



MICROTECH



SWISS
READING
SYSTEM

MICRON COMPUTERIZED MULTI-FORCE CALIPER

USER MANUAL



ISO17025:2017





Item No	Range		Reso- lution	Accu- racy*	eForce	Jaws	Measuring HUB	Analog scale	Graphic	Preset	Go/NoGo	Max/Min	Formula	Timer	Temp comp	Linear corr.	Calibr date	Recharge	Auto off	Password	Memory	Statistics	WIRELESS	USB HID	FW update
	mm	inch	mm	μm	N	mm																			
141088015A	0-150	0-6"		± 5		40/16		•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
141088020A	0-200	0-8"	0,001	± 8	1-20	50/17		•	•	•	•	•	•	•	•	•	•	•	•	•	1000 val	•	•	•	•
141088030A	0-300	0-12"		± 10		60/20		•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•

* For internal jaw and depth bar accuracy according DIN 862

TECHNICAL DATA

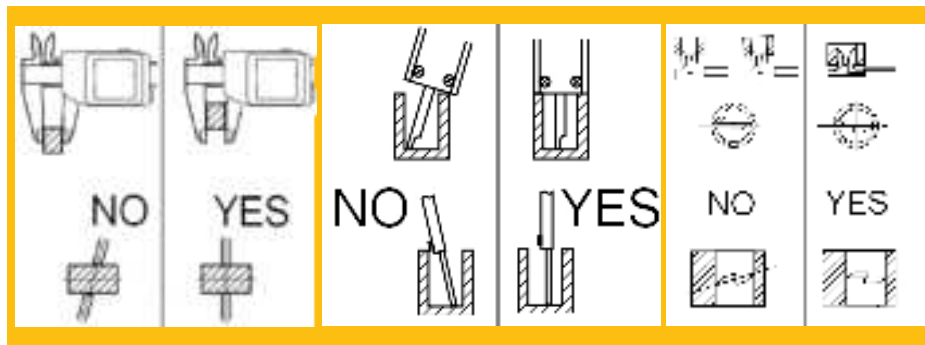
Parameters	
LED display	color 2,0 inch
Resolution	320x240
Indication system	MICS 3.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	400 mAh
Charging port	micro-USB / Magnetic port
Case material	Aluminium
Buttons	Switch (Multifunctional)
Wireless data transfer	Long range/HID

Clean the oil from the measuring surfaces of caliper by cloth.

DO NOT LEAVE UNCHARGED CALIPER FOR A LONG TIME.

THIS MAY RESULT TO INTERNAL BATTERY FAILURE!

CORRECT MEASURING





For charging connect USB cable

BUILT-IN BATTERY - rechargeable Li-Pol battery



SWITCH ON DEVICE - button push (1 sec)

SWITCH OFF DEVICE - button push (3 sec)/ auto switch off

DATA TRANSFER - programming throw menu

FORCE CONTROL



FORCE 1-20N



FORCE LOW

FORCE OK

FORCE TOO HIGH

Electronic MULTI FORCE control module 1-20N

Cauper with electronic multi-Force control module, gives possibility measure all time with a requested FORCE in range 1-20N

FORCE MODES:

DISABLE - FORCE mode OFF

INDICATE - Indicating requested FORCE and status on FORCE bar

AUTO - Indicating requested FORCE and status on FORCE bar and Saving to memory actual lenght value upon reaching requested FORCE (1-20N).

FORCE - Indicating actual FORCE value during pushing

FORCE Indication on FORCE bar:

Green color - actual FORCE OK

Yellow color - lower FORCE

Red color - over FORCE

For **ZERO** setting also use Force control module (push Force up to **Green** indication and set **ZERO** by push for **0** button.

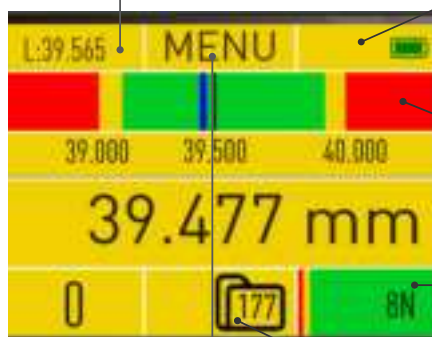
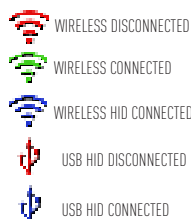


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MAIN SCREEN

LAST VALUE

CONNECTION STATUS



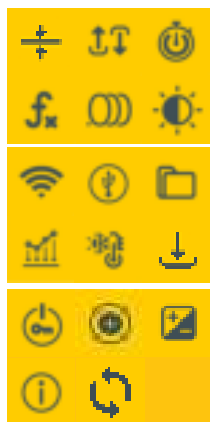
ANALOG SCALE

FORCE bar

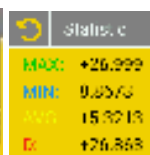
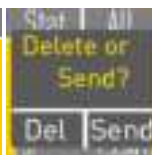
MEMORY



STANDARD or FOLDER system can be activated throw MEMORY menu

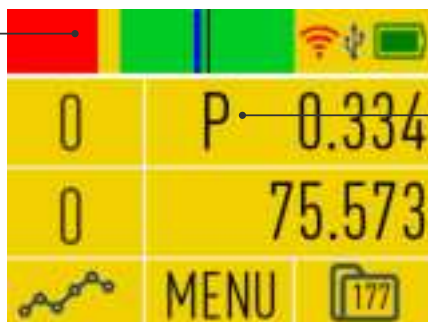


For save measuring data to internal device memory touch data area on screen or button push. You can view saved data or send by WIRELESS or USB connection to Windows PC, Android or iOS It's possible to use Standard or Folders memory modes



MAIN SCREEN on 2D mode

ANALOG SCALE
FOR PROBE MODE



2D AND HUB MODE

PROBE -Saving data when Probe will reach value
PROBE Auto - Saving data when Probe will reach value with this value compensation
2D - 2 axis data reading
2D Sync - Synchronized 2 axis data reading

FUNCTIONS



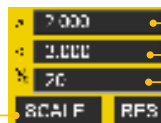
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LIMITS mode GO/NOGO



MAX - NoGo more Upper limit
MIN - NoGo less Lower limit
RANGE - Go between Limits
SCALE - Analog scale active

COLOR INDICATION LIMITS ON MAIN SCREEN Go NoGo



Upper limit
Lower limit
Yellow zone on analog scale

PEAK mode MAX/MIN/MODULE/RANGE



DISABLE - non active mode
ENABLE - activating mode
REFRESH - refresh peak value according timer



MAX - indicating MAX measured value
MIN - indicating MIN measured value
MODULE - indicating MAX module
RANGE - indicating deviation between MAX and MIN

TIMER mode



SAVING DATA TO MEMORY OR SENDING WIRELESS/USB BY TIMER



Select timer period
Reset to disactivate mode

FORMULA mode



Select FORMULA Type (Math, Radius or other)
Select arguments

RESOLUTION selection

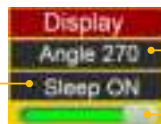


Resolution selecting
mm/inch conversion

DISPLAY settings



Sleep OFF (15 s low brightness off, sleep off)
Sleep 15s (15 s low brightness on, sleep off)
Sleep ON (15 s low brightness on, sleep on)

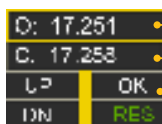


Display rotation 0°, 90°, 180°, 270°
Brightness level

LINEAR error compensation



Re-calculation detail size to calibration conditions (20°C)



Linear correction error's on device

actual values
correct values by up&down button
confirm point correction

TEMP compensation



Manual Temperature setting



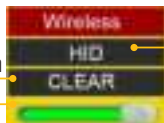
4 types of material for selection:
- Glass, Quartz
- Stainless steel
- Cuprum and alloys
- Aluminium and alloys



WIRELESS data transfer



Reconnection button
Wireless power
regulation



ON - WIRELESS data transfer to MDS App for Android, iOS, Windows
HID - WIRELESS HID direct transfer data to any App in Windows, MacOS, Linux, Android devices (like keyboard). Configure data format in USB sub-menu

2D-S - Slave device on WIRELESS connection on HUB mode

2D-M - Master device on WIRELESS connection on HUB mode

USB OTG data transfer



Connect USB cable to PC & Activate USB HID connection mode

Select setting of data transfer

Direct transfer data to any App in Windows, MacOS, Linux, Android devices

Configuring data transfer Dot/Comma and Tab/Arrow Down/CR+LF

HUB connection



A.C.on - Auto Connection active

A.C.off - Auto Connection no active

PROBE - Saving data when Probe will reach value

PROBE Auto - Saving data when Probe will reach value with this value compensation

2D - 2 axis data reading

2D Sync - Synchronized 2 axis data reading

Disable - switch off modes



External Wireless device connection

Axis priority selecting

Setting PROBE limit value

PROBE MODE

A.C.on - Auto Connection active

A.C.off - Auto Connection no active

PROBE - Saving data when Probe will reach value

PROBE Auto - Saving data when Probe will reach value with this value compensation

2D - 2 axis data reading

2D Sync - Synchronized 2 axis data reading

Disable - switch off modes



External Wireless device connection

Symbol between Axis

Graphic mode indication setting

2D MODE

FUNCTIONS



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FORCE



DISABLE - FORCE mode OFF

INDICATE - Indicating requested FORCE and status on FORCE bar

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FORCE - Indicating actual FORCE value during pushing

RESET to Factory settings



Push 10 times to RESET device to factory settings

Push 10 times to FIRMWARE UPDATE

EXTRA



Selecting normal or inverted axis mode (+/- value indication)

Coefficient setting (for distributor and calibration only)

MEMORY manager setting



Activating STANDARD or FOLDER SYSTEM

Values in each Folder



FOLDERS SYSTEM

CALIBRATION date info



Push for change calibration date info

Device INFO



Information about device

- Firmware version

- MAC adress for WIRELESS connection



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INDUSTRY 4.0 INSTRUMENTS



0,1 μ m



1 μ m

FORCE CONTROL
1-20N



0,1 μ m



1 μ m

MICROTECH

innovative measuring instruments

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