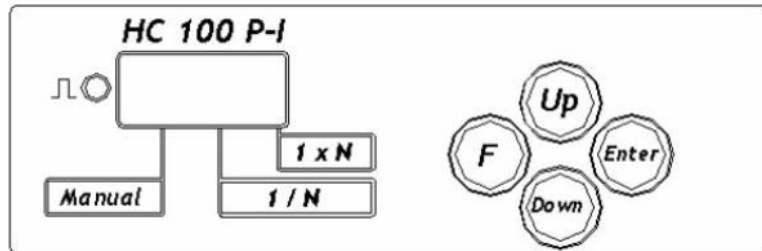**PROGRAMMING INSTRUCTIONS**
FOR DOSING PUMP TYPE

HC 100 PI

This dosing pump can be used both in manual and in proportional mode.
If it is connected to a water-meter ,the HC 100 PI pump is able to dose in direct proportion to the amount of liquid that passes through the water meter. This pump is not specific to a particular type of water meter, and can be adapted to the most water-meters even if they have the following K factor of:
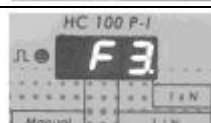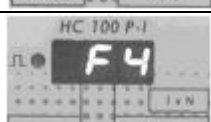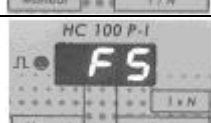
0,1 imp/l, 1 imp/l, 2 imp/l, 4 imp,/l.

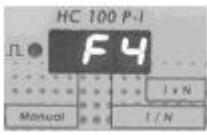The HC 100 PI pump is capable of being controlled by any volt free contact.
In order to calculate the correct dosage rate required it is necessary to know the exact amount delivered per stroke.
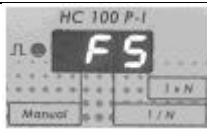
MODELLO	LT/H MAX	BAR MAX	N° COLPI MAX	CC / PULSE
HC 100 PI 02-08	2	8	105	0,32
HC 100 PI 05-05	5	5	105	0.8
HC 100 PI 10-02	10	2	105	1,60

DESCRIPTION OF FUNCTION

	Constant dosing
	The pump waits a number of pulses from water-meter to do one injection.
	For every pulse coming from the water-meter the pump gives the number of injections set in F3. **The injection frequency of the pump depends on the time distance between the last two received pulses from water meter.**
	It allows to reduce the percentage of the dosing (set by F2 or F3)
	It allows to activate or deactivate the memory of the pulses coming from the water-meter when the pump is still working.

Details

HC 100 P-I F 4	ʳOF	Function deactivated (default value)
	ʳ97	It allows to give from 1 to 99% of the initial maximum dosing. The initial maximum dosing is set in F2 or F3 function.
HC 100 P-I F 5	On	Memorization of the pulses from the water-meter while the pump is still working. The dosing referred to the memorized pulses is automatically done by the pump consequentially
	OFF	Deactivation of the memory of the pulses coming from the watermeter while the pump is working.

LOW LEVEL ALARM

When stopped the pump display will simulate a picture of a tank emptying and show the words Lo being displayed on the right of the display. A small time delay of a 5 seconds is present to eliminate nuisance switching caused by ripples on the surface of chemical. The pump restarts automatically when the chemical level is restored.

PROGRAMMING

The Enter button allows to stop the pump (stand by state) and to start it
Push the **F** button to choose your desired function :
**F 1** - manual, **F 2** - 1 / N, **F 3** - 1 x N, **F4** - %, **F5**- memory
Push the **Enter** button to confirm the choice.
Push the button **Up** and **Down** to decide the number of impulses N (if you select function F2 or F3), the number of impulses in a minute (if you select the manual function F1 maximum 105),the percentage of dosing (if you select the function F4%) and the activation and deactivation of memory (if you select the function F5- memory).
Push the **Enter** button to confirm, the Green Led of working lights up and the pump will be ready to run.
During running, every injection the pump delivers will make the display light up.
The little point in the lower right part of digit on the display will show the programmed function of the pump.

1.0.0	1.0.0	1.0.0
MANUAL FUNCTION	**1/N FUNCTION**	**1XN FUNCTION**
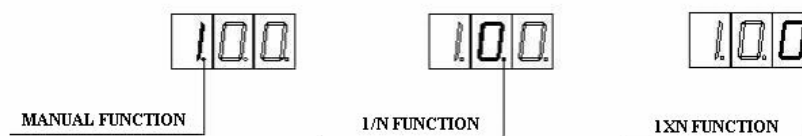
EXAMPLES OF PROGRAMMING

● **MANUAL 100 imp/min**
Push the F button and select F1 function. Push the ENTER button and while the display is blinking with the UP and DOWN buttons select 100, push ENTER to confirm, GREEN LED will light up and the pump will work.

● **1 / N   N = 100, 100% dosing without memory**
Push the F button and select F2 function. Push the ENTER button and while the display is blinking, with the UP and DOWN buttons select 100, push ENTER button to confirm.
Push the F button and select F4 function. Push the ENTER button and with the UP and DOWN buttons select OF, push ENTER button to confirm.
Push the F button and select F5 function. Push the ENTER button and with the UP and DOWN buttons select OFF, push ENTER button to confirm.
The pump will dose once every 100 impulses received and it will not memorize the pulses coming from watermeter while it is dosing.

● **1 x N   N = 100 , 40% of dosing with memory**
Push the F button and select F3 function. Push the ENTER button and on lightning display is blinking, with the UP and DOWN buttons select 100, push the ENTER button to confirm.
Push the F button and select F4 function. Push the ENTER button and with the UP and DOWN buttons select 40, push ENTER button to confirm.
Push the F button and select F5 function. Push the ENTER button and with the UP and DOWN buttons select On, push ENTER button to confirm.
The pump will dose 40 times every 1 impulse received and it will memorize the pulses coming from water-meter while it is dosing.

CONNECTIONS

CONT. 3-4

Livello/Level - sinistra/left

CONT. 3-4

digital input - destra/right