



SPAGNI

42019 SCANDIANO-REGGIO EMILIA-ITALY Tel +39 0 522857086 Fax + 39 0 522984875 info@spagni.com www.spagni.com

1.8.7.2.3.6.5.4

AFROMETER AFRO AL

INSTRUCTIONS FOR USE AND MAINTENANCE
TO ALWAYS KEEP NEAR THE INSTRUMENT for CONSULTATION



Fig.1a

12a

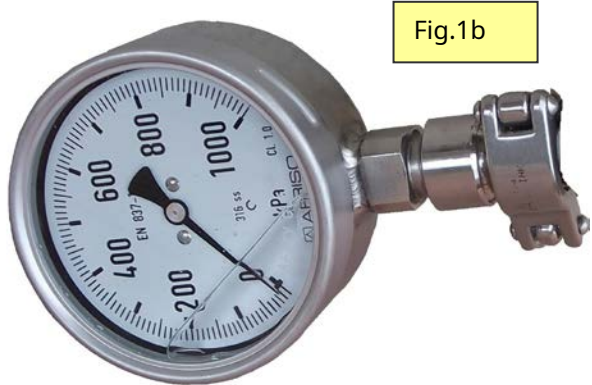


Fig.1b

Fig.1b
ON REQUEST valid only at the time of first purchase: precision pressure gauge Diameter
100 mm Completely stainless steel Class 1 1000 Kpa

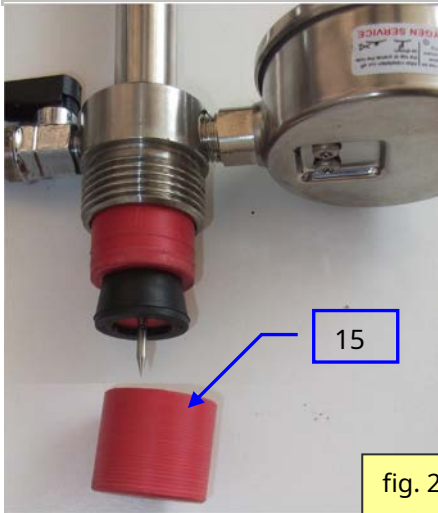


fig. 2a



fig. 2b

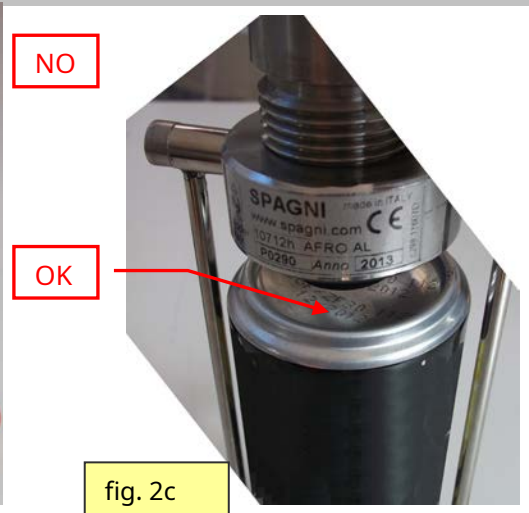


fig. 2c

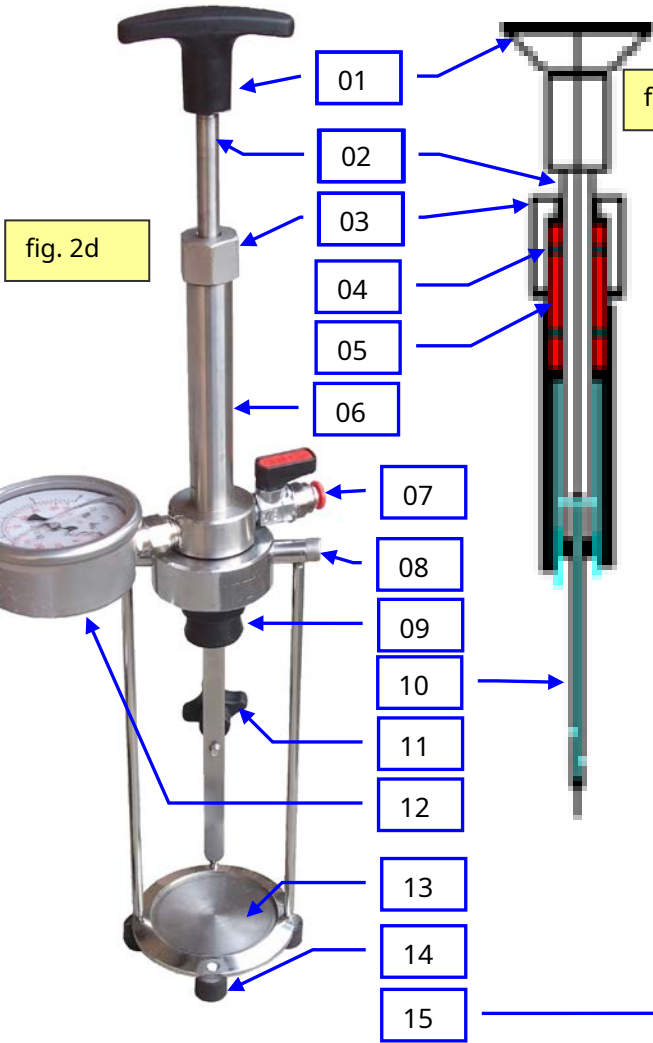


fig. 2d

fig. 2e

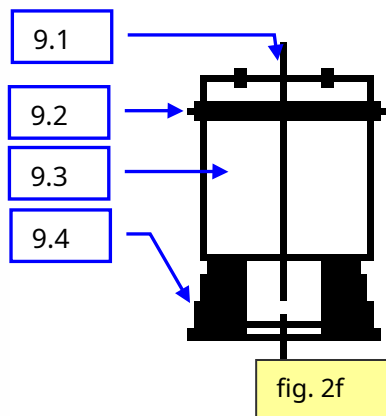


fig. 2f

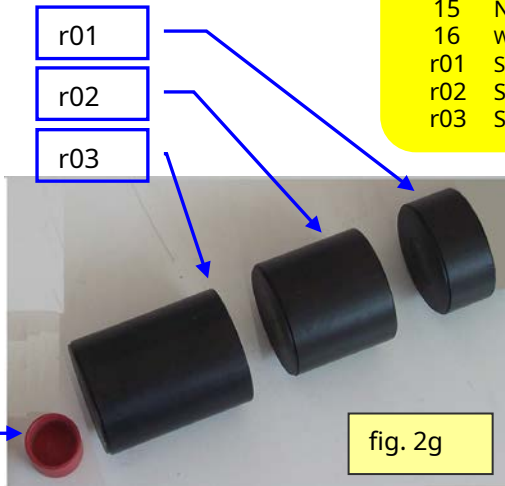


fig. 2g

Legend
AFROMETER 10712

No.	Description
01	Pusher knob
02	Pusher pin
03	Perforated nut
04	Or pusher seal x 2 Orings
05	spacers x 3 Stainless
06	steel manifold group
07	Drain cock
08	Removable group
09	Seal group
10	Pierced needle
11	Centering handwheel
12	Glycerine pressure gauge
12a	Plug but0n8ormbehind
13	Stainless steel support base
14	Rubber foot x 4
15	Needle protection
16	Wire ino x cleaning to needle
r01	Support11p0erAL 147
r02	Support for AL 115
r03	Support for AL 93

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IDENTIFICATION CARD

ART. + ART. + ART.	FIRST NAME	SERIAL NUMBER	YEAR
10712-n	AFRO AL	P0290	2013

CONVENTIONAL SIGNALS**GENERIC DANGER:personal injury****DANGER SHARP NEEDLEpersonal injury****NOTE** DANGERdamage to the instrument

IT IS THE MANUFACTURER'S OPTION TO MAKE CHANGES TO THE PRODUCTION AND TO THE MANUAL WITHOUT THE OBLIGATION TO UPDATE THE PREVIOUS MANUALS
FAILURE TO COMPLY WITH THIS MANUAL RELEASES THE MANUFACTURER FROM ANY LIABILITY
All rights reserved to this use and maintenance manual with prohibition of reproduction, even partial, without our authorization

WARRANTY

The warranty of our products lasts 12 months from the date of shipment of the goods, certified with a receipt or invoice issued by the seller authorized by us.

The guarantee recognizes the free replacement of parts or products sold with proven manufacturing defects. Our The company reserves the right to evaluate with its technicians whether the piece or product has been correctly installed and to verify the exact methods of use. The products to be repaired and / or replaced must be returned to us carriage paid. The costs of returning to the customer will be borne by the same.

No expenses will be recognized for the assembly on the machine of the parts replaced under warranty. No expenses will be recognized for repairs carried out by third parties except as a result of agreements confirmed by us in writing. No claims for damages and / or indemnities will be recognized.

The warranty automatically lapses in the following cases:1) improper use of the product 2) repairs carried out by personnel not authorized by us 3) use of non-original spare parts.

TABLE 1**TECHNICAL TABLE**

Art.	FIRST NAME	STAIRS * std.	USE	Overall dimensions mm			Weight gr.
				Length	Width	Height	
10712-n	AFRO AL 173	0 + 6	CAN d66 H173	70	30	220	160
Endowment							
10712r011	THICKNESS 27.5		H Can 147	Diam. 60		27.5	
10712r012	THICKNESS 58.0		H Can 115	Diam. 60		58.0	
10712r013	THICKNESS 81.5		H Can 093	Diam. 60		81.5	
10718-02	SAFETY CAP			Diam. 40		18	
Option							
10716a	PUNCHED NEEDLE 070			Diam. 2.5		70	
Option for							
10718c01	MANOMETER kit 0 + 1000Kpa class 1 SIT certifiable			Diam. 100		110	450

* For HAND OUT "0" see page 8 troubleshooting §D

CHAPTER 1:**DESCRIPTION**

Thank you for choosing our AFRO AL series aphrometer.

1.1 GENERAL The AFRO AL series aphrometers are manual use measuring instruments for:

- Control of the overpressure of the 'carbonated' liquid introduced into the ALUMINUM CANS.
- Control of overpressure of neutral nitrogen gas introduced to protect still liquids.
- Evaluation of the behavior of the CAN under pressure as the external temperature varies. The instrument you have purchased, based on the model chosen, quickly and accurately measures the pressure inside a can previously filled with liquid completely sealed.

The test at the end of the test is DISTUCTIVE for the can that must be discarded. The measurement is made possible by inserting a suitably shaped and perforated stainless steel needle. The needle, inserted manually in the bottom of the can, has the function of transferring the pressure values to the needle of the pressure gauge.

The standard pressure gauge with a diameter of 60mm, precision class 1.6, is placed in an optimal position to allow easy reading of the values.

CHAPTER 2**GENERAL SAFETY WARNINGS**

Failure to observe these warnings will release the writer from any liability in the event of accidents to persons, damage to things or to the instrument itself.

2.1 Protective measures to be taken by the user

As already said, the operator must handle a very sharp needle of such length and strength to operate **cause SERIOUS INJURY TO THE PERSON**




Attention!When the operator removes the safety protection (pos10718-02) to use the instrument, he assumes full responsibility against damage caused to himself and especially to third parties.

DANGEROUSmaking sudden movements with unprotected instrument in hand, there is a high risk of injuring even seriously, the neighbors accidentally hit.

Never subject empty cans to overpressure, danger of container explosion

2.2 Significant protections

 the constant presence of the protection pos 15 (2a-g) covering the needle tip makes handling of the instrument safe.

ATTENTION The instrument which is not used even with guards fitted, must NEVER be accessible to children and incapacitated persons.

CHAPTER 3: INTENDED AND NOT INTENDED USE

3.1 AFROMETER AL with guided needle:

All commercial ALUMINUM CANS can be used as long as they fall within the maximum diameter and maximum height measurements indicated in the technical table.

NOTE The bending or breaking of the needle due to improper use is not covered by the guarantee

CHAPTER 4: HANDLING and UNPACKING

The standard version of the instrument is delivered packed in a box.

Check the integrity of the packaging at the time of unloading. If it is damaged, it must be immediately contested and noted on the transport document.

THE SPAGNI COMPANY IS NOT LIABLE FOR DAMAGES DUE TO TRANSPORT

THE PACKAGING WASTE MATERIAL WILL BE QUICKLY SELECTED AND DISPOSED OF IN THE NORMAL LANDFILL

CHAPTER 5: GENERAL TUNING RULES

5.1 Remove the needle safety / protection cap pos15 ATTENTION
from this moment there is a high DANGER of PUNCTURES



(the simple downward push of the pusher knob pos 01 causes the needle to come out, see fig.3a)

5.2 Join the removable group pos 08 to the manifold group pos 03
SCREWING for one - two turns:

5.3 According to the height of the can to be tested, choose the thickness
Code 10712-r011 H27,5 for cans H147

Code 10712-r012 H58,0 for cans H115 Code

10712-r013 H81,5 for cans H093

THICKNESS + CAN must enter easily as in fig.1a ...

Position the Can to be tested as in fig.2c Inserting the Can
as in fig.2b the instrument does not work and the needle
can be broken

NOTE

The damage is not covered by the warranty.

CHAPTER 6: START TEST

6.1 Center the Can using the centering handwheel pos 11

6.2 SCREW the manifold assembly until the seal assembly is pushed hard on the convex bottom of the Can.

6.3 Close the tap pos 07

6.4 Firmly press the knob pos01 to pierce the aluminum and pass the transversal holes of the needle inside the can.

6.5At this point the pressure gauge marks the pressure existing inside the can.

6.6 If the instrument has been correctly assembled, there must be no pressure loss over time.

6.7Leaving the seal unit locked, push the handwheel down and keep the tap closed

it is possible to move the instrument in different environments and situations even for long periods.

CHAPTER 7: END OF TEST

7.1. Open the cock pos. 07 to 'bleed' the overpressure in one direction only

7.2. Pull the handwheel pos 01 up to remove the needle from the can

7.3 Remove by UNSCREWING the group pos. 03 from the group pos 08

7.4 Remove the can FULL OF LIQUID. DESTRUCTIVE TEST NON + MARKETABLE CAN.

CHAPTER 8 OTHER USES OF THE TAP(pos. 07)

8.1 The tap with quick coupling for rilsan hose can be used to introduce compressed air or other inert gases into cans FULL of LIQUID. The test allows to evaluate the behavior (read swelling) of the ALUMINUM CAN at different pressures and temperatures before putting a new drink on the market.



Never subject empty containers to pressure, danger of container explosion

CHAPTER 9**CLEANING AND MAINTENANCE OF THE INSTRUMENT**

8.1 At the end of each work session, before putting the instrument away, check that the needle discharge holes are free and that no test liquid stagnates inside the needle.

8.2 Wash the needle with plenty of water

8.3 Wash the instrument with a sponge soaked in water and neutral detergent.

8.2 Rinse and dry quickly with compressed air.

NOTE DO NOT USE ABRASIVE SPONGES OR TOOLS

CHAPTER 10**TROUBLESHOOTING**

No.	INCONVENIENT	REASON FOR FAILURE	SOLUTION
(A) General AFROMETERS			
1	Inserted the needle in a full and sealed can the pressure gauge does not mark	<ul style="list-style-type: none"> - If the liquid is not carbonated The pressure gauge must not show anything - The top and bottom drain holes of the needle are clogged with aluminum residues or product stagnation 	<p>No flaws.</p> <p>Remove the needle try to pass the steel wire pos16 blow with compressed air</p>
2	After inserting the needle, the pressure gauge marks but after a while it returns to 0	<ul style="list-style-type: none"> - Leak through the seal group - Open or faulty tap - Leaks on the pressure gauge thread - Defective pressure gauge - Losses on seals 	<p>To reliably detect the exact location of the leak</p> <p>It is necessary to prepare a container with clean water that can contain the whole instrument with can and aphrometer mounted.</p>
(FROMFROMMETRI with GLIC GAUGE ERINA			
1	When the instrument is new, the needle of the glycerine pressure gauge is not at '0'	Variation of temperature and pressure with respect to the mounting conditions of the instrument.	<p>Keeping the vacuum gauge in a vertical position, remove the cap (pos 12a fig.1a) by hand</p> <p>Put the cap back on</p> <p>The pointer should return to 0. Otherwise, the pressure gauge is broken</p>