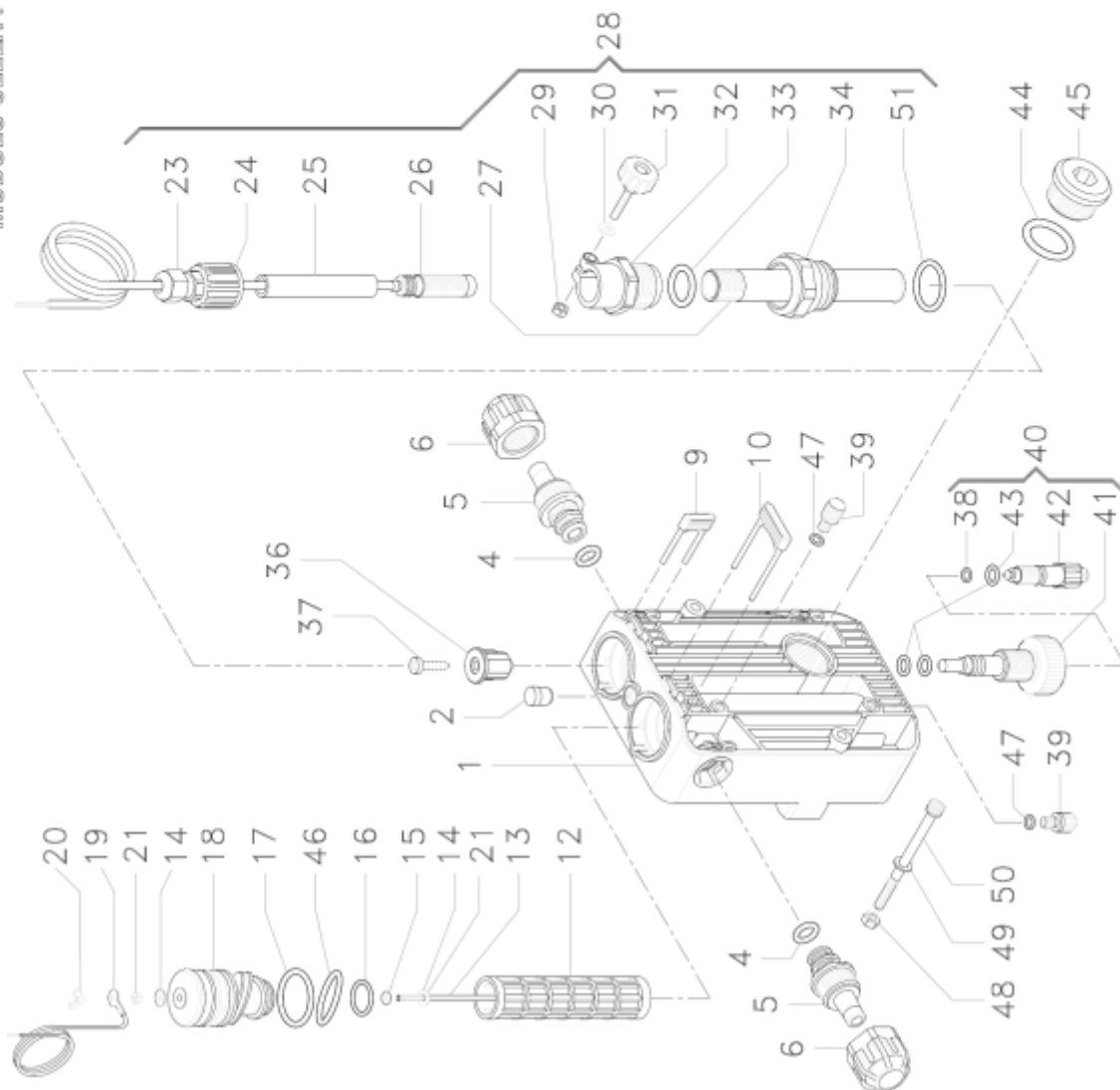
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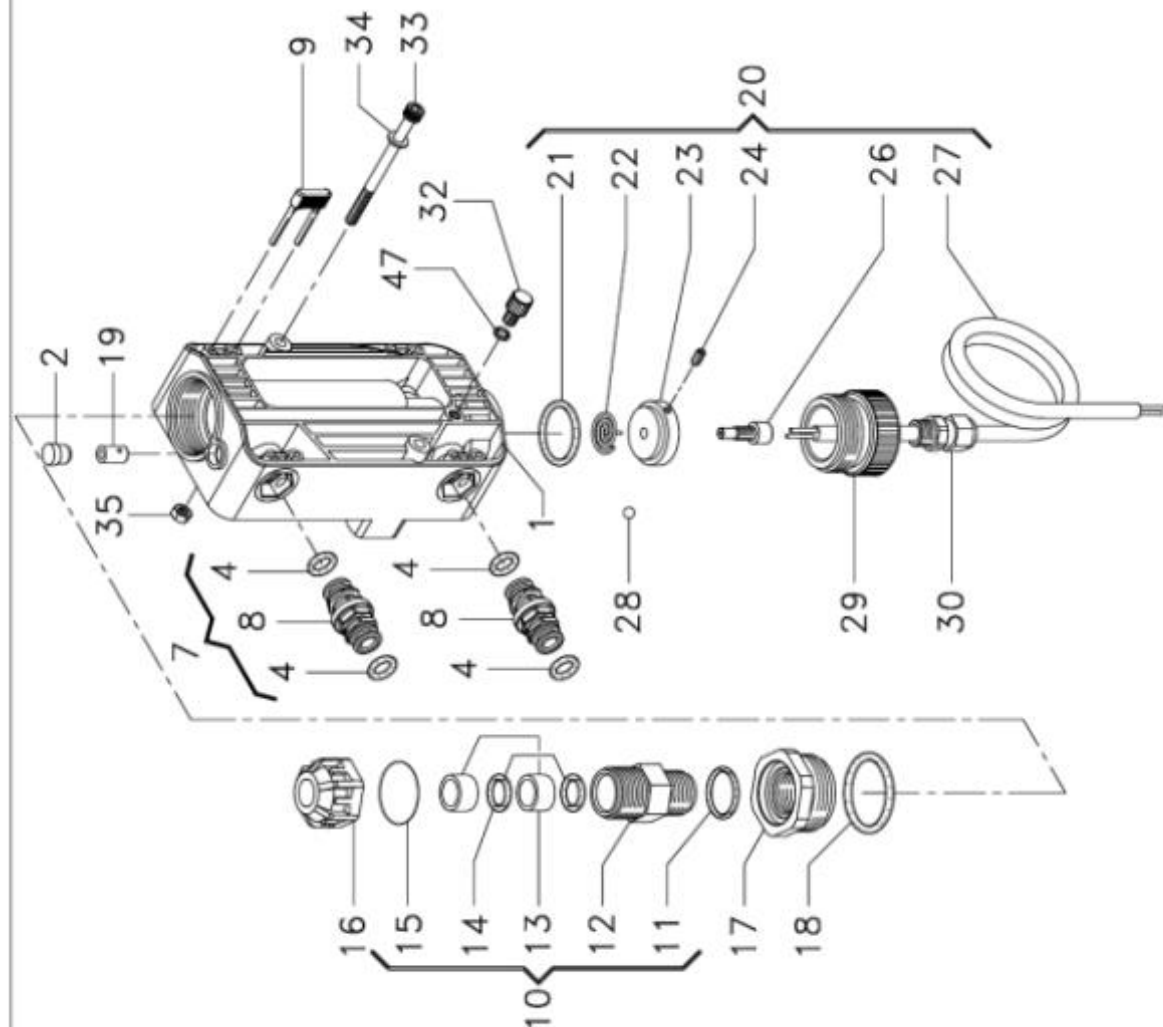
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EXPLODED VIEW

MODULO CELLA FILTRO - FLUSSO
COD. ADSP3600004



POS	CODICE	DESCRIZIONE	Q.T.A.
51	ADSP5007106	CR - RF. 3100 - VITON NERO	1
50	ADSP6000501	VITE M5X70 UNI 5931 (TCE) INOX A2	2
49	ADSP6000701	RONDELLA PIANA D.5 - UNI 6592 INOX A2	2
48	MB010360	DADO M6 UNI 5938 - INOX A2	2
47	NG010960	CR 3,0X2 VITON NERO	2
46	ADSP5007206	CR 132 VITON NERO 2,62 X 23,81 (V/N)	1
45	PA010100	TAIPO 3/4 M.	1
44	MO010460	CR 20,22X3,53 RF 4081 NBR70SR COD.DIS. 013.1102.05	1
43	ADSP5007213	CR - METRICO D.8X7,2 - VITON NERO	3
42	ADSP6100079	SPILLO PRELIEVO PER CELLE MODULARI RP	1
41	ADSP6100078	VITE REG. FLUSSO RP CON FORO PER SPILLO PRELIEVO PER CELLE MOD.	1
40	ADSP6000621	VITE REGOLAZIONE FLUSSO COMPLETA DI RUBINETTO PRELIEVO	1
39	ADSP6100075	TAIPO SINGOLO M6 PER PORTA Sonda MODULARE	2
38	ADSP5007022	CR 2015 VITON NERO 3,89 X 1,78 PM165	1
37	ADSP6000754	VITE 4,2 X 16 INOX A2 TESTA CILINDRICA TAGLIO CRUCE AUTOFRETTANTE	1
36	ADSP6100046	PESO FLUSSOSTATO PER PORTA Sonda MODULARE	1
34	ADSP6100048	TAIPO PORTA SENSORE DI FLUSSO M6X1,5 PER PORTA Sonda MODULARE	1
33	ADSP5007206	CR 110 X 13 VITON NERO (V/N)	1
32	ADSP6100070	CR 110 X 13 VITON NERO (V/N)	1
31	ADSP6000294	MANOPOLA FISSAGGIO COPERCHIO TRASPARENTE PER-R	1
30	ADSP6000306	RONDELLA D04 X 10 X 1 A2	1
29	ADSP6000302	DADO M4 X 8 mm UNI 5587 INOX A2	1
28	ADSP3	SENSORE FLUSSO COMPLETO PER PORTA Sonda MODULARE	1
27	ADSP6100071	TUBO D12X63 PER SENSORE DI FLUSSO PER PORTA Sonda MODULARE	1
26	ADSP2	SENSORE DI PROSSIMITA' A-SP (M12 PNP) (V/N)	1
25	ADSP6100072	GUIDA PORTA SENSORE DI FLUSSO PER PORTA Sonda MODULARE	1
24	ADSP6000406	GHERA 3/8" RP PER VALVOLA A SFERA	1
23	ADSP6000424	PRESSACAVO + DADO PG7 NERO	1
21	ADSP6000466	DADO M03 INOX	2
20	ADSP6000335	DADO AD ALETTE M0 UNI 5448-A A81 A2	1
19	ADSP6020012	CAVO TERRA CM 35 CON CAPOCORDA	1
18	ADSP6100065	TAIPO PER FILTRO PORTA Sonda MODULARE	1
17	ADSP5007211	CR 2015 20X3 VITON NERO	1
16	ADSP5007087	CR 2015 VITON NERO D14x1,78	1
15	ADSP5007049V	CR 2010 VITON NERO 2,57 X 1,78	1
14	ADSP6000489	RONDELLA A FASCE LARGA D03 X 09 INOX	2
13	ADSP6000031	ELETTRODO TERRA PER PORTA Sonda MODULARE	1
12	ADSP6000030	CARTUCCIA RICAMBIO ACQUA MINI	1
10	ADSP6100073	FORCELLA TAIPER PER PORTA Sonda MODULARE	2
9	ADSP6100074	FORCELLA GIUNTI PER PORTA Sonda MODULARE	3
6	ADSP6000002	GHERA FISSA TUBO RP NERA 1/2" 10x14	2
5	ADSP6100063	GIUNTO A TRIANGOLO A FORCELLA RP 1/2" PER TUBO 10X14	2
4	NG010960	CR R 1302.62 RF 109 NBR 70SH	2
2	ADSP6100067	TAIPO PER CONDOTTO D8 PER PORTA Sonda MODULARE	1
1	ADSP6100060	MODULO CELLA FILTRO - FLUSSO PER PORTA Sonda MODULARE	1



MODULO CELLA CLORO CON PORTASONDA CDO. A08P0600012

47	MOD10060	OR 1.52 VITON NERO	1
35	A08P0000464	DADO M3 NIX	2
34	A08P0000101	RODDELLA RAUPE D5 - UN 6502 NIX A2	2
33	A08P0000091	VITE M8 X 70 NIX A2 TESTA CLINDRICA ESAGONO INOXASSATO	2
32	A08P1000075	TUPO SPARGO M8 PER PORTA Sonda MODULARE	1
30	A08P0000404	PRESSACAVO - DADO PGT NERO	1
29	A08P1000065	RAUCC PER PORTA ELETTRICO PER Sonda CLORO PORTA Sonda MODULARE	1
28	A08P0001007	SPERA Ø13.00mm VETRO SOCCO CALDOO G.100	25
27	A08P0000951	CAVO BRONZE 2 X 0.75 METR.3	1
26	A08P0000809	PERNO PVC FLETTATO RECOP. SPRALE PLATINO	1
24	A08P0000796	GRAND 10008 NIX ESAGONO INOXASSATO	1
23	A08P0000807	ELETTRODO RAUPE PLATINO COMPLETO PER PORTA Sonda MODULARE	1
22	A08P0000810	PLATINO SPIRALE 1 L. 14MM RLO 10MM - (peso gr. 2.355)	1
21	A08P0001006	OR 3102 VITON NERO 25 Ø72.42	1
20	A08P0000820	ELETTRODO RAUPE PLATINO COMPLETO PER PORTA Sonda MODULARE	1
19	A08P1000076	UGELLO CONV. COLUTORE FLUSSO PER PORTA Sonda MODULARE	1
18	MOD10060	OR 3142 X 2.62 RF 3125 NBR 70SH	1
17	A08P1000077	ROLOZIONE PORTA Sonda PER MODULO CLORO PORTA Sonda MODULARE NBR61G12"	1
16	A08P0000807	RODDELLA D 21/2 GOMMA NBR NERA ("VATTI CORREDZ")	1
15	A08P0000408	CHERA PORTA Sonda DEF. LUBROTTUBAZIONE PPR NERA	1
14	MOD10180	OR - RF 115 - NBR	2
13	A08P0000406	CILINDRO PP PORTA Sonda DEF. LUBROTTUBAZIONE	2
12	A08P0000503	RAUCCORDO PORTA Sonda RF 1/2" X 24 X 1.25 ØM. ØM.	1
11	A08P0001111	OR - RF 3075 - VITON NERO	1
10	A08P11	PORTA Sonda PER TUBAZIONE - RIL. A TACCO 1/2"	1
9	A08P1000074	FORDELLA GUANTI PER PORTA Sonda MODULARE	3
8	A08P1000064	GIUNTO COLLEGAMENTO MODULO CELLA	2
7	A08P1000087	KIT COLLEGAMENTO 2 MODULI	1
4	MOD10060	OR 8.1302.62 RF 108 NBR 70SH	4
2	A08P1000067	TUPO PER CONDOTTORE PER PORTA Sonda MODULARE	1
1	A08P1000062	MODULO CELLA CLORO PER PORTA Sonda MODULARE	1



MANUALE D'USO E MANUTENZIONE PANNELLO DOSAGGIO

A-LEGIO SENSE

FOR OTHER LANGUAGES:

