

#### **INSTALLATION AND OPERATING MANUAL**

# **ZVG 2 EURO UL**

LPGas Nozzle with 'EURO' Connector



Please read this manual carefully before installation or operation of the nozzle.

Be sure all instructions are understood. Correct installation, use and maintenance are essential. In case of doubt or question please contact your service contractor or the manufacturer.

## **DESCRIPTION**

The ZVG 2 EURO UL nozzle is designed for the LPGas vehicle refueling. Unlike the previously used LPGas nozzles with screw-on connectors, it is equipped with a 'EURO' coupling and optionally with an orange safe latching mechanism to increase user comfort as per UL 125. It incorporates ease of use, operating safety and low gas release volume upon uncoupling. The nozzle is designed to only allow gas to flow when it is correctly coupled.

# **APPROVALS / OPERATING CONDITIONS**

ZVG 2 EURO UL is listed in accordance with UL 125 and UL 567 for use with LPGas (Liquefied Petroleum Gas like propane, butane and their mixtures). It also meets the requirements of EN 13760, UN R67 and ISO 19825.

Flowrate up to 50 litres/min. Rated service pressure 363 psi (25 bar), operation temperature range -40° F (-40° C) to 158° F (70° C). Test pressure 544 psi (37.5 bar), burst pressure in excess of 1450 psi (100 bar). Each nozzle is factory tested before being labelled with the prescribed marking, production date and unique serial number.

#### **GENERAL INFORMATION ABOUT LPG / WARNINGS**

- LPGas is liquefied under pressure when transported and stored. It is heavier than air.
   Commercial LPGas is odourised before distribution to enable detection by its sulfurous smell.
   It appears as white fog or cloud when exposed to the atmosphere. It has an evaporation factor of 1/260: one liter of liquefied gas corresponds to 260 liters of inflammable gas.
- → A small gas release upon uncoupling is normal but uncontrolled gas release to the atmosphere must be avoided. If you suspect a leakage: stop refueling, use the emergency button to shut off the dispenser, immediately evacuate the area and inform station personnel.



- LPGas is extremely flammable, which is capable of igniting at concentrations between 2 and 10% in air.
- → Open fires, smoking, sources of static electricity and the use of mobile phones or other electric devices is prohibited in the area of gas transfer. Turn off vehicle engine before refueling.













• LPGas is extremely cold when released to the air (depressurized).

Local laws and code of practice regarding LPGas handling as well as instructions of vehicle, dispenser and authorized personnel must be followed. Please also refer to the safety codes NFPA 54 + 58 and NPGA 306.

#### INSTALLATION

The ZVG 2 EURO UL is delivered ready for use.

Nozzles should only be installed and tested by competent personnel. Applicable laws, regulations and Codes of Practice have to be followed.

Do not use PTFE sealing tape for sealing threaded connections, as electrical conductivity may be insufficient and particles of the tape commonly become loose and could clog the nozzle strainer or damage vehicle motor parts. Use suitable liquid seal (non permanent) instead.





Do not use PTFE tape

Use liquid seal (non permanent)

After connecting to the hose assembly, an operational test shall be performed. It is essential to examine that the nozzle, hose connector and swivel are tight under pressure and do not leak – e.g. by external application of foaming agents.







**Check tightness** 

2 3

#### **OPERATING INSTRUCTIONS**

Please follow any additional or deviating operating instructions displayed at the dispenser.



Switch off vehicle engine.



Ensure that all coupling parts, seals and sealing surfaces of nozzle and vehicle coupling are clean and undamaged.



Take nozzle from dispenser. If necessary activate the dispenser. Align nozzle with vehicle sided fill point as shown.



Push nozzle firmly onto the vehicle fill point.



Pull nozzle lever as shown to open the nozzle valve. If latch is fitted, push latch up with forefinger and release lever.



Fueling will now usually start. If leakage is observed, release lever to stop process.

Do not lean on / tilt the nozzle.



On completion of refueling release lever to disconnect. If latch is fitted, squeeze lever and latch will automatically release.



During lever release a quantity of liquid gas is discharged from front of the nozzle.

If the vehicle is equipped with an integrated EURO coupling this will be a small amount. If an adapter is used this will be a considerably larger amount.

To avoid cold burns, keep hands off the coupling area.



Remove nozzle and take it back to its parking position on the dispenser.

#### FILL POINT ADAPTORS

The use of fill point adaptors is not recommended by ELAFLEX PACIFIC PTY LTD.

If an adaptor is used, please note:

- During the release of the nozzle lever at the end of the fueling process, a quantity of liquid
  gas remaining between vehicle fill point and nozzle is discharged. When using adaptors,
  the released volume of gas is much greater compared to a direct connection with the
  vehicle filling connector.
- Replace worn out adaptors (tears, breaks, cuts, damaged sealing surface).

# **MALFUNCTION**

- If the lever cannot be pulled back
- → Check the correct seating of the nozzle to the vehicle coupling. A safety feature prevents operation of the nozzle if the connection is misaligned. If you have any doubts or questions, please contact the station personnel.
- → Never force operation of the nozzle. If the connection process does not work smoothly, disconnect and re-connect nozzle as indicated under chapter 'Operation'.
- Leakage (escaping gas)
- → A small gas release upon uncoupling is normal. If uncontrolled and/or permanent gas release to the atmosphere occurs, immediately stop fueling. If the leakage continues, push emergency button of dispenser, leave area and inform station personnel.
- → If area is safe, check tight connection between vehicle connection and ZVG 2 EURO UL nozzle and coupling. Check seals of vehicle connection and ZVG 2 EURO UL coupling. If the problem persits notify the station personnel or the service contractor.

# **MAINTENANCE**

The ZVG 2 EURO UL nozzle is a mechanical device that may become inoperative due to wear, corrosion and ageing of components. Regular inspections and maintenance are essential for a safe operation.

Daily visual inspections of the nozzle by trained personnel should be carried out to ensure proper function. The nozzle coupling shall be clean and not show any signs of damage (e.g. dents, sharp edges, blocked lever, swivel non rotating). Especially check the red coloured front seal inside the coupling part of the nozzle to confirm there is no dirt or mechanical damage.

The nozzle condition shall be thoroughly checked during the annual pump maintenance by competent personnel. Applicable laws, regulations and Codes of Practice have to be followed.

Nozzles in unfit condition for use must be immediately replaced.

4

## **CONDITIONS OF USE**

Failure to comply with any warnings, instructions, procedures or any other common sense procedures may result in injury, equipment damage, property damage or poor performance of the equipment.

ELAFLEX PACIFIC PTY LTD accepts no liability for direct, incidental, special, or consequential damages resulting from failure to follow any warnings, instructions and procedures in this manual, or any other common sense procedures generally applicable to equipment of this type. The foregoing limitation extends to damages to person or property caused by the unit or damages resulting from the inability to use the unit including loss of profits, loss of products, loss of power supply, the cost of arranging an alternative power supply, and loss of time, whether incurred by the user or their employees, the installer, the commissioner, a service technician, or any third party.

The manufacturer reserves the right to change the specifications of its products or the information in this manual without necessarily notifying its users.

Variations in installation and operating conditions may affect the unit's performance. ELAFLEX PACIFIC PTY LTD has no control over each installation's unique operating environment. Hence, no representations or warranties concerning the performance of the unit under the actual operating conditions prevailing at the installation are made. A technical expert of your choosing should validate all operating parameters for each application.

ELAFLEX PACIFIC PTY LTD has made every effort to explain all servicing procedures, warnings, and safety precautions as clearly and completely as possible. However, due to the range of operating environments, it is not possible to anticipate every issue that may arise. This manual is intended to provide general guidance. For specific guidance and technical support, contact your authorized supplier.

Only approved original parts shall be used and no unauthorized modifications to the hardware shall be made. The use of non-approved parts or modifications will void all warranties and approvals. The use of non-approved parts or modifications may also constitute a safety hazard.

Information in this manual shall not be deemed a warranty, representation, or guarantee. For warranty provisions applicable to this unit, please refer to the warranty provided by the supplier.

Every effort has been made to ensure the accuracy of this document. However, it may contain technical inaccuracies or typographical errors. ELAFLEX PACIFIC PTY LTD assumes no responsibility for and disclaims all liability of such inaccuracies, errors or omissions in this.

# **WARRANTY**

ELAFLEX PACIFIC PTY LTD guarantee against defective materials and manufacturing for 18 months from date of supply. If the delivery date cannot be established, the factory date code on the nozzle guard applies (e.g. •19 = 1st quarter 2019).

Excluded are nozzles and parts subjected to wear and tear and damages caused by improper use, for example the use with unsuitable fluids. Furthermore excluded are indirect damages and costs, such as travelling related to exchange and repair work. We refuse any liability for consequential loss or damage resulting from the use of our nozzle.

# CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference 20180504-MH17142 MH17142-20150211

Issue Date

2018-MAY-04

Issued to: Elaflex Pacific Pty Ltd

TAREN POINT BUSINESS CENTER

PO BOX 2186

**NEW SOUTH WALES 2229 AUSTRALIA** 

This is to certify that representative samples of LP-GAS HOSE NOZZLE VALVES

USL, Model ZVG2 LP-Gas hose nozzle valve.

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 125, Flow Control Valves for Anhydrous Ammonia and

LP-Gas.

UL 567, Emergency Breakaway Fittings, Swivel Connectors

and Pipe-Connection Fittings for Petroleum Products and

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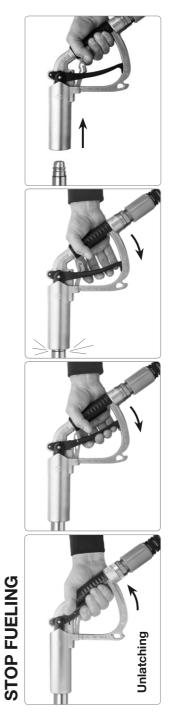
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Page 1 of 1

6





Complete operating instructions see page 4 of this manual. Follow any additional or deviating instructions displayed at dispenser.