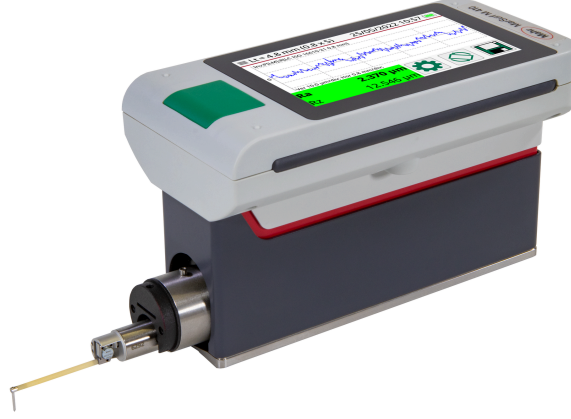# Ürün bilgileri

Mobil yüzey ölçüm aleti MarSurf M 410

Ürün özellikleri

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

Malzeme no.: **6910290**

Teknik veriler

Hareket uzunluğu (Lt)	till 26 mm
Ölçme prensibi	Tactile stylus method
Unit of measurement	metrisch/inch
Ölçüm kuvveti (N)	0.00075
Probe tip radius	2 µm
ISO/JIS'e göre filtre	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)
ISO/JIS'e göre Kesme lc	0,08 mm, 0,25 mm, 0,8 mm, 2,5 mm, otomatik filtre algılama, değişken
ISO/JIS'ye uygun kısa strok	selectable
ISO/JIS'e göre örnekleme uzunluğu sayısı n	selectable: 1 to 16
Ölçüm hızı	0.1 mm/s - 1 mm/s
positioning speed X-axis max.	3 mm/s
Konumlandırma hızı (mm/sn), X ekseni	till 3 mm/s
Yüzey parametreleri	Über 55 Kennwerte für R-, P-, W-Profil gemäß aktueller Normung ISO/JIS/ASME/Motif
Enerji kaynağı	Integrated rechargeable battery (min. 1200 measurements) or via charging unit
Veri arabirimi	USB A, MarConnect (RS-232), SD / SDHC kartlar için Micro SD yuvası, 32 GB
Diller	Almanca, İngilizce, Fransızca, İtalyanca, İspanyolca, Portekizce, Felemenkçe, İsveççe, Rusça, Lehçe, Çekçe, Japonca, Çince, Korece, Macarca, Türkçe, Rumence
Depolama kapasitesi	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)
Prob	inductive skidless probe system
IP koruması kategorisi	IP 40
Bağıl nem	30 % to 85 %, non-condensing!
Ağırlık	1.42 KG
Ağırlık ölçüm aleti	300 g
Ağırlık tahrik ünitesi	1120 g
Mm cinsinden boyutlar	198 mm x 77 mm x 97 mm
Ölçüm aleti için mm cinsinden boyutlar (U x G x Y).	162 mm x 77 mm x 35 mm
Tahrik ünitesi için boyutlar (U x G x Y), mm cinsinden.	194 mm x 38 mm x 72 mm
Diğer	Lock/code word protection, date/time

Ürün bilgileri

Mobil yüzey ölçüm aleti MarSurf M 410

- 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.
- 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.

Uygulama

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

Teknik veriler

Tarama ucu	2 µm; 5 µm
Parametreler	Ra, Rq, Rz, Rz (JIS), Rz (Ry (JIS) Rz eşdeğeridir), Rmax, Rp, Rp (ASME), Rpm (ASME), Rv, R3z, Rk, Rpk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, RPc, Rmr (tp (JIS, ASME) Rmr eşdeğeridir), RSm, RS, Rdq, RSk, Rku, Rdc, RHtp, Pdc, Pa, Pt, PMr, Wa, Wq, WSm, WSk, Wt, CR, CF, CL, R, Ar, Rx, W, AW (MOTIF), Wx (MOTIF), Wte (MOTIF), NW (MOTIF), NR (MOTIF), NCRX (MOTIF), CPM (MOTIF)
Koruma sistemi	IP 40
Şarj edilebilir piller	Li-Ion battery, 3.7 V, nominal capacity 11.6 Wh, min. 500 measurements
Geniş aralıklı güç kaynağı	100 to 264 V
Ölçüm aralığı mm	500 µm (±250 µm) for probe arm length 45 mm to 1500 µm (±750 µm) for probe arm length 135 mm

Boyutlar

Mm cinsinden boyutlar	198 mm x 77 mm x 97 mm

Aksesuarlar

Sipariş no.	Adı	Ürün tipi
4102603	Veri kablosu USB çift yönlü	DK-U1
6852403	Probe arm	BFW
6710803	Dökme demir tabanlı 300 mm ölçüm standı	ST-D
6710806	Granit plakalı 300 mm ölçüm standı	ST-F
6710807	Granit plakalı ve T yuvalı 300 mm ölçüm standı	ST-G
6710401	V blok	PP
6710604	Paralel mengene	PPS
6710529	XY Tablası	CT 120
4246819	Minyatür hassas mengene takımı	109 PS
6820420	Mahr kalibrasyon sertifikası ile pürüzlülük standardı, profil derinliği 10 µm	PRN 10