OPERATING INSTRUCTIONS

Electronic digital position indicator

DD51-E *(GN 9054)**
DD51-E-RF

*(Product series valid only for Germany)

elesa®

Contents

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

1. Safety Instructions

The product has been designed and manufactured in accordance with the current regulations. The product leaves the factory ready for use and complies with the safety standards. To maintain the product in this state, it is necessary that it is assembled and used properly, in the closest compliance with this instructions manual and with the following specific safety precautions.

Before installing and using the DD51-E, read carefully this manual, which is intended as an indispensable supplement to the existing documentation (catalogues, data sheets). Morever, all the rules of law must be observed, in regard to accident prevention and environmental protection.

The use, without complying with the descriptions / specific parameters, (in combination with systems / machines / processes to be controlled), can lead to a malfunction of the product, causing:

- health hazards,
- environmental hazards,
- damage to the product and to its proper functionality.

The device must not be used:

- in explosion hazard areas;
- in medical / life support areas and equipment.

Do not open the equipment and do not make any modifications! Modification of the equipment could adversely affect the reliability of the device and could lead to hazards! Do not attempt any repairs. Always return any defective equipment to the manufacturer! Any breach of the integrity of the device as delivered will invalidate the warranty.

Setup/Commissioning

In the event of abnormal behaviour (including change of operating conditions), the device must be shut down

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

immediately. Installation and commissioning must only be carried out by adequately trained and authorised personnel. After correct assembly and commissioning, the device is ready for operation.

Maintenance/repair

Switch off the power supply to the equipment before carrying out any operation. Maintenance must be performed only by trained and authorised persons.

Do not open or modify the indicator case. Tampering with this product can compromise the correctness and accuracy of its function.

In the event of a malfunction, do not attempt to repair the unit and contact the Elesa sales office.

1.1 Product release information

Although almost all features are the same as in previous releases, this manual specifically refers to devices updated to firmware revision 6.0 or later.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operating in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy: if not installed and used in accordance with the instructions manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

2. Description

The DD51-E position indicators, with battery power supply, can be used, mounted on pass-through shafts, to provide the reading of the absolute or relative positioning of a machine component.

Caratteristiche Meccaniche - Elettriche	
Power supply	Lithium battery CR2450 3.0 V
Battery life	Up to 5 years (3 years for RF version)
Display	5-digit LCD of 8 mm height and special characters
Reading scale	-19999; 99999
Number of decimal digits	programmable
Unit of measure	mm, inches, degrees programmable
Rotation max. speed	300/600/1000 r.p.m. (2) programmable
Precision	10.000 impulses/revolution
Protection level	IP65 or IP67
Working temperature	0 °C ÷ +50 °C
Storage temperature	-20 °C ÷ +60 °C
Relative humidity	max. 95% a 25 °C without condensation
Environment	indoor use
Interference protection	Complies with Directive 2014/53/EU (RED).
Conditions of use	For use in closed and sheltered places only
Altitude	up to 2000 m

(2) Default: 600 r.p.m.

A rotation speed higher than 600 rpm can only be maintained for short periods of time.
The maximum speed value affects the battery life.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

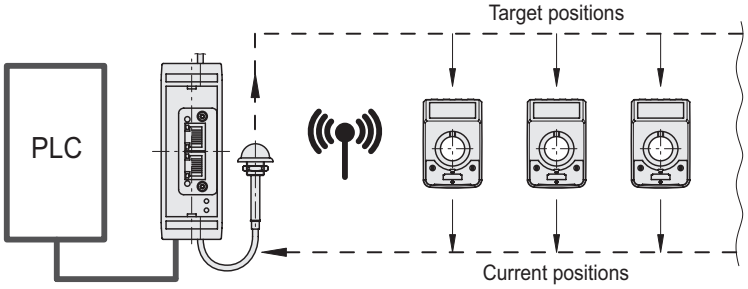
2.1 Version – DD51-E-RF

The DD51-E-RF is compatible with Elesa wireless network which allows meters and electronic indicators to communicate via radio with a PLC.

Elesa wireless network is made by the following components:

- One control unit UC-RF
- Max 36 device as DD51-E-RF, DD52R-E-RF or MPI-R10-RF

The UC-RF exchanges information with the DD51-E-RF via radio frequency and makes it possible to set the target position and check the current position of each indicator. Through an interface, available for the most common industrial buses (ProfiNet, Ethernet/IP, Modbus/TCP, and others), the UC-RF control unit allows the exchange of this information with a PLC and/or a generic controller of the machine.

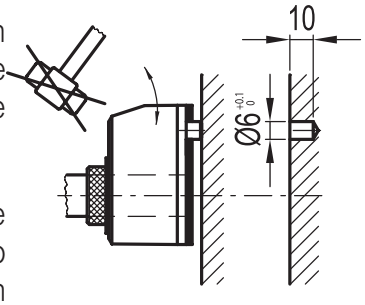


3. Installation

1.Drill a Ø 6x10 mm hole in the machine body with a 22 mm centre distance from the shaft for mounting the rear reference pin.

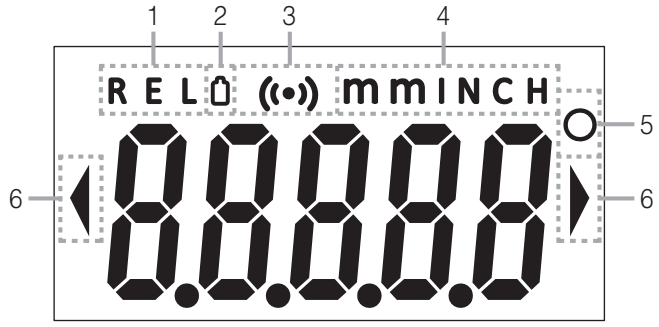
2. Mount the indicator on the shaft and make sure the reference pin fits into the hole.

3. Lock the bushing on the shaft by tightening the grub screw with a 2.5 mm hexagon socket (as per UNI 5929-85).



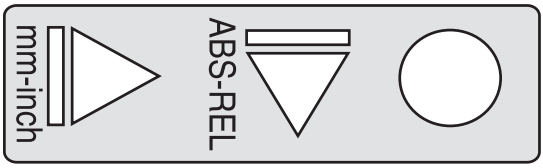
Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

4. Display



1. Relative mode indicator
2. Low battery level indicator
3. Connection indicator (only for DD51-E-RF)
4. Unit of measure: mm, inch
5. Unit of measure: degrees
6. Target position indications

5. Key functions



Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

Key Or Key Combination	Operating Mode	Programming Mode
○	Keeping the key pressed down for 3s activate programming mode. When in target mode, it reacts to a short press according to the setting of item _ _ _ _ 0 of the main menu (chap. 8.3): *d_tArG*: When a target is loaded, the display shows the current absolute position. By pressing the key, the position of the destination to be reached appears on the display. *d_toG0*[DEFAULT]: when a target is loaded, the display flashes the distance from the current position to the target position to be reached. By pressing the key, the current absolute position will appear on the display. *0FF*: the function is disabled.	Select the item menu or confirm selection or insertion of the parameter value

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

	Select the measure mode: *ABS*: absolute measure mode *REL*: relative measure mode It is possible to choose one of the following options (see item _ _ O _ _ of the menu - chap.8.3): *ArCLr* [DEFAULT]: when changing from *ABS to REL* the counter is reset. *Ar*: when changing from *ABS* to *REL* the counter is not reset. *OFF*: the function is disabled.	Digit increase selected / exit
	Unit of measure selection. The available options are: millimetres, inches and degrees. It is possible to choose one of the following options (see item _ _ _ _ 0 of the menu - chap.8.3): *ALL* [DEFAULT]: selectable units of measure: mm, inch, degrees *nodEG*: selectable units of measure: mm, inch *OFF*: the function is disabled	Scroll down the list of possible selections or menu items / select the next digit

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

	Programmable for one of the following functions (see menu item 0 _ _ _ _ 0 – chap.8.3): *P_0rG* [DEFAULT]: shows and allows you to set the *0riGin* parameter. *P_StP*: shows and allows you to set the *StEP* parameters. *P_0FS*: shows and allows you to set the *0FFS* parameters. *0FF*: the combination is disabled.	N/A
	In relative measure mode, resets the measure. In absolute measure mode it is programmable for one of the following functions (see menu item _0 _ 0 – chap.8.3): *L_0FS* [DEFAULT]: select one of the offsets and set the measure using it together with the Origin parameter (see chap.7.5). *0FF*: the combination is disabled.	N/A

6. Switching on/off the device

6.1 Switching on the device

After reading and understanding the “Safety Instructions” section, proceed by switching on the indicator.

To switch on the indicator, hold down  while pressing the key  .

The display will switch on and the indicator will be ready for use.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

6.2 Switching off the device (for storage only)

To switch the system off:

- select the *rESEt* item from the main menu (see chap.8.3)

- using the key 

, scroll through the items to select OFF.

- press the key  to confirm. The display will switch off and the indicator will go into sleep mode.

7. Operational mode

7.1 Reference points, origin and offset

When the device is turned on or reset, the position of the shaft at that moment is set as the origin of the measure.

The value attributed to this position is given by the parameters, Origin and Offset, which can be set by the user. Origin is an arbitrary number that can be set in the range -19999 ÷ 99999 depending on the resolution set and is to be considered as the machine's limit switch value in its default conditions.The offset is added to Origin which is always an arbitrary value that can be set in the range -19999 ÷ 99999 depending on the resolution and which allows you to move the actual origin of the measure based on any changes in the machine configuration.

For example, a certain set point can operate different tools with relative displacements of the point of origin. For example, in the case of a tube cutting machine the device indicates the position of the stop that determines the length of the tube. The limit switch point is fixed but it does not necessarily correspond to a zero length of the tube and therefore Origin will be different from zero but always the same.

However, the machine makes it possible to mount different blades depending on the type of tube and these can have different positions and/or thicknesses.Therefore the actual length will have to be corrected with a determined value which will be memorised as an offset.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

For greater flexibility of use, the DD51-E permits storage of up to 10 different offset values.

To program the offset values see the OFFS parameter in chap. 8.2 However, during installation and for other specific applications, it is useful to be able to reset the internal reference value in another position. For this purpose, see chap. 8.5.1.

WARNING: The value of the Origin parameters and the offsets are the same for the mm and inch units of measure and are displayed, depending on the unit of measure in use (see chap. 7.4), with the appropriate conversion coefficient.In the case of degrees, these parameters are totally different and independent from the previous ones.

7.2 Resolution

The device manages different measure display resolution values for each of the three units of measure managed (mm, inch and degrees). The same display resolution set is used to set different parameters such as Origin, offsets and targets.

WARNING: If the resolution of one of the units of measure is changed, to avoid setting errors, all the parameters that are affected are reset: Origin, offset, etc.: It is therefore advisable to decide and set the display resolution of all units of measure as a first step in installing the device. To make the most of the device's measure capacity, the resolution is automatically reduced if the measure to be displayed exceeds the capacity of the display. The measure on the display will flash.

In this case, the resolution variation is temporary (it is restored if the display is able to display the measurement with the set resolution) and has no effect on the set parameters.

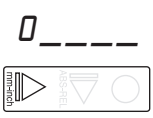
7.3 Absolute or relative measure selection

Press the key 

to select the absolute or relative measure mode. The relative measure mode is indicated on the display by the *REL* symbol. In the case of

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

absolute measure mode, no symbol appears.



It is possible to change the function of the key by choosing one of the options available in the menu item _ _ 0 _ _

The available options are:

- *ALL* (default): when changing from *ABS* to *REL* the counter is reset.
- *nodEG*: when changing from *ABS* to *REL* the counter is not reset.
- *OFF*: the key 

is disabled and it is not permitted to change the measure mode.

7.4 Unit of measure selection

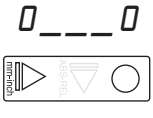
Press the key 

to select the required unit of measure.

The available options are millimetres, inches and degrees.

The selected measure mode is indicated on the display by the symbols:

- *mm*: millimeters - *INCH*: inches - *D*: degrees



It is possible to change the function of the key by choosing one of the options available in the menu item. 0_ _ _ _

The available options are:

- *ALL* (default): selectable units of measure: mm, inches and degrees.
- *nodEG*: selectable units of measure: mm, inch
- *OFF*: the key 

is disabled and it is not permitted to change the selected measure mode.

7.5 Reference point setting

By pressing the key combination 

it is possible to reset the measure references of the device by loading

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

the origin value and an offset value (see chap. 7.1).

By pressing the key combination + the screen will show the last offset value used (e.g *OFS 0*). It is possible to select the desired offset value by pressing the key and then confirm by pressing the key .

It is possible to change the function of the key combination by choosing one of the options available in the menu item _ _0 _ 0

The available options are:

- *P_OFS*: the key combination allows you to select an offset and set the origin value.
- *OFF*: the key combination + is disabled.

WARNING: This function is available only in absolute measure mode.

7.6 Direct programming of Origin, Offset and Step parameters

The key combination + allows direct access to the programming of one of the following parameter: Origin, Offset or Step.

It is possible to change the function of the key combination by choosing one of the options available in the menu item 0 _ _ _ 0.

The available options are:

- *P_OrG*: direct programming of the absolute reference value (Origin parameter)
- *P_StP*: direct programming of the reading after one revolution (Step parameter)
- *P_OFS*: direct programming of the offset value (OFFS parameter)

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

- *OFF*: the key combination  is disabled.

For programming the parameters listed above see parameter *0___0* of chap. 8.3.

7.7 Targets

The DD51-E allows you to set up to 32 target positions allowing you to store any relevant and frequently used settings.

7.7.1 Programming the targets

To program the targets:

- select *tArGE* in the main menu (see chap. 8.3)
- select *PrOGt* (see chap. 8.4)
- select the desired memory location (from *PtG01* to *PtG32*) using the keys  and  .
- press the key  to select.
- follow the instructions in chap. 8.1 to set the desired value.

7.7.2 Load a target:

To load a target:

- select *tArGE* nel menu principale (see chap. 8.3)
- select *LOAdt* (see chap. 8.4)
- select the desired target value (from *LtG01* to *LtG32*) using the keys  and  .
- Press the key  to select.
- The selected target value is displayed.
- Press  again to confirm or press  to return to the target selection list.

7.7.3 Indications for reaching the target position

When a target is selected it is sent by the PLC (RF version only), the device will suggest the direction of rotation of the shaft to reach the target through the symbols ◀ ▶ of

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

the target position indicators.

It is possible to set an acceptable tolerance value for the targets through the *PtOLL* parameter so that the target position is considered to have been reached when the difference between the set target and the current position is less than *PtOLL* in absolute value.

The target position ◀ ▶ indicators work, depending on the, *dir* and *PtOLL* parameters, as in the following table:

T = target value set

M = actual measure

Toll = tolerance (see *PtOLL*)

	dir –o	**dir o--**
M < T - Toll	◀ (blinking)	▶ (blinking)
T - Toll ≤ M < T	◀	▶
M = T		
T < M ≤ T + Toll	▶	◀
M > T + Toll	▶ (blinking)	◀ (blinking)

7.7.4 Disabling the target

If a target is active, it can be cancelled by accessing programming mode and selecting the *StoPt* option.

7.7.5 Display in target mode

By pressing the key ○ when a target is active, you can view the current position or the target position depending on the device settings.

It is possible to modify the function of the key and the target mode by selecting one of the options available in the menu item ____0 (see chap. 8.3)

The available options are:

- *dtArG* (default): when a target is activated, the display

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

shows the actual absolute position and the indication to reach the target (see chap. 7.7.3).

Pressing the key  shows the set target position.

- *dtoGo*: when a target is activated, the display flashes showing the distance from the set target and the indication to reach the target (see chap. 7.7.3). When the target is reached, less than the set tolerance, the display shows the current position and stops flashing.

Pressing the key  ,the display shows the current absolute position.

7.8 Version - DD51-E-RF

7.8.1 Programming the Net ID and Net CH parameters

Each RF device is defined within the Elesa wireless network by the following two parameters:

nEt id: this is a number between 0 and 99 and differentiates different subnets allowing different systems to work on the same RF channels.

nEt ch: this is the RF transmission channel and can be set from 1 to 36. Two or more devices set to the same Net CH cannot have the same Net ID.

These parameters can be configured in the indicator's Radio menu (see chap. 8.2) and must be set according to the PLC settings to ensure perfect communication with UC-RF.

WARNING: In pre-existing systems in which a UC-RF with a firmware release prior to 0F051120 is used (for more information refer to the UC-RF manual) it is necessary to take into consideration that the Net CHs are out of phase by 3 channels. In practice, a DD51-E-RF set with Net CH = 1 will communicate with UC-RF on CH = 4 and so on for the following channels.

It will not be possible for DD51-E-RF with firmware revision 6.0 or later to communicate with older generation UC-RF on channels 1 to 3.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

7.8.2 Targets

Using the DD51-E-RF, the target positions can be sent from the PLC to the indicators via the UC-RF control unit. When a target is transmitted, it behaves in the same way described in chap. 7.7.

WARNING: If the target transmission on UC-RF is enabled, it will be refreshed on the DD every time a communication occurs. Consequently, before disabling the target on the device (see chap. 7.7.4), disable the target transmission on UC-RF.

8. Programming mode

Press the key  p for 3 seconds to access programming mode. Depending on the setting of the *PASS* parameter (see chap. 8.6.4), the system may ask for a password to be entered. Press the key  to scroll through the list of menu items or parameters and select the desired one by pressing the key  . Press the key  to return to the previous menu level (when allowed) or exit programming mode. Programming mode is automatically exited after 30 seconds of inactivity.

8.1 Input of numeric parameters

Press the key  the selected digit, flashing, increases in value up to 9 and then returns to 0.
If the first digit on the left is selected and the parameter can assume negative values, -1 will be displayed after digit 9 and, by pressing the key again, -.

It is possible to select the digit to be changed by pressing the key  With each press, the digit to the right of the current one will be selected. If the selected digit is already at the far right of the display, the selection will jump to the first digit on the left. Press the key  to confirm the value entered. If the confirmed parameter is different from the one currently stored, the display will show the message *CHAnG*.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

WARNING: It is not possible to cancel the insertion of a parameter value but only to confirm the displayed one. If you do not want to change the value already stored, it is obviously possible to set it to the same value as before and check that the word *CHAnG*. does not appear. Or, by waiting 30s, the device will exit programming mode without saving the changes. The value of any modified parameters is stored only when exiting the programming mode. If the operation was successful, the display will show the messag *StorE*

8.2 Programmable parameters (in alphabetical order)

Parameter	Description	Available options	Default
dir	Direction of measure. Sets the positive rotation direction of the shaft.	*--o* anticlockwise *o--* clockwise	*--o*
diSP	Display orientation	*0°* *180°*	*180°*
OFFS	Offset values	It is possible to store up to 10 offset value: *OFS 0* ... *OFS 9* The settable values depend on the resolution set as follows: **Res = 1 : -19999 ÷ 99999** **Res = 0.1 : -1999.9 ÷ 9999.9** **Res = 0.01: -199.99 ÷ 999.99** **Res =0.001: -19.999 ÷ 99.999**	*0*

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

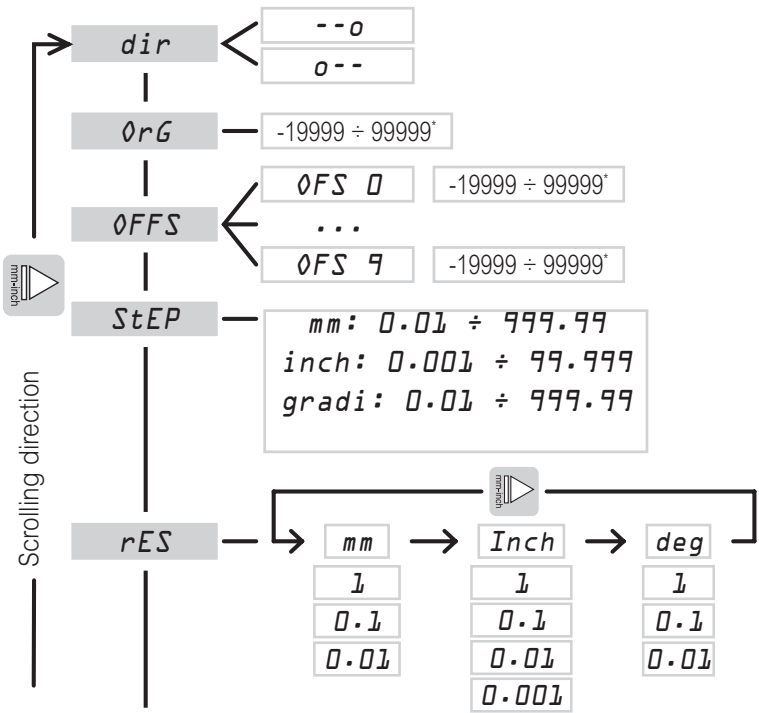
Parameter	Description	Available options	Default
OrG	Reference value	The settable values depend on the resolution set as follows: **Res = 1 : -19999 ÷ 99999** **Res = 0.1 : -1999.9 ÷ 9999.9** **Res = 0.01: -199.99 ÷ 999.99** **Res =0.001: -19.999 ÷ 99.999**	0.0
Ptoll	Tolerance of target position	The settable values depend on the unit of measure in use: ***mm: 0.01 ÷ 9.99*** ***inches: 0.001 ÷ 0.393*** ***degrees: 0.01 ÷ 9.99***	mm: 0.10 inches: 0.004 Degree: 0.10
Radio	RF settings	***nEt id: id00 ÷ id99*** ***nEt ch: ch01 ÷ ch36***	*Netid: 00* *Netch: 01*
rES	Resolution of the displayed measure	Depending on the unit of measurement, the permitted values are: **mm:** ***1***; ***0.1***; ***0.01*** **inches:** ***1***; ***0.1***; ***0.01***; ***0.001*** **degrees:** ***1***; ***0.1***; ***0.01*** *An independent resolution is stored for each unit of measure.*	mm: 0.01 inches: 0.01 degrees: 0.01°
SPEEd	Maximum permitted shaft rotation speed	300; 600; 1000	600

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

Parameter	Description	Available options	Default
StEP	Conversion coefficient between the number of shaft rotations and the selected unit of measure	*The programmable values depend on the selected unit of measure:* ***mm: 0.01 ÷ 999.99*** ***inch : 0.001 ÷ 99.999*** ***gradi: 0.01 ÷ 999.99*** *The step value for mm and inch is the same except for the appropriate conversion when viewing the measure. The Step value for degrees is, on the other hand, independent.*	001.00
____0 "t_Sho"	Display mode when the target is active. In the menu appears as the setting for the key	d_toGO or d_tArG: See chap. 7.7.5.	d_toGO
tArGe	Target positions	It is possible to store up to 10 offset values: TG 01, ..., TG 32. The settable values depend on the resolution set as follows: **Res = 1 : -19999 ÷ 99999** **Res = 0.1 : -1999.9 ÷ 9999.9** **Res = 0.01: -199.99 ÷ 999.99** **Res =0.001: -19.999 ÷ 99.999**	0.0

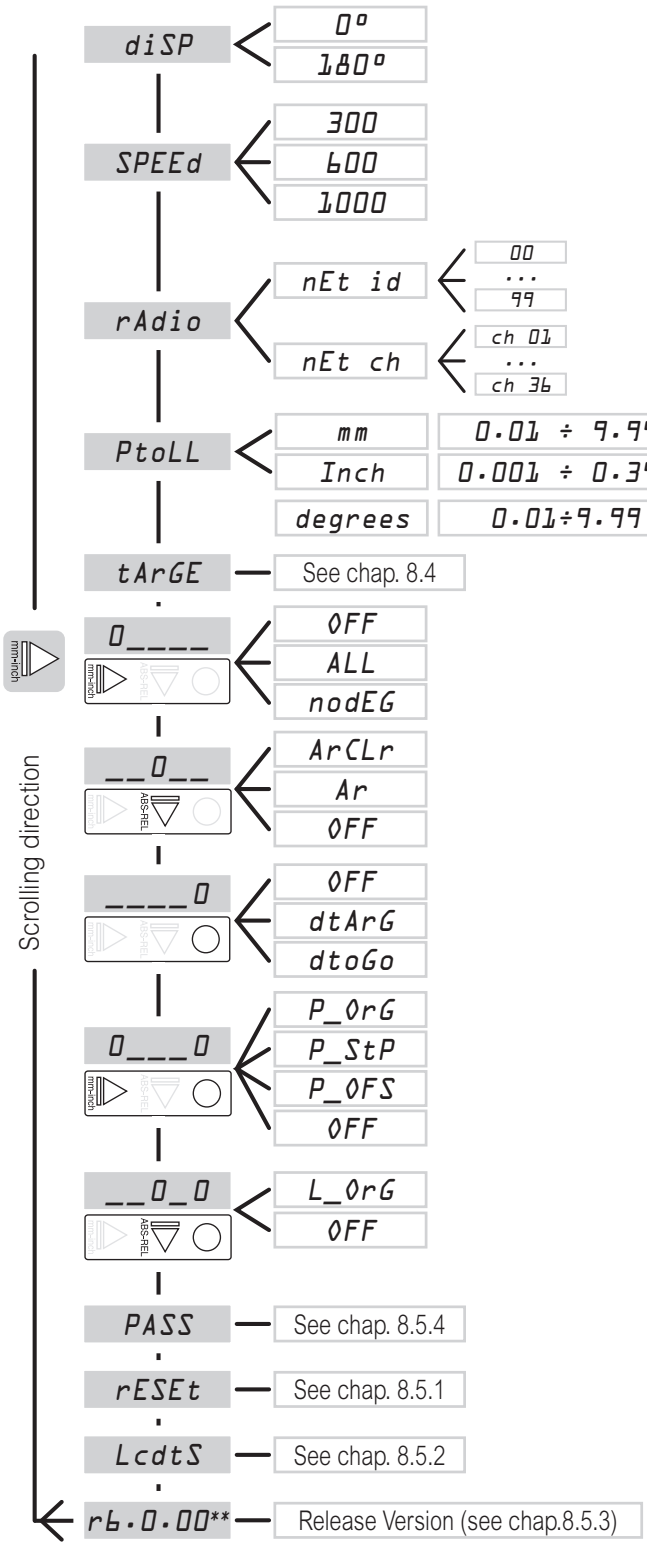
Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

8.3 Main menu tree



* The values must be divided by the number of decimal places of the resolution set.

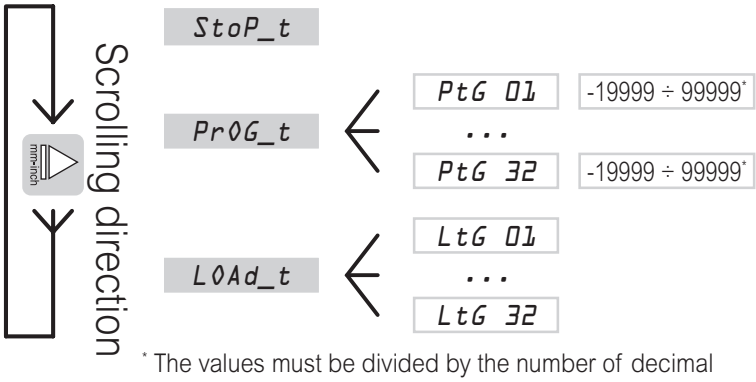
Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.



** The revision code may vary depending on the actual revision of the firmware loaded on the device.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

8.4 Target menu tree



* The values must be divided by the number of decimal places of the resolution set.

8.5 Additional functions

8.5.1 Reset

To restore the factory settings on the device:

- select the voice **rESEt** from the main menu (see chap. 8.3)
- using the key ABS-REL select **ALL**.
- press the key ○ to confirm.

To reset the only internal reference measure:

- select the voice **rESEt** from the main menu (see chap. 8.3)
- using the key ABS-REL selezionare **ALL** .
- press the key ○ to confirm.

To exit the reset command, press the key mm-inch or:

- using the keys ABS-REL and ABS-REL select No.
- press the key ○ to confirm.

8.5.2 LCD test

The **LcdtS** item in the main menu allows you to turn on all the segments and symbols of the display to check that it is working correctly.

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

8.5.3 Device version

The device version code is displayed as the last item of the main menu, with the r as the first character. By pressing the key ○ several times, other data are displayed which, if support is required, must be noted and provided to Elesa.

WARNING: A variation of the last two digits in the revision code has no impact on the device's features and performance.

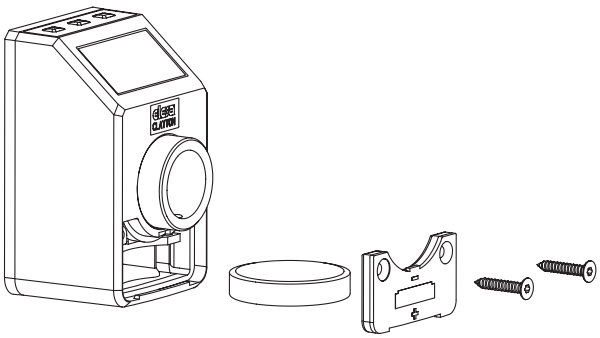
8.5.4 Password

You can avoid unwanted access to the device menu by choosing "*on*" in the *PASS* menu item. In this case to enter the menu the password 22011 must be inserted.

9. Battery replacement

The internal lithium battery CR2450 - 3V guarantees a battery life of over 5 years (3 years for RF).

The symbol appears on the display when the battery needs replacing. To replace the battery, simply remove the battery cover without removing the indicator from the drive shaft, keeping all the configuration parameters unchanged. The cover is screwed with two TORX T6 screws. To facilitate the removal of the battery from the battery compartment, the use of a magnet is recommended.



Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

10. Display messages and troubleshoting

Message on the display	Description	Action
- - - - -	The value cannot be displayed because it exceeds the capacity of the display (-19999;99999)	In operational mode, the device continues to correctly measure the position of the shaft. If the measured value is within the capacity of the display, it will be shown correctly. If you are viewing a parameter, the problem may be due to the difference in units of measure between when it was set and when it is displayed. Change the current unit of measure and try again to view the parameter. Attempting to change a parameter when the display shows ------, automatically returns the parameter to the first value that can be displayed, losing the initial setting.
S_Err	The shaft has exceeded the maximum permitted rotation speed.	Press the key ○ to go back to reading the measured value.
 Flashing battery symbol	Low Battery	Replace the battery as soon as possible (see chap. 9).

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

EU DECLARATION OF CONFORMITY (DoC)

COMPANY NAME:	Elesa S.p.a.
POSTAL ADDRESS:	Via Pompei 29
POSTCODE AND CITY:	20900 Monza
TELEPHONE NUMBER:	+39 039 28111
E-MAIL ADDRESS:	info@elesa.com

Declare that the DoC is issued under our sole responsibility and belongs to the following product:

PRODUCT:	Electronic Position Indicators
APPARATUS MODEL:	DD51-E
TRADE MARK:	Elesa

The object of the Declaration described above is in conformity with the relevant Union Harmonization Legislation:

2014/30/UE (EMC): Electromagnetic Compatibility Directive

2011/65/UE (RoHS): Restriction of the use of certain Hazardous Substances in electrical and electronic equipment

The following harmonized standards and technical specifications have been applied:

EN 61326-1:2013

Notified Body:

Not Involved (Annex II - Conformity Assessment Module A)

Additional information:

Software Version: 5.1 or higher

PLACE, DATE OF ISSUE:	CARLO BERTANI
Monza – Italy	MANAGING DIRECTOR
17/05/2021	GENERAL MANAGER

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

EU DECLARATION OF CONFORMITY (DoC)

COMPANY NAME:	Elesa S.p.a.
POSTAL ADDRESS:	Via Pompei 29
POSTCODE AND CITY:	20900 Monza
TELEPHONE NUMBER:	+39 039 28111
E-MAIL ADDRESS:	info@elesa.com

Declare that the DoC is issued under our sole responsibility and belongs to the following product:

PRODUCT:	Electronic Position Indicators
APPARATUS MODEL:	DD51-E-RF
TRADE MARK:	Elesa

The object of the Declaration described above is in conformity with the relevant Union Harmonization Legislation:

2014/53/EU (RED) Radio Equipment Directive
2011/65/UE (RoHS) Restriction of the use of certain Hazardous Substances in electrical and electronic equipment

The following harmonized standards and technical specifications have been applied:

EN 62311:2008
EN 61010-1:2010
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-1 V2.2.3
ETSI EN 301 489-17 V3.1.1
Draft ETSI EN 301 489-17 v3.2.2
EN 61326-1:2013
ETSI EN 300 328 V2.2.2

Notified Body:

Not Involved (Annex II - Conformity Assessment Module A)

Additional information:

Software Version: 5.1 or higher

PLACE, DATE OF ISSUE:	CARLO BERTANI
Monza – Italy	MANAGING DIRECTOR
17/05/2021	GENERAL MANAGER

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

Elesa S.p.A., Monza, May 2021

The texts and examples have been written with great care, nonetheless, mistakes can always happen.

The Company Elesa S.p.A. can neither be held legally responsible nor liable for lacking or incorrect information and the ensuing consequences.

The Company Elesa S.p.A. reserves the right to alter or improve the electronic position indicators or parts of them and/or the enclosed brochures without prior notice.

ELESA S.p.A.
Via Pompei, 29
20900 Monza (MB) Italy
phone +39 039 28111
info@elesa.com
www.elesa.com

© COPYRIGHT ELESA 2021
Art. Nr. ZZDOIU-DD51E-EN-R0