

# Mobile Roughness Measuring Instrument MarSurf PS 10

Willrich Precision

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## Application:

- For shafts and housing components
- For large machines
- For large workpieces
- For milled and turned parts
- For ground and honed workpieces
- On the production line or directly on the machine; ideal for rapid testing of the surface roughness of a workpiece in or on the machine.

## Technical Data

Order no.	6910230	6910232
Product type	PS 10	
Parameters	Ra, Rq, Rz (Ry (JIS) is equivalent to Rz), Rz (JIS), Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, RPC, Rmr (tp (JIS, ASME) is equivalent to Rmr), RSm, RSk, RS, CR, CF, CL, R, Ar, Rx	
Stylus	2 µm	5 µm
Calibration function	dynamic; Ra, Rz, Rsm	
Storage capacity	min. 1350 profiles, min. 500,000 results, min. 250 PDF records, expandable to 32 GB with microSD card	
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, MarConnect (RS232), microSD Slot for SD / SDHC-Cards up to 32 GB	
System of protection	IP 40	
Rechargeable batteries	Lithium-ion battery, min. 1200 measurements	
Wide range power supply	100 to 264 V	
H x W x D	mm	160 mm x 77 mm x 50 mm
Weight	kg	0.49
Measuring principle	Stylus method	
Probe	inductive skidded probe	
Measuring range	mm	350 µm
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	
Number n of sampling length according to ISO/JIS	selectable: 1 to 16	
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 lenth ln according to ISO/JIS	1.25 mm, 4.0 mm, 12.5 mm	
Measuring force	N	0.75 mN

„sMAHRtSurf“ - Simple, smart and mobile

- Compact roughness measuring instrument for mobile use
- Simple and intuitive to use: As easy to use as a smart phone
- Large, illuminated 4.3" TFT touch display
- Adjustable display
- Start button also serves as the Home button for direct access to the start screen
- Data backup as TXT, X3P or PDF file
- Creation of completed PDF measuring records in the measuring device
- Customer-specific comments for the PDF measuring record are entered directly into the MarSurf PS 10
- Power supply 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
- All the measuring positions you need: horizontal, vertical, upside down
- 31 surface parameters offer the same range of functions as a laboratory instrument.
- Error free operation thanks to an integrated, removable roughness standard
- Quick access to your frequently used functions via the Favorites list in the display
- Very short activation time: results available within seconds
- Automatic cutoff selection, so even non-specialists can be sure of getting the correct measuring results
- NEW: Additional version with transverse drive unit MarSurf PS 10 C2 available (article number 6910235)
- **Scope of delivery:**
  - MarSurf PS 10 unit
  - Drive unit (detachable)
  - 1 standard probe conforming to standards
  - Built-in rechargeable battery
  - Roughness standard integrated into housing (detachable), including Mahr calibration certificate
  - Probe protection
  - Charger / 3 adapters
  - Operating instructions
  - Carry case with shoulder strap
  - USB cable
  - Extension cable for drive unit (length 1.2 m)
  - Height adjustment (integrated)
- **Software:** MarCom Professional free download: [www.mahr.com/marcom](http://www.mahr.com/marcom) (only for Mahr data cables and wireless systems with USB and RS232 interface)

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## Accessories

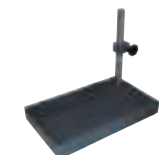
Order no.	Product description	Product type
6850540	PHT pick-up extension 80 mm	PHT (80 mm)
6111520	Standard probe 2 µm	PHT 6–350
6111526	Standard probe 5 µm	PHT 6–350/ 5µm
6111527	Standard probe 10 µm	PHT 6–350/ 10µm
6111521	Probe for bores with a dia. larger than 3 mm	PHT 3–350
6111524	Probe for grooves	PHT 11–100
6111525	Probe for concave and convex surfaces	PHTR–100
6111522	Probe for gear tooth flanks	PHTF 0.5–100
6111523	Probe for metal sheets	PT 150
6850715	Pick-up protection with header V-block, steel	PHT-ts4
7028530	Pick-up protection header V-block, plastic	PHT-ts3
6910209	Mount MarSurf PS 10 on measuring stand ST	ST-a3
6910435	RD 18 C / PS 10 upright holder for cylindrical drive unit, Ø 8 mm	ST-a2
6710803	Measuring stand 300 mm with cast iron base	ST-D
6710806	Measuring stand 300 mm with granite plate	ST-F
6710807	Measuring stand 300 mm with granite plate and T-slot	ST-G
2247086	Adjustable mounting bracket to connect to 814 SR	814 Sh
4426100	Height Measuring and Scribing Instrument	814 SR
4426101	Height Measuring and Scribing Instrument	814 SR
4102410	Data connection cable RS232C	16 EXr
4102357	Data connection cable USB	16 EXu
4102231	Transmitter	16 EWe
4102230	Receiver	e-Stick
6710401	V-block	PP
6710604	Parallel vice	PPS
6710529	XY Table	CT 120
4246819	Miniature precision vises, set	109 PS
6820420	Roughness standard with Mahr calibration certificate, profile depth 10 µm	PRN 10
6820601	Geometric Standard with sinusoidal groove profile, Profiltiefe 3 µm	PGN 3
6820602	Geometric Standard with sinusoidal groove profile, Profiltiefe 1,5 µm	PGN 1
6820605	Geometric Standard with sinusoidal groove profile, Profiltiefe 10 µm	PGN 10
9027715	Mahr-calibration certificate for PGN Standard	PGN
6980102	DKD (German Calibration Service) calibration certificate for PGN Standard	PGN
4413000	Indicator Stand with Base	815 GN
4413001	Indicator Stand with Base	815 GN
4413005	Indicator Stand with Base	815 GN
4416000	Indicator Stand with Magnetic Base	815 MA
6299054	Evaluation Software	SW XR 20



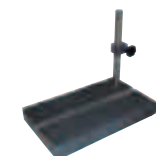
ST-D



814 Sh



ST-F



ST-G



814 SR



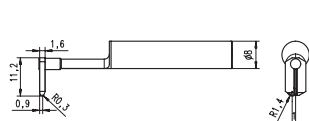
109 PS



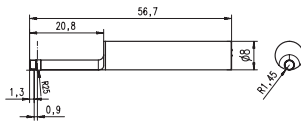
e-Stick



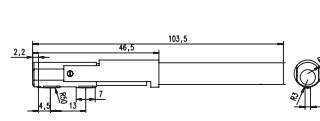
16 EWe



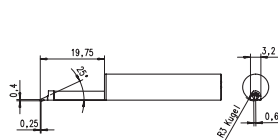
PHTR–100



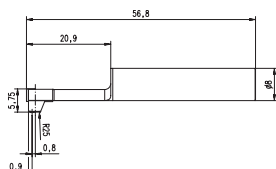
PHT 3–350



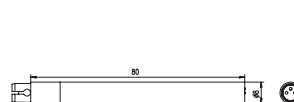
PT 150



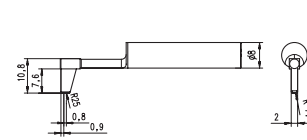
PHTF 0.5–100



PHT 6–350;PHT 6–350/ 5µm



PHT (80 mm)



PHT 11–100