

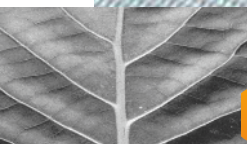


Vogel & Plötscher


Track and switch  
measuring devices

# MessReg PTP II

Digital switch inspection system



Switches



Track bed



Track gauge



Digital





# MessReg PTP II

## The new system standard for digital switch inspection

"MessReg" has been the benchmark of quality for digital switch inspection since the 1990s, in accordance with international standards. MessReg PTP II is the third generation of the series which is now being used and setting standards on a global scale.

Adapter for wide measurement base (MB-1100 or MB-1800)

Wide measuring support with 3 measuring pins

Adjustable tool for switch blades (optional)

Ergonomic carrying handle (isolated)

Digital base measuring device DBM-2

### MPCe display and control unit

Multifunctional measurement computer with a colour display (320 x 240 pixels), specially developed for outdoor use on tracks – even in wet conditions and in darkness. An integrated SD storage card acts as a data carrier whilst power is provided by a high-performance lithium-polymer battery. The MPCe's operating software manages measurement tasks and automatically evaluates measurement values. Helpful additional functions such as time/date management, real-time display, virtual keyboard and Bluetooth (optional) round off the scope of performance. Another plus point is the fact that the MPCe can be used separately from the measuring device, for example for visual track inspections. Together with the optional checklist software, the material and geometric condition of track systems can be ascertained and evaluated quickly and efficiently.

### DBM-2 digital base measuring device

Modern switch gauge with digital measuring device and electronic inclination sensor for precise measurements. The DBM-2 is available for a range of track gauges and with a variety of optional extras.

SD card port

Fine adjustment knob with integrated slip clutch function for manual track gauge adjustment

MPCe display and control unit (removable)

Narrow, mobile measuring support (isolated) with measurement pin

### Software

There is a variety of different software options for the MessReg PTP II:

#### MessProfi 3.x

The tried-and-tested MessProfi software offers measurement data management including track system management, switch editor and standardised measurement reports.

#### Customer-specific interfaces

Individual solutions can also be provided for direct data exchange with customer-specific software (such as Excel, SAP, etc.).

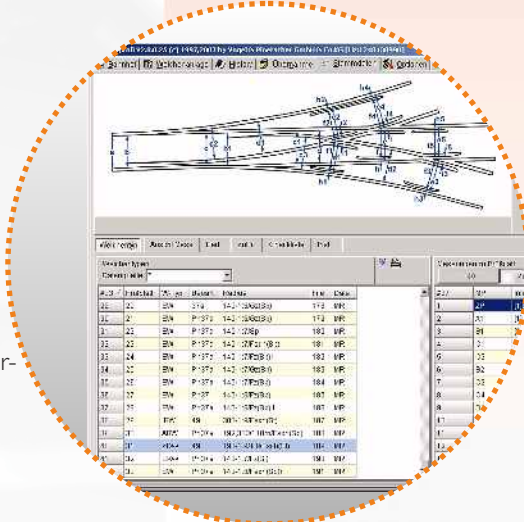
## Features

- Digital electronic measuring system for optimum precision
- Measurement in accordance with valid international standards
- High-performance removable MPCe measurement computer (incl. colour display, touch-screen function, date/time display function)
- Direct measurement of all relevant switch dimensions (track gauge, flangeway clearance, check rail gauge, back-to-back distance, cant)
- Automatic storage of cant values at all track measurement points
- Automatic evaluation of dimensions derived from measurement points (twist, differences in track gauge between adjacent measurement points)
- Dynamic tolerance monitoring and display (up to 5 evaluation criteria for each measurement point)
- User-defined text entry (comments) possible for each measurement point
- Correct ascertainment and evaluation of new test values:
  - free wheel passage
  - frog groove depth
  - passage gauge
  - free wheel clearance

This high-performance, user-friendly and extremely accurate system combines the latest measuring technology with the latest testing and measurement provision. MessReg PTP II simplifies the ever more complex requirements when it comes to measuring track systems. The user is guided through every step of the measurement process with the help of the clear and concise menu. The system immediately recognises and displays all occurrences of measurement points or dimensions derived from



these points (e.g. twist) exceeding predefined tolerances. All measurement values are available in digital form as final values straight after the completion of the measurement process. The core functional components of the MessReg PTP II are the digital base measuring device (DBM-2) and the measurement computer (MPCe) which has been specially developed for use outdoors. Data exchange between the measurement system and the user software takes place via an SD card.







### Trolley "WeichenCaddy"

Mobile measurement trolley which fits the DBM-2 and other track gauge measurement devices. The ideal solution for ergonomic and efficient measurement.



### Wide measurement base

Attachable piece of equipment to provide support for measurements in unguided switch areas. The wide measurement base is available in short (MB-1100) and long (MB-1800) versions.



### Adaptable tool

Equipped with up to 4 gauges and test feeler to investigate switch blade wear.



### Measuring device case

Robust padded case with carrying handle for safe transport and storage of all MessReg components. Available in two different versions: narrow and wide (= extra space for wide measurement bases).



## > Measurement parameters\*

|                         | Measurement range | Resolution |
|-------------------------|-------------------|------------|
| ➤ Track gauge           | 1335 – 1475 mm    | 0.1 mm     |
| ➤ Check rail gauge      | 1315 – 1455 mm    | 0.1 mm     |
| ➤ Back-to-back distance | 1295 – 1435 mm    | 0.1 mm     |
| ➤ Flangeway clearance   | 20 – 128 mm       | 0.1 mm     |
| ➤ Cant                  | ± 225 mm          | 0.1 mm     |
| ➤ Twist                 | calculated        | 0.1 mm     |

## > Technical data\*

#### DBM-2 digital base measurement device

|                         |   |
|-------------------------|---|
| Length x width x height | 1618 x 100 x 156 mm   |
| Weight                  | 3,2 kg  |
| Note                    | The measurement device is isolated and approved by Deutsche Bahn. |

#### MPCe display and control unit

|                         |  |
|-------------------------|--|
| Length x width x height | 154 x 125 x 40 mm  |
| Weight                  | 0,9 kg   |
| Power supply            | Li-polymer battery (3.7 V, 2260 mAh)                     |
| Storage capacity        | 1 GB (SD card)<br>(approx. 1,000,000 measurement points) |

| Measuring device case   | wide version        | narrow version      |
|-------------------------|---------------------|---------------------|
| Length x width x height | 1920 x 300 x 200 mm | 1750 x 200 x 190 mm |
| Weight                  | 9 kg                | 7 kg                |

\* All information refers to a nominal gauge of 1435 mm. Other gauges available on request.

