# **ORION**® Spring dividers

- Strong annular spring and hardened pivot pins for
- firm control of legs
- No. 35015: Replaceable tips

# Execution:

Application:

 Quick-action clamping nut and particularly strong legs

For marking dimension lines, e.g. for hole circles.





No. 35015

Length (mm)		125	150	200	250	300
35010	Ident. No.	127	150	200	250	301
35010	Price/unit, €	•	•	•	•	•
35015	Ident. No.	126	150	200	250	301
35015	Price/unit, €	•	•	•	•	•

Prod. Gr. 3BG

### **Compass vernier callipers** ORION For marking off



Application: For marking off on workpieces by directly setting the required dimensions.

### Execution:

- No. 35025: Hardened steel marking-off arms
- No. 35026: Carbide-tipped marking-off arms

### Technical data:

- Vernier scale: 0.1 mm
  Limb length: 40 mm



Max. length of application area (mm)		150	200	300
Max. Ø (mm)		300	400	600
35025	Ident. No.	150	200	300
35025	Price/unit, €	•	•	•
35026	Ident. No.	150	200	300
35020	Price/unit, €	0	•	•

Prod. Gr. 3BG

#### Marking-off vernier callipers ® ATOR With fine adjustment



### Application:

For marking off on workpieces by directly setting the required dimensions

### Execution:

- Gauge bar and marking ruler made from one piece
- · Measuring faces very finely ground, made of alloyed steel, hard-chrome plated

### 35036...

Prod. Gr. 3AF

 Scale and vernier scale with anti-glare, brushed chromium-plated finish

### Technical data:

- Max. length of application area: 300 mm
- Vernier scale: 0.05 mm







# ATORN<sup>®</sup> Beam compasses With fine adjustment

### Application:

For scribing by directly setting required dimensions at intervals of 1 mm.

### Execution:

- Steel pipe beam with guide groove (special steel)
- With fine adjustment
- Graduation with 1 mm scale interval
- Anodised aluminium slide
- Hardened tips, Ø 6 mm

Two movable trammels
 Notes:

contact with hand perspiration.

Replaceable tips



# Technical data:

Vernier scale: 0.1 mm

Max. length of ap	oplication area (mm)	500	1000	1500	2000	3000
Pipe Ø (mm)		20	20	20	20	28
Weight (kg)		0.9	1.45	2	2.6	5.3
25042	Ident. No.	050	100	150	200	300
35042	Price/unit, €	•	•	0	(°) <sup>+</sup>	(°) <sup>+</sup>

300

030

Clean measuring equipment after use and avoid

Prod. Gr. 3AF Replacement scribing tips no. 35044050

# **RION**<sup>®</sup> Marking gauge With fine adjustment

Ident No

Price/unit, €

### Application:

For precise marking off parallel to the workpiece edge.

Exchangeable, hardened scribing tipSteel slide with rectangular stop plate

Technical data:

200

020

needle

Ident. No.

Price/unit, €

Locking screw

Technical data:

Scale value: 0.1 mm

With fine adjustment

Exchangeable cemented carbide marking-off

011

- Execution:
- Round rod made of INOX steel, with guide groove
- Graduation with 1 mm scale interval

## Max. working length (mm)

**35051...** Prod. Gr. 3BG

# **DRION**<sup>®</sup> Marking gauge With runner

Application:

For precise marking off parallel to the workpiece edge.

### Execution:

INOX steel beam

### 35052...

Prod. Gr. 3BG

## **ORION**<sup>®</sup> Marking gauge With flat slide

### Application:

Execution:

For precise marking off parallel to the workpiece edge

- Anti-glare, brushed chromium-plated
- Hardened, wide marking-off edge

Max. working length: 200 mmScale value: 0.1 mm

# Technical data:





Prod. Gr. 3BG

# **DRION**<sup>®</sup> Scriber Sturdy cast iron base



### Application:

For marking scale lines on workpiece surfaces.

Fine adjustment

Execution:

- Carbide-tipped marking-off needle
- Ergonomically designed cast iron base

Max. length measuring range (mm)		300	600
Vernier scale		0.05 mm	0.05 mm
Base length x base width		136 x 91 mm	180 x 120 mm
35060	Ident. No.	031	061
35060	Price/unit, €	•	•
Prod. Gr. 3BE			



Source: Hahn+Kolb Werkzeuge GmbH

1090 Technical data subject to change. Availability subject to country specific rules and regulations

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# ATORN® Scriber with sliding scriber



Application:

For marking scale lines on workpiece surfaces.

Execution:

- Parallax-free reading
- Stainless steel measuring arms
- Marking-off needle from base

 Scale and vernier scale with anti-glare, brushed chromium-plated finish



Ident. No. 030-100

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Prod. Gr. 352

# ATORN<sup>®</sup> Electronic scriber with data output



Application:

For marking scale lines on workpiece surfaces and for measuring heights and clearances

### Execution:

- Marking-off needle from base
- LCD display, 11 mm
- Carbide-tipped marking-off needle
- Steel foot
- ON/OFF



Zero setting at any position

- mm/inch changeover
- Hold function
- Preset function
- Advantage:

Ident. No. 430–500: With sliding, straight marking-off needle

### Delivery:

Battery included (1 x 3 V lithium type CR 2032)





Ident. No. 430-500

Max. length measuring range (mm)			300	600	1000
Digit increment (mm)			0.01	0.01	0.01
Base length x base width	Base length x base width			189 x 118 mm	189 x 118 mm
Data transmission type			Proximity	Proximity	Proximity
35072	fine adjustment	Ident. No.	230	260	300
33072	5072		•	•	0
35072	toothed rack	Ident. No.	330	360	400
33072	LOOLITEU TACK	Price/unit, €	•	•	0
35072	sliding scriber	Ident. No.	430	460	500
35072	sinuling scriber	Price/unit, €	•	•	•

Ident. No. 330-400

Prod. Gr. 352

# Scribing tips for ATORN scriber

Length 75 mm CC-tipped	Length 150 mm CC-tipped	for scriber with sliding needle, straight, length 270 mm	for scriber with sliding needle, straight, length 270 mm, cemented carbide	for scriber with sliding needle, depressed centre, length 270 mm	for scriber with sliding needle, depressed centre, length 270 mm, cemented carbide		
35072	35072	35072	35072	35072	35072		
ldent. No.	Ident. No.	Ident. No.	Ident. No.	Ident. No.	Ident. No.		
900 •	910 •	920 •	925 •	930	935 •		
	Price/unit,€						

Prod Gr 352

Source: Hahn+Kolb Werkzeuge GmbH Technical data subject to change. Availability subject to country specific rules and regulations



# **DRION**<sup>®</sup> Height measuring and marking-off device Round scale and double guide

# М

### Application:

For marking scale lines on workpiece surfaces and for measuring heights and clearances.

### Execution:

- Adjusted using hand wheel
- Carbide-tipped marking-off needle
- Ergonomically designed cast iron base
- Rotating scale dial
- Double counter, one positive counter, one negative counter

### Delivery:

Basic device, 1 carbide-tipped measuring and marking-off blade, 1 clamping element for marking-off blade and gauge slides



· · ·			
Max. length measuring range (r	nm)	300	600
Scale value (mm)		0.01	0.01
Base length x base width		125 x 85 mm	180 x 120 mm
Ident. No.		030	060
35140	Price/unit €		

Prod. Gr. 3BE

# **DRION**<sup>®</sup> Electronic scribers



Application:

For marking scale lines on workpiece surfaces.

### Execution:

- Guide column made from INOX steel
- Fine adjustment
- Carbide-tipped marking-off needle
- Ergonomically designed cast iron base
- mm/inch switch-over HOLD function

ON/OFF

ABS/TOL/SET

### Deliverv:

### Battery included (type SR44)

Zero setting at any position





Ident. No. 035

Prod. Gr. 3BE

#### Height measuring and marking-off device Mahr **Digimar 814 SR**



Application: For marking scale lines on workpiece surfaces and for measuring heights and clearances.

### Execution:

- Data output
- Fine adjustment
- Carbide-tipped marking-off needle
- Easy-grip, secure base
- Reset function
- Zero setting at any position
- mm/inch switch-over
- Auto off
- Preset function

### Max. length measuring range (mm)

### 35132...

Prod. Gr. 306

ABS function

### Advantage:

- Key lock to prevent unintentional adjustment
- Switch on by moving the slider
- Large hand wheel for positioning and measuring

### Delivery:

Marking-off tip, battery, box, operating instructions

### Technical data:

- Digit increment: 0.01 mm
- Base length x base width: 180 x 80 mm
- Data transmission type: multiCOM







# Quality test at max. level

Each TESA height measuring device with SCS calibration certificate

TESA is the leading manufacturer of height measuring devices with decades of experience. To meet the highest expectations, TESA has invested in state-of-the-art air conditioning technology for the production lines of height measuring device series TESA-HITE and MICRO-HITE. The assembly cell and final inspection area for these precision instruments meet the highest climatic laboratory specifications. The ambient temperature of 20°C (reference temperature) is maintained with a tolerance of 0.1 K. This is unique and outstanding within the entire industry. This investment was a further milestone towards meeting the requirement for TESA height measuring devices to enable the smallest error limits to be produced and controlled reproducibly with the lowest possible measurement uncertainty.

**SCS calibration certificate:** The precision of each TESA height measuring device is generally certified by the accredited TESA laboratory by awarding an SCS calibration certificate (SCS = Swiss Calibration Service). This corresponds to the same level as DAkkS (DAKKS = German accreditation body). For each measured test feature, the SCS calibration certificate comprehensively certifies the adherence to specification limits; the measured values are based directly on the national standards.



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# TESA HITE magna and TESA-HITE Overview of the measuring options









measurement in one probe direction

measurement in two probe directions

measurements of parallelism

measurements of perpendicularity (TESA-HITE only)

#### TESA-HITE magna and TESA-HITE height measuring devices ΈSΔ

### Application:

Ident. No. 004–007: For measuring external, internal, height, depth and distance dimensions, as well as diameters using automatic recording of the reversal point in bores and shafts (TESA patented measuring system). Parallelism deviations can also be measured.

Ident. No. 040-070: For measuring external, internal, height, depth and distance dimensions, as well as diameters using automatic recording of the reversal point in bores and shafts (TESA patented measuring system). Parallelism deviations can also be measured. Optional accessories also enable testing of perpendicularity deviations.

### Execution:

 Scans with consistent, repeatable measuring force (with acoustic signal)

- Reset to zero at any position
- Large, clear LCD display
- Ident. No. 040-070: Air cushion system for easy movement on the measuring plate (at the push of a button)

### Advantage:

- Large measuring ranges
- Degrees of protection up to IP65 for optimum workshop compatibility

### **Delivery:**

Basic device includes control panel, standard gauge slide carrier, standard gauge slide with carbide ball (diameter 5 mm), reference piece, adapter plug 110-240 V and SCS calibration certificate (DAkkS standard)





Ident. No. 004-007

Ident. No. 040-070

Length measuring range (mm)			415	715	415	715
Min./max. application are	Min./max. application area with standard gauge slide carrier			0-870 mm	0-570 mm	0-870 mm
Digit increment (can be pre-selected)			0.001 mm   0.005 mm   0.01 mm	0.001 mm   0.005 mm   0.01 mm	0.0001 mm   0.001 mm   0.01 mm	0.0001 mm   0.001 mm   0.01 mm
Height gauge error limit			< 8 µm	< 8 µm	(2.5 + 4 x L) µm (L in m)	(2.5 + 4 x L) µm (L in m)
Repeat accuracy of drill h	iole (µm)		5	5	3	3
Repetition accuracy, leve	I (μm)		3	3	2	2
Perpendicularity toleranc	e (front) (µm)		-	-	10	15
Min./max. measurement	force		1.0-2.0 N	1.0-2.0 N	1.0-2.0 N	1.0-2.0 N
Max. battery operating tir	ne (h)		60	60	60	60
Data transmission type			RS232	RS232	RS232	RS232
With air cushion equipme	nt		No	No	Yes	Yes
Weight (kg)	Weight (kg)		15	18	27	32
35147	Ident. N		004	007		
35147	TESA-HITE magna	Price/unit, €	•	•	-	-
35147	TESA-HITE	Ident. No.			040	070
33147	ILSA-IIIL	Price/unit, €	-	-	•	•

Prod. Gr. 362





measurement in one probe direction



measurement in two coordinate

directions





measurement in two coordinate directions

measurements of parallelism

measurement in two coordinate directions

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measurements of perpendicularity and straightness



Angle measurement

#### TESA-HITE plus M 400/700 height measuring devices **ESA** with motorised drive

### Application:

For measuring external, internal, height, depth and distance dimensions, as well as diameters using automatic recording of the reversal point in bores and shafts (TESA patented measuring system). It is also possible to measure in two coordinate directions and to measure deviations in parallelism. Optional accessories also enable angle measurement and perpendicularity testing.

### Execution:

- 1D/2D control panel with geometric functions for measurements in 1 and 2 coordinate directions
- Reset to zero at any position
- Scans with consistent, repeatable measuring force (with acoustic signal)

- Automatic programming and implementation of measuring sequences
- Large, clear LCD display
- Air cushion system for easy movement on the measuring plate (at the push of a button)
- Statistical data processing
- Ident. No. 042, 072: Integrated matrix printer

### Delivery:

TESA-HITE plus M basic device with 1D/2D control panel, standard gauge slide carrier, standard gauge slide with carbide ball (diameter 5 mm), reference piece, mains power adapter 110-240 V and SCS calibration certificate (DAkkS standard)



Ident. No. 040, 070-072



Control panel with integrated matrix printer 042 and 072

			405	705
Length measuring range (mm)		405	705	
Min./max. application area with stand	ard gauge slide carrier		0-560 mm	0-860 mm
Digit increment (can be pre-selected)			0.0001 mm   0.001 mm   0.01 mm	0.0001 mm   0.001 mm   0.01 mm
Height gauge error limit			(2.5 + 3 x L) µm (L in m)	(2.5 + 3 x L) µm (L in m)
Repeat accuracy of drill hole (µm)			2	2
Repetition accuracy, level (µm)			1	1
Perpendicularity tolerance (front) (µm)			8	12
Min./max. measurement force			0.5-1.5 N	0.5-1.5 N
Max. battery operating time (h)			60	60
Data transmission type			RS232	RS232
With air cushion equipment			Yes	Yes
Weight (kg)			30	32
35160	without printer	Ident. No.	040	070
35100	without printer	Price/unit, €	•	0
35160	with printer	Ident. No.	042	072
33100	with printer	Price/unit, €	0	0

Prod. Gr. 365



# **TESA** MICRO-HITE height measuring devices Motorised and manual

### Application:

Ident. No. 030-095: For measuring external, internal, height, depth, step and distance dimensions on geometric elements with flat, plane-parallel and circular cylindrical surfaces in 1D or 2D coordinate directions. Dynamic measuring processes with max., min. and max.-min. memory functions. Optional via TESA IG-13 measuring probe for perpendicularity, straightness and parallelism deviations.

Ident. No. 130-190: For measuring external, internal, height, depth, step and distance dimensions on geometric elements with flat, plane-parallel and circular cylindrical surfaces. Measurement of diameters using automatic recording of the reversal point of bores and shafts (TESA QUICKCENTER patented measuring system). It is also possible to measure in two coordinate directions. Dynamic measuring processes are possible using max., min. and max.-min. memory functions. The TESA IG-13 measuring probe can optionally be used to output additional perpendicularity, straightness and parallelism deviations.

### Execution:

- Ident. No. 030, 060, 090: manual measuring slide movement using handwheel
- Ident. No. 030-095:
  - hybrid control panel with backlit keypad and colour touchscreen display
- Air cushion activation for easy movement
- Quickcenter functionality for efficient determination of the reversal points
- Ident. No. 035, 065, 095: manual measuring slide movement using handwheel and fine adjustment
- Ident. No. 130–190:
- control panel with touchscreen or via operator keypad

- quick, easy and reliable measurements, especially for bores
- reset to zero at any position
- air cushion system for easy movement on the measuring plate (at the push of a button)

### Advantage:

### Ident. No. 030-095:

- hybrid control panel allows "classic" operation via keyboard, as well as "modern" operation via touchscreen
- new Quickcenter technology simplifies the task of measuring bore holes and shaft diameters
- intelligent context menu supports the process by providing specific information and supporting the user while performing measuring tasks
- the measurement result display provides clear organisation of large amounts of information
- flexible data management, allowing for easy data export
- Ident. No. 130-190:
- automatic correction for very high accuracy suitable for measurements on the production line or in the laboratory

### **Delivery:**

battery cartridge, charger (mains power supply adapter), standard gauge slide carrier, standard gauge slide with carbide ball Ø 5 mm, reference piece, SCS calibration certificate (DAkkS standard).

### Technical data:

- Digit increment (can be pre-selected): 0.1 mm |
- 0.001 mm | 0.0001 mm
- Repeat accuracy of drill hole: 1 µm
- Max. battery operating time: 8 h Data transmission type: TLC
- · With air cushion equipment: Yes



Ident. No. 030-095

Length measuring range (mm)			365	615	920	365	615	920	
Min./max. application area with standard gauge slide carrier			0-520 mm	0-770 mm	0-1075 mm	0-520 mm	0-770 mm	0-1075 mm	
Height gauge error limit			2 + 2L/1000 (L in mm )	2 + 2L/1000 (L in mm )	2 + 2L/1000 (L in mm )	1,8 + 2L/1000 (L in mm )	1,8 + 2L/1000 (L in mm )	1,8 + 2L/1000 (L in mm )	
Repetition accuracy, level (µm)		1	1	1	0.5	0.5	0.5		
Perpendicularity tolerance (front) (µm)		7	9	11	7	9	11		
Weight (kg)		33	37	45	33	37	45		
35170	MICRO-HITE	Ident. No.	030	060	090		_		
35170	MIGRO-HITE	Price/unit, €	•	•	•*	-	-	-	
35170 MICRO-HITE F		Ident. No.	035	065	095				
35170		Price/unit, €	(°) <sup>+</sup>	(°) <sup>+</sup>	(°) <sup>+</sup>	-	-	-	
35170	MICRO-HITE	Ident. No.	. /		. ,	130	160	190	
33170	+M	Price/unit, €	-	-	-	•*	•*	•*	

Prod Gr 365

# Accessories for height measuring device TESA Micro-Hite and TESA Micro-Hite plus M until model year 2016 - 35170 003/006/009, 35171 003/006/009

### Application:

Ident. No. 090: For determining straightness and squareness deviations.



Ident. No. 090

Charger for Micro-Hite/ TESATRONIC	Replacement battery for TESA Micro-Hite 350/600/900 to model year 2016	Paper roll for MICRO-HITE printer and memo printer	Battery cartridge for models TESA Micro-Hite 350/600/900 to model year 2016	Electronic measuring probe FT 13 to model year 2016 When used with MI- CRO-HITE plus M, cable 35172098 is required!	Extension cable for IG 13 length 1 m	
35172	35172	35172	35172	35172	35172	
Ident. No.	Ident. No.	Ident. No.	Ident. No.	Ident. No.	Ident. No.	
515 •	530 •	610 •	<b>650</b> O	090 0	098	
	Price/	Set price, €	Price/unit, €			

Prod. Gr. 362



# Mahr Digimar 816 CL height measuring device with motorised measuring slide

### **Application:**

For measuring external, internal, height, depth and distance dimensions, as well as diameters and reversal points in bores and shafts. Also allows dynamic measurements.

### Execution:

- Reset to zero at any position
- Large function keys
- Language-neutral navigation using self-explanatory symbols
- Measured value storage of up to 99 values
- Clear display with LCD display and backlighting
- Air cushion system for easy movement on the measuring plate
- Optical incremental measuring system with double reading head for outstanding precision

#### **Delivery:**

Height measuring device includes operating and display element, carrier 817 h1, gauge slide K6/51, setting block 817 eb, operating instructions, charger, USB cable, protective cover, calibration certificate

Length measuring range (mm)		350	600
Min./max. application area with gauge slide carrier	standard	0-520 mm	0-770 mm
Digit increment (can be pre-sele	ected)	0.001 mm   0.01 mm	0.001 mm   0.01 mm
Height gauge error limit		2.8 + L/300 (L in mm)	2.8 + L/300 (L in mm)
Repeat accuracy of drill hole (µr	n)	3	3
Repetition accuracy, level (µm)		2	2
Perpendicularity tolerance (fron	t) (µm)	15	20
Min./max. measurement force		0.8-1.2 N	0.8-1.2 N
Max. battery operating time (h)		14	14
Data transmission type		RS232	RS232
With air cushion equipment		Yes	Yes
Weight (kg)		25	30
35131	Ident. No.	035	060
33131	Price/unit, €	•+	•*

Prod. Gr. 306

# Mahr Digimar 817 CLM height measuring device with motorised measuring slide

### **Application:**

For measuring external, internal, height, depth and distance dimensions, as well as diameters and reversal points in bores and shafts. It is also possible to measure in two coordinate directions and to measure deviations in straightness and rectangular tolerance.

#### Execution:

Prod. Gr. 306

- 1D/2D control panel with geometric functions for measurements in 1 and 2 coordinate directions
- Reset to zero at any position
- Large function keys
- Language-neutral navigation using self-explanatory symbols

- Automatic stand-by function and adjustable auto-off function with no loss of measurement values
- Clear display with LCD display and backlighting
   Air cushion system for easy movement on the measuring plate
- Optical incremental measuring system with double reading head for outstanding precision
- Update-capable

### Delivery:

Height measuring device includes operating and display element, carrier 817 h1, gauge slide K6/51, setting block 817 eb, operating instructions, charger, USB cable, protective cover, calibration certificate

,					
Length measuring range	e (mm)	350	600	1000	
Min./max. application a standard gauge slide ca		0-520 mm	0-770 mm	0-1170 mm	
Digit increment (can be	pre-selected)	0.0001 mm   0.0005 mm   0.001 mm   0.01 mm   0.1 mm	0.0001 mm   0.0005 mm   0.001 mm   0.01 mm   0.1 mm	0.0001 mm   0.0005 mm   0.001 mm   0.01 mm   0.1 mm	
Height gauge error limit		1.8 + L/600 (L in mm)	1.8 + L/600 (L in mm)	1.8 + L/600 (L in mm)	
Repeat accuracy of drill	hole (µm)	1	1	1	
Repetition accuracy, lev	/el (μm)	0.5	0.5	0.5	
Perpendicularity toleran	ice (front) (µm)	5	6	10	
Min./max. measuremen	nt force	0.8-1.2 N	0.8-1.2 N	0.8-1.2 N	
Max. battery operating time (h)		16	16	16	
Data transmission type		RS232	RS232	RS232	
With air cushion equipm	nent	Yes	Yes	Yes	
Weight (kg)		25	30	35	
35130	Ident. No.	035	060	100	
33130	Price/unit,€	(°) <sup>+</sup>	•*	(O) <sup>+</sup>	



Ident. No. 035

Digimar 816 Cl



Mahr Measuring probe sets for MAHR height measuring devices



Source: Hahn+Kolb Werkzeuge GmbH 1096Technical data subject to change. Availability subject to country specific rules and regulations



Marking-off and height measuring instruments \ Vertical height measuring devices



Source: Hahn+Kolb Werkzeuge GmbH Technical data subject to change. Availability subject to country specific rules and regulations Price/unit, €



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# Marking-off and height measuring instruments \ Vertical height measuring devices

35172	Coheviael massessing muches dispersion 0 mm	Ident. No.	428
	Spherical measuring probe, diameter 8 mm	Price/unit, €	0
35172	Spherical measuring probe, diameter 10 mm	Ident. No.	429
55172		Price/unit, €	0
35172	Spherical measuring probe, extra long, diameter	Ident. No.	430
55172	10 mm	Price/unit, €	0
35172	Mount for exchangeable gauge slides with thread	Ident. No.	435
35172	M1.4 gauge slide diameter 1	Price/unit, €	0
35172	Cylindrical measuring probe, diameter 10 mm	Ident. No.	440
55172	Cylinarical measuring probe, diameter 10 mm	Price/unit, €	0
35172	Measuring probe with measuring disc diameter	Ident. No.	444
55172	12 mm	Price/unit, €	0
35172	Conical measuring probe for diameters	Ident. No.	446
55172	0.5–5.5 mm	Price/unit, €	0
05170	Conical measuring probe for diameters 5-20 mm	Ident. No.	448
35172	Conical measuring probe for diameters 5-20 min	Price/unit, €	0
35172	Mount for exchangeable gauge slides with thread	Ident. No.	450
55172	M1.4 gauge slide diameter 2	Price/unit, €	0
25172	Adjustable depth gauge diameter 1 mm	Ident. No.	460
35172	Aujustable depth gauge diameter 1 mm	Price/unit, €	0

Prod. Gr. 362

### 3-piece measuring probe set with ruby balls RIN For height measuring devices



Ident. No. T-probe: Length 100 mm | 2 ruby balls diameter 2 mm | ball distance 18 mm | straight gauge slide: Length 3 080 100 mm | ruby ball diameter 6 mm | measuring probe holder: Overall length 63 mm Set price, €

Prod. Gr. 3BE

# Universal measuring probe assortment for MICRO-HITE/TESA-HITE height measuring devices, hardened steel















Ident. No. 300



Ident. No. 360



Ident. No. 370-380

Ident. No. 320

ø 0,9

Ident. No. 330

Ident. No.

300

35172... Gauge slide holder M3 Price/unit, € Ident. No. 310 35172... Probe rod angled 8° Price/unit, € ٠ Ident. No. 320 35172... Probe rod, cylindrical, offset Price/unit, € ۰ 330 Ident, No. 35172... Spherical measuring probe, diameter 0.9 mm Price/unit, € • 340 Ident. No. 35172... Spherical measuring probe, diameter 1.9 mm Price/unit, € ٠ Ident. No. 350 35172... Spherical measuring probe, diameter 2.9 mm Price/unit, € ۰ Ident No 360 35172... Conical measuring probe, diameter 8 mm Price/unit, € 0 370 Ident. No. 35172... Measuring probe extension M3 to M3 Price/unit, € • Ident. No. 380 35172... Measuring probe adapter M3 to M2.5 Price/unit, €

Prod. Gr. 3BE

Source: Hahn+Kolb Werkzeuge GmbH

1098Technical data subject to change. Availability subject to country specific rules and regulations



# **TESA** <sup>μ-HITE</sup> vertical length measuring device

### Application:

to measure external, internal, height, depth, step and distance dimensions, hole and shaft diameter, as well as for parallel, radial and axial runout tolerances, ideal for measuring small workpieces in production

### Execution:

- modern hybrid control panel with touchscreen and keypad
- memory functions max., min., max-min. (for dynamic measurements)
- built-in temperature sensor
- data export using USB memory stick, TLC interface and via radio with optional accessories

### Advantage:

- smart operator concept
- automatic detection of reversal point at holes and shafts
- motorised measuring head for safe and quick probing
- reset to zero at any position

### Technical data:

- Length measuring range: 100 mm
- Min./max. application area with standard gauge slide carrier: 0-160 mm
- Digit increment (can be pre-selected): 0.0001 mm
   | 0.001 mm
- Height gauge error limit: 1 μm axial/2 μm radial
   Min./max. measurement force: 0.63-1.0 N
- Min./max. mea
  Weight: 21 kg



Radial measuring probe

35175...Ident. No.Price/unit, €Prod. Gr. 365

**ORION**<sup>® Vee</sup> blocks made of special cast iron

020

### Application:

For checking, marking off and aligning cylindrical parts.

Ident, No.

### Execution:

- Machined in pairs
- Vee block faces and base machined level and parallel

No. 35180: Finely milled

No. 35181: Finely ground

Delivery: In pairs

### Technical data: Angle: 90 Degree



Length x width x height	Flatness tolerance (mm)	Min./max. workpiece Ø	35180 Ident. No.			
50 x 40 x 30 mm	0.04	4-30 mm	005	•	-	-
75 x 40 x 30 mm	0.04	6-40 mm	007	٠	-	-
100 x 40 x 30 mm	0.04	6-50 mm	010	•	-	-
150 x 50 x 40 mm	0.05	8-60 mm	015	٠	-	-
200 x 70 x 50 mm	0.05	8-70 mm	020	٠	-	-
50 x 40 x 30 mm	0.016	4-30 mm	-	-	005	
100 x 40 x 30 mm	0.016	6-50 mm	-	-	010	
150 x 50 x 40 mm	0.016	8-60 mm	-	-	015	٠
200 x 70 x 50 mm	0.016	8-70 mm	-	-	020	
				Price,	′pair, €	

Prod. Gr. 3BE



### Pair of vee blocks Made of hardened steel

## \_\_\_\_\_

Application: For checking, marking off and aligning cylindrical parts.

### Execution:

- Machined in pairs
- Vee block faces and base machined level and parallel

Finely ground
 Delivery:

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In pairs
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### Technical data:

Flatness tolerance: 0.004 mmAngle: 90 Degree



Length x width x height		75 x 35 x 30 mm	100 x 47 x 40 mm	150 x 55 x 45 mm	200 x 65 x 55 mm	250 x 85 x 70 mm
Min./max. workpiece Ø		5-40 mm	5-55 mm	5-60 mm	5-75 mm	5-100 mm
35182	Ident. No.	075	100	150	200	250
35182	Price/pair, €	•	•	•	•	•

Prod. Gr. 3BE

