

EV50
230V 50 Hz



PIUSI
Fluid Handling Innovation

MANUALE D'USO E MANUTENZIONE
USE AND MAINTENANCE MANUAL

Bulletin M0218 ITEN\_00



www.petroind.com

IT
EN

P EVERY DAY USE

USE PROCEDURE
1. If flexible pipes are used...

ATTENTION
THE WORKING OPERATIONS MUST ALWAYS BE GUARDED BY THE OPERATOR.

Q MAINTENANCE
THE PUMP IS DESIGNED AND CONSTRUCTED TO require a minimum of maintenance.

ATTENTION
BEFORE ANY OPERATION, ENSURE TO BE OUT OF POTENTIALLY EXPLOSIVE AREAS...

ATTENTION
BEFORE ANY OPERATION, ENSURE TO BE OUT OF POTENTIALLY EXPLOSIVE AREAS...

R NOISE LEVEL
Under normal operating conditions, noise emission of all models does not exceed 74 dB at a distance of 1 metre from the electric pump.

S PROBLEMS AND SOLUTIONS

For any problems contact the authorized dealer nearest to you.

PROBLEM
Lock electric power
Check the electrical connections...

THE MOTOR IS NOT TURNING
Motor problems
Contact the Service Department...

LOW OR NO FLOW RATE
Low voltage in the electric power line
Bring the voltage back with power line...

INCREASED PUMP NOISE
Irregular functioning of the pump
Check the electrical connections...

LEAKAGE FROM THE PUMP BODY
Sector defect performed
Remove the leakage from the sector...

THE PUMP DOES NOT FILL THE LIQUID
Malfunction of foot valve fitted on suction circuit
Adjust foot valve...

THE HEAT SENSOR ACTIVATES UNDER NORMAL OPERATING CONDITIONS
Operating fault
Contact the technical support.

T DEMOLITION AND DISPOSAL

Foreword
If any systems need to be disposed, the parts which will be disposed must be delivered to companies that specialize in the recycling and disposal of industrial waste...

N CONNECTIONS

N1 ELECTRICAL CONNECTIONS

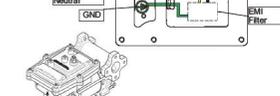
ATTENTION
BEFORE ANY OPERATION, ENSURE TO BE OUT OF POTENTIALLY EXPLOSIVE AREAS...

ATTENTION
Comply with the following (on exhaustive) instructions to ensure a proper electrical connection:

ATTENTION
During installation and maintenance make sure that power supply to the electric cable is not made by the user...

ATTENTION
All motors are equipped with a grounding terminal. Make sure all the plant is properly grounded.

ATTENTION
BEFORE USE TO INSTALL A CABLE GLAND, WITH SUFFICIENT PROTECTION GRADE (IP65)



ATTENTION
BEFORE ANY OPERATION, ENSURE TO BE OUT OF POTENTIALLY EXPLOSIVE AREAS...

N2 PIPING CONNECTIONS

FOREWORD
Before carrying out any connection, refer to the visual indications in the diagram...

ATTENTION
Wrong connection can cause serious pump damage.

PRELIMINARY INSPECTION
Verify that all components are present. Request any missing parts from the manufacturer...

PRELIMINARY INSPECTION
Before connection, make sure that the piping and the suction tank are clean and solid residue that could damage the pump...

ATTENTION
Fluid leaks can damage objects and injure persons.

NOTE
Never start or stop the pump by connecting or cutting off the power supply.

IF THE PUMP DOES NOT FILL
Check that the quantity of fluid in the suction tank is greater than the amount you wish to transfer.

ATTENTION
THIS PUMP IS NOT PROVIDED FOR FURTHER REGULATION OF DELIVERY AND PRESSURE

ATTENTION
Fluid leaks can damage objects and injure persons.

L OPERATING CONDITIONS

L1 ENVIRONMENTAL CONDITIONS

AMBIENT TEMPERATURE
min. -20 °F / max. 101 °F
min. -10 °C / max. 40 °C

ATTENTION
The environment must conform to directive 89/105/EEC, on work environments.

L2 ELECTRICAL POWER SUPPLY
The pump must be powered by DC 12V, the nominal values of which are indicated on the table in the paragraph "1 - ELECTRICAL DATA"

L3 DUTY CYCLE
The pumps have been designed for intermittent use and a duty cycle of 20 min. ON and 60 min. OFF in normal transfer conditions.

L4 FLUIDS PERMITTED
THE PUMP CAN BE USED ONLY WITH THE FOLLOWING FLUIDS:
-DIESEL - KEROSENE
-PETROL (MAX. ALCOHOL MIXED MAX 15%
-ANGAS 100/100 (LAMP) - JET A1 (pump only) - ASPEN2/4

M INSTALLATION

ATTENTION
BEFORE ANY OPERATION, ENSURE TO BE OUT OF POTENTIALLY EXPLOSIVE AREAS...

PRELIMINARY INSPECTION
Verify that all components are present. Request any missing parts from the manufacturer...

ATTENTION
IF VALUES WITHIN THE CURVE ARE TO BE INSTALLED, install the pump at a height of 80 cm.

ATTENTION
CLEAN THE TANK AND MAKE SURE IT'S WELL VENTILATED / RECOMMENDED OPENING PRESSURE: 3 bar

ATTENTION
DO NOT BLOCK THE DRAINAGE HOLES

M1 POSITIONING, CONFIGURATIONS AND ACCESSORIES

NOTE
The pump must be secured in a stable manner.

ATTENTION
It's the installer's responsibility to provide the line accessories necessary for the safe and proper functioning of the pump.

M2 NOTES ON SUCTION AND DELIVERY LINES
The selection of the pump model must be made taking into account the characteristics of the liquid to be pumped...

SUTION
Suction pumps are characterized by limited suction capacity. During the start-up phase when the suction pipes are empty and the pump is wet with the fluid...

ATTENTION
If the suction tank is higher than the pump, an anti-siphon valve should be installed to prevent automatic pressure equalization...

F FIRST AID RULES

Contact with the product
In the event of problems developing following EYE/SKIN CONTACT, INHALATION or INGESTION of the treated product...

SMOKING PROHIBITED
DO NOT SMOKE NEAR THE PUMP AND DO NOT USE THE PUMP NEAR FLAMES.

G GENERAL SAFETY RULES

IT IS ESSENTIAL TO GO TO KNOW AND UNDERSTAND THE INFORMATION CONTAINED IN THIS MANUAL.

Essential protective characteristics
Safety shoes, close-fitting clothing, anti-static gloves, safety goggles, helmet goggles.

NOTE
To prevent electric shock and detonation of sparks, ALL PIPING SYSTEM MUST HAVE PROPER GROUNDING, INCLUDING TANK AND ANY ACCESSORIES.

DANGER
BEFORE ANY OPERATION, ENSURE TO BE OUT OF POTENTIALLY EXPLOSIVE AREAS...

ATTENTION
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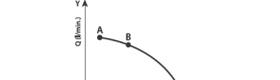
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H TECHNICAL DATA

H1 PERFORMANCE SPECIFICATIONS

Table with 4 columns: Functioning Point, Absorption(l), Flow Rate (l/min), Back Pressure (BAR), Typical delivery configuration.



ATTENTION
The curve refers to the following operating conditions:
Temperature: 20°C
Suction conditions: The pipe and the pump position relative to the fluid level is such that a low pressure value can be created that reduces the flow rate compared to the same back pressure value.

ATTENTION
BEFORE PROCEEDING WITH THE REFUELLING OF THE AIRCRAFT, ENSURE THAT THE SYSTEM INTENDED FOR SUCH ACTION COMPLIES WITH THE REGULATIONS IN FORCE IN THE COUNTRY OF USE.

ATTENTION
DO NOT USE THE PUMP WITH LIQUID FOOD PRODUCTS AND DO NOT OPERATE THE PUMP DRY OR UNDER VACUUM.

Table with 4 columns: PUMP MODEL, POWER SUPPLY, CURRENT, PRESSURE.

D MACHINE DESCRIPTION

PUMP
SELF-PRIMING, VOLUMETRIC, ROTATING ELECTRIC-VANE PUMP EQUIPPED WITH PRESS VALVE.

ATTENTION
MOTOR EQUIPPED WITH AUTOMATIC THERMAL OVERLOAD PROTECTION AND TURN OFF THE PROTECTION AFTER TURN OFF OF THE PUMP AND WAIT FOR IT TO COOL DOWN.

D1 DEFINITION OF CLASSIFIED ZONES

DEFINITION OF ZONES AS SHOWN IN DIAGRAM 99/20/CE
Zone 1: Area where an explosive atmosphere is formed...

Zone 2: Area where it is probable that an explosive atmosphere, made up of a mix of air and inflammable substances...

Zone 21: Area where it is probable that an explosive atmosphere, in the form of a dust or inflammable powder...

Zone 22: Area where it is probable that an explosive atmosphere, in the form of a dust or inflammable powder...

D2 INTENDED USE

INTENDED USE
PUMP FOR TRANSFERRING FLUID SUITABLE FOR OPERATION IN ZONES CLASSIFIED "1" AND "2" ACCORDING TO DIRECTIVE 99/20/CE.

FORBIDDEN
THE PUMP IS EQUIPPED WITH CURRENT-SENSING PROTECTION. IT ACTIVATES AFTER THE PUMP IMMEDIATELY.

PLANT OPERATION RESTRICTIONS FORBIDDEN
1. To use the appliance in a construction configuration other than that contemplated by the manufacturer.

D3 HANDLING AND TRANSPORT
Due to the limited weight and dimensions of the pumps, special lifting equipment is not required to handle them.

E GENERAL WARNINGS

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

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

C3 DECLARATION OF CONFORMITY IECEx

DECLARATION OF CONFORMITY IECEx
The undersigned, PIUSI S.p.A., declares under its own responsibility that the machine...

ATTENTION
BEFORE PROCEEDING WITH THE REFUELLING OF THE AIRCRAFT, ENSURE THAT THE SYSTEM INTENDED FOR SUCH ACTION COMPLIES WITH THE REGULATIONS IN FORCE IN THE COUNTRY OF USE.

ATTENTION
DO NOT USE THE PUMP WITH LIQUID FOOD PRODUCTS AND DO NOT OPERATE THE PUMP DRY OR UNDER VACUUM.

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B MACHINE AND MANUFACTURER IDENTIFICATION

Table with 2 columns: Model, Manufacturer. Includes CE, PUSI, and IECEx logos.

C1 DECLARATION OF CONFORMITY 94/9/CE, Annex X, lett. B)

DECLARATION OF CONFORMITY 94/9/CE, Annex X, lett. B)
The undersigned, PIUSI S.p.A., declares under its own responsibility that the machine...

C2 DECLARATION OF CONFORMITY PARTLY-COMPLETED MACHINERY

DECLARATION OF CONFORMITY PARTLY-COMPLETED MACHINERY
The undersigned, PIUSI S.p.A., declares under its own responsibility that the partly-completed machinery...

DECLARATION OF CONFORMITY IECEx
The undersigned, PIUSI S.p.A., declares under its own responsibility that the machine...

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