



LIQUID DYNAMICS™

AUTOMATIC NOZZLE

Owners Manual

This manual covers P/N 100396



This manual contains important warnings and information. READ AND KEEP FOR REFERENCE.

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A GENERAL WARNINGS

Important precautions

To ensure operator safety and to protect the pump from potential damage, workers must be fully acquainted with this instruction manual before performing any operation.

Symbols used in the manual

The following symbols will be used throughout the manual to highlight safety information and precautions of particular importance:



ATTENTION
This symbol indicates safe working practices for operators and/or potentially exposed persons.



WARNING

This symbol indicates that there is risk of damage to the equipment and/or its components.



NOTE

This symbol indicates useful information.

Manual preservation

This manual should be complete and legible throughout. It should remain available to end users and specialist installation and maintenance technicians for consultation at any time.

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B FIRST AID RULES

Contact with the product

In the event of problems developing following EYE/SKIN CONTACT, INHALATION or INGESTION of the treated product, please refer to the SAFETY DATA SHEET of the fluid handled. Please refer to the safety data sheet for the product

NOTE



SMOKING PROHIBITED



When operating the dispensing system and in particular during refuelling, do not smoke and do not use open flame.

WARNING



Keep the product to be dispensed away from eyes and skin
Keep the product to be dispensed out of reach of children
The nozzle must only be used for the purposes for which it was designed

Using unsuitable component parts and materials could be hazardous

Not checking correct part installation could be hazardous.

C GENERAL SAFETY RULES

Essential protective equipment characteristics



ATTENTION



Wear protective equipment that is:

- suited to the operations that need to be performed;
- resistant to cleaning products.

It is a good practice to consider the instructions manual as an integral part of the purchased product. Always keep the instructions manual nearby the product.

Personal protective equipment that must be worn



safety shoes;



close-fitting clothing;



protective gloves;



safety goggles;

Protective gloves



Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

Do not proceed to dispense if the suction/supply hose, the nozzle or the safety devices are damaged. Immediately replace the damaged part.

D BECOMING ACQUAINTED WITH SB32

FOREWORD



DISPENSER NOZZLE FEATURING AUTOMATIC STOP DEVICE, MADE OF NON-CONDUCTIVE PLASTIC AND DESIGNED TO BE USED WITH WATER/UREA SOLUTION (DEF, AUS32), ALSO COMPATIBLE WITH WATER.

D.1 INTENDED USE

SB32

WATER/UREA SOLUTION - D.E.F. - AUS 32, ACCORDING TO DIN 70070
WATER
WINDSCREEN
FOOD LIQUIDS

CONDITIONS OF USE AND ENVIRONMENTAL CONDITIONS

Refer to the product technical sheets

E PACKAGING

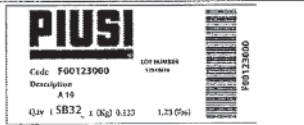
FOREWORD

THE NOZZLES ARE SUPPLIED PACKED IN CARDBOARD BOXES, WITH LABEL SHOWING FOLLOWING DETAILS:

1 - Package contents

2 - Weight

3 - Product description



F TECHNICAL CHARACTERISTICS

Description	Min. flow-rate (l/min)	Max. flow-rate (l/min)	Pressure loss at 35 l/min (bar)	Inlet thread with swivel	External diameter hose-end fitting (mm)	Max. operating pressure (bar)	Weight (Kg)
SB32	15	45	0,9	1" GAS	20	3,5	0,6

G INSTALLATION

FOREWORD



The automatic nozzles are supplied ready for use. The nozzle features SWIVEL hose-end fitting (complete with O-ring) useful for connecting to the supply hose.

TO ENSURE PERFECT OPERATION, THE DEVICE MUST BE USED TO DISPENSE FLUIDS WITH CHARACTERISTICS FALLING WITHIN THE FOLLOWING PARAMETERS:

- Qmin : 15 l/min - Qmax: 45 l/min
 - Pmin : 1,5 bar - Pmax: 3,5 bar

ATTENTION



During installation, use adequate sealants, being careful no residues remain inside the hose.

So as not to negatively affect product operation, couple the hose-end fitting with the hose without using tools such as pliers, etc.

Assembly will be easier if the swivel hose-end fitting is already fitted on the nozzle.

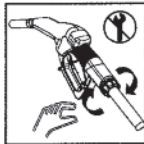
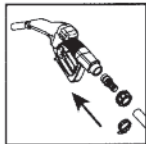
Make sure the hoses and the suction tank are without threading scale or residues which could damage the nozzle and the accessories.

WARNING



Apply adequate sealants on the male threads of the connections and swivels

Do not use Teflon tape



H USE MODALITY

FOREWORD



The main feature of these nozzles is that they are easy to use.
Two operating modes are available:

1 ASSISTED MODE

Dispense by operating the nozzle lever. To interrupt dispensing manually, release the lever.

2 AUTOMATIC MODE

Use the opening lever lock device for automatic dispensing.
To continue dispensing after automatic stop, the lever must be fully released before proceeding to operate it again.
To interrupt dispensing in manual mode, press the lever again, thereby releasing the device, and then release.

ATTENTION



DO NOT USE THE NOZZLE OUTSIDE THE PARAMETERS INDICATED ON THE "TECHNICAL SPECIFICATIONS" CHART

ATTENTION



Dispensing is automatically interrupted thanks to the shut-off device, which operates when the level of the liquid reaches the end of the spout.

I PREVENTION MISFILLING (optional)

PREMISE



Refuelling with the nozzle equipped with "magnet switch" is only possible in combination with the "magnet adapter", so misfuelling into tanks is made impossible

OPERATION

The "magnet switch" is a fixed magnetic field within the filler necks of the nozzle. This opens the magnet switch in the spout, so it is only possible to dispense from the tank where the magnet adaptor is installed.

ATTENTION



Nozzles equipped with "magnet switch" work only in combination with the "magnet adapter". The "magnet adapter" is an optional to be bought separately.

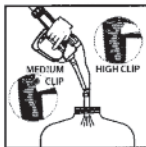
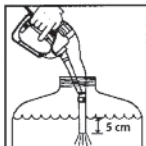
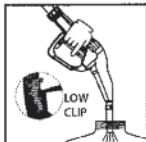
L PRELIMINARY CHECK

WARNING



Check the correct operation of the lock device, according to the following procedure:

- 1 Take a graduated receptacle with a capacity of 20 litres (5 gal).
- 2 Begin dispensing into the receptacle, setting the lever in the minimum flow position, until the receptacle is full.
- 3 Keeping the lever open, make sure the spout is submerged by about 5 cm (2 inches).
- 4 The nozzle must stop, with a click of the lever.
- 5 Repeat the same operations with the lever in medium-flow and maximum-flow position. Check the correct operation of the stop device as described above.
- 6 If the nozzle stops during dispensing, check and reduce the flow.
- 7 If the dispensing stop device fails to operate, replace the nozzle.



M INITIAL START UP

FOREWORD

Only start dispensing after making sure that assembly and installation have been correctly performed.

ATTENTION



It is a good practice to only operate the nozzle lever after making sure the spout has been properly inserted in the mouth of the tank to be filled.

NOTE



When using for the first time and every time the nozzle is used, following the connection of the supply hose, gently operate the lever to enable the air to escape from the circuit, until normal operation is achieved.

ATTENTION



Check the correct operation of the automatic stop device once the tank is full.

ATTENTION



THE FAULTY OPERATION OF THIS DEVICE COULD CAUSE THE SPILL OF LIQUIDS THAT ARE HAZARDOUS FOR PEOPLE AND THE ENVIRONMENT.

N MAINTENANCE

- 1 PERIODICALLY CHECK THE CORRECT OPERATION OF THE AUTOMATIC STOP DEVICE
- 2 IF FITTED, IT IS BEST TO PERIODICALLY CHECK THE FILTER AND CLEAN IT EVERY 1000 LITRES OF TRANSFER.
- 3 PERIODICALLY CHECK THE TIGHTNESS OF THE CONNECTIONS

O MALFUNCTIONS

FOREWORD

THE POSSIBLE CAUSES OF MALFUNCTION ARE MAINLY ATTRIBUTABLE TO THREE FACTORS:

- 1 **NOZZLE DIRTY IN INNER HOLE OF LIP AT END OF SPOUT**
- 2 **OPERATING PRESSURE OF LIQUID TO BE DISPENSED BELOW 0.5 bar OR ABOVE 3.5 bar**
- 3 **FLOW RATE TOO LOW OR TOO HIGH**

NOTE



CORRECT AND REGULAR MAINTENANCE OF THE NOZZLE AND OF THE SYSTEM TO WHICH IT IS CONNECTED PREVENTS MALFUNCTIONS AND POSSIBLE ACCIDENTAL SPILLS OF HAZARDOUS LIQUIDS.

P DEMOLITION AND DISPOSAL

Foreword

If the system needs to be disposed, the parts which make it up must be delivered to companies that specialize in the recycling and disposal of industrial waste and, in particular:

Disposal of packing materials

The packaging consists of biodegradable cardboard which can be delivered to companies for normal recycling of cellulose.

Disposal of metal parts

Metal parts, whether paint-finished or in stainless steel, can be consigned to scrap metal collectors.

Disposal of electric and electronic components

These must be disposed of by companies that specialize in the disposal of electronic components, in accordance with the indications of directive 2002/96/CE (see text of directive below).

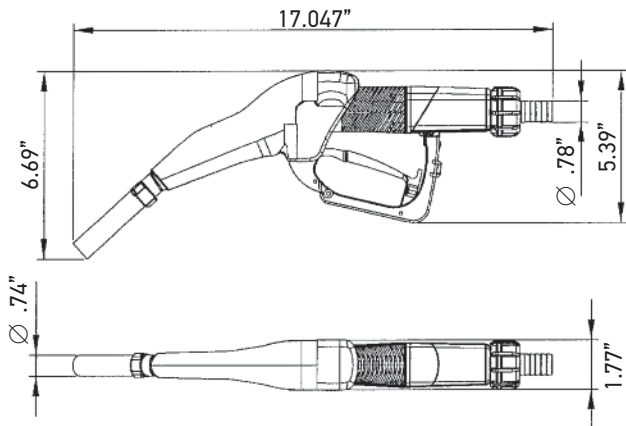


Information regarding the environment for clients residing within the European Union
Disposal of miscellaneous parts

European Directive 2002/96/EC requires that all equipment marked with this symbol on the product and/or packaging not be disposed of together with non-differentiated urban waste. The symbol indicates that this product must not be disposed of together with normal household waste. It is the responsibility of the owner to dispose of these products as well as other electric or electronic equipment by means of the specific refuse collection structures indicated by the government or the local governing authorities.

Other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial waste.

P DIMENSIONS



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