



Diverse and innovative – our new products for 2021



New Products 2021

More efficient production – with new products by Mahr

From dial comparators to fully-automated measuring stations: State-of-the-art measuring technology can do more than just measure precisely. Get to know our new products and find out how Mahr can boost your quality assurance!

Greater process reliability, less waste

As your global quality assurance partner, we offer products and solutions that combine proven precision with high efficiency. Short measuring times and simple controls speed up work processes. Through a clever combination of different measuring procedures, multiple tasks can be carried out by a single system – and in one setup. At the same time, innovative software tools and a wide choice of interfaces ensure that Mahr metrology is in tune with modern manufacturing requirements. Ensuring the productivity of your quality assurance is our aim.

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**MarSurf WI 50 M,
WI 50 and WI 100**
White light interfero-
meter with exclusive
ICA technology

Page 6

Millimar C 1202
Flexible evaluation
and display wher-
ever you are

Page 20

A variety of products for numerous industries

For 160 years the name "Mahr" has stood for modern technology, maximum precision and pioneering inventions. Today, the Mahr Group is a global operation, supporting customers in a wide range of industrial segments. A long-term focus is key to reliable, high-quality products and sustainable customer relations. Close cooperation with our customers leads to a comprehensive understanding of the special requirements and technical challenges associated with these industries.

7

Industries

Whether in the automotive industry, medicine, new energies or even aerospace – Mahr metrology is used all over the world.



Automotive



Aviation



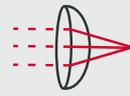
Electronics



Machines &
Tools



Medical



Optics



New Energies

More than

20

Product groups

Whatever the measuring task you're facing, the right measuring technology will help you tackle the most complex applications. Take advantage of Mahr's full range of measuring technology: We have everything you need in over 20 different product groups, from manual calipers to customized fully-automated, robot-controlled measuring stations.

Premium quality by Mahr for

160 years

New in **Surface metrology**

Careful testing is paramount wherever surface structures and topographies affect the function or appearance of components. MarSurf surface measuring instruments offer outstanding quality for both tactile and optical measurements.

The new precision for extremely smooth surfaces

Exact measurement down to the lower nanometer range is child's play thanks to the new Mahr WI 50 M, WI 50 and WI 100 white light interferometers with exclusive ICA technology.

Surface properties are becoming increasingly relevant in determining the performance of components and thus products. To help you measure these properties quickly and precisely to the nanometer, Mahr has now developed three powerful white light interferometers with a new algorithm – unique **ICA technology**. This algorithm searches for the best correlation by comparing every single pixel. The calculated height values are very precise and robust. This minimizes noise, which consequently ensures unparalleled data quality.



Advantages

- Minimum noise figure of around 80 picometers
- Up to 5 million measuring points in an individual measurement
- High-precision topography data at a very high vertical resolution



More details can be found online.

Functional tilting table

... and manual X-, Y- and Z-axes

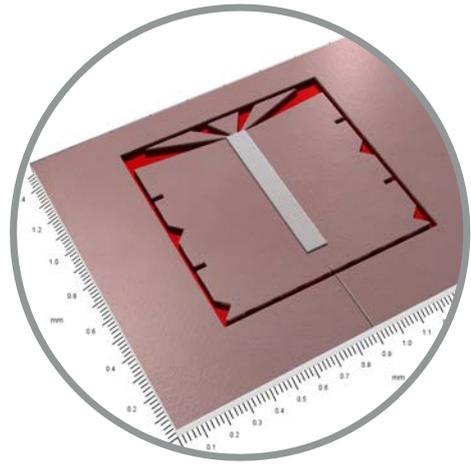


MarSurf WI 50 M

- Simple technology without motorized axes
- Intuitive operation
- Fast measurements
- Cost-effective
- Robust and reliable
- Max. sample height 220 mm
- Control unit integrated in tripod

50,000

MTBF LED light source



20 nm roughness standard



Screw

For extending the Z-axis to measure XXL components

MarSurf WI 50 und WI 100

- High measuring speed – even at full resolution
- CNC functionality in all axes
- Safe thanks to collision detection
- HD stitching: Constantly high resolution, even on large measuring surfaces
- HDR function 16 bit



MarSurf WI Series

Item numbers:
see pages 8 – 10



Availability:
immediately

MarSurf WI 50 M

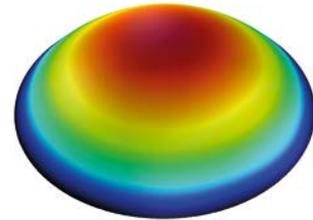
Areal 3D measurement

Description

The MarSurf WI 50 M is a white light interferometer for the three-dimensional measurement and analysis of surfaces – contactless, independent of material and fast. Precise measurement in the sub-nanometer range – simple with the new MarSurf WI 50 M, the perfect entry-level solution. The system meets all the requirements of your measuring tasks in the nanometer range – offering maximum performance and outstanding value for money. Adjustment and focusing are child's play thanks to the functional tilting table and manual X-, Y- and Z-axes.

Scope of delivery

- Interferometric measuring head
- HDR camera (2 MP or 5 MP)
- L-tripod including control electronics
- Manual XY table (105 x 50 mm)
- Motorized Z-axis (70 mm) with glass measuring scale
- Measuring system computer including 24"-TFT monitor
- Objective lenses: 5x to 100x selectable
- MarSurf MSW for intuitive data acquisition
- MarSurf MfM for professional evaluation, graphical representation and creation of measuring records (standard, extended, premium versions available)



Technical data

WI 50 M	
Measuring principle	White light interferometer High power LED (650 nm/white)
Resolution	up to 0.2 (nm) vertical
Measuring speed	up to 140 fps
Parameters	ISO 4287, ISO 13565, ISO 25178

Applications

- **Mechanical engineering:** Qualification and quantification of roughness, geometry, and wear volume
- **Electronic system and semiconductors:** Component inspection right down to the sub-nanometer range for fault-free products
- **Medical technology:** Quality assurance of medical surfaces in production and the laboratory
- **Materials science:** Optimization of functional properties on new surfaces and products
- **Micro-system technology:** Measure complex surface geometries of the smallest components with nanometer precision

This new optical measuring system is successfully used, for example, for:

- Roughness measurement according to DIN EN ISO 4287 / 25178
- Topography measurement (including volume, wear, isotropy)
- Measurement of microgeometry and layer thicknesses

Users value the reliability of MarSurf series measuring systems as they provide quantitative, traceable 3D parameters for many industries.

MarSurf WI 50

Areal 3D measurement

Description

The MarSurf WI 50 is a white light interferometer for the three-dimensional measurement and analysis of surfaces – contactless, independent of material and fast. The compact WI 50 is the ideal measuring solution when it comes down to sub-nanometers. This high-precision measuring tool for research and quality assurance delivers reliable 3D measuring values – quickly and easily in just a few steps. With its user-friendly design and high measuring speed at full resolution, the instrument reliably records roughness, even on very smooth surfaces.

Scope of delivery

- Interferometric measuring head
- HDR camera (2 MP or 5 MP)
 - 4x lens revolver with identification
- L-tripod including control electronics
- Motorized XY table (50 x 50 mm) with glass scales for sample positioning and image field merging ("stitching")
- Motorized Z-axis (70 mm) with glass measuring scale
- Measuring system computer including 24" TFT monitor
- Objective lenses: 2.5x to 100x selectable
- MarSurf MSW for intuitive data acquisition
- MarSurf MfM for professional evaluation, graphical representation and creation of measuring records (standard, extended, premium versions available)



Technical data

WI 50	
Measuring principle	White light interferometer High power LED (650 nm/white)
Resolution	up to 0.2 (nm) vertical
Measuring speed	up to 140 fps
Parameters	ISO 4287, ISO 13565, ISO 25178

Applications

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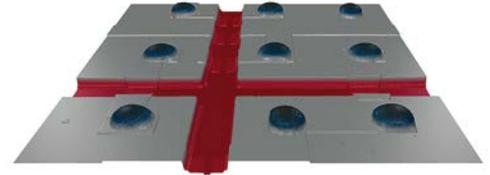
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MarSurf WI 100

Areal 3D measurement

Description

The high-end MarSurf WI 100 instrument features an extended working area in XYZ direction for especially large sample volumes: Simply press the side adjustment used to move the additional manual Z-axis and measure the XXL components. The option of performing user-independent, fully automatic measurements makes this surface measuring system ideal for straightforward and efficient use in quality assurance.



Scope of delivery

- Interferometric measuring head
- HDR camera (2 MP or 5 MP)
 - 4x lens revolver with identification
- L-tripod including control electronics
- Motorized XY table (100 x 100 mm) with glass scales for sample positioning and image field merging ("stitching")
- Motorized Z-axis (70 mm) with glass measuring scale
- Additional manual Z-axis (100 mm)
- Measuring system computer including 24"-TFT monitor
- Objective lenses: 2.5x to 100x selectable
- MarSurf MSW for intuitive data acquisition
- MarSurf ASW for automation (optional)
- MarSurf MfM for professional evaluation, graphical representation and creation of measuring records (standard, extended, premium versions available)

Technical data

WI 100	
Measuring principle	White light interferometer High power LED (650 nm/white)
Resolution	up to 0.2 (nm) vertical
Measuring speed	up to 140 fps
Parameters	ISO 4287, ISO 13565, ISO 25178

Applications

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Mahrlights | Product Highlights for You

Unmissable offers in metrology

Your offer brochure with low prices

Twice yearly you will receive lucrative discounts in our Mahrlights special offers.

Discover

- Interesting bundles and package deals
- Product discounts from calipers and evaluation instruments to system measuring stations
- Useful additional information about new software, product updates and specific product benefits



Limited time only – our
Mahrlights offers!

Quick feedback, low waste – new Fizeau interferometer for lens production

MarOpto FI 100: The new standard instrument with 100 mm aperture for testing different lenses.

The new MarOpto FI 100 is a sturdy, compact and cost-effective Fizeau interferometer for quick and accurate form and shaft front measurements on flat and spherical surfaces, vee-blocks and optical assemblies. Its simple, sturdy design and compact size make the FI 100 ideal for use in production: It delivers quick, accurate feedback, thus helping to prevent waste.

Its compact dimensions, USB 3.0 port and motorized focus mean that it can be easily integrated into more complex measuring systems, for example measuring towers and table constructions. The instrument is controlled using intuitive software with scripting functions, which enable automatic standard measurements and entire measuring sequences. This makes Mahr's new FI 100 Fizeau interferometer powerful and flexible enough to adapt to changing requirements.



MarOpto FI 100

Item number:

2811120



Availability:

from Q3/2021



Advantages

- Small base saves space and increases flexibility
- Sturdy instrument design for close-to-production use
- 12 V power supply and USB port for easy setup and integration
- Scripting functions for automation and use with customer-specific user interface
- Reliable global service and application support



Benefits for greater productivity in production



Best value for money

With its compact dimensions and light weight, the MarOpto FI 100 is versatile for flexible use, even when requirements change. Low acquisition costs complete the profile.



Reliable operation

An external PC controls the motorized focus and other operating elements, ensuring reliable handling, even with restricted accessibility.



Flexible setup and integration

Thanks to the 12 V power supply and USB port, you can set up the instrument easily yourself and flexibly integrate it into more complex measuring systems.



Fast maintenance

The laser on the MarOpto FI 100 can be replaced on site. This makes maintenance easier and minimizes downtime.

MarOpto FI 100

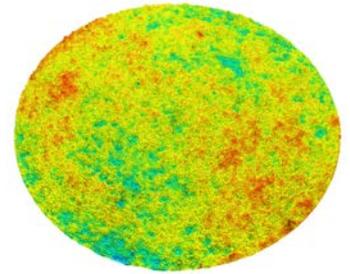
Areal 3D measurement

Description

The MarOpto FI 100 offers contactless measurements on flat and spherical lenses. In addition, wavefront measurements can be performed on optical components or assemblies in transmitted light. Measurements may be made by means of simple interference fringe analysis or phase-modulated interferogram analysis. The established IntelliWave software offers superior measurement and evaluation capabilities. The MarOpto FI 100 provides the versatility and reliability to handle today's advanced applications at unrivaled value for money.

Features

- USB port (laptop or desktop) with 1k x 1k true resolution
- Excellent versatility, stability and repeatability
- Digital zoom, focus and attenuation control and vibration-insensitivity can be achieved with Mahr's IntelliPhase Static Spatial Carrier recording and evaluation software.
- Compact, lightweight and rugged design
- Compatible with all industry standard 4" (100 mm) reference lenses and accessories
- High-accuracy measurements at an affordable price
- Configurations include horizontal and vertical measuring station alignment, optional for flats as well as the measurement of curvature radii



Technical data

FI 100	
Measuring principle	Fizeau-Interferometer HeNe LASER (632.8 nm)
Size/weight	443 mm x 208 mm x 315 mm; 16.8 kg
Beam diameter	102 mm
Resolution	10 nm (vertical)
Typical measuring time (phase shifting)	4.2 s
Parameters	ISO 10110-5

Applications

- Measurement of flat, concave or convex surfaces
- Prism, corner cube, wedge angle and homogeneity measurements
- Measurement of machined, ceramic, and wafer surfaces
- Wavefront analysis of optical systems & components
- Integration into OEM systems

At your service around the world

With 40 Mahr locations in America, Asia and Europe and an additional 39 dealerships around the world, we have created a broad network to ensure an international presence on all five continents.

5 continents



Clever combination: High performer twin pack

The reliable MarWin Easy Roughness software is now also available as a version for the MarSurf M 310 mobile measuring instrument, adding many parameters to the measuring spectrum.

You can now control the MarSurf M 310 as a drive unit using MarWin Easy Roughness mobile software. Simply connect to the computer by cable or Bluetooth, start the measurement and you're done!

This allows you to combine the handiness of the mobile measuring instrument with the range of functions of powerful software. For you this means even more parameters, the most accurate analysis of your measuring results and easy handling.



Advantages

- Multiple measurements with segmented measurements
- Start program sequences using function keys: Simply click to activate results, profiles, globally standardized parameters and characteristic curves
- Virtual rulers: Interactive setting of distances in X- and Z-direction in the profile field to view defined profile sections
- Simple operation: Operating messages with photos between the measurements



**MarSurf
M 310 PC**

Item number:
6910295



Availability:
immediately



MarSurf M 310 PC version with MarWin (basic version)

Measuring station consisting of MarSurf M 310 (2 µm stylus tip) and MarWin EasyRoughness mobile software; PC not included in set

For profile values and surface parameters such as R, Rk, P, W, Motif and D including export to text file (ASCII). With profile wizard for USB instruments and tolerance monitoring on screen and in the measuring record.

Other features:

- User administration
- Statistics
- Start program sequences using function keys
- Automatic export of profile files, results files and records to PDF format
- Interactive zoom to specify a profile section and recalculate selected parameters

Description	Item no.
"Digital I/O" option	6268392
"Profile processing" option	6292269
"User-defined parameters" option	6292270
"ISO 13565-3 parameter" option	6292263
"QS-STAT" option	6292268
"QS-STAT Plus" option	6292271
"Dominant waviness" option	6292203



MarSurf M 310 PC

Mobile roughness measuring instrument

Features

- Over 80 surface parameters for R-, P- and W-profiles as per current standards
- ISO/JIS or MOTIF (ISO 12085)
- Bandpass filter Ls in accordance with current standard; Ls can also be switched off or varied as required.
- Comprehensive measuring records
- Quick & Easy measuring programs can be created fast using teach-in methods
- Automatic functions for choosing cut-off and traversing length in accordance with standards
- Support for various calibration methods (static and dynamic) by specifying the Ra or Rz parameter
- Adjustable maintenance and calibration intervals
- Multiple measuring station configurations for custom applications.
- Range of options provide system flexibility
- Various user levels protect the device against misuse and prevent unauthorized people from using it.

Scope of delivery

- MarWin Easy Roughness mobile software including Mahr License Key with standard license
- MarSurf M 310 set, 2 µm stylus tip



Technical data

Order no.	6910295
Type	M 310 PC
Weight	1.9 kg
Measuring principle	Stylus method
Probe	Inductive skidded probe
Filter as per ISO/JIS	Gaussian filter as per ISO 16610– 21 (formerly ISO 11562), special filter as per DIN EN ISO 13565– 1, Ls filter as per DIN EN ISO 3274 (can be switched off)
Cutoff lc as per ISO/JIS	0.25 mm, 0.8 mm, 2.5 mm, automatic filter detection, variable
Number n of sampling lengths as per ISO/JIS	selectable: 1 to 16
Shorter cutoff as per ISO/JIS	selectable
Traversing length as per ISO 12085 (MOTIF)	1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm

Applications

- **Mechanical engineering:** Qualification and quantification of roughness, geometry, and wear volume
- **Electronic system and semiconductors:** Component inspection right down to sub-nanometer range for fault-free products
- **Medical technology:** Quality assurance of medical surfaces in production and the laboratory
- **Materials science:** Optimization of functional properties on new surfaces and products
- **Micro-system technology:** Measure complex surface geometries of the smallest components with nanometer precision

Mahr | New Products 2021

New in Length metrology

Length metrology is key to highly-efficient processes in all areas of industrial manufacturing. Mahr's comprehensive portfolio combines accuracy and efficiency – allowing you to optimize production sequences and keep quality costs within budget.

Flexible evaluation and display **wherever you are**

The new Millimar C 1202 compact instrument is versatile and suitable for use with a variety of sensors.

The new Millimar C 1202 represents the next generation of multichannel compact instruments for length metrology. Thanks to its sophisticated features such as the tilting easy-to-read display, clear menu navigation and flexible representation of measuring values, it offers maximum ergonomics and user-friendliness.

Combine with an easy to change module from the N 1700 series to create just the right measuring instrument for your measuring task. Thanks to its wide range of functions, the C 1202 is hugely versatile: It can be used to tackle a multitude of measuring tasks, e.g. static and dynamic measurements as well as cone calculations. Moreover, depending on the module, measuring probes by other manufacturers may also be compatible, which will reduce your costs.



Advantages

- Three features can be displayed at the same time - for even more static and dynamic measuring tasks
- Two independent inputs via N 1700 module for the optional connection of measuring probes and pneumatic transducers
- Interchangeable modules for flexibility and compatibility
- Digimatic and USB ports for easy connection to data collection systems and evaluation software
- Programmable measuring sequences for greater productivity and reliability

Tilting display

Measuring values can be read clearly and effortlessly from all viewing angles. The display also features a backlight.

Sturdy plastic housing

As the C 1202 is impervious to external influences, it is ideal for use in production.

Interchangeable modules

The C 1202 can be easily converted to handle different measuring tasks.



9

Various N 1700 modules
can be combined with C 1202

Interpret measuring results with ease

The high contrast color display provides a clear presentation of the measuring results.

Large keys

The C 1202 can also be reliably operated with gloves. Even dirt does not impede its function.



* Excluding N 1700 module
(required accessory).



**Millimar
C 1202**

Item number*:
5312025



Availability:
from mid Q3/2021

Flexible setup options

Users can position the instrument on the table or fix it to the wall.

Millimar C 1202

Compact amplifier



Functions

- mm/inch
- TOL (enter tolerance and warning limits)
- PRESET (enter a numerical value)
- 1 and 2 point master measurement
- MAX/MIN memory for reversing point search
- (MAX-MIN) for radial runout and flatness test
- HOLD (storage of measured values)
- Switch resolution
- Factor (adjustable)
- Reversal of counting direction
- Programmable control input
- Measuring routine with time control
- DATA (data transfer)
- Menu lock

Features

- Versatility for a wide range of measuring tasks
- N 1700 modules as measuring channels for inductive and incremental probes or for pneumatic measuring equipment
- High-resolution, high-contrast color display
- Fully adjustable display for ideal viewing angle
- 3 measurement value display options available: number, pointer or bar
- 1 - 3 features can be displayed at once.
- Extremely easy to operate
- Several measuring tasks can be stored on the memory card
- Compact housing
- Suitable for wall mounting
- **Scope of delivery:** AC adapter, micro SD memory card, operating instructions, excludes N 1700 module (required optional accessory)
- **Software:** MarCom Professional is free to download: www.mahr.com/marcom (only for Mahr data cables and wireless systems with USB and RS-232 interface)



Applications

Indicating instrument for precise length measurements

- for connecting different sensors by way of N1700 measuring modules
- for connecting up to 2 measuring sensors

Please note: N 1700 measuring modules are necessary additional accessories.

Accessories

Order no.	Description	Type
5331120	Module for inductive probes	N 1702 M
5331125	Module for inductive probes	N 1702 M-HR
5331121	Module for inductive probes	N 1702 T
5331122	Module for inductive probes	N 1702 U
5331155	Module for pneumatic measuring equipment	N 1701 PF-2500/5000
5331157	Module for pneumatic measuring equipment	N 1701 PF-10000
4102603	USB bi-directional data cable (2 m)	DK-U1
4102606	Digimatic data cable (2 m)	DK-D1
4102058	Foot switch for the adoption of measuring values	16 ESf



Technical data

Order no.	5312025
Type	C 1202
Display	TFT color display 110 mm (4.3"), 480 x 272 pixels
Range of digital display	± 999 999.9 µm
Range of analog display	± 5000, ± 2000, ± 1000, ± 300, ± 100, ± 30, ± 10, ± 3 µm
Resolution	0.01, 0.1, 1 µm
Reading	500, 200, 100, 20, 10, 2, 1, 0,2 µm
Measuring combinations	+A, -A, +B, -B, A+B, +A-B, -A+B, -A-B
Features	3
Dynamic functions	Max, Min, Max-Min, (Max+Min)/2, Average
Dynamic functions	Length, angle
Configuration	Keyboard
Data transmission rate	30 Hz
Refresh rate	40 fps
Error limit, digital display	0.3 % (min. 0.2 µm); 0.3 % (min. 0.04 µm)* *(with N 1702 M-HR)
Error limit, analog display	0.25 % of scale end value / 0.3 % of displayed value
Data interface	USB, Digimatic
Control inputs	Programmable control input (functions and function sequences)
Power supply	AC adapter, 230 V/115 V; 50/60 Hz
IP protection class	IP 42

Order no.	Width	Height	Depth
5312025	130 mm	175 mm	145 mm

Maximum accuracy thanks to **High Resolution**

High resolution module N 1702 M-HR added to proven Millimar series.

Mahr's modular Millimar N 1700 bus system offers the right solutions for both easy and precise measuring. Numerous combination options are possible with the individual modules to tackle a wide range of measuring tasks individually.

Module N 1702 M-HR for inductive Mahr probes is new to the portfolio. It has an extremely high measuring signal resolution of 0.01 μm . This means that it is suitable for high-precision comparative and repeat measurements, for example in gage block test stands. However, it is also ideal for use in production thanks to its sturdiness. Users will find the N 1702 M-HR to be a flexible instrument suitable for many applications requiring maximum accuracy.



Advantages

- Maximum accuracy with a resolution of 0.01 μm
- Reliable visualization and evaluation of measuring data using the Millimar Cockpit or das Millimar C 1202 software
- Powerful connection modules with flexible combination options for evaluating measuring sensors (inductive/pneumatic)
- Synchronous data retrieval from multiple connected probes
- Maximum theoretical bus data rate of 4,189 values/s (depending on the number of connected channels)



**Millimar
N 1702 M-HR**

Item number:
5331125



Availability:
from mid Q3/2021

64

64 measuring steps
for your measuring tasks

One transducer for every task

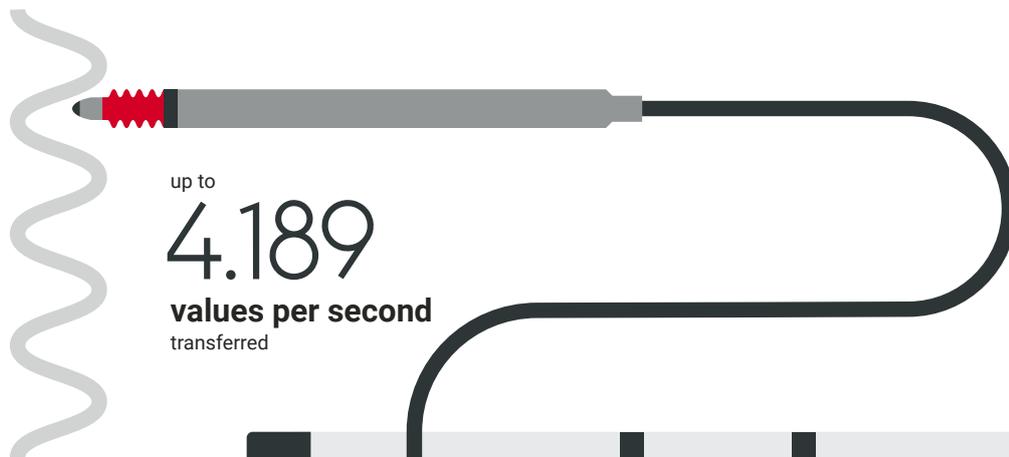
Mahr's portfolio of measuring systems includes over 100 transducers, so you're guaranteed to find the right solution for every task.

Compact

The modular design of the units saves space because you can choose which modules you want to work with or set aside. Modules you do not currently need can simply be put away in the drawer for later use.

43

inductive probes
in the portfolio



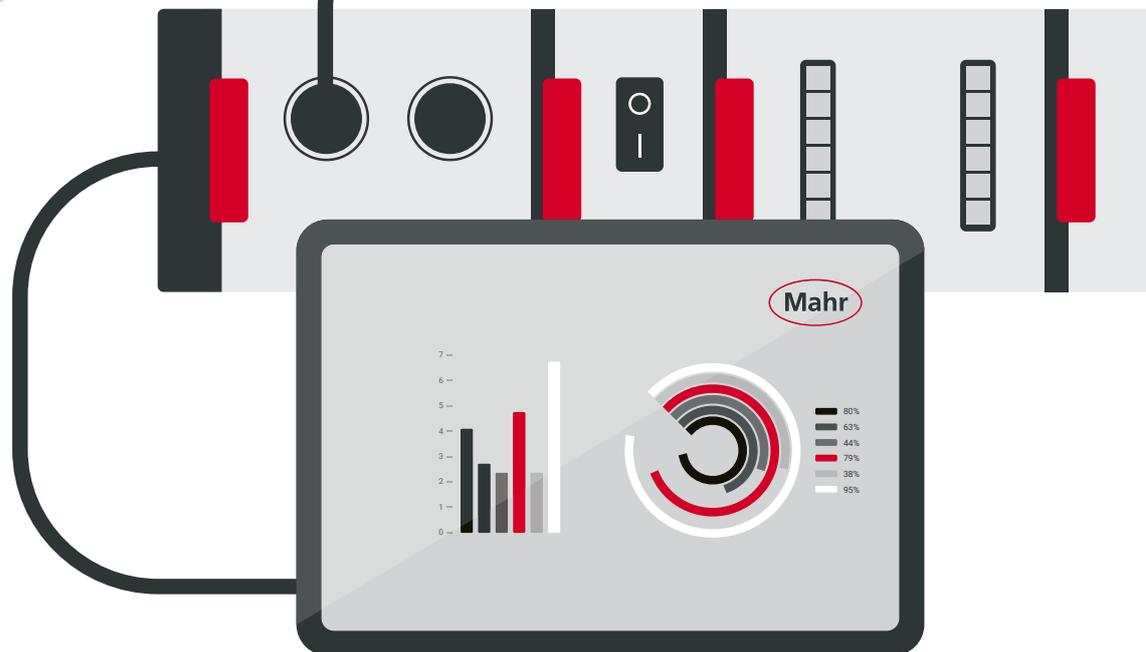
up to
4.189
values per second
transferred

Individual use

Thanks to the many products from the Millimar family, you will find the right evaluation unit for every application.

Easy combination

The portfolio of the new Millimar generation includes 15 modules which you can combine for your measuring task with ease. The modular design works according to the mix-and-match principle: select and combine the modules with each other to suit your needs.



9

seconds
on average to replace
a module

Intelligent software

The Millimar Cockpit software allows you to carry out professional measurements and evaluations.

15

different modules
in the portfolio for individual combination

Millimar N 1702 T | N 1702 U | N 1702 M-HR

Module for inductive probes

Features

- Flexibly configurable RS485 bus modules
- Powerful connection modules for evaluating measuring sensors (inductive/pneumatic)
- Synchronous data retrieval from multiple connected probes
- Connection of N 1700 modules via USB interface to the smart, universal evaluation and configuration software Millimar Cockpit
- Connects all compatible measuring probe types using one module
- Flexible and modular product combinations to tackle customer-specific measuring tasks
- Maximum theoretical bus data rate of 4189 values/s (depending on the number of connected channels)
- **Scope of delivery:** Operating instructions



Applications

Smart, flexible combination of measuring modules and software to tackle customer-specific measuring tasks



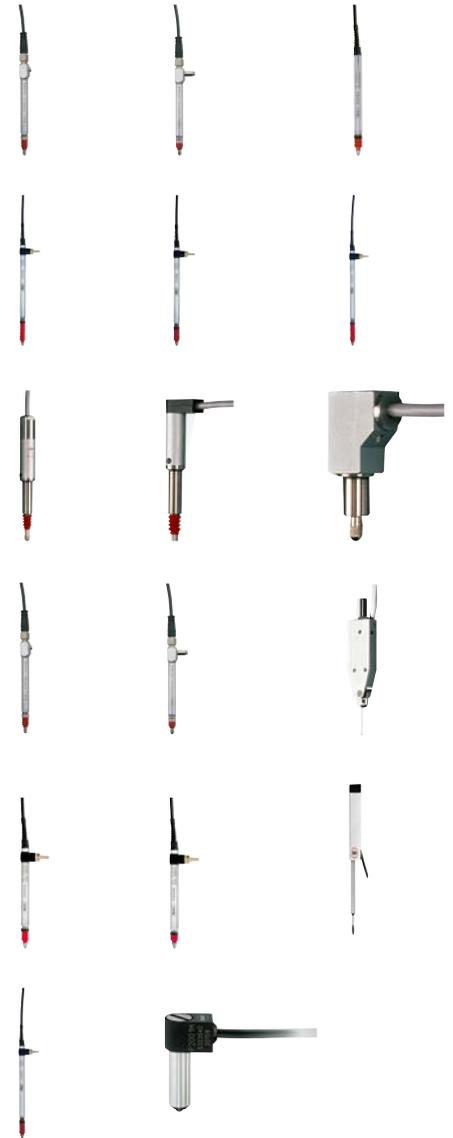
Technical data

Order no.	5331121	5331122	5331125
Type	N 1702 T	N 1702 U	N 1702 M-HR
Resolution	0.1 µm	0.1 µm	0.01 µm
Measuring range, inductive probe	± 5000, ± 2000, ± 1000, ± 500 µm		± 200 µm
Probe inputs	2		
Compatibility	Tesa	Marposs	Mahr, Mahr 1340, Mahr-half-bridge, Mahr-LVDT, Mahr-VLDT
Configuration	Mahr Cockpit software		
Data transmission rate	4189 Hz		
Error limit	0.3 % (min. 0.2 µm)		0.3 % (min. 0.04 µm)
Data interface	RS-485		
Power consumption	95 mA	110 mA	
Power supply	+ 5V from N 1700 bus		
IP protection class	IP 42		

Order no.	Width	Height	Depth
5331121	77 mm	54.8 mm	66 mm
5331122	77 mm	54.8 mm	66 mm
5331125	77 mm	54.8 mm	66 mm

Accessories

Order no.	Description	Type
4400190	Inductive probe, ± 1 mm	P1300 TA
4400191	Inductive probe, ± 1 mm	P1300 TB
5323011	Inductive probe, ± 2 mm	P2004 T
5323021	Inductive probe, ± 2 mm	P2004 TA
5323031	Inductive probe, ± 2 mm	P2004 TB
5324021	Inductive probe, ± 5 mm	P2010 TA
5324031	Inductive probe, ± 5 mm	P2010 TB
5324071	Inductive probe, ± 2 mm	P2104 TA
5324081	Inductive probe, ± 2 mm	P2104 TB
5331138	Extension cable, length 2 m	N 1700 RS485
5323013	Inductive probe, ± 2 mm	P2004 U
5323023	Inductive probe, ± 2 mm	P2004 UA
5323033	Inductive probe, ± 2 mm	P2004 UB
5324023	Inductive probe, ± 5 mm	P2010 UA
5324033	Inductive probe, ± 5 mm	P2010 UB
5324073	Inductive probe, ± 2 mm	P2104 UA
5324083	Inductive probe, ± 2 mm	P2104 UB
5313400	Inductive probe, ± 2 mm	1340
5313010	Inductive probe, ± 1 mm	1301
5313030	Inductive probe, ± 1 mm	1303
5313049	Inductive probe, ± 1 mm	1304 K
5323010	Inductive probe, ± 2 mm	P2004 M
5323020	Inductive probe, ± 2 mm	P2004 MA
5323030	Inductive probe, ± 2 mm	P2004 MB
5324070	Inductive probe, ± 2 mm	P2104 MA
5324080	Inductive probe, ± 2 mm	P2104 MB
5323040	Inductive probe, ± 0.5 mm	P2001 M
4400180	Inductive probe, ± 2 mm	P1300 MA
4400181	Inductive probe, ± 2 mm	P1300 MB
5313180	Inductive probe, - 0.3 ... 1 mm	1318



Unique, durable & efficient

The new inside measuring probes with DLC coating

Our new Marameter 844 KC inside measuring probes boast an impressive, unique DLC coating (diamond-like carbon). This makes the probes particularly hard-wearing and thus guarantees excellent long-term accuracy.

Durable and safe: The new probes from the 844 K family feature an impressive, innovative special coating. The very smooth probe surface and the consequently very low friction coefficient prevent streaking and wear in precision-machined and sensitive bore surfaces. This avoids waste or factory seconds. The dark DLC coating allows you to identify early on if the measuring surface is worn, because unlike conventional probes, a worn measuring surface will be obvious thanks to a light spot on the contact point. This visual indicator will show you at a glance if your measuring instrument is fit for use, which means that you are always assured of exact and precise measuring results.



Innovative DLC coating

The **adamantine layer** ensures a long service life of the probe and also offers you the advantage of being able to **visually identify signs of wear early on**.



Advantages

- Innovative and unique DLC coating (diamond-like carbon)
- Process reliability thanks to visual wear indicator: The wear of the probe can be seen immediately.
- Prevents streaking of sensitive surfaces, no waste or factory seconds
- Reduced purchase costs thanks to unparalleled long service life of probe



**Marameter 844
KC**

Item number:
see p. 38 – 46



Availability:
from Q2/2021

Extremely low friction coefficient

The very smooth surface of the probe prevents streaking e.g. on precision-machined non-ferrous metal surfaces.



Excellent corrosion prevention

The DLC coating perfectly protects the probe from corrosion.

Practical

Modular bore measuring system



Marameter 844 K family

The inside measuring probes from the Marameter 844 K family are a permanent feature of the Marameter 844 K hole measuring system. Thanks to a scrupulous overhaul of the probe families, this tried and tested measuring system has been upgraded once more. Driving needles exclusively of carbide now ensure maximum linearity accuracy.

Probes included in the modular unit:

- **844 K:** Inside measuring probe made of hardened steel, hard chrome plated measuring surfaces, for general applications
- **844 KC:** Inside measuring probe made of hardened steel, measuring surfaces and inner edges coated with DLC. Increased wear protection and low friction, can be used in sensitive or abrasive surfaces
- **844 KS:** Inside measuring probe made of hardened steel, hard chrome plated measuring surfaces, for measurements close to the bottom of the hole

Marameter 844 KC

Self-centering inner measuring device

Features

- Measuring head made of hardened steel, with DLC coating
- Constant measuring force thanks to automatic suspension. Measuring results are therefore independent of personal sense of touch
- Measuring head, driving needle, measuring instrument holder, depth extensions, right-angle attachments and setting rings form a comprehensive modular system
- Advantages of DLC coating
 - DLC = diamond-like carbon
 - Extremely high wear resistance, for long service life, even on hard and abrasive surfaces
 - Reduced friction, ideal for sensitive surfaces such as non-ferrous metals and aluminum alloys
 - Wear display, worn areas appear as light spots in the dark DLC coating
- Minimum composition of a measuring instrument: Measuring head, driving needle and measuring instrument holder plus indicating instrument
- **Scope of delivery:** Measuring instrument holder 844 Kg, measuring probe, driving needle, wooden box, excludes indicating instrument

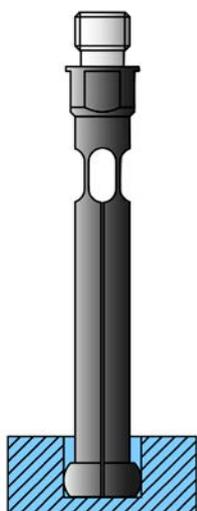


Applications: Standard version with wear-resistant DLC coating

- For comparative measurements of diameters and testing for form deviations such as roundness and conicity
- Ideal for testing batches
- Determine reversal point by oscillation in hole

Technical data

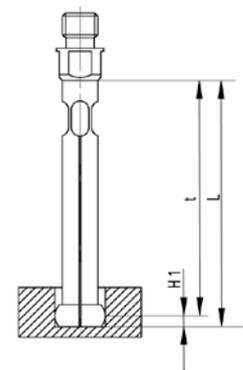
Order no.	Type	Nominal size in mm	Individual area probe in mm	Number of measuring probes	Linearity deviation f_e	Repeatability f_w
4473105	844 KC	1.00	0.95 – 1.15	5 units	2 %, min. 1 μ m	1 μ m
		1.10	1.07 – 1.25			
		1.20	1.17 – 1.35			
		1.30	1.27 – 1.45			
		1.40	1.37 – 1.55			
4473106	844 KC	1.75	1.50 – 1.90	9 units	1 %, min. 1 μ m	1 μ m
		2.00	1.80 – 2.20			
		2.25	2.05 – 2.45			
		2.50	2.30 – 2.70			
		2.75	2.55 – 2.95			
		3.00	2.80 – 3.20			
		3.25	3.05 – 3.45			
		3.50	3.30 – 3.70			
4473107	844 KC	4.00	3.70 – 4.30	12 units	1 %, min. 1 μ m	1 μ m
		4.50	4.20 – 4.80			
		5.00	4.70 – 5.30			
		5.50	5.20 – 5.80			
		6.00	5.70 – 6.30			
		6.50	6.20 – 6.80			
		7.00	6.70 – 7.30			
		7.50	7.20 – 7.80			
		8.00	7.70 – 8.30			
		8.50	8.20 – 8.80			
		9.00	8.70 – 9.30			
		9.50	9.20 – 9.80			



Order no.	Type	Nominal size in mm	Individual area probe in mm	Number of measuring probes	Linearity deviation f_e	Repeatability f_w
4473108	844 KC	1.75	1.50 – 1.90	21 units	1 %, min. 1 μm	1 μm
		2.00	1.80 – 2.20			
		2.25	2.05 – 2.45			
		2.50	2.30 – 2.70			
		2.75	2.55 – 2.95			
		3.00	2.80 – 3.20			
		3.25	3.05 – 3.45			
		3.50	3.30 – 3.70			
		3.75	3.55 – 3.95			
		4.00	3.70 – 4.30			
		4.50	4.20 – 4.80			
		5.00	4.70 – 5.30			
		5.50	5.20 – 5.80			
		6.00	5.70 – 6.30			
		6.50	6.20 – 6.80			
		7.00	6.70 – 7.30			
		7.50	7.20 – 7.80			
8.00	7.70 – 8.30					
8.50	8.20 – 8.80					
9.00	8.70 – 9.30					
9.50	9.20 – 9.80					
4473109	844 KC	10.00	9.40 – 10.60	11 units	1 %, min. 1 μm	1 μm
		11.00	10.40 – 11.60			
		12.00	11.40 – 12.60			
		13.00	12.40 – 13.60			
		14.00	13.40 – 14.60			
		15.00	14.40 – 15.60			
		16.00	15.40 – 16.60			
		17.00	16.40 – 17.60			
		18.00	17.40 – 18.60			
		19.00	18.40 – 19.60			
		20.00	19.40 – 20.60			

Order no.	Nominal size	H1	L	Measuring depth	Order no.	Nominal size	H1	L	Measuring depth
4473105	1.00 mm	0.6 mm	19.50 mm	10.5 mm	4473107	4.00 mm	2.0 mm	47.30 mm	38 mm
	1.10 mm	0.6 mm	19.50 mm	10.5 mm		4.50 mm	2.0 mm	47.30 mm	38 mm
	1.20 mm	0.6 mm	19.50 mm	10.5 mm		5.00 mm	2.0 mm	47.30 mm	38 mm
	1.30 mm	0.6 mm	19.50 mm	10.5 mm		5.50 mm	2.0 mm	47.30 mm	38 mm
	1.40 mm	0.6 mm	19.50 mm	10.5 mm		6.00 mm	2.0 mm	47.30 mm	38 mm
4473106	1.75 mm	0.9 mm	25.30 mm	16 mm		6.50 mm	2.0 mm	47.30 mm	38 mm
	2.00 mm	0.9 mm	25.30 mm	16 mm		7.00 mm	2.0 mm	47.30 mm	38 mm
	2.25 mm	0.9 mm	25.30 mm	16 mm		7.50 mm	2.0 mm	47.30 mm	38 mm
	2.50 mm	1.2 mm	30.60 mm	21 mm		8.00 mm	2.0 mm	47.30 mm	38 mm
	2.75 mm	1.2 mm	30.60 mm	21 mm		8.50 mm	2.0 mm	47.30 mm	38 mm
	3.00 mm	1.2 mm	30.60 mm	21 mm		9.00 mm	2.0 mm	47.30 mm	38 mm
	3.25 mm	1.2 mm	30.60 mm	21 mm	9.50 mm	2.0 mm	47.30 mm	38 mm	
	3.50 mm	1.2 mm	30.60 mm	21 mm					
	3.75 mm	1.2 mm	30.60 mm	21 mm					

Order no.	Nominal size	H1	L	Measuring depth	Order no.	Nominal size	H1	L	Measuring depth	
4473108	1.75 mm	0.9 mm	25.30 mm	16 mm	4473109	10.00 mm	3.3 mm	48.50 mm	45 mm	
	2.00 mm	0.9 mm	25.30 mm	16 mm		11.00 mm	3.3 mm	48.50 mm	45 mm	
	2.25 mm	0.9 mm	25.30 mm	16 mm		12.00 mm	3.3 mm	48.50 mm	45 mm	
	2.50 mm	1.2 mm	30.60 mm	21 mm		13.00 mm	3.3 mm	48.50 mm	45 mm	
	2.75 mm	1.2 mm	30.60 mm	21 mm		14.00 mm	3.3 mm	48.50 mm	45 mm	
	3.00 mm	1.2 mm	30.60 mm	21 mm		15.00 mm	3.3 mm	48.50 mm	45 mm	
	3.25 mm	1.2 mm	30.60 mm	21 mm		16.00 mm	3.3 mm	48.50 mm	45 mm	
	3.50 mm	1.2 mm	30.60 mm	21 mm		17.00 mm	3.3 mm	48.50 mm	45 mm	
	3.75 mm	1.2 mm	30.60 mm	21 mm		18.00 mm	3.3 mm	48.50 mm	45 mm	
	4.00 mm	2.0 mm	47.30 mm	38 mm		19.00 mm	3.3 mm	48.50 mm	45 mm	
	4.50 mm	2.0 mm	47.30 mm	38 mm		20.00 mm	3.3 mm	48.50 mm	45 mm	
	5.00 mm	2.0 mm	47.30 mm	38 mm						
	5.50 mm	2.0 mm	47.30 mm	38 mm						
	6.00 mm	2.0 mm	47.30 mm	38 mm						
	6.50 mm	2.0 mm	47.30 mm	38 mm						
	7.00 mm	2.0 mm	47.30 mm	38 mm						
7.50 mm	2.0 mm	47.30 mm	38 mm							
8.00 mm	2.0 mm	47.30 mm	38 mm							
8.50 mm	2.0 mm	47.30 mm	38 mm							
9.00 mm	2.0 mm	47.30 mm	38 mm							
9.50 mm	2.0 mm	47.30 mm	38 mm							



Accessories

Order no.	Description	Type
4333000	Millimess 5 µm, ± 130 µm	1004
4334000	Millimess 1 µm, ± 50 µm	1003
4335000	Millimess 0.5 µm, ± 25 µm	1002
4337662	Digital dial indicator, 0.0005 mm, 12.5 mm	1087 BR
4337664	Digital dial indicator, 0.0005 mm, 12.5 mm	1087 BRi
4473375	844 Ke setting rings in set for measuring range 1 – 1.4 mm	844 Ke
4473376		
4473400	844 Kg measuring instrument holder, Ø 8 mm / M6 x 0.75	844 Kg
4473401	844 Kga measuring instrument holder, Ø 8 mm / M6 x 0.75	844 Kga
4473402	844 Kgz measuring instrument holder, Ø .375" / M6 x 0.75	844 Kgz
4473405	844 Kv measuring depth extension, length 50 mm	844 Kv
4473406	844 Kv measuring depth extension, length 100 mm	844 Kv
4473407	844 Kv measuring depth extension, length 250 mm	844 Kv
4473409	844 Kw right-angle attachment 90°, M6 x 0.75	844 Kw
4473376	844 Ke setting rings in set for measuring range 1.75 – 3.75 mm	844 Ke
4473377	844 Ke setting rings in set for measuring range 4 – 9.5 mm	844 Ke
4473378	844 Ke setting rings in set for measuring range 1.75 – 9.5 mm	844 Ke
4473379	844 Ke setting rings in set for measuring range 10 – 20 mm	844 Ke

Marameter 844 K

Self-centering inner measuring device

Features

- Measuring head made of hardened steel, hard chrome plated
- Constant measuring force thanks to automatic suspension. Measuring results are therefore independent of personal sense of touch
- Measuring head, driving needle, measuring instrument holder, depth extensions, right-angle attachments and setting rings form a comprehensive modular system
- Minimum composition of a measuring instrument: Measuring head, driving needle and measuring instrument holder plus indicating instrument
- **Scope of delivery:** Measuring instrument holder 844 Kg, measuring probe, driving needle, wooden box, excludes indicating instrument

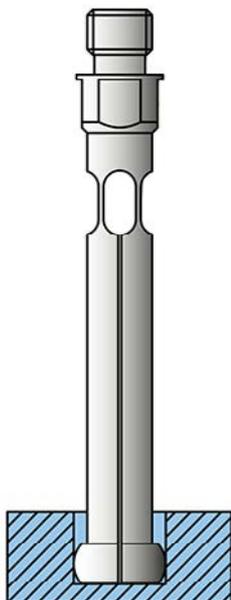


Applications: Standard model

- For comparative measurements of diameters and testing for form deviations such as roundness and conicity
- Ideal for testing batches
- Determine reversal point by oscillation in hole

Technical data

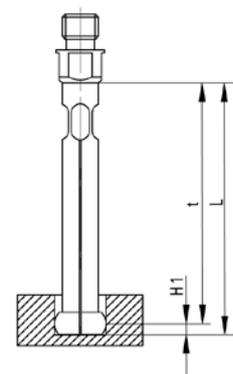
Order no.	Type	Nominal size in mm	Individual area probe in mm	Number of measuring probes	Linearity deviation f_e	Repeatability f_w
4473005	844 K	1.00	0.95 – 1.15	5 units	2 %, min. 1 μ m	1 μ m
		1.10	1.07 – 1.25			
		1.20	1.17 – 1.35			
		1.30	1.27 – 1.45			
		1.40	1.37 – 1.55			
4473006	844 K	1.75	1.50 – 1.90	9 units	1 %, min. 1 μ m	1 μ m
		2.00	1.80 – 2.20			
		2.25	2.05 – 2.45			
		2.50	2.30 – 2.70			
		2.75	2.55 – 2.95			
		3.00	2.80 – 3.20			
		3.25	3.05 – 3.45			
		3.50	3.30 – 3.70			
		3.75	3.55 – 3.95			
4473007	844 K	4.00	3.70 – 4.30	12 units	1 %, min. 1 μ m	1 μ m
		4.50	4.20 – 4.80			
		5.00	4.70 – 5.30			
		5.50	5.20 – 5.80			
		6.00	5.70 – 6.30			
		6.50	6.20 – 6.80			
		7.00	6.70 – 7.30			
		7.50	7.20 – 7.80			
		8.00	7.70 – 8.30			
		8.50	8.20 – 8.80			
		9.00	8.70 – 9.30			
		9.50	9.20 – 9.80			



Order no.	Type	Nominal size in mm	Individual area probe in mm	Number of measuring probes	Linearity deviation f_e	Repeatability f_w
4473008	844 K	1.75	1.50 – 1.90	21 units	1 %, min. 1 μ m	1 μ m
		2.00	1.80 – 2.20			
		2.25	2.05 – 2.45			
		2.50	2.30 – 2.70			
		2.75	2.55 – 2.95			
		3.00	2.80 – 3.20			
		3.25	3.05 – 3.45			
		3.50	3.30 – 3.70			
		3.75	3.55 – 3.95			
		4.00	3.70 – 4.30			
		4.50	4.20 – 4.80			
		5.00	4.70 – 5.30			
		5.50	5.20 – 5.80			
		6.00	5.70 – 6.30			
		6.50	6.20 – 6.80			
		7.00	6.70 – 7.30			
		7.50	7.20 – 7.80			
		8.00	7.70 – 8.30			
		8.50	8.20 – 8.80			
9.00	8.70 – 9.30					
9.50	9.20 – 9.80					
4473009	844 K	10.00	9.40 – 10.60	11 units	1 %, min. 1 μ m	1 μ m
		11.00	10.40 – 11.60			
		12.00	11.40 – 12.60			
		13.00	12.40 – 13.60			
		14.00	13.40 – 14.60			
		15.00	14.40 – 15.60			
		16.00	15.40 – 16.60			
		17.00	16.40 – 17.60			
		18.00	17.40 – 18.60			
		19.00	18.40 – 19.60			
		20.00	19.40 – 20.60			

Order no.	Nominal size	H1	L	Measuring depth	Order no.	Nominal size	H1	L	Measuring depth
4473005	1.00 mm	0.6 mm	19.50 mm	10.5 mm	4473007	4.00 mm	2.0 mm	47.30 mm	38 mm
	1.10 mm	0.6 mm	19.50 mm	10.5 mm		4.50 mm	2.0 mm	47.30 mm	38 mm
	1.20 mm	0.6 mm	19.50 mm	10.5 mm		5.00 mm	2.0 mm	47.30 mm	38 mm
	1.30 mm	0.6 mm	19.50 mm	10.5 mm		5.50 mm	2.0 mm	47.30 mm	38 mm
	1.40 mm	0.6 mm	19.50 mm	10.5 mm		6.00 mm	2.0 mm	47.30 mm	38 mm
4473006	1.75 mm	0.9 mm	25.30 mm	16 mm		6.50 mm	2.0 mm	47.30 mm	38 mm
	2.00 mm	0.9 mm	25.30 mm	16 mm		7.00 mm	2.0 mm	47.30 mm	38 mm
	2.25 mm	0.9 mm	25.30 mm	16 mm		7.50 mm	2.0 mm	47.30 mm	38 mm
	2.50 mm	1.2 mm	30.60 mm	21 mm		8.00 mm	2.0 mm	47.30 mm	38 mm
	2.75 mm	1.2 mm	30.60 mm	21 mm		8.50 mm	2.0 mm	47.30 mm	38 mm
	3.00 mm	1.2 mm	30.60 mm	21 mm		9.00 mm	2.0 mm	47.30 mm	38 mm
	3.25 mm	1.2 mm	30.60 mm	21 mm		9.50 mm	2.0 mm	47.30 mm	38 mm
	3.50 mm	1.2 mm	30.60 mm	21 mm					
	3.75 mm	1.2 mm	30.60 mm	21 mm					

Order no.	Nominal size	H1	L	Measuring depth	Order no.	Nominal size	H1	L	Measuring depth
4473008	1.75 mm	0.9 mm	25.30 mm	16 mm	4473009	10.00 mm	3.3 mm	48.50 mm	45 mm
	2.00 mm	0.9 mm	25.30 mm	16 mm		11.00 mm	3.3 mm	48.50 mm	45 mm
	2.25 mm	0.9 mm	25.30 mm	16 mm		12.00 mm	3.3 mm	48.50 mm	45 mm
	2.50 mm	1.2 mm	30.60 mm	21 mm		13.00 mm	3.3 mm	48.50 mm	45 mm
	2.75 mm	1.2 mm	30.60 mm	21 mm		14.00 mm	3.3 mm	48.50 mm	45 mm
	3.00 mm	1.2 mm	30.60 mm	21 mm		15.00 mm	3.3 mm	48.50 mm	45 mm
	3.25 mm	1.2 mm	30.60 mm	21 mm		16.00 mm	3.3 mm	48.50 mm	45 mm
	3.50 mm	1.2 mm	30.60 mm	21 mm		17.00 mm	3.3 mm	48.50 mm	45 mm
	3.75 mm	1.2 mm	30.60 mm	21 mm		18.00 mm	3.3 mm	48.50 mm	45 mm
	4.00 mm	2.0 mm	47.30 mm	38 mm		19.00 mm	3.3 mm	48.50 mm	45 mm
	4.50 mm	2.0 mm	47.30 mm	38 mm		20.00 mm	3.3 mm	48.50 mm	45 mm
	5.00 mm	2.0 mm	47.30 mm	38 mm					
	5.50 mm	2.0 mm	47.30 mm	38 mm					
	6.00 mm	2.0 mm	47.30 mm	38 mm					
	6.50 mm	2.0 mm	47.30 mm	38 mm					
	7.00 mm	2.0 mm	47.30 mm	38 mm					
	7.50 mm	2.0 mm	47.30 mm	38 mm					
8.00 mm	2.0 mm	47.30 mm	38 mm						
8.50 mm	2.0 mm	47.30 mm	38 mm						
9.00 mm	2.0 mm	47.30 mm	38 mm						
9.50 mm	2.0 mm	47.30 mm	38 mm						



Accessories

Order no.	Description	Type
4333000	Millimes 5 μm , $\pm 130 \mu\text{m}$	1004
4334000	Millimes 1 μm , $\pm 50 \mu\text{m}$	1003
4335000	Millimes 0.5 μm , $\pm 25 \mu\text{m}$	1002
4337662	Digital dial indicator, 0.0005 mm, 12.5 mm	1087 BR
4337664	Digital dial indicator, 0.0005 mm, 12.5 mm	1087 BRi
4473375	844 Ke setting rings in set for measuring range 1 – 1.4 mm	844 Ke
4473376		
4473400	844 Kg measuring instrument holder, $\varnothing 8 \text{ mm}$ / M6 x 0.75	844 Kg
4473401	844 Kga measuring instrument holder, $\varnothing 8 \text{ mm}$ / M6 x 0.75	844 Kga
4473402	844 Kgz measuring instrument holder, $\varnothing .375''$ / M6 x 0.75	844 Kgz
4473405	844 Kv measuring depth extension, length 50 mm	844 Kv
4473406	844 Kv measuring depth extension, length 100 mm	844 Kv
4473407	844 Kv measuring depth extension, length 250 mm	844 Kv
4473409	844 Kw right-angle attachment 90°, M6 x 0.75	844 Kw
4473376	844 Ke setting rings in set for measuring range 1.75 – 3.75 mm	844 Ke
4473377	844 Ke setting rings in set for measuring range 4 – 9.5 mm	844 Ke
4473378	844 Ke setting rings in set for measuring range 1.75 – 9.5 mm	844 Ke
4473379	844 Ke setting rings in set for measuring range 10 – 20 mm	844 Ke

Marameter 844 KS

Self-centering inner measuring device

Features

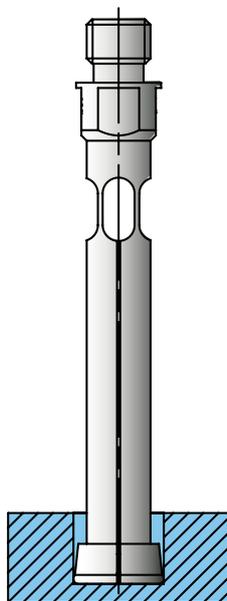
- Measuring head made of hardened steel, hard chrome plated
- Constant measuring force thanks to automatic suspension. Measuring results are therefore independent of personal sense of touch
- Measuring head, driving needle, measuring instrument holder, depth extensions, right-angle attachments and setting rings form a comprehensive modular system
- Minimum composition of a measuring instrument: Measuring head, driving needle and measuring instrument holder plus indicating instrument
- **Scope of delivery:** Measuring instrument holder 844 Kg, measuring probe, driving needle, wooden box, excludes indicating instrument



Applications: Model for blind holes

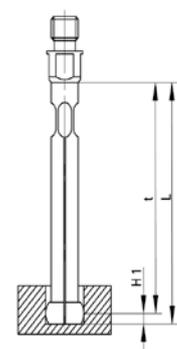
- For measurements close to the bottom of the hole
- For comparative measurements of diameters and testing for form deviations such as roundness and conicity
- Ideal for testing batches
- Determine reversal point by oscillation in hole

Technical data



Order no.	Type	Nominal size in mm	Individual area probe in mm	Individual area probe in mm	Linearity f_e	Repeatability f_w
4473007	844 KS	4.00	3.70 – 4.30	12 units	1 %, min. 1 μm	1 μm
		4.50	4.20 – 4.80			
		5.00	4.70 – 5.30			
		5.50	5.20 – 5.80			
		6.00	5.70 – 6.30			
		6.50	6.20 – 6.80			
		7.00	6.70 – 7.30			
		7.50	7.20 – 7.80			
		8.00	7.70 – 8.30			
		8.50	8.20 – 8.80			
		9.00	8.70 – 9.30			
		9.50	9.20 – 9.80			
4473009	844 KS	4.00	9.40 – 10.60	11 units	1 %, min. 1 μm	1 μm
		4.50	10.40 – 11.60			
		5.00	11.40 – 12.60			
		5.50	12.40 – 13.60			
		6.00	13.40 – 14.60			
		6.50	14.40 – 15.60			
		7.00	15.40 – 16.60			
		7.50	16.40 – 17.60			
		8.00	17.40 – 18.60			
		8.50	18.40 – 19.60			
		9.00	19.40 – 20.60			
		9.50				

Order no.	Nominal size	H1	L	Measuring depth	Order no.	Nominal size	H1	L	Measuring depth
4473207	4.00 mm	0.5 mm	47.30 mm	38 mm	4473209	4.00 mm	1.0 mm	48.50 mm	45 mm
	4.50 mm	0.5 mm	47.30 mm	38 mm		4.50 mm	1.0 mm	48.50 mm	45 mm
	5.00 mm	0.5 mm	47.30 mm	38 mm		5.00 mm	1.0 mm	48.50 mm	45 mm
	5.50 mm	0.5 mm	47.30 mm	38 mm		5.50 mm	1.0 mm	48.50 mm	45 mm
	6.00 mm	0.5 mm	47.30 mm	38 mm		6.00 mm	1.0 mm	48.50 mm	45 mm
	6.50 mm	0.5 mm	47.30 mm	38 mm		6.50 mm	1.0 mm	48.50 mm	45 mm
	7.00 mm	0.5 mm	47.30 mm	38 mm		7.00 mm	1.0 mm	48.50 mm	45 mm
	7.50 mm	0.5 mm	47.30 mm	38 mm		7.50 mm	1.0 mm	48.50 mm	45 mm
	8.00 mm	0.5 mm	47.30 mm	38 mm		8.00 mm	1.0 mm	48.50 mm	45 mm
	8.50 mm	1.0 mm	48.50 mm	45 mm		8.50 mm	1.0 mm	48.50 mm	45 mm
	9.00 mm	1.0 mm	48.50 mm	45 mm		9.00 mm	1.0 mm	48.50 mm	45 mm
	9.50 mm	1.0 mm	48.50 mm	45 mm		9.50 mm			



Accessories

Order no.	Description	Type
4333000	Millimes 5 μm , $\pm 130 \mu\text{m}$	1004
4334000	Millimes 1 μm , $\pm 50 \mu\text{m}$	1003
4335000	Millimes 0.5 μm , $\pm 25 \mu\text{m}$	1002
4337662	Digital dial indicator, 0.0005 mm, 12.5 mm	1087 BR
4337664	Digital dial indicator, 0.0005 mm, 12.5 mm	1087 BRi
4473375	844 Ke setting rings in set for measuring range 1 – 1.4 mm	844 Ke
4473376		
4473400	844 Kg measuring instrument holder, $\varnothing 8 \text{ mm}$ / M6 x 0.75	844 Kg
4473401	844 Kga measuring instrument holder, $\varnothing 8 \text{ mm}$ / M6 x 0.75	844 Kga
4473402	844 Kgz measuring instrument holder, $\varnothing .375''$ / M6 x 0.75	844 Kgz
4473405	844 Kv measuring depth extension, length 50 mm	844 Kv
4473406	844 Kv measuring depth extension, length 100 mm	844 Kv
4473407	844 Kv measuring depth extension, length 250 mm	844 Kv
4473409	844 Kw right-angle attachment 90°, M6 x 0.75	844 Kw
4473376	844 Ke setting rings in set for measuring range 1.75 – 3.75 mm	844 Ke
4473377	844 Ke setting rings in set for measuring range 4 – 9.5 mm	844 Ke
4473378	844 Ke setting rings in set for measuring range 1.75 – 9.5 mm	844 Ke
4473379	844 Ke setting rings in set for measuring range 10 – 20 mm	844 Ke

Marameter 844 KM

Measuring tripod

Features

Measuring tripod with practical features:

- High measuring column with large setting range
- Stop ring for measuring height, ideal when switching measuring probe
- Large stroke path for lowering probes
- Depth stop to limit stroke
- Large measuring table with dust grooves and four threaded bores for individually attaching a 844 Kmp vee-block stop
- Holder element for instrument holder 844 Kg / 844 Kga / 844 Kgz with shaft \varnothing 10 mm
- Additional holder \varnothing 8 mm for optional dial indicator as measuring depth display



Applications:

Ideal for production testing with 844 K. Inside measuring probes without time-consuming reversing point search by oscillation

Technical data

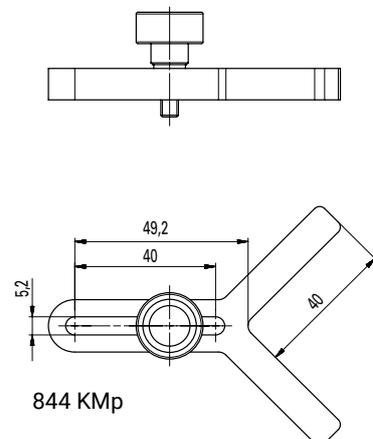
Order no.	Overhang	Stroke	Max. object height	Table diameter	Type
4473420	90 mm	50 mm	approx. 150 mm	120 mm	844 KM

Accessories

Order no.	Description	Type
4473425	Holder on floating bearings for measuring tripod 844 KM	844 KMs
4473426	Vee-block stop including knurled clamping screw for measuring table 844 KM	844 Kmp



844 KMs



844 Kmp



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All illustrations, numerical values, etc. are therefore subject to change.

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