

38005

Electronic inclinometer ClinoBevel 1 USB



Design

- Universal compact device with 4 precision-machined measuring bases on the housing circumference
- Slope indicator can be selected via the keyboard in every common tilt unit

Selectable units of measure:

- degrees, degrees/min., mm/m, inch/10 or 12 inch, mm or inch rel. base (to be selected), milliradians and others
- Housing is impermeable to spray water and resistant to workshop chemicals

Scope of delivery:

- USB cable 1.8 m
- Software Clino Soft1 on CD
- 1 x 1.5 V battery (type LR 6, AA)
- Test certificate with declaration of conformity
- In case

Applications

For incline measurements in immediate and comparative measuring processes.

Note:

Replacement batteries, see art. no. 39900 303.
Optional remote control available.

38005



Measuring range Degrees	Digit increment sensitivity mm/m	Repeatability mm/m	RS 485	W x H x D mm	38005	...
+/- 45	≥ 0.02	< 0.1	x	100 x 75 x 30		101

Info

Electronic levels

Working according to the pendulum system with capacitive scanning, insensitive to magnetic fields. No mechanical transmissions, therefore wear-free. With digital display of the angle (tilt and pitch in mm/m), precise, handy and robust. For inspection work and workshop use.

Horizontal model

With prismatic measuring base, 2 sensitivities, switchable 0.001/0.01 mm/m, with analogue output for recorder.

Angled model

With 2 prismatic measuring bases, 2 sensitivities, switchable 0.001/0.01 mm/m, with analogue output for recorder.

Electronic level set

The ideal set for fitters

Contents:

- 1 level, horizontal model 150 mm long, with flat, hardened steel measuring base and without its own display
- 1 the same, but angle model 150 mm long
- 1 display and power supply unit
- 2 connecting cables, each 2.5 m long
- 4 batteries, each 1.5 volts in a robust plastic case.

Electronic precision levels

Powerful design, but very handy. Suitable for both inspection and operation.

Angled model

With horizontal and vertical prisms and surfaces for horizontal and vertical shafts and surfaces.



Please contact us!

38014 - 38018

Precision spirit levels, adjustable

ATORN®

Design

- Adjustable precision spirit level in accordance with DIN 877
- Easy setting of a relative zero point ≤ with the adjustment unit
- Adjustment range +/- 4.0 mm/m
- With ground, externally adjustable longitudinal vial, transverse vial and full thermal insulation
- Indication of the scale value on the name plate
- Flat and prismatic measuring surface (150°)
- Measuring surfaces finely ground
- Supplied in a case

Applications

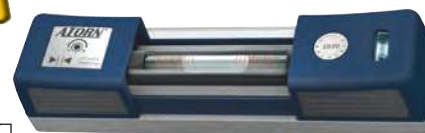
For aligning horizontal surfaces and shafts.

Quality

High-quality special cast iron.

NEW

38014 - 38018



Sensitivity	0.3 mm/m	0.1 mm/m	0.04 mm/m	0.02 mm/m	0.01 mm/m
Length mm	38014	38015	38016	38017	38018
160	101	101	101	101	
200	102	102	102	102	101
250	103	103	103	103	102
300	104	104	104	104	103
500	105	105	105	105	104

Spirit levels

38010 - 38013

Horizontal spirit levels DIN 877



Design

- With prismatic base, ground and graduated longitudinal vial and full thermal insulation
- Longitudinal vial visible from the side – Advantageous when measuring points that are high up
- Measuring surfaces finely ground
- Consistent accuracy thanks to stress-free installation of the level: Eliminates time-consuming adjustments
- Sensitivity of the longitudinal vial = in mm/m
- Deviation from the horizontal at 1 m length
- In case

Applications

For aligning horizontal surfaces and shafts.

Quality

Heavy special cast iron.

38010 - 38013



Sensitivity	0.1 mm/m		0.04 mm/m		0.02 mm/m		0.01 mm/m	
Length mm	38010	...	38011	...	38012	...	38013	...
160		101		101		101		
200		102		102		102		102
300		104		104		104		104

38020

Light metal spirit levels



Design

- With prism and surfaces
- 1 graduation mark = 0.6 mm/m
- In plastic case

Applications

For simple measurements.

Quality

Aluminium.

38020



Length mm	38020	...
150		101
200		102

38025 - 38029

Frame spirit levels DIN 877



Design

- 3 sides prismatic
- 1 vertical side, flat, with ground and graduated longitudinal vial, a transverse vial and full thermal insulation
- Longitudinal vial also visible from the side – Advantageous when measuring points that are high up
- Finely ground measurement surfaces
- Consistent accuracy thanks to stress-free installation of the level: Eliminates time-consuming adjustments
- Sensitivity of the longitudinal vial = in mm/m
- Deviation from the horizontal at 1 m length
- In case

Applications

For aligning horizontal surfaces and shafts.

Quality

Heavy special cast iron.

38025 - 38029



Sensitivity	0.1 mm/m		0.04 mm/m		0.02 mm/m		0.01 mm/m	
Length 1 side mm	38025	...	38026	...	38028	...	38029	...
100				101				
150				102		102		
200		103		103		103		103
300						104		104

38034

Precision circular spirit level



Design

- With longitudinal and transverse vial and 3 screw holes
- Incl. declaration of conformity

Applications

As a level on machines, devices, etc.

Note:

Prismatic or T-shaped levels with different sensitivities and dimensions are available on request.

38034



Ø mm	Thickness mm	Sensitivity mm/m	38034	...
40	11	Scale interval		
		2.0-5.0		101

38043
Precision crankpin spirit levels DIN 877


Neigungsmesstechnik e.K.

Design

- Longitudinal and transverse prism in the base
- Longitudinal and transverse vial with graduation
- Full thermal insulation
- Ground measurement surfaces, highly sensitive
- In case

Applications

For aligning crankshafts and crankpins on engines, etc.

Quality

Heavy special cast iron.

38043


Length mm	1 graduation mark equals longitudinal/transverse mm/m	38043	...
60	0.2 / 0.8	101	
90	0.1 / 0.8	102	

38047
Graduated spirit level (angle spirit level)


Neigungsmesstechnik e.K.

38047 102
Graduated spirit level
Design

- With a flat base and mounting holes, 300 mm long, 25 mm wide
- Measuring range 4 x 90°, **accuracy 1°**

Applications

For horizontal, vertical and angle measurements.

38047 103
Case
38047


	38047	...
Graduated spirit level	102	
Case	103	

38150
Plastic angle spirit level

Design

- All-round plastic spirit level
- Horizontal vial and vial with angle measuring device made of acrylic glass
- **With magnet**

- Marking edges as a drawing aid for 45°, 60°, 120° and 135° angles
- Measuring scale graduated in cm and mm


38150


Length mm	38150	...
250	101	

38155
Tube spirit level

Design

- Unbreakable **acrylic glass tubes**
- With plastic fittings and plastic vent valves
- Scale: mm graduation 5–155 mm
- For tube widths 10 and 12 mm (1/2 inch)
- **Supplied with 20 m tube**, in box

Applications

Fast and easy work: Attachment of level and meter markers, for gradient measurements at great distances, level measurements when the survey points are out of sight, ground surveying.

38155


	38155	...
	101	

Spirit levels

38054 - 38055

Pocket spirit levels



STABILA®

Design

- With an extra strong rare-earth magnet – up to 5x more powerful than a conventional ferrite magnet
- **Measurement accuracy +/- 1.0 mm/m in normal position**
- With belt clip – always within reach

38054

Pocket electric

Design

- Plastic spirit level for rapid and reliable horizontal alignment of flush switches and sockets thanks to a powerful rare-earth magnet system
- With base measurement surface on the rear of the spirit level and an ingenious cut-out for the screwdriver guide
- The installation part can be conveniently adjusted with the attached spirit level

38055

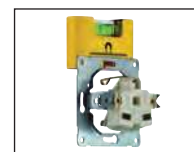
Pocket Pro Magnetic

Design

- Professional mini-format spirit level with robust right-angle aluminium-core housing with two precise milled measuring surfaces with V-groove for horizontal and vertical measurements on flat and round surfaces
- Vertical measuring area is at a 90° angle to the horizontal measuring area – this allows for vertical measurements with the horizontal vial
- Strong rare-earth magnet system on ground and side measuring surface for adhesion to metallic components – free hands for aligning and adjusting
- Always on hand – the small spirit level takes up hardly any space



38054



38055



Type	L x W x H mm	38054	...	38055	...
Pocket Electric	70 x 20 x 40		101		
Pocket Pro Magnetic	70 x 20 x 40				101

38057

PICO spirit level and scale

BMI

Design

- Ideal measuring equipment, as horizontal/vertical measurements usually have to be performed in combination with length measurements
- Rust-free stainless steel tape measure
- Waterproof
- Made in Germany

Accuracy:

- Tape measure EG II
- Spirit level 1.0 mm/m

Advantages:

- The tape measure can be stretched and locked on the housing for measurement applications
- The tape measure can be stored compactly and securely in the spirit level housing
- The convex arch of the tape allows for perfect readings

38057 101

Design

- Without magnet

38057 102

Design

- With magnet



38057



38057 102



Tape length mm	Tape width mm	Without magnet		With magnet	
		38057	...	38057	...
1000	16		101		102

38052

Hardwood spirit levels

BMI

Design

- Low heat conduction
- Oiled
- **Measuring accuracy in normal position**
1.0 mm/m

Applications

For all sensitive surfaces.

38052



Length mm	38052	...
300	201	
400	202	

Length mm	38052	...
500	203	
600	204	

38056

Light metal spirit levels

HHW

Design

- Made of reinforced, grey powder-coated aluminium profile with smooth side surfaces
- Horizontal and vertical vial
- Very good visibility thanks to acrylic glass
- **Measuring accuracy in normal position**
0.5 mm/m

Applications

For measurements in horizontal and vertical normal position.

38056



Length mm	38056	...
300	101	
400	102	
500	103	

Length mm	38056	...
600	104	
800	105	
1000	106	

38053 - 38066

Light metal (magnetic) spirit levels

ATORN

Design

Laser-divided horizontal round vial:

- **1** = Precision reading due to additional divisions for exactness of the 0-position of the air bubble for the horizontal vial (zero-point deviation in the normal position: 0.5 mm/m)
- **2** = Additional reading of 2% incline
- Absolutely secure connection to the profile thanks to ultrasound welding
- Maximum long-term accuracy thanks to laser marking (patented process)
- Magnifying effect for improved readability
- 270° view of vial from all positions without any interfering edges
- Made from high-strength non-breakable polycarbonate

Strong aluminium rectangular profile:

- **3** = Silicone pads on rear side surface for non-slip positioning on walls
- **4** = Rubber end caps with impact protection
- Scratch-proof thanks to special anodising treatment

38053 - 38066



38053 106-108

Design

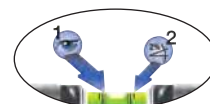
- **5** = With printed scale on the upper measuring surface and 2 movable markers attached for measuring and marking

38066

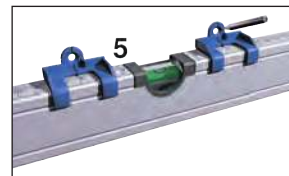
Design

- Magnetic base

38066



38053 106-108



With magnet

Length mm	38053	...	38066	...
200	101			
300	102			
400	103		101	
500	104			
600	105		102	
800	106		103	

With magnet

Length mm	38053	...	38066	...
1000	107		104	
1200	108			
1500	109			
1800	110			
2000	111			

38061

Short magnetic spirit level

BMI

Design

- Exceptionally good view in the case of vertical measurements thanks to head vial
- Vials with magnifying glass effect for good readability
- With strong internal permanent magnet
- **Measuring accuracy 0.5 mm/m in normal position and during reverse measuring**

Quality

Smooth aluminium profile, silver anodised.

38061



Length mm	38061	...
200		101

Spirit levels | Inclinometers

38063

Aluminium spirit levels SUPERSTAR

BMI

Design

- Powder-coated surface
- Round horizontal vial with magnifying effect
- Edgeless horizontal vial for undistorted view of bubble even during reverse measuring
- Life-long high measuring accuracy (0.5 mm/m) thanks to ultrasound-welded level
- Reverse measuring possible (0.5 mm/m)
- Solid body and impact-resistant rubber end flap maintain high measuring precision
- Milled measuring surface

38063 201-203

Design

- Magnetic base

NEW



38063

38063 201-203



With magnet

Length mm	38063	...	38063	...
400		101		201
500				202
600		103		203
800		104		
1000		105		
2000		106		

38065

Aluminium spirit levels HIGHPRECISION

BMI

Design

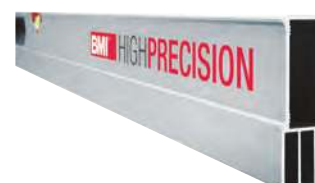
With the new HIGHPRECISION, levels are used that offer the user **5 times better readability** than conventional spirit levels. Thanks to the use of a level with a 1000 mm turning radius (200 mm is standard), the smallest inaccuracies/inclines can be detected more quickly.

- With the same incline, the bubble makes a 5x wider path than conventional spirit levels. As a result, inaccuracies are can be detected more quickly

- **BMI round vial** for non-glare visibility
- Built-in accuracy of the levels of 0.3 mm/m in normal position
- **BMI 4-chamber profile**, the most robust profile on the market
- Effective additional protection thanks to **shock-absorbing rubber end caps**

Note:

Available as a magnetic spirit level on request.



38065

Length mm	38065	...
1000		101
1200		102

Length mm	38065	...
1800		103
2000		104

38078

Electronic light-metal spirit levels

IP
65

STABILA®

Design

- Extra strong light-metal rectangular profile with handle grooves and innovative, **removable end caps** made from two material components
- These end caps ensure increased absorption and, after removal, a continuous, clean marking line into the corners
- **Patented anti-slip stoppers**
- Punch-through openings in two-component technique
- With a second vertical vial
- Two milled measuring surfaces
- **Electronics module for inclination measurement**
- Display in degrees, percent, mm/m and many more.

- Two displays for easy reading, even from above (narrow face) with selectable lighting
- Acoustic guidance in the range of $\pm 2^\circ$ for a vertical, horizontal and individually adjustable reference plane and key lock to secure the reference plane
- **Degree of protection IP 65**
- Hold and automatic shutdown function
- Warning when tilting the spirit level in the second axis
- **Supplied with transport bag**



38078

Electronics module		Level			
Length mm	Error limit ° at 0° and 90°	Error limit ° at 1° to 89°	Max. measurement tolerance standard position mm/m (°)	Max. measurement tolerance reverse measurement mm/m (°)	
610	0.05	0.2	0.5 (0.029)	0.5 (0.029)	101
800	0.05	0.2	0.5 (0.029)	0.5 (0.029)	102

38080

Electronic inclinometer

ATORN®

Design

- **With digital display (in degrees and percent)**
- Arrows in the display indicate the direction of the 0° or 90° position
- Easy resetting
- Switchable acoustic signal for the 0° or 90° position
- With hold function
- Supplied with battery electric block 9 V 6LR61
- In sturdy plastic tubes

Applications

For rapid and precise measurement of gradients/pitches.

Note:

Replacement batteries, see art. no. 39900 405.



Display in percent



Display in degrees

38080

Measuring range	Resolution °/%	Error limit ° at 0° and 90°	Error limit ° at 1° to 89°	Total length approx. mm	Test surface length approx. mm	
4 x 90°	0.1	+/- 0.05	+/- 0.3	256	230	101

38085

Digital inclinometer GIM 60 L

BOSCH

Design

- Integrated point laser for inclination measurement up to 30 m length
- Strong magnets and two tethers for secure mounting on workpieces
- Tilt mechanism for fine adjustment on uneven surfaces
- Any value can be set as an alternative 0°
- Manual adjustment of angles is possible for easy transfer
- Audio signal leads to the desired angle even without viewing the display

- Levelling accuracy of laser: ± 0.5 mm/m
- Measurement units: °, %, mm/m
- Tripod mount: 1/4 inch

Scope of delivery:

- 4 x 1.5 V batteries (type LR6, AA)
- Protective case

Note:

Replacement batteries see art. no. 39900 303.



38085

Technical data:

- Laser type: 635 nm, less than 1 mW
- Laser range: 30 m
- Laser class: 2

Length cm	Measuring range	Measuring accuracy electronics 0°/90°	Measuring accuracy electronics 1-89°	Work area of laser m	L x W x H mm	Weight approx. kg	
60	0-360 (4 x 90°)	+/- 0.05°	+/- 0.1°	30	618 x 27 x 59	0.9	101

Goniometers | Cross-line lasers

38086

Digital goniometer TECH 700 DA

IP
54

STABILA®

Design

- Electronic goniometer for quickly determining and transferring external angles in a range of 0°–270°
- Digital display with large digits and switchable, dimmable lighting
- **LOCK function:** Locking mechanism for reliable transfer of angles
- Optimum readability of levels, even when the arm is folded in
- Two extra wide edge guides for precise and secure marking off of angles in all positions
- **REF function:** easy acceptance, saving and transfer of a reference angle to other components
- **HOLD function:** saves the measured value for precise measurements and rapid transfer, even on difficult-to-access areas
- Display of the bisecting angle at the push of a button, ideal for fast and precise mitre cuts
- Automatic switch-off after 60 minutes when not in use
- Precise measurement results with an accuracy of $\pm 0.1^\circ$
- Protection class IP 54
- Equipment: 1 digital display, 1 horizontal vial, 1 vertical vial, 2 coated measuring surfaces

Scope of delivery:

- Digital goniometer TECH 700 DA
- 2 batteries (type AA)
- Bag

Application areas:

- Ideal for carpentry and joinery work
- Determine and transfer angles, for example for kitchen building or for aligning other built-in furniture
- The ideal assistant for laying complex tile motifs – transfer of angles when cutting the tiles
- The perfect partner in timber construction – removal of angles to prepare mitre cuts
- Indispensable in metalwork – when measuring, checking or marking off angles

Note:

Replacement batteries, see art. no. 39900 303.

NEW

38086 101



38086 102



Length cm	Measuring range degrees (°)	Accuracy in normal position mm/m (°)	Accuracy in reverse position mm/m (°)	Accuracy for electronic angle measurement (°)	38086	...
45	0–270	0.5 (0.029)	0.75 (0.043)	± 0.1	101	
80	0–270	0.5 (0.029)	0.75 (0.043)	± 0.1	102	

38111

Cross-line soldering laser LAX 300

STABILA®

Design

- 1 horizontal line, 1 vertical line
- Solder points upwards and downwards
- Easy to see, bright and sharp laser lines and points for precision work
- Compact, rotatable housing with extendable foot for height adjustment for direct work on U profiles
- Shock-absorbing STABILA Softgrip casing
- Easy change of function thanks to one-button operation
- Protection class IP 54

Scope of delivery:

- Cross-line soldering laser LAX 300
- Target plate
- Wall bracket
- Batteries (3 x 1.5 V AAA)
- Belt bag

Application areas:

- In dry walling – suspending ceilings, positioning partition walls and dividers
- For electrical installation work – installing cable ducts
- For tile work – creating a tile backsplash
- In window construction – levelling off the window height
- For carpentry and joinery work – constructing kitchen cabinets, aligning worktops

Note:

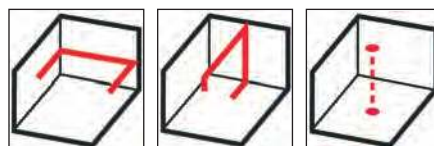
Replacement batteries, see art. no. 39900 304.



IP
54

NEW

38111



Technical data:	
Levelling accuracy:	± 0.3 mm/m
Top/bottom line accuracy:	0.3 mm/m / 0.4 mm/m
Self-levelling area:	$\pm 4.5^\circ$
Range of visible line:	20 m*
Laser class:	2
Batteries:	3 x 1.5 V AAA

* Indoors under typical working conditions

Type	38111	...
LAX 300	101	



38100

Cross-line laser autoCROSS 3

BMI

38100 101

Cross-line laser autoCROSS 3

Design

- Red diode laser, wavelength 635 nm
- Laser class 2
- Self-levelling (pendulum)
- Horizontal and vertical lines can be switched separately
- Thanks to pulsed laser diode, can also be used with receiver
- Range with receiver at least 30 m
- Automatic detection of „outside levelling area“
- Slope by switching off auto-levelling
- Multifunctional adapter

Scope of delivery:

- Basic device
- 3 x 1.5 V batteries (type LR6, AA)
- Wall bracket
- Transport case

Note:

Replacement batteries, see art. no. 39900 303.

38100 301

Tripod

Design

- Tripod connection 1/4 inch
- Robust aluminium design with handle and level
- Including carrying case

Applications

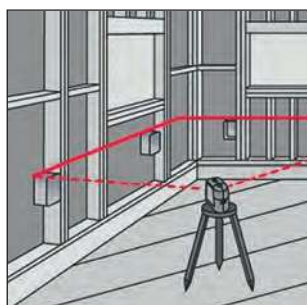
For Torpedo 3, autoCROSS 3, autoCROSSplus and autoMAGIC.

Technical data:

- Height min. 0.6 m, max. 1.68 m
- Weight: 1.3 kg
- Max. load capacity 3 kg



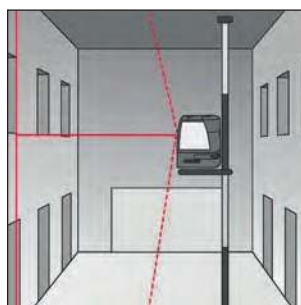
IP
54



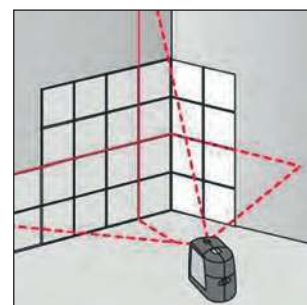
Meter markers for floors, electrical components etc.



... Suspending ceilings



Vertical line (carpentry work)



Laser cross for aligning tiles, etc.

Type	Self-levelling range +/-°	Accuracy +/- mm/m	Opening angle of the lines vertical/horizontal	Work area °C	Storage temperature °C	Dimensions mm	38100	...
autoCROSS 3	4	3/10	140°/120°	-10 to +50	-20 to +70	120 x 95 x 62	101	
Tripod	-	-	-	-	-	-	301	

38101

Cross-line laser micro CL-100

RIDGID

Design

- One-button operation, very user friendly
- Levelling and alignment tasks can be performed in no time at all
- Immediate projection of extremely bright vertical and horizontal lines
- Extended range in 30 m rooms
- Integrated 360° turntable
- Laser class 2/630-670 nm

Scope of delivery:

- Cross-line laser micro CL-100
- Robust plastic case
- 3 AAA batteries
- Laser goggles
- Tripod

Note:

Replacement batteries, see art. no. 39900 304.



38101



NEW



Technical data:	
Accuracy:	2 mm/10 m
Work area, inside:	30 m
Laser lines:	2x, horizontal and vertical
Self-levelling area:	+/- 6°
Area deviation display:	Yes (visual)
Dust and splash protection:	IP 54
Locking mechanism:	Yes (to prevent damage)
Tripod mount:	Yes (5/8 inch thread)
Power supply:	3x batteries (type AAA)
Weight:	0.54 kg

Type	38101	...
micro CL-100		101



Laser and distance meters | Pocket scales

38143

Laser range finder GLM 40 / GLM 80

BOSCH

38143 100
GLM 40

Design

- **Particularly easy and convenient reading of measured values** even with poor lighting conditions thanks to a large and automatically illuminating display
- **Robust and reliable** protection against dust and water (IP 54), fall tested up to 1 m
- **Long service life:** 5,000 single measurements or 2.5 hours of continuous measurement without changing the battery
- **Intuitive operation** thanks to the clear and self-explanatory keypad
- **Convenient and pleasant handling** thanks to the slim and handy design with soft grip as well as high-quality silicone keys
- **Ideal for indoor use** with a range of up to 40 m and a measuring accuracy of +/- 1.5 mm.

Scope of delivery:

Range finder, GLM 40, 2 x 1.5 V batteries (AAA), protective case, manufacturer's certificate.

38143 102

GLM 80

Design

- **Highest level of functionality** thanks to integrated 2-axis tilt sensor:
- Horizontal axis - +/- 60° (reference area - back)
- Vertical axis - 360° (reference area - side edge)
- **Extraordinary working efficiency** with up to 25,000 measurements thanks to lithium-ion technology, rechargeable via standard micro-USB connector
- **Automatically rotating display** for better reading of measured values regardless of the device position
- **Automatic display lighting** due to an intelligent light sensor for different lighting conditions
- **Especially easy and convenient handling** thanks to the new slim and handy design as well as the high-quality silicone keyboard.

Scope of delivery:

Range finder, GLM 80, 1 x Li-ion battery 3.7 V/1.25 Ah, micro-USB charger, protective case, short guide, manufacturer's certificate.


IP
54

38143 100



38143 102



Indirect height measurement made easy

The tilt sensor allows for very fast and accurate indirect height measurements. Obstructions in the measuring range are now also no longer a problem.

Technical data:	38143 100	38143 102
Type:	GLM 40	GLM 80
Measuring range:	0.15 - 40 m	0.05 - 80 m
Measuring accuracy:	+/- 1.5 mm	+/- 1.5 mm
Display accuracy:	1 mm	1 mm
Measuring time type:	< 0.5 s	< 0.5 s
Max. measuring time:	< 4 s	< 4 s
Integrated tilt measurement:	-	x
Number of memory values:	10	20 + 1
Laser class/diode:	2/635 nm, < 1 mW	2/635 nm, < 1 mW
Automatic switch-off:	5 min.	5 min.
Units of measurement:	m/cm/mm	m/cm/mm
Power supply:	2 x 1.5 V (AAA)	1 x Li-ion battery 3.7 V/1.25 Ah

Type	38143	...
GLM 40	100	
GLM 80	102	

38146

Laser distance meter Leica DISTO™

Bluetooth®
SMART

IP
54

Leica DISTO™
The original laser distance meter

Design

Fast and accurate, distance, area and volume measurement with visible laser.
Small and handy for every pocket.

Note:

Using a homing board is very helpful, especially for measurements outdoors and in bright surroundings.
Deliverable on request.

Replacement batteries, see art. no. 39900 303.

Other models are available on request.

38146 201

Disto™ D110

The smallest model in the Leica Disto™ series with integrated Bluetooth® SMART technology.

38146 302

Disto™ D2

Small and handy laser distance measuring device for indoor use. Data can also be transferred to smartphones via Bluetooth® using the free Leica Disto™ sketch app.

38146 201



38146 302



Technical data:	38146 201	38146 302
Type:	DISTO™ D110	DISTO™ D2
Measuring accuracy:	+/- 1.5 mm	+/- 1.5 mm
Range:	0.2 - 60 m	0.05 - 100 m
X-Range Power Technologie™	x	x
Area and volume measurement:	area only	x
Painter function:	-	x
Min./max. Distance tracking:	x	x
Pythagoras function:	-	x
Addition/subtraction:	-	x
Most recent values can be called up:	-	10
BLUETOOTH® technology:	x	x
Multi-line display:	x	x
Display lighting:	-	x
Multi-functional end piece:	-	x
Hand strap:	-	x
Belt bag:	x	x
Pocket clip:	x	-
Measurements with one set of batteries:	up to 5000*	up to 10,000*
Batteries:	2 x 1.5 V (AAA)	2 x 1.5 V (AAA)
Protection rating:	IP 54	IP 54
Dimensions in mm:	120 x 37 x 23	116 x 44 x 26
Weight with batteries g:	93	100

* reduced in BLUETOOTH® mode



Type	38146	...
Disto™ D110	201	
Disto™ D2	302	

Info

Functional overview of scales art. no. 38160–38431

KERN®**- Adjustment programme (CAL):**

For setting the accuracy with an external test weight (not included in the scope of delivery)

**- Quantities (PCS):**

Reference quantities can be selected, toggles display between unit and weight

**- Recipe A (RECIPE):**

The weight values of the recipe components can be added up and the total weight of the recipe printed out

**- Percentage determination (PERCENT):**

Display of deviation from reference weight (100%) as a percentage instead of in grammes

**- Animal weighing programme (MOVE):**

Vibrations are filtered out to determine a stable weight value

**- Underfloor weighing (UNDER):**

Load suspension option with a hook on the bottom of the scales

**- Weighing units (UNIT):**

Can be switched at the push of a button, e.g. to non-metric units

**- Weighing with tolerance range (checkweighing):**

Input of an upper/lower limit. An optical signal supports portioning, dosing and sorting in counting mode

**- Sum level A (SUM):**

The weight values of similar products to be weighed can be added up and the total printed out

38160

Pocket scales type CM

**KERN®****Design**

- LCD display (digit height 12 mm)
- Hinged lid offers protection against pressure and dust
- With integrated calculator
- Battery operation with automatic switch-off (approx. 4 minutes)
- Total dimensions W x D x H 85 x 130 x 25 mm
- Supplied with 2 x 1.5 V batteries (type AAA)

Note:

Replacement batteries, see art. no. 39900 304.

Test weights available on request.

38160



Model	Reading g	Weighing range max. g	Weighing tray mm	38160	...
CM 60-2N	0.01	60	80 x 70		100
CM 320-1N	0.1	320	80 x 70		102
CM 1 K1N	1	1000	80 x 70		103

38161

Pocket scales type TGC

**KERN®****Design**

- High-resolution pocket scales with extremely fast reaction and settling time
- Backlit LCD display (digit height 12 mm)
- With practical tare tray
- Especially flat design
- Cover made of shock-resistant plastic
- Stainless steel weighing tray
- Total dimensions W x D x H 100 x 130 x 18 mm
- Supplied with 2 batteries of type CR 2032, operating time up to 33 h

Note:

Replacement batteries, see art. no. 39900 102.

DKD certificate and test weights available on request.

38161

NEW

Model	Reading g	Weighing range max. g	Weighing tray mm	38161	...
TGC 150-2	0.01	150	Ø 81		201
TGC 500-1	0.1	500	Ø 81		202
TGC 1K-3	1	1000	Ø 81		203

Precision scales | Counting scales | Counting systems

38162

Precision scales type PCB



KERN

NEW

38162 200

38162 209

38162 211-212

Design

- Backlit LCD display (digit height 15 mm)
- **PRE-TARE function** for manually subtracting a known container weight, useful for filling volume checks
- Freely programmable weighing unit, e.g. thread length g/m, paper weight g/m² or similar
- Recipe function
- Plus/minus weighing operations
- Protection hood included in the scope of delivery
- Total dimensions W x D x H 163 x 245 x 79 mm (without wind protection)



38162 200

Design

- With ring-shaped wind protection (weighing chamber ØxH 90x40 mm)

Model	Readability g	Weighing range max. g	Weighing tray mm	Reproducibility g	Linearity +/- g	38162	...
PCB 350-3	0.001	350	Ø 81	0.002	0.005		200
PCB 3500-2	0.01	3500	130 x 130	0.02	0.05		209
PCB 6000-1	0.1	6000	150 x 170	0.1	0.3		211
PCB 10000-1	0.1	10000	150 x 170	0.1	0.3		212

38174

Precision scales type EMB



KERN

Design

- Entry-level laboratory scales with impressive weighing performance
- Large LCD display (digit height 15 mm)
- Plastic weighing tray
- Especially flat design
- AUTO-OFF function to conserve battery
- Secure and slip-free installation thanks to rubber feet
- Total dimensions W x D x H 170 x 244 x 39 mm
- Permissible ambient temperature range 5°C–35°C
- Supplied with 9 V batteries

Note:

Replacement batteries, see art. no. 39900 405.
Mains power supply adapter, DKD certificate and test weights available on request.

38174 101

38174 102-105



Model	Reading g	Weighing range max. g	Reproducibility g	Linearity +/- g	Weighing tray Ø mm	38174	...
EMB 600-2	0.01	600	0.01	0.03	105		101
EMB 500-1	0.1	500	0.1	0.2	150		102
EMB 1200-1	0.1	1200	0.1	0.3	150		103
EMB 2200-0	1	2200	1	2	150		104
EMB 5.2K1	1	5200	1	3	150		105 NEW



38165

Counting scales type CXB

KERN

Design

- Large LCD display (digit height 18 mm)
- Automatic shut-off of the backlight after 5 seconds to save power, can be switched off
- With protective cover over keyboard and housing
- Dirt-repellent design thanks to water channels on the housing edge and sealing rings over the top housing inlets
- Mains power supply adapter 230V/50Hz
- Internal rechargeable battery with approx. 200 h running time (charging time approx. 8 h)
- With indication of charging status in the display

Functions programmable via keypad:

- Known reference weight
- Desired reference quantity
- Manual saving of a known container weight (PRE-TARE)
- Programmable target quantity or target weight
- When reaching the target value, an acoustic signal sounds (fill-to-target)
- Counting total memory to add up equal counted parts in total pieces and total weight

Note:

DKD certificate and test weights available on request.



38165



Model	Reading g	Weighing range max. kg	Reproducibility g	Linearity +/- g	Piece weight min. for piece counting g	Weighing tray mm	38165	...
CXB 3K0.2	0.2	3	0.2	0.4	0.10	300 x 225		101
CXB 6K0.5	0.5	6	0.5	1.0	0.25	300 x 225		102
CXB 15K1	1	15	1.0	2.0	0.50	300 x 225		103
CXB 30K2	2	30	2.0	4.0	1.00	300 x 225		104

38166

Counting systems type CCS

KERN

Design

Reference scales CFS:

- Programmable via keypad
- Three displays
- Memory PLU for 100 articles
- Acoustic signal, fill-to-target
- Precise counting
- Protection hood included in the scope of delivery

Quantity scales:

- Quantity piece counting with high precision on the weighing platform, so that even the smallest countable parts can be counted in very large volumes
- Stainless steel weighing tray, steel base
- Aluminium single point weighing cell

Applications

For counting the smallest parts in large quantities.

Note:

DKD certificate and test weights available on request.



38166



Model	Readability Quantity scales g	Weighing range Quantity scales kg	Readability Reference scales g	Weighing range Reference scales g	Counting resolution Parts	Smallest part weight g/piece	38166	...
CCS 30K0.1	1	30	0.1	6000	300,000	1		301
CCS 60K0.1	2	60	0.1	6000	600,000	1		302
CCS 60K0.1L	2	60	0.1	6000	600,000	1		303
CCS 150K0.1	5	150	0.1	6000	1,500,000	1		304
CCS 150K0.1L	5	150	0.1	6000	1,500,000	1		305

Table scales | Platform scales | Suspended scales

38173

Table scales type FCB/FKB

KERN

NEW

Design

- Large LCD display (digit height 25 mm)
- Pre-tare function
- High mobility thanks to operation with rechargeable battery (batteries not included in the scope of delivery), battery operation optional
- Data interface RS 232
- Protection hood included in the scope of delivery

Note:

Batteries, see art. no. 39900 405.

DKD certificate and test weights available on request.

38173 102-105

Design

- With a second display on the rear of the scales



38173 102-105:

The second display is on the rear of the scales



38173 102-105

38173 106



Model	Readability g	Weighing range max. g	Weighing tray mm	38173	...
FCB 8K0.1	0.1	8000	253 x 229		102
FCB 12K1	1	12,000	253 x 229		103
FCB 30K1	1	30000	253 x 229		105
FKB 65K1A	1	65,000	340 x 240		106

38175

Platform scales type EOC with practical flip/flop evaluation device

KERN

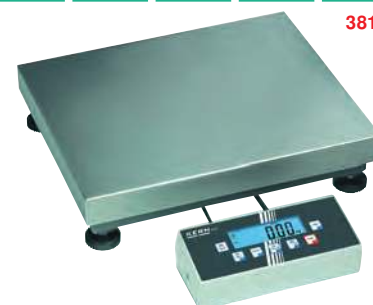
Design

- High mobility thanks to operation with rechargeable battery
- Platform: Stainless steel weighing tray, painted steel base, dust and splash protection IP 65, level and foot screws
- Backlit LCD display (digit height 24 mm)
- Weighing in the tolerance range (checkweighing): Optical and acoustic signal
- Hold function
- Table base incl. wall bracket fitted as standard
- Protection hood included in the scope of delivery

- Query and remote control of the scales via external control devices or computer using Kern Communication Protocol (KCP)



NEW



38175

Model	Readability g*	Weighing range max. kg*	Smallest part weight g/piece	Cable length approx. m	Weighing tray W x D x H mm	38175	...
EOC 10K-3	2/5	6/12	5	3	300 x 300 x 110		101
EOC 30K-3	5/10	15/35	10	3	300 x 300 x 110		102
EOC 60K-2	10/20	30/60	20	3	300 x 300 x 110		103
EOC 60K-2L	10/20	30/60	20	3	500 x 400 x 120		104
EOC 100K-2	20/50	60/150	50	3	300 x 300 x 110		105
EOC 100K-2L	20/50	60/150	50	3	500 x 400 x 120		106
EOC 300K-2	50/100	150/300	100	3	500 x 400 x 120		107

* Dual range scales (automatic switch-over)

Info

Test weights

Test weights can be delivered in both standard and special forms or in set combinations.
DKD calibration certificates are available for all test weights.

Please contact us for more information.



38427

Digital suspended scales type CH

KERN

Design

- With stainless steel hook and extendable tape measure (length 100 cm)
- LCD display (digit height 11 mm)
- Data hold button
- Housing W x D x H 90 x 30 x 175 mm (with hook 270 mm)
- Battery operation with automatic shut-off (approx. 3 min.)
- Incl. 1 x 9 V battery (type 6 LR 61)

Note:

Replacement batteries, see art. no. 39900 405.
Accessories (wall console, belt, tare tray, tray bracket) available on request.



38427



Model	Reading g	Weighing range max. kg	38427	...
CH 15 K 20	20	15		101
CH 50 K 50	50	50		103
CH 50 K 100	100	50		104

38424

Digital suspended scales type HCB

KERN

Design

- With stainless steel snap hook with safety catch (opening 15 mm) and stainless steel S hook (opening approx. 25 mm)
- LCD display (digit height 12 mm)
- Data hold button
- Housing W x D x H 80 x 45 x 150 mm (with snap hook and S-hook 290 mm)
- Battery operation with automatic shut-off (3 min.)
- Incl. 3 x 1.5 V batteries (type AA)

Note:

Replacement batteries, see art. no. 39900 303.
Accessories (snap hook and S-hook) and DKD certificate available on request.



38424



Model	Reading g	Weighing range max. kg	38424	...
HCB 20 K 50	50	20		101
HCB 50 K 100	100	50		102
HCB 100 K 200	200	100		103
HCB 200 K 500	500	200		104

38425

Digital suspended scales type HDB-XL

KERN

Design

- LCD display (digit height 12 mm)
- Additional weighing units: kg, lb, N
- Permissible ambient temperature range: 5°C–35°C
- Hold function
- Incl. 2 x 1.5 V batteries (type AAA) operating time up to 180 hours

Note:

Replacement batteries, see art. no. 39900 304.

NEW

38425



Model	Readability g	Weighing range max. kg	Housing dimensions W x D x H mm	38425	...
HDB 6K-3XL	5	6	107 x 25 x 101		101
HDB 10K-2XL	10	15	107 x 25 x 101		102
HDB 30K-2XL	20	30	107 x 25 x 101		103

38429

Type HCD digital crane balances

KERN

Design

- Full-fledged crane scales for lower to medium load ranges
- Large, high-contrast LCD display (digit height 28 mm)
- Hold function
- Battery charge indicator
- Hook with safety catch
- Infrared remote control
- Supplied with 4 x 1.5 V batteries (type AA) operating time up to 100 hours

Note:

Replacement batteries see art. no. 39900 303.
DKD certificate and test weights available on request.

NEW



IR remote control



38429

Model	Readability g	Weighing range max. kg	Net weight approx. kg	38429	...
HCD 60K-2	20	60	0.85		101
HCD 100K-2	50	150	0.85		102
HCD 300K-1	100	300	0.85		103

38431

Type HFM digital crane balances

KERN

Design

- Self-illuminated LED display (digit height 30 mm)
- Professional device for robust applications in production, quality control, logistics, etc.
- Also ideally suited for continuous use in industrial environments thanks to the sturdy construction and robust design
- Adjust to unstable environmental conditions by changing the readability
- Data hold button
- Hook with safety catch, rotating
- **Wireless remote control** (incl. 2 x 1.5 V batteries, type AAA), range approx. 20 m, all functions are selectable (with the exception of ON/OFF)

- High mobility thanks to operation with rechargeable battery, operating time of up to 50 hours, charging time approx. 14 hours via mains power supply adapter, LED battery charge indicator
- With the TÜV/GS mark, the scales meet the requirements of the German Equipment and Product Safety Act and were tested in accordance with EN 13155 (Non-fixed sensors) and EN 61010-1 (Electrical safety)

Note:

Replacement batteries for wireless remote control, see art. no. 39900 304.
DKD certificate available on request.



38431

Model	Reading g	Weighing range max. kg	38431	...
HFM 1T0.1	100	1000		101
HFM 3T0.5	500	3000		102
HFM 5T0.5	500	5000		103
HFM 10T1	1000	10,000		104

38210

spring balances with spherical probes

ATORN

Design

- Tolerance $\pm 0.01 \times$ (measuring range + measured value)
- To achieve an accurate measurement result, the probe ball must be loaded perpendicular to the lever axis
- The measurements can be carried out in both directions
- **With trailing pointer**
- Supplied with test certificate in accordance with factory guidelines
- In case

Applications

For measuring and setting the correct values for contact pressures on electrical switch gears, tracking forces of motor brushes, measuring pressures of pointer-type measuring devices, tactile pressures of typewriters, calculators and musical instruments, support weights of phonograph pick-ups, tensile and compressive forces of springs.

Note:

Factory calibration certificate for traceability to test equipment monitoring is available on request.



38210

Measuring range cN	Dial Ø mm	Graduation line cN	Lever gauge length mm	38210	...
3-30	36	1.0	29		103
5-50	36	1.0	29		104
10-100	36	2.0	29		105
25-250	36	5.0	29		106

Measuring range cN	Dial Ø mm	Graduation line cN	Lever gauge length mm	38210	...
0.5-5	72	0.1	48		107
1-10	72	0.2	48		108
3-30	72	0.5	48		110
5-50	72	1.0	48		112
10-100	72	2.0	8		114

38401

Cylindrical dynamometers

Design

- With built-in overload protection
- The instrument can be loaded up to approx. 20% over the max. measured value without any change occurring to the measuring spring
- Reserved measurement errors: +/- 1% from the full scale value

- Black scale on silver-plated inner tube
- Nickel-plated tube, caps, ring and hook

Applications

For fine measurements and fine weighing.

Note:

Also available with factory calibration certificate on request.

38401



Measuring range N	Fine graduation N	Total length mm without/with max. load	Scale tube Ø mm	Scale length mm	Weight kg	38401	...
2	0.02	240/340	14.5	100	0.15		201
5	0.05	240/340	14.5	100	0.15		202
10	0.10	240/340	14.5	100	0.15		203
25	0.25	240/340	14.5	100	0.15		204
50	0.50	246/346	14.5	100	0.15		205
100	2.00	246/346	14.5	60	0.15		206
200	4.00	262/322	18.0	60	0.20		207
300	5.00	302/362	21.0	60	0.35		208

38605

Digital force measuring devices (tension and pressure)

ATORN®

Design

- Aluminium die-cast housing
- LCD display with switchable backlight
- Mechanical overload protection, up to approx. 200% of the measuring range
- Tare suppression
- Switchable units: kN, N, kg, lbs
- Automatic saving of settings when device shuts off
- Electronic peak value acquisition for tension and compression
- Simultaneous display of the current measured value in peak operation
- Analogue output 0-2 V DC, USB 2.0 interface for data transfer to PC
- Tolerance limit settings
- Connecting thread for clamping devices: ≤1000 N: M6, > 1000 N: M12
- 4 languages selectable (D/GB/F/I)
- Software on CD (installation on PC)
- Power supply: Mains operation or NiMH batteries (3 x 1.2 V AA). Alternatively, use of non-rechargeable 1.5 V AA batteries is also possible

- Dimensions H x W x D = 170 x 75 x 35 mm (Dimension H without threaded spindle)

Data transfer to a PC using either:

- 1) interchangeable 2 GB SD card via an SD card reader (not included in the scope of delivery).
- 2) continuous data transfer in streaming mode in real time via the USB interface.

Scope of delivery:

Device with battery pack, 230 V power supply unit/charger, SD memory card, USB connecting cable, CD with software and operating instructions, factory calibration certificate, transport case.

38605 101-106

Additionally with pressure plate Ø 23 mm, 2 extensions M 6 x 25 or 45 mm and pull hook.

38605 107-108

Additionally with pressure piece Ø 18 mm and 1 extension M 12 x 50 mm.

38605



Measuring range N	Resolution N	Accuracy %	38605	...
0-20	0.001	< +/- 0.05		101
0-50	0.001	< +/- 0.05		102
0-100	0.01	< +/- 0.05		103
0-200	0.01	< +/- 0.05		104

Measuring range N	Resolution N	Accuracy %	38605	...
0-500	0.01	< +/- 0.05		105
0-1000	0.1	< +/- 0.05		106
0-2000	0.1	< +/- 0.05		107
0-5000	0.1	< +/- 0.05		108

Info

Test stands for force measuring devices

Universal test stands for force measuring devices available on request.

Please contact us!



ATORN®

Design

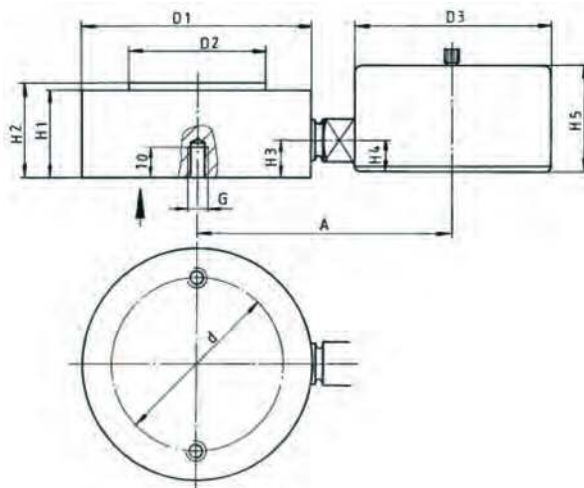
- Extremely low overall height
- Measurability from zero
- Temperature resistance from -20°C to +70°C
- High load frequency
- With maximum trailing pointer
- Accuracy +/- 2% from the full scale value
- Throttle damping for light, prompt loading and unloading
- Supplied with plant test certificate in accordance with ISO 9001
- In transport case

Applications

For static and dynamic force measurements.

Note:

For additional force measuring cells, see HHW Catalogue Volume 1 (Machining + Clamping technology) art. no. 27701.



38801

Measuring range N	Measuring range kN	Scale interval N	Scale interval kN	Ø D1 mm	Ø D2 mm	H1/H2 mm	H3/H4 mm	H5 mm	A mm	G	Ø d mm	Ø D3 mm	38801	...
160	-	5	-	75	45	28/30	12/10	36	82	M 6	55	63		101
250	-	5	-	75	45	28/30	12/10	36	82	M 6	55	63		102
400	-	10	-	75	45	28/30	12/10	36	82	M 6	55	63		103
600	-	10	-	75	45	28/30	12/10	36	82	M 6	55	63		104
-	1.0	-	0.02	75	45	28/30	12/10	36	82	M 6	55	63		105
-	1.6	-	0.05	75	45	28/30	12/10	36	82	M 6	55	63		106
-	2.5	-	0.05	75	45	28/30	12/10	36	82	M 6	55	63		107
-	4.0	-	0.10	75	45	28/30	12/10	36	82	M 6	55	63		108
-	6.0	-	0.10	75	45	28/30	12/10	36	82	M 6	55	63		109
-	10.0	-	0.20	75	45	28/30	12/10	36	82	M 6	55	63		110
-	16.0	-	0.50	75	45	28/30	12/10	36	82	M 6	55	63		111
-	25.0	-	0.50	75	45	28/30	12/10	36	82	M 6	55	63		112
-	40.0	-	1.00	75	45	28/30	12/10	36	82	M 6	55	63		113
-	60.0	-	1.00	90	56	30/32	12/10	36	90	M 6	75	63		114
-	100.0	-	2.00	90	56	30/32	12/10	36	90	M 6	75	63		115