

Product information

Mobile roughness measuring instrument M 310

Product features

Mobile roughness measurement – guaranteed success!

- Compact roughness measuring instrument for mobile use
- Simple and intuitive to use: as easy as using a smartphone
- Large, illuminated 4.3" TFT touch display
- Adjustable display
- Micro-USB interface for remote control via ASCII commands, e.g. via software for statistical process control or remote start control for automation solutions
- USB-A interface - for connecting e.g. a USB Bluetooth adapter or the USB/Bluetooth printer
- Specification of the cutting line C in μm or in % of Rz for the characteristic values Rmr and tp
- Data backup as TXT, X3P, CSV or PDF file
- Transfer of measuring records and data optionally via Bluetooth or cable
- IATF 16949 compliant – safe traceability with MarConnect
- Print directly on mobile printer (as option or directly in set with printer)
- Create complete PDF measuring records directly in the measuring instrument
- Customer-specific comments for the PDF measuring record can be entered directly into MarSurf M 310
- Mains-independent operation: Over 1200 measurements without having to recharge the instrument
- An all-in-one solution. Small and lightweight (approx. 500 g)
- Instrument flexibility: removable drive unit
- 31 thread parameters: offer the same range of functions as a laboratory instrument.
- Roughness standard stored within housing aids in reducing errors
- Quick access to your frequently used functions via the Favorites list in the display
- Automatic cutoff selection, so even non-specialists can be sure of getting the correct measuring results
- Additional versions with transverse drive unit available as



Item no.: 6910265

Technical data

Measuring principle	Stylus method
Probe	Inductive skidded probe
Parameters	A1, A2, Ar, Mr1, Mr2, R, R3z, R _{Pc} , R _S m, Ra, Rk, R _{max} , R _{mr} (tp (JIS, ASME) is equivalent to R _{mr}), R _p , R _{pk} , R _q , R _t , R _{vk} , R _x , R _z , R _z (JIS), R _z (R _y (JIS) is equivalent to R _z), V _o
Measuring units	metric/inches
Measuring range mm	0,350
Profile resolution	8 nm
Filter according to ISO/JIS	Gaussian filter as per ISO 16610-21 (formerly ISO 11562), special filter as per DIN EN ISO 13565-1, Lambda s filter as per DIN EN ISO 3274 (can be switched off)
Cutoff lc according to ISO/JIS	0,25 mm, 0,8 mm, 2,5 mm, automatic filter detection, variable
Short stroke under ISO/JIS	Selectable
Traversing length Lt according ISO/JIS	1.5 mm, 4.8 mm, 15 mm, N x Lc, variable, automatic
Traversing length according ISO 12085 (MOTIF)	1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm
Evaluation length ln according to ISO/JIS	1,25 mm, 4,0 mm, 12,5 mm
Number n of sampling length according to ISO/JIS	Selectable: 1 to 16
Stylus	5 μm
Measuring force (N)	.00075
Calibration function	dynamic; Ra, Rz, R _s m
Storage capacity	min. 3900 profiles, min. 500,000 results, min. 1500 PDF measuring records, expandable to 32 GB with microSD card (320x memory capacity)
Languages	German, English, French, Italian, Spanish, Portugese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish, Romanian
Other	Lock/password protected, date/time
Data interface	USB A, USB B, MarConnect (bidirectional), Micro SD slot for SD / SDHC cards up to 32 GB
System of protection	IP 40
Rechargeable batteries	Lithium-ion battery, 3.7 V, nominal capacity 11.6 Wh, min. 1200 measurements
Wide range power supply	100 to 264 V
Dimensions in mm	160 mm x 77 mm x 50 mm
Weight	3.6 KG

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Accessories

Designation	Product type	Order no.
PHT pick-up extension 80 mm	PHT (80 mm)	6850540
Standard probe 2 μm	PHT 6-350	6111520
Standard probe 5 μm	PHT 6-350/ 5 μm	6111526
Standard probe 10 μm	PHT 6-350/ 10 μm	6111527
Probe for bores with a dia. larger than 3 mm	PHT 3-350	6111521
Probe for grooves	PHT 11-100	6111524
Probe for concave and convex surfaces	PHTR-100	6111525
Probe for gear tooth flanks	PHTF 0.5-100	6111522
Probe for metal sheets	PT 150	6111523
Measuring stand 300 mm with cast iron base	ST-D	6710803
Measuring stand 300 mm with granite plate	ST-F	6710806
Measuring stand 300 mm with granite plate and T-slot	ST-G	6710807
Adjustable mounting bracket to connect to 814 SR	814 Sh	2247086
Height measuring and scribing instrument	814 SR	4426100
Height measuring and scribing instrument	814 SR	4426101
Data connection cable RS232C	16 EXr	4102410
Data connection cable USB	16 EXu	4102357
Transmitter	16 EWe	4102231
Receiver	e-Stick	4102230
V-block	PP	6710401
Parallel vice	PPS	6710604
XY Table	CT 120	6710529
Set of miniature precision vises	109 PS	4246819
Roughness standard with Mahr calibration certificate, profile depth 10 μm	PRN 10	6820420
Geometric standard with sinusoidal groove profile, profile depth 3 μm	PGN 3	6820601
Geometric standard with sinusoidal groove profile, profile depth 1,5 μm	PGN 1	6820602
Geometric standard with sinusoidal groove profile, profile depth 10 μm	PGN 10	6820605
Mahr calibration certificate for PGN Standard	PGN	9027715
DKD (German Calibration Service) calibration certificate for PGN Standard	PGN	6980102
Measuring tripod with triangular pedestal	815 GN	4413000
Measuring tripod with triangular pedestal	815 GN	4413001
Measuring tripod with triangular pedestal	815 GN	4413005
Measuring tripod with magnetic base	815 MA	4416000