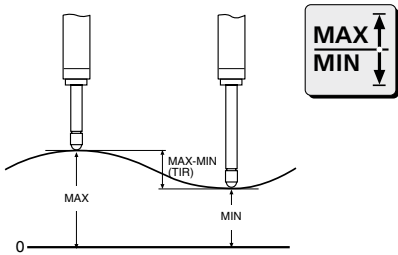


MarCator 1087

► | The new Digital Indicator **MarCator** 1087. The multi-functional Digital Indicator with a combined analog and digital display; plus tolerance and dynamic measuring functions. | ◀

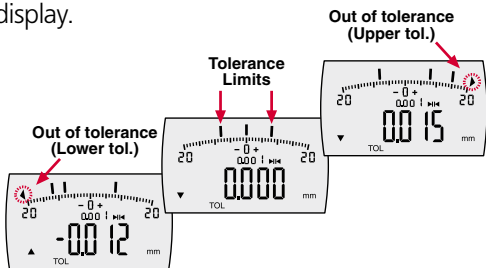
Dynamic measuring functions

- **MAX-MIN**-Function ideal for testing flatness and concentricity
- **MAX** and / or **MIN** for searching the reversal point



Clear display Tolerance indication

The integrated bar graph visualizes the tolerance deviation. The out of tolerance; whether above the upper or below the lower tolerance limit is represented by arrows shown in the display.



Universal Data-Interface

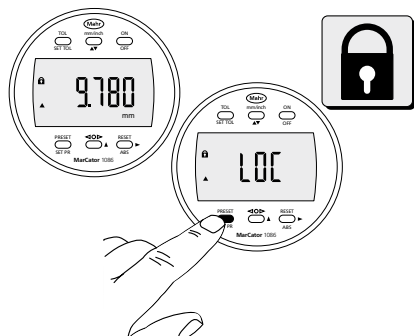
- **USB**
No interface box is required! Simple and inexpensive way to set up a multiple measuring instruments via a USB hub
- **Digimatic**
To connect a Digimatic compatible evaluation instrument
- **Mahr Opto RS232C**
For direct connection to a COM port on a PC



LEADFREE
RoHS conform components

- **ABS**
Absolute function: Digital Indicator can be set in any position to 0.000 without losing the reference to the preset value.

Error free operation - Lock function



Lock function: This prevents unintentional activation of an operating button. Either all the operating buttons or only certain individual buttons can be locked. If a locked operating button is pressed the "LOC" symbol will appear in the display.

Factor is adjustable
a symbol with appear in the display

Example of application:
- Chamfer Gage



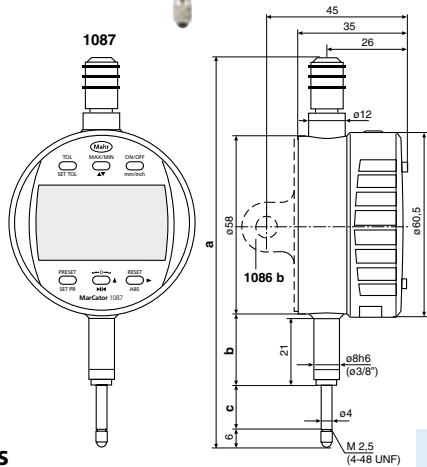
Digital Indicators MarCator 1087 / 1087 Z, with analog display



12.5 mm



25 mm



Shown with Mounting Lug

Dimensions

Measuring range	a	b	c
mm (inch)	mm	mm	mm
12.5 (.5")	126.3	23	13.5
25 (1")	153.4	26.8	26.5

Analog display

Readings mm / inch	Display range mm / inch
0.001 / .00005"	± 0.02 / ± .001"
0.002 / .0001"	± 0.04 / ± .002"
0.004 / .0005"	± 0.08 / ± .01"
0.01 / .001"	± 0.2 / ± .02"

Features

- Functions:**
- ON/OFF
 - RESET (Set display to zero)
 - mm/inch
 - Reversal of the counting direction
 - PRESET (Allows the entry of any value using set buttons)
 - TOL (Enter tolerance limit values)
 - MAX/MIN memory, ideal for searching the reversal point
 - TIR (MAX-MIN) ideal for testing concentricity and flatness
 - ABS (Display can be set to zero, without losing the reference to the Preset value)
 - 0 (Set the analog display to zero)
 - DATA (when connected with a data connection cable)
 - Factor (adjustable)
 - Individual buttons can be locked
 - Operating and display unit (bezel) can be rotated through 280°
 - High contrast LCD with 8.5 mm high digits
 - Inductive measuring system, battery life approx. 2000 hrs.
 - Maximum measuring speed 1.5 m/s (60"/s)
 - MarConnect data output: choose either
 - USB
 - OPTO RS232C
 - Digimatic
 - Operating temperature 10 - 40°C
 - Class of protection IP42 in accordance to IEC 60529

Supplied with:
Battery, operating instructions

Technical Data

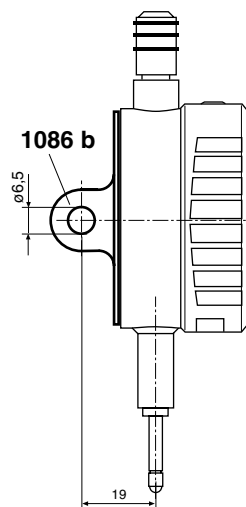
Measuring range	Resolution	Span of error*	Repeatability	Measuring force	Weight	Mounting shank	Order no.
mm (inch)	mm/inch	mm	mm	N	g	dia.	
12.5 (.5")	0.001 / .00005"	0.005	0.002	0.65 - 0.90	140	8h6	4337060
25 (1")	0.001 / .00005"	0.005	0.002	0.65 - 1.15	150	8h6	4337061
12.5 (.5")	0.001 / .00005"	0.005	0.002	0.65 - 0.90	150	3/8"	4337070
25 (1")	0.001 / .00005"	0.005	0.002	0.65 - 1.15	160	3/8"	4337071

* in any zero point

Accessories for MarCator 1086, 1087 and 1088

Accessories for MarCator 1086 and 1087

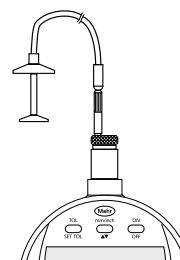
		Order no.
Battery 3V , Type CR 2450		4884464
Data Connection Cable USB (2 m)	16 EXu	4102357
Data Connection Cable Opto RS232C (2 m), with SUB-D jack 9-pin	16 EXr	4102410
Data Connection Cable Digimatic (2 m), Flat plug 10-pin	16 EXd	4102411
Mounting Lug	1086 b	4337421



Accessories for MarCator 1088

		Order no.
Data Connection Cable USB (2 m)	2000 usb	4346023
Data Connection Cable Opto RS232C (2 m), with SUB-D jack 9-pin	2000 r	4346020
Data Connection Cable Digimatic (2 m), Flat plug 10-pin	2000 d	4346021
Cable to connect control output to an SPS	2000 sps	4346031
Mounting Lug	1085 b	4336310
Control Instrument for remote control button operation	2000 sg	4346035

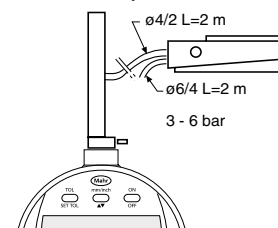
1085 a



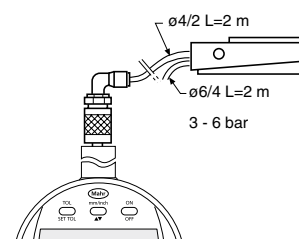
Accessories for MarCator 1086, 1087 and 1088

		Order no.
Cable Release for measuring ranges 12.5 and 25 mm	1085 a	4336311
Pneumatic Lifter for measuring ranges 12.5 and 25 mm	1082 p	4336237
Pneumatic Lifter for measuring ranges 50 and 100 mm	1082 p	4336230
Additional Accessories		Page
Contact Points	901-913	5-52
Special Holder	941	5-53
Sensor Lever	943	5-53

1082 p (12,5/25)



1082 p (50/100)



Contact Points and Accessories for Dial Indicators, Dial Comparators and Probes

Standard Contact Points 901

Ball dia. 3 mm

Catalog no.		Order no.
901	with steel ball	4360001
901 H	with carbide ball	4360002
901 R	with ruby ball	4360003

Spherical Contact Points 902 Flat Contact Points 903

902	902 H	903	903 H
Steel	Carbide contact face	Steel	Carbide tipped
Length mm	Order no.	Order no.	Order no.
4	4360007	-	4360070
6	4360009	-	4360071
8	4360010	4360040	4360072
10	4360011	4360041	4360073
12	4360012	4360042	4360074
15	4360013	4360043	4360075
20	4360014	4360044	4360076
25	4360015	4360045	4360077
30	4360016	4360046	4360300
35	4360017	4360047	4360078
40	4360019	4360049	4360310
45	4360026	4360050	4360303
50	4360018	4360048	4360079
55	4360031		
65	4360035		
75	4360020		
85	4360036		
95	4360029		

Ball Contact Point 906 H

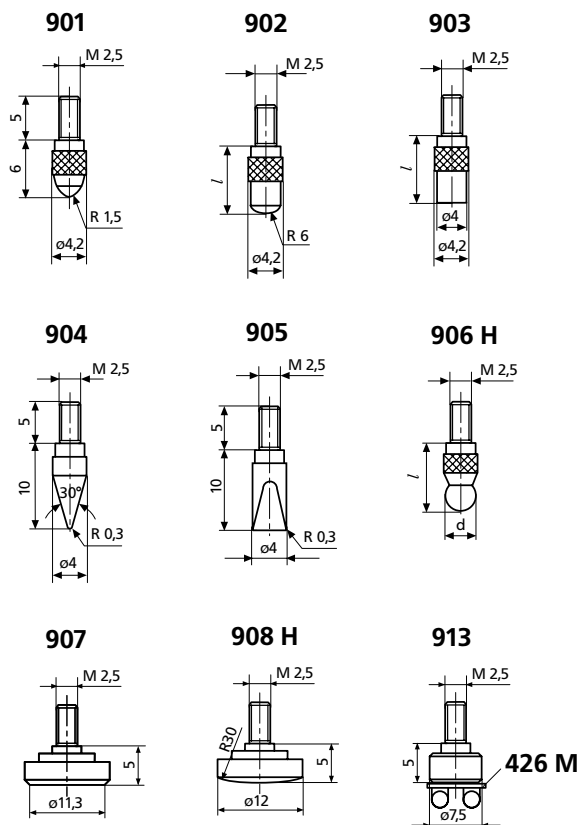
with carbide ball. accuracy ball dia. 0/-6µm

Ball dia. d mm	l mm	Order no.	Ball dia. d mm	l mm	Order no.
1	8.5	4360150	5.5	9	4360161
1.25	8.5	4360151	6	9	4360162
1.5	8.5	4360152	6.35 (1/4")	9	4360163
1.75	8.5	4360153	6.5	10	4360164
2	8.5	4360154	7	10	4360165
2.5	8.5	4360155	7.5	11	4360166
3	8.5	4360156	8	11	4360167
3.5	8.5	4360157	8.5	12	4360168
4	8.5	4360158	9	12	4360169
4.5	8.5	4360159	10	13	4360170
5	9	4360160			

Contact Rollers 909

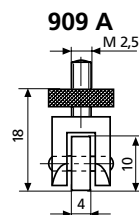
Concentricity error 3 µm

	Order no.
Cylindrical Roller	909 A 4360220
Radiused Roller, R = 5 mm	909 B 4360221



Special Contact Points

	Order no.
Conical Contact Points, Steel	904 4360130
Carbide tipped	904 H 4360131
Wedge Shaped Contact Points, Steel	905 4360140
Carbide tipped	905 H 4360141
Flat Contact Points, Steel, A = 1 cm²	907 4360200
Carbide tipped, dia. 7 mm	907 H 4360201
Spherical Contact Points, Steel	908 4360210
Carbide tipped	908 H 4360211
Flat Contact Point, for mounting Pin Gage Holder 426 M for measuring threads using three-wire method	913 4360400



Contact Points and Accessories for Dial Indicators, Dial Comparators and Probes

Measuring Attachment 910 H

	Order no.
with parallel adjustable carbide blades	910 H 4360230

Pin Contact Point 911

dia. 1 mm, flat

Length l mm	Order no.	Length l mm	Order no.
15	4360280	35	4360284
20	4360281	40	4360285
25	4360282	50	4360286
30	4360283		

Pin Contact Point 911 H

	Order no.
Carbide tipped, dia 1 mm, flat	911 H1 4360240
Carbide tipped, dia 1.5 mm, flat	911 H2 4360241

Measuring Spindle Extensions 912

Length l mm	Order no.	Length l mm	Order no.
10	4360250	35	4360254
15	4360251	50	4360255
20	4360252	75	4360256
25	4360253	100	4360257

Special Holder 941

For all types of measuring equipment
 For placing a dial indicator at a certain distance or angle
 Travel of the measuring spindle 3 mm
 Contact Point 901 (interchangeable)

Straight Holder 941 G

Mounting shank length l_1

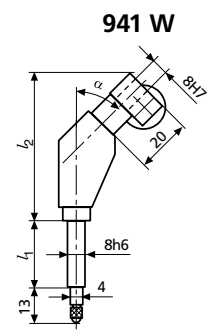
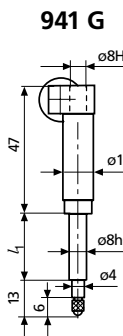
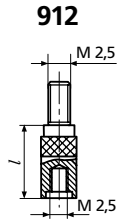
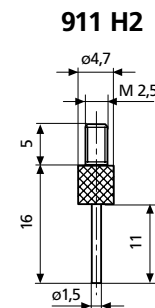
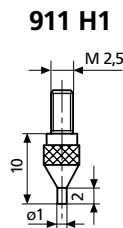
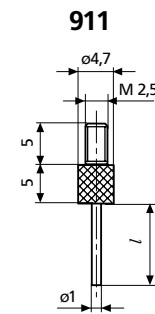
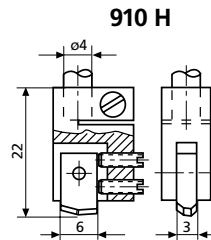
Order no.
4365000
4365001
4365002

Angular Holder 941 W

Order no.	l_2	Order no.	l_2	Order no.	l_2
Angle $\alpha=45^\circ$	mm	Angle $\alpha=60^\circ$	mm	Angle $\alpha=90^\circ$	mm
4365010	53.7	4365020	49.3	4365030	34.5
4365011		4365021		4365031	
4365012		4365022		4365032	

Sensor Level 943

	Order no.
For testing concentricity in bore holes as well as difficult to reach outside diameters To be inserted in a measuring stand with a lifting device Contact Point 901 interchangeable Travel ± 1 mm	4367000



Transmission error with the 941 W
 max. 1%;
 for travel 3 mm = 0.03 mm

