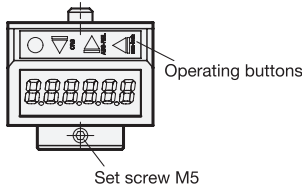
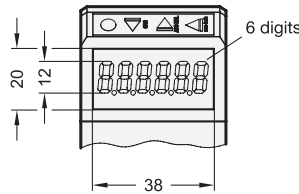


Top view



View on the LCD Display



Metric



elesa

Original design DD52R-E-RF



reddot design award winner



2 Identification no.

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

4 Generation

V2 Version 2

Specification

Housing

Plastic, Polyamide (PA)

• Color

- Orange, RAL 2004, shiny finish
- Gray, RAL 7035, shiny finish
- Black-gray, RAL 7021, shiny finish
- Blue, RAL 5005, shiny finish

- OR
- GR
- SG
- BL

• Operating temperature  
32 °F to 122 °F (0 °C to +50 °C)

• Oil and solvent resistant

LCD display

6 digits and special characters

Hollow shaft

Stainless steel AISI 304

O-ring for identification no. 2

Acrylonitrile butadiene rubber (NBR)

RoHS

On request

• Bore size 3/4 inch

Technical Information

Installation Instructions and Accessory	QVX
Further Information for Position Indicators	QVX
Electrical and Mechanical Characteristics	QVX
ISO Fundamental Tolerances	QVX
IP Protection Classes	QVX
Plastic Characteristics	QVX
Stainless Steel Characteristics	QVX

Digital position indicators EN 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 EN 9150 by radio frequency as a wireless system for quick positioning.

Control units EN 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...

	Page
EN 953   GN 953.2 Digital Position Indicators (Mechanical Counter)	QVX
EN 9053 Digital Position Indicators (Electronic, without Data Transmission via Radio Frequency)	QVX

Accessory

EN 9150 Control Units	QVX
EN 952.1 Mounting Adaptors	QVX
GN 9053.6 Clamping Plates	QVX
GN 957 Control Knobs	QVX
EN 957.1 Control Knobs	QVX

How to order

1	Bore d
2	Identification no.
3	Color
4	Generation

EN 9153-B20-2-OR-V2

1.1  
1.2  
1.3  
1.4  
2.1  
2.2  
2.3  
2.4

<b>Electrical and Mechanical Characteristics</b>	
<b>Tension feed</b>	Lithium battery CR2477, 3 V
<b>Battery life</b>	2.5 years
<b>Display</b>	6 digit LCD display, 12 mm high with special character support
<b>Reading scale</b>	-199999; 999999
<b>Number of decimal digits</b>	programmable (see operating instruction)
<b>Unit of measure</b>	mm, inch or degrees (programmable)
<b>Rotation max. speed</b>	300 / 600 / 1000 rpm (programmable, standard 600 rpm)
<b>Precision</b>	10,000 impulses / revolution
<b>Operating temperature</b>	32 °F - 122 °F (0 °C - 50 °C)
<b>Humidity</b>	Max. 95 % at 77 °F (25 °C) (without condensation)
<b>Interference protection</b>	according to guideline 2014/53/EU (RED)
<b>Compatibility</b>	Position indicators and control units can only be combined with each other in the same version.

### Configurable Display Options

The particular advantage of the electronic position indicator with wireless data transmission is their programmability as well as the ability to wirelessly transmit data bidirectionally between the position indicator and the machine control unit.

The following settings can be configured using the 4 function buttons:

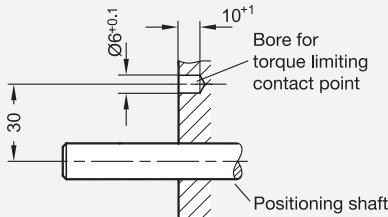
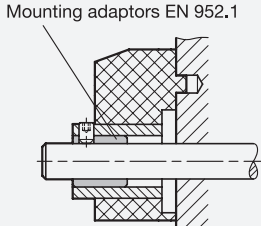
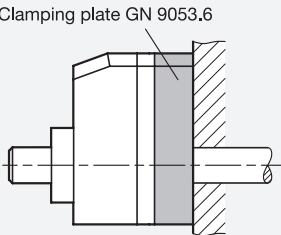
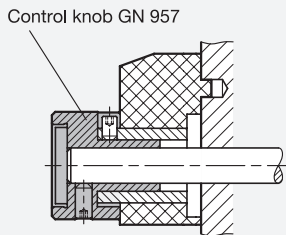
- Selecting incremental or absolute measurement mode
- Changing the unit of dimension (mm, inch or degree)
- Resetting the counter or setting an offset value
- Changing the display value after one turn
- Changing the resolution, i.e. the number of displayed decimal places
- Changing the direction of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

The lithium battery is included in the scope of delivery and has a service life of up to 2.5 years. Time to replace the battery is indicated by a symbol on the display. Battery replacement is easy - simply remove the front cover.

The position indicators are available with protection class IP 65 or IP 67 and are suitable for corresponding ambient conditions.

## Installation Instructions and Accessory

Regarding the mounting options and external architecture, electronic position indicators EN 9153 with data transmission via radio frequency are very similar to mechanical position indicators EN 953 / EN 953.2 → Page XYZ and can normally be substituted for the latter. See also „Explanations about position indicators“ → Page XYZ.

<p>When mounting the position indicator, an appropriately situated mounting hole is required for the torque support.</p>	<p>If the position indicator is used with smaller shaft diameters, the hollow shaft diameter <math>\varnothing 20</math> H7 can be reduced with <b>mounting adaptors EN 952.1</b>.</p>
	
<p><b>Clamping plates GN 9053.6</b> can be used to clamp spindles after adjustment to secure them against independent or accidental turning.</p>	<p>If reduction is desired in addition to installation of a control knob, <b>control knobs GN 957</b> are available, which combine both functions in a single element.</p>
	

## Security Information

The position indicators and control communicate using a proprietary ELESa 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.

The information in the operating instructions must be observed during installation, initial operation, and use. These are enclosed with the product or are provided digitally on the product page.

