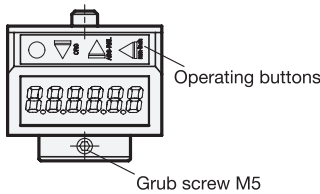


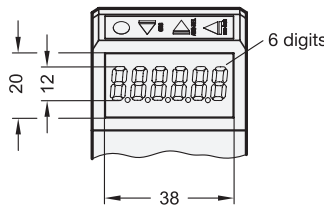
1 Identification no.

- 1 Protection class IP 65
- 2 Protection class IP 67

Top view



View on the LCD display



Specification

- Housing
Plastic (Polyamide PA)
- Orange, RAL 2004 ● **OR**
- Gray, RAL 7035 ● **GR**
- Temperature resistant up to 50 °C
- Oil and solvent resistant

- LCD-Display
6 digits and special characters

- Hollow shaft
Stainless steel AISI 304

- Seal
O-ring
Rubber NBR (Perbunan®)
(only for identification no. 2)

- ISO Fundamental Tolerances → Page 2151
- IP Protection Classes → Page 2153
- Plastic Characteristics → Page 2158
- Stainless Steel Characteristics → Page 2166
- RoHS



Information

Electronic position indicators GN 9153 with data transmission via radio frequency are particularly suited for frequent format adjustments and can be mounted quickly and easily. They are connected to the control unit GN 9150 by radio as a wireless system for quick positioning.

Control units GN 9150 are required for the system to function. They form the interface between the position indicator and the machine control. A target position value is sent by the machine control to the control unit, which transmits this via radio frequency to the position indicator. The position indicator signals its current position value back to the control unit.

In combination with the machine control, this makes it possible to ensure that the production cycle does not start when the position set on the position indicator is incorrect, which can prevent errors in the production process.

see also...

- Description of Function → Page QVX
- Control Units GN 9150 → Page 410
- Adapter Bushings GN 952.1 (for Position Indicators) → Page 412
- Control Knobs GN 957 (for Position Indicators) → Page 413
- Clamping Plates GN 9053.6 (for Position Indicators) → Page QVX

How to order

GN9153-1-OR

- 1 Identification no.
- 2 Color

Electrical and mechanical characteristics	
Tension feed	Lithium battery CR2477, 3 V
Battery life	3 years
Display	6 digit LCD display, 12 mm high with special character support
Reading scale	-199999; 999999
Number of decimal digits	programmable (see operating instruction)
Unit of measure	mm, inch or degrees (programmable)
Rotation max. speed	300 / 600 / 1000 U/min (programmable, standard 600 U/min)
Precision	10,000 impulses / revolution
Working temperature	0 °C ... 50 °C
Humidity	max. 95 % at 25 °C (without condensation)
Interference protection	acc. to guideline 2014/53/EU (RED)

Configurable display options

One advantage of electronic position determination lies in the wide range of display options on the position indicator. The following settings can be configured with the 4 function buttons:

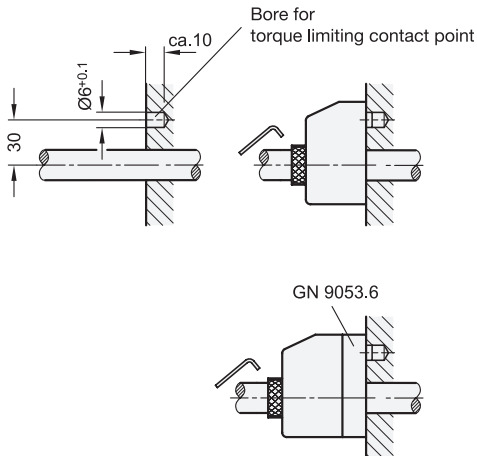
- Selecting incremental or absolute measurement mode
- Changing the unit of dimension (mm, inch or degree)
- Resetting the counter or setting an offset value
- Changing the display value after one turn
- Changing the resolution, i.e. the number of displayed decimal places
- Changing the direction of rotation or counting
- Changing the display orientation (based on the installation orientation)
- Setting the maximum speed of rotation

The installed lithium battery has a life of over 3 years. Time to replace the battery is indicated by a symbol on the display. Battery replacement is easy - simply remove the front cover.

Other important information and instructions can be found in the operating instruction for position indicators GN 9153. This is included with every position indicator and can be downloaded from www.ganternorm.com in the "Service" section.

Installation instructions

Regarding the mounting options and external architecture, electronic position indicators GN 9153 with data transmission via radio frequency are very similar to mechanical position indicators GN 953 (→ Page QVX) and can normally be substituted for the latter (see also „Explanations about position indicators“ → Page QVX).



Before installation the position indicator, a locating hole must be made on the machine side for the torque limiting contact point, according to the drawing (see left).

With the **mounting adaptor bushings GN 952.1** (→ Page QVX), the hollow shaft (with bore 14 H7) of the position indicator can be adapted to fit the spindle.

If a reduction in the diameter of the hollow shaft is to be made at the same time as mounting a control knob, **control knobs GN 957** (→ Page QVX) are available which combine both functions in a single component.

The position indicator is mounted with the torque limiting contact point inserted in the bore hole, to stabilize the housing in place. The hollow shaft is mounted to the spindle and secured with the grub screw.

With **clamping plates GN 9053.6** (→ Page QVX), spindles can be clamped and secured after adjusting.

Security information

The position indicators and control communicate using a proprietary ELESAs protocol. The control unit can only process the target and current position value of the position indicators and send these to the machine control. The machine control therefore cannot be accessed directly over the wireless network of the control unit. The radio communication is therefore protected against system alterations or third-party access.

Disruptions or interference from other typical wireless networks, such as WiFi, Bluetooth, etc. do not impair the functioning of the system, but they may lengthen the response time of the position indicators to the control unit.

Avoid placing the control unit immediately next to high-powered components, such as motors, converters, etc. If this is not possible, a safe distance of at least 200 mm should be ensured.