



INDUSTRIAS TECHNOFLEX SA

MANUAL DE INSTRUCCIONES
INSTRUCTION MANUAL
MANUEL D'INSTRUCTIONS
MANUAL DE INSTRUÇÕES / REPOSTOS

PARA EL USO Y MANTENIMIENTO DE LAS TRANSMISIONES DE:
"ALTA FRECUENCIA"
FOR USE AND MAINTENANCE OF THE TRANSMISSIONS:
"HIGH FREQUENCY"
POUR L'UTILISATION ET LA MAINTENANCE DES TRANSMISSIONS À:
"HAUTE FRÉQUENCE"
PARA A UTILIZAÇÃO E A MANTIMENTO DAS TRANSMISSÕES DE:
"ALTA FREQUÊNCIA"

Modelos / Models / Modèles / Modelle
VAF-38LT, VAF-50CT, VAF-50LT, VAF-60CT, VAF-60LT, VAF-70CT, VAF-70LT



FABRICADO POR/ MANUFACTURED BY/ FABRIQUÉ PAR / FABRICADO POR:
INDUSTRIAS TECHNO-FLEX, S.A.

CTRA. D'ULLASTRELL, S/N. - APARTADO DE CORREOS - 43
08191-RUBÍ - BARCELONA - SPAIN
Teléfono / Phone: (+34) 93 588 53 37 - Fax. (+34) 93 697 37 54

Internet: <http://www.technoflex.es> e-mail: teflex@ficsa.com

MAQUINARIA PARA LA CONSTRUCCIÓN Y OBRAS PÚBLICAS
BUILDING AND PUBLIC WORKS MACHINERY
MACHINES POUR LA CONSTRUCTION ET LES TRAVAUX PUBLICS
MAQUINARIA PARA A CONSTRUÇÃO E OBRAS PÚBLICAS

CONTENTS

Chapter

1 INTRODUCTION

- 1.-1. *General Characteristics*
- 1.-2. *Technical Data*
- 1.-3. *Safety at Work*
- 1.-4. *Conditions for use*

2 INSTRUCTIONS FOR THE INSTALLATION AND USE

- 2.-1. *Starting*
- 2.-2. *Instructions for Use*

3 MAINTENANCE INSTRUCTIONS

- 3.-1. *Overhauling*

4 TRANSPORT AND STORAGE

- 4.-1. *Conditions for the Transport and Storage*

5 INSTRUCTIONS TO ORDER SPARE PARTS

6 TROUBLESHOOTING

7 GUARANTEE

- 7.-1. *Period of Guarantee*
- 7.-2. *Coverage of Guarantee*
- 7.-3. *Cancellation of Guarantee*

8 LIST OF SPARE PARTS

- 8.-1. *High Frequency Control.....MAF*
- 8.-2. *High Frequency Needle..... VAF-38LT*
- 8.-3. *High Frequency Needle..... VAF-50CT*
- 8.-4. *High Frequency Needle..... VAF-50LT*
- 8.-5. *High Frequency Needle..... VAF-60CT*
- 8.-6. *High Frequency Needle..... VAF-60LT*
- 8.-7. *High Frequency Needle..... VAF-70CT*
- 8.-8. *High Frequency Needle..... VAF-70LT*

9 MAINTENANCE CONTROL SHEET

1 INTRODUCTION

1.-1. General Characteristics

The HIGH FREQUENCY transmissions, for concrete is designed to give maximum satisfaction to the user, as long as the instructions of use and maintenance contained in this manual.

The transmissions will be used by personnel trained for this job it will only be used in specific jobs for which it has been technically developed, after having read the instructions contained in this manual and which must be followed correctly.

The manufacturer or authorized distributor must be consulted about any doubts.

Industrias Techno-flex S.A. will not accept any responsibility derived from incorrect installation, manipulation or misuse of the transmissions. The data contained in this manual are correct from the moment of editing. However the manufacturer reserves the right to modify the characteristics, without prior notice in consideration of contract commitment of continuous improvement.

No acting according to the instructions indicated in this manual, will cause the cancellation of the guarantee.

1.-2. Technical Data

Type	Ø Needle mm. (in.)	Length Needle mm. (in.)	Lgt. Hose Lgt. Cable m. (in.)	V.P.M.	Centrifugal Force (N)	Amplitude	Weight Kg. (lbs.)	Absorp. A.
VAF-38LT	38 (1,5)	360 (14)	5+10 (196+393)	12.000	1.500	1,3	12 (26)	6
VAF-50CT	50 (2)	333 (13)	5+10 (196+393)	12.000	2.700	1,4	13 (28,6)	10
VAF-50LT	50 (2)	398 (15,7)	5+10 (196+393)	12.000	3.000	1,6	14 (31)	12
VAF-60CT	60 (2,4)	361 (14)	5+10 (196+393)	12.000	3.600	1,8	14,5 (32)	12
VAF-60LT	60 (2,4)	405 (16)	5+10 (196+393)	12.000	4.800	2,1	16 (35)	13
VAF-70CT	70 (2,7)	353 (13,8)	5+10 (196+393)	12.000	5.600	2,0	16,5 (36)	15
VAF-70LT	70 (2,7)	398 (15,7)	5+10 (196+393)	12.000	7.000	2,5	18 (39,6)	17

Input Voltage: 42 V. – 200 Hz.

Note: CT = Short with Thermal Protection LT = Length with Thermal Protection

1.-3. Safety at Work

The HIGH FREQUENCY transmissions fulfils the E.C regulation of safety at work low voltage and vibration in portable machines or hand driven, as well as ISO 6081 regulation, regarding noise at the place of work. However the use of hearing protection during the vibrating time.

The manufacturer will not accept responsibilities for accidents if they derive from structure modification.

For safety reasons and so as to avoid an accidental starting, don't forget to disconnect the transmission from the converter when some kind of operation or part substitution is made.

In addition to our recommendations the safety regulations of each country in force.

1.-4. Conditions for Use

The **HIGH FREQUENCY** transmissions are designed to vibrate concrete and be used under the hardest conditions, both environmental as well as use.

The vibrating needle are equipped with a powerful motor encased in EPOXY resin, protecting the from vibration.

All the models VAF-, are factory-equipped with thermal protection against over-heating. When the system detects an increase of temperature over the predetermine levels, the needle stops automatically. One has missing the conditions that have produced the stopping the starting is automatic.

The vibrating needle are protected by a thermal system, the stopped for the needle doesn't mean a fault, only when the vibrating needle is into the concrete, probably exist a fault.

If the stopped is produced with the needle out of concrete, its not an fault, is simply a natural protection.

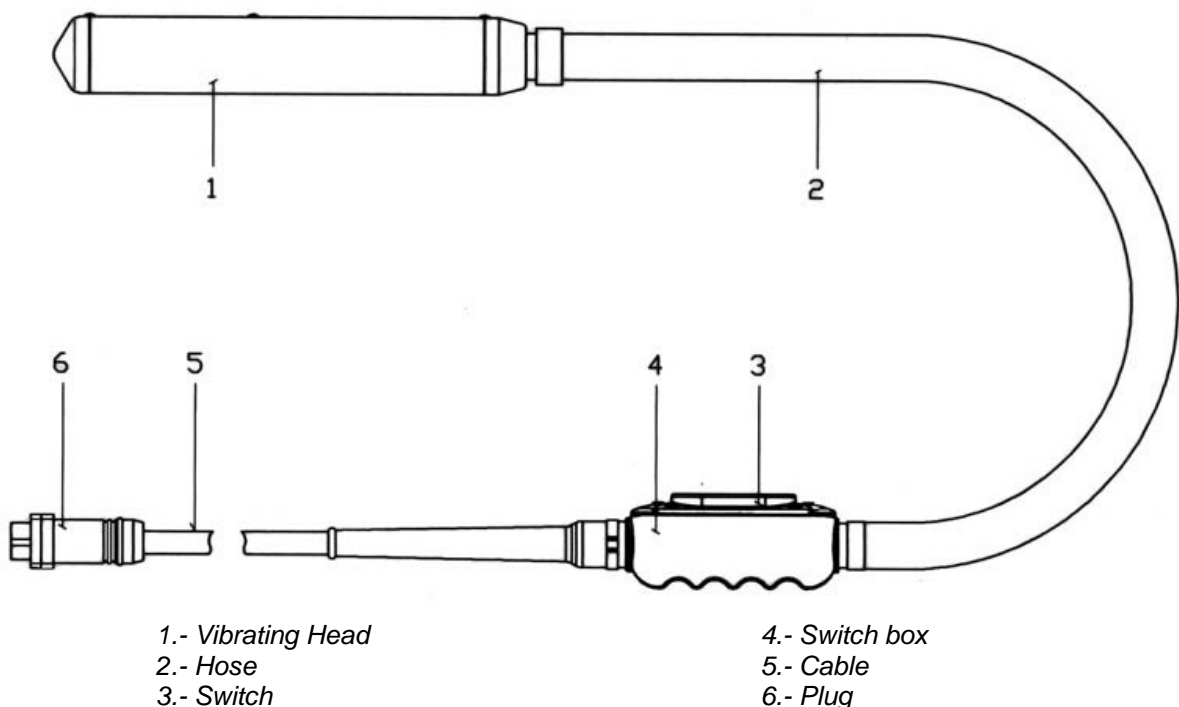
The transmissions' needle of **HIGH FREQUENCY** must be submerged into the concrete as a minimum two third parts, to facilitate its cooling.

Avoid the vibrating needle working in contact with solid and ridged prominent objects for long periods of time.

The needles without thermal can't be out of the concrete more than 5 minutes, for avoid a possible damage of the winding.

In case that the stopping will be produced with the needle into the concrete and vibrating it, the equipment must be stopped immediately. It will be check and repair if it is necessary. Under any circumstance, continue vibrating, because it produced the breakdown in the needle motor.

2 INSTRUCTIONS FOR INSTALLATION AND USE



2.-1. Starting

The **HIGH FREQUENCY** transmissions are equipped with vibrating needles type **VAF** that must be connected necessarily to converts of **HIGH FREQUENCY** with output voltage of 42V. 200Hz. of frequency. **No connect directly to the network.**

Before starting, the transmission must be checked, paying special attention for the started of plug, electric cable, switch box, and functioning of this. Before any rib, rupture or damage it must be repaired, to avoid subsequently faults.

Under no circumstance, make any reparation or change of pieces with the hose plug into the connection plug of the converter.

Once it has been revised, check that the transmission's switch is in position "0", connect the plug up to the connection base of the converter and may be started subsequently the transmission switch may be moved to the position "1".

NOT use converter's plug for starting up or stop it, always must be used with the corresponding switch.

Under **ANY** circumstances, have the arrange switch of the needle in position "1" (starting position) before that the converter has been started, it means that the first the converter must be started and then the vibrating needle, because it starts on load and overcoat in Single-Phase models may produce a fault in the motor of the converter.

With temperatures below 3°C., the vibrator may present difficulties to start after a long period stopped, this is due to the solidifying of the grease bearings and of the cable, it must start letting the vibrator run light long enough for normal vibration to be achieved.

2.-2. Instructions for Use

Be careful to avoid that the electrical cable works forming Knots or interlacing, also with very closed bend, this produces premature and unnecessary wearing of the flexible cable, causing even their immediate breakage.

Avoid the electrical cable being near heat sources, or that it slips to where there are objects with sharp edges, it must also be protected from heavy machines and other objects which may cause its deterioration.

Do not allow personnel not capable to make use of the vibrator or manipulate the electric parts.

The concrete must vibrate in horizontal layers, the needle must **NEVER** be used to move the concrete laterally.

The vibrator must **NEVER** be stopped while it is introduced into the concrete, to stop it must be taken out of it first.

3 MAINTENANCE INSTRUCTIONS

3.-1. Overhauling

Depending on conditions of use and at the maximum every year, must be carried out a complete overhauling of the converter. The state of the plug, electric cable, needles bearings, wear of exterior tubs and the ends must be check.

If the loose bearings, heats up or make too much noise must be replaced and always remember **ORIGINAL SPARE PARTS MUST BE USED.**

The greasing of the bearing must be done with grease STABURAGS NBU 4 from the firm KLÜBER LUBRICATION or any other equivalent one.

Remember, for safety reasons do not forget to disconnect converter the transmissions when some kind of operation or part substitution is made.

4 TRANSPORT AND STORAGE

4.-1 Conditions for transport and storage

The packaging of the HIGH FREQUENCY transmissions allows its easy transport without taking any special precaution.

Its storage the HIGH FREQUENCY transmissions if it is for a long period of time, its storage will be in a safe dry place.

Before storage and after use the transmissions must be perfectly cleaned outside, taking all the concrete removing, this operation can be carried out by hydro jet avoiding the electric parts.

5 INSTRUCTIONS FOR ORDERING SPARE PARTS

The spare parts are on sale at the official dealers and from the distributors of the make in your neighbourhood.

When you require spare parts do not forget to indicate:

-The type of the vibrator, and diameter of the needle.

-Units required, code and description of the parts ordered and whenever possible provide the serial number of the machine.

-Indicate also the delivery means preferred, the delivery will be made in the means desired.

6 TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	COUNTERMEASURE
<i>The motor needle doesn't work</i>	<i>-Electrical connections are let or broken -Faulty switch -Fail of the line</i>	<i>-Checking and replace if it necessary -Replace -Checking plugs of converter</i>
<i>The needle makes more noise than normally</i>	<i>-Faulty bearing</i>	<i>-Replace them with original spare</i>
<i>The needle stops when it is vibrating the concrete</i>	<i>-The thermal protection switch off</i>	<i>-Checking electrical parts and bearings</i>
<i>Doesn't start with below temperatures</i>	<i>-The grease is solidified</i>	<i>-Starting the vibrating needles to work without load enough time until it works normally.</i>
<i>The needle revolves with a slow speed and warm it</i>	<i>-Voltage line is low -Blocked bearings -The motor rotor frictioned</i>	<i>-Checking output voltage of the converter must be (48 V.) -Replace bearings with original spare -Sending to our factory or Official Agent</i>

7 **GUARANTEE**

7.-1 Period of Guarantee

Industrias Techno-Flex S.A., guarantees the products and components they manufacture, for a period of 6 months.

7.-2 Coverage of Guarantee

The guarantee covers all the defects from manufacturing of the components of the product, as well as their replacement or substitution, on behalf of the Technical After Sales Service.

7.-3 Cancellation of Guarantee

The guarantee does not cover the misuse or inadequate manipulation, on behalf of the use of the transmission, nor the incorrect connection, knocks, maltreatment or repairing by unauthorised personnel.

(It must never be connected directly to network)

During the period of guarantee the breakdowns must be repaired by personnel from Industrias Techno-Flex S.A., authorised to do so, if this is not so the right given by the guarantee will be lost.

The equipment which has been dismantled or manipulated previously by personnel unauthorised by Industrias Techno-Flex S.A., will not be in guarantee.

*In all the cases of application for guarantee, **prior notice** must send the equipment to Industrias Techno-Flex S.A., or where they indicate.*


(Do not forget to always indicate: Name, Address, and Telephone, as well as name of person of contact.)

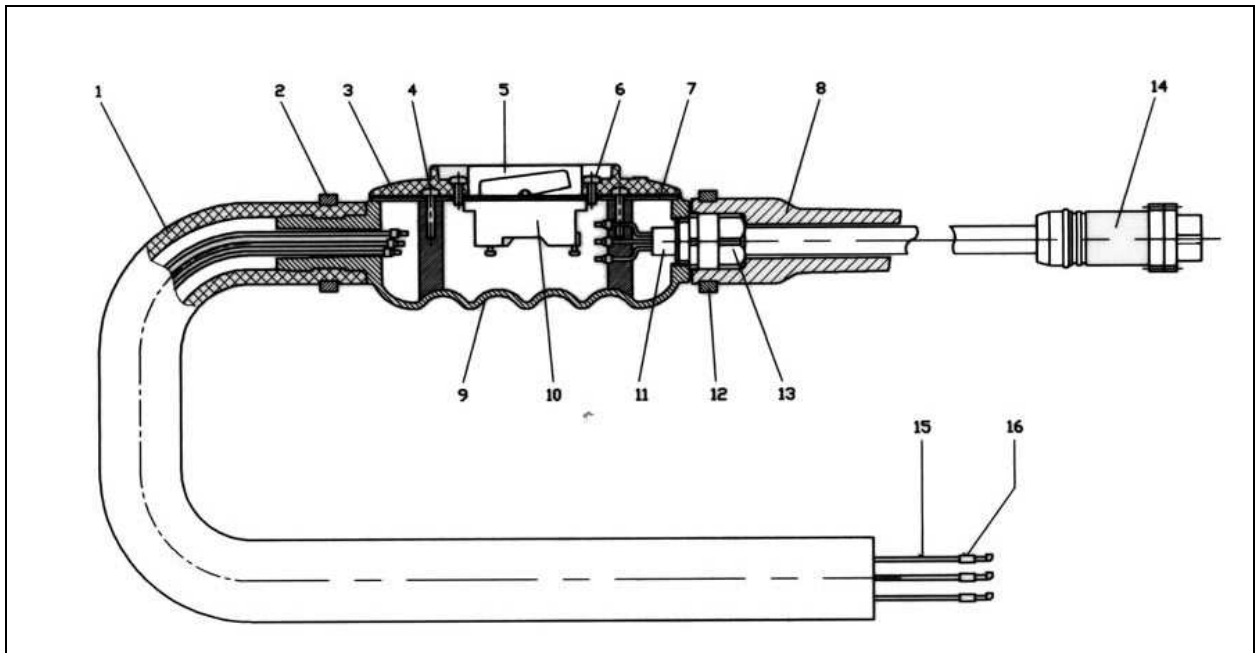
IMPORTANT NOTICE:

Industrias Techno-Flex S.A., are not responsible for damage caused to the product or persons due to their misuse or bad manipulation.

8.- 1. Mando alta frecuencia.....MAF
 Commande à haute fréquence.....MAF


High frequency control..... MAF
 Encomenda Alta Frequência..... MAF

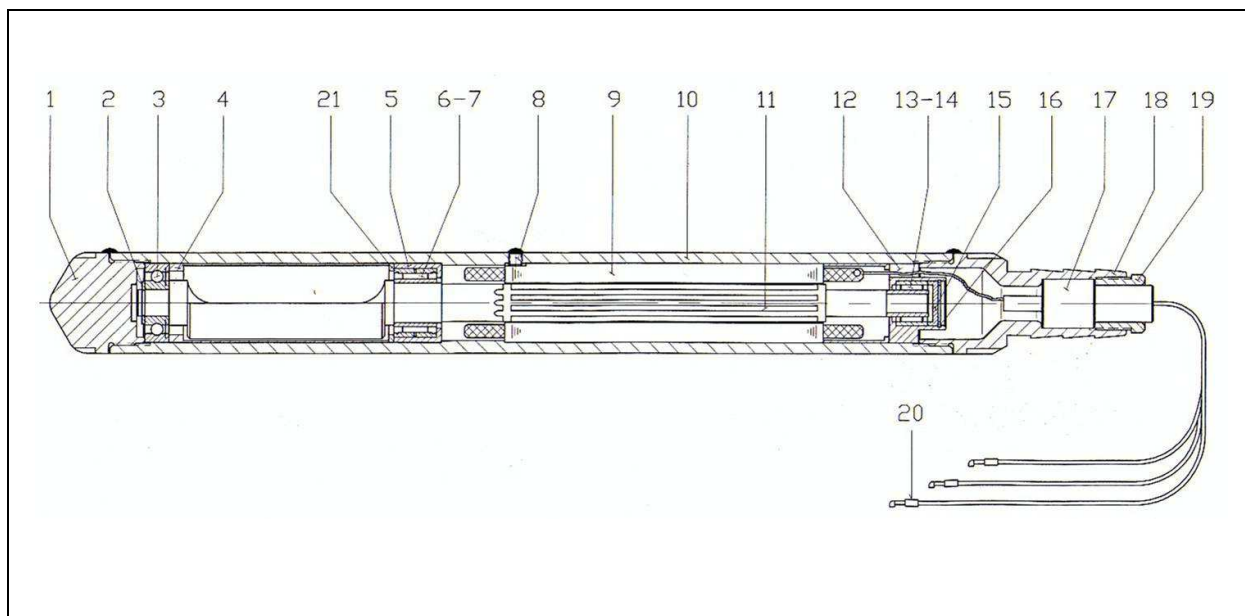
 INDUSTRIJS TECHNOFLEX SA	Mando MAF Control MAF Commande MAF Encomenda MAF	Código: 141595R013
--	---	-------------------------------------



<u>Pos.</u>	<u>Denominación</u>	<u>Description</u>	<u>Description</u>	<u>Descrição</u>	<u>Código/ Code</u>	<u>Cant. Qty.</u>
01	Funda	Hose	Gaine	Tubo de borracha	173627R014	1
02	Casquillo	Coupling	Accouplement	Casquillo	130675R014	1
03	Tapa	Lid	Couvercle	Tampa	120546R013	1
04	Tornillo auto.	Screw	Vis	Parafuso	4075010420	4
05	Protección Interruptor	Switch protection	Protection interrupteur	Protecção interruptor	173999R014	1
06	Tornillo Philips	Philips screw	Vis philips	Parafuso Philips	3798520410	4
07	Junta	Seal Join	Joint	Junta	173708R014	1
08	Manguito	Cable Channels	Manchon	União	173132R013	1
09	Caja	Switch box	Boitier interrupteur	Caixa interruptor	173676R013	1
10	Interruptor	Switch	Interrupteur	interruptor	4048000452	1
11	Cable manguera	Cable	Câble tuyau	Cabo tubo	4020000434	1
12	Abrazadera	Hose clamp	Anneau	Anel	4000003740	1
13	Prensaestopas	Cable attaching	Presse éutope	Prensa estopas	4048000016	1
14	Clavija	Plug	Prise	Cavilha	4048032030	1
15	Cable eléctrico	Cable	Câble électrique	Cabo eléctrico	4020000413	1
16	Terminal	Connector	Terminal	Terminal	4048000346	3
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						


8.-2. **Aguja Alta Frecuencia.....VAF-38LT High frequency needle.....VAF-38LT**
Aiguille à haute fréquence.....VAF-38LT Agulha Alta Frequência.....VAF-38LT

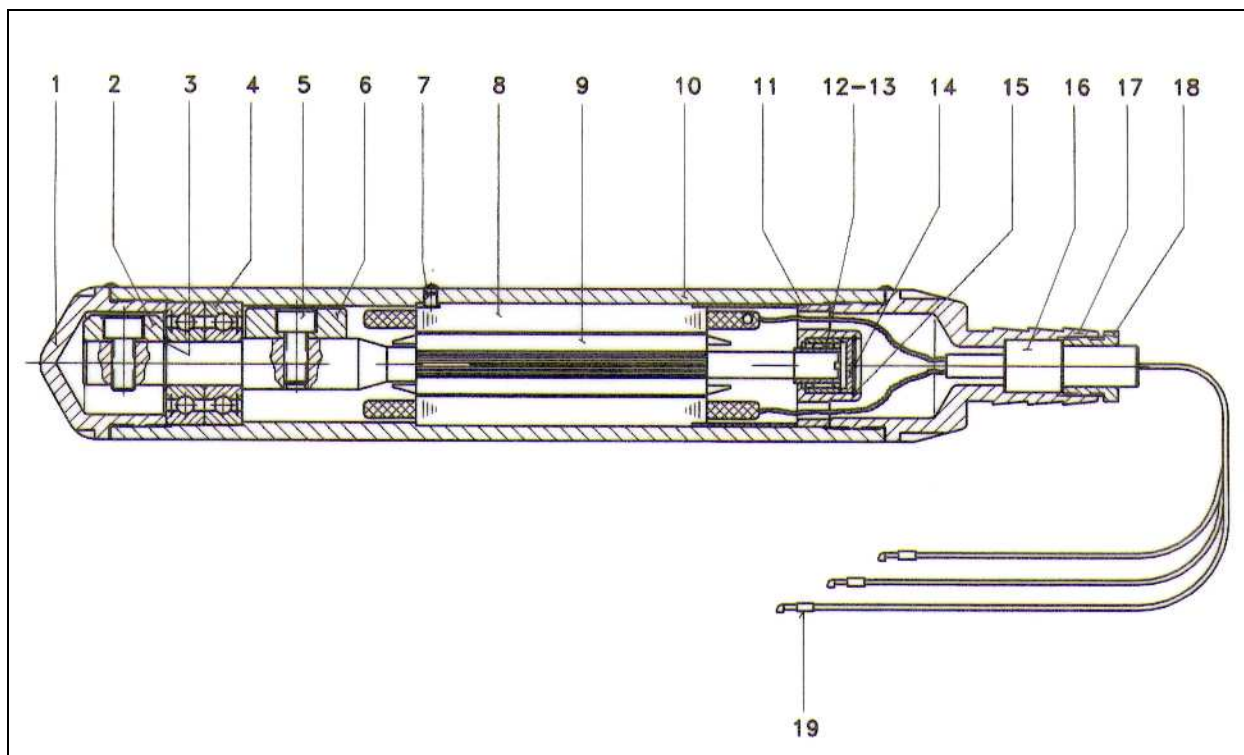
 INDUSTRIAS TECHNOFLEX SA	Aguja VAF-38LT Needle VAF-38LT Aiguille VAF-38LT Agulha VAF-38LT	Código: 141311R013
--	---	---



Pos.	Denominación	Description	Description	Descrição	Código/ Code	Cant. Qty.
01	Punta	Vibrating Head	Pointe	Ponta	173355R014	1
02	Anillo	Safety Ring	Anneau	Anel	4005000010	1
03	Rodamiento	Bearing	Roulement	Rodamento	4060060620	1
04	Casquillo Distancia	Distance Ring	Frette Distancie	Casquilho Distancçia	130714R014	1
05	Casquillo	Ring	Frette	Casquilho	130713R013	1
06	Anillo	Ring	Anneau	Anel	4012001518	1
07	Rodamiento de Agujas	Needle bearing	Roulement d'aiguilles	Rodamento de Agulha	4060181600	1
08	Espárrago Allen	Allen Bolt	Tige Allen	Perno Allen	3913105005	1
09	Estator Completo	Stator	Stator Complet	Estator Completo	141312R014	1
10	Carcasa	Housing	Carcasse	Carcaça	110386R013	1
11	Rotor Completo	Rotor	Rotor Complet	Rotor Completo	141309R013	1
12	Casquillo	Ring	Frette	Casquilho	130719R013	1
13	Anillo	Ring	Anneau	Anel	4012003010	1
14	Rodamiento de Agujas	Needle Bearing	Roulement d'aiguilles	Rodamento de Agulha	4060101207	1
15	Tapeta	Lid	Couvercle	Tampa	120507R014	1
16	Anillo	Safety Ring	Anneau	Anel	4006000017	1
17	Pasacables	Cable protection	Gaine	Paso cabos	173401R014	1
18	Acoplamiento	Coupling	Manchon d'accouple.	Acoplamento	173356R014	1
19	Prensaestopas	Cable attaching	Presse-étoupe	Prensa Estopas	173098R014	1
20	Terminal	Connector	Terminal	Terminal	4048000346	3
21	Arandela Tope	Washer End	Rondelle d'arrêt	Anel Tope	150861R014	1
22						
23						
24						
25						
26						
27						
28						
29						

8.-3. Aguja alta frecuencia..... VAF-50CT High frequency needle..... VAF-50CT
 Aiguille à haute fréquence..... VAF-50CT Agulha Alta Frequência..... VAF-50CT


 INDUSTRIJS TECHNOFLEX SA	Aguja VAF-50CT Needle VAF-50CT Aiguille VAF-50CT Agulha VAF-50CT	Código: 141160R013
--	---	-------------------------------------

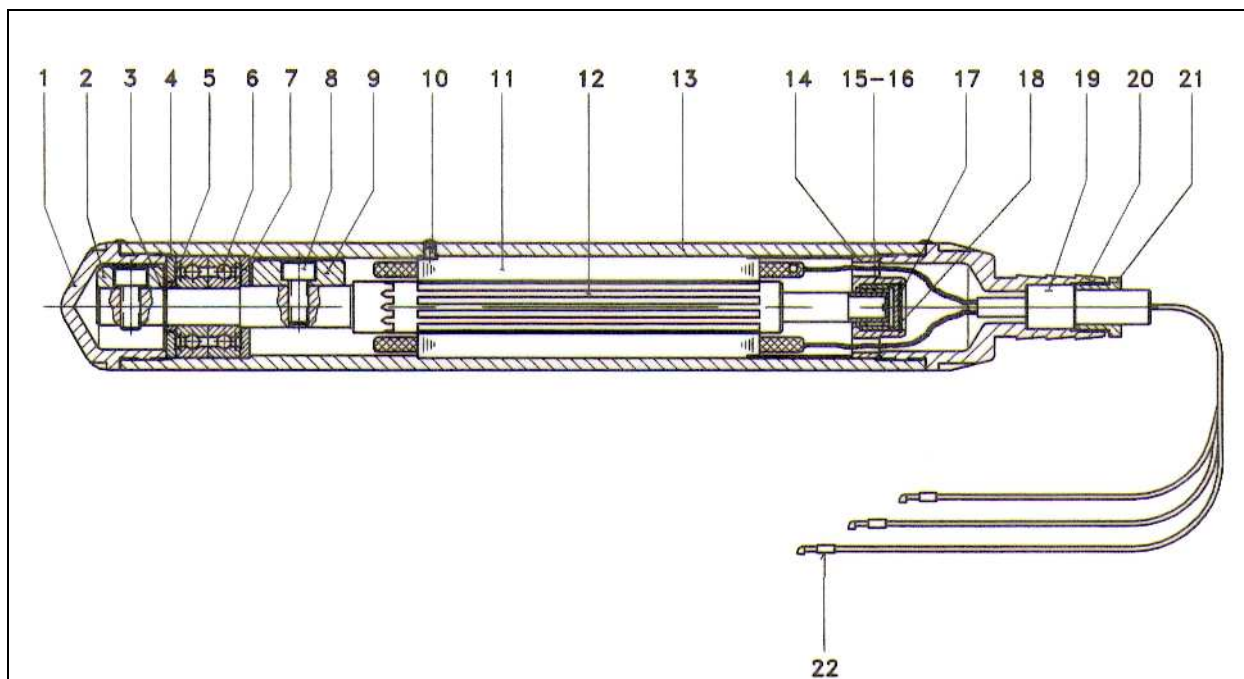


<u>Pos.</u>	<u>Denominación</u>	<u>Description</u>	<u>Description</u>	<u>Descrição</u>	<u>Código/Code</u>	<u>Cant. Qty.</u>
01	Punta	Vibrating Head	Pointe	Ponta	173091R014	1
02	Casquillo Contrapeso	Eccentric Mass	Frette	Casquilho contrapeso	130685R014	1
03	Anillo	Safety Ring	Anneau	Anel	4005000015	1
04	Rodamiento	Bearing	Roulement	Rodamento	4060630209	2
05	Tornillo Allen	Allen Screw	Vis Allen	Parafuso allen	3912608015	2
06	Casquillo Contrapeso	Eccentric Mass	Frette contrepoids	Casquilho contrapeso	130683R014	1
07	Espárrago Allen	Allen Bolt	Tige Allen	Perno allen	3913105005	1
08	Estator Completo	Stator	Stator Complet	Estator completo	141095R013	1
09	Rotor Completo	Rotor	Rotor Complet	Rotor completo	141169R013	1
10	Carcasa	Housing	Carcasse	Carcaça	110373R013	1
11	Casquillo Tope	Ring	Frette d'arrêt	Casquilho tope	130684R013	1
12	Anillo	Ring	Anneau	Anel	4012003012	1
13	Rodamiento Agujas	Needle Bearing	Roulement d'Aiguilles	Rodamento agulhas	4060121200	1
14	Tapeta	Lid	Couvercle	Tampa	120492R014	1
15	Anillo	Safety Ring	Anneau	Anel	4006000019	1
16	Pasacables	Cable Protection	Gaine	Paso cabos	173097R014	1
17	Acoplamiento	Coupling	Manchon d'accouplement	Acoplamento	173093R013	1
18	Prensaestopas	Cable Attaching	Presse-étoupe	Prensa estopas	173098R014	1
19	Terminal	Connector	Terminal	Terminal	4048000346	3
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						

8.-4. Aguja alta frecuencia..... VAF-50LT
 Aiguille à haute fréquence..... VAF-50LT

High frequency needle..... VAF-50LT
 Agulha Alta Frequência..... VAF-50LT


 INDUSTRIAS TECHNOFLEX SA	Aguja VAF-50LT Needle VAF-50LT Aiguille VAF-50LT Agulha VAF-50LT	Código: 141166R013
--	---	-------------------------------------

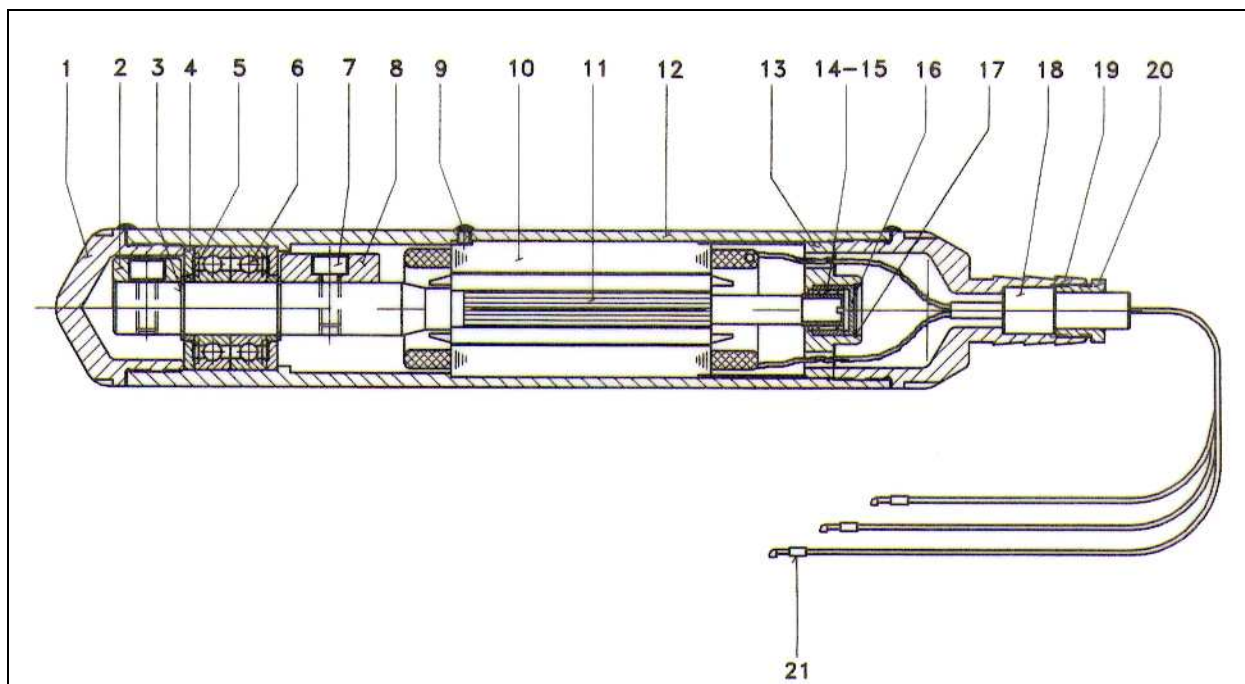


Pos.	Denominación	Description	Description	Descrição	Código/ Code	Cant. Qty.
01	Punta	Vibrating Head	Pointe	Ponta	173091R014	1
02	Casquillo Contrapeso	Eccentric Mass	Frette	Casquillo contrapeso	130685R014	1
03	Anillo	Safety Ring	Anneau	Anel	4005000015	1
04	Tapeta	Lid	Couvercle	Tampa	120512R014	1
05	Arandela	Washer	Rondelle	Anel	150848R014	1
06	Rodamiento	Bearing	Roulement	Rodamento	4060630209	2
07	Tapeta	Lid	Couvercle	Tampa	120511R014	1
08	Tornillo Allen	Allen Screw	Vis Allen	Parafuso allen	3912608015	2
09	Casquillo Contrapeso	Eccentric Mass	Frette contrepoids	Casquillo Contrapeso	130686R014	1
10	Espárrago Allen	Allen Bolt	Tige Allen	Perno Allen	3913105005	1
11	Estator Completo	Stator	Stator Complet	Estator Completo	141162R013	1
12	Rotor Completo	Rotor	Rotor Complet	Rotor Completo	141203R013	1
13	Carcasa	Housing	Carcasse	Carcaça	110380R013	1
14	Casquillo Tope	Ring	Frette d'arrêt	Casquillo Tope	130684R013	1
15	Anillo	Ring	Anneau	Anel	4012003012	1
16	Rodamiento de Agujas	Needle Bearing	Roulement aiguilles	Rodamiento Agulhas	4060121200	1
17	Tapeta	Lid	Couvercle	Tampa	120492R014	1
18	Anillo	Safety Ring	Anneau	Anel	4006000019	1
19	Pasacables	Cable Protection	Gaine	Paso cabos	173097R014	1
20	Acoplamiento	Coupling	Manchon d'accouple.	Acoplamento	173093R013	1
21	Prensaestopas	Cable Attaching	Presse-étoupe	Prensa estopas	173098R014	1
22	Terminal	Connector	Terminal	Terminal	4048000346	3
23						
24						
25						
26						
27						
28						
29						

8.-5. Aguja alta frecuencia..... VAF-60CT
 Aiguille à haute fréquence..... VAF-60CT

High frequency needle..... VAF-60CT
 Agulha Alta Frequência..... VAF-60CT


 INDUSTRIAS TECHNOFLEX SA	Aguja VAF-60CT Needle VAF-60CT Aiguille VAF-60CT Agulha VAF-60CT	Código: 141177R013
--	---	-------------------------------------

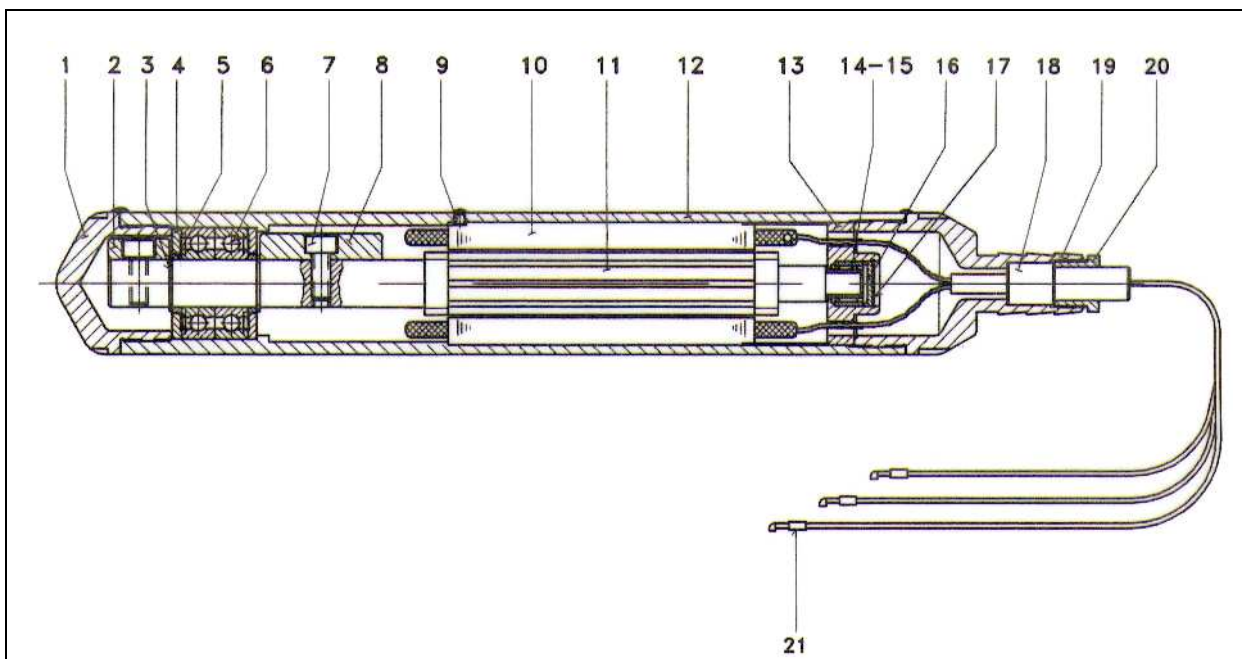


<u>Pos.</u>	<u>Denominación</u>	<u>Description</u>	<u>Description</u>	<u>Descrição</u>	<u>Código/ Code</u>	<u>Cant. Qty.</u>
01	Punta	Vibrating head	Pointe	Ponta	173096R014	1
02	Casquillo Contrapeso	Eccentric Mass	Frette contrepoids	Casquilho contrapeso	130688R014	1
03	Anillo	Safety Ring	Anneau	Anel	4005000020	2
04	Tapeta	Lid	Couvercle	Tampa	120514R014	2
05	Arandela	Washer	Rondelle	Anel	150849R014	2
06	Rodamiento	Bearing	Roulement	Rodamento	4060620409	2
07	Tornillo Allen	Allen Screw	Vis Allen	Parafuso Allen	3912168020	2
08	Casquillo Contrapeso	Eccentric Mass	Frette contrepoids	Casquilho contrapeso	130692R014	1
09	Espárrago Allen	Allen Bolt	Tige Allen	Perno Allen	3913105005	1
10	Estator Completo	Stator	Stator Complet	Estator Completo	141180R013	1
11	Rotor Completo	Rotor	Rotor Complet	Rotor Completo	141204R013	1
12	Carcasa Aguja	Housing	Carcasse Aiguille	Carcaça Agulha	110381R013	1
13	Casquillo Tope	Ring	Frette d'arrêt	Casquilho Tope	130687R013	1
14	Anillo	Ring	Anneau	Anel	4012003012	1
15	Rodamiento de Agujas	Needle Bearing	Roulement Aiguilles	Rodamiento Agulhas	4060121200	1
16	Tapeta	Lid	Couvercle	Tampa	120492R014	1
17	Anillo	Safety Ring	Anneau	Anel	4006000019	1
18	Pasacable	Cable Protection	Gaine	Paso cabos	173097R014	1
19	Acoplamiento	Coupling	Manchon d'accouple.	Acoplamento	173094R013	1
20	Prensaestopas	Cable Attaching	Presse-étoupe	Prensa estopas	173098R014	1
21	Terminal	Connector	Terminal	Terminal	4048000346	3
22						
23						
24						
25						
26						
27						
28						
29						

8.-6. Aguja alta frecuencia..... VAF-60LT
 Aiguille à haute fréquence..... VAF-60LT

High frequency needle..... VAF-60LT
 Agulha Alta Frequência..... VAF-60LT


 INDUSTRIAS TECHNOFLEX SA	Aguja VAF-60LT Needle VAF-60LT Aiguille VAF-60LT Agulha VAF-60LT	Código: 141167R013
--	---	-------------------------------------

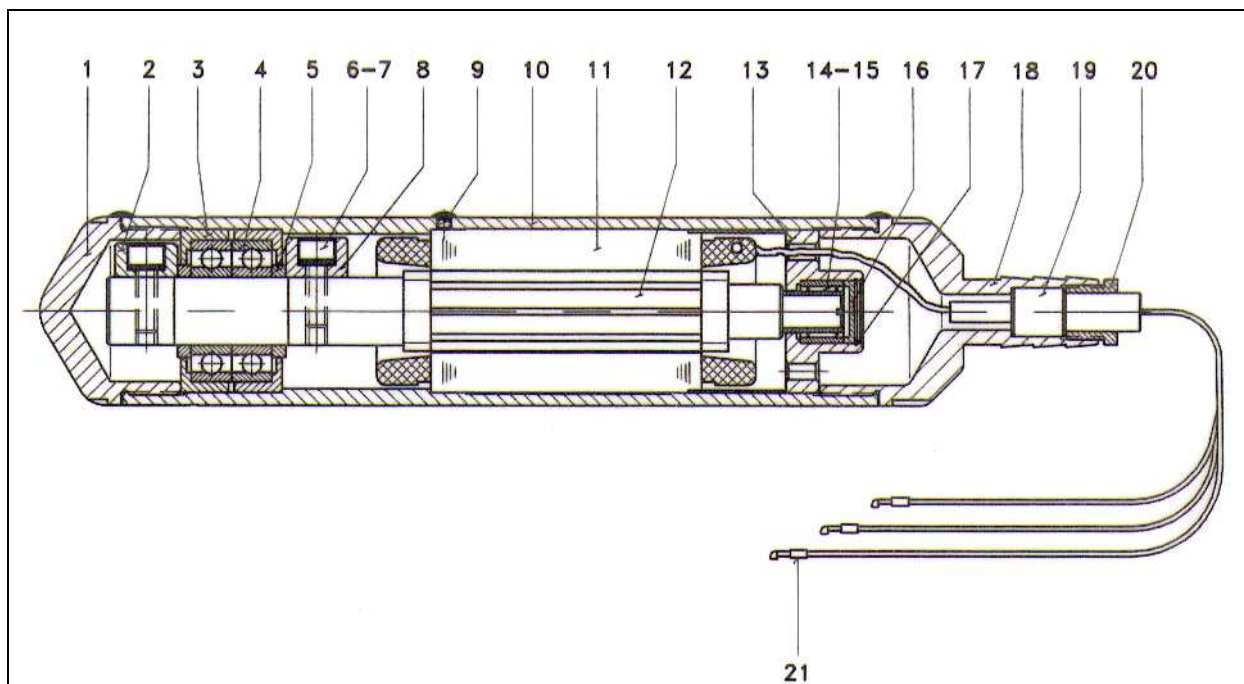


<u>Pos.</u>	<u>Denominación</u>	<u>Description</u>	<u>Description</u>	<u>Descrição</u>	<u>Código/Code</u>	<u>Cant. Qty.</u>
01	Punta	Vibrating Head	Pointe	Punta	173096R014	1
02	Casquillo Contrapeso	Eccentric Mass	Frette Contrepoids	Casquilho contrapeso	130688R014	1
03	Anillo	Safety Ring	Anneau	Anel	4005000020	2
04	Tapeta	Lid	Couvercle	Tampa	120514R014	2
05	Arandela	Washer	Rondelle	Anel	150849R014	2
06	Rodamiento	Bearing	Roulement	Rodamento	4060620409	2
07	Tornillo Allen	Allen Screw	Vis Allen	Parafuso Allen	3912168020	2
08	Casquillo Contrapeso	Eccentric Mass	Frette Contrepoids	Casquilho contrapeso	130689R014	1
09	Espárrago Allen	Allen Bolt	Tige Allen	Perno Allen	3913105005	1
10	Estator Completo	Stator	Stator Complet	Estator Completo	141172R013	1
11	Rotor Completo	Rotor	Rotor Complet	Rotor Completo	141170R013	1
12	Carcasa	Housing	Carcasse	Carcaça	110374R013	1
13	Casquillo Tope	Lid	Frette d'arrêt	Casquilho Tope	130687R013	1
14	Anillo	Ring	Anneau	Anel	4012003012	1
15	Rodamiento de Agujas	Needle Bearing	Roulement Aiguilles	Rodamento Agulhas	4060121200	1
16	Tapeta	Lid	Couvercle	Tampa	120492R014	1
17	Anillo	Safety Ring	Anneau	Anel	4006000019	1
18	Pasacables	Cable Protection	Gaine	Paso cabos	173097R014	1
19	Acoplamiento	Coupling	Manchon d'accouple.	Acoplamento	173094R013	1
20	Prensaestopas	Cable Attaching	Prese-étoupe	Prensa estopas	173098R014	1
21	Terminal	Connector	Terminal	Terminal	4048000346	3
22						
23						
24						
25						
26						
27						
28						
29						

8.-7. Aguja alta frecuencia..... VAF-70CT
 Aiguille à haute fréquence..... VAF-70CT

High frequency needle..... VAF-70CT
 Agulha Alta Frequência..... VAF-70CT


 INDUSTRIJS TECHNOFLEX SA	Aguja VAF-70CT Needle VAF-70CT Aiguille VAF-70CT Agulha VAF-70CT	Código: 141173R013
--	---	-------------------------------------

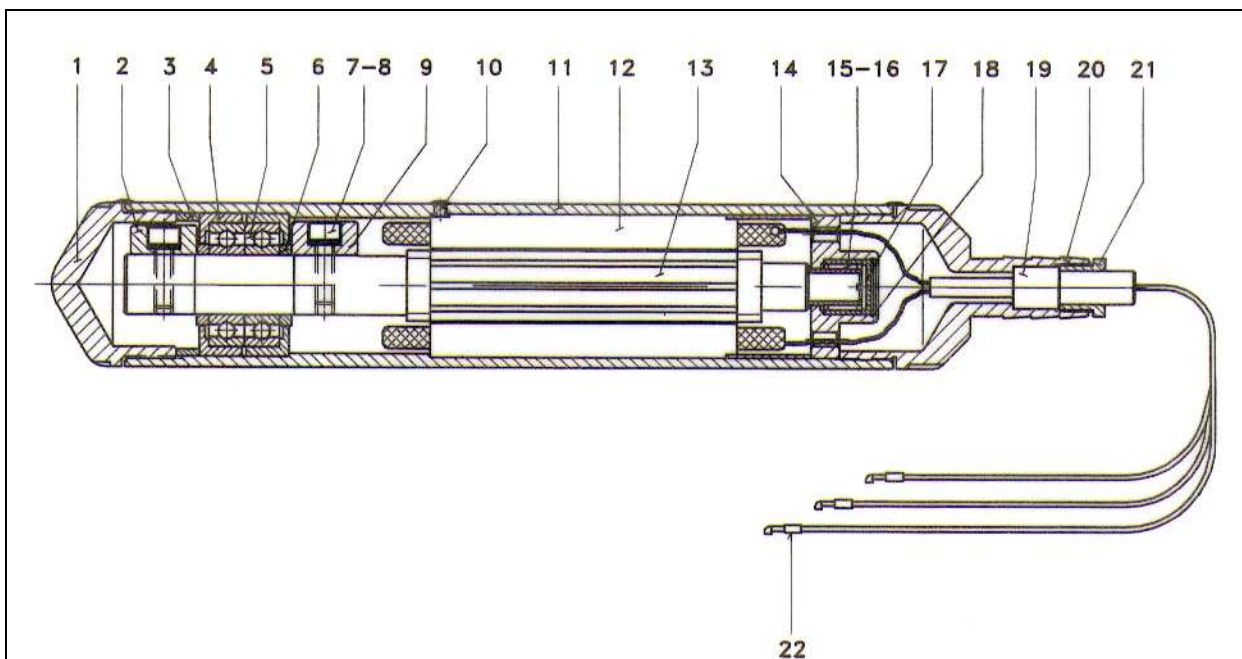


<u>Pos.</u>	<u>Denominación</u>	<u>Description</u>	<u>Description</u>	<u>Descrição</u>	<u>Código/Code</u>	<u>Cant. Qty.</u>
01	Punta	Vibrating head	Pointe	Ponta	173088R014	1
02	Casquillo Contrapeso	Eccentric Mass	Frette Contrepoids	Casquilho contrapeso	130691R014	1
03	Casquillo	Ring	Frette	Casquilho	130681R014	2
04	Rodamiento	Bearing	Roulement	Rodamento	4060620509	2
05	Arandela	Washer	Rondelle	Anel	150846R014	2
06	Arandela Dentada	Notched lock washer	Rondelle Dentée	Anel Denteado	4013000908	2
07	Tornillo Allen	Allen screw	Vis Allen	Parafuso Allen	3912168025	2
08	Casquillo Contrapeso	Eccentric Mass	Frete Contrepoids	Casquilho contrapeso	130690R014	1
09	Espárrago Allen	Allen Bolt	Tige Allen	Perno Allen	3913105005	1
10	Carcasa	Housing	Carcasse	Carcaça	110375R013	1
11	Estator Completo	Stator	Stator Complet	Estator Completo	141176R013	1
12	Rotor Completo	Rotor	Rotor Complet	Rotor Completo	141174R013	1
13	Casquillo	Ring	Frette	Casquilho	130678R013	1
14	Anillo	Ring	Anneau	Anel	4012001215	1
15	Rodamiento Agujas	Needle Bearing	Roulement Aiguilles	Rodamento Agulhas	4060151600	1
16	Tapeta	Lid	Couvercle	Tampa	120505R014	1
17	Anillo	Safety Ring	Aneau	Anel	4006000023	1
18	Pasacables	Cable Protection	Gaine	Paso cabos	173097R014	1
19	Acoplamiento	Coupling	Manchon d'accouple.	Acoplamento	173092R013	1
20	Prensaestopas	Cable Attaching	Prese-étoupe	Prensa estopas	173098R014	1
21	Terminal	Connector	Terminal	Terminal	4048000346	3
22						
23						
24						
25						
26						
27						
28						
29						

8.-8. Aguja alta frecuencia..... VAF-70LT
 Aiguille à haute fréquence..... VAF-70LT

High frequency needle..... VAF-70LT
 Agulha Alta Frecuência..... VAF-70LT

 INDUSTRIAS TECHNOFLEX SA	Aguja VAF-70LT Needle VAF-70LT Aiguille VAF-70LT Agulha VAF-70LT	Código: 141157R013
--	---	-------------------------------------



<u>Pos.</u>	<u>Denominación</u>	<u>Description</u>	<u>Description</u>	<u>Descrição</u>	<u>Código/Code</u>	<u>Cant. Qty.</u>
01	Punta	Vibrating Head	Pointe	Ponta	173088R014	1
02	Casquillo Contrapeso	Eccentric Mass	Frette Contrepoids	Casquilho contrapeso	130680R014	1
03	Casquillo	Ring	Frette	Casquilho	130682R014	1
04	Casquillo	Ring	Frette	Casquilho	130681R014	2
05	Rodamiento	Bearing	Roulement	Rodamento	4060620509	2
06	Arandela	Washer	Rondelle	Anel	150846R014	2
07	Arandela Dentada	Notched lock washer	Rondelle Dentée	Anel Denteado	4013000908	2
08	Tornillo Allen	Allen screw	Vis Allen	Parafuso Allen	3912108025	2
09	Casquillo Contrapeso	Eccentric Mass	Frette Contrepoids	Casquilho contrapeso	130679R014	1
10	Espárrago Allen	Allen Bolt	Tige Allen	Perno Allen	3913105005	1
11	Carcasa	Housing	Carcasse	Carcaça	110371R013	1
12	Estator Completo	Stator	Stator Complet	Estator Completo	141156R013	1
13	Rotor Completo	Rotor	Rotor Complet	Rotor Completo	141159R013	1
14	Casquillo	Ring	Frette	Casquilho	130678R013	1
15	Anillo	Ring	Anneau	Anel	4012001215	1
16	Rodamiento de Agujas	Needle Bearing	Roulement Aiguilles	Rodamento Agulhas	4060151600	1
17	Tapeta	Lid	Couvercle	Tampa	120505R014	1
18	Anillo	Safety Ring	Anneau	Anel	4006000023	1
19	Pasacables	Cable Protection	Gaine	Paso cabos	173097R014	1
20	Acoplamiento	Coupling	Manchon d'accouple.	Acoplamento	173092R013	1
21	Prensaestopas	Cable Attaching	Presse-étoupe	Prensa estopas	173098R014	1
22	Terminal	Connector	Terminal	Terminal	4048000346	3
23						
24						
25						
26						
27						
28						
29						

9 MAINTENANCE CONTROL SHEET

NUMBER OF OVERHAU- LING	<u>DESCRIPTION OF OVERHAULING AND SIGNATURE</u>	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

INDUSTRIAS TECHNOFLEX, S.A.

C/Josep Pujol, s/n.
Apartado de correos, 43
E-08191 RUBÍ (Barcelona)-SPAIN

Tel. (+34) 93 588 53 37
Fax (+34) 93 697 37 54
e-mail: technoflex@ficsa.com
Internet: <http://www.technoflex.es>



Cód.:4046600008 / 01.12



INDUSTRIAS TECHNOFLEX SA