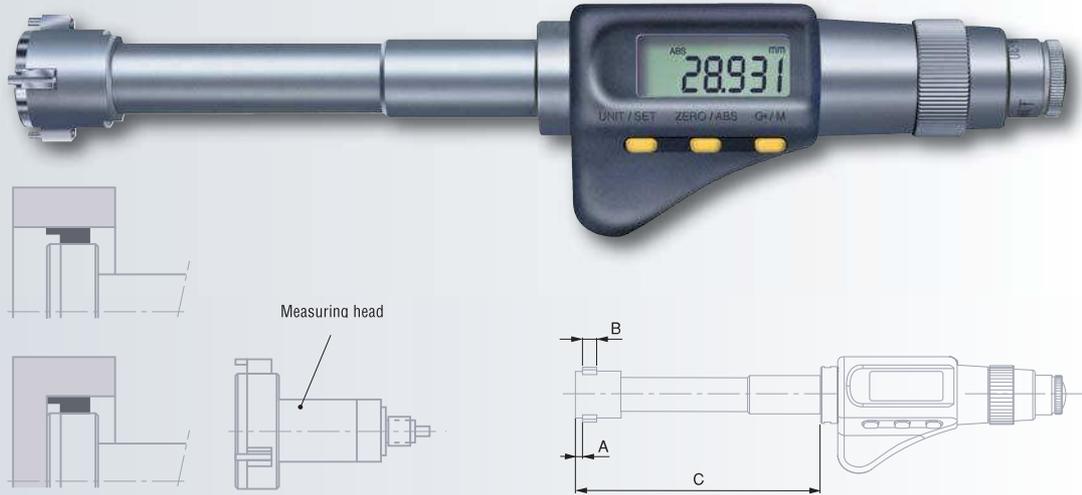


# TESA ALESOMETER *capa u system* with Digital Display

Fitted with a TESA patented capacitive measuring system

Bore gauges with 3-line contact. All TESA ALESOMETER are made to measure through and blind bores as well as short centring shoulders, except for the models covering the application range from 6 to 10 mm.



## Single Bore Gauges. Complete

No	Measuring range		Resolution		Dimensions		
	mm	in	µm	µm	A mm*	B mm	C mm
06230051	6 ÷ 8	0.2362 ÷ 0.3150	4	4	1.2	3	55
06230052	8 ÷ 10	0.3150 ÷ 0.3970	4	4	1.2	3	55
06230023	10 ÷ 12.5	0.3970 ÷ 0.4921	4	4	0.3	6.5	65
06230024	12.5 ÷ 15	0.4921 ÷ 0.5905	4	4	0.3	6.5	65
06230025	15 ÷ 17.5	0.5905 ÷ 0.6890	4	4	0.3	6.8	65
06230026	17.5 ÷ 20	0.6890 ÷ 0.7874	4	4	0.3	6.8	95
06230027	20 ÷ 25	0.7874 ÷ 0.9843	4	4	0.3	8.5	100
06230028	25 ÷ 30	0.9843 ÷ 1.1811	4	4	0.3	8.5	100
06230029	30 ÷ 35	1.1811 ÷ 1.3780	4	4	0.3	8.5	100
06230030	35 ÷ 40	1.3780 ÷ 1.5748	4	4	0.3	8.5	100
06230031	40 ÷ 50	1.5748 ÷ 1.9685	4	4	0.3	14.5	140
06230032	50 ÷ 60	1.9685 ÷ 2.3622	5	5	0.3	14.5	140
06230033	60 ÷ 70	2.3622 ÷ 2.7560	5	5	0.3	14.5	140
06230034	70 ÷ 85	2.7560 ÷ 3.3465	5	5	0.3	14.5	140
06230035	85 ÷ 100	3.3465 ÷ 3.9370	5	5	0.3	14.5	140
06230036	100 ÷ 125	3.9370 ÷ 4.9212	6	6	0.3	30	175
06230037	125 ÷ 150	4.9212 ÷ 5.9055	6	6	0.3	30	175
06230038	150 ÷ 175	5.9055 ÷ 6.8897	7	7	0.3	30	175
06230039	175 ÷ 200	6.8897 ÷ 7.8740	7	7	0.3	30	175
06230040	200 ÷ 225	7.8740 ÷ 8.8582	8	8	0.3	30	175
06230041	225 ÷ 250	8.8582 ÷ 9.8425	8	8	0.3	30	175
06230042	250 ÷ 275	9.8425 ÷ 10.8267	8	8	0.3	30	175
06230043	275 ÷ 300	10.8267 ÷ 11.8110	8	8	0.3	30	175

### Optional Accessory

**01961000** 1 Lithium battery 3 V, 190 mAh, type CR 2032

\* Not applicable for models from 10 mm since the measuring inserts are close to the micrometer front face. For ordering information on setting rings, see both pages D-12 and D-17, or report to page D-10 for storage cases or to section A for connecting cables and the like.



DIN 863 T4, Style C1 for models 6 to 10 mm or style C2 for all other models

0.001 mm / 0.00005 in

Metric/inch conversion

LCD, digit height 7 mm

Floating zero

Display lock

Measuring inserts for application range 6 to 10 mm: steel, hardened to HV30 550, 10 to 300: tungsten carbide tipped, HRC ≥ 70.

RS 232 opto-coupled, bidirectional

3 V lithium battery

1 to 2 a (≈ 2000 h/a)

Automatic shut down after 10 min. Display setting is retained as long as power supply remains stable.

10 °C to 40 °C

-10 °C to 60 °C

80% non condensing



For the measuring element IP54 (IEC 60529) or IP40 with active data output

≤ 100 mm in a plastic case > 100 mm in a wooden case

Identification number

Inspection report with a declaration of conformity

# TESA ALESOMETER *capa u svstem* with *Digital Displav*

## Partial Sets plus Components



Fitted with TESA patented capacitive measuring system

Models that cover the application range from 6 to 10 mm can only measure through bores – All other partial sets also allow blind bores as well as short centring shoulders to be inspected.



✓



DIN 863 T4.  
Style C1  
for models  
6 to 10 mm or C2 for  
all other models



0.001 mm  
0.00005 in



Measuring inserts  
for application  
range  
6 to 10 mm: steel,  
hardened to HV30 550.  
10 to 300: tungsten carbide  
tipped to HRC ≥ 70.



For additional  
technical data,  
see on page D-9  
or D-12 for setting rings.



≤ 100 mm in a  
plastic case.  
> 100 mm in a  
wooden case



Identification  
number



Inspection report  
with a declaration  
of conformity

<b>Nº</b>		<b>Nº</b>		<b>Nº</b>	<b>Nº</b>	<b>Nº</b>		<b>Nº</b>
<i>Partial sets including</i>		<i>Measuring heads</i>		<i>Connectors</i>	<i>Measuring elements</i>	<i>Setting rings</i>		<i>Storage cases</i>
<b>06230100</b>	6 ÷ 10	0081720351 0081720353	6 ÷ 8 8 ÷ 10	0081620491	06230020	0211625101	8	06260001
<b>06230110</b>	10 ÷ 20	0081720356 0081720358 0081720360 0081720362	10 ÷ 12.5 12.5 ÷ 15 15 ÷ 17.5 17.5 ÷ 20	0081620492	06230020	0211625102 0211625103	12.5 17.5	06260001
<b>06230111</b>	20 ÷ 40	0081720364 0081720366 0081720368 0081720370	20 ÷ 25 25 ÷ 30 30 ÷ 35 35 ÷ 40	0081620493	06230020	0211625104 0211625105	25 35	06260001
<b>06230112</b>	40 ÷ 100	0081720372 0081720374 0081720376 0081720378 0081720380	40 ÷ 50 50 ÷ 60 60 ÷ 70 70 ÷ 85 85 ÷ 100	0081620494	06230020	0211625106 0211625107 0211625109	45 60 85	0081629525

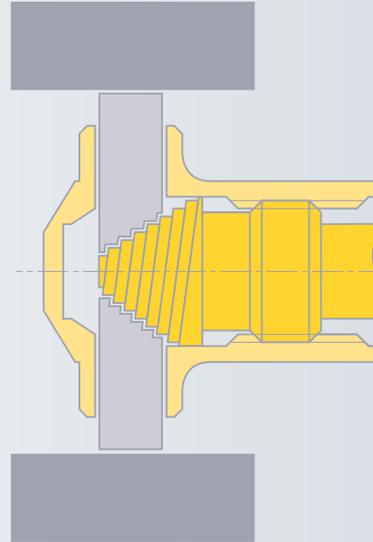
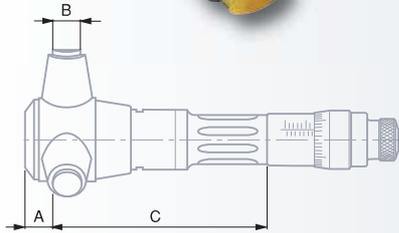
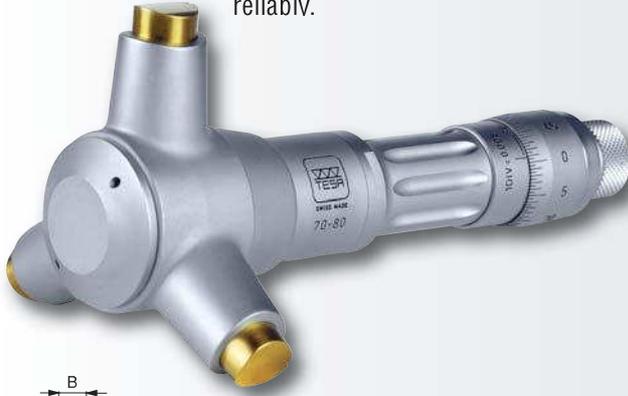
Set composition for application range from 100 to 300 mm available upon request

<i>Measuring heads</i>	<i>Connectors</i>	<i>Measuring element</i>	<i>Setting rings</i>	<i>Storage cases</i>
<b>0081720382</b>	100 ÷ 125	0081620495	06230020	0211625111
<b>0081720384</b>	125 ÷ 150			0211625112
<b>0081720386</b>	150 ÷ 175			0211625112
<b>0081720388</b>	175 ÷ 200			0211625113
<b>0081720390</b>	200 ÷ 225			0211625114
<b>0081720392</b>	225 ÷ 250			0211625115
<b>0081720394</b>	250 ÷ 275			0211625116
<b>0081720396</b>	275 ÷ 300			0211625117

Each storage case can contain a single measuring head only.

# TESA IMICRO with Analogue Indication – Metric

Self-centring and self-aligning internal micrometers. The high-precision thread machined into the measuring cone, combined with the measuring bolts specially arranged to provide 3-line contact, make them the only micrometers in the world that respect the ABBE principle. Measure depth, reliably.



DIN 863 T4  
(Style C1)  
NF E 11-099



Measuring faces for application

ranges from  
3.5 to 12 mm:  
hardened steel (HV30 770)  
11 to 100 mm:  
TiN hard-coating (HV5 2300)  
100 to 300 mm:  
carbide tipped (HV5 1300)



Application ranges from  
3.5 to 200 mm  
in a shipping box  
200 to 300 mm in a wooden  
case with 1 extension of  
150 mm (No. 00842600)



Identification number



Inspection report with a declaration of conformity

No	mm	mm	um	um	A mm	B mm	C mm
00813410	3.5 ÷ 4	0.001	4	4	2	1.5	20
00813411	4 ÷ 4.5	0.001	4	4	2	1.5	20
00813412	4.5 ÷ 5.5	0.001	4	4	2	1.5	25
00813413	5.5 ÷ 6.5	0.001	4	4	2	1.5	25
00810001	6 ÷ 8	0.001	4	4	2.5	2.5	52
00810002	8 ÷ 10	0.001	4	4	2.5	2.5	52
00810003	10 ÷ 12	0.001	4	4	2.5	2.5	52
00810801	11 ÷ 14	0.005	4	4	3.5	4	77
00810802	14 ÷ 17	0.005	4	4	3.5	4	77
00810803	17 ÷ 20	0.005	4	4	3.5	4	77
00811501	20 ÷ 25	0.005	4	4	7	7	78
00811502	25 ÷ 30	0.005	4	4	7	7	78
00811503	30 ÷ 35	0.005	4	4	7	7	78
00811504	35 ÷ 40	0.005	4	4	7	7	78
00812301	40 ÷ 50	0.005	4	4	11	12	84
00812302	50 ÷ 60	0.005	5	5	11	12	84
00812303	60 ÷ 70	0.005	5	5	11	12	84
00812304	70 ÷ 80	0.005	5	5	11	12	84
00812305	80 ÷ 90	0.005	5	5	11	12	84
00812306	90 ÷ 100	0.005	5	5	11	12	84
00812601	100 ÷ 125	0.01	6	6	26	18	81
00812602	125 ÷ 150	0.01	6	6	26	18	81
00812603	150 ÷ 175	0.01	7	7	26	18	81
00812604	175 ÷ 200	0.01	7	7	26	18	81
00813101	200 ÷ 225	0.01	8	8	26	18	81
00813102	225 ÷ 250	0.01	8	8	26	18	81
00813103	250 ÷ 275	0.01	8	8	26	18	81
00813104	275 ÷ 300	0.01	8	8	26	18	81

# TESA IMICRO with Analogue Indication – Full Metric Sets



DIN 863 T4  
(Style C1)  
NF E 11-099



Measuring faces  
on models from  
3.5 to 12 mm:  
hardened steel, HV30 770;  
11 to 100 mm: titanium  
nitride (TiN) hard-coating  
to HV5 2300.  
100 to 200 mm: tungsten  
carbide tipped to HV5 1300.



Additional  
technical data:  
see on the  
previous page.  
Setting rings on  
page D-17.



Plastic case  
or suitcase



Identification  
number



Inspection report  
with a declaration  
of conformity



No	mm	No	mm	No	mm	No	mm
Full sets including		Single micrometers		Setting rings		Extensions	
<b>00813409</b>	BAE	3.5 ÷ 6.5	00813410	3.5 ÷ 4	00843200	4	–
			00813411	4 ÷ 4.5	00843201	5.5	
			00813412	4.5 ÷ 5.5			
			00813413	5.5 ÷ 6.5			
<b>00810000</b>	BAF	6 ÷ 12	00810001	6 ÷ 8	00840101	8	00840001 100
			00810002	8 ÷ 10	00840102	10	
			00810003	10 ÷ 12			
<b>00810800</b>	BAG	11 ÷ 20	00810801	11 ÷ 14	00840103	11	00840301 150
			00810802	14 ÷ 17	00840105	17	
			00810803	17 ÷ 20			
<b>00811500</b>	BAH	20 ÷ 40	00811501	20 ÷ 25	00840106	25	00841100 150
			00811502	25 ÷ 30	00840107	35	
			00811503	30 ÷ 35			
			00811504	35 ÷ 40			
<b>00812300</b>	BAJ	40 ÷ 100	00812301	40 ÷ 50	00840108	50	00841800 150
			00812302	50 ÷ 60	00840109	70	
			00812303	60 ÷ 70	00840110	90	
			00812304	70 ÷ 80			
			00812305	80 ÷ 90			
			00812306	90 ÷ 100			
<b>00812600</b>	BAK	100 ÷ 200	00812601	100 ÷ 125	00840112	125	00842600 150
			00812602	125 ÷ 150	00840113	175	
			00812603	150 ÷ 175			
			00812604	175 ÷ 200			

## Accessories for both TESA IMICRO and TESA IMICRO capa u svstem

### Extensions for Deep Hole Measurement



N <sup>o</sup>	mm	mm	N <sup>o</sup>	mm	mm
00840001	6 ÷ 12	100	00841800	40 ÷ 100	150
00840301	11 ÷ 20	150	00841801		500
00840302		500	00841802		1000
00841100	20 ÷ 40	150	00842600	100 ÷ 300	150
00841101		500	00842601		500
00841102		1000	00842602		1000



DIN 863 T4 (Style C1)



### Centrina Devices for TESA IMICRO

N <sup>o</sup>	mm	mm
00860001	40 ÷ 100	150
00862601	100 ÷ 200	200



### Moulded Cases for Single Micrometers. Full Sets and Partial Sets

N <sup>o</sup>	mm	N <sup>o</sup>	mm
<i>Sinle micrometers</i>			
-	06160002	06160002	3.5 ÷ 12
00860007	06160002	06160002	11 ÷ 20
00860011	06160002	06160002	20 ÷ 40
00860015	06160003	06160003	40 ÷ 70
00860016	06160003	06160003	70 ÷ 100
00863016	00863016	00863016	100 ÷ 300

N <sup>o</sup>	mm	N <sup>o</sup>	mm
<i>Micrometer sets</i>		<i>Full and partial micrometer sets</i>	
00863035	06160006	06160006	3.5 ÷ 6.5
00863005	06160005	06160005	6 ÷ 12
00860008	06160005	06160005	11 ÷ 20
00860012	06160006	06160006	20 ÷ 40
00860017	06160007	06160007	40 ÷ 100
00863017	00863017	00863017	100 ÷ 200

### IMICRO Adapter

Every TESA IMICRO (SM versions or models with analogue indication) can easily be updated by means of the adapter used for couplina the measuring head with the new capa u svstem element.



N <sup>o</sup>	N <sup>o</sup>	mm
<i>Capa u svstem element</i>	<i>Adapter</i>	<i>Application range</i>
06130011		6 ÷ 100
	06140048	6 ÷ 12
	06140049	11 ÷ 20
	06140050	20 ÷ 40
	06140051	40 ÷ 100

**Note:** To ensure accuracy, the micrometer needs to be recalibrated.