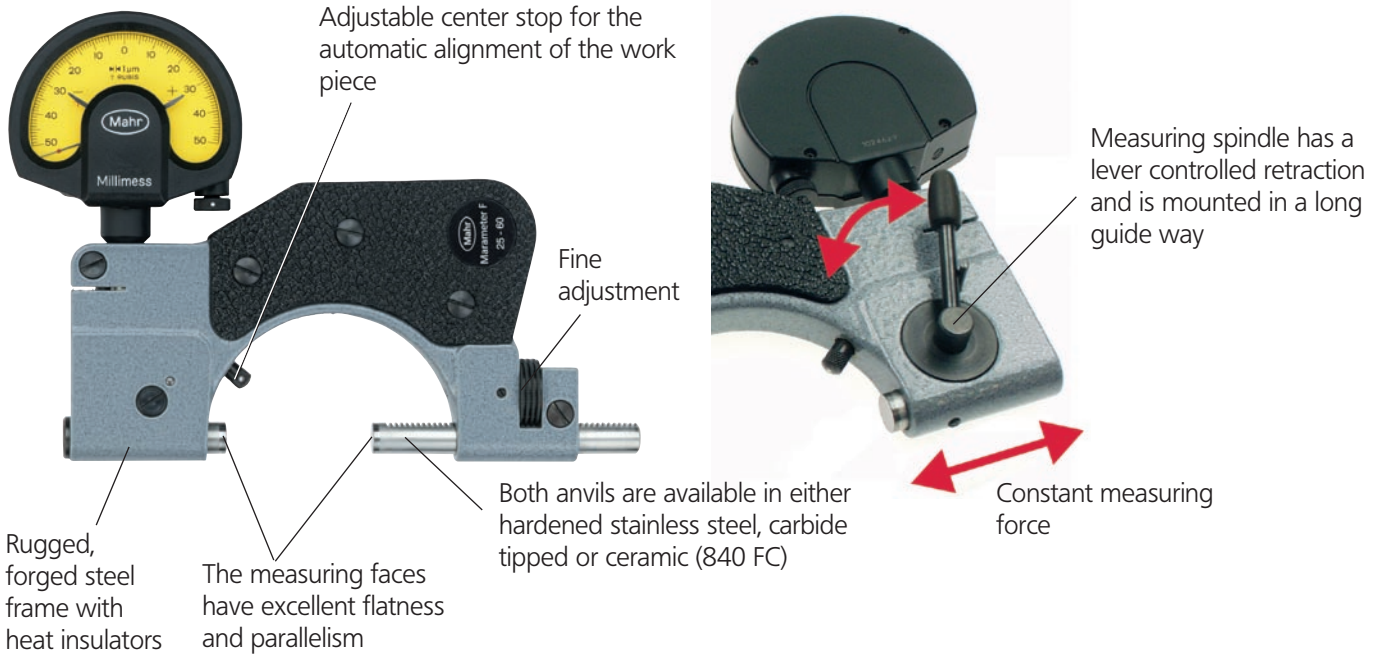


MaraMeter. Indicating Snap Gages

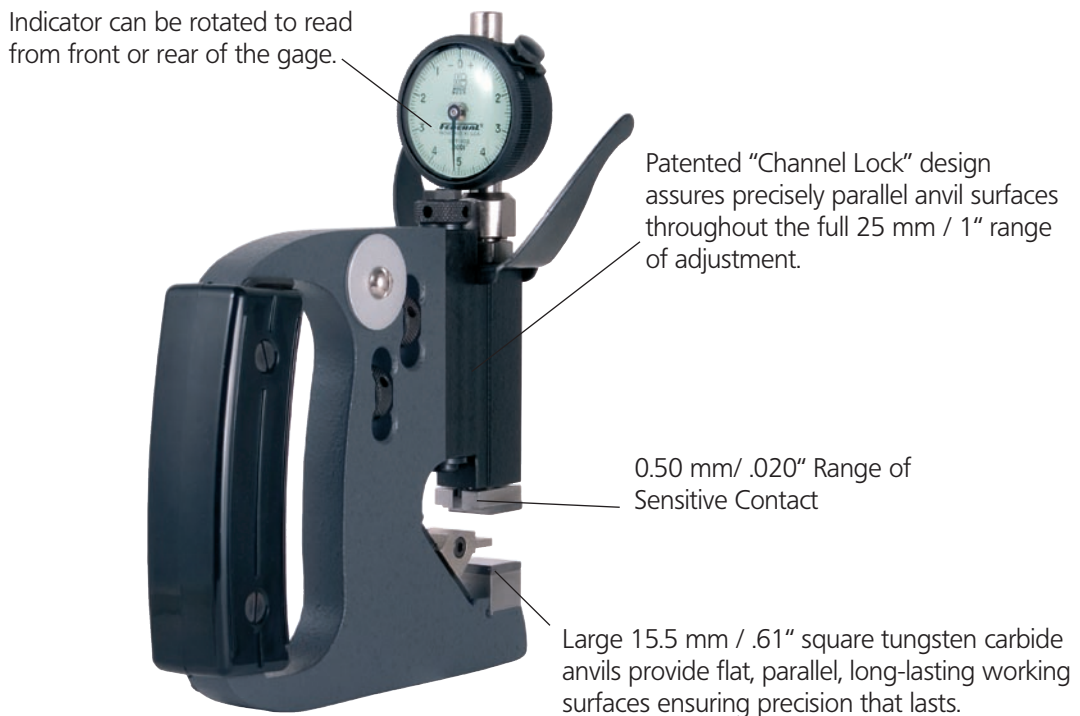
Overview

▶ | **MaraMeter.** The Indicating Snap Gage is ideal for highly accurate and reliable results on cylindrical work pieces with a narrow tolerance. ◀

MaraMeter 840 F



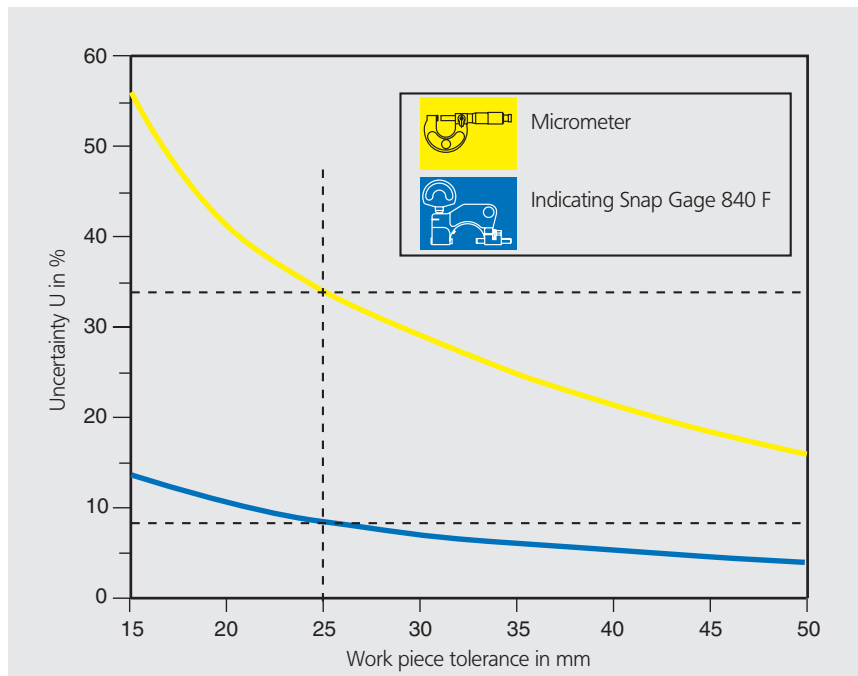
MaraMeter 300 P-1



Advantages of the Snap Gage compared to a Micrometer

• Reduced Measuring Uncertainty

The MaraMeter Indicating Snap Gages have a notably reduced measuring uncertainty in comparison to a Micrometer.



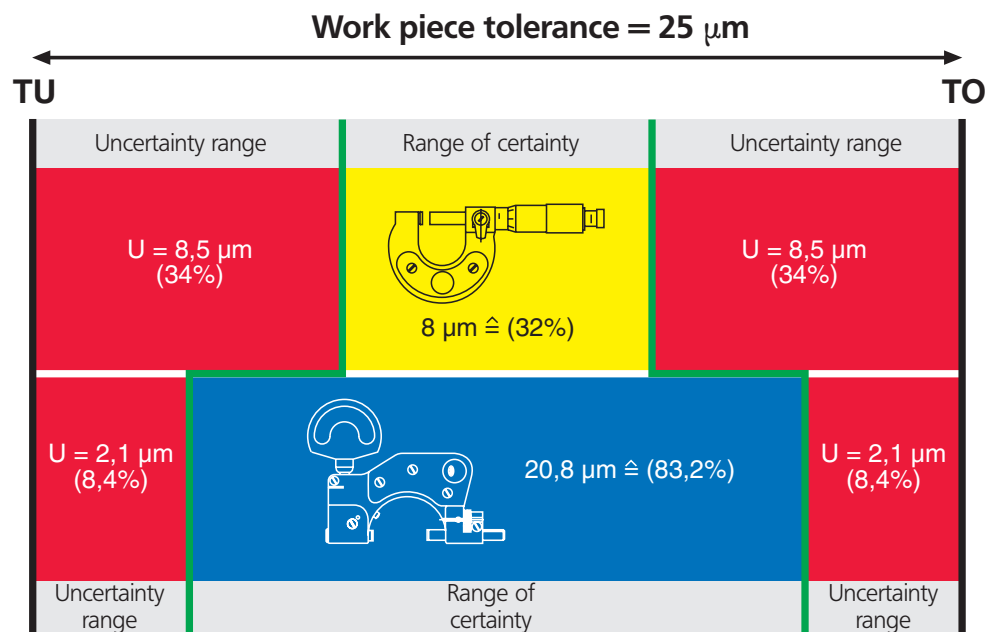
Measuring Uncertainty U is dependent upon the tolerance of the work piece

• Better utilization of the tolerance zone

Example:
Work piece tolerance 25 μm

The measured value in the uncertainty range can lie outside of the tolerance range, therefore the utilized tolerance of the micrometer is reduced to only 32% (8 μm).

With a MaraMeter Indicating Snap Gage 83% (20.8 μm) of the work piece tolerance can be utilized.



Advantage:

With the Indicating Snap Gage the tolerance zone can be used to far greater extent, thus reducing the production costs.

Indicating Snap Gages 840 F / 840 FC MaraMeter F



Features

- For cylindrical parts such as shafts, bolts and spindles, for thickness and length measurements
- Rugged, forged steel frame with heat insulators
- Measuring spindle is mounted in long guide way with lever-controlled retraction
- Anvil spindle can easily be fine adjusted
- Measuring spindle and anvil spindle are both made of hardened stainless steel, carbide-tipped or ceramic (840 FC) measuring faces
- Adjustable center stop for automatic alignment
- Maximum wear resistance due to non-contact positioning in conjunction with carbide-tipped measuring faces
- Constant measuring force as a result of built-in spring, thus eliminating user influence
- Universally applicable and extremely versatile. Each instrument spans a broad measuring range, within this range any dimension and fit can be very quickly and easily adjusted

Technical Data

Catalog no.	Measuring range		Measuring** force N	Distance of moveable anvil mm	Measuring face		Order no.*	Order no. Wooden case
	mm	(inch)			Flatness μm	Parallelism μm		
840 F	0 - 25	(0 - 1")	7.5	2	≤ 0.2	≤ 1	4450000	4450010
	25 - 60	(1 - 2.36")	7.5	2	≤ 0.2	≤ 2	4450001	4450011
	50 - 100	(2 - 4")	7.5	2.5	≤ 0.2	≤ 2	4450002	4450012
	100 - 150	(4 - 6")	7.5	2.5	≤ 0.2	≤ 2	4450003	4450013
	150 - 200	(6 - 8")	7.5	2.5	≤ 0.2	≤ 2	4450004	4450014
840 FC	0 - 25	(0 - 1")	7.5	2	≤ 0.2	≤ 1	4450100	4450010
	25 - 60	(1 - 2.36")	7.5	2	≤ 0.2	≤ 2	4450101	4450011

* Excludes indicating instrument ** Further measuring forces are available on request

Indicating Instruments

All indicating instruments that has a 8 mm mounting shank may be used. Recommended are:

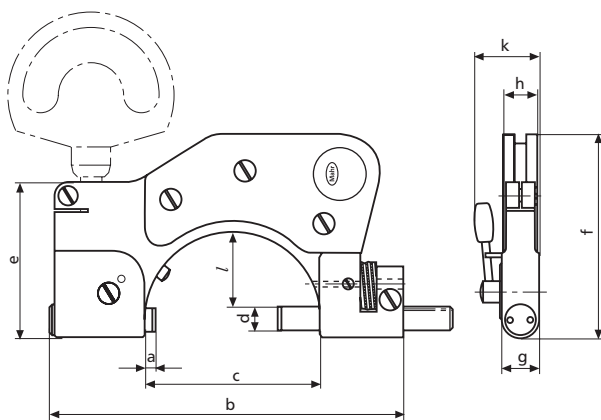
Dial Comparator		Readings		Order no.	
		mm	/ inch	mm	/ inch
Compramess	1004 / 1004 Z	5 μm	/.0001"	4333000 / 4333900	
Millimess	1003 / 1003 Z	1 μm	/.00005"	4334000 / 4334900	
Millimess	1003 XL	2 μm		4334001	
Supramess	1002 / 1002 Z	0.5 μm	/.00002"	4335000 / 4335900	
Extramess	2000	0.2 μm	/.00001"	4346000*	
		0.5 μm	/.00002"		
		1 μm	/.00005"		
Extramess	2001	0.2 μm	/.00001"	4346100*	
		0.5 μm	/.00002"		
		1 μm	/.00005"		
$\mu\text{Max}\mu\text{m}$		0.5 μm	/.00002"	EDI-20302**	

Digital Indicators see Chapter 5

Electrical Indicating Instruments see Chapter 7

* 230 V, for 115 V please refer to page 6-5

** requires contact 4360107



Meas. range mm	0 - 25	25 - 60	50 - 100	100 - 150	150 - 200
a*	5	5	6.5	6.5	6.5
b	97	140	193	258	316
c	34	68	110	162	212
d	8	9	10	12	12
e	54	60	60	70	75
f	65	77	103	141	171
g	12	13	14	16	16
h	13	13	13	12	12
k	23	25	28	31	31
l	14	30	54	81	106

* In initial position

Accessories

Reference Discs 390 see Chapter 13

Gage Blocks see Chapter 13

Holder 840 Fk and Stand 840 Ff see Page 9-15

Accessories for Dial Indicators and Dial Comparators



Holder 840 Fk for Dial Indicators and Dial Comparators

- For attaching to the following measuring instruments **840 F/FC, 840 FH, 840 FG, 840 FM** and **852**
- Straight transfer of the spindle movement to the indicator
- Following the Abbe principle allows an even higher degree of accuracy than the already excellent level obtained with the standard set-up employing 90° transmission
- When the indicating instrument is in the shown position it is often easier to read
- For stationary application when in conjunction with the **Stand 840 Ff**

Catalog no.	Suitable for instruments with measuring ranges (mm)					Order no.
	840 F/FC	840 FH	840 FG	840 FM	852	
840 Fk/1	0 - 25					4450050
840 Fk/2	25 - 60	0 - 30	0 - 50	0 - 40	0 - 45	4450051
840 Fk/3	50 - 100	30 - 80	40 - 90	40 - 80	45 - 85	4450052
840 Fk/4	{ 100 - 150 150 - 200 }			{ 80 - 130 130 - 180 }	{ 85 - 140 140 - 190 }	4450053



Stand 840 Ff

- For stationary application in conjunction with the following measuring instruments **840 F/FC, 840 FH, 840 FG, 840 FM, 840 E** and **852**
- User has both hands free for insertion of work piece and retraction of moving spindle
- Indicating instrument is always in operator's field of vision
- Rugged, rigid cast-iron stand with clamp for locking the indicating snap gage
- Indicating snap gage is locked in mounting hole for dial comparator
- Only in conjunction with **Holder 840 Fk**

Catalog no.	Suitable for instruments with measuring ranges (mm)						Order no.
	840 F/FC	840 FH	840 FG	840 FM	840 E	852	
840 Ff	{ 0 - 25 25 - 60 }	0 - 30	0 - 50	0 - 40	0 - 25	0 - 45	4450020