













### Buy online at shop.mapra.co.uk

MAPRA technik has been supplying high quality metrology and materials testing equipment since 1990. We pride ourselves on the service provided to our customers, large and small, and are a reliable business partner who offer quality and value.

### Official agents for:

KÄFER GmbH of Germany: precision dial gauges, dial test indicators and thickness gauges.

FISSO - Baitella AG of Switzerland: gauging arms, magnetic stands & bases.

#### Manufacturers of:

MAPRA Q1: MAPRA technik has its own range of MAPRA Q1 precision measuring instruments at affordable prices to complement our existing range of high quality products.

Exclusive agents in the UK and Ireland for:

MARCEL AUBERT S.A. of Switzerland: 'non contact' optical

measuring and inspection systems.

BAREISS GmbH of Germany: hardness testers and

materials testers.

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MAPRA Q1

precision measuring instruments at affordable prices



Wäler













Reading: 0.01 mm Range: 30 mm Bezel Ø: 58 mm £101.45

### Dial Gauge M2 / 50 S

Reading: 0.01 mm Range: 50 mm Bezel Ø: 58 mm Shockproof £153.20



Reading: 0.01 mm

Accuracy to DIN 878

Range: 10 mm Bezel Ø: 58 mm

£46.90

£125.65



### Dial Gauge SI 45

Reading: 0.01 mm Range: 0.4 mm Bezel Ø: 40 mm Error Free with Overtravel Shockproof Accuracy to DIN 878 £75.80



### Small Dial Gauge MU 28

Reading: 0.01 mm Range: 3.5 mm Bezel Ø: 28 mm £83.70



Reading: 0.001 mm

Digital Dial Gauge MD 12 TOP

Output: RS 232 / DIGIMATIC / USB

Reading: 0.01 mm / 0.0005"

Range: 12.5 mm / .5"

Maximum Error: 20 µm

Bezel Ø: 60 mm

Range: 1 mm

Shockproof

£191.90

Bezel Ø: 58 mm

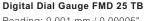
### Dial Gauge M 2 SW Reading: 0.01 mm

Range: 10 mm Bezel Ø: 61.5 mm Shockproof Waterproof Accuracy to DIN 878 £111.80



Dial Gauge M 2 R with Back Plunger

Reading: 0.01 mm Range: 3 mm Bezel Ø: 58 mm Accuracy to DIN EN ISO 463 £106.40



Reading: 0.001 mm / 0.00005" Range: 25 mm / 1" Bezel Ø: 60 mm Output: RS 232 / USB Maximum Error: 5 µm £389.55



### Comparator Gauge Compika 1001

Reading: 0.001 mm Range: 0.1 mm (+- 0.05 mm) Overtravel: 3.0 mm Bezel Ø: 62 mm Shockproof Accuracy to DIN 879-1 £194.95





Dial Gauge KM 4/5 TOP S

Reading: 0.01 mm

Accuracy to DIN 878

Range: 5 mm

Shockproof

£55.65

04

Bezel Ø: 40 mm









### Dial Test Indicator K 30

Reading: 0.01 mm Range: 0.8 mm Bezel Ø: 32 mm Contact point Length: 12.8 mm Shockproof, Non-magnetic Accuracy to DIN 2270 £88.00



#### Dial Test Indicator K 37

Reading: 0.002 mm Range: 0.2 mm Contact point Length: 12.8 mm Shockproof, Non-magnetic Accuracy to DIN 2270



#### Dial Test Indicator K 46

Reading: 0.002 mm Range: 0.2 mm Bezel Ø: 40 mm Contact point Length: 12.8 mm Shockproof, Non-magnetic Accuracy to DIN 2270 £109.65



### Dial Depth Gauge TM 2/30

Reading: 0.01 mm Range: 30 mm Bezel Ø: 58 mm Base TB80: 80x16 mm £201.55



#### Dial Thickness Gauge J 50 R without side discs

Reading: 0.01 mm Saw Setting Dial Gauge Range: 5 mm Depth of jaw 50mm Bezel Ø: 58 mm Rollers Width: 8.7 mm Maximum Error: 20 µm £254.15



#### Dial Thickness Gauge J 50

With lifting device Reading: 0.01 mm Range: 10 mm Depth of Jaw 50mm Standard Feeler: C (10 mm Ø Flat) Maximum Error: 15 µm





### Digital Thickness Gauge JD 50

With lifting device Reading: 0.01 mm / .0005" Range: 12.5 mm / .500" Depth of Jaw 50mm Standard Feeler: C (10 mm Ø Flat) Maximum Error: 20 um Output: RS 232 / USB £408.65



### Dial Thickness Gauge J 15

Reading: 0.01 mm Range: 10 mm Depth of Jaw 18 mm Contact Points: 6.35 mm Ø Accuracy to DIN 878 £114.30

### Digital Thickness Gauge K 200

Reading: 0.1 mm Range: 30 mm Depth of Jaw 200mm Standard Feeler: C (10 mm Ø Flat) Maximum Error: 50 µm £177.10

#### Types of contact points











Other KÄFER instruments are available. Please let us know if there is a particular KÄFER model that you are interested in, so that we can provide details and prices.

Reading: 0.1 mm

Range: 2 mm

£61.40

Bezel Ø: 40 mm



### 3D articulated gauging arms and bases



**FISSO** range of high quality 3D articulated gauging arms with holders and bases for the mounting of dial gauges, dial test indicators and other instruments.

# Simply the best fixation.

#### Precise microfine adjustment:

- zero-play fine adjustment made of high-quality steel
- precise positioning of the gauging instruments
- · high accuracy

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 combined holder for dial gauges and electronic length probes

### Clever central tightening system:

- easy positioning
- all three joints fixed safely with one handle
- maintenance-free, mechanical central tightening system
- quick, stepless lock

#### Secure, stable base:

choice of Switch Magnet bases

· different top-quality bases

### Base Line – Gauging arm

The Base Line models are simple, practical solutions with a high degree of stability. They feature strong clamping with robust aluminum clamping jaws, an additional joint for fine adjustment as well as precise microfine adjustment (F) with a combination holder for dial gauges and probes with dovetails. With Switch Magnet base.



Model	Article No.	Overall height	Horizontal arm Ø x L mm	Verticle Ø x L mm	Base size mm	Fine adjust. mm	Hold strength	Price
LXS25 F + S2	LXS25.10	277 mm	8 x 75	10 x 106	34 x 30 x 35	Ø 8	300 N	£127.20
LS30 F + M	LS30.10	367 mm	10 x 106	12 x 156	60 x 50 x 55	Ø 8	800 N	£136.30

### Classic Line – 3D articulated gauging arm

The Classic Line contains well-proven products with chrome-plated arm sections. The articulated arms are available in six different sizes and can be combined with different bases. All models are equipped with a zeroplay microfine adjustment (F) with a combined holder for dial gauges, electronic length probes and dial test indicators.



### Classic 1100-13

The smallest Classic model is suitable for use with dial test indicators on machine tools, in measurement systems and when only limited space is available.



1113.10 with switch magnet (S2)



The small Classic model for measurement probes and dial gauges can be used in any type of mechanical system.



### Classic 3300-28 and 3300-40

The standard Classic model for measurement probes and dial gauges can be used in any type of mechanical system.



The large Classic model is well suited for large workpieces and machines. The steplessly adjustable pre-tensioning protects the instruments

3328.10 with switch magnet (M)

Model	Article No.	Overall height	Radius of movement	Base size mm	Fine adjust.	Holding strength	Price
1100-13 F + S2	1113.10	220 mm	130 mm	34 x 30 x 35	Ø8mm	300 N	£170.00
1100-13 F	1113.20	185 mm	130 mm	-	Ø8mm	800 N	£133.60
2200-20 F + M	2220.10	310 mm	200 mm	60 x 50 x 55	Ø8mm	800 N	£210.90
2200-20 F	2220.30	255 mm	200 mm		Ø8mm	-	£146.30
2200-20 F+S+TM	2220.50	335 mm	200 mm	Ø 40 x 30	Ø8mm	300 N	£184.50
3300-28 F + M	3328.10	390 mm	280 mm	60 x 50 x 55	Ø8mm	800 N	£243.60
3300-28 F	3328.30	335 mm	280 mm		Ø8mm	-	£179.00
3300-40 F + SM	3340.10	510 mm	400 mm	75 x 50 x 55	Ø8mm	1000 N	£277.20
3300-40 F	3340.30	455 mm	400 mm	_	Ø8mm	_	£195.40
4400-45 F + SM	4445.10	568 mm	450 mm	75 x 50 x 55	Ø8mm	1000 N	£429.00
4400-45 F	4445.20	513 mm	450 mm	_	Ø8mm	_	£347.20
6400-63 F + MM	6463.10	740 mm	630 mm	120 x 60 x 55	Ø8mm	1500 N	£660.90

4445.10 with switch magnet (SM)



### 3D articulated gauging arms and bases

### Strato Line – 3D articulated gauging arm

The Strato Line is the modern series with red anodized arm sections made of high-quality light alloy. The articulated arms are available in four sizes and can be combined with different bases. All models are equipped with a zero-play microfine adjustment (F) with a combined holder for dial gauges, electronic length probes with shaft and dial test indicators.

### Strato XS-13

The smallest Strato model is suitable for use with dial test indicators on machine tools, in measurement systems and when only limited space is available.

XS13.20 with pot magnet (TMS)

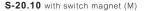


The mid-range Strato model for measurement probes and dial gauges can be used in any type of mechanical system.



Strato M-28

The large Strato model additionally features steplessly adjustable pre-tensioning to protect the instrument.



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Model	Article No.	Overall height mm	Radius of movement	Base size mm	Fine adjust.	Holding strength	Price
XS-13 F + TMS	XS13.20	210	130 mm	Ø 30 x 25	Ø8mm	150 N	£164.50
XS-13 F	XS13.30	185	130 mm	-	Ø8mm	_	£142.70
XS-13 f + C	XS13.41	201	130 mm	Ø 10 x 40	Ø8mm	_	£134.50
XS-13 F + S2	XS13.50	220	130 mm	34 x 30 x 35	Ø8mm	300 N	£179.00
S-20 F + M	S-20.10	310	200 mm	60 x 50 x 55	Ø8mm	800 N	£228.10
S-20 F + TM	S-20.20	335	200 mm	Ø 40 x 30	Ø8mm	300 N	£190.90
S-20 F + AM	S-20.30	310	200 mm	77 x 48 x 55	Ø8mm	600 N	£232.70
S-20 F	S-20.50	255	200 mm		Ø8mm	-	£163.60
M-28 F + M	M-28.10	390	280 mm	60 x 50 x 55	Ø8mm	800 N	£295.40
M-28 F + V	M-28.20	365	280 mm	Ø 88 x 27	Ø8mm	-	£357.20
M-28 F	M-28.30	335	280 mm		Ø8mm	-	£230.90
M-28 F + G	M-28.40	385	280 mm	150x120x50x50	Ø8mm	-	£462.70
M-28 F + SM	M-28.50	390	280 mm	$75 \times 50 \times 55$	Ø8mm	1000 N	£312.70
A-20 P + M	AP20.10	317	204 mm	60 x 50 x 55	Ø8mm	800 N	£380.00
A-28 P + M	AP28.10	399	287 mm	60 x 50 x 55	Ø8mm	800 N	£450.90
A-28 P + V	AP28.20	369	287 mm	Ø 88 x 27	Ø8mm	-	£512.70
A-33 P + SM	AP33.10	444	330 mm	$75 \times 50 \times 55$	Ø8mm	1000 N	£506.30

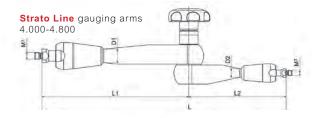
### Strato μ-Line – extremely high precision 3D articulated gauging arm

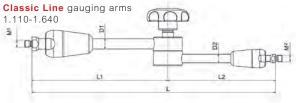
The Strato  $\mu$ -Line is an expansion of the Strato Line into areas requiring extremely high precision. The articulated arm stands out due to its well-dimensioned components, very high stability and accuracy. The precision fine adjustment (P) with excellent ease of setting and high repetitive accuracy makes the unit exceptionally well suited for measurements in the  $\mu$  region. See models A-13, A-20, A-28 and A-33.

AP33.10 with switch magnet (SM)

### Individual articulated arm attachments

Individual 3D articulated gauging arms can be assembled from single Fisso components to meet specific customer requirements. The dimensions of the unit's base are matched to the size of the articulated arm.





Model	Article r	o. Colour	L	L1	M1	L2	M2	Price
Strato XS-13	4.000	red	130 mm	70 mm	M6	60	M6	£108.10
Strato S-20	4.100	red	200 mm	120 mm	M8	80	M6	£129.00
Strato M-28	4.200	red	280 mm	170 mm	M8	110	M6	£196.30
Strato µ A-28	4.700	red	287 mm	172 mm	M8	115	M8	£205.40
Classic 1100-13	1.110	chrome	130 mm	71 mm	M6	59	M6	£99.00
Classic 2200-20	1.220	chrome	197 mm	112 mm	M8	85	M6	£111.80
Classic 3300-28	1.330	chrome	288 mm	161 mm	M8	127	M6	£144.50
Classic 3300-40	1.360	chrome	407 mm	220 mm	M8	187	M8	£160.90
Classic 4400-45	1.440	chrome	453 mm	260 mm	M8	193	M8	£312.70
Classic 6400-63	1.640	chrome	635 mm	373 mm	M10x1.25	262	M8	£480.90

Other FISSO arms and accessories are available. Please let us know if there is a particular FISSO model that you are interested in, so that we can provide details and prices. All models without dial gauge/dial test indicator.





# MAPRA Q1

### Digital Calipers DIN 862 Standard



### Accuracy according to DIN 862

- Made from hardened stainless steel
- Extra Large easy to read LCD display
- Power ON/OFF
- · Metric / Inch conversion
- Zero setting at any position
- · Thumb roller for fine adjustment on 150 mm & 200 mm Models
- · Locking Screw
- 4-way measurement
- SPC Data Output via USB interface
- Spare Type SR44 Battery Included
- Supplied in fitted Plastic Case



ı	MAPRA Q1	Item No.	Measuring	Reading	Error Limit	Jaw	Price
ı	Reference	110111110.	Range	rodding	To DIN 862	Length	1 1100
ı	Reference		Range		10 DIN 002	Lengui	
ı	DC-150 DIN862	10101	0 – 150 mm	0.01 mm / 0.0005"	0.03 mm	40 mm	£34.00
ı	DC-200 DIN862	10102	0 – 200 mm	0.01 mm / 0.0005"	0.03 mm	50 mm	£50.00
п	DC-300 DIN862	10103	0 – 300 mm	0.01 mm / 0.0005"	0.04 mm	60 mm	£74.00

### Digital Caliper IP67 Protection

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### IP67 Protection Class against water, fluid, oil and dust

- Suitable for coolant liquid conditions
- Accuracy according to DIN 862
- Made from hardened stainless steel
- Large easy to read LCD display
- Power ON/OFF
- Metric / Inch conversion
- Zero setting at any position
- Locking Screw
- 4-way measurement
- Spare Type CR2032 Battery Included
- Supplied in fitted Plastic Case

MAPRA Q1 Reference	Item No. Range	Measuring	Reading	Error Limit To DIN 862	Jaw Length	Price
DC-150 IP67	10121	0 – 150 mm	0.01 mm / 0.0005"	0.03 mm	40 mm	£124.00
DC-300 IP67	10123	0 – 300 mm	0.01 mm / 0.0005"	0.04 mm	60 mm	£173.00

### Digital Calipers ABS Absolute



DC-150 ABS £42.00

### Origin setting without repeated zero setting

- Large 7.8 mm easy to read LCD display
- Auto power ON/OFF
- Metric / Inch conversion
- Zero setting at any position
- · Thumb roller for fine adjustment
- Locking Screw
- 4-way measurement
- Spare Type CR1632 Lithium Battery Included
- Supplied in fitted Plastic Case

MAPRA Q1	Item No.	Measuring	Reading	Error Limit	Jaw	Price
Reference		Range	_	To DIN 862	Length	
DC-150 ABS	10 <mark>1</mark> 31	0 – 150 mm	0.01 mm / 0.0005"	0.03 mm	40 mm	£42.00
DC-200 ABS	10 <mark>132</mark>	0 – 200 m <mark>m</mark>	0.01 mm / 0.0005"	0.03 mm	50 mm	£59.00
DC-300 ABS	<mark>1</mark> 0133	0 – 300 m <mark>m</mark>	0.01 mm / 0.0005"	0.04 mm	60 mm	£83.00

### Digital Caliper Small Point

for small grooves



#### To measure small grooves

- · Factory Standard
- · Jaw Length: 40mm
- · Made from hardened stainless steel
- · Metric / Inch conversion
- SPC Data Output via USB interface
- Spare Type SR44 Battery included
- · Supplied in fitted Plastic Case

MAPRA Q1 Reference	Item No.	Measuring Range	Reading	Error Limit	Jaw Length	Price
DC-150 POINT	10271	0 – 150 mm	0.01 mm / 0.0005"	+/-0.04 mm	40 mm	£52.00



# MAPRA Q1

### Digital Outside Micrometers IP65 Protection Class







DM-75-100 IP65 £137.00

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IP65 Protection Class against dust and fluid Accuracy according to DIN 863

- Ergonomic light weight design
- Simple one handed use
- Friction Ratchet Thimble for contact measuring force
- Stainless steel spindle screw 6.5 mm diameter with Locking Lever
- Carbide Tipped Measuring Faces
- Extra Large easy to read 7.8mm LCD display
- Power ON/OFF
- Metric / Inch conversion
- Zero setting at any position
- Absolute measurements
- Adjusting Key
- Aujusting Rey
- SPC Data Output via USB interface
- Spare Type SR44 Battery included
- Supplied in fitted Plastic Case

MAPRA Q1 Reference	Item No.	Measuring Range	Reading	Error Limit to DIN 863	Price
DM-0-25 IP65	15021	0 – 25 mm	0.001 mm / 0.00005"	0.004 mm	£84.00
DM-25-50 IP65	15022	25 – 50 mm	0.001 mm / 0.00005"	0.004 mm	£111.00
DM-50-75 IP65	15023	50 – 75 mm	0.001 mm / 0.00005"	0.005 mm	£118.00
DM-75-100 IP65	15024	75 – 100 mm	0.001 mm / 0.00005"	0.005 mm	£137.00

### Digital Thickness Gauge Mini



MINI (horizontal) for measuring Thickness of paper, film, sheet metal and similar materials up to 12 mm

- · Metric / Inch conversion
- Spare Type SR44 Battery included
- · Supplied in fitted Plastic Case

TG-12-MINI £87.00

	MAPRA Q1 Reference	Item No.	Measuring Range	Reading	Error Limit	Price
l	TG-12-MINI	16001	0 – <mark>12 mm</mark>	0.01 mm / 0.0005"	+/-0.03 mm	£87.00



### Digital Thickness Gauge

For measuring Thickness of Small pieces and sheet material up to 15 mm

- Metric / Inch conversion
- Spare Type SR44 Battery included
- Supplied in fitted Plastic Case

TG-15 £69.00

MAPRA Q1 Reference	Item No.	Measuring Range	Reading	Error Limit	Price
TG-15	16002	0 – 15 mm	0.01 mm / 0.0005"	+/-0.03 mm	£69.00



### SNAP Gauge for pieces up to 30 mm

- Metric / Inch conversion
- Spare Type SR44 Battery included
- · Supplied in fitted Plastic Case

TG-30-SNAP

£89.00

MAPRA Q1 Reference	Item No.	Measuring Range	Reading	Error Limit	Price
TG-30-SNAP	16003	0 – 30 mm	0.01 mm / 0.0005"	+/-0.03 mm	£89.00

### marcel - aubert - sa (M



**Marcel Aubert S.A.** range of products includes centering microscopes; profile projectors; video measuring and inspection systems with the latest USB 3.0 cameras and zoom optics; choice of software for Measuring via computer; choice of software for Measuring and Comparison with CAD files via computer; and other special optical instruments and software. A selection from the product range is featured.

### **Centering Microscopes**



Magnification	10X	20X	30X	50X	100X
Ø of Field of View	13.8 mm	6.9 mm	4.6 mm	2.7 mm	1.3 mm

Microscopes are supplied as standard with Graticule R1 – Cross-Hair with 12 circles. Other Centering Microscope Models are available on request with different Magnifications, Graticules, Holders (with thread M20x0.75), Illuminators and Accessories.



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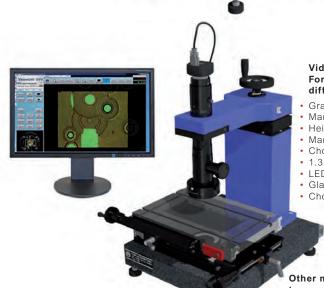
### Small Measuring Microscope OpenMIC 50

- Cast iron Base Type MA 331 with Transmitted light for profile illumination
- Manual X-Y Table Measuring Range 50 x 50 mm
- SYLVAC Digital Micrometers on X and Y axis
- Column with height 300 mm and Geared Drive for 40 mm fine adjustment
- Microscope Type MA 113GW-77
- Goniometer (G) for 360° Angle measurement
- 1 Objective with Magnification of choice
- (10X, 20X, 30X, 50X or 100X)
- Real Image
- LED incident light for surface illumination

### **Video Measuring and Inspection Systems**

### Video Measuring System OpenSYS 50 with USB 3.0 Camera and choice of software • Granite Base Type MA 183-035 with Transmitted

- light for profile illumination
- Manual X-Y Table Measuring Range 50 x 50 mm
- SYLVAC Digital Micrometers on X and Y axis
- Column with height 300 mm and Geared Drive for 40 mm fine adjustment
- 6.5X Zoom-optic with 4 indexes
- Magnification 25X to 180X (with 24" monitor)
- Range of Field of View from: 2.2 x 1.8 mm to 14.5 x 11.6 mm
- 1.3 Mpx USB 3.0 colour camera
- LED Incident light for surface illumination
- · Choice of Measuring and Comparison software



#### Video Measuring System OpenSYS 150 For fast and reliable measurement of different Fields of View

- Granite Base MA 185-021
- Manual X-Y Table Measuring Range 150 x 70 mm
- · Heidenhain measuring scales
- · Manual precision Z column, range 150 mm
- Choice of Zoom-optics with indexes
- 1.3 Mpx USB 3.0 colour camera
- LED Incident light for surface illumination
- · Glass chromium deposit calibration ruler
- · Choice of Measuring and Comparison software

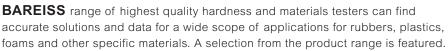
Other modular optical measuring systems available to provide a suitable solution to your requirement. Please contact us to discuss your specific application or send us your samples for evaluation.



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bareiss

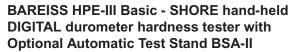
### bareiss





### BAREISS HP – SHORE hand-held ANALOGUE durometer hardness tester

- Available for all SHORE hardness ranges including SHORE A, SHORE D and SHORE OO
- Supplied in Plastic Case with BAREISS Manufacturers Test Certificate



- Available for all SHORE hardness ranges including SHORE A, SHORE D and SHORE OO
- Constant Pressure Force and Measuring Time according to standards
- RS232 interface and cable with USB connection
- Supplied in Plastic Case with BAREISS Manufacturers Test Certificate

BAREISS SHORE A and SHORE D durometers supplied according to Standards DIN 53505, DIN EN ISO 868, ASTM D 2240, DIN ISO 7619. BAREISS SHORE B, C, DO, O, OO and OOO durometers supplied according to Standard ASTM D 2240.

Hardness Range	Examples of Applications	Material Thickness
SHORE A	Soft & natural rubber, elastomers etc.	From 4 or 6 mm
SHORE D	Plastic, hard rubber etc.	From 4 or 6 mm
SHORE B	Medium hard rubber etc.	From 6 mm
SHORE C	Plastic, Medium hard rubber etc.	From 6 mm
SHORE DO	Plastic, Medium hard to hard rubber etc.	From 6 mm
SHORE O	Soft elastic materials, nylon, rayon etc.	From 6 mm
SHORE OO	Sponge rubber, foam rubber etc.	From 6 mm
SHORE 000	Sponge rubber, foam rubber etc.	From 6 mm
SHORE AM/M	Soft rubber, flexible materials, O'rings etc.	From 1.25 mm
MICRO SHORE A	Soft rubber, flexible materials, O'rings etc.	From 1.25 mm
IRHD MICRO	Soft rubber, flexible materials, O'rings etc.	0.6 mm to 5 mm
IRHD NORMAL	Soft rubber, flexible materials, plastic etc.	6 mm to 10 mm
IRHD HARD	Plastic, hard rubber etc.	6 mm to 10 mm



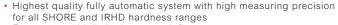
## Latest BAREISS HPE-III Standard SHORE hand-held DIGITAL durometer hardness tester with indication of Temperature and Humidity for SHORE A and SHORE D

- Indication of ambient Temperature and Humidity, and sample Temperature
- Constant Pressure Force and Measuring Time according to standards
- · Memory for 300 measurements
- RS232 interface and cable with USB connection
- Supplied in Plastic Case with Control Ring 40 SHORE and BAREISS Manufacturers Test Certificate

### Optional for BAREISS HP and HPE III SHORE durometers:

- Automatic Test Stand BSA or Manual Test Stand BS 61
- · Official DAkkS (UKAS equivalent) Calibration Certificate
- · Standard Rubber Test Blocks

### BAREISS DIGI-TEST II automatic bench hardness tester for all SHORE & IRHD hardness ranges



- Easy to use with limited operator influence to guarantee accurate and repeatable hardness test results
- Electronic Unit provides clear display of measured value, navigation menu and Data Output
- Separate interchangeable Measuring Devices for each hardness range as required
- Simple to change over the Measuring Devices in the Pick-Up Bracket Bracket, which are automatically identified eg. SHORE A or IRHD MICRO. No adjustment is required
- According to Standards DIN EN ISO 868, DIN ISO 7619, ASTM D 2240, DIN ISO 48, ASTM D 1415, BS903-A 26, DIN ISO 27588
- HARDTEST software available for data logging and statistical evaluation of measured values

Other testers available including Abrasion Testers; Rebound Testers; Pusey & Jones; BARCOL; FFF (firmness of fruit); Gelatine Capsules; Vickers.

Please contact us to discuss your specific application or send us your samples for evaluation.









### **MAPRA** technik

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