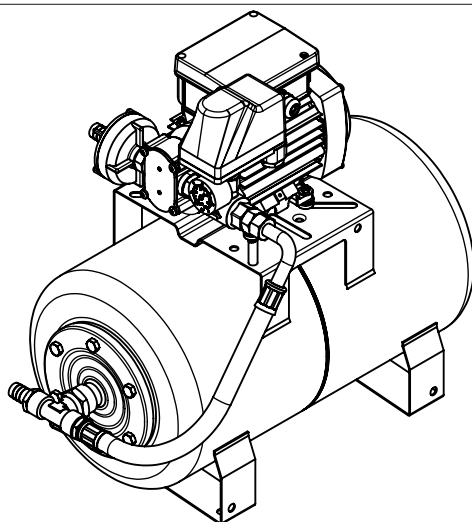




**ELETTROPOMPA AUTOADESCANTE
PER TRAVASO LIQUIDI
SELF-PRIMING ELECTRIC PUMP
FOR TRANSFERRING VARIOUS LIQUIDS**

**AVVERTENZE D'USO
INSTRUCTIONS FOR USE**

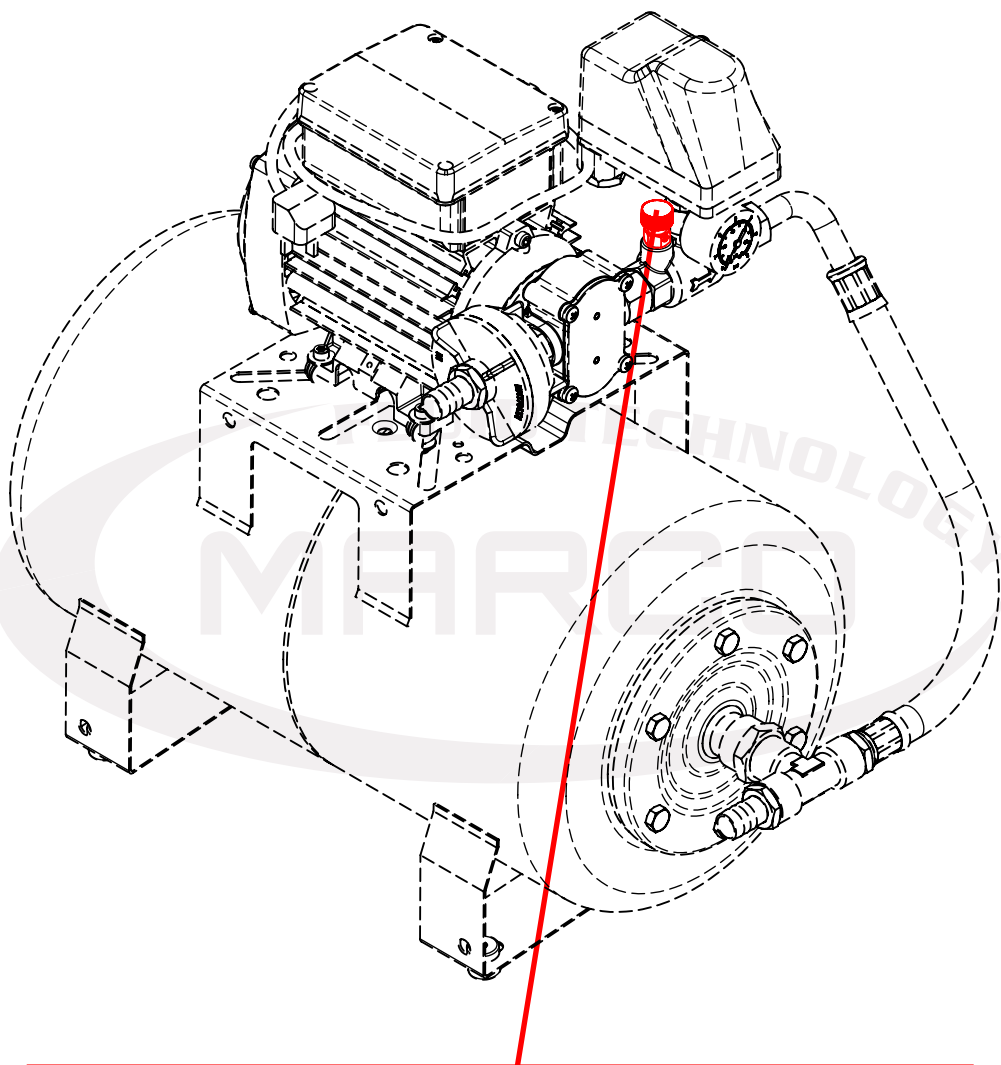
164 626 1C - UP6/A-AC 220V



CE

18/09/15 Rev.02

ATTIVAZIONE VALVOLA DI SFIATO / AIR VENT VALVE ACTIVATION



Al primo avvio della pompa, oppure in caso di svuotamento del serbatoio, agire brevemente sulla valvolina manuale per sfogare l'aria e favorire l'adescamento.
Una volta azionata la pompa, richiudere la valvolina.

*When starting the pump, or when emptying the tank, slightly open the small valve, in order to let the air out and facilitate the priming.
As soon as the pump is operating close the small valve.*

A

PRODUCT DESCRIPTION

Self-priming gear pump with in line filter, check valve and pressure switch: to be used as automatic pump for boats, trucks, camper, etc.

Brass body, PTFE gear, stainless-steel rod and lip seal.

The pressure switch is preset in factory between 1,5 and 2,5 bar.

B


TECHNICAL DETAILS

CODE	TYPE	FLOW RATE	PRESSURE	VOLT	FUSE	WEIGHT	P.CS x CART.
164 626 1C	UP6/A-AC	28 l/min	2,5 bar	220	2,5 A	14 kg	1

C

AMBIENT CONDITIONS

TEMPERATURE: min. -10 °C / max. +60 °C **RELATIVE HUMIDITY:** max. 90 %

 **WARNING:** the above indicated temperature ranges are applicable to all components of the the pump and these limits must be respected in order to avoid any possible damage or malfunctioning.

D

OPERATING CYCLE

The pump has been designed for discontinuous use. Under conditions of high operating pressures (eg. with closed or blocked outlet, excessive length of the delivery circuit and/or excessive pressure due to accessories), it can be subjected to elevated stresses and overheating and therefore should not be used for prolonged periods under such conditions.

E

APPLICATIONS

There are numerous fields of applications for the pump, however only exclusively with the allowed liquids mentioned.

- Main use as automatic pump for freshwater and sanitary water systems.

FLUIDS ALLOWED / NOT ALLOWED

F

ALLOWED:

FRESH WATER AND SEA WATER (max 40°C)

NOT ALLOWED:

- PETROL (GASOLINE)
- FLAMMABLE LIQUIDS with PM < 55°C
- LIQUIDS WITH VISCOSITY > 20 cSt
- FOODSTUFF LIQUIDS
- CORROSIVE CHEMICAL PRODUCTS
- SOLVENTS

RELATED DANGERS

- FIRE EXPLOSION
- FIRE EXPLOSION
- MOTOR OVERHEATING
- FOODSTUFF LIQUID CONTAMINATION
- PUMP CORROSION
- INJURY TO PERSONNEL
- FIRE EXPLOSION
- DAMAGE TO SEALS

WARRANTY EXPIRES IF MAX FLUID TEMPERATURE IS EXCEEDED

TRANSPORTATION AND HANDLING

G

Due to limited weight and dimensions the pump does not require the use of any special handling or lifting equipment. When handling manually, normal personal protective gear should be worn (safety shoes with toe piece, etc.)

The pump is carefully packed prior to shipment. Upon receiving, the packaging should be inspected for damages and the pump stored in a dry area.

INSTALLATION

H

It is recommended that the use of the pump be according to normative safety standards and also as per the precautions listed below.

PRELIMINARY CHECKS

H-1

Check that there has been no damage to the pump during transportation or storage. Both inlet and outlet ports should be carefully cleaned removing possible dust or residual packaging material. Verify that the available electrical power supply corresponds to the specification requirements.

POSITIONING

H-2

The pump can be mounted in any position. Fix it utilizing suitable screws corresponding to the antivibration mounts supplied.

⚠ WARNING: THE MOTOR IS NOT EXPLOSION PROOF. Do not install the pump where flammable vapours or gases may be present. Install it in an accessible place for inspection.

The pump is IP54 protection rated. It is good practice to avoid any pump contact with water splashes possibly causing water seepage into the motor with high risk of internal oxidation and/or short circuit.

H-3

TUBING CONNECTIONS

- Prior to making any tube/hose connections, check that the inlet ports have no end caps.
- Do not position the pump at a height greater than 1,5 m with respect to the minimum level of the fluid to be transferred.
pump damage may occur if this height is exceeded as the pump may not draw fluid.
- Make sure that the outlet tube is empty and without chokes.
- Avoid choking the inlet or outlet tubes so that pump efficiency is optimized. The use of an inlet filter is mandatory especially with fluids containing impurities (filter grid gauge 0,5mm). In this case frequent cleaning and maintenance of the filter is advisable. Utilize tubes and connection pieces that are resistant to the fluid types handled and avoid any possible environmental dispersion.

H-4

PUMP INSTALLATION

The electrical installation of the pump must include a protection fuse which is suitably rated as indicated on the motor label.

WARRANTY EXPIRES IF NO FUSE IS UTILIZED

Always mount the anti vibration rubber fittings supplied with the pump kit. Their usage ensures a consistent reduction in noise and vibration levels.

Electrical cabling size should depend on the distance between pump and battery power supply.

The use of undersized cabling can cause overheating of the electrical wiring and subsequent fire hazard. There will also be a voltage drop at the motor terminals with a consequent reduction in efficiency.

Up to 30 m length: 0,75 mm²

The flow rate value indicated on the motor label is obtained with internal tube diameter. Tubes with inferior diameters will cause an increase in current with potential risk of motor overheating.

⚠ WARNING: it is the responsibility of the installation technician to ensure a correctly designed circuit installation fitted according to regulations. Environmental risks must be taken into account with the installation.

TROUBLESHOOTING

I

CHECK POINTS IF THE PUMP HAS STOPPED OR WILL NOT START

I-1

- Check the effectiveness of the battery power supply (voltage activity)
- Check if the fuse has blown
- Check for any foreign matter present in-between the pump gear drives. To do this, disconnect the power supply and unscrew the four fixing screws, remove the pump front cover plate and inspect the pump chamber. Replace the cover plate in the same initial position after inspection.
- Avoid running the pump dry for more than a few minutes. **Pumps found defective that have run dry in the absence of fluid are not covered by warranty.**

WHY THE PUMP WILL NOT PRIME ITSELF?

I-2

- The pump is fitted at a height greater than 1,5 m above the fluid level.
- The pump has run dry for too long a period
- Long periods of inactivity. In this case it is advisable to add liquid directly into the pump Chamber before start-up.
- Air leak at the suction pipe due to the following reasons:
 - Possible cuts in the pipe, inadequate hose clamps, malfunctioning of the filter due to Defective/worn seals or filter clogged.
- Air leak at the pump front plate cover due to the following reasons:
 - Loose fixing screws, poor effectiveness of the seal.
- Presence of obstructions or restrictions in the suction or delivery pipes.

GOOD PRACTICES ENSURING A WELL FUNCTIONING PUMP

I-3

No particular maintenance is required the pump.

Check under conditions of maximum operating pressure that the motor current value is within the motor label specifications.

NORMAL MAINTENANCE

I-4

- Check frequently and keep the inlet filter clean.
- Check every month the pump chamber and keep clean from any foreign matter.
- Check every month that electrical wiring is in good condition.

I-5

INDICATORS THAT THE PUMP IS FUNCTIONING CORRECTLY

- Regular flow and constant pump noise levels
- Amp-draw within the limits indicated in the technical details.

I-6

TO OPEN THE PUMP

- It is recommended that a specialized service technician be consulted for any pump repair work or the replacement of worn out internal components, exclusively with original spare parts.
- During the warranty period, only by authorized Marco S.p.A. personnel, failing which the warranty will expire.

L

ENVIRONMENTAL DISPOSAL

Do not dispose of pumps into household waste. Pumps that are non longer usable must be collected separately and disposed of in an environmentally correct manner.

M

WARRANTY

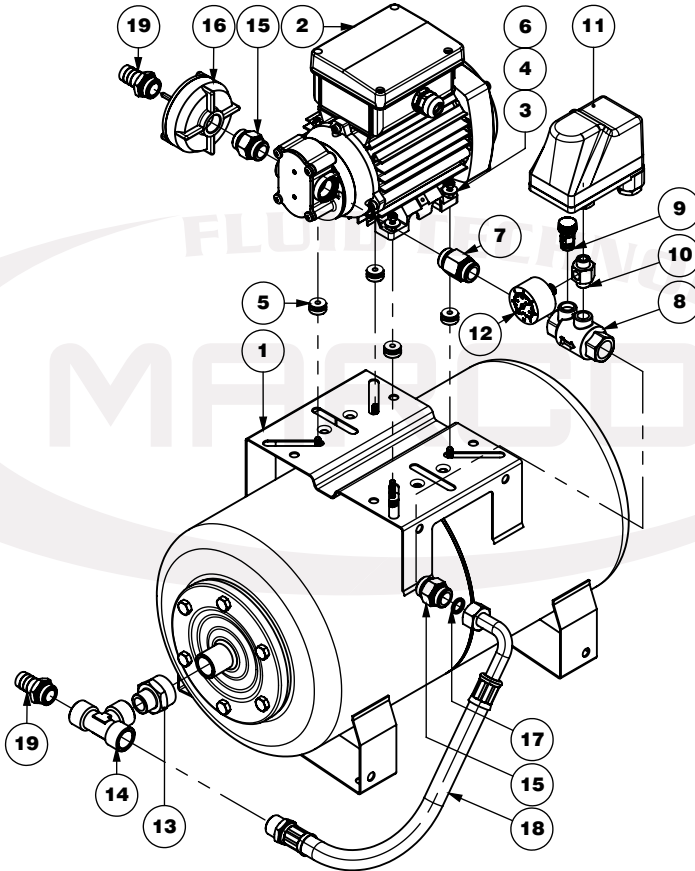
- 1) The Warranty period is 2 years from date of purchase on production of the appropriate sales invoice.
- 2) Should the original sales invoice not be available, then the 2 year warranty period will be valid from date of production.
- 3) The Warranty becomes null and void in the case of incorrect utilization or disregard of the instructions contained herein.
- 4) The Warranty only covers original production defects.
- 5) The Warranty does not cover any related installation costs involved.
- 6) Transport costs are refundable only in the case where warranty has been duly recognized and accepted by Marco Spa. These costs will be limited to the actual shipment costs between Marco Spa warehouse and the client's delivery address.
- 7) No credit notes or replacement items will be issued prior to the receipt and proper testing of any Marco goods that are deemed faulty.

SCHEDA DI ASSEMBLAGGIO / EXPLODED VIEW

N

Pos.	Q.tà	Descrizione
1	1	VASO
2	1	POMPA
3	8	RONDELLA
4	4	VITE
5	4	ANTIVIBRANTE
6	4	DADO
7	1	NIPPLO
8	1	VALVOLA DI NON RITORNO
9	1	VALVOLA DI SFIATO
10	2	NIPPLO

Pos.	Q.tà	Descrizione
11	1	PRESSOSTATO
12	1	MANOMETRO
13	1	NIPPLO
14	1	RACCORDO "T"
15	2	NIPPLO
16	1	FILTRO
17	1	GUARNIZIONE
18	1	TUBO FLEX
19	2	PORTAGOMMA



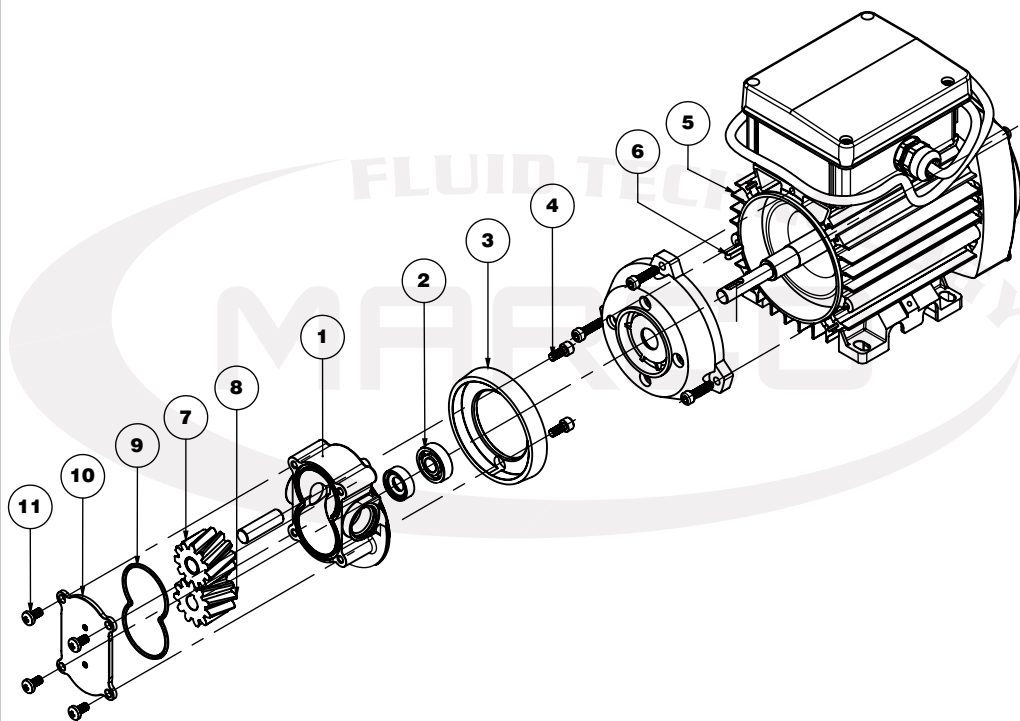
Art.	Q.ty	Description
1	1	VASE
2	1	PUMP
3	8	WASHER
4	4	SCREW
5	4	ANTIVIBRATION MOUNT
6	4	NUT
7	1	NIPPLE
8	1	NON RETURN VALVE
9	1	AIR VENT VALVE
10	2	NIPPLE

Art.	Q.ty	Description
11	1	PRESSURE SWITCH
12	1	PRESSURE GAUGE
13	1	NIPPLE
14	1	"T" NIPPLE
15	2	NIPPLE
16	1	FILTER
17	1	GARNISHING
18	1	FLEX TUBE
19	2	TUBE OUTLET

N1 SCHEDA DI ASSEMBLAGGIO / EXPLODED VIEW

Pos.	Q.tà	Descrizione
1	1	CORPO
2	1	CUSCINETTO
3	1	FLANGIA
4	2	VITE
5	1	MOTORE
6	1	LINGUETTA

Pos.	Q.tà	Descrizione
7	1	INGRANAGGIO FOLLE
8	1	INGRANAGGIO TRAINANTE
9	1	O-RING
10	1	PIATTELLO
11	4	VITE

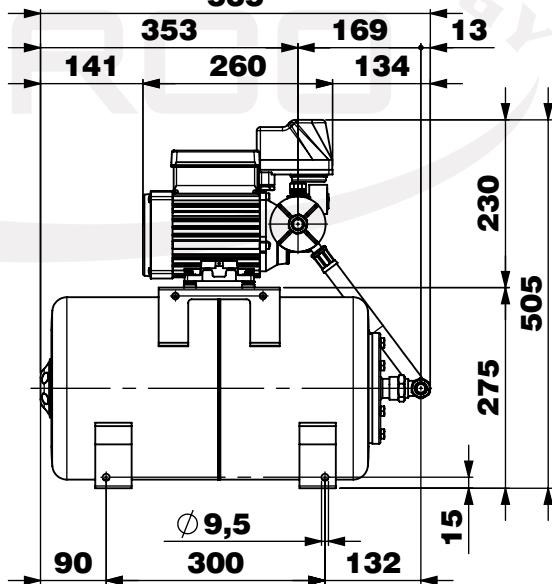
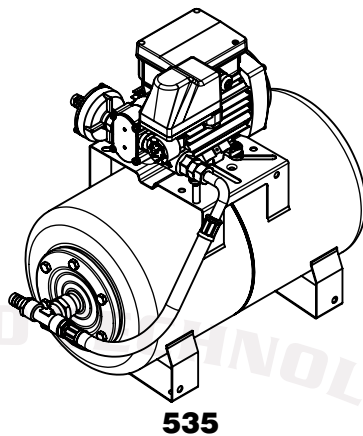
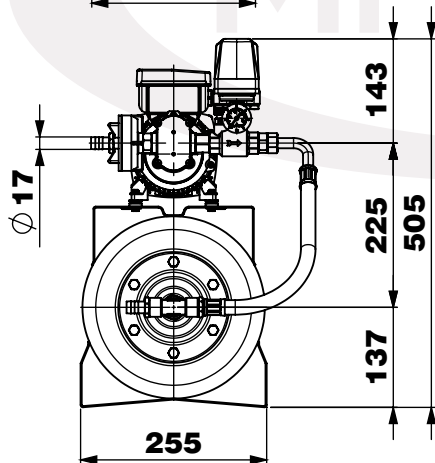
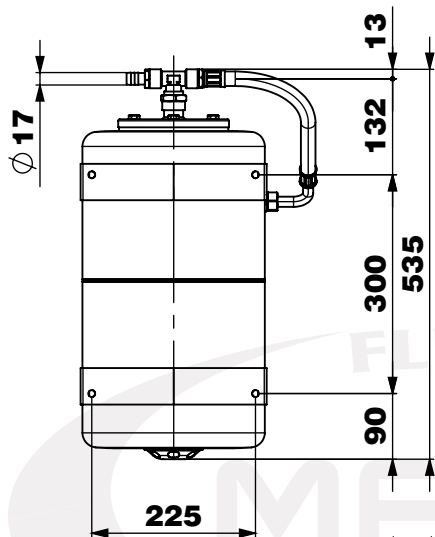


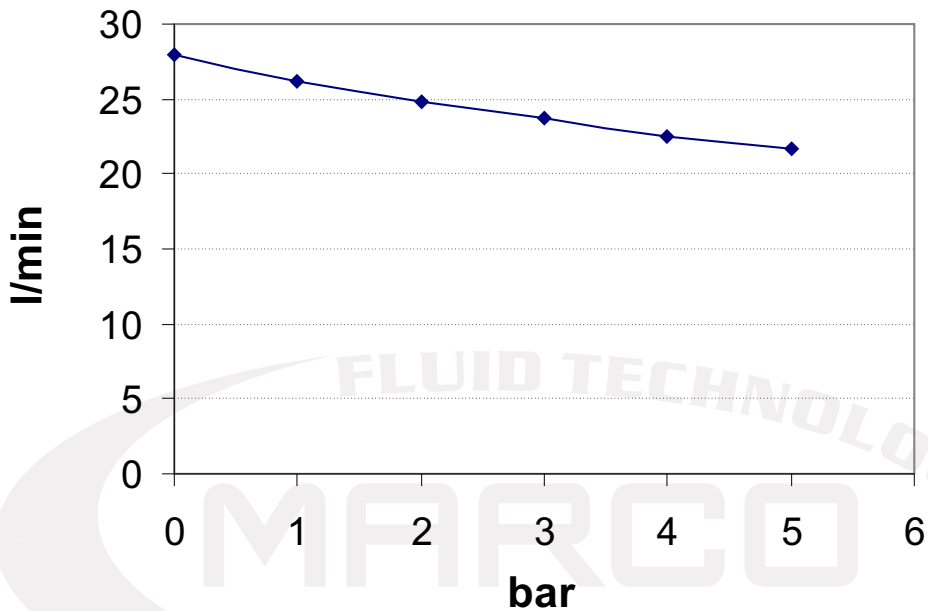
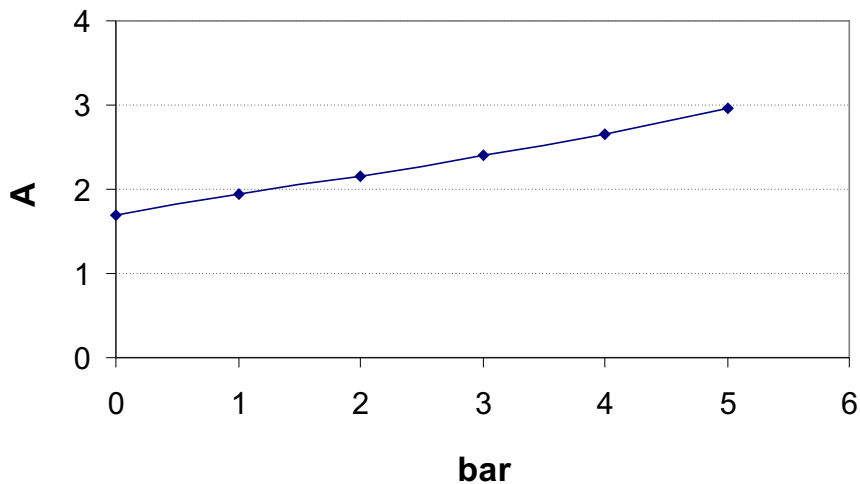
Art.	Q.ty	Description
1	1	PUMP BODY
2	1	BALL BEARING
3	1	FLANGE
4	2	SCREW
5	1	MOTOR
6	1	KEY

Art.	Q.ty	Description
7	1	IDLE GEAR
8	1	DRIVING GEAR
9	1	O-RING
10	1	TOP PLATE
11	4	SCREW

INGOMBRI / DIMENSIONS

01



DIAGRAMMI / DIAGRAM**DIAGRAMMA PORTATA
FLOW RATES DIAGRAM****DIAGRAMMA ASSORBIMENTI
AMPERE-DRAW DIAGRAM**



Associazione AIB
Associazione
Industriale
Bresciana

DICHIARAZIONE DI CONFORMITA' C.E. E.C. DECLARATION OF CONFORMITY

Confermiamo che il prodotto:
We confirm that the product:

164 626 1C - UP6/A-AC 220V Pompa ad ingranaggi 30 l / Gear pump

E' conforme alla Direttiva 2004/108/CE (ex.89/336/CE) relativa alla Compatibilità Elettromagnetica.
Is in conformity with the Directive 2004/108/EC (ex.89/336/EC) relating to Electromagnetic Compatibility.

Questa dichiarazione è valida per tutti gli articoli prodotti secondo la documentazione tecnica che è parte di questa dichiarazione. In caso di eventuali verifiche pertinenti alla Compatibilità Elettromagnetica sono state applicate le seguenti normative:

This declaration is valid for all products which are produced in accordance with the technical documentation which is a part of this declaration. For verification of conformity with regard to Electromagnetic Compatibility the following standards are applied:

EN 55014-1

Compatibilità elettromagnetica.
Requisiti per gli elettrodomestici,
gli utensili elettrici ed apparecchi simili.
Parte 1: Emissione.

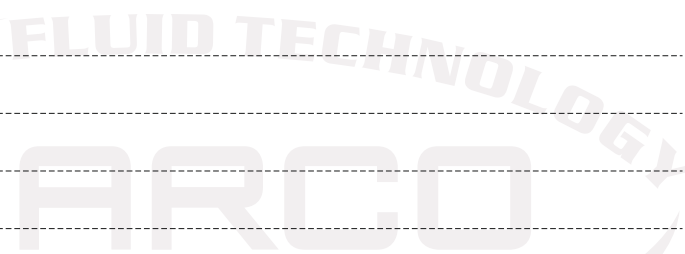
*Electromagnetic compatibility.
Requirements for household appliances,
electric tools, and similar apparatus.
Part 1: Emission.*

Questa dichiarazione è rilasciata sotto la responsabilità esclusiva di:
This declaration is given under the sole responsibility of:

MARCO S.P.A.
Via Mameli 10 - 25014 Castenedolo - Brescia - Italy
Tel. 030/2134.1 Fax 030/2134.300

NOTE / NOTES

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NOTE / NOTES

FLUID TECHNOLOGY
MARCO

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Tutti i diritti sono riservati.

Per ulteriori informazioni vedere nostro sito internet - www.marco.it

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