

Description of function

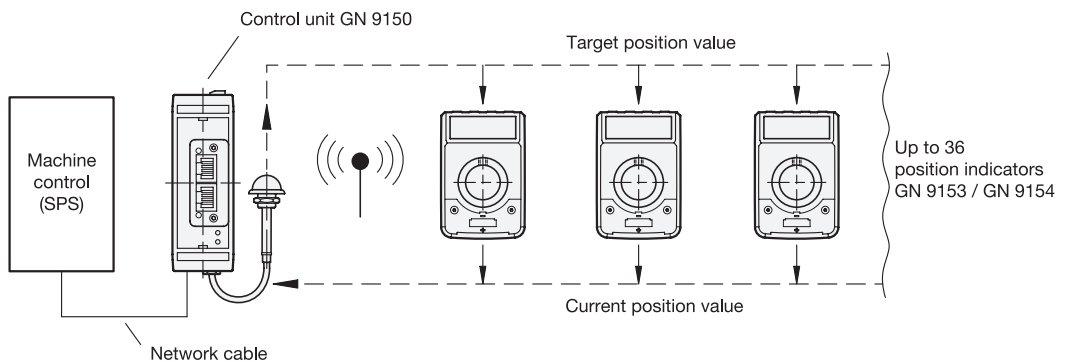
The following components are required to start up the wireless system:

- Electronic position indicator GN 9153 / GN 9154
- Control unit GN 9150

Each control unit can be coupled to up to 36 position indicators. A RJ45 network cable is used to connect to the machine control. The following standard bus systems are offered for the control unit:

- Profinet
- Modbus TCP
- Ethernet / IP

The control unit can send the target position value received from the machine control to the position indicators. The indicators then report their current position via radio frequency.



If the target position value and current position value do not match, the LCD display of the position indicator begins to flash. The machine technician must then adjust the position indicator to the correct value. The LCD display shows the difference between the target position value and the current position value and the direction in which it must be turned. It must be turned until a value of 0 appears on the display, meaning zero deviation between the current and target position value.

Example: The current position of the position indicator is 80 mm, the specified target position is 100 mm, and a difference of 20 mm appears on the display of the position indicator. The indicator must be turned in the appropriate direction until the value 0 appears on the display.

The position indicators communicate with the control units via a proprietary ELESA protocol and use the ISM SRD frequency range of 2.4 GHz – 2.48 GHz. The following data is communicated over the radio signal:

- Target position value of the position indicator
- Current position value of the position indicator
- Battery change required

The effective range of the radio communication is up to 30 meters. The antenna of the control unit must be in a clear and ideally high location. It can also be extended, if necessary.

The response time of a position indicator to the control unit via radio communication is 1 second. When using multiple position indicators, these are connected in series; in other words, the maximum number of 36 position indicators results in a response time of 36 seconds. The response time can be shortened if necessary; however, this reduces the battery life.