



**FEATURES AND APPLICATIONS**

DD51-E-RF position indicators, with battery power supply, can be used on passing through shafts in any position to provide the reading of the absolute or incremental positioning of a machine component. The 5-digit display of 8,0 mm height ensures excellent readability even from a distance and from different viewing angles. The window in transparent technopolymer protects the LCD display against accidental shocks.

In the operating mode, by using the 3 function keys, it is possible to select the incremental or the absolute mode, the unit of measure (mm, inches or degrees), reset the absolute counter or load a preset source value and the preset offset value.

In the programming mode, through the 3 function keys, it is possible to program the reading after one revolution of the shaft, the direction of rotation, the display orientation, the resolution (number of decimal digits displayed), the source value and the offset value, the max. speed of rotation and set the functions of the keys among different options available.

The internal battery has a battery life of 1.5 years. A specific symbol appears on the display when the battery needs replacing. It is easy to replace the battery by removing the front cover (Fig. 1) without having to remove the indicator from the drive shaft and without losing the configuration parameters. Further technical information available in Operating instructions.

**QUICK POSITIONING SYSTEM**

DD51-E-RF indicators (Elesa Patent) are networked to the control unit UC-RF via radio frequency (RF), constituting a wireless system for rapid positioning of the machine parts (fig.2).

The wireless connection allows:

- reading of the current position
- setting of the target position
- configuration of all operational parameters

The radio frequency system network allows different machines to coexist in the same space without problems of mutual interference. This system is particularly suitable for applications that require frequent format changes, facilitating the correct adjustment of the target/current position of the machine parts, also representing a safety system. In fact, even if a single DD51-E-RF indicator is not placed in the target position, PLC doesn't allow the beginning of the machine production cycle, thus avoiding production issues.

The installation of the system is quick and easy as it does not require the use of connecting cables between the control unit and the indicators.

Further technical information available in Operating instructions.

**COMPATIBILITY**

The "-W2" electronic indicators are compatible exclusively with the electronic indicators and control unit of the same "-W2" version.

Mechanical and electrical characteristics	
Power supply	Lithium battery CR2450 3.0 V
Battery life	up to 1.5 years
Display	5-digit LCD of 8 mm height and special characters
Reading scale	-19999; 99999
Number of decimal digits	programmable (1)
Unit of measure	mm, inches, degrees programmable (1)
Rotation max. speed	300/600/1000 r.p.m (2) programmable (1)
Resolution	10.000 impulses / revolution
Protection class	IP65 or IP67
Working temperature	0 ÷ 50 °C
Storing temperature	-20 ÷ +60 °C
Relative humidity	Max. 95% at 25°C without condensation
Conditions of use	For use in closed and sheltered places only
Altitude	Up to 2000 m
RF frequencies	2400-2416MHz

(1) See the operating instructions.

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

Higher rotation speed to 600 r.p.m. can be maintained for short periods of time.

The maximum speed value, the number of drives and the frequency of transmissions affect battery life.

Battery life depends on the conditions of use (setup, temperature, ...). The indicated value is an estimate made in temperature conditions > 20 °C and <30 °C, and default setup. Furthermore, this value refers to the condition of the device when it leaves the Elesa factory. Long storage times must always be considered for the estimation of the battery life when the device becomes operational.

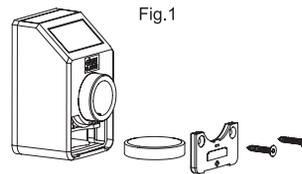
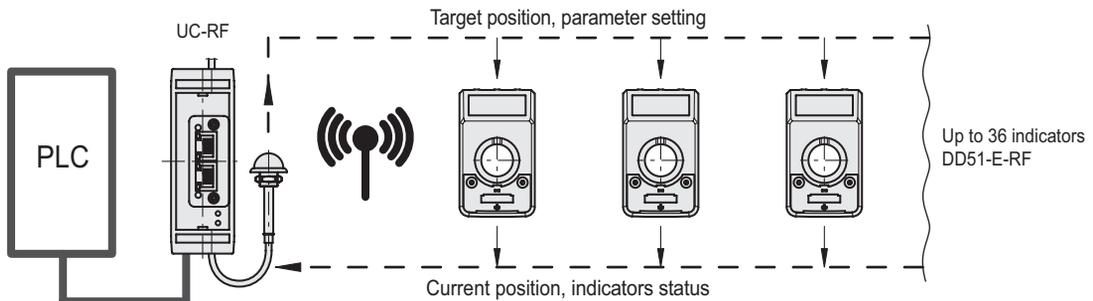


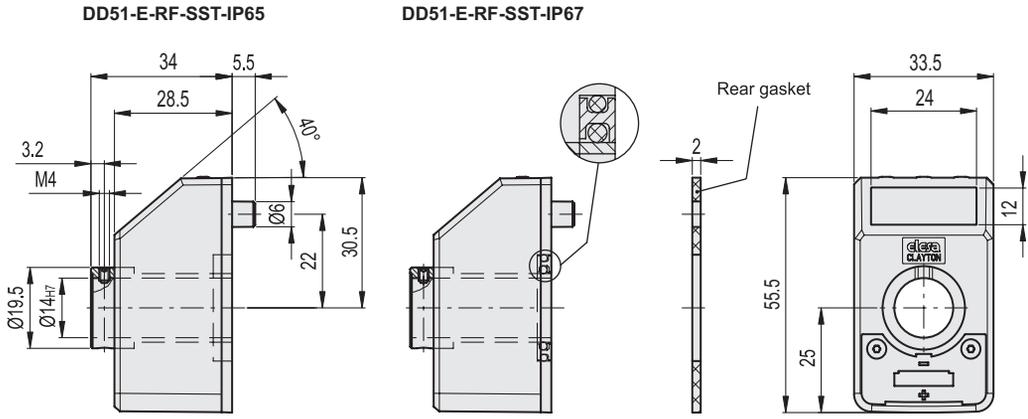
Fig.1

Fig.2





Rotary controls 7



DD51-E-RF

STAINLESS STEEL

Code	Description	⚖
CE.99303-W2	DD51-E-RF-W2-SST-F.14-IP65-C1	166
CE.99302-W2	DD51-E-RF-W2-SST-F.14-IP65-C2	166
CE.99301-W2	DD51-E-RF-W2-SST-F.14-IP65-C3	166
CE.99305-W2	DD51-E-RF-W2-SST-F.14-IP65-C55	166
CE.99313-W2	DD51-E-RF-W2-SST-F.14-IP67-C1	172
CE.99312-W2	DD51-E-RF-W2-SST-F.14-IP67-C2	172
CE.99311-W2	DD51-E-RF-W2-SST-F.14-IP67-C3	172
CE.99315-W2	DD51-E-RF-W2-SST-F.14-IP67-C55	172