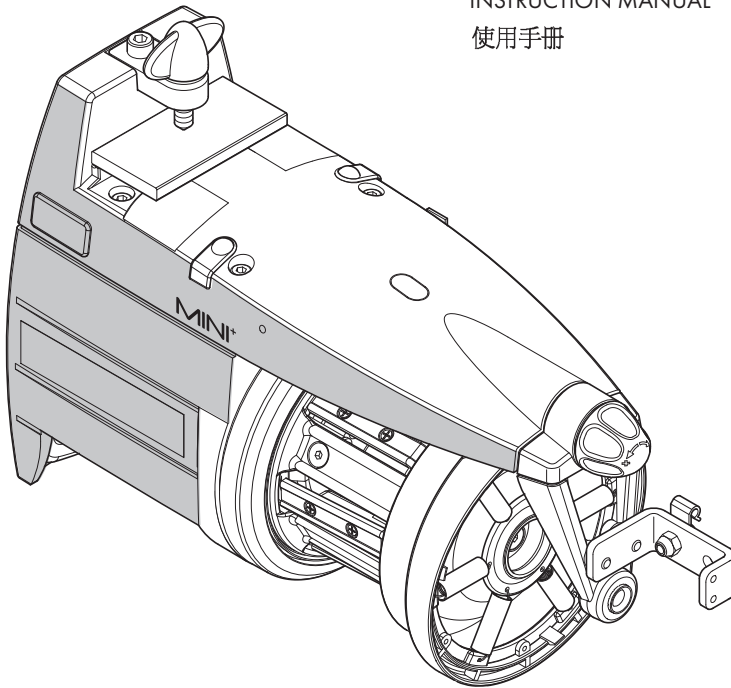




MINI⁺
MINI^{VE}
MINI^{CB}

MANUALE DI ISTRUZIONE
INSTRUCTION MANUAL
使用手册



ALIMENTATORE DI FILO A SPIRE SEPARATE
YARN ACCUMULATOR WITH SEPARATE COILS
分离线圈导纱器

VALID FROM SERIAL
n° KM+ 00/0001



Scope of supply: Design, manufacture and after sales service of yarn and weft feeders, measuring winders, stands, creels and oil systems for textile machinery.

TRADUZIONI DELLE ISTRUZIONI ORIGINALI.
TRANSLATION OF THE ORIGINAL INSTRUCTIONS.
原始使用说明书的翻译.

**L.G.L. Electronics is gratified by your choice
and thanks you for the preference**

MINI⁺
MINI^{VE}
MINI^{CB}

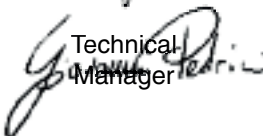
**yarn feeder
INSTRUCTION MANUAL**

ISSUED BY:


Service
Manager

Date: 10/12/18

APPROVED BY:


Technical
Manager

Date: 10/12/18

WARNINGS



- 1) *Power down the yarn feeder's power supply box mains switch before beginning any power supply hook-up, maintenance or part replacement operations.*



- 2) *During standard machine operation, the yarn feeder may suddenly start up without prior warning.
CAUTION: the orange lights do not signal that the yarn feeder is ON, but that the feeder has gone into an alarm mode. Therefore, during standard operation they should be OFF.*



- 3) *Before yarn feeder start-up, inspect it physically for damage (check the flywheel/the eyelet/all moving parts).*



- 4) *Strictly avoid touching any moving part during feeder operation.*



- 5) *Only use the original L.G.L. Electronics spare parts and accessories.*



- 6) *Any repairs to the feeder's electronic parts must be performed by appropriately qualified personnel, regularly authorised by L.G.L. Electronics accordingly.*



- 7) *Yarn feeders that are moved from warehouse storage into a warmer knitting mill environment may develop condensation; please wait until they are completely dry before connecting them up. Failure to do so may damage the electronic components.*



- 8) *Never pick the yarn feeder up by its yarn spool body or by its tensioning unit.*

WARNINGS

ADVICE TO ALWAYS KEEP THE FEEDER IN PERFECT WORKING ORDER AND EXTEND ITS SERVICE LIFE.

For an always satisfying performance of the weft feeder over the years, we deem it advisable to provide you with some simple tricks:

- 1. At the time of installation, passing from the store to the warm knitting environment, Condensation may form on a weft feeder that has been stored in cold places when this is brought into a warm area. Wait until this is completely dry before connecting it, otherwise the electronic components could be damaged.*
- 2. Water and dampness may harm the electronic parts of the feeder. Operating the weft feeder for long time periods in extremely damp environments (dampness exceeding 80%) or using water-impregnated threads might quickly compromise the electronic cards. Moreover, the feeder shall not be cleaned with water or similar substances.*
- 4. Machines working in environments featuring a lot of dust require increased maintenance. By prevent the knitting environment clean, you avoid residual dirt and dust from compromising the performance of the machine by stressing the moving parts. The latter are protected, but the accumulation of dust might result in a more difficult movement and, as consequence, in early wear-and-tear.*
- 4. We suggest storing feeders that are not used for long time periods in the special polystyrene boxes, which ensure the best storage.*
- 5. When the weft feeder is being loaded, use the special heddle tool. Do not use other tools, especially if made from metal, as the inlet sensor might be damaged, along with any outlet brakes.*

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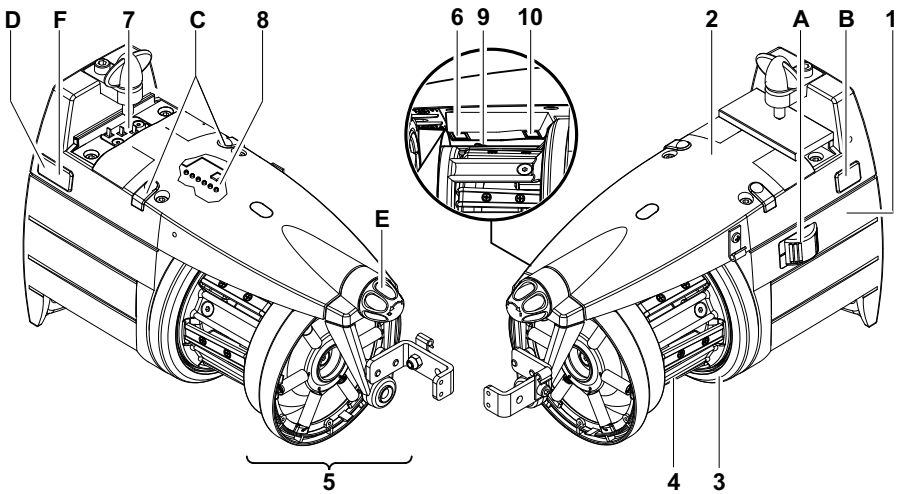
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1 - GENERAL FEATURES

1.1 MAIN PARTS – CONTROL AND ADJUSTMENT POINTS

Main Parts:

- | | |
|---------------------------|------------------------------------|
| 1 • MOTOR | 6 • OPTICAL OUTPUT SENSOR |
| 2 • TOP PANEL | 7 • POWER CABLE CONNECTION |
| 3 • FLYWHEEL | 8 • MAIN ELECTRONIC CONTROL BOARD |
| 4 • YARN SPOOL BODY | 9 • WINDING RESERVE CONTROL FEELER |
| 5 • OUTPUT TENSIONER UNIT | 10 • INPUT FEELER |

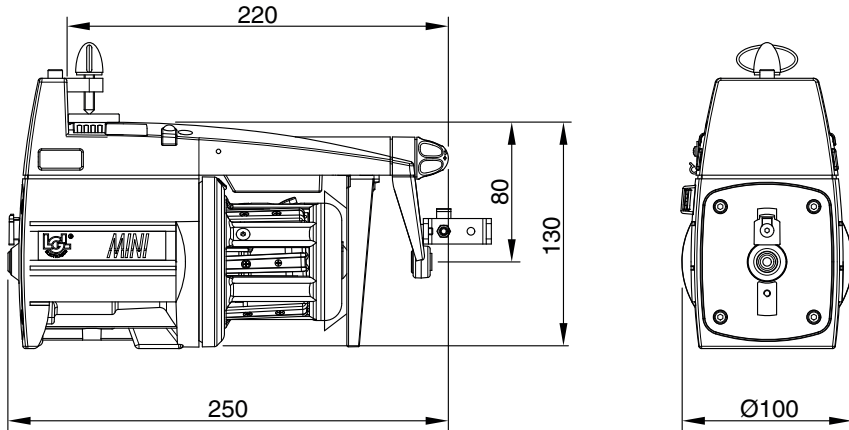


CONTROLS / ADJUSTMENTS	FUNCTION
A 0 – I SWITCH	<ul style="list-style-type: none"> • Switches the yarn feeder ON and OFF.
B SERIAL COMMUNICATION PORT	<ul style="list-style-type: none"> • Enables Pocket and PC interfacing.
C SIGNAL LAMPS	<ul style="list-style-type: none"> • If yarn feeder is turned on and there are no malfunctions, they will not light up. • They will light up if any malfunction arises. (<i>consult paragraph 9 “Trouble shooting”</i>).
D DIP SWITCH	<ul style="list-style-type: none"> • Enables adjustment of the optical sensor’s sensitivity range, reverse the direction of rotation, self-calibrate magnetic sensors.
E ADJUSTING TWIST-KNOB	<ul style="list-style-type: none"> • Enable adjustment of the outbound yarn tensioning.
F THREE-WAY CONNECTOR	<ul style="list-style-type: none"> • Enables connection of an output yarn feeler

1 - GENERAL FEATURES

1.2 OVERALL DIMENSIONS

MINI featuring the TWM tension modulator



Weight 2.5 Kg

1 - GENERAL FEATURES

1.3 INTENDED USE – TECHNICAL AND OPERATIONAL FEATURES

Intended Use:

The MINI is a yarn feeder featuring **separate coils**, suitable for all types of knitting machines or for textile machines requiring yarn feed-in with constant tension.

Optimised operation is provided with yarn counts ranging from **500 den** (the thicker yarn counts) down to **10 den** (fine yarn counts).

Operational features:

- Automatic speed adjustment designed to cover the machine's yarn quantity requirements.
- Spool body winding reserve control by means of a magnetic feeler system.
- Yarn feeder and machine stop function if no yarn is detected at the feeder's yarn input (broken yarn or empty yarn bobbin).
- Kit KLS (Optional):
Feeder and machine stop function when no yarn is found on feeder outlet without using mechanical sensors (yarn broken or out of the needles).
- The option of being able to fit on various tensioning devices based on the type of yarn actually being used, at both the feeder's inlet and outlet.
- Either vertical set-up or horizontal set-up assembly option, selectable based on requirements.
- Real-time detection and display function of the yarn consumption related to each machine feed.

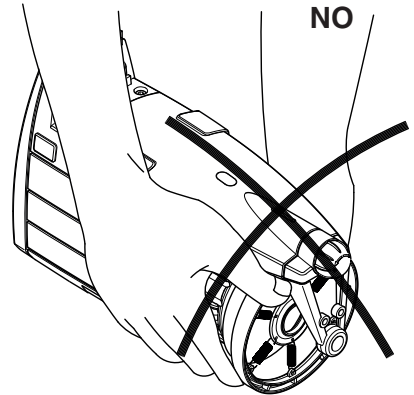
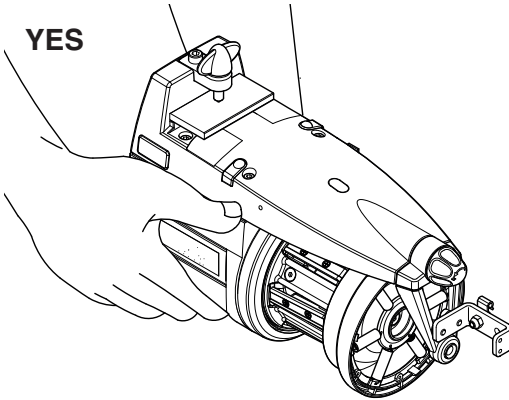
Technical specifications:

- Power supply by means of a direct connection with the machine, or through a power supply box that is supplied separately by L.G.L. Electronics.
Power supply voltage data: **V = 42-48 VAC Three-phase Hz = 50/60 (AC Version)**
V = 57 VDC (DC Version - MINI CB)
- Automatic yarn input speed control provided up to a maximum of **600 m/min** (MINI+); **950 m/min** (MINI VE - MINI CB);
- Coil separation feature fixed at **1 mm**.
- Three-phase asynchronous motor, maintenance-free.
Motor data:
Maximum power: **35 W** Average absorbed power: **18 W**
- Equivalent continuous A-weighted sound pressure level at maximum speed: **>70 dB (A)**
- Operation and storage conditions:
 - Room temperature: from **+10** to **+40 °C**
 - Maximum humidity: **80%**

1 - GENERAL FEATURES

1.4 HANDLING AND STORAGE INSTRUCTIONS

Never pick the yarn feeder up by its yarn spool body, by its top panel or by its tensioning unit.

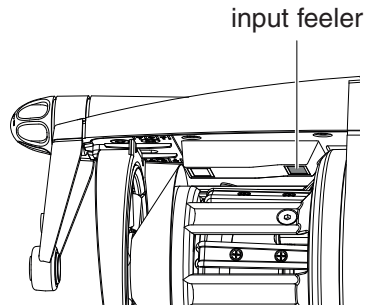


The yarn feeder is supplied in an appropriate polystyrene casing; please store the casing for use during any future handling.

1.5 INPUT FEELER

The yarn feeder features an input feeler that provides the following function:

- **"Machine stop" function:** this function stops both the feeder and the machine if no yarn is detected at feeder input (broken yarn or empty yarn spool).

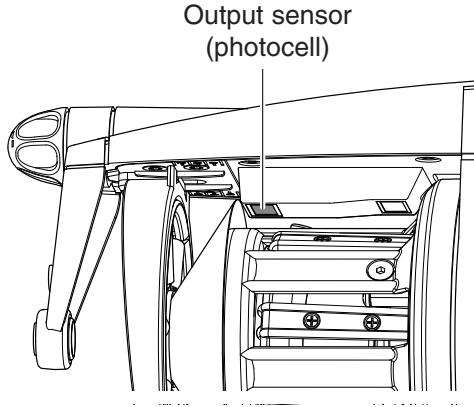


Caution: the machine will not stop if the feeder comes to a halt. The machine stop signal is operative only if the signal lamps are ON.

1 - GENERAL FEATURES

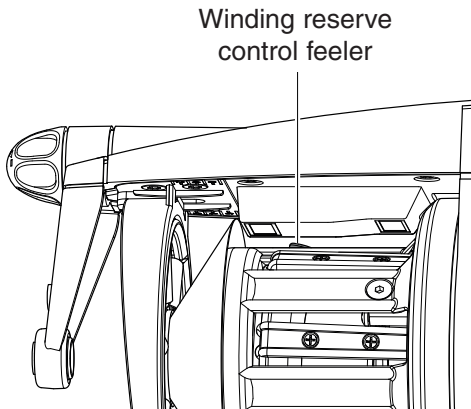
1.6 OPTICAL OUTPUT SENSOR

The optical sensor featured by the yarn feeder provides automatic speed adjustment based on the quantity of yarn needed by the machine. For very fine yarn count processing (lower than 40 den), the sensor requires DIP SWITCH settings (*paragraph 4 refers*).



1.7 YARN SPOOL BODY WINDING RESERVE CONTROL FEELER

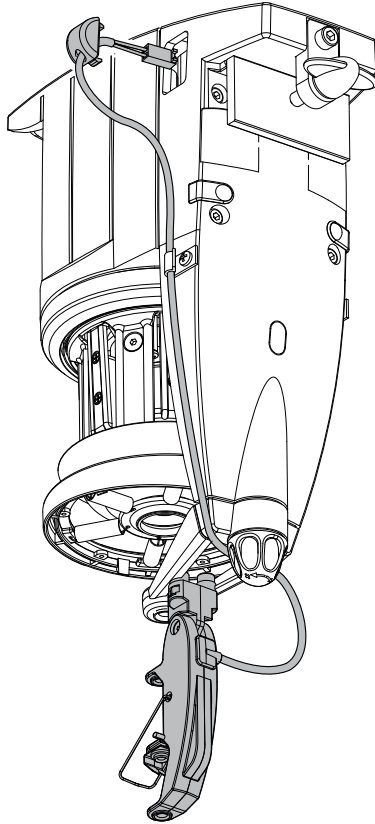
The magnetic sensor that the yarn feeder is provided with has the function of monitoring the yarn winding reserve on the spool body.



1 - GENERAL FEATURES

1.8 YARN OUTPUT DETECTION FEELER

The assembly of this detection feeler onto the feeder output, enables the machine to receive a stop signal that is relayed by the feeder when it detects output yarn snaps/breaks.



Installation: once the feeler has been fixed onto the feeder using the nuts and bolts provided on the support bracket, connect up the wire with the three-way connector located on the feeder housing.

2 - INSTALLATION AND START-UP

2.1 YARN FEEDER INSTALLATION AND START-UP

N.B.: Yarn feeders that are moved from warehouse storage into a warmer knitting mill environment may develop condensation; please wait until they are completely dry before connecting them up.

Failure to do so may damage the electronic components.

For installation of the yarn feeder onto the machine, proceed as follows:

VERTICAL SET-UP VERSION

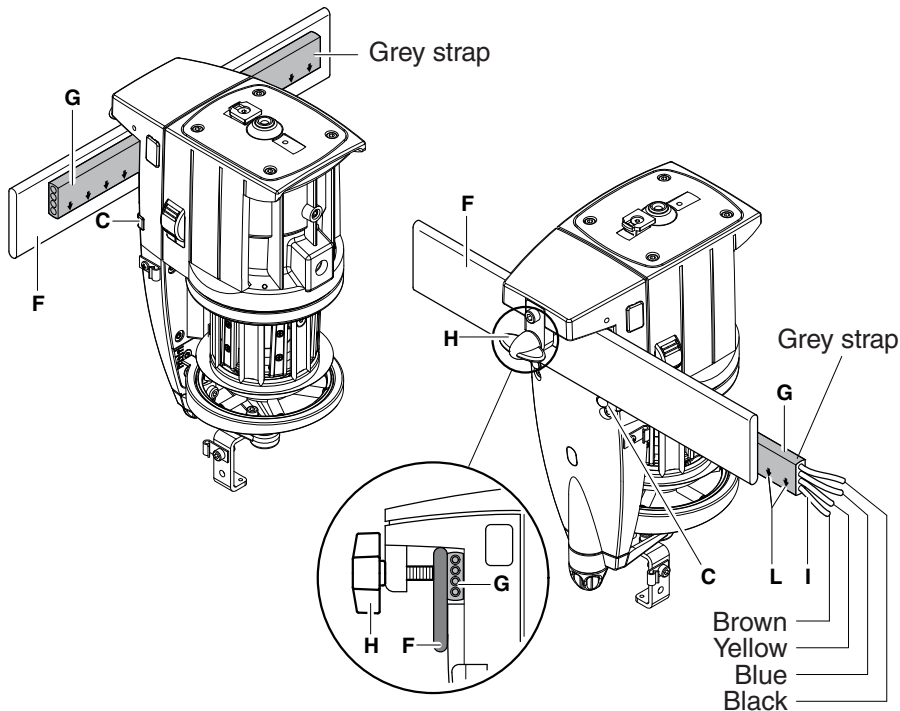
Fix the feeder onto the appropriate support plate (F) and fit in the power supply cable strip (G) as well; tighten in grub screw (H) until the strip is punctured.

IMPORTANT: To avoid damaging the electronic components, the installation sequence illustrated in the figures below must absolutely be complied with exactly.

AC version

The brown cable (I) must be kept facing the signal lamps (C) (if the cable strip is supplied by LGL, the brown cable (I) can be identified by the arrows (L) printed on the cable strip).

N.B.: Make sure that the support plate the yarn feeder is fixed onto is provided with an earth connection, the same goes for the 48V AC three-phase power supply transformer star-connection.

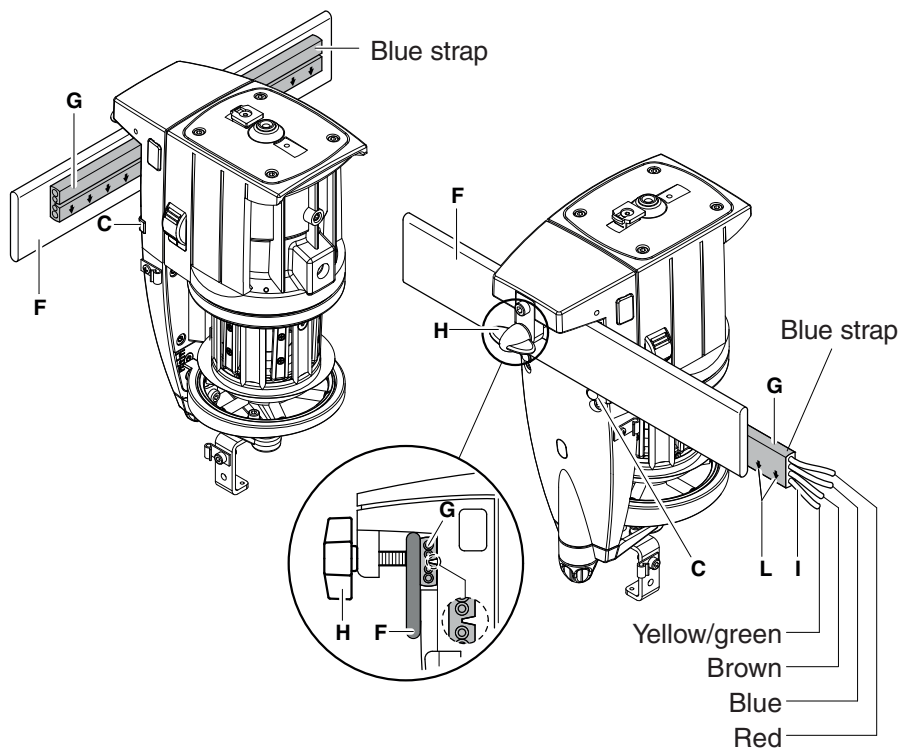


2 - INSTALLATION AND START-UP

DC version - MINI CB

The yellow/green cable (I) must be kept facing the signal lamps (C) (if the cable strip is supplied by LGL, the yellow/green cable (I) can be identified by the arrows (L) printed on the cable strip).

N.B.: Ensure that the stand onto which the yarn feeder is fastened is electrically grounded.

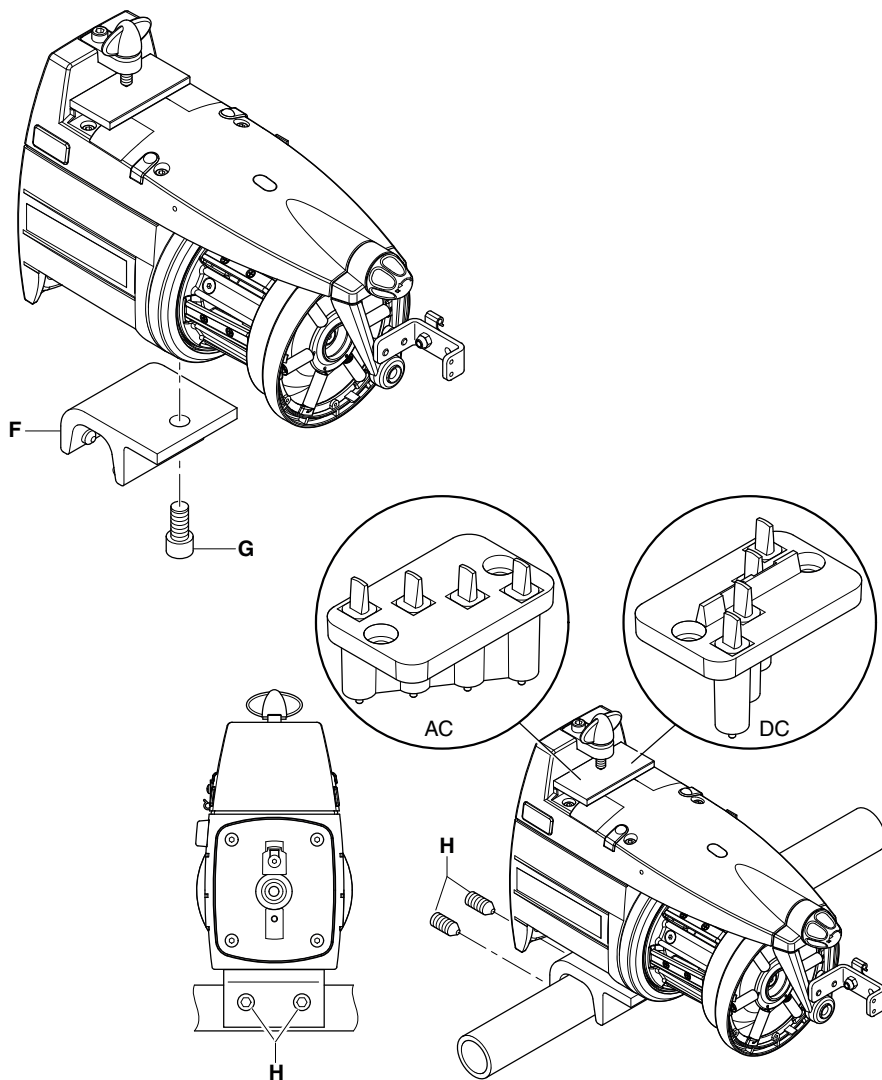


2 - INSTALLATION AND START-UP

HORIZONTAL SET-UP VERSION

For the installation of the feeder onto the machine, proceed as follows:

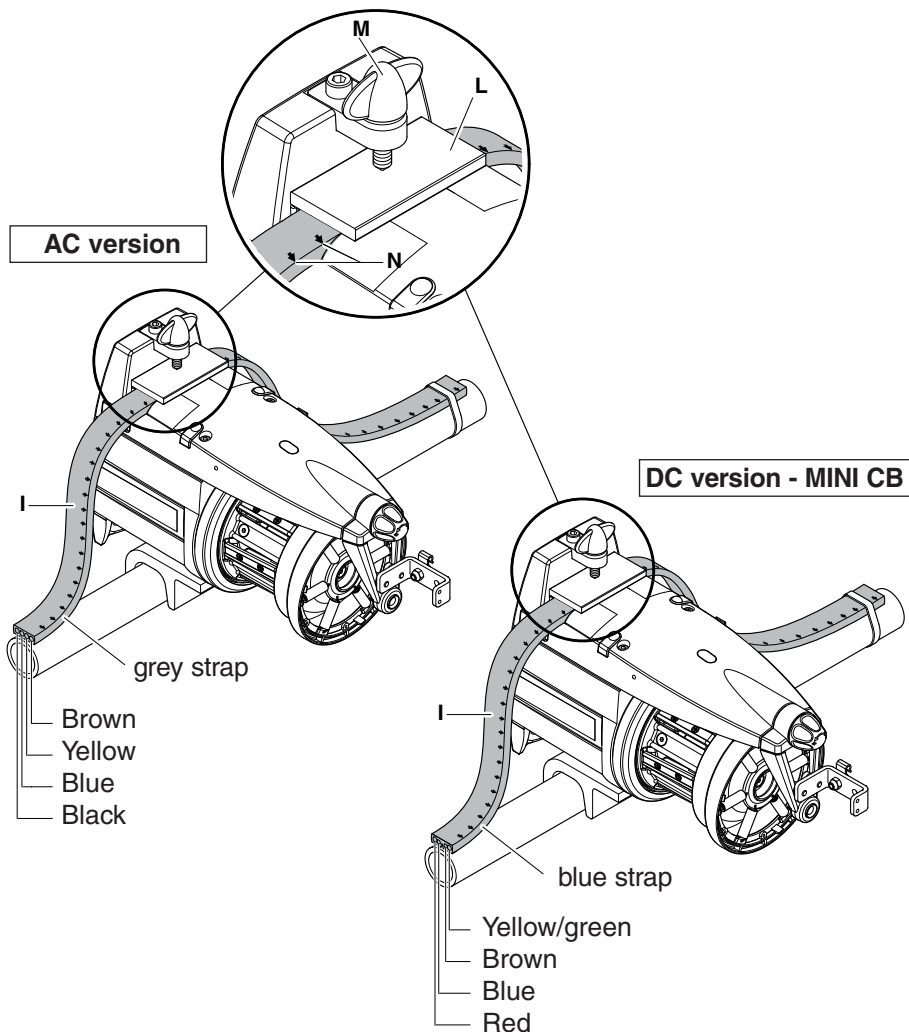
- using screw (**G**) fix clamp (**F**) underneath the feeder; fix the clamp onto the machine tube using the grub screws (**H**) located in the clamp, and position the yarn feeder so that it is set into the exact angle required for operation.



2 - INSTALLATION AND START-UP

- Connect up the feeders to the flat power cable (I) by means of the appropriate locking plate (L) then tighten it in with screw (M) located on the housing.

CAUTION: when connecting the flat power cable, keep to the printed reference marks showing the exact fixing position (the arrows (N) must point towards the front end of the feeder).

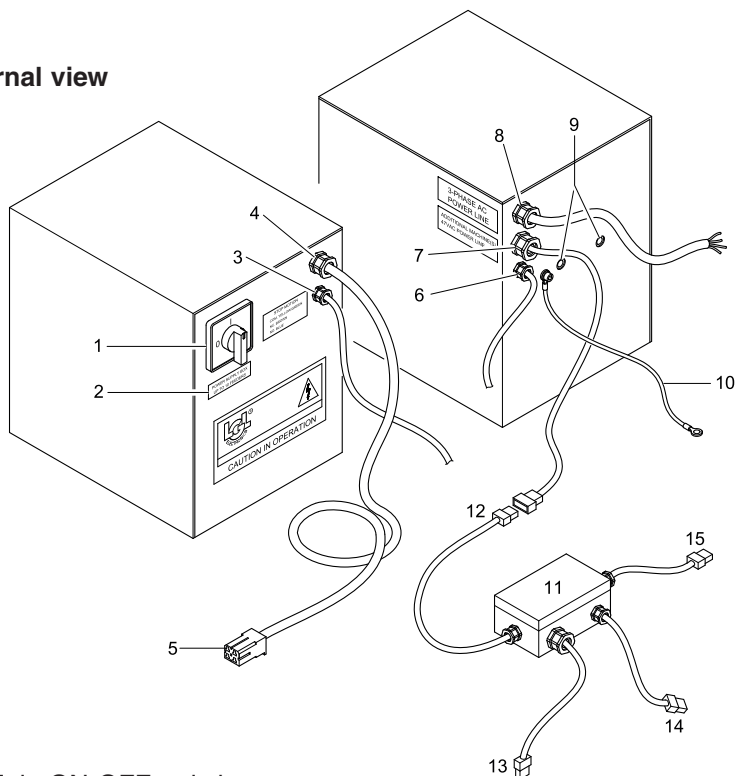


2 - INSTALLATION AND START-UP

2.2 POWER SUPPLY BOX

(Available for machines that are not originally equipped with yarn feeders)

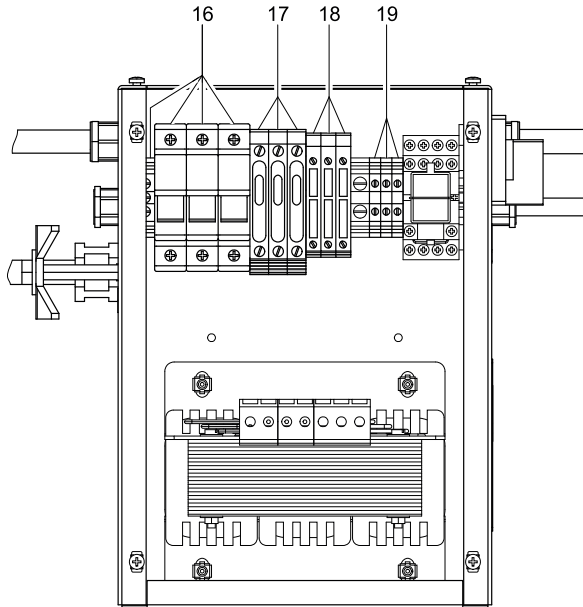
External view



1. Main ON-OFF switch.
2. Label that specifies the maximum number of feeders supported.
3. Machine STOP function, spool end or broken yarn cable (1).
4. Machine flat power supply strip connection cable (1).
5. Flat power supply strip connector.
6. AUX (additional input/output)
7. Additional machine connection cable, through cable branch boxes.
8. Mains power supply cable. *Machine-fed power supply.*
9. Fix-on holes.
10. Earthing cables. *They must strictly be connected up to the machine.*
11. Cable branch boxes for additional machines.
12. Previous machine power supply box or cable branch box connection cable.
13. Power supply cable for working machine's strip cable.
14. Machine STOP function, spool end or broken yarn cable.
15. Next in-line machine (where present) connection cable.

2 - INSTALLATION AND START-UP

Internal view



- 16. Power supply input.
- 17. Delayed protection fuses 48 V AC.
- 18. Delayed protection fuses 48 V AC main machine power line.
- 19. Machine stop cable connection clamps
 - yellow/green wire: common
 - brown wire: contact normally closed
 - grey wire: contact normally open

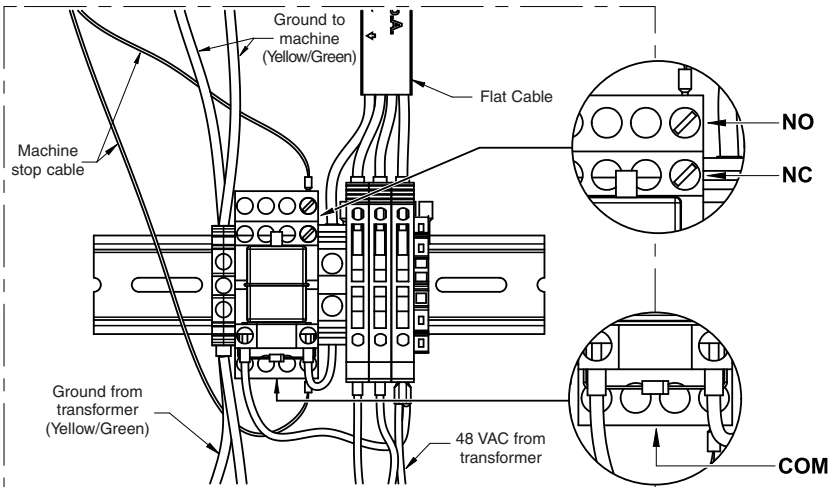
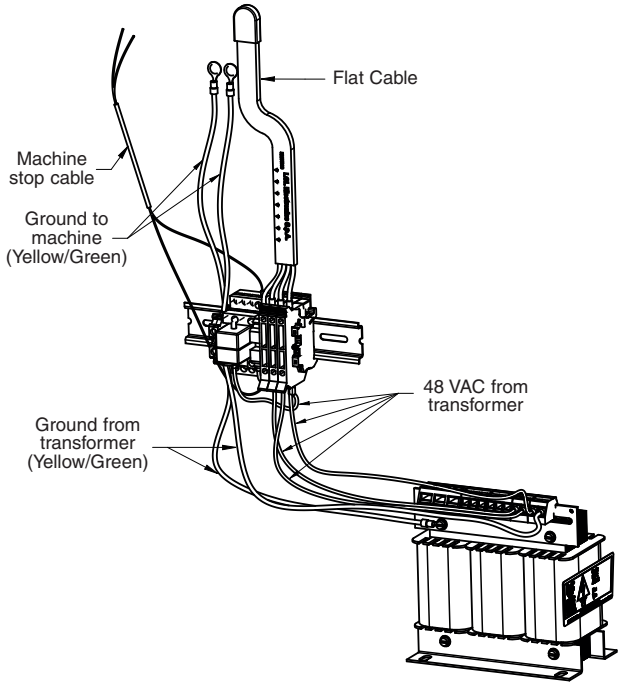
N.B. The spare fuses are located inside the relative fuse carriers (17-18)

- i*** Always replace fuses with new fuses having the same value.
- i*** Check to see that the transformer inlet connection complies with the power supply voltage.

2 - INSTALLATION AND START-UP

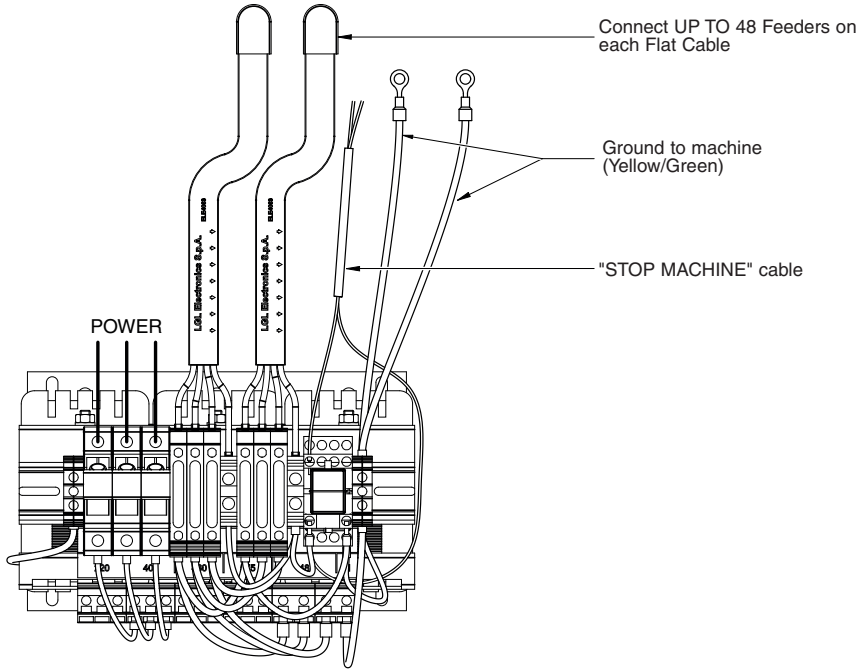
2.3 TRANSFORMER KIT

Up to 10 Feeders



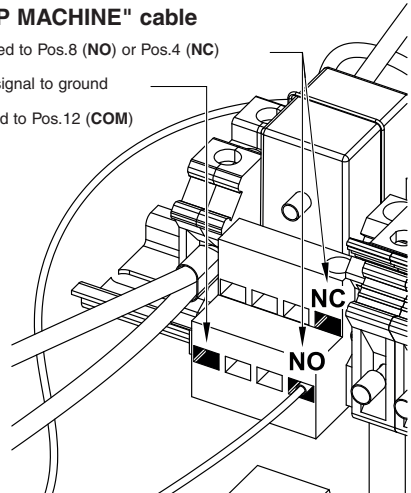
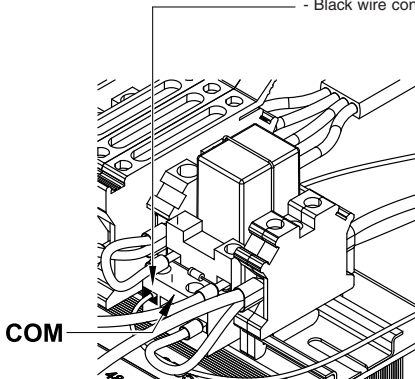
2 - INSTALLATION AND START-UP

Up to 96 Feeders



"STOP MACHINE" cable

- Green wire connected to Pos.8 (NO) or Pos.4 (NC)
- Stop machine with signal to ground
- Black wire connected to Pos.12 (COM)



2 - INSTALLATION AND START-UP

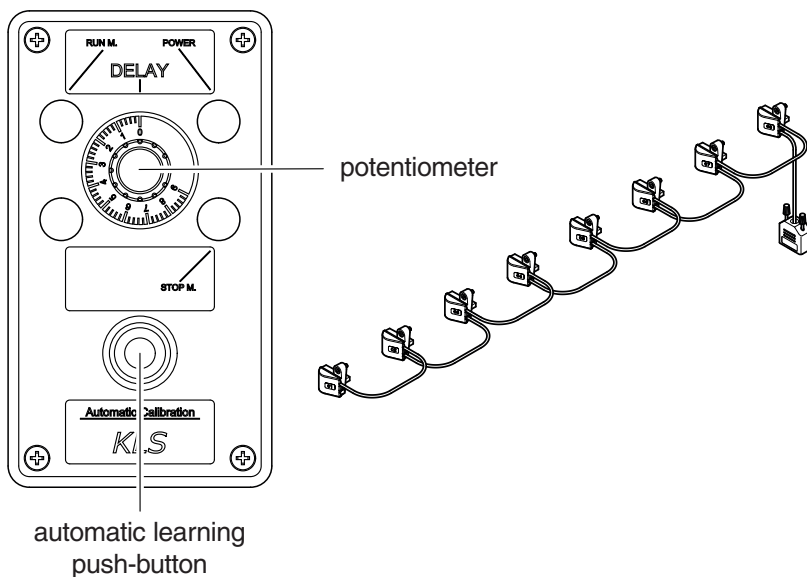
2.4 DETECTION OF YARN BREAKAGE ON FEEDER OUTLET: KLS KIT

This kit allows any irregular use of yarn by the machine to be detected without using any mechanical sensors.

These sensors bring about undesired changes in yarn tension that are likely to negatively affect the overall efficiency of the equipment.

The KLS KIT allows these sensors to be completely removed with no need to replace them, as it only makes use of the sensors already found in the feeder.

This Kit, unlike mechanical sensors, does not simply detect breakages, but also other events, e.g. cases when the yarn, though in tension, moves out of the needles and is not properly fed any longer.



Potentiometer: time set by the machine to reach the working speed from the idle state. **Set this value to 3 seconds.**

Automatic learning push-button: each feeder learns the characteristic speed of the item being processed.

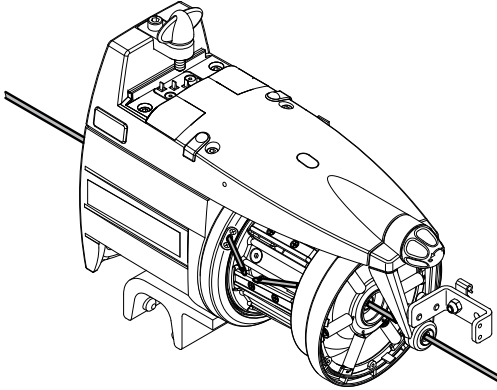
Procedure (to be carried out at every item change):

1. Press the PUSH-BUTTON. The feeders' lights will switch off.
2. Start the machine, produce a complete item then stop the machine.
During production, the outlet detection system does not operate.
3. When the machine stops, the feeders will store the speed value.
4. Upon restarting the machine, the system will be active and operating.

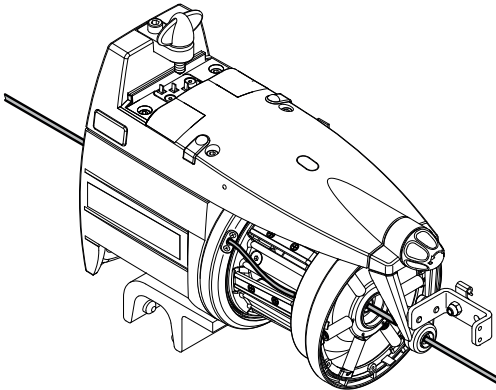
3 - THREADING AND ADJUSTMENTS

3.1 THREADING YARN FEEDER WITH THE TWM TENSION MODULATOR

Yarn feeder threading must be carried out when the device is OFF and as illustrated below:



PARTIAL THREADING



COMPLETE THREADING

To avoid damaging the TWM we recommend use of threaders that are in good condition with no accumulation around the threader-ends. Use of iron needles for threading must absolutely be avoided as they are liable to damage the

3 - THREADING AND ADJUSTMENTS

3.2 SPEED ADJUSTMENT

The MINI yarn feeder is provided with a microprocessor and an output sensor that enable **automatic speed adjustment** that conforms to machine feeder speed.

No speed adjustment is therefore required by the operator.

For applications that may require special operational conditions, please consult subsequent paragraph 4 herein.

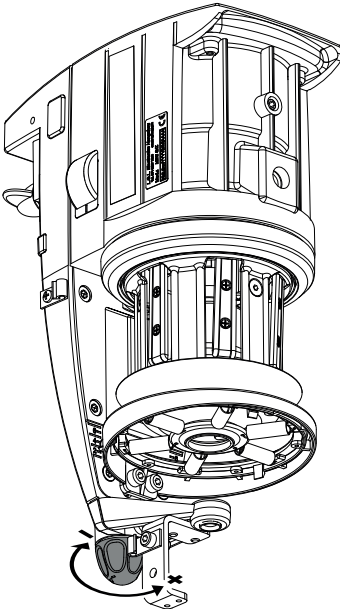
3.3 TENSIONING ADJUSTMENT

Adjust tensioning until required yarn tension is reached by acting on the outbound tension modulator (TWM) that is fitted onto the feeder.

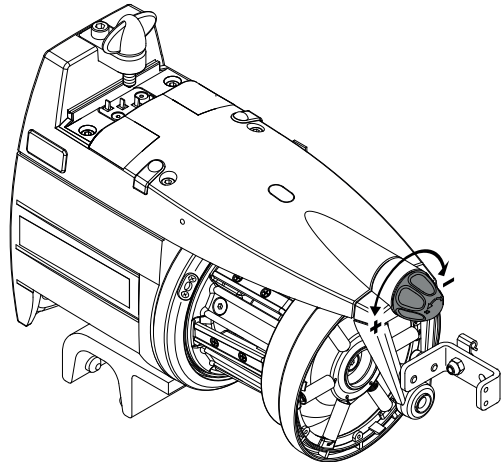
Use the adjusting twist-knob to do so.

However, tensioning adjustment is completely automatic in yarn feeders that are equipped with the ATTIVO electronic tensioner.

VERTICAL SET-UP VERSION



HORIZONTAL SET-UP VERSION



4 - OPERATIONAL PARAMETERS AND YARN CONSUMPTION KIT

4.1 DIP-SWITCH SETTINGS

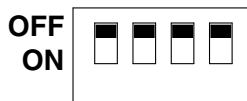
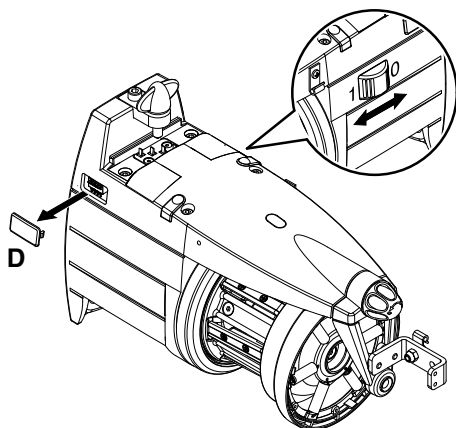
Access to the DIP-SWITCH is enabled by snapping off side cap (A) located on the feeder housing.

DS1	SETTING MEANING (Default Position = OFF)
OFF	Z Rotation
ON	S Rotation

DS2	SETTING MEANING (Default Position = OFF)
OFF	Standard optical sensor sensitivity.
ON	Increased optical sensor sensitivity, set when operating with yarn counts thinner than 40 den.

DS3	SETTING MEANING (Default Position = OFF)
OFF	Work position (standard)
ON	Self-calibration of magnetic sensors. The recommended procedure is stated below: <ul style="list-style-type: none"> - Set switch 0-1 to 0. Set DS3 to ON. - Remove the yarn reserve from the spool body, keeping the feeder threaded. - Set switch 0-1 to 1. The feeder winds the reserve laying down a fixed number of turns on the spool body - If the procedure has been correctly performed, the feeder will put the indicator lamps on for one second to indicate that calibration has been correctly performed.

DS4	SETTING MEANING	
	DC VERSION - MINI CB	AC VERSION
OFF	Bus termination OFF.	Communication speed 38400 bit / second
ON	Bus termination ON (see paragraph 4.2).	Communication speed 9600 bit / second



DS1 DS2 DS3 DS4

Note: To enable the function performed by each Dip-Switch, the feeder needs to be switched off by acting on switch 0-1; then set the Dip-Switch to the desired position and switch the feeder on again.

4 - OPERATIONAL PARAMETERS AND YARN CONSUMPTION KIT

4.2 INSTALLATION OF THE YARN CONSUMPTION KIT

This kit enables display in the relative page on the machine screen, of the simultaneous yarn consumption for all the feeds put together, expressed in centimetres per machine rows.

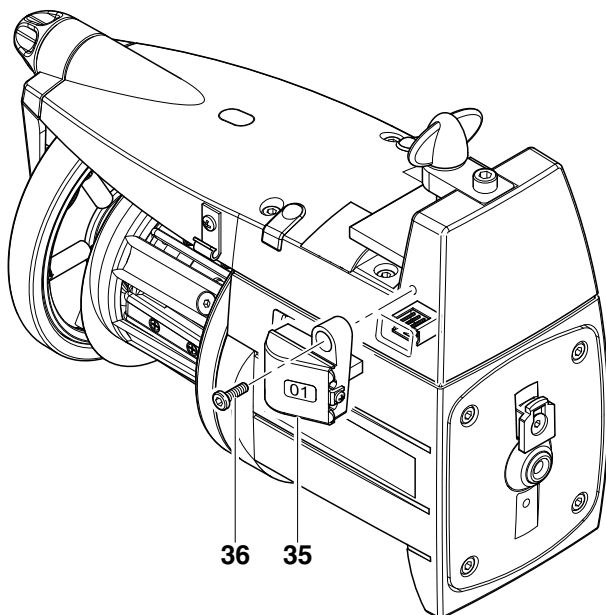
The kit comprises a set of numbered **T-connectors** with the relative connection cables. If the machine is not equipped to display yarn consumption, LGL provides a small yarn consumption display kit (POCKET), with an appropriate adapter cable. The kit displays a read-off of the actual yarn consumption in centimetres (or inch) per no. of machine rows if the machine provides a synchronisation signal. Alternatively it also displays the cm (or inch) / sec value, to be set through the Pocket.

Installation:

Plug the **T-connector** into the serial communication port and carefully check to see that the number on the connector corresponds with the machine-feed number.

Using its appropriate screw (**36**) fix the connector (**35**) to the outer feeder housing. If not already connected, connect up the relative cables as shown in figure 2. below. Connect the cable leading from the first feeder up to the machine.

FIGURA 1



4 - OPERATIONAL PARAMETERS AND YARN CONSUMPTION KIT



On the first and on the last feeders that are fitted on the machine, DS4 shall be set to ON (Bus termination).

Practical example: A yarn consumption kit has been installed onto the machine and a further number of feeders must now be added on. Proceed as follows:

- 1 On the kit's last feeder, change the DS4 setting from ON to OFF;
- 2 Connect up the new set of feeders in-line subsequent to the kit's last feeder, making sure that the number of the T connectors is progressive and follows the number of the kit already installed.

N.B. : for these cases it is important that LGL is informed accordingly, so that the T connectors are appropriately supplied with a correct progressive numbering.

- 3 The feeder that becomes the last in the new kit shall have DS4 set to ON (Bus Termination).

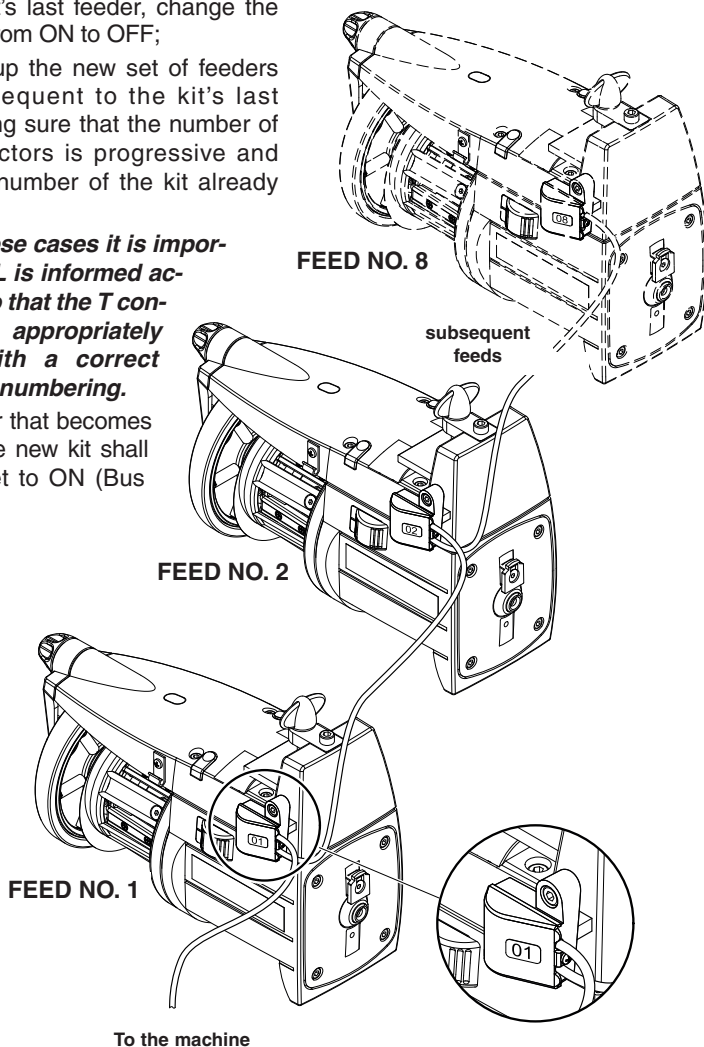


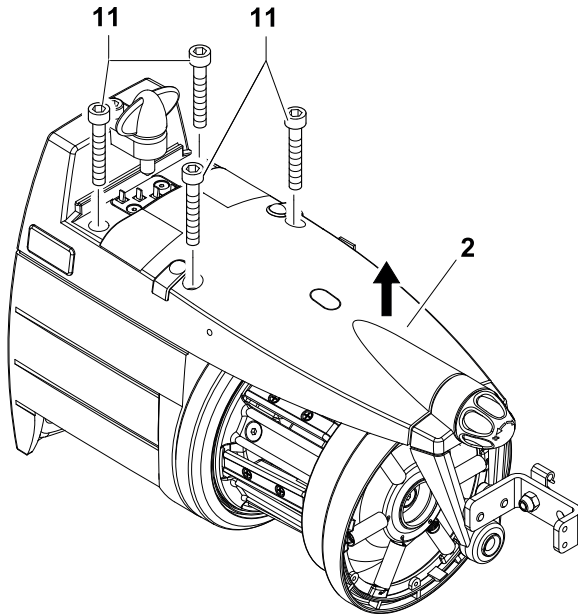
FIGURE 2

5 - MAINTENANCE OPERATIONS

5.1 REMOVAL OF THE YARN SPOOL BODY

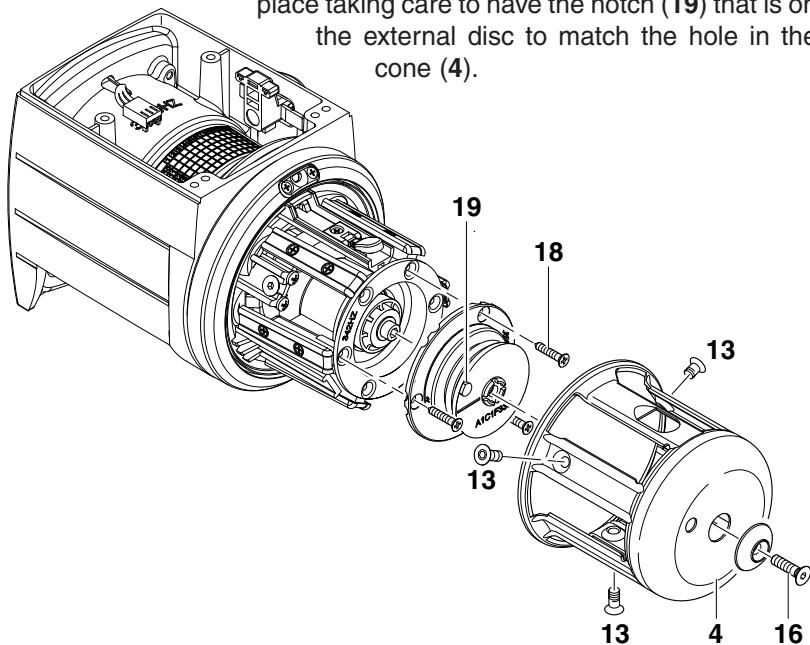
Proceed as follows to remove the yarn spool body:

- 1) Switch the machine OFF and unplug power mains.
- 2) Disconnect the flat strip power cable and disassemble the feeder. Lift it off the machine.
- 3) Remove the 4 screws (11) belonging to the housing panel (2).

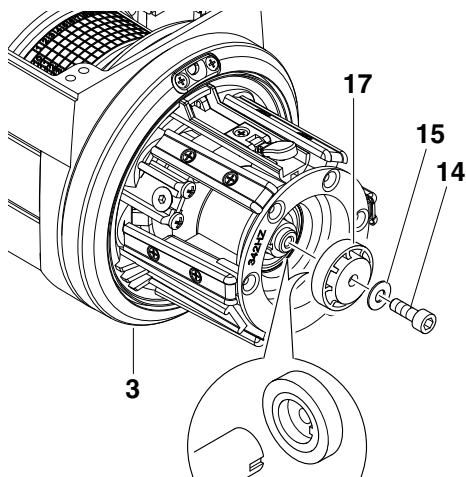


5 - MAINTENANCE OPERATIONS

- 4) Unscrew the screw (16) that fastens the plug and remove both items; unscrew the 3 fastening screws (13) that are on the thread winding cone (4) and remove the latter.
- 5) Remove the absorber that is fastened to the teetered hub by unscrewing the related fastening screws (18). The absorber shall be later put back in place taking care to have the notch (19) that is on the external disc to match the hole in the cone (4).

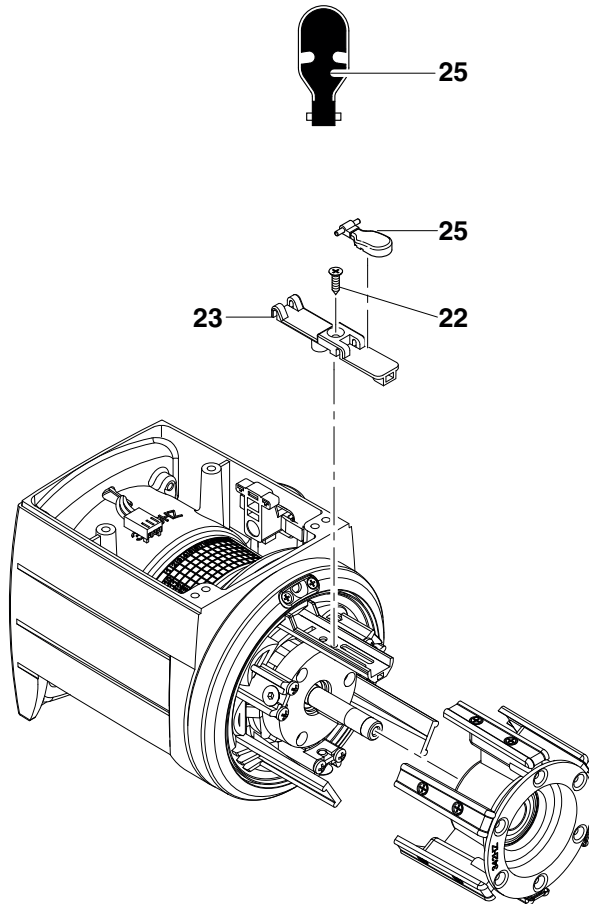


- 6) By holding the flywheel (3) steady (3), unscrew the screw (14) and remove it along with the Belleville spring (15); remove the protection (17) from its location on the bush. The latter shall be fit back in place in the same position, i.e. with the protection reference notch into the bush hollow.



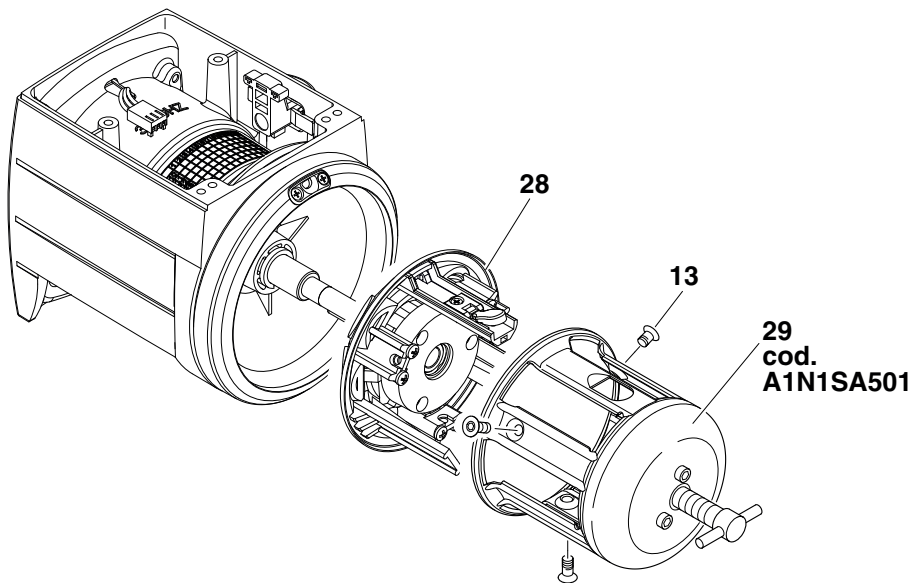
5 - MAINTENANCE OPERATIONS

- 7) Remove the winding assembly by taking it out of the shaft.
- 8) At this point, if necessary, you may unscrew the fastening screw (22) to pull out the feeler retainer (23) and the thread feeler (25) (black-coloured plastic).



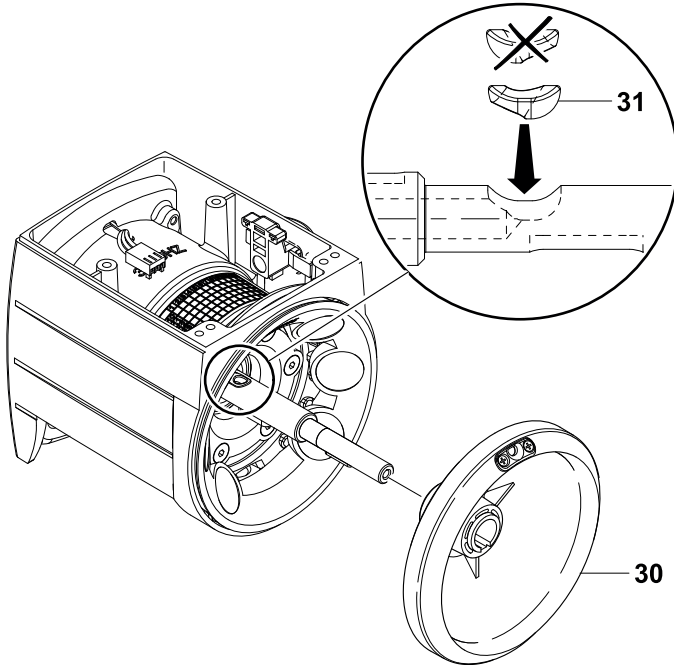
5 - MAINTENANCE OPERATIONS

- 9) Removal of the front magnet holder (28) must be carried out using the appropriate tool (29) that needs to be fixed onto the magnet holder being removed, using the three fixing screws (13) belonging to the yarn spool body. Once removed, detach it from the tool used for extraction.



5 - MAINTENANCE OPERATIONS

10) At this point the flywheel (30) can be removed. It is now also easy to replace the ceramic bushing (31) located in the yarn feeder shaft.



5.2 REPLACEMENT OF THE MAIN ELECTRONIC CONTROL BOARD

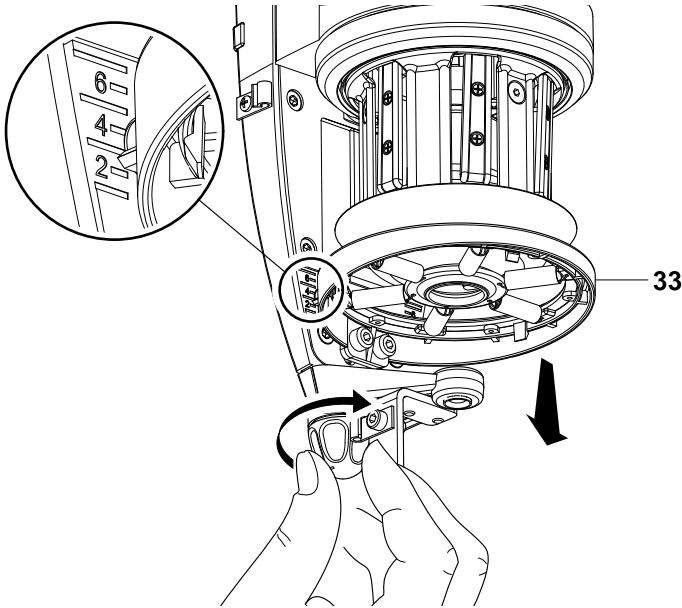
The main electronic control board can only be replaced by a regularly authorised L.G.L. service and repair centre.

6 - COMPONENT REPLACEMENT

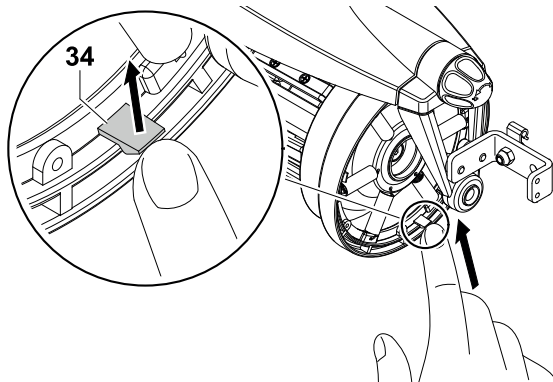
6.1 REPLACEMENT OF THE TWM TENSIONER

For removal of the TWM tension modulator proceed as follows:

- 1 Turn the knob until the tensioner (33) reaches the end of its run, at number 0 on the index scale (Figure A).

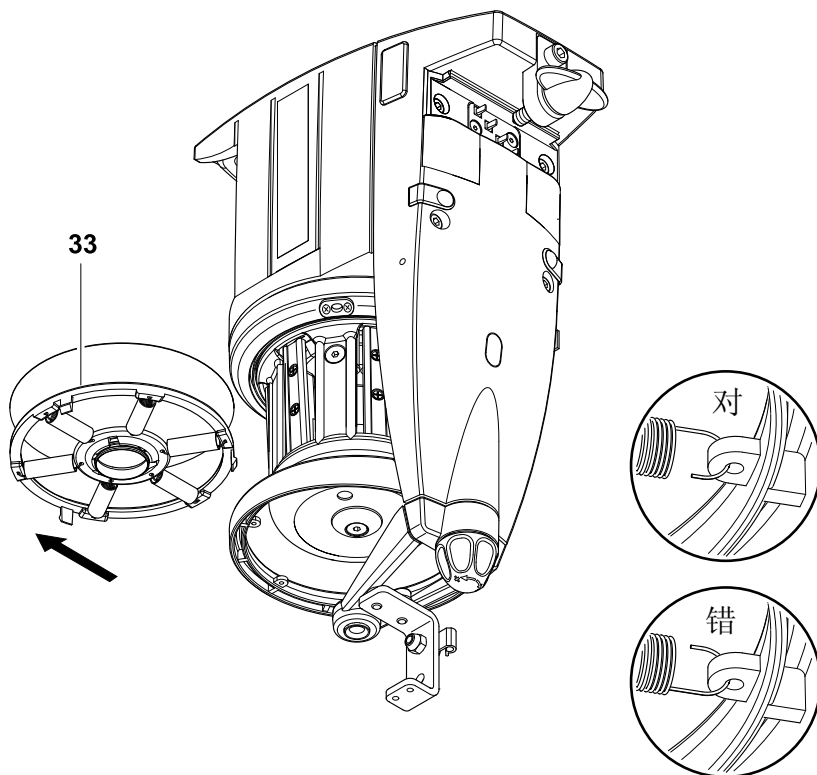


- 2) Uncouple the TWM tensioner by pressing one of the ring tabs (34).



6 - COMPONENT REPLACEMENT

- 3) Remove the tensioner (33). Pay careful attention to the way in which the springs are attached to the TWM: the spring-hooks must be hooked into place so that they face outwards from the TWM. This to prevent them from coming into contact with the truncated cone and damaging it.



7 - APPLICATION RANGE

7.1 TWM TENSION MODULATOR APPLICATION RANGES

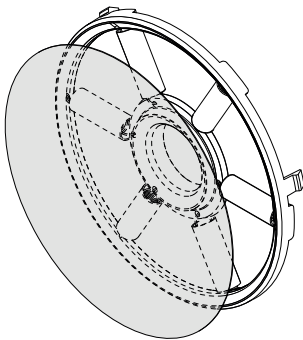
TWM TYPE K

(code no. A1N3S930-03 00 HZ / A1N3S930-04 00 HZ / A1N3S930-05 00 HZ)

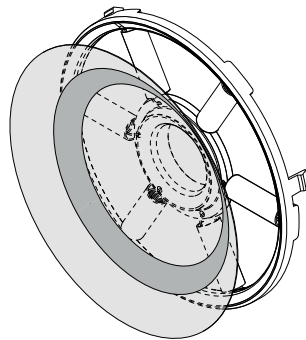
TWM TYPE KL

(code no. A1N3S930-03 KL HZ / A1N3S930-04 KL HZ / A1N3S930-05 KL HZ)

<i>type of yarn</i>	<i>springs</i>	<i>antiballoon</i> <small>(for vertical vers. only)</small>	<i>yarn range</i>
Woollen yarns	0.4	YES	From 100 Nm to 15 Nm
Cotton and viscose fibre yarns	0.4	YES	From 120 Ne to 10 Ne
High-twist, crêpe and silk yarns	0.3	NO	From 20 Den to 120 Den
High-twist, crêpe and silk yarns	0.4	YES	From 100 Den to 250 Den
Viscose and synthetic fibre yarns	0.3	NO	From 10 Den to 120 Den
Viscose and synthetic fibre yarns	0.4	YES	From 100 Den to 250 Den



TWM TYPE K

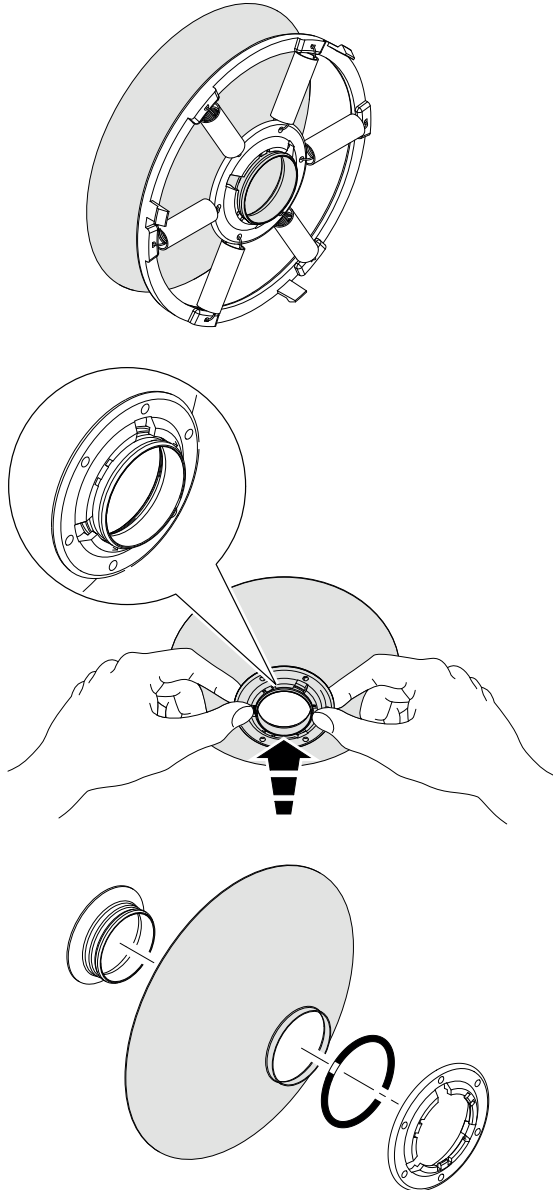


TWM TYPE KL

- For tensioning strength exceeding 10 grams, use of **TWM KI** is recommended.

7 - APPLICATION RANGE

It's possible to replace the truncated cone of TWM, keeping the disk, the o-ring and chrome ring already on TWM.



8 - CONVERSION TABLE

8.1 CONVERSION TABLE FOR THE VARIOUS YARN COUNT SYSTEMS

Nm	Ne	tex	den	Dtex	Ne _L	Nm	Ne	tex	den	Dtex	Ne _L
18.000	10,63	56	500	550	29,76	48.000	28,35	21	187	208	79,37
18.140	10,71	56	496	551	30	48.380	28,57	21	186	206	80
19.350	11,43	52	465	516	32	50.000	29,53	20	180	200	82,68
20.000	11,81	50	450	500	33,07	50.800	30	20	177	197	84
20.320	12	50	443	492	33,60	54.190	32	18	166	184	89,6
21.170	12,50	48	425	472	35	54.430	32,14	18	165	183	90
22.500	13,29	44	400	440	37,20	60.000	35,43	17	150	167	99,21
23.710	14	42	380	420	39,20	60.480	35,71	17	149	166	100
24.190	14,29	42	372	413	40	60.960	36	16	147	165	100,8
25.710	15,19	38	350	390	42,52	64.350	38	16	140	156	106,4
27.090	16	36	332	369	44,80	67.730	40	15	132	147	112
27.210	16,07	36	331	367	45	70.000	41,34	14	129	143	115,7
30.000	17,72	34	300	335	49,61	74.510	44	13	121	134	123,2
30.240	17,86	34	297	330	50	75.000	44,29	13	120	133	124
30.480	18	32	295	328	50,40	80.000	47,24	12,5	112	125	132,3
32.000	18,90	32	280	310	52,91	81.280	48	12,5	110	122	134,4
33.260	19,64	30	270	300	55	84.670	50	12	106	118	140
33.870	20	30	266	295	56	90.000	53,15	11	100	110	148,8
34.000	20,08	30	265	294	56,22	101.600	60	10	88	97	168
36.000	21,26	28	250	280	59,53	118.500	70	8,4	76	84	196
36.290	21,43	28	248	275	60	120.000	70,86	8,4	75	84	198,4
39.310	23,21	25	229	254	65	135.500	80	7,2	66	73	224
40.000	23,62	25	225	250	66,14	150.000	88,58	6,8	60	67	248
40.640	24	25	221	246	67,20	152.400	90	6,4	59	64	252
42.330	25	24	212	235	70	169.300	100	6	53	58	280
44.030	26	23	204	227	72,80	186.300	110	5,2	48	53	-
45.000	26,57	22	200	220	74,41	203.200	120	5	44	49	-
47.410	28	21	189	210	78,40						

9 - TROUBLE SHOOTING

9.1 DURING INSTALLATION

- If the yarn feeder will not work once it has been fitted onto the machine, (i.e. the orange lights won't light up and the motor won't run), check to see that the flat strip power cable has been connected correctly (par. 2.1 refers). Try loosening and reconnecting the feeder back onto the power cable once again. If it doesn't start up, try moving the fixing point on the power cable 1 cm away to the side.

If, after having tried the above options the feeder still doesn't start up, it must be replaced due to a probable failure of the main control board.

9.2 DURING OPERATION

- If after having functioned correctly, the feeder's orange signal lights won't light up when the machine stops, check to see whether the lights are still working correctly.
- If any failure by the feeder were not caused by incorrect installation or by connection errors, there probably is a failure in the main control board. In these cases the yarn feeder must be replaced and the repair operations must be carried out by regularly authorised L.G.L. personnel.

10 - STRIPPING AND SCRAPPING

10. STRIPPING AND SCRAPPING

If stripping and scrapping of the machine is required, relative rating plates and all related documents must be destroyed or cancelled. If the machine is to be scrapped by third parties, only authorised centres are to be used for any waste recovery or disposal of the ensuing materials.

If the machine is to be scrapped directly by the user, it is important that the materials are split according to their category and then disposed of separately through specialised centres.

All metal parts, the electrical motor, rubber parts and all the parts made out of synthetic materials must be separated for recycling. Scrapping must at all times be carried out in full conformity with prevailing laws in the country of use wherefore any liability for non compliance with any local requirement lies solely with the last proprietor of the machine and/or any appointed nominee.

L.G.L. Electronics will not be held liable for any damage or injury whatsoever arising from reuse of any one of the machine components for operations or assemblies that do not in any way conform to the original use the machine was intended for.

L.G.L. ELECTRONICS S.p.a.

Sede amministrativa, legale e stabilimento
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— ITALIANO —

DICHIARAZIONE DI CONFORMITÀ CE

La macchina è un alimentatore di trama per macchine per maglieria.

Produttore: **L.G.L. Electronics**

Modello: **MINI + MINI VE MINI CB**



La macchina è conforme ai requisiti essenziali delle direttive 2006/42/CE, 2014/35/UE, 2014/30/UE.

— ENGLISH —

CE CONFORMITY DECLARATION

This machine is a weft accumulator, suitable for knitting machines.

Manufacturer: **L.G.L. Electronics**

Model: **MINI + MINI VE MINI CB**



The machine is in compliance with the main requirements of directives 2006/42/CE, 2014/35/UE, 2014/30/UE.

— FRANÇAISE —

DECLARATION DE CONFORMITE CE

L'appareil est un délivreur de trame pour métiers à tricoter.

Producteur: **L.G.L. Electronics**

Modele: **MINI + MINI VE MINI CB**



La machine est conforme aux conditions requises essentielles des directives 2006/42/CE, 2014/35/UE, 2014/30/UE.

— DEUTSCH —

CE ÜBEREINSTIMMUNGS ANGABE

Die Maschine ist ein Vorspulgerät für Wirkmaschinen.

Hersteller: **L.G.L. Electronics**
Typ: **MINI + MINI VE MINI CB**



Die Maschine entspricht der wesentlichen Anforderungen der Richtlinien 2006/42/CE, 2014/35/UE, 2014/30/UE.

— ESPAÑOL —

DECLARACIÓN DE CONFORMIDAD CE

La máquina es un alimentador de trama para máquinas de género de punto por urdimbre.

Productor: **L.G.L. Electronics**
Modelo: **MINI + MINI VE MINI CB**



La máquina está en conformidad con los requisitos esenciales de las directivas 2006/42/CE, 2014/35/UE y 2014/30/UE.

— PORTOGUES —

DECLARAÇÃO DE CONFORMIDADE CE

A máquina è um alimentador de trama para máquinas de malha por urdimento.

Productor: **L.G.L. Electronics**
Modelo: **MINI + MINI VE MINI CB**



A máquina está em conformidade com os requisitos essenciais das directivas 2006/42/CE, 2014/35/UE, 2014/30/UE.

— NEDERLANDS —

VERKLARING VAN CE OVEREENSTEMMING

Deze machine is een inslagvoorspoelmachine voor breimachines.

Merk: **L.G.L. Electronics**

Type: **MINI + MINI VE MINI CB**



De machine voldoet aan de essentiële vereisten van de richtlijnen 2006/42/CE, 2014/35/UE, 2014/30/UE.

— ΕΛΛΗΝΙΚΑ —

ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ CE

Το μηχάνημα είναι ένας τροφοδότης υφαδιού που δουλεύει με μηχανικούς αργαλειούς με λαβίδες ή σαίτες.

Ïñêá: **L.G.L. Electronics**

Τύπος: **MINI + MINI VE MINI CB**



Η μηχανή πληρεί τις βασικές προϋποθέσεις που ορίζονται από τις οδηγίες 2006/42/CE, 2014/35/UE, 2014/30/UE.

— SVENSKA —

CE OVERENSSTÄMMELSEDEKLARATION

Maskinen är en stickmaskin.

Märke: **L.G.L. Electronics**

Typ: **MINI + MINI VE MINI CB**



Maskinen överensstämmer med de grundläggande kraven enligt EU-direktiven 2006/42/CE, 2014/35/UE och 2014/30/UE.

— SUOMEKSI —

CE VASTAAVUUSTODISTUS

Kone on neulekone.

Merkki: **L.G.L. Electronics**

Tyyppi: **MINI + MINI VE MINI CB**



Kone on direktiivien 2006/42/CE, 2014/35/CE ja 2014/30/UE olennaisten vaatimusten mukainen.

— DANSK —

CE OVERENSSTEMMELSERKLÄRING

Maskinen er en strikkemaskine.

Mærke: **L.G.L. Electronics**

Type: **MINI + MINI VE MINI CB**



Maskinen opfylder de grundlæggende krav i EU-direktiverne 2006/42/CE, 2014/35/UE og 2014/30/UE.

Gandino, 01/01/2016

Authorized to compile the technical file

Il Direttore Generale: Ing. Zenoni Pietro

A handwritten signature in black ink, appearing to read 'Ing. Zenoni Pietro', located below the printed name.



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DECLARATION OF CONFORMITY UKCA

The machine is a weft accumulator.

Manufacturer: **L.G.L Electronics S.p.A** **UK**
Model: **MINI** **CA**

L.G.L Electronics S.p.A DECLARE

under its responsibility that the MINI are designed, manufactured and commercialized in compliance with the following UKCA Standards:

- The Electrical Equipment (Safety) Regulations 2016 – UK SI 2016 No. 1101
- Electromagnetic Compatibility Regulations 2016 – UK SI 2016 No. 1091
- Supply of Machinery (Safety) Regulations 2008 – UK SI 2008 No. 1597

Gandino (BG), 19/09/2022

CEO: Pietro Zenoni

A handwritten signature in black ink, appearing to read 'Pietro Zenoni', is written below the printed name.



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commercial reason without prior notice and without any obligation
to supply these modifications to the machines, already installed.