MarSurf M 410

Mobile surface measuring instrument

FEATURES

Simple, innovative, flexible – modern surface metrology for handheld use

- Handy roughness tester for mobile use
- Simple and intuitive operation: As easy as operating a smartphone
- Large, backlit 4.3" TFT touch display
- Rotatable display
- Magnetic probe holder: Fast probe arm change without tools
- Thanks to skidless probe: measurements of roughness as well as waviness – no extra measuring station required, determination of R, W and P parameters
- Simple alignment of the probe system: The inclination can be easily corrected using the menu-guided graphic instructions./li>
- Process and material safety thanks to automatic zeroing
- Micro USB interface for remote control via ASCII commands, e.g. via software for statistical process control
- USB-A interface for connecting e.g. a USB wireless adapter or the USB wireless printer
- Wireless transmission of measurement results via wireless stick to the free MarCom software
- Remote start of measurement via cable or wireless
- Connection of a scanner for automatic start of the measuring programs or reading of protocol texts via barcode or QR code
- Specification of the profile section lebel C in µm or in % of Rz for the characteristic values Rmr and tp/li>
- Data backup as TXT, X3P, CSV and PDF file
- Transmission of measurement protocols and data optionally via cable or wireless
- IATF 16949 compliant - secure traceability with MarConnect.
- Print directly to the mobile printer (as an option or directly in the set with printer)
- Creation of finished PDF protocols directly in the measuring device
- Customer-specific comments for the PDF log are entered directly on the MarSurf M 410
- MRK and ADK curve display and printing
- Measuring programs are saved (Quick & Easy)
- Mains-independent operation: over 1200 measurements without having to recharge the device
- Everything in the palm of your hand. Small size and low weight (approx. 500 g)
- Flexible device: Removable drive unit
- More than 50 parameters: Offer a performance range like a laboratory instrument.





Application:

Mechanical engineering
Bearings, shafts, racks, valves, various components from the engineering and precision mechanics industries

Automotive
Steering, brake systems, transmissions, crankshafts, camshafts, cylinder heads, cylinder blocks, turbochargers

Medical
Roughness measurement on hip and knee endoprostheses

Aerospace
Turbine components

Optics
Diverse optical components

TECHNICAL DATA

Order no.		6910290	6910291
Type		M 410	
Traversing length (Lt)		till 26 mm	
Measuring principle		tactile stylus method, tactile skidless probe	
Measuring force	N	0.00075	
Filter according to ISO/JIS		Gaussian filter according to DIN EN ISO 16610–21, robust Gaussian filter according to DIN EN ISO 16610–31, special filter according to DIN EN ISO 13565–1, ls filter according to DIN EN ISO 3274 (can be switched off)	
Cutoff lc according to ISO/JIS		0,08 mm, 0,25 mm, 0,8 mm, 2,5 mm, automatic filter detection, variable	
Short stroke under ISO/JIS		selectable	
Number n of sampling length according to ISO/JIS		selectable: 1 to 16	
Surface parameters		Over 55 characteristic values for R-, P-, W-profile in accordance with current ISO/JIS/ASME/Motif standardization	
Battery type		Lithium-ion accu 3.7 V	
Data interface		USB A, MarConnect (RS–232), Micro SD slot for SD / SDHC cards up to 32 GB	
Languages		German, English, French, Italian, Spanish, Portugese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish, Romanian	
Storage capacity		min. 3900 profiles, min. 500,000 results, min. 1500 PDF logs, expandable with microSD card up to 32 GB (increases storage capacity by a factor of 320)	
Probe		inductive skidless probe system	
IP protection category		IP 40	
Operating temperature	°C	10 °C to 45 °C	
Relative humidity		30 % to 85 %, non-condensing!	
Lagertemperatur	°C	–10 °C to 60 °C	
Weight measuring instrument		300 g	
Weight drive unit		1120 g	
H x W x D	mm	198 mm x 77 mm x 97 mm	
(L x W x H) for measuring instrument		162 mm x 77 mm x 35 mm	
(L x W x H) for drive unit		194 mm x 38 mm x 72 mm	
Other functions		Lock/code word protection, date/time	

- Quick access to your desired functions through favorites storage in the display
- Automatic cutoff selection: ensures correct measurement results even for the non-measuring technician

- Free software "MarWin Easy Roughness Viewer" for further documentation (statistics, multiple profiles and results on one page etc.) available for download on the Mahr website.