

WATCH & TIME ANNUAL CATALOGUE 2018

Valid until 30.09.2018



THE CATALOGUE AREAS



MOVEMENT:

Everything about building clocks yourself. Movements, parts and accessories

from page 4



WORKSHOP:

Tools, materials, tools for workshop and home from page 67



FINISHED WATCHES:

Timepieces of all types and styles, selected gift ideas from page 111



CREATIVE DESIGN:

Ideas, materials, kits, tools for a wide variety of craft hobbies from page 167

SERVICE

Learn about the product index together with everything about ordering, deliveries and services from

page 192.

SELVA - competence and tradition since 1961!

Dear Customer,

Modern, clear, comprehensible - this is how the new SELVA catalogue presents itself. Discover almost a thousand new items and proven best-sellers in just under 200 pages.

Starting on page 111, you will find an even larger selection of living room clocks, wrist-watches and weather instruments together with useful and important devices to help maintain your safety.

Exciting, new products to build yourself and a larger assortment of ideas to arouse your creativity for construction from page 167 - just try them out and be amazed!

Discover a lot of new and useful items for your home workshop from page 67 onwards. Practical helpers, high-quality tools, sparkling clean care products, secure adhesives and many hundreds of new products offer you reliable support both with your hobby and your daily work.

From page 4 onwards, there is an introduction to the fascinating world of watch technology - as you are used to - with a large selection of quartz, radio and mechanical watch movements as well as everything you need in watch accessories - for new projects as well as for repair.

Much is new - but everything is easy to find: With the product index on the page 192/193 and the tried and tested, colour-coded chapters, you will have everything under control very quickly

Current offers and promotions as well as many other products can also be found at www.matinkulta.fi. Subscribe to the newsletter and be the first to receive valuable information about bargains, news and actions such as sweepstakes, vouchers or test weeks.

Just order easily around the clock - whether via email, Internet, fax, post or phone. Your order will be processed and delivered promptly.

We wish you a lot of fun with the new SELVA rangeyour SELVA team





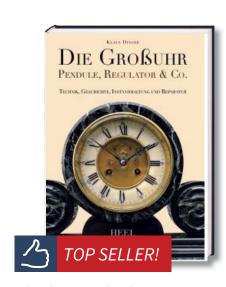
Professional Tool Kit

Professional tool kit in leather case with everything a watchmaker needs, including forceps, Jaxa case opener, mounting cushion, magnifying glass, watchmaker's hammer, hand remover, spring bar assortment, screwdriver, polishing materials etc. Excellent price-performance ratio.

337740 59.90



Precise clock mechanisms And a huge range of watch accessories!



The large clock - Pendulum, Regulator & Co.

By Klaus Dinger

The only book on this topic! With instructions on servicing, maintenance, care and repairs that can be applied without horogical expertise. All historical and technical

aspects of large clocks - a standard work with top Internet reviews.

220 pages with many black and white images and sketches.

336167

29,95



Clocks Repair set

Also suitable for XL clocks, among others with casing mounts and openers, screwdriver, magnifying glass, spring bar tool and dressing forceps.

In a practical bag.

Outstanding cost-effectiveness.

337741

39,00

RADIO-CONTROLLED **CLOCKS**

A matter of course for DIY clockmakers: Radio controlled and quartz clock movements by SELVA

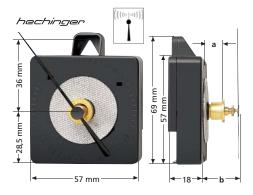
Those who are well versed in the field know: Europe's largest specialist for the hobby of clockmaking offers a uniquely wide range of clock movements. All are stringently checked for serviceability and longevity and undergo precise inspections during manufacture. This guarantees you high precision and reliability and is therefore also your guarantee for real joy in clocks you have built yourself.

Radio-controlled clock movements receive their "time updates" from the DCF77 transmitter in Frankfurt/Mainflingen, which is itself controlled by the most accurate clock in the world at the Federal German Physics and Technical Institute in Brunswick

Radio-controlled clocks can receive these time signals wherever long wave reception is possible with a good portable radio.



Several times a day, there is a time comparison between the information from the transmitter and that from the clock; necessary time corrections are made automatically. The change from summer to winter time and vice versa is also completely automatic.



FL radio-controlled clock movements

Installation Ø	80 mm (without suspension hook)	
Battery	1.5 V AA battery cell (page 8)	
Matching hands	Up to max, 120 mm long Column 1 p. 41-44	
Fully automatic synchronisation five times daily		

Equipment: Integrated antenna, 50-mm second hand, integrated hanger and installation kit (see INFO on page 5). Over 80 different SELVA hand models, easy to fit. Convenient, fully automatic time setting within 3 to a maximum of 17 minutes with 1 motor. Please order pairs of hands separately!

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 5 mm	15,0 mm	309118	29,90
up to 9 mm	20,0 mm	245031	29,90
up to 16 mm	25,0 mm	245032	29,90

FP radio-controlled pendulum movements



Installation Ø	125 mm
Battery	2 x1.5 V AA cell (page 8)
Matching hands	Up to max. 120 mm Column 2 p. 41-44
Matching pendu- lums:	Page 12
Automatic synchronisation on the hour	

Equipment: Integrated antenna, fully automatic time setting and changing with 2 motors, 80 mm second hand, integrated hanger and installation

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 4,0 mm	12,0 mm	336472	43,50
up to 11 mm	18,5 mm	336473	43,50

German Technology 28 mm **4** 21 → **b**

FK/GK radio-controlled clocks

Installation Ø	78 mm (without hanger)
Battery	1.5 V AA battery cell (page 8)
Matching hands	Up to max. 120 mm (FK) or 160 mm long (GK), Column 2, p.41-44
Automatic synchronisation on the hour	

FK radio-controlled clocks - standard version

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 4,5 mm	13,0 mm	334404	25,90
up to 11 mm	19,5 mm	336462	25,90

GK radio-controlled clocks - Extra strong version

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 4,5 mm	13,0 mm	336465	29,90
up to 11 mm	19,5 mm	336466	29,90

Equipment: Case with integrated antenna and wire hanger. Fully automatic, very fast time setting and changing (max. 5 minutes) with 2 motors. Complete with 80 mm second hand installation accessories (see INFO on p. 5). Please order pairs of hands separately!

Ideal for beginners! 56 mm

Installation Ø	78 mm
Battery	1.5 V AA battery cell (page 8)
Further matching hands:	Up to max. 120 mm, column 2, pages 41-44



WF quartz clock movement set **Equipment:**

Retractable hanger, central screw, rubber washer. 1 pair of gold and black antique hands 75/50 mm long each and 1 pair of gold and black bar hands 75/55 mm long each. 2 gold and black second hands, each 60 mm long.

Clock face thickness	a Hand length b	Order No.	€/item
Up to 3.0 mm.	13.5 mm	334357	9.95
Up to 16.5 mm.	16.5 mm	334438	9.95

kit.			
Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 4,0 mm	12,0 mm	336472	43,50
up to 11 mm	18,5 mm	336473	43,50



IMPORTANT

When choosing a clock, it is essential to measure the thickness of the front of the clock case including the dial = dial thickness "a". Please always consider this dimension, as both the central fastening screw of the hand length "b" can otherwise be too short or too long. If there is any doubt, please choose a larger dial thickness "a" and, if necessary, compensate with rubber spacers between the clock and housing (see sketch bottom right).

RADIO-CONTROLLED / QUARTZ CLOCKS Bases



Equipment: Case with integrated antenna. Fully automatic time setting and changing (3 to 10 minutes) with 2 motors. Complete with 80-mm second hand and installation kit (see INFO below). Without hanger (order no. 242399, p. 9) Please order pair of hands separately!

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 4,0 mm	12,0 mm	334429	56,90
up to 11 mm	19,5 mm	334430	56,90

Installation Ø	116 mm
Battery	1.5 V AA battery cell (page 8)
Operating temp.	-5 to +55°C
Matching hands	Up to max, 120 mm long Column 1 p. 41-44
Automatic synchronisation 13 times daily	

IMPORTANT

Clocks with central fastening

are dead simple and unproblematical to install. They are the most universally usable and most frequently used clocks.



these advantages:

- High running accuracy
- In any working position
- Very simple installation with only central
- Dial central hole Ø 10.2 mm.
- (with MQM clock mechanism only 0.7 mm) Delivery complete with installation kit: Central screw, second hand Hand nut (if necessary)
- 1-2 rubber washers
- deviations are listed in the the running descriptions
- life of an alkaline-manganese battery: appr. 1-2 years



WD quartz clock movements

Installation Ø	74 mm
Battery	1.5 V AA battery cell (page 8)
Operating temp.	-5 to +55°C
Matching hands	Up to max, 120 mm long Column 1 p. 41-44

Equipment: Plug-in hangers and installation kit (see INFO bottom left). Please order pairs of hands separately!

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 6,0 mm	15,0 mm	325139	8,50
up to 9,0 mm	18,0 mm	336457	8,50
up to 13,0 mm	24,0 mm	336458	8,50

WL quartz clock movements

with "creeping" second hand Installation Ø 1.5 V AA battery cell (page 8) Battery Up to max, 160 mm long Column 2 p. 41-44 Matching hands

Equipment: Plug-in hangers and installation kit (see INFO bottom left). Please order pairs of hands separately! With "creeping" second hand, therefore very quiet

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 6,0 mm	15,0 mm	316707	10,50
up to 13,0 mm	24,0 mm	2510586	10,50

hechinger 46 28 mm 56 mm

WB/WK quartz clock movements Installation Ø 78 mm

1.5 V AA battery cell (page 8) Up to max. 120 mm (WB) or up to max. 200 mm long (WK), column 1, pages 34-44 Matching hands

WB quartz clocks - standard version

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 3,0 mm	13,5 mm	334400	8,50
up to 7,0 mm	16,5 mm	336460	8,50
up to 13,0 mm	22,5 mm	334403	8,50

WB quartz clock - extra long version

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 19,0 mm	29,0 mm	336461	10,50

WK quartz clock - extra strong version

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 3,0 mm	13,5 mm	325266	11,50
up to 10,0 mm	19,0 mm	325929	11,50
up to 13,0 mm	22,5 mm	325173	11,50

Bases

hands separately!

.35 mm

28 mm

for shelf and desk clocks

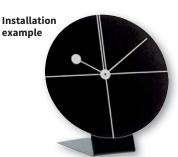
56 mm

For easy assembly between clock movement and dial:

1-2 bases. Arched bracket 100 x 50 x 60 mm, 1.5 mm thick. Max. dial Ø 160 mm.

Equipment: Retractable hanger and installation kit (see INFO left). Please order pairs of

1. Black painted sheet steel 334657 2. Gold-bronze sheet steel 334656 8,60





IMPORTANT

Dials, numeral sets, hands etc. can be found from page 26 onwards. If you are unsure when choosing the clock movement, simply call our experts on 07425/930300 or contact service@ selva.de

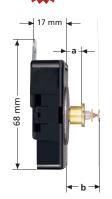


CLOCK MECHANISMS

Hermle

NH quartz clock mechanisms

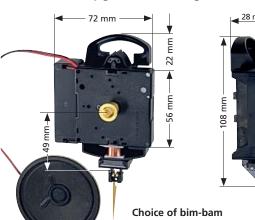




Equipment: Retractable hanger, complete installation kit (see INFO on page 5). Delivery without hands. Please order set of hands separately! Installation Ø 78 mm, 1.5 V AA battery cell (see p. 8), Matching hands up to max. 120 mm long, column 1, pages 41-44

Dial thickness a	Hand shaft length b	Hand shaft length without sec	Order No.	€/Pcs
up to 3,0 mm	13,5 mm	11,0 mm	4123-104670	7,95
up to 7,0 mm	18,5 mm	16,0 mm	4123-104671	7,95
up to 13,0 mm	23,5 mm	21,0 mm	4123-104672	7,95

JS quartz pendulum movements with electronically generated striking



Melodious strike, 2 selectable types of strike: Full 4/4 Westminster chime (hours are struck).

- Bim bam strike at half and quarter hours (hours are counted)
- Night muting to reduced volume is possible.
- Volume control: 100% / 50% / 0.

Equipment: Ø 66 mm loudspeaker with plug-on mounting, integrated hanger, complete installation kit (see INFO on page 11).

Installation Ø	120 mm
Matching hands	Up to max. 120 mm long, column 1, pages 41-44
Second hand	Up to 80 mm long (see page 46)
Battery	2 x 1.5 V AA cell (page 8)

Westminster chime

Please order matching pendulum separately from tables, p. 12

Dial thickness a	Hand shaft length b	Hand shaft length without sec	Order No.	€/Pcs
up to 9,0 mm	17,5 mm	15,0 mm	4123-104678	67,90
up to 13,0 mm	22,5 mm	20,0 mm	4123-104780	69,90



'JS" clockwork loudspeaker mounting with laterally plugged-on loudspeaker holders

Hermle

MS quartz pendulum mechanisms without striking





Powerful pendulum movement, ideal for installation in wall clocks of

Equipment: Integrated hanger, complete installation kit (see INFO on page 13). Delivery without hands. Please order set of hands separately!

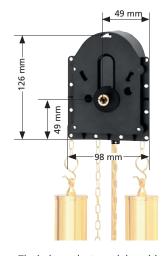
Installation Ø	100 mm
Matching hands	Up to max. 120 mm long, column 1, pages 41-44
Second hand	Up to 80 mm long (see page 46)
Battery	1.5 V AA cell (page 8)

Please order matching pendulum separately from tables, p. 12

Dial thickness a	Hand shaft length b	Hand shaft length without sec	Order No.	€/Pcs
up to 9,0 mm	18,5 mm	16,0 mm	4123-104674	15,50
up to 13,0 mm	23,5 mm	21,0 mm	4123-104675	15,50
up to 19,0 mm	28,5 mm	26,0 mm	4123-104677	15,50

MS quartz pendulum mechanisms without striking







The independent pendulum drive has no influence on the high running accuracy of this clock mechanism **Equipment:** Complete installation kit (see INFO on page 13), with front plate. Without pendulum and dummy weights

Installation Ø	155 mm
Central hole Ø:	10.2mm
Battery	1 x 1.5 V AA cell (page 8)
Matching hands	Up to max. 120 mm long, column 1, pages 41-44
Dummy weights	see Page 24, - 4.

Please order matching pendulum separately from tables, p. 12

Dial thickness a	Hand shaft length b	Hand shaft length without sec	Order No.	€/Pcs
up to 13,0 mm	22,5 mm	20,0 mm	4123-104676	39,90

JUNGHANS

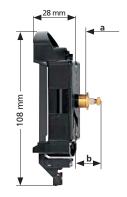
Installation depth with hands: appr.

105 mm

105 mm Installation depth without hands: appr. 82 mm

TP quartz pendulum mechanisms without striking





Powerful pendulum movement, ideal for installation in wall clocks of all

Equipment: Integrated hanger and complete installation kit (see INFO on page 11). Delivery without hands. Please order set of hands separately!

Installation Ø	100 mm
Matching hands	Up to max. 120 mm long, Column 1, pages 41-44.
Second hand	Up to 80 mm long (see page 46)
Battery	1.5 V AA cell (page 8)

Please order matching pendulum separately from tables, p. 12.

Dial thickness a	Hand shaft length b	Hand shaft length without sec	Order No.	€/Pcs
up to 4,0 mm	13,5 mm	11,0 mm	4123-104716	15,50
up to 9,0 mm	18,5 mm	16,0 mm	4123-104717	15,50
up to 13,0 mm	22,5 mm	20,0 mm	4123-104718	15,50



HG Cuckoo clock mechanism Substitute mechanism for replacement Regula 25

1-day cuckoo clock movement

With chains, hand nut and washers, minute hand socket Equipped with hook anchor escapement and hammers for strike chain (1/2 hour once, hours struck). With bird perch and whistle levers.

(Hand mechanism, pendulum tip): appr. 19 cm. Without sound spring, hands, lifting wires and whistles. Pendulum length 19.5 cm

Order No. €/Pcs 4113-104743 59,90



Φ

Holes

UR tension spring mechanism Substitute mechanism for replacement with 4/4 Westminster chime

7-Day regulator mechanism

With tension spring, Without pendulum, dial, hands and seat board Pendulum length 41 cm, pendulum swing approx. 21 cm

Order No. €/Pc:	203759	359,00
	Order No.	€/Pcs



Equipment: Integrated hanger, complete installation set (see INFO on page 5). Delivery without hands. Please order set of hands separately!

Installation Ø	78 mm
Battery	1,5-V-Mignonzelle (Seite 8)
Second hand	Up to 120 mm, Spalte 1, S.41-44

Dial thickness a	Hand shaft length b	without sec	Order No.	€/Pcs
up to 3,0 mm	13,5 mm	11,0 mm	4123-104719	7,95
up to 7,0 mm	18,5 mm	16,0 mm	4123-104720	7,95
up to 13,0 mm	22,5 mm	20,0 mm	4123-104721	7,95
up to 19,0 mm	28,5 mm	26,0 mm	4123-104758	7,95

Counter-clockwise runner RG

The hands of this quartz clock mechanism move to the left, i.e. anti-clockwise (for gag clocks) Suitable dials see p. 29

Dial thickness a	Hand shaft length b	Hand shaft length without sec	Order No.	€/Pcs
up to 7,0 mm	18,5 mm	16,0 mm	4123-104726	8,95



RG set quartz clock mechanisms With second hand

Contains 10 RG quartz clock mechanisms in the following versions:

Volume	Clock face thick- ness a	Hand mechanism Length b
2x	Up to 3.0 mm.	13.5 mm
6x	Up to 7.0 mm.	18.5 mm
2x	Up to 13.0 mm.	22.5 mm

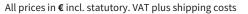
€/Pcs Order No. 4123-104724 54,90

RG set quartz clock mechanisms With second hand

Contains 10 RG quartz clock mechanisms in the following versions:

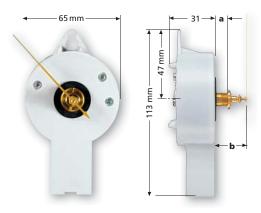
Volume	Clock face thick- ness a	Hand mechanism length b
10x	Up to 7.0 mm.	18.5 mm

Order No. €/Pcs 4123-104725 54,90



QUARTZ SYNCHRONOUS CLOCK MOVEMENTS Batteries

G synchronous clock movements



Problem-free installation with central fastening. Powerful, also preferred for long and heavy hands. High running accuracy through control via the AC power supply (230 V/50 Hz).

Central hole Ø:	10.2 mm
Matching hands	Up to max. 300 mm long, Column 1, pages 41-44.

Installation kit: Integrated hanger, gold-coloured 80 mm second hand, central nut, hand nut, rubber washers, connection clamps with strain relief. Without connection cables. For very heavy clock shields: Please order hangers (order no. 242399, p. 9) additionally.

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 6,0 mm	21,0 mm	336474	69,95
up to 10,0 mm	24,0 mm	4123-104731	69,95
up to 22,0 mm	36,0 mm	336475	102,00

MQM mini quartz clock movements

Suitable for picture clocks







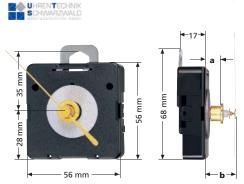


Installation Ø	53 mm
Central hole Ø:	Only 7 mm
Battery	1.5 V lady cell (see page 8)
Matching hands	Up to max. 60 mm long, Column 4, pages 41-44.
Also perfectly suite central screw ensu	ed for picture clocks. Fastening by one ires easy installation!

Equipment: 32 mm second hand, installation kit (see INFO on page 5). Please order pairs of hands separately!

Dial thickness a	Hand shaft length ${\bf b}$	Order No.	€/Pcs
up to 2,0 mm	9,0 mm	239706	18,90
up to 4,0 mm	11,5 mm	336467	18,90

WX reverse running movements



The hands of this quartz clock move to the left, therefore counter-clockwise (for unusual joke clocks).

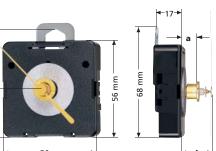
Installation Ø	78 mm
Battery	1.5 V AA battery cell (page 8)
Matching hands	Up to max. 120 mm, Column 1 p. 41-44
Suitable Dials	Page 29

Equipment: Insertable hanger, complete installation kit (see INFO on page 5).

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 3,0 mm	13,5 mm	336459	10,50
up to 10,0 mm	19,0 mm	331254	10,50

WZ world time clock movement





The hour hand of this clock describes 1 turn / 24 hours (therefore suitable only for world-time clocks!), the minute hand makes 1 turn / hour and the second hand 1 turn / minute.

Installation Ø	78 mm
Battery	1.5 V AA battery cell (page 8)
Matching hands	Up to max. 200 mm, Column 1 p. 41-44
Suitable Dials	Page 31

Equipment: Second hand (52 mm long, can be shortened), hanger, complete Installation kit (see INFO on page 5).

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 10,0 mm	19,0 mm	336464	12,50



Energiser Ultimate lithium cells

1.5 V batteries for very high capacity demands and temperature conditions (-40 to +60°C). Ideal for long term applications (cameras etc.) and use outside (e.g. weather sensors) Shelf life: 15 years at 21°C.

1 4		
Туре	Order No.	€/pack
1 L92 / AAA microcell 1.5 V, Ø 10.5 x 44.5 mm high (in packs of 2)	334863	5.60
2 LR91 / AA 1.5 V, Ø 14.5 x 50.5 mm high (in packs of 2)		5.60



1.2 V accumulators are not suitable for battery-powered clock mechanisms! You can find button cells on page 72 of the catalogue.



You will find a note on disposal of batteries on the last page of our general business terms,





VARTA HIGH ENERGY Batteries

High-performance alkaline batteries: Powerful energy for all devices, "made in Germany".

Тур	Order No.	€/Pack
1. Micro LR03/AAA 1,5V, Ø 10,5 x 44,5 mm hoch (4er Pack)	2625010	3,80
2. Mignon LR6/ AA 1,5V, Ø 14,5 x 50,5 mm hoch (4er Pack)	331226	3,80
3. Baby Zelle C LR14 1,5V, Ø 26,2 x 50 mm hoch (2er Pack)	2625002	3,80
4. Mono-Zelle D LR20 1,5V, Ø 34,2 x 61,5 mm hoch (2er Pack)	2625003	6,80
.5 E-Block 9V, 26,5 x 17,5 x 48,5 mm hoch (1 Pcs)	2625018	4,95
6. Lady Zelle 1,5V, Ø 11,5 x 30 mm hoch (1 Pcs)	307368	2,40

CLOCK MECHANISMS Tools, accessories



1 Rubber washers

For centrally fastened clock mechanisms. Outside Ø appr. 30 mm, hole Ø appr. 11 mm. 10 units/pack

336501	1 mm thick	1,30
222738	3 mm thick	2,50

23 central bezel.

Ideal for covering oversized or damaged dial central holes. Polished brass. Outside Ø 22 mm, inside Ø 10.5 mm, 0.3 mm thick. 5 units/pack

222482 7,50



6 Hand bushes for gluing.

Hour hand bushes with inside Ø 5 mm, minute hand washer with long slot 2.8 x 3.5 mm. 10 pairs/pack

330497 9.90

More hand bushes can be found on page 45.



37 central screws, brass.

Thread M10 x 0.75 mm. 10 units/pack

Neck length with thread	Order No.	€/Pack
5,9 mm	222579	3,20
8,9 mm	334743	3,20

48 central screws, brass-plated.

For AS, CK, CP, CS, CT, CX, FD, FK, FL, FP, FT, FW, GK, WB, WD, WK, WL, WX and WZ clock movements. M8 x 0.75 mm. 10 units/pack

Neck length with thread	Order No.	€/Pack
5,0 mm	202098	2,80
9,0 mm	205832	2,90
11,0 mm	331671	2,95
16,0 mm	222742	3,80
21,0 mm	209739	12,80

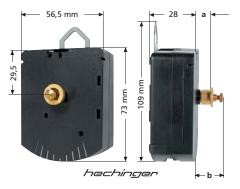
Covers



Caps for WB, WD, WK, WL and plastic quartz clock mechanisms. Outside dimensions 60 x 60 x 20 mm.

330496 silver 334747

CX quartz clock movements with electronically generated Westminster chime



CX quartz clock movements with electronically generated Westminster chime on the hour and all hour counts are struck Automatic strike synchronisation. Integrated loudspeaker, Ø 29 mm. No strike

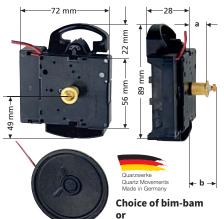
Installation Ø	88 mm
Battery	1.5 V AA battery cell (page 8)
Matching hands	Up to max. 120 mm long, Column 1 p. 41-44
Second hand	Up to 80 mm long (see page 46

Equipment: Complete installation kit incl. hanger, battery cover, central screw, 1 each open and closed hand nuts, 2 rubber washers and 1 spacer.

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 9,0 mm	18,0 mm	224631	52,00
up to 16,0 mm	23,0 mm	224632	52,00

AS quartz clock movements





Melodious strike, 2 selectable types of strike:

- Complete 4/4 Westminster chime. (hours are counted)
- Bim bam strike at half and quarters hours (Number of hours is struck on the hour Night-time muting with reduced sound volume is possible
- Volume control: 100%/50%/0%.

Installation Ø	120 mm
Battery	2 x1.5 V AA cell (page 8)
Matching hands	Up to max. 120 mm long, Column 1 p. 41-44
Second hand	Up to 80 mm long (see page 46

Equipment: Ø 66 mm loudspeaker with plug-in mounting (see "CS", page 10), integrated hanger, complete installation kit (see INFO on page 13).

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 9,0 mm	18,0 mm	336456	54,00
up to 13,0 mm	22,0 mm	334431	54,00

Central screw wrench



Wrenches

for central screws and nuts on all conventional battery and synchronous clock movements. Particularly sturdy design made from high quality steel. Ø 52 mm.

216364 3.95



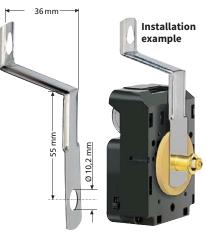
Universal wrench

Westminster chime

for central screws and nuts. Additional adjustment range. Also suitable for opening screwed wristwatch backs.

327758 8,95

Hangers for particularly weighty clocks



12 Hanger for very heavy clock faces or dials, e. g. made from stone, when using battery or synchronous clock mechanisms with Ø 10.2 mm central fastening. Hanger is fitted between clock face and clock movement and can then fully support the weight of the clock. Embossed, nickel-plated steel.

242399 4,20



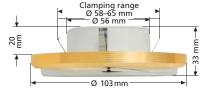
IMPORTANT

An even greater selection of hand nuts can be found on p. 45

PLUG-IN MOVEMENTS

BE quartz plug-in movements





Installation Ø	Min. 57 mm.
Battery	1.5 V lady cell (see page 8)

Equipment: Attractively priced, completely fitted unit with printed dial, hands and acrylic glass with brass-coloured, polished regulator ring. Easy fixing in case provided by means of 4 integrated spring clips.

336455 a arabic numerals **20,60 334422 b** roman numerals **20,60**

WE quartz plug-in movements





Installation Ø	From approx. 58 to 66 mm.
Housing depth	min. 20 mm
Battery	1.5 V lady cell (see page 8)

Completely fitted installation unit, with dial, hands, domed acrylic glass and polished regulator ring. Completely encapsulated quartz clock movement with small installation depth. Easy installation with integrated spring clips.

Only as long the supply lasts!

336463 a roman numerals Ø 65 mm **36,90 200501 b** arabic numerals Ø 85 mm **36,90**

GC quartz plug-in movements



Completely fitted unit, ready for installation, with silvered dial, black hands, flat acrylic glass and chromed, polished regulator ring. Easy installation by means of clamping with the cap! Silver-coloured dial.

334432 roman numerals **19,95**



Installation Ø	81 mm
Installation wall thickness	11–13 mm
Housing depth	min. 27–29 mm
Battery	1.5 V AA cell (page 8)

IMPORTANT

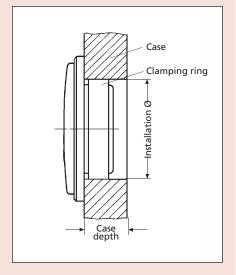
Plug-in movement installation (BE, GE and WE movements)

Quartz plug-in mechanisms are already completely mounted with hands, glass fronts and battery mounts.

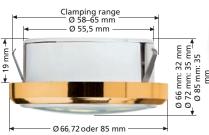
Installation is very easy: The movements are pushed from the front into the matching case.

They have this in common:

- High working accuracy ensured by quartzcontrol
- hand position at side or from rear
- long life with a
 Long-time battery: 1–2 years.



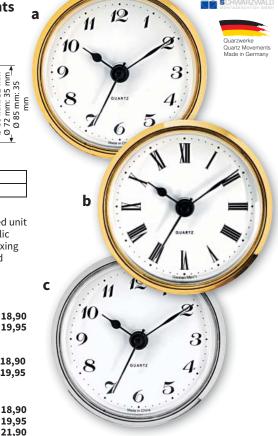
GE quartz plug-in movements



Installation Ø	Min. 57 mm.
Battery	1.5 V lady cell (see page 8)

Equipment: Good value, completely fitted unit with printed dial, hands and domed acrylic glass with polished regulator ring. Easy fixing in case provided by means of 4 integrated spring clips.

a gold-colored, a 334408 Ø 65 mr 223219 Ø 72 mr	m	18,90 19,95
b gold-colored, 4123-104702 334351		18,90 19,95
c gold-colored, r		18.90

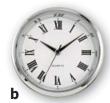


334436 Ø 72 mm

334437 Ø 85 mm











	,
Installation Ø	31 mm
Housing depth	Min. 8 mm.
Battery	Battery 1.5 V button cell (incl.)

Equipment: Polished case, white dial. Easy fitting with separate installation box, which is pressed or bonded into the case provided.

4123-104762 4123-104763 4123-104759 a arabic numerals, gold-plated
b roman numerals, nickel-plated
c roman numerals, gold-plated

20,90 20,90 20,90

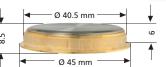
MP mini plug-in movements

Equipment:

Gold plated metal case, white dial. Easy installation with flexible rubber clamping ring.



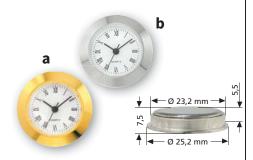




Installation Ø	40.5 mm
Housing depth	Min. 6 mm.
Battery	Battery 1.5 V button cell (incl.)

334434 335164 a quartz movement, roman numeralsb Thermometer19,9015,90

MA mini quartz plug-in movements



Installation Ø	23.2 mm
Housing depth	Min. 5.5 mm.
Battery	Battery 1.5 V button cell (incl.)

Equipment: Metal case, white dial behind glass. Easy installation with rubber clamping ring. Roman numerals.

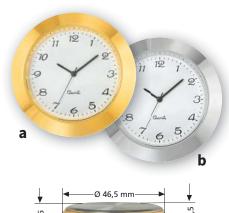
334423 a gold-plated **16,90 334424** b chromium plated **14,95**



Mini quartz plug-in movementshave – like wristwatches – a control crown on the side for setting the exact time.

Turning-Q

MC mini quartz plug-in movements

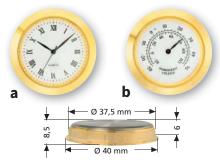


↑	50 mm
Installation Ø	46.5 mm
Housing depth	Min. 7.5 mm.
Battery	Battery 1.5 V button cell (incl.)

Equipment: Metal case, white dial behind glass. Easy installation with rubber clamping ring. Arabic numerals

334428 a gold-plated **19,90 334344 b** chromium plated **19,90**

MM mini plug-in movements

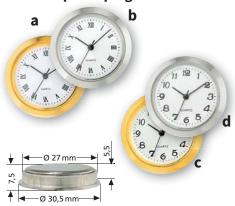


Installation Ø	37.5 mm
Housing depth	Min. 6 mm.
Battery	Battery 1.5 V button cell (incl.)

Equipment: Gold plated metal case, white dial behind glass. Easy installation with flexible rubber clamping ring.

334433	roman numerals	19,90
335163	b Thermometer	15,90

MB mini quartz plug-in movements



Installation Ø	27 mm
Housing depth	Min. 5.5 mm.
Battery	Battery 1.5 V button cell (incl.)

Equipment: Metal case, white dial behind glass. Easy installation with rubber clamping ring.

334426	a gold-plated, roman numerals b chromium plated, roman numerals	17,90 15,95
	c gold-plated, arabic numerals d chromium plated, arabic numerals	17,90 15,95

PD rotating pendulum movement



PD Particularly suitable for converting year clocks with mechanical movements and for building new mantlepiece and table clocks in traditional year clock style. The pendulum movement works completely independently from the clockwork used in each case and is either screwed firmly or bonded into the case. **Equipment:** Metallized, polished rotating pendulum. Rotational Ø approx. 70 mm.

334334 61,90

Pendulum lengths up to

QUARTZ CLOCK MOVEMENTS

.56 mm 108

12

CS quartz pendulum movements with electronically generated striking

Melodious strike, 2 selectable types of strike: Complete 4/4 Westminster chime. (hours are counted)

- Bim - bam strike at half and quarter hours (hours are counted)

Night-time muting with reduced sound volume is possible

- Volume control: 100%/50%/0.

Installation Ø	120 mm
Matching hands	Up to max. 120 mm long, Column 1, pages 41-44.
Second hand	Up to 80 mm long (see page 46)
Battery	2 x 1.5 V AA cell (page 8)

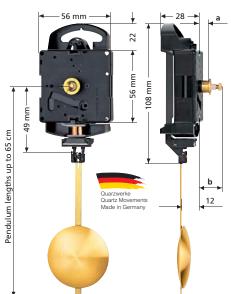
Please order the matching pendulum separately from the tables below.

Equipment: Ø 66 mm loudspeaker with plug-in mounting, integrated hanger, complete installation kit (see INFO on page 13).

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 9,0 mm	18,0 mm	336469	55,90
up to 13,0 mm	22,0 mm	336468	55,90



Loudspeaker mounting for "CS" clocks with loudspeaker mounting plugged in at the side!



Bim-Bam- or Westminsterschlag

selectable

CP quartz pendulum movements no strike

Powerful pendulum movement, ideal for installation in wall clocks of all kinds.

Installation Ø	100 mm
Matching hands	Up to max. 120 mm long, Column 1, pages 41-44.
Second hand	Up to 80 mm long (see page 46)
Battery	1.5 V AA cell (page 8)

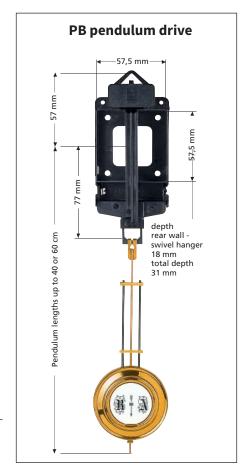
Please order the matching pendulum separately from the tables below.

Equipment: Integrated hanger and complete installation kit (see INFO on page 13).

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
up to 9,0 mm	18,0 mm	334405	16,50
up to 13,0 mm	22,0 mm	336471	16,50

1 - 3 Ornamental pendulum for battery-powered pendulum movements and drivers.

allu uliveis.	Version			
For pendulum move- ments and drives	1 Polished brass.	2 Polished brass.	3 Polished brass.	
CK, CP, CS, EP, FP, FW, PB	334496 35,50	334642 38,90	303579 32,50	
Pendulum bob Ø	80 mm	80 mm	55 mm	
Pendulum length (handshaft to pendu- lum tip):	60 cm	41 cm	31 cm	
Can be shortened to approx.	30 cm	36 cm	24 cm	
Pendulum rod length:	55 cm	36 cm	26 cm	
Pendulum swing approx.:	20 cm	17 cm	15 cm	



Recess for clock mechanism	56 x 56 mm.
Matching pendulums	See below left
Battery	1.5 V AA cell (page 8)
Battery life	approx. 1 year.

Transistor-controlled pendulum movement, is simply fitted between clock and case. This increases the dial thickness to be included by appr. 2 mm. Suitable for use with FK, GK, WB, WD, WL, WK, WX and WZ clock movements.

Pendulum drive without pendulum

For pendulums up to 40 cm long, max. weight approx. 100 g: 330465

For pendulums up to 60 cm long, max. weight approx. 250 g: 330466 9,95



Besides the pendulums offered on this page, the PB pendulum movement is also suitable for

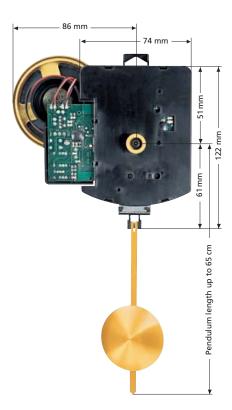
heavier (original) pendulums with a length of up to 40 cm and a weight of up to 100 g, or up to 60 cm long / 250 g in weight.

Matching pendulums: For the clocks on these pages (except CK/CT movements), the pendulum is not included in the price. A selection of pendulums in different lengths (can be shortened) and designs are on this page.



4 Loose pendulums for PB pendulum drive and CP, CS, EP, FP and FW clock movements (no image)					
Pendulum rod (can be shortened):	20 cm	35 cm	50 cm	60 cm	
Pendulum length approx. * (Shortenable):	25 cm	40 cm	55 cm	65 cm	
Pendulum wheel-Ø:	48 mm	55 mm	70 mm	80 mm	
Pendulum swing approx .:	13 cm	17 cm	20 cm	22 cm	
4a polished brass color Price	330620 13,90	334712 15,40	334714 19,20	334715 21,20	
4b polished brass color Price	334773 14,60	334774 15,40	334775 22,90	334776 22,90	
4c old tin painted colors	334711 14,90	334713 15,90	_	_	

RADIO-CONTROLLED / QUARTZ CLOCKS





FW radio-controlled pendulum movements with electronically generated striking (((((|)))))



Equipment:

Dial thickness a

Chime change and off switch, night lowering or switching off, volume control. Integrated radio antenna, completely automatic time setting and changing with 2 motors, 80 mm second hand, loose but hard-wired Ø 66 mm loudspeaker, integrated hanger and installa-

Order No

€/Pcs

Diat tillekiless a	riaria silari terigti	oraci No.	C/1 C3
up to 4,0 mm	12,0 mm	334441	61,50
up to 11,0 mm	18,5 mm	334442	61,50
Installation Ø	m	ax. 190 mm	
Matching hands		to 120 mm long, lumn 2, pp. 41-44	
Matching pendulu	ıms Pa	ge 12	
Batteries	2)	(1.5 V AA cell and (1.5 V baby cells (page 8)	
Time synchronisation		tomatic at every full hou	r

With completely electronic, particularly powerful strike.

Hand shaft length h

- 3 selectable types of strike:
- Complete 4/4 Westminster chime.
- Bim bam strike at half and quarters hours (hours are counted)
- Westminster or Bim-Bam chime only on the hour.



Quartz pendulum movements

These pendulum clock movements are very easy to use and are universally applicable.

Their independent pendulum movement has no effect on running accuracy

- they can therefore also be operated without a pendulum.

They have this in common:

- High running accuracy Due to quartz control
- Very simple installation Fastened by a single central screw
- Dial centre hole Ø of 10.2 mm
- Delivery complete with accessory kit (Included in price) Hand nut, central screw, 2 rubber washers. Deviations are listed in the mechanism description. Column 1, pp 41-44
- Life cycle with long-term battery / batteries: approx. 1 year
- Max. Loading of movement hanger: approx. 1.2 kg



Quartz clock movements with strike

These quartz clock movements have integrated strikes with miniature loudspeakers.

They have this in common:

- High running accuracy Due to quartz control
- -Very simple installation Fastened by a single central screw
- -Dial centre hole Ø 10.2 mm.
- Hands can be positioned from front and rear Delivery complete with installation kit: (included in price) Hand nut, central screw, 2 rubber washers. Deviations are listed in the mechanism description
- Running time with long life battery / batteries: approx. 1 year
- Max. Loading of movement hanger: approx. 1.2 kg



Pendulum drives

Pendulum movements complement normal clock mechanisms and turn both wall and table clocks into "pendulum clocks" - without the oscillations of the pendulum affecting the accuracy of the clock mechanism.

The pendulum is driven completely independently of the clock.



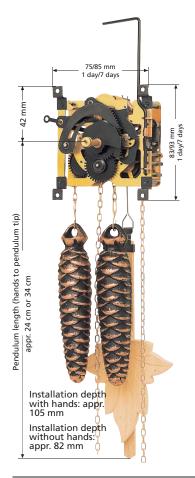
TIP!

When steel casings / hands are used in conjunction with CP, CS, FP and FW pendulum movements, a spacer consisting of rubber washers, wood, plastic or other non-magnetic material at least 8 mm thick must be fitted as a shield between the clock mechanism and the casing / dial.



For particularly heavy clock faces: Hanger order no. 242399 (p. 9)

TRACTION CHAINS: Cuckoo clock components



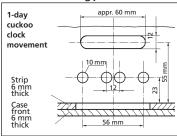
Cuckoo clock movement KG

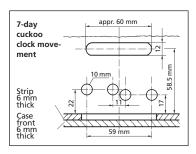
6 Complete with pine cone weights, chains, wooden pendulums (unfinished) with pendulum extension, hand nuts and washers, minute hand bushes. Equipped with hook anchor escapement and hammers for strike chain (1/2 hour once, hours struck).

With bird perch and whistle levers. Without sound spring, hands, lifting wires and whistles.



Case base - drilling pictures





1-day cuckoo clock movement with 2 weights of 275 g each

Pendulum length (hands to pendulum tip): appr. 24 cm. Drop of the weights: 172 cm / 24 hrs

29911 99,90

7-day cuckoo clock movement with 2 weights of 1500 g each

Pendulum length (hands to pendulum tip): appr. 24 cm. Drop of the weights: 25.7 cm / 24 hrs

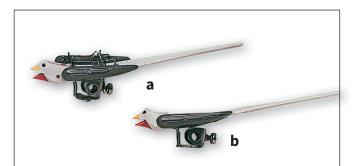
336249 189,00

7-day cuckoo clock movement with 2 weights of 1500 g each

Pendulum length (handshaft to pendulum tip): appr. 34 cm.

Drop of the weights: 25.7 cm / 24 hrs

336252 195,00



Birds for cuckoo clocks.

Plastic with dyed wings, moving beak and metal base with clamping screw. Length appr. 78 mm.

223037	a movable wings	26,50
334817	b rigid wings	4,80



2 Cuckoo clock dials.

Turned, stained wood with hooked numbers. Complete with pair of hands matching the "KG" movement.

Dial thickness a	Hand shaft length b	Order No.	€/Pcs
6,0 cm	3,5 mm	335006	10,90
8,0 cm	4,0 mm	203287	11,90
9,0 cm	4,0 mm	335007	12,90
10,0 cm	4,0 mm	335008	15,90

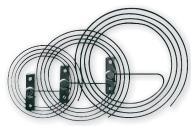


Cuckoo clock dials.

Wooden dial lasered with wooden hands and bushing for Regula calculators Dial thickness approx. 4 mm.

337610	Ø approx. 6,0 cm	13,20
337611	Ø approx. 7,0 cm	13,50
337612	Ø approx. 8,0 cm	14,60
337613	Ø approx. 9,0 cm	15,90
337614	Ø approx. 10,0 cm	16,90
337615	Ø approx. 11.0 cm	17.90





Sound springs of steel wire. Complete with fixing loop.

334650	Ø approx. 8,0 cm	4,50
118812	Ø approx. 10,0 cm	5,50
118066	Ø approx. 12,0 cm	6,50
334651	Ø approx. 14,0 cm	7,60



KE cuckoo installation unit

1 Complete with quartz pendulum movement, loudspeaker unit with bird and doors, dial Ø 80 mm, pair of hands, antique stained wooden pendulum rod, 2 dummy weights with chains and chain rail, together with installation instructions. On the hour, a cuckoo call sounds, with echo and babbling brook in the background; the hours are struck. The little doors also open and the colourfully painted bird appears.

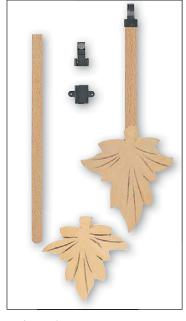
Loud or soft calls can be chosen or switched off entirely. The night silencing is controlled by an integrated light sensor. The ideal clock for realizing your (not only cuckoo) ideas!

Suitable for interior casing dimensions from approx. 14 x 17 x 7.5 cm (W x H x D). Front thickness max. 10 mm. Pendulum length (handshaft to pendulum tip): 26 cm.

305042 82.90

Please order at the same time: LR14 Varta Baby (two-cell pack) **26250023** 6.80 / pack

TRACTION CHAINS: Cuckoo clock components



1 Vine leaf pendulum.

Sawn and carved sheet with wooden pendulum rod, unfinished. With loose hanger and guide piece.

Leaf approx.	Stick approx.	Order No.	€/Pcs
60 x 65 mm	190 mm	324731	6,90
75 x 85 mm	210 mm	334624	7,90



Cuckoo clock whistles with wooden hollow bodies

Clock bellows	Order No.	€/Paar
7 cm	334756	22,95
8 cm	334757	23,50
10 cm	334758	23,95



2 white plastic cuckoo clock hands. Hour hand boring Ø 4 mm, minute hand - square hole 4 x 4 mm or square bushing 2.5 x 2.5 mm.

2 pairs of hands ea. 28/23 mm, 36/32 mm, 43/32 mm, and 48/ 42 mm long. Assortment 325959

2 pairs of hands ea. 63/49 mm, 70/55 mm, and 86/67 mm long. Assortment

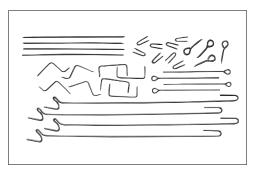
331233

Cuckoo clock numerals of white plastic. 8 numeral sets I to XII, sorted (From 9 to 28 mm high).

327807 18,95



Clock bellows	Order No.	€/Paar
12 cm	334759	24,60
15 cm	113922	27,60



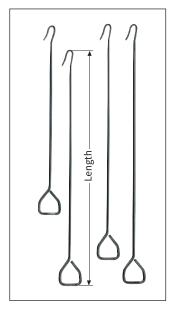
Wire assortment for cuckoo clock mechanisms

4 lifting wire units each, 106 mm long, whistle rings, whistle wires 60 mm long, door opener 41 mm long, door clips, door lock and 8 door cramps.

222583 5,95

Carved headpiece for cuckoo clocks Oak leaf with weapons. Unfinished, pre-sanded wood. Width approx. 30 cm. 334755 39.90 Carved head piece for cuckoo clocks Vine leaf with bird. Unfinished, pre-sanded wood. Appr. 17.5 cm wide. 334625 14.90





O chain movement with Black Forest fittings and sound spring strike

7-day chain movement with strike on sound spring (1/2 hours once, number of hours struck). Special Black Forest (bulkhead) clock equipment with stamped pendulum bob and lead weights with folded brass jackets (2 x 1450 g), pendulum bob / weight unpolished. The clock with hook anchor escapement is fully integrated in a box that can be fastened with screws to the dial or case (see sketch on page 17). With strike silencer.

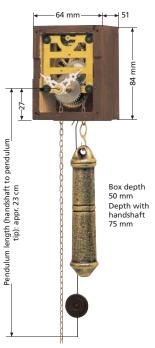
Pendulum length (Hand mechanism, pendulum tip): 72 cm pendulum swing: at least 20 cm

Dial thickness: approx. 12 mm Central hole Ø: Min. 8 mm drop height of weights: 18.5 cm/ 24 hours

Matching hands: Column 3, p. 41-44

307474 292,00





1-Day chain-driven movement

Without strike fitting

The clock with hook anchor escapement is built into a wooden case. Complete with chain, wire pendulum, cast weight (250 g) and hands (28 / 23 mm long). Pendulum length (handshaft - pendulum tip) approx. 23 cm dial thickness. Up to 12 mm Central hole Ø: Min. 6 mm.

336019

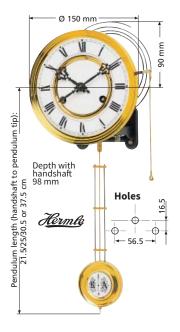
69,90

Pendulum extensions

for cuckoo and Black Forest clocks. Range with 2 extensions each of 80, 90, 100 and 110 mm length overall.

334053 5,50

BF spring movements with strike on wire

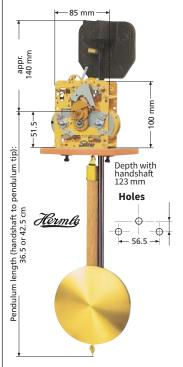


14-Day regulator mechanism

with tension spring, solid anchor escapement and strike on wire sound spring (1/2 hour once, full hours struck). Complete fittings with dial (Ø 150 mm), hands, grid pendulum with bob, sound spring (Ø appr. 9 cm), platform, key and installation instructions. With strike silencer.

Pendulum length	Pendulum bob Ø.	Pendulum swing
21,5 cm	63 mm	approx. 12,0 cm
336241		339,00
25,0 cm	63 mm	approx. 13,0 cm
336246		339,00
30,5 cm	63 mm	approx. 13,5 cm
230964		339,00
37,5 cm	80 mm	approx. 16,5 cm
311870		346,00

FF spring movements with Bim-Bam strike rear

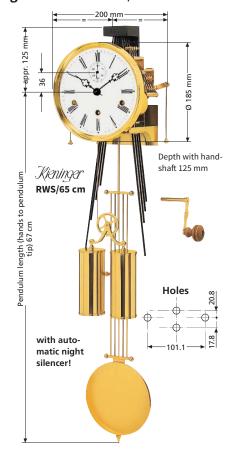


14-Day regulator mechanism

with tension spring, solid anchor escapement and Bim-Bam strike on 3-rod gong (1/2 hour once, hours struck). Complete with wooden pendulum rod, movement fastening screws, gong, key and installation instructions. With strike silencer. Without pendulum bob, dial, board, hands and sound board.

Pendulum length	Pendulum swing
36,5 cm	approx. 20,0 cm
336242	254,00
42,5 cm	approx. 22,0 cm
336243	254.00

FS regulator clockwith 4/4 Westminster chime



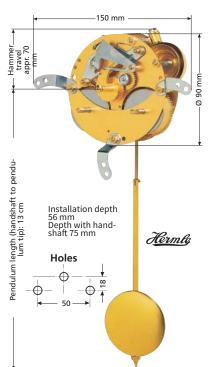
FS 7 - day pull-wire regulator mechanism

with 4/4 Westminster chime on 8-rod gong. High-precision clock with solid escapement, escapement automation, second hand and weight drive for the running gear, quarter and hour strike movements with tension spring. Automatic night rest (22.15 to 7.00 a.m.) or complete strike switch-off selectable. Complete fittings with clock, Ø 180 mm dial with seconds, pair of

hands, bronze rope with pulley, polished brass weight sleeves Ø 50 mm with 2-kg fillings, grid pendulum with Ø 140 mm pendulum bob, platform, gong (approx. 45 cm long), crank key, installation guide.

Pendulum length (handshaft to pendulum tip): 67 cm. Pendulum swing: appr. 20 cm. Drop/7 days: approx. 69 cm. (Hand axis - weight underside).

336394 1.369,00



AF tension spring mechanism with double bell chime

7-Day chain-driven movement

with solid anchor escapement and Bim-Bam strike on double bells (1/2 hour once, hours struck). Complete with polished brass pendulum, movement fastening lugs, key and installation guide. Bell Ø: 32/36 mm. Central hole Ø: Min. 8 mm. Dial thickness: Up to 10 mm. Matching hands: Column 3, pages 41-44.

length 13,0 cm	approx. 9,0 cr
336244	 229.90

Pendulum length (handshaff to pendulum tip): 13.5 or 27.3 cm 19.1 13.5

KF spring movement

7-Day chain-driven movement

With solid anchor escapement. Very compact installation dimensions. Complete with polished brass pendulum, movement fastening lugs, key and installation guide.

Central hole Ø: Min. 8 mm. Dial thickness: Up to 12 mm. Matching hands: Column 3, pages 41-44.

Pendulum length	Pendulum bob Ø.	Pendulum swing
13,5 cm	43 mm	approx. 9,0 cm
336236		119,90
27,3 cm	55 mm	approx. 12,0 cm
336237		124,90

SPRING MOVEMENTS Construction plan



Regulator construction plan

2 The construction plan is designed for various pendulum lengths from 31.5 cm to 37.5 cm (hands to pendulum tip). Suitable for installation:

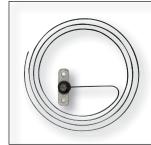
BF or MF spring movements from pages 16 - 17.

Wooden decoration: Pages 6 - 163.

Fittings: Pages 50 + 60.

Outside dimensions: $30 \times 79 \times 16 \text{ cm}/30 \times 85 \times 16 \text{ cm}$. Inside dimensions 19 x 41.5 x 9.5 cm / 19 x 47.5 x 9.5 cm.

336194

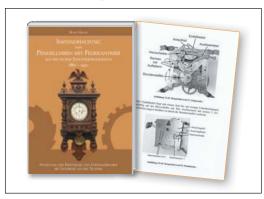


Sound spring / round gong for regulators

Steel wire, outside Ø approx. 11 cm. Complete with mounting loop.

334563 12.60

Order matching book at the same time:



Maintenance of spring-driven pendulum clocks

industrially manufactured in Germany from 1869 to 1940. The author has been occupied with these large clocks in particular for some years . As a rule, these can be acquired at favourable prices, but almost always require repair. The problems arising are illustrated, the repairs broken down into work stages and described in detail with pictures and sketches. The necessary tools and consumables are also explained. An instructive book for both beginners and experienced clock collectors. 344 pages with many black and white images, format 15 x 21 cm.

336155 34,90



Wooden movement holder

Wall model for large clock mechanisms Dimensions: 107 x 100 x 320 mm Clamping range: 260 mm

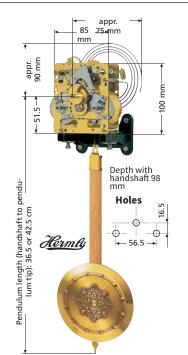
99,00

4360561

Metal movement mounting (not shown)

Overall length adjustable in all directionsP Dimensions: 340 x 230 x 165 mm Clamping range: 230 mm

4360562 229,00



MF spring movements with strike on wire

14-Day regulator mechanism

with tension spring, solid anchor escapement and strike on wire sound spring (1/2 hour once, full hours struck). Complete with wooden pendulum rod, platform, sound spring (Ø approx. 9 cm), key and installation guide. With strike silencer. Without pendulum bob, dial, blind plate and hands.

Pendulum length	Pendulum swing
36,5 cm	approx. 20,0 cm
240939	259,00
42,5 cm	approx. 22,0 cm
336245	269,00



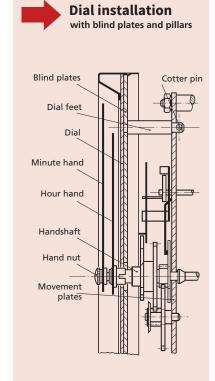
Spring movements

Mechanical clock mechanisms with a running time of approx. 7 - 14 days per winding. For wall clocks (regulators) with pendulum, for table clocks with balance spring adjustment.

They have this in common:

- Front winding with key.
- Produced in southern Germany.
- Dial fastened with blind plate and pillars
- Matching hands: Column 3, p. 41-44
- Pendulum bobs Ø 115 mm and dials on p. 23 and 27

In the case of mechanical pendulum movements, the length of the pendulum is determined by the transfer ratios in the gears. The pendulum length given in each case from the hands to the pendulum tip therefore cannot be changed accidentally.



Please order an extra Ø 115 mm pendulum bob for each of the FF and MF spring movements. There is a selection on page 23.



Pendulum swing:

This dimension is related to the width of the pendulum oscillation, measured at the circumference of the pendulum bob. To prevent the pendulum bob from knocking against the clock case, the case must be approx. 2 cm wider than the pendulum swing.

TABLE CLOCK MOVEMENTS

100 mm 70 mm structions. Central hole Ø: Dial thickness: Matching hands: 336494 Hermly 340-020 Installation Ø appr. 160 mm Installation depth 65 mm Depth with handshaft 85 mm 100 mm appr.

IF table clock movement with 4/4 Westminster chime on 5-rod gong

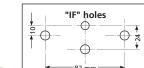
7-Day chain-driven movement

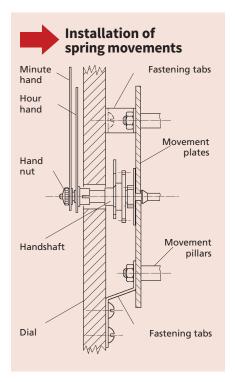
with 4/4 Westminster chime on 5-rod gong and timekeeping adjustment (no pendulum). Complete with fastening tabs, gong, key and installation in-

at least 8 mm Up to 12 mm

Column 3, pages 41-44.

355,00





Strike in nautical sequence

4.00 8:00 12:00 = 8 sequences 8:30 12:30 = 1 sequence 4:30 5:00 9:00 13:00 = 2 sequences 5:30 9:30 13:30 = 3 sequences ---6:00 10:00 14:00 = 4 sequences ----6:30 10:30 14:30 = 5 sequences -----7:00 11:00 15:00 = 6 sequences -----7:30 11:30 15:30 = 7 sequences -----8:00 12:00 16:00 = 8 sequences -- -- --- = single chime -- = double chime

LF table clock movement with Bim-Bam strike on 4-rod gong

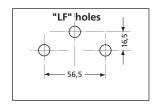
7-Day spring movement

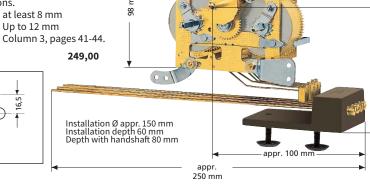
with Bim-Bam strike (half hour once, number of hours struck) and escapement regulator (no pendulum).

Complete with fastening tabs, gong, key and installation instructions.

Central hole Ø: at least 8 mm Dial thickness: Up to 12 mm Matching hands:

336495





max. 135 mm



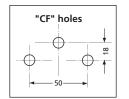
51 mm

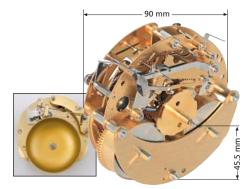
What is the "Westminster" sound? You can listen to all types of chime in the Internet at www.selva.de under the relevant works number.

124 mm

130-070

Installation depth 70 mm Installation Ø approx. 110 mm Depth with handshaft 85 mm





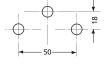
Hermle 132-071 SG

Installation depth 47 mm Installation Ø appr. 104 mm Depth with handshaft 59 mm

<u>Hermle</u>

150-010

"SG" holes



CF table/style movement with Bim-Bam strike on double bells

7-Day spring movement

with escapement regulator (no pendulum) and Bim-Bam strike on double bells (half hour once, number of hours every hour). Complete with fastening lugs, gong, key and installation instructions. Bell Ø: Up to 65 mm

Central hole Ø: At least at least 8 mm Dial thickness: Up to 10 mm Column 3, pages 41-44. Matching hands: 4113-104656 229,00

SG ship's bell movement with strike in nautical sequence on bell

7-Day spring movement

with 11-jewel escapement, strike in nautical sequence on brass bell. With wind-up key and instructions.

Bell Ø: Up to 65 mm

Central hole Ø: At least at least 8 mm Dial thickness: Up to 2 mm

Matching hands: Column 3, pages 41-44. 4113-104659 386,00

EP quartz pendulum movement with hanging strip for dummy weights

Powerful pendulum movement, ideal for installation in wall clocks of all kinds.



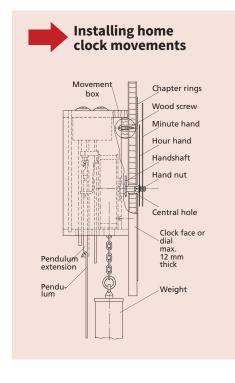
Equipment: Integrated hanger and complete installation kit (see INFO on page 11).
Dial thickness a: up to 10 mm 19 mm
Installation Ø: 120 mm
Battery: 1.5 V AA cell (see page 6)
Matching hands: Up to max. 120 mm long,

column 1, pages 41-44
Matching pendulums: See page 12

Matching pendulums: Matching dummy weights:

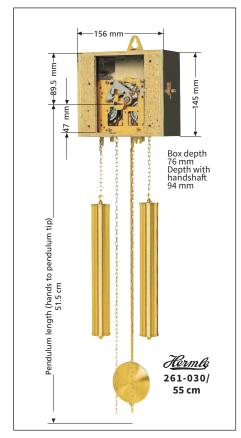
Up to Ø 40 mm (see page 24)

334443 27,50



GRANDFATHER / HOME CLOCK MOVEMENTS

Home clock movement I with Bim-Bam strike



7-Day home clock movement

with weight lift Strike on

3-rod Bim-Bam gong, once on the 1/2 hour, full hours struck. This clock, with solid anchor escapement, is built into a sturdy wooden box, which can be fastened with screws to the dial provided or to the casing (see sketch). Complete with pendulum, weights (2 x 1.2 kg, Ø 32 mm) and chains. With strike silencer.

Pendulum length (handshaft to pendulum tip):

51.5 cm

pendulum bob: Ø 80 mm
pendulum swing: approx. 15 cm
Central hole Ø: at least 8 mm
Dial thickness: Up to 12 mm
watch main plates: 87 x 87 x 1.3 mm
Matching hands: Column 3, p. 41-44
Weight drop height:

Column 3 p. 41-44: 19.7 cm / 24 hours Weights and pendulum: Polished brass Chains: brass-plated steel

336493 399,00

For replacement purposes: Loose clock mechanism with chains, but without rear box, pendulum, gong, weights and other accessories.

336017 Hermle 261-030/45 cm **139,90 4113-104692** Hermle 261-030/55 cm **139,90**



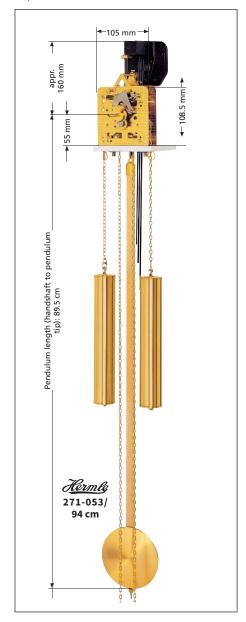
Repair of American pendulum clock and worldwide replicas

A guide for beginners and people interested in technology. This book imparts the necessary knowledge to bring these clocks back to life. 260 pages with a wealth of illustrations and sketches.

336178 32,90

GG longcase clock movements with Bim-Bam strike

Depth with handshaft 155 mm



7-Day home clock movement

with Bim-Bam strike Solid anchor escapement, anchor automation and strike stop. Complete with wooden pendulum rod, pendulum bob, weight sleeves with fillings, chains, gong, blind plates and installation instructions.

Without seat board (see page 20)

Pendulum length (handshaft to pendulum tip): 89.5 cm pendulum bob

Polished brass, Ø 115 mm.

Pendulum swing: appr. 24 cm Matching dials: Page 27

Matching hands: Column 3, pp. 34-44 Weights: Polished brass, Ø 40 mm, 2 x 2.2 kg approx. 125 cm. (Hand axis - weight underside) Gong: 3 rods fitted, approx. 45 cm long.

308354 419,00

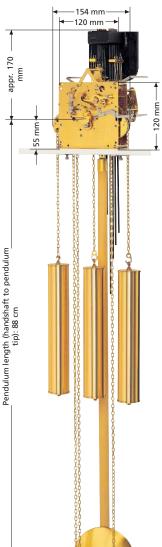


Any weight shells must not exceed Ø of original shells.

LONGCASE CLOCK MOVEMENTS

FG longcase clock movement with 4/4 Westminster chime

Depth with handshaft 160 mm



7-Day chain-driven movement

with 4/4 Westminster chime Solid anchor escapement, automatic anchor. Choice of complete chime silencing or automatic silencing at night from 10 p.m. to 7 a.m.

Complete with wooden pendulum rod, pendulum bob, weight sleeves with fillings, chains, gong, blind plates and installation instructions. A universal blind plate with pillars for easy dial assembly is included.

Without seat board (see bottom left). Pendulum length

(Hand mechanism, pendulum tip): 88 cm pendulum bob:

Polished brass, Ø 115 mm Pendulum swing: approx 24 cm

Pendulum swing: approx 24 cm Pass. dials: Page 29 Matching hands: Column 3, pp. 41-44

Weights: Polished brass, Ø 50 mm, 2 x 2.2 kg, 1 x 2.9 kg

Drop height / 7days: approx. 130 cm (Hand axis to underside of weight). 8 rods fitted, approx. 50 cm long.

336496

659,00



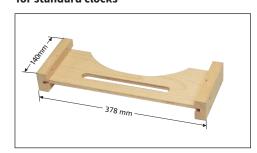


TIPP!

In FG grandfather clock movements.

any exchanged weight sleeves must not exceed the diameter of the original sleeves. The original Ø is stated in the movement description.

Universal seat boards for standard clocks



Seat board

plywood, 10 mm thick, with matching grooved rails. Pendulum cutout matching the FG, GG and SU clock movements.

222571 34,50



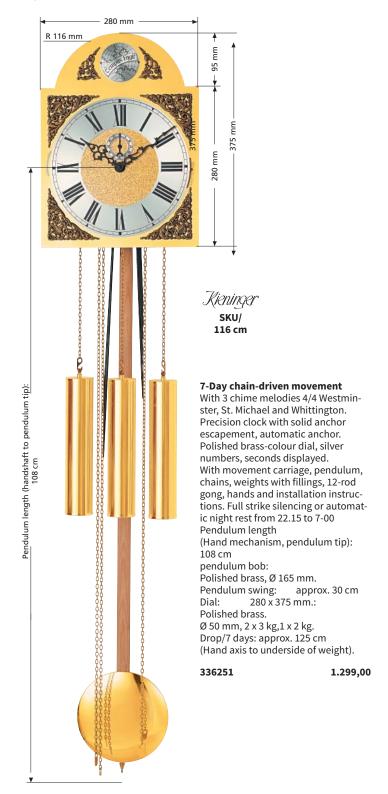
Stable hook

To fasten clock movements to seat boards. With tapped end and square nut. Overall length 59 mm.

334596 5,20

SKU longcase clock movement with triple chimes

Depth with handshaft 175 mm





Repairing longcase clocks (reprint)

For the first time, a clockmaker and a restorer (father and son) clearly explain in this book how to repair longcase clocks and restore longcase clock cases and dials. This book will help you to undertake repairs to these fascinating clocks yourself, as well as to secure the future of the clock through proper care. 192 pages with appr. 155 diagrams. Format 17 x 24 cm.

336176 44,85

Order quickly and easily right now:

www.matinkulta.fi

Tel.: +358 (05) 413 2888

LONGCASE CLOCK MOVEMENTS

SU longcase clock movement with triple chimes





7-day rope movement with solid anchor escapement, anchor automation and seconds display. Choice of complete chime silencing or automatic silencing at night from 10 p.m. to 7 a.m. Complete fittings with lyre pendulum and polished brass weight sleeves, fillings, bronze ropes with pulleys, gong (appr. 68 cm long), dial, hands, crank and installation instructions. The brass-coloured dial has a moon phase display, a silvered chapter ring and centre and applied spandrels with etched decoration. Midnight blue moon disk with printed golden decoration.

Pendulum length (Hand mechanism, pendulum tip): 114 cm pendulum bob: Ø 220 mm pendulum swing: at least 32 cm Dial: 280 x 395 mm Weights: Ø 60 mm, 2 x 3.5 kg, 1 x 4.5 kg Drop height / 7days: Appr. 120 cm (Hand axis to underside of weight).

SU clock movement with changeover strike movement, (4/4 Westminster/St. Michael / Whittington) **336393 1.275,00**

KSU longcase clock movement with changeover strike movement





7-day rope movement with change-over strike train. 3 classic chimes – 4/4 Westminster, St. Michael and Whittington – can be set manually or can be selected automatically to sound a different chime every 3 hours. Precision clock with tray escapement, automatic anchor, bronze bushings and seconds display. Power reserve during winding. Automatic overnight silencing (10.15 p.m. to 7 a.m.) or complete switching off of the hour and / or quarter strike can be selected.

Complete fittings with polished fire brass lyre pendulum, brass weight sleeves with fillings, bronze ropes with pulleys, 12-rod gong (approx. 68 cm long), dial, hands, seat boards, crank and installation instructions. High-gloss polished brass-coloured dial with moon phase display and

silvered numeral ring, applied polished numbers. Moon arch with midnight blue moon and golden printing. Etched central disk and spandrels.

Pendulum length

(Hand mechanism, pendulum tip): at least 110 cm

Dial: 280 x 395 mm: Ø 169 mm pendulum swing: approx. 26 cm Weights:

Ø 60 mm, 1 x 3 kg, 1 x 4 kg, 1 x 5 kg Drop height / 7 days: approx. 120 cm (Hand axis to underside of weight).

336392 2.369,00





11 Pendulums for English longcase clocks.

1.2 kg lead bob with brass bezel Ø 100 mm. Including pendulum spring Total length appr. 109 cm.

334698 199,9

2 Pendulum springs for English longcase clocks. 0.20 mm spring steel with brass ends. Inside thread 1/8" x 40. Total length 130 mm.

334699 14,95

3 Pear-shaped pendulum

Cast lead pear with individual, loose wires, matt finish. Total length appr. 89 cm.

334494 57,90

4 Lyre pendulum.

Polished lyre and Ø 165 mm pendulum bob with stamped decoration, steel/brass grid rods. length 85 cm. For Kieninger clock movements PL 93 cm. Produces pendulum length (handshaft to tip of pendulum) appr. 97 cm.

334708 149,90

5 Lyre pendulum.

Polished brass bob Ø 270 mm, brass lyre and brass/steel grid rods. length 109.5 cm. Suitable for clock mechanisms with so-called seconds pendulum (e.g. Hermle PL 114 cm, Kieninger PL 116 cm).

334573 169,90

6 Lyre pendulum.

with polished lyre and Ø 169 mm pendulum bob, steel/brass grid rods. length 104 cm. For SKU clock movement (Kieninger PL 116 cm). Produces pendulum length (handshaft to tip of pendulum) appr. 114 cm.

334492 122,00

PENDULUM ACCESSORIES Pendulum bob, weight sleeves



Pendulum bob, polished fire brass.

Ø	Description	Order No.	€
80 mm	19 x 6 mm	329179	15,60
115 mm	19 x 6 mm	328257	39,50
165 mm	25 x 7 mm	202463	42,90



Pendulum bob, Circular ground fire brass.

Ø	Description	Order No.	€
80 mm	19 x 6 mm	248347	19,90
140 mm	19 x 6 mm	316114	32,50

3



Pendulum bob,

3 Pendulum bob, fire brass with circular grind and stamped rosette decoration, antiqued.

Ø	Description	Order No.	ŧ
115 mm	19 x 6 mm	336248	62,90



Fire brass Brass-plated steel sheet, with greater stability than normal brass sheet.



Ground weight sleeves

With polished end caps. Penetrating tapped rod with hook and cap nut.

Ø	length	Order No.	€
40 mm	248 mm	248346	38,90
50 mm	250 mm	334683	45,90
60 mm	245 mm	232419	49,90

Polished weight sleeves

with polished end caps. Penetrating tapped rod with hook and cap nut.

Ø	length	Order No.	€
60 mm	252 mm	313529	54,90



1 Grey-cast iron fillings for longcase weight sleeves

Weight	Ø x height	Order No.	€
2,0 kg	37 x 245 mm	330639	31,50
3,0 kg	48 x 242 mm	330640	44,90
3,5 kg	56 x 207 mm	202111	51,90

2 Lead fillings

for longcase and regulator weight sleeves

Weight	Ø x height	Order No.	€
2,0 kg	48 x 105 mm	334566	41.90

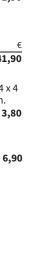
3 Brass pendulum hooks.

With tapped pin for wooden pendulum rods. 4 x 4 mm square, length without tapped pin 25 mm. 334616

4 Brass pendulum hooks, slotted.

4 x 4 x 17.5 mm Ø 2.5 mm hole

334597





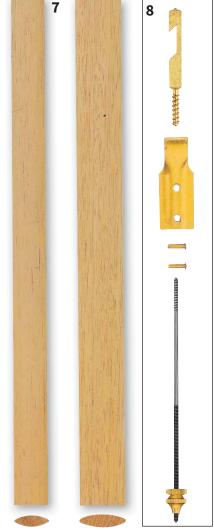
5 Wrought iron clock console.

23 cm wide, 20 cm high, 15.5 cm deep. 49,90

6 Lead shot

Ideal for filling weight sleeves. Bag with 1 kg.

113933 24,90



7 Wooden pendulum rod,

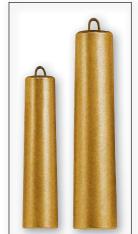
Rough, 95 cm long. Without fittings.

Description	Order No.	•
19 x 6 mm	334761	17,90
25 x 7 mm	334327	19,50

8 Set of fittings, screw hooks, flat hooks, tapped pin, regulating nut and 2 hollow rivets. For wooden rod cross-sections 19 x 6 and 25 x 7 mm.

313672 19,90

WEIGHTS:



7 Black Forest clock weights.

Folded brass jacket with cast lead filling. Unpol-

weight	Ø	length	Order No.	€
275 g*	30 mm	130 mm	208926	22,50
500 g	30 mm	86 mm	334524	19,95
750 g	30 mm	125 mm	334523	26,90
900 g	35 mm	105 mm	200873	28,90
1200 g	35 mm	140 mm	334639	33,90
1450 g	35 mm	155 mm	241750	39,90
1800 g	40 mm	140 mm	334638	43,90
2500 g	45 mm	170 mm	334671	52,90
With wooden / lead corel				



1+2 Weight sleeves

as decorations for battery-driven pendulum clocks or for filling with lead shot. Including a chain for each, 23 cm and 86 cm long.

32 x 130 mm €	740 g	114039 29,60	334764 33,60
32 x 219 mm	1.250 g	334765	_
€		34,60	_



3 +4 Chains for dummy weights,

Including rings and hooks. With a chain for each, 23 cm and 86 cm

334636	3. brassed	7,20
334030		1,20
334637	4. black	7,20



B. Schaaf, "Blackwalduhren" (Black Forest clocks).

The extended 4th edition of this standard work, with a comprehensive overview of the 200 years' history of the Black Forest clockmakers' art. With his immense knowledge, the author gives a vivid impression of the works of art produced by the Black Forest clockmakers in the 18th and 19th centuries. More than 400 diagrams with some previously unpublished pictures and an extended and amended list of clockmakers. Approx. 440 pages, format 19 x 26 cm.

336138 29,95



5 8 Regulator weight with lead filling.

Polished, painted brass sleeve, Ø 40 mm, 120 mm long. approx. 1500 g

334643 68,50

6 Jockey / Alarm weight

Solid brass, turned, unpolished. Ø 18 mm, 60 mm long. approx. 130 g

334814 15,90

7. Regulator weight

Brass sleeve with lead filling. Ø 40 mm, 120 mm long. Unpolished. approx. 1500 g

334658 73,90



8 14 Solid cast weights for wall and longcase clocks.

No.	weight	Ø	Order No.	Piece
8.	1600 g	40 mm	334627	38,90
9.	500 g	31 mm	334732	16,50
9.	750 g	36 mm	334733	19,90
10.	1000 g	40 mm	115558	27,90
11.	250 g	25 mm	334617	10,95
12.	130 g	23 mm	217243	5,90
13.	600 g	42 mm	231121	16,90
13.	1200 g	45 mm	241647	33,90

Pine cone weights with cast-on eyelet

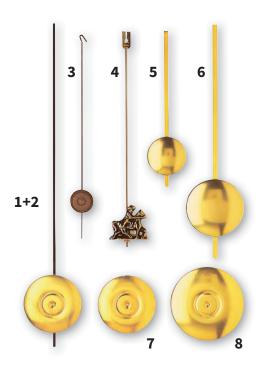
€	Order No.	length	Ø	weight
5,60	334644	115 mm	27 mm	275 g
9,95	118565	130 mm	28 mm	375 g
13,20	334652	140 mm	32 mm	500 g
19,90	334653	170 mm	38 mm	750 g
26,50	334645	195 mm	40 mm	1000 g
26,90	334654	170 mm	45 mm	1260 g
31.50	334655	205 mm	45 mm	1500 g



14 15 Solid cast weights, painted blacquered

No.	weight	Ø	Order No.	Piece
14.	2500 g	50 mm	334752	63,90
14.	3400 g	57 mm	231227	83,90
15.	4200 g	76 mm	334746	99,90

PENDULUMS / GONGS / BELLS



1 -2 1-2 Black Forest pendulum with wire rod.

Total length 95 cm (can be shortened)

114106 with pendulum disc No. 7, Ø 55 mm **32,90** with pendulum disc No. 8, Ø 70 mm **33,90**

3 Pendulum with wire rod and stained wooden bob Ø 22 mm. Total length 20 cm (can be shortened)

18703 3,95

44 "Horse and rider" pendulum for Dutch Zaanse clocks. Wire rod with cast brass figure. Total length 20.5 cm.

118060 39,90

5 Pendulum with sliding lens for small pendulum movements. Bobs \emptyset 37 mm, overall length 15 cm (can be shortened). Unpolished brass.

202458 9,20

6 Scottish movement pendulum with sliding lens for Black Forest **clock movements.** Bobs Ø 55 mm, overall length 26 cm (can be shortened). Unpolished brass!

118104 10,90

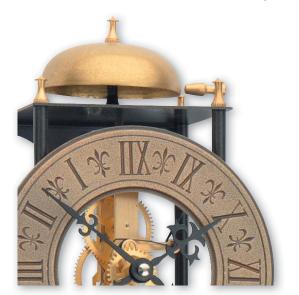
Matching pendulum extensions page 13, item 8.

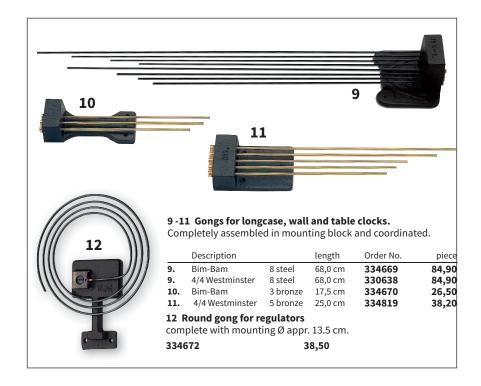
7 Pendulum bob for Black Forest clocks, \emptyset 55 mm. Stamped brass front with wooden core, unpolished.

235774 14,90

8 Pendulum bob for Black Forest clocks, Ø 70 mm. Stamped brass front with wooden core, unpolished.

235781 15,90









Cast bronze bells in the Comtoise form of the 18th and 19th centuries. Very pure sound.

85 mm 32 mm 334797 16,50 100 mm 38 mm 113913 23,90 120 mm 44 mm 118585 34,90 130 mm 48 mm 334798 46,90				
100 mm 38 mm 113913 23,90 120 mm 44 mm 118585 34,90 130 mm 48 mm 334798 46,90	Ø	height	Order No.	piece
120 mm 44 mm 118585 34,90 130 mm 48 mm 334798 46,90	85 mm	32 mm	334797	16,50
130 mm 48 mm 334798 46,90	100 mm	38 mm	113913	23,90
	120 mm	44 mm	118585	34,90
140 mm 52 mm 334799 56,50	130 mm	48 mm	334798	46,90
	140 mm	52 mm	334799	56,50



Cast brass bells. Flat form with very pure sound. No hole.

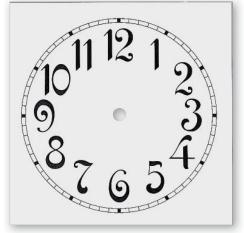
Ø	height	Order No.	piece
55 mm	20 mm	334748	9,95
60 mm	20 mm	334749	11,50
70 mm	21 mm	334750	15,50



Dial

Silver-coloured aluminium with longitudinal grind, polished turned chapter ring, printed hour markings. Outside Ø 200 mm, 1 mm thick, flat. Central hole Ø 10.2 mm For hand lengths 76-88 mm.

334972 23,50



5 Dial 220 x 220 mm.

Silver-coloured aluminium, satin finish, printed numerals, 0.4 mm thick. Central hole Ø 10.5 mm Numeral ring Ø 190 mm. For hand lengths 85-95 mm.

312642 29,90



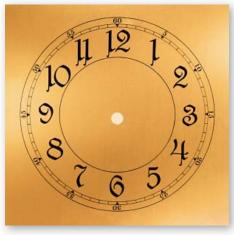
Chapter rings

Gold painted aluminium with facetted edges. Printed Roman numerals. Outside Ø 114 mm, inside Ø 65 mm, 0.5 mm thick. For hand lengths 45-55 mm.

334960 13,90



Regulator ring and blind plates can be found on page 31 of the catalogue, Dial pillars on page 27.



5 Dial 200 x 200 mm.

for wall clocks, regulators and two-bearing screens Gold-coloured aluminium, satin finish. 0.5 mm thick. Central hole Ø 10.5 mm Numeral ring Ø 170 mm. For hand lengths 78-85 mm.

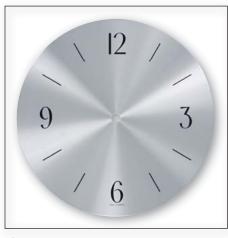
334963 26,50



Dial

White painted aluminium with printed black numerals. Outside Ø 155 mm, 0.6 mm thick, flat. Central hole Ø 10.2 mm For hand lengths 60-72 mm.

246200 9,95



Dial

Silver coloured, circular ground aluminium, printed hour markings

Outside Ø 222 mm, mm thick, flat, outer edge flanged towards the rear. Central hole Ø 10.2 mm For hand lengths 85-95 mm.

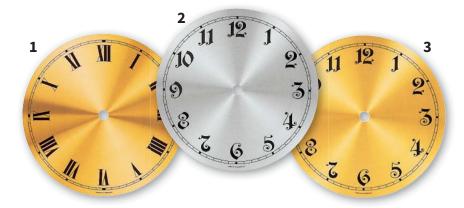
334970 39,90



Dial

Brass-plated, polished aluminium sheet with stamped spandrels. Central decoration and chapter ring. 112 x 112 mm, 0.3 mm thick. Central hole Ø 10.2 mm For hand lengths 40-48 mm.

335010 19,50



1 3 Dials for regulators and two-bearing screens

Aluminum, gold or silver coloured, satin finish with printed numerals. Central hole Ø 10.5 mm, 0.4 mm thick.

	Ø 148 mm	Ø 164 mm	Ø 175 mm	Ø 197 mm	Ø 215 mm
1. Gold-color, roman numerals	 	 	205667 23,90	_	_
2. Silver-color, arabic numerals	242581 19,90	326588 19,90	115924 23,90	241740 24,90	335013 25,60
3 .Gold-color, arabic numerals	_	_	305881 23,90	314040 24,90	_
for clock hand length	56-63 mm	63-68 mm	70-80 mm	80-86 mm	85-97 mm



12 Regulator dials

Brass-coloured, polished aluminium with printed numbers and white central part. Outside Ø 152 mm, central hole Ø 10.2 mm. Dial thickness at central hole 1 mm. For hand lengths 50-63 mm.



Without winding hole and board

334969	Arabic numerals	38.90
334968	2 Roman numerals.	38.90

With winding hole, blind plate and pillars for BF, FF and MF spring movements:

334974	Arabic numerals	54.90
334973	2 Roman numerals.	54.90



3 Pillars for regulator dials.

Ø 5 mm, Ø 3.5 mm approaches, transverse boring for cotter pin. Package with 4 pillars including cotter pins.

Length	Total length	Order no.	Price
16 mm	22 mm	334585	19.95



3 Decorative bushings for Ø 10 mmwinding and central holes in dials. 22 open bushings, outside Ø 9 to 10 mm, various heights. Yellow and burnished.

327154 **4 Decorative bushings** for Ø 10 mm winding and central holes in

dials. Range with a total of 12 bushings in brass and silver colours

5 Decorative bushings for Ø 10 mm winding and central holes in

dials. Range with a total of 12 bushings in brass and silver colours

and burnished. For dial thicknesses of approx. 3 - 7 mm.

and burnished. For dial thicknesses of approx. 1 - 7 mm.



Pendulum swing scale

for regulators, painted enamel-white 62 x 26 mm, 0.5 mm thick.

114104 9,20

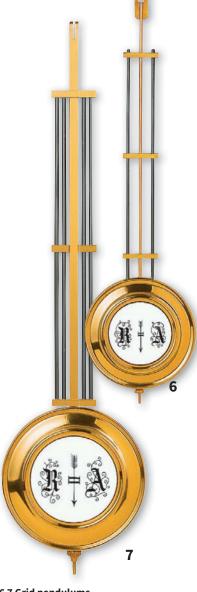




334516

movement (R) or accelerate it (A).

R/A = Retarder/Advancer = the direction in which the pendulum nut must be turned to Retard the clock



67 Grid pendulums

Fire brass bob with polished front and enamel-white paint, printed R/A inlay. Steel grid rods with brass crosspieces.

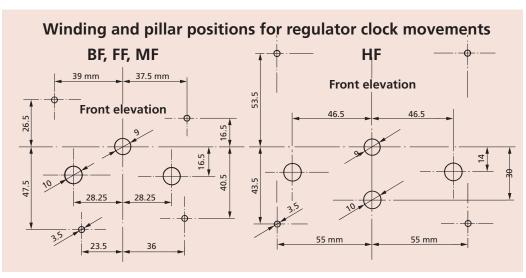
Pic.	Total length	Pendulum bob	Order No.	Piece
6.	142 mm	Ø 63 mm	334718	44,90
6.	180 mm	Ø 63 mm	334719	46,90
6.	236 mm	Ø 63 mm	334720	47,50
7.	305 mm	Ø 80 mm	334721	51,90



Pendulum bobs

Brass with polished front and painted enamel-white, printed R/A inlay.

Bob Ø	Order no.	Price
63 mm	334716	31.90
80 mm	334717	34.90



DIALS



Dial

Brass-coloured anodized aluminium with straight grind and printed, black numerals. Outside Ø 155 mm, 0.6 mm thick, flat. Central hole Ø 10.2 mm For hand lengths 60-70 mm.

334967 22,40



Dial

in polished brass Chapter ring, Arabic numerals and central ornament printed. Outside Ø 155 mm, central hole Ø 10.2 mm, 0.6 mm thick. For hand lengths 60-70 mm.

334965 34,50



Dial

Gold-coloured, anodized, circular-ground aluminium with printed Roman numerals. Outside Ø 127 mm, 0.4 mm thick, flat. Central hole Ø 10.2 mm

For hand lengths 53-60 mm.

334977 22,90

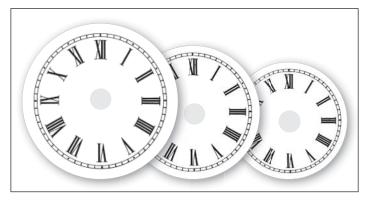


Dial

Gold-coloured, anodized, circular-ground aluminium with printed Roman numerals. Outside Ø 110 mm, 0.4 mm thick, flat. Central hole Ø 10.2 mm

For hand lengths 40-48 mm.

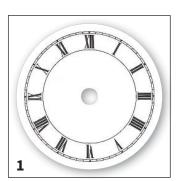
334976 22,90



Genuinely enamelled dials

Old white Appr. 1.5 mm thick, slightly curved. Central hole Ø 10.2 mm

Outside Ø	Length of hand	Order no.	Price
60 mm	20-26 mm	335014	33.50
70 mm	25-30 mm	213727	33.90
80 mm	29-35 mm	335015	39.90





1 2 Dials

Aluminum, painted white. Central hole \emptyset 10.5 mm, 0.8 mm thick, flat. Winding holes can be drilled without difficulty!

		Fig. 1		Fi	g. 2
Outside Ø	Length of hand	Order no.	Price	Order no.	Price
57 mm	22-25 mm	334987	15.90	334996	15.90
71 mm	27-30 mm	330571	17.20	-	-
79 mm	30-35 mm	334988	17.60	-	-
90 mm	35-40 mm	227903	18.50	334997	18.50
94 mm	37-41 mm	334989	19.20	-	-
101 mm	40-44 mm	334990	19.20	334998	19.20
108 mm	43-47 mm	334991	19.50	220117	19.50
115 mm	45-50 mm	214688	19.90	334999	19.90
139 mm	55-63 mm	314537	20.50	-	-
150 mm	60-68 mm	334992	25.90	-	-



Enamelled dial.

Outside Ø 95 mm, 5 mm high, slightly arched. Central hole Ø 10.2 mm For hand lengths 35-41 mm.

334986 52,90



Enamelled dial.

with decorative garlands 5 mm high, slightly curved. Central hole Ø 10.2 mm

 Outside Ø
 Length of hand
 Order no.
 Price

 83 mm
 34-38 mm
 335004
 43.90

 100 mm
 35-41 mm
 335005
 45.50





34 Dials

Stable, white PVC film with black printed numbers, self-adhesive, approx. 0.3 mm thick. Central hole Ø 10 mm

		Fig. 3		Fig. 4		
Outside Ø	Length of hand	Order no.	Price	Order no.	Price	
84 mm	32-37 mm	334982	10.90	334985	10.90	
130 mm	50-60 mm	334983	13.90	-	-	
140 mm	53-65 mm	334984	16.95	-	-	



Moon phase dial

Brass-coloured aluminium sheet with printed decoration. chapter ring and "Tempus Fugit" ground aluminium bob. $108 \times 102 \times 1$ mm (W x H x D), Overall height with arch 142 mm. Central hole Ø 10.2 mm For hand lengths 35-40 mm.

335016 49,90



Dial

Aluminum, painted white with printed numeral decoration, 1 mm thick, flat. Central hole Ø 10.5 mm

Outside-Ø	Length of hand	Order No.	price
160 mm	60-68 mm	335001	24,90
172 mm	63-70 mm	335002	25,60
181 mm	68-76 mm	116373	26,90
202 mm	75-85 mm	335003	28,50
217 mm	85-100 mm	334201	30,90
249 mm	100-115 mm	327857	36,90



Dial central disk.

Suitable as decoration or even for covering unusable or incorrect winding holes. Brass-coloured anodized aluminium with engraved decoration, highly polished. Ø 103 mm, 0.5 mm thick. Central hole Ø 10.2 mm

334964 6,90



Dial

Aluminum, painted white with printed numeral decoration, 1 mm thick, flat. Central hole Ø 10.5 mm

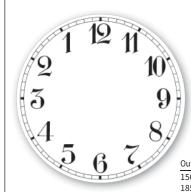
Outside-Ø	Length of hand	Order No.	price
160 mm	57-70 mm	334993	24,90
172 mm	60-75 mm	334994	25,60
190 mm	70-88 mm	238724	
237 mm	90-110 mm	334995	35,90
249 mm	95-115 mm	325302	36.90



Dial Ø 300 mm.

Circular ground brass with deeply embossed, black designed numerals, embossed rose ornaments and loose regulator ring. Without blind plates and pillars. For hand lengths 135 mm.

335009 165,90



Dials for backwards clocks

White painted aluminium with printed numerals 1 mm thick.
Central hole Ø 10.5 mm

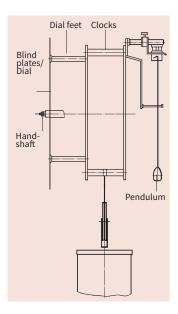
Jutside-Ø	Length of hand	Order No.	price
.50 mm	60-72 mm	335011	20,50
85 mm	75-87 mm	331656	26.50



Chapter rings

Silver coloured, circular ground aluminium, printed hour markings. Outside Ø 204.5 mm, inside Ø 127.5 mm, 0.6 mm thick. For hand lengths 80-98 mm. Complete with matching "Tempus Fugit" disc Ø 69 mm, slightly arched.

334956 52,90



Tempus Fugit disc, old brass-coloured cast frame with inlaid, arched disc. Ø 57 x 6 mm high.

334742 14,95



Arched dial 250 x 330 mm.

336247

with moon phase display. Brass-coloured, anodised and polished aluminium disc with circular-ground aluminium chapter ring, applied numerals, granulated central disc and antiqued spandrels. Silver-coloured moon arch, midnight-blue moon disc with gold-coloured printed décor. Complete with blind plate and pillars to match FG longcase clock movement on page 20. For hand length 85-100 mm.

236,00



Arched dial 250 x 330 mm.

with moon phase display. Ground brass with applied chapter ring of circular-ground aluminium, applied numerals, granulated central disk with silver-coloured seconds ring and antiqued spandrels. Silver-coloured moon arch, midnight blue moon plate with golden printed decoration. Complete with board and pillars matching KIENINGER longcase clock movements. For hand lengths appr. 100 mm.

336250 384,00

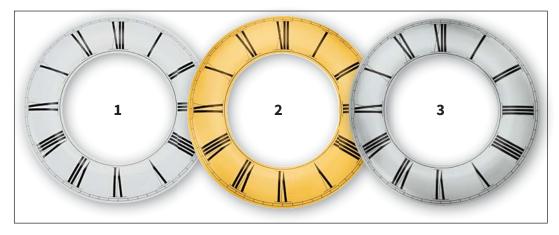


Arched dial 250 x 330 mm.

Brass-coloured aluminium with applied, silver-coloured chapter ring and Tempus Fugit plaque as well as cast decorations and granulated central disk. Central hole Ø 10.2 mm For hand lengths 88-100 mm.

334975 184,00

CHAPTER RINGS



1 - 3 Chapter rings

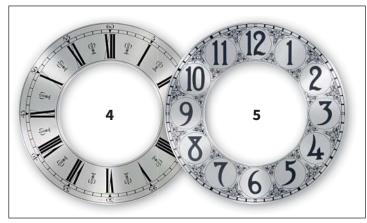
with printed Roman numerals. Outside Ø 190 mm, inside Ø 110 mm, approx. 4.5 mm high (slightly arched). For hand lengths 80-90 mm.

1. Enamel-white finish	
334952	14,50
2. Brass-coloured, satin finish	-
334953	17,20
3. Silver-coloured, satin finish	
334954	17,20

4 - 5 Chapter rings

Silver-coloured, circular ground aluminium. Outside Ø 244.5 mm, inside Ø 136.5 mm, 0.6 mm thick. For hand lengths 95-115 mm.

4. printed roman numerals **327088 37,90 5.** attached Arabic numbers **334955 53,90**





Chapter rings

with real white enamelling and black Roman numerals. Outside Ø 137 mm, inside Ø 86 mm, appr. 2.5 mm high, slightly arched.

For hand lengths 56-62 mm.

328184 57,90



Chapter rings

Aluminum, white-coated, printed numerals. Outside Ø 203 mm, inside Ø 114 mm, 0.8 mm thick. For hand lengths 76-90 mm.

334961 31,50



Chapter rings

Gold-coloured,satin-finish aluminium with printed numerals and decorations. Outside Ø 202 mm, inside Ø 112 mm, 0.5 mm thick. For hand lengths 80-95 mm.

240328 31,50



Chapter rings

Diamond-turned, solid brass with polished edges and printed Arabic numerals. Outside Ø 202 mm, inside Ø 110 mm, 0.8 mm thick. For hand lengths 85-92 mm.

334958 29,90



Chapter rings

Gold-coloured, anodized, circular ground aluminium with printed Roman numerals. Outside Ø 183 mm, inside Ø 108 mm, 0.5 mm thick. For hand lengths 76–88 mm.

334957 29,60



6 - 7 Chapter rings

Ivory white painted aluminium with printed numerals. 0.5 mm thick.

Pic.	Outside Ø	Inside Ø	Length of hand	Order no.	Price
6	117 mm	72 mm	50-56 mm	334959	29.50
7	140 mm	85 mm	60-68 mm	328435	29.90
7	160 mm	98 mm	70-78 mm	240388	30.90

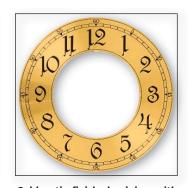
ight now: w



13 Chapter ring, silver-coloured, satin-finish aluminium with printed numerals. Outside Ø 182.5 mm, inside Ø 102 mm, 0.4 mm thick. For hand lengths 75–88 mm.

334962 29,20

Tel.: +358 (05) 413 2888



Gold, satin-finish aluminium with printed numerals. Outside -Ø 182.5 mm, inside Ø 102 mm, 0.5 mm thick. For hand lengths 75–88 mm.

326424 28,50

CHAPTER RINGS Bezels





Bezel for wall and table clocks.

White enamel dial, hinged glass cover with patinated brass ring and real arched glass. Outside \emptyset 160 mm. Central hole Ø 10.2 mm Cleared interior height appr. 16 mm. For hand lengths 58-65 mm.

334948



Bezel

Polished, brass-coloured aluminium with printed, champagne-coloured ring zone, recessed numerals. Arched hinged glass lid with diamond-cut brass ring. Outside Ø 160 mm, inside Ø 96 mm. Cleared height appr.18 mm. For hand lengths 60-70 mm.

326039 92,00



Bezel

chapter ring with black printing. White Hinged glass lid with diamond-cut brass ring and real arched glass. Outside Ø 130 mm, inside Ø 70 mm. Overall height appr. 16 mm. For hand lengths 45-55 mm.

334947 49,90

1 - 3 9-11 Hinged glass lidwith arched real glass, hinge and closing bushing.

1 Chromed ring, diamond-cut:

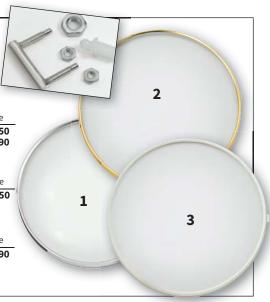
Outer Ø	Inner Ø	light height appr.	Order No.	Price
130 mm	122 mm	14 mm	335094	16,50
150 mm	142 mm	14 mm	335095	16,90

2 Brass ring, diamond-cut:

Outer Ø	Inner Ø	light height appr.	Order No.	Price	
160 mm	152 mm	16 mm	305551	16,50	

311 - Plastic ring, matt white:

160 mm	155 mm	15 mm	335096	14,90	
Outer Ø	Inner Ø	light height appr.	Order No.	Price	





25,90



24-hour dial.

White-painted aluminium with printed numerals. Outside Ø 185 mm, central hole Ø 10.5 mm. 1 mm thick. For hand lengths 72-80 mm.

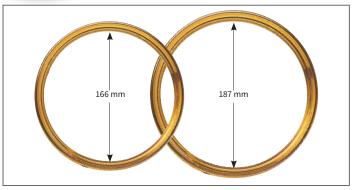
335012 26,90



Dial

White painted aluminium with printed black numerals. Outside Ø 178 mm, 0.6 mm thick, flat. Central hole Ø 10.2 mm For hand lengths 65-80 mm.

334966 10,90



334971

Loose closing ring

for regulator dials.. Polished brass.

Outer Ø	Inner Ø	Outer height	Inner height	max. dial-Ø	Order No.	Price
182 mm	166 mm	15 mm	8 mm	180 mm	334978	42,90
205 mm	187 mm	16,5 mm	10 mm	204 mm	334979	49,90



The bezels on this page have a dial or numeral ring thickness of approx. 1 mm.



Loose blind plate

to match closing ring pos. 4 Gold-coloured painted steel sheet with bordered edge. With winding and pillar holes for HERMLE clocks.

Outside Ø	Order no.	Price
181 mm	334980	24.90
204 mm	334981	26.50

Passende Pfeiler: Seite 25, Abb. 3.

GLASS DOME / **WATCH GLASSES**

Create individual sandglasses according to your own ideas!





Sandglass clock

with a runtime of approx. 15 minutes. Ø approx. 4.9 cm, approx. 10.7 cm high.

336087

25,90



Wooden pedestal for glass domes (s. below). Turned alder wood, unfinished. 15 mm high.

Dimensions	No.	Order No.	Price
Ø 150 mm	В	336091	26,90
Ø 174 mm	С	336090	29,90



Real glass dome

for year clocks, skeleton clocks, hearth clock and much more besides. No pedestal.

No.	External dimensions	Order No.	Price
Α	Ø 80 x 135 mm hoch	318887	27,90
В	Ø 119 x 200 mm hoch	325265	29,90
С	Ø 142 x 260 mm hoch	237568	35,90



Acrylic glass dome with hooks.

Inside Ø 68 mm, inside height from hooks to base 88 mm. With black, grained plastic base. Overall height 12.5 cm. Without pocket watch!

114058 22,50

LCD hour glass plates of plastic. All dimensions are approximate data.

External dimensions	Thickness	Order No.	Price
100 x 100 mm	0,9 mm	7098004	5,60
42 x 42 mm	0,9 mm	310178	2,80
100 x 100 mm	1,0 mm	7098002	5,60
42 x 42 mm	1,0 mm	7098001	2,80
100 x 100 mm	1,2 mm	7098103	5,60
42 x 42 mm	1,2 mm	7098005	2,80
100 x 100 mm	2,0 mm	118359	5,60
42 x 42 mm	2,0 mm	203874	2,80



Mr Town Talk Cleaning cloth for clocks

Ultrafine, super-soft microfibre cloths to gently clean clock glass, clock cases etc. Washable up to 40° with absolutely no chemicals.

Size: 180 x 180 mm.

321888

5,99

You can find out more about Mr Town Talk on pages 88 - 89!

CLOCK SHIELDS



Flower-decorated clock shield Time track slightly raised.

Dim. appr. mm Length of hand Order No. Price 20 x 27,5 x 1 65–75 mm **335137 59,90**



Blossom-decorated clock shield Time track slightly raised.

Dim. appr. mm Length of hand Order No. Price 20 x 27,5 x 1 65–80 mm **335135 59,90**



Freiburg Cathedral clock shield Font slightly convex, with zodiac signs

 Ø
 Length of hand
 Order No. Price

 20 mm
 65–80 mm
 335136
 42,00

Clock shields - the original article from the Black Forest. The hand-made, elaborately crafted shields have been delivered to clock factories since 1922. The clock shields are turned from solid wood, decorated according to historical examples, protectively lacquered and given an antique finish. The fitting with chain movements Q or I (except fig. 2) is particularly stylish. The CK, CP, CS, CT, EP, FP and FW battery pendulum movements are outstandingly suitable. Central hole Ø 10.2mm, shield thickness at central hole approx. 5mm.



Flower-decorated clock shield.

Time track slightly raised.

 Dim. approx. mm
 Length of hand
 Order No.
 Price

 25 x 34,5 x 1
 90-102
 335126
 78,00



Clock shield with clock bearers with typical Black Forest scenes.

with typical Black Forest scenes. Time track slightly raised.

Dim. approx. mm	Length hand	^{of} Order No.	Price
12,5 x 17 x 0,7	44-55	335129	35,90
20 x 27,5 x 1	70-88	335130	59,90



Clock shield farmer with plough Time track slightly raised.

 Dim. approx. mm
 Length of Order No. land
 Price

 20 x 27,5 x 1
 72-80
 335132
 59,90



Flower-decorated clock shield.

Time track slightly raised. Approx. 12.5 x 17 x 0.7 cm. Recommended hand lengths 40-46 mm.

335128 35,90



Flower-decorated clock shield.

Time track slightly raised.

Dim. appr. mm Length of hand Order No. Price 20 x 27,5 x 1 65–76 mm **335127 59,90**



Clock shield with decorative gentians Time track slightly raised.

 Dim. appr. mm
 Length of hand
 Order No.
 Price

 25 x 34,5 x 1
 90-102 mm
 335131
 78,00



Clock shield with decorative thistles Time track slightly raised.

Dim. appr. mm Length of hand Order No. Price 25 x 34,5 x 1 80–100 mm **335133 78,00**

CLOCK GLASSES

Large clock glasses mineral, flat All dimensions are approximate data.

Outer Ø mm	Order No.	€/Pcs
40,00	233161	22,50
45,00	240921	22,50
46,00	236411	22,50
47,00	223483	22,50
48,00	206771	22,50
49,00	219432	22,50
51,00	208538	22,50
52,00	118222	22,50
53,00	206133	22,50
55,00	202066	22,50
56,00	218787	22,50
57,00	207320	22,50
58,00	206166	22,50
59,00	211308	22,50
60,00	203327	22,50
61,00	238770	22,50
62,00	201522	22,50
64,00	222314	22,50
65,00	200784	22,50
66,00	217624	22,50
67,00	230346	22,50
68,00	235128	22,50
69,00	211250	22,50
70,00	7083009	22,50
71,00	235138	22,50
72,00	214912	22,50
73,00	212589	22,50
74,00	235139	22,50
75,00	7083010	22,50
76,00	200217	22,50

Outer Ø mm	Order No.	€/Pcs
77,00	232588	22,50
78,00	229142	22,50
79,00	235140	22,50
80,00	212940	22,50
81,00	207820	22,50
82,00	203945	22,50
85,00	214823	22,50
86,00	7083018	22,50
87,00	210081	22,50
88,00	7083019	22,50
89,00	7083020	22,50
90,00	208003	22,50
91,00	201748	22,50
92,00	210169	22,50
93,00	321918	22,50
94,00	210568	22,50
96,00	200405	22,50
97,00	206034	22,50
99,00	7083015	22,50
100,00	7083005	22,50
102,00	215502	22,50
104,00	209427	22,50
114,00	7083008	22,50
115,00	207862	22,50
116,00	217858	22,50
117,00	204944	22,50
121,00	222248	22,50
122,00	229701	22,50
123,00	205180	22,50
125,00	211566	22,50

Outer Ø mm	Order No.	€/Pcs
126,00	217641	22,50
128,00	216490	22,50
132,00	219557	22,50
133,00	218182	22,50
139,00	310557	22,50
144,00	211834	22,50
145,00	216683	22,50
146,00	220772	22,50
147,00	118376	22,50
150,00	201282	22,50
153,00	246310	22,50
155,00	303641	22,50
157,00	223519	22,50
159,00	239270	22,50
160,00	201518	22,50
162,00	320649	22,50
164,00	237229	22,50
165,00	208807	22,50
167,00	204272	22,50
168,00	207174	22,50
169,00	208152	22,50
170,00	220751	22,50
172,00	211664	22,50
175,00	236159	22,50
177,00	317670	22,50
178,00	308087	22,50
179,00	229449	22,50
182,00	242203	22,50
185,00	205404	22,50
188,00	204426	22,50

Outer Ø mm	Order No.	€/Pcs
189,00	230966	22,50
198,00	211900	22,50
202,00	232911	22,50
206,00	228609	22,50
207,00	214926	22,50
208,00	202162	22,50
211,00	319422	22,50
212,00	321806	22,50
215,00	200662	22,50
218,00	223484	22,50
229,00	247078	22,50
230,00	202593	22,50
232,00	225689	22,50
233,00	209862	22,50
235,00	118629	22,50
240,00	213291	22,50
242,00	205752	22,50
247,00	234252	22,50
248,00	241238	22,50
254,00	207936	22,50
260,00	217692	22,50
266,00	219783	22,50
268,00	242582	22,50
270,00	215131	22,50
273,00	310149	22,50
275,00	241223	22,50
280,00	234752	22,50
285,00	211373	22,50
288,00	248510	22,50
305,00	229555	22,50

Clock glasses

Large clock glasses mineral, convex.

All dimensions are approximate data.

		1	
Ext. dim. mm	Light Height mm	Order No.	€/Pcs
41,00	5,00	218721	7,30
43,00	5,00	230131	7,30
46,00	5,00	233432	7,30
47,00	5,00	246096	7,30
48,00	5,00	220006	7,30
50,00	5,00	7082072	7,30
51,00	5,00	207591	7,30
52,00	5,00	205297	7,30
53,00	5,00	202272	7,30
54,00	5,00	212740	7,30
55,00	5,00	210841	7,30
56,00	5,00	210840	7,30
57,00	5,00	214336	7,30
58,00	5,00	205695	7,30
59,00	5,00	225092	7,30
60,00	5,00	200650	7,30
61,00	5,00	214965	7,30
62,00	5,00	215636	7,30
63,00	5,00	204436	7,30
64,00	5,00	215637	7,30
66,00	6,00	237166	7,30
67,00	6,00	215271	7,30
68,00	6,00	200432	7,30
69,00	6,00	200433	7,30

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
70,00	6,00	335109	7,30
71,00	6,00	207085	7,30
72,00	6,00	212281	7,30
73,00	6,00	205318	7,30
74,00	6,00	202687	7,30
75,00	6,00	7082056	7,30
76,50	6,00	335097	7,30
77,00	7,00	206619	7,30
78,00	7,00	212443	7,30
79,00	7,00	213574	7,30
80,00	7,00	335110	7,30
81,00	7,00	235184	8,90
82,00	7,00	204582	8,90
83,00	7,00	203800	8,90
84,00	7,00	213254	8,90
86,00	7,00	204355	8,90
88,00	8,00	208428	8,90
89,00	8,00	220996	8,90
90,00	8,00	335111	8,90
91,00	8,00	207996	8,90
92,00	8,00	7082042	8,90
93,00	8,00	220070	8,90
94,00	8,00	7082073	8,90
95,00	8,00	7082051	8,90

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
96,00	8,00	213314	8,90
97,00	8,00	335098	8,90
98,00	8,00	203738	8,90
99,00	8,00	7082071	8,90
100,00	8,00	335099	8,90
101,00	8,00	226135	8,90
102,00	8,00	7082068	8,90
103,00	8,00	221649	8,90
104,00	8,00	7082029	8,90
106,00	9,00	7082022	8,90
108,00	9,00	7082012	8,90
110,00	9,00	335112	8,90
111,00	9,00	249531	8,90
112,00	9,00	7082054	8,90
113,00	9,00	7082023	8,90
114,00	9,00	7082045	8,90
116,00	9,00	7082062	8,90
117,00	9,00	206896	8,90
118,00	9,00	335100	8,90
119,00	9,00	200223	8,90
120,00	9,00	335113	8,90
122,00	9,00	203799	12,50
124,00	9,00	7082005	12,50
126,00	9,00	7082004	12,50

CLOCK GLASSES

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
128,00	10,00	335101	12,50
130,00	10,00	335114	12,50
132,00	10,00	7082030	12,50
134,00	10,00	7082034	12,50
136,00	11,00	7082031	12,50
138,00	11,00	7082039	12,50
140,00	11,00	335115	12,50
142,00	11,00	201429	12,50
144,00	11,00	208440	12,50
146,00	11,00	7082048	12,50
148,00	11,00	7082066	12,50
150,00	11,00	335102	12,50
152,00	11,00	7082024	12,50
154,00	11,00	7082025	12,50
156,50	11,00	335103	12,50
158,00	11,00	221537	12,50
160,00	11,00	335116	12,50
162,00	11,00	7082041	19,20
164,00	11,00	7082017	19,20
166,00	12,00	7082019	19,20
168,00	12,00	7082008	19,20
169,00	12,00	334288	19,20

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
170,00	12,00	335117	19,20
172,00	12,00	7082003	19,20
174,00	12,00	7082002	19,20
176,00	12,00	7082013	19,20
177,00	12,00	335104	19,20
178,00	12,00	7082020	19,20
180,00	13,00	335118	19,20
182,00	13,00	204422	19,20
184,00	13,00	7082006	19,20
185,00	13,00	335105	19,20
186,00	13,00	7082046	19,20
188,00	13,00	210327	19,20
190,00	14,00	335119	19,20
192,00	14,00	7082052	19,20
194,00	14,00	7082001	19,20
196,00	14,00	7082026	19,20
198,00	14,00	335106	19,20
200,00	15,00	335120	19,20
205,00	15,00	209810	28,50
210,00	16,00	335121	28,50
215,00	17,00	7082015	28,50
220,00	18,00	335122	28,50

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
225,00	18,00	7082069	28,50
230,00	18,00	200263	28,50
235,00	18,00	207826	28,50
240,00	19,00	213206	28,50
245,00	18,00	335107	28,50
250,00	19,00	7082044	28,50
255,00	19,00	7082060	39,90
265,00	20,00	203632	39,90
270,00	20,00	335123	39,90
275,00	20,00	201718	39,90
280,00	21,00	335124	39,90
285,00	21,00	7082064	39,90
290,00	21,00	335108	39,90
295,00	21,00	205805	39,90
300,00	22,00	7082050	39,90
305,00	22,00	7082038	41,60
310,00	22,00	335125	41,60
315,00	22,00	7082057	41,60
320,00	23,00	203185	41,60
325,00	23,00	213665	41,60
330,00	24,00	220238	41,60

Large clock glasses plastic, convex

All dimensions are approximate data.

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
50,50	4,00	7077004	4,70
51,00	4,00	7077008	4,70
51,50	4,00	7077010	4,70
52,00	4,00	7077001	4,70
52,50	4,00	207770	4,70
53,00	4,00	7077002	4,70
53,50	4,00	217485	4,70
54,00	4,00	7077009	4,70
54,50	4,00	217447	4,70
55,00	4,00	7077006	4,70
55,50	4,00	7077016	4,70
56,00	4,00	7077003	4,70
56,50	4,00	205848	4,70
57,00	4,00	249008	4,70
57,50	4,00	208470	4,70
58,50	4,00	213263	4,70
59,00	4,00	211374	4,70
60,00	4,00	7077017	4,70
60,50	4,00	201384	4,70
61.00	4.00	208482	4.70

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
61,50	4,00	307376	4,70
62,00	4,00	233519	4,70
62,50	4,50	242722	4,70
63,00	4,50	238756	4,70
64,00	4,50	214258	4,70
64,50	4,50	311187	4,70
66,00	4,50	207416	4,70
66,50	4,50	212195	4,70
68,00	4,50	210970	4,70
69,00	4,50	318258	4,70
70,00	4,50	201701	4,70
77,00	5,00	236423	4,70
78,00	5,00	200311	4,70
84,00	5,50	7077012	5,20
85,00	5,50	230881	5,20
86,00	5,50	217050	5,20
90,00	7,00	218037	5,20
91,00	7,00	210809	5,20
92,00	7,00	238017	5,20
93,00	7,00	211861	5,20

Ext. dim. mm	Light Height mm	Order No.	€/Pcs
95,00	7,00	7077014	5,20
96,00	7,00	238245	5,20
97,00	7,00	210219	5,20
98,00	7,00	217479	5,20
99,00	7,00	7077013	5,20
100,00	7,50	7077011	5,20
105,00	7,50	302704	5,20
106,00	7,50	211018	5,20
107,00	8,00	235859	5,20
111,00	8,50	236229	5,20
116,00	8,50	233380	5,20
117,00	8,50	242560	5,20
119,00	8,50	240964	5,20
120,00	9,50	212863	5,20
127,50	11,00	7077007	7,50
147,50	11,50	238725	7,50
157,50	12,00	232482	7,50
177,50	13,00	7077015	7,50



10,90



2K Clock glass adhesive

Due to its low viscosity, it is particularly suitable for stably glueing clock glasses of all types, fashion jewellery, untreated gems etc. Its good flow characteristics make it recommendable for application to level surfaces and in closed recesses. Leaves no white film, dries glassily clear, resists chemicals

Contents: 100G resin C and 40g hardener V20L.

323614 24,95

Selection of most commonly used small clock glasses

Installation without special machine (just stick - and finished!) Suitable adhesives can be found on page 35



Type M: Round glass, plastic

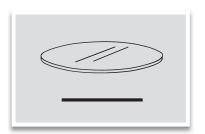
	Slightly d	omed	
	Pre-no.	Sizes	€ / item
	7023	164 - 380*	6.90
	7023	382 - 500*	7.90

^{*} in 1/10 downgrading 220, 221, 222 etc. in store

Type MDM: Mineral round glass

	Slightly domes		
	1.1 1.2 mm thick		
	Pre-no.	Sizes	€ / item
	7057	180380	8.10
	The sizes 385 Can be found u	5 - 415 ■ nder www.selva.de	8.10

 $^{^{\}star}$ in 1/10 downgrading 220, 221, 222 etc. in store



Type YFO: Imitation mineral glass

Flat, colourless		
 1.0 1.2 mm thick		
Pre-no.	Sizes	€ / item
 7027	140 - 350*	6.90

^{*} in 1/10 downgrading 220, 221, 222 etc. in store

Type MS: Mineral round glass

Flat, colourless		
1.0 1.1 mm thick		
Pre-no.	Sizes	€ / item
7051	130 - 350*	3.10
7051	351 - 460*	4.10

^{*} in 1/10 downgrading 220, 221, 222 etc. in store



IMPORTANT

Small clock glasses are measured in 1/10mm steps, e.g. M380 = 38.0 mm

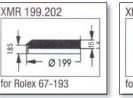


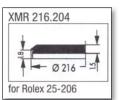
When you order, please complement the pre-no. by the desired Ø, e.g. Type M with a Ø of 38.0 mm = 7023380

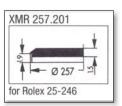
Structurally identical glasses for Rolex* manufactured in Germany.

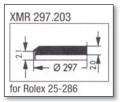
Mineral glass / sapphire glass

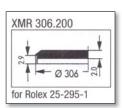


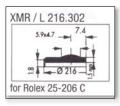












44,50

66,50

7071199

7072257

44,50

7071216

7071257 35,50

44,50

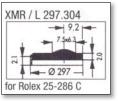
35,50

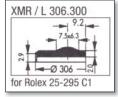
35,50

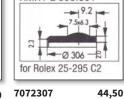
7071306

7072216 Sapphire XSR/L

for Rolex 25-246 C







7072306 44,50 7072307 Sapphire XSR/L Sapphire XSR/L 303341 302099 66,50

7072297

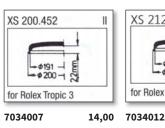
66,50

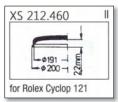
[■] in 5/10 downgrading 400, 405, 410 etc. in store

Structurally identical glasses for Rolex* manufactured in Germany.

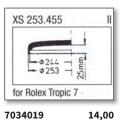


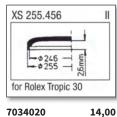


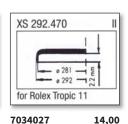




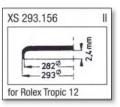
14,00











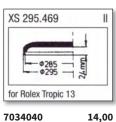
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7034013

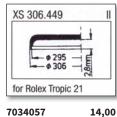
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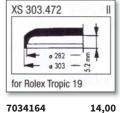
7034047

7034058











236001 14.00

Stülpglas plastic with magnifying glass

7034014

7034030

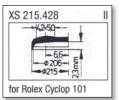
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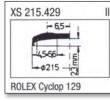
14,00

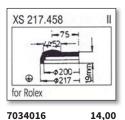
14,00

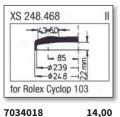
14,00

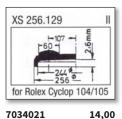
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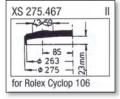








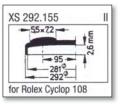


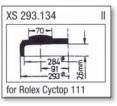


14,00

14,00

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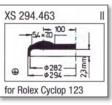


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14,00

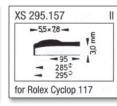
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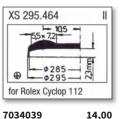
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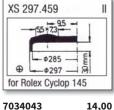


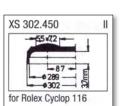
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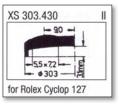
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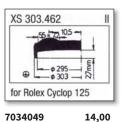


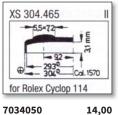










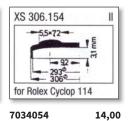


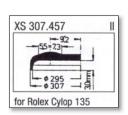
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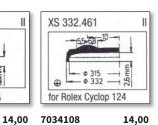


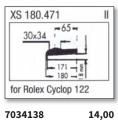
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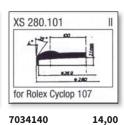
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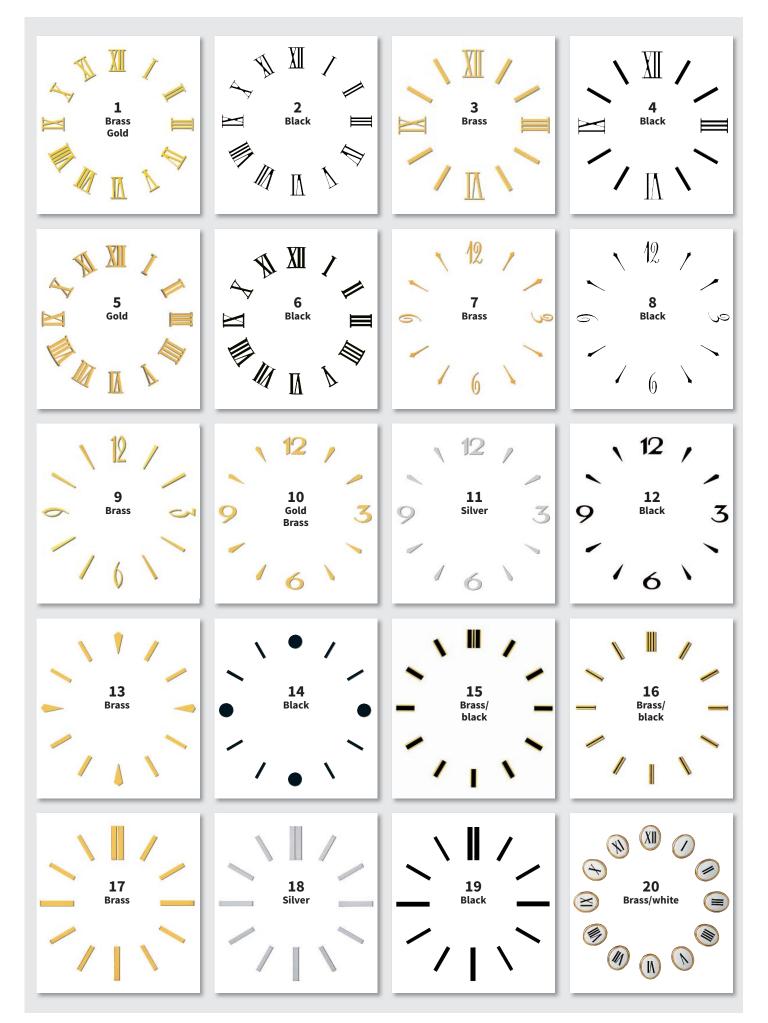




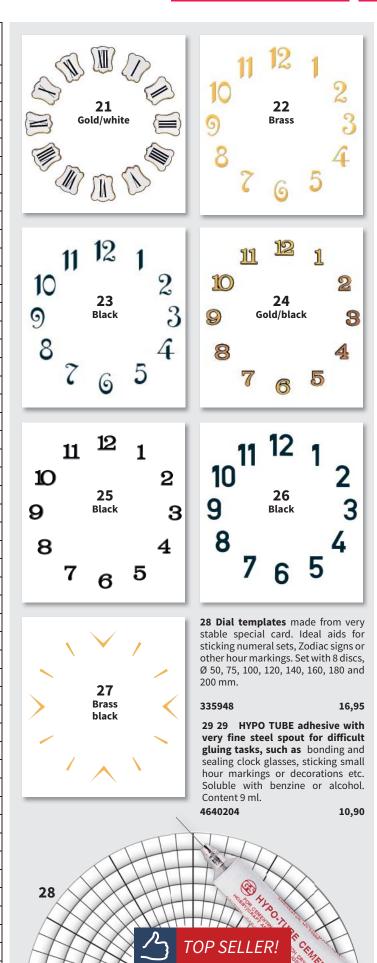








III.	Color/ surface treat- ment	Size mm	Material	Mat. Thick- ness mm	Min. outer Ø	Order No.	€
1.	Brushed brass	10	Brass	0,5	55	246780	16,50
1.	Brushed brass	12	Brass	0,5	60	334444	18,90
1.	Brushed brass	15	Brass	0,5	95	334445	23,90
1.	Brushed brass	20	Brass	0,5	120	334446	18,80
1.	Brushed brass	25	Brass	0,5	140	334447	19,90
1.*	Gold	20	Plastic	0,3	120	334482	9,90
2.	Black lacquered	10	Brass	0,5	55	323666	18,90
2.	Black lacquered	15	Brass	0,5	95	334448	18,90
2.	Black lacquered	20	Brass	0,5	120	334449	18,90
2.*	Black	20	Plastic	0,3	120	334481	9,95
3.	Polished Brass	25	Brass	0,5	140	334450	20,90
3.	Polished Brass	40	Brass	0,5	170	334453	22,50
4.	Black lacquered	15	Brass	0,5	90	334451	19,90
4.	Black lacquered	20	Brass	0,5	120	334452	21,90
4.	Black lacquered	40	Brass	0,5	170	334454	22,50
5.	Gold	18	Plastic	2	70	217244	7,90
5.	Gold	30	Plastic	2	140	334485	9,40
6.	Black	18	Plastic	2	70	334484	7,50
6.	Black	30	Plastic	2	140	328436	8,20
7.	Brushed brass	20	Brass	0,5	70	334455	19,90
8.	Black lacquered	20	Brass	1	70	334456	16,20
8.	Black lacquered	25	Brass	0,5	100	334457	24,90
9.	Brushed brass	18	Brass	0,5	100	334458	24,90
10.*	Gold	10	Plastic	0,3	60	334479	11,50
10.*	Gold	15	Plastic	0,3	75	334480	10,95
10.	Polished Brass	12	Brass	0,5	60	203860	22,50
10.	Brushed brass	15	Brass	0,5	75	331259	24,90
11.	Silber lacquered	12	Aluminum	0,5	60	248079	16,50
12.	Black lacquered	12	Brass	0,5	60	334459	16,50
12.	Black lacquered	15	Brass	0,5	75	222380	16,50
13.	Polished Brass	12	Brass	0,6	55	334460	16,50
13.	Polished Brass	15	Brass	0,6	70	334461	16,50
13.	Polished Brass	20	Brass	1	80	334462	16,50
13.	Polished Brass	25	Brass	1	100	334463	16,50
14.	Black lacquered	Ø 12	Brass	0,5	100	334464	24,90
15.	Brass black	6 x 15	Brass	0,5	90	334465	13,50
16.	Brass black	4 x 17	Brass	0,5	80	334466	13,50
17.	Polished Brass	4 x 27/5	Brass	0,5	110	334467	18,50
18.	Silver lacquered	x 33 4 x 27/5 x 33	Aluminum	0,5	110	334469	18,50
19.	Black lacquered	4 x 27/5 x 33	Brass	0,5	110	334468	18,50
20.	Brass white	21 x 25	Zamak/Alu	3,5	120	334478	31,90
21.	Gold/White	24 x 27	Plastic	2,5	150	334483	39,90
22.	Brushed brass	20	Brass	0,5	120	234693	24,90
23.	Black lacquered	10	Brass	0,5	55	334471	24,90
23.	Black lacquered	15	Brass	0,5	95	334472	24,90
23.	Black lacquered	20	Brass	0,5	120	334473	24,90
24.	Gold/Black	18	Plastic	2,2	120	334486	7,95
25.	Black	18	Plastic	2,2	120	334477	5,90
25. 26.	Black lacquered	20	Brass	1	120	334474	16,50
26.	Black lacquered	25	Brass	0,5	140		16,50
	Polished Brass		1			331607	
27. 27		20	Brass	0.5	160	334476	24,90
27.	Black lacquered	20	Brass	0,5	160	334475	16,50

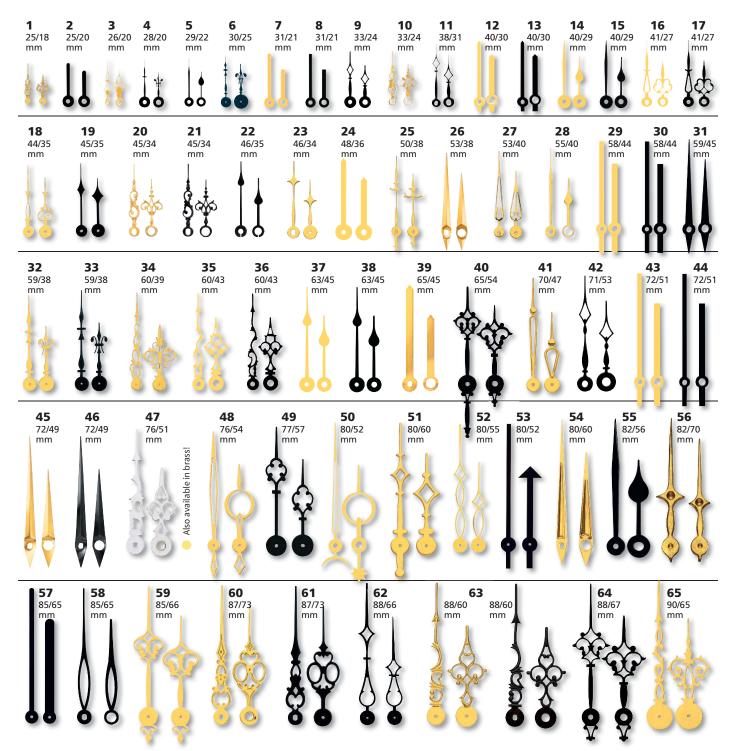


HANDS



TIPS for selection and installation

- *All hand pairs on one page are shown in the same scale. The length (minute/hour hand) is in each case measured from the centre of the hole to the tip of the hand.
- The hand length should preferably be selected so that the top of the minute hand barely reaches the outside Ø of the numeral ring. If no pair of hands with the right size is shown, choose a somewhat longer model, which you can then shorten accordingly.
- During installation, it is very important to push the hour hand fully onto the hour pinion of the clock movement (see sketch on page 43). This will ensure that the minute hand does not come into contact with the hour hand. This applies particularly to hands with compensating weights.
- The hand pinions and shafts of our clock movements as well as the bushings of our hands are machined to precise tolerances. Occasionally, however, minor fitting difficulties may arise. Please never press on a hand with force. Bushes that are too narrow can be enlarged with a conical reamer (see page 73) or a fine round file, bushes that are too wide can be compressed carefully to some degree with a flat pair of pliers.
- For very heavy hands e. g. steel or brass hands with a length of more than approx. 110 mm we recommend installing SELVA FT, GK and WK battery clock movements with particularly high torque, as well as G synchronous clock movements.
- SELVA spring, chain and rope movements can be equipped with all hands shown in the corresponding column.
- Hands can be easily recoated with the hand lacquers shown on page 46.
- A seconds hand is included in the price of most SELVA Battery movements. Special lengths and colours are on page 46.
- The rectangular bushings of the match pairs in Column 3 (pages 41/43) are riveted so that they can turn, so that the strikes of the mechanical striking movements can be synchronised with the time display (see sketch on page 43). Precise instructions accompany the clock movements in each case.
- **Special steel pendulum hands** are shown on p. 42, pocket watch hands are shown on p. 46.





III.

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The bushing for the hands must match your clock movement. You should therefore always quote the order no. from the table - not the illustration no.! Hands for movements from other manufacturers can be delivered only if the bushing or hole dimensions correspond with the information in the footer of this table.

Length mm Min/Std.

25/18

25/20

26/20

28/20

29/22

30/25

31/21

31/21

33/24

33/24

38/31

40/30

40/30

40/29

40/29

41/27

41/27

44/35

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77/57

80/52

80/60

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82/56

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85/65

85/65

85/66

87/73

87/73

88/66

88/60

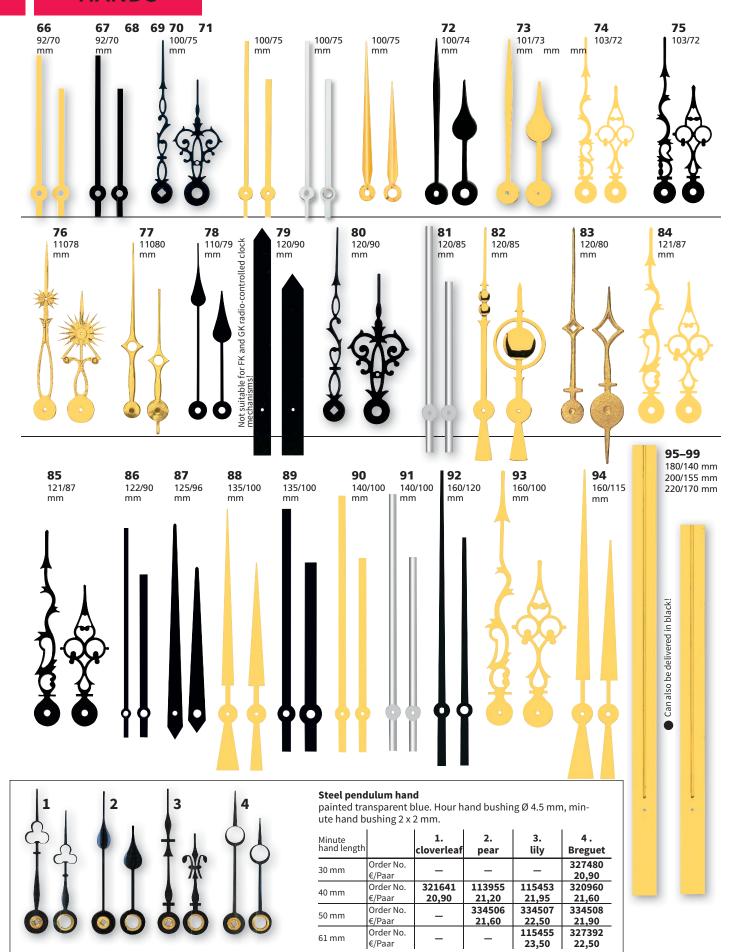
88/60

88/67

90/65

t match your clock				Zoigor ga	buchet fü	E CEIVA I	Ibruarka			
ore always quote the	Spalte	1	Spal			lte 3	Uhrwerke Spalt	o 4	Spalte 5	
the illustration no.! er manufacturers can be	AS, CK, CP		Spai	ite 2	·		Spatt	-	Ungebuchste	
hole dimensions corre-	CT, CX, EP, F	D, FL,	FK, FP,	FT, FW,	AF, BF, C FS, GG,	r, FF, FG, I, IF, KF,			Pointer couples Pointer eye onl	s: v
he footer of this table.	G, JS, MS, RG, TP, WB		GK, W			, MF, Q,	MQI	M	grained or with centering ho	ole
	WK, WX,				SG, SF	(U, SU			Provided	
Material/surface treatment	Order No.	€/set	Order No.	€/set	Order No.	€/set	Order No.	€/set	Order No. €/s	set
Brass, punched, domed							233297 327466	12,20		
Aluminum, lacquered Aluminum, anodized, polished							329225	6,40 5,95		
Aluminum, lacquered	335017	8,50					326435	7,40		
Aluminum, lacquered							319182	5,80		
Brass, lacquered	335048	3,30					225472			
Aluminum, anodized, polished Aluminum, lacquered							325172 326972	5,95 5,80		
Aluminum, lacquered	325893	5,90	335089	6,30			020012	2,20		
Aluminum, anodized, polished							334949	7,95		
Aluminum, lacquered	330602	4,20	225050	6.50						
Aluminum, anodized, polished Aluminum, lacquered	115497 335018	5,80 4,30	335059 335060	6,50 4,95			334950	4,60		
Aluminum, anodized, polished	332403	5,80	335061	6,40	335165	6,95	334951	6,30		
Aluminum, lacquered	306293	4,30	329942	4,95	335166	5,30	325136	4,60		
Aluminum, anodized, polished	331121	5,60								
Aluminum, lacquered Aluminum, anodized, polished	329941 335044	5,70 5,60								
Aluminum, lacquered	326436	4,30	327964	4,95						
Aluminum, anodized, polished	335019	7,60	335062	8,30						_
Steel, lacquered	203696	5,60	335063	5,20	328160	6,75				
Steel, lacquered Brass, polished	306294 335051	6,20 10,60								
Aluminum, anodized, polished	306296	5,70	335064	6,40						
Brass, polished	227012	5,60		,						
Brass, polished	335020	5,95	335065	6,80	335167	7,20				
Brass, polished	335045	5,95								
Brass, polished Aluminum, anodized, polished	335052 335021	11,95 5,95	335066	6,75						
Aluminum, lacquered	335022	4,40	335067	4,95						
Aluminum, lacquered	326063	4,40	335068	4,95	335168	5,40				
Brass, etched	335049	16,40			225402	12.60				
Brass, etched, lacquered Brass, milled	324590 324765	15,90 12,50			335183	13,60				
Aluminum, anodized, polished	335023	5,95	335069	6,75	335169	7,20				
Aluminum, lacquered	328667	4,40	335070	4,95	331603	5,40				
Aluminum, anodized, polished	335024	5,95	335071	7,95		8,50				
Aluminum, lacquered Brass, polished	306295 330603	6,75 13,60	329596	7,60	215309	7,50				
Aluminum, lacquered	331198	7,20	335072	8,60	335171	7,90				
Brass, polished	335046	14,20		·						
Aluminum, lacquered	335025	4,40	335073	5,20	335172	5,50				-
Aluminum, anodized, polished Aluminum, lacquered	229979 327405	6,30 4,40	331596 335074	6,95 5,20				ı f.	no order no.	
Aluminum, anodized, polished	329349	6,30	335075		335173	7,50			shown, the	
Aluminum, lacquered	330520	4,40	335076	5,20	335174	5,50			nds in the	Ε
Aluminum, polished	335047	11,60						ective b elivered	ushing cannot เ	
Brass, polished, lacquered Brass, polished	214612 221849	12,30 6,30	335091	11,40			De d	cuvered		
Aluminum, lacquered	335041	6,90								
Aluminum, anodized, polished	335026	7,20	335077	7,75	335175	8,20				
Brass, milled	335040	21,90								
Brass, polished Aluminum, lacquered	331715 330994	12,50 6,70	335087	7.05						
Brass, punched, embossed	328256	14,20	333081	7,95						
Aluminum, lacquered	215286	4,75	335078	5,30						
Rotguss, brushed									335409 23,	95
Aluminum, lacquered	329325	6,60								
Aluminum, lacquered Brass, polished	335042	6,70			227776	14,20				
Brass, embossed, polished	335053	14,60				,				
Alu., embossed, lacquered	335050	8,95								
Aluminum, lacquered	330644	6,70	225070	0.00	225170	0.05				
Aluminum, anodized, polished Aluminum, lacquered	335027 325971	7,20 7,40	335079 335080	9,60 7,95	335176 335177	9,95 7,95				
Aluminum, lacquered	335028	4,75		.,55	335178	5,75				
Brass, milled	335039	16,90				•				

HANDS





5 Square profile spindle

with plastic handle Ideal for turning minute hand bushing to align the hand exactly to the half-hourly or hourly strike. Square 1.5 - 5.5 mm, approx. 18.5 cm long

227777

7,50

IMPORTANT

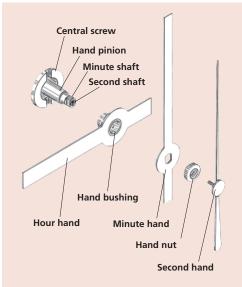
The bushing for the hands must match your clock movement. You should therefore always quote the order no. from the table - not the illustration no.!

		Z	eiger ge	buchst für	SELVA-I	Jhrwerke	
	Spalte 1	Spalt	e 2	Spalte	e 3	Spalt	e 4
AS, CK, CP, CS, CT, CX, EP, FD, FL G, JS, MS, NH, RG, TP, WB, WD, WK, WX, WZ		FK, FP, F GK, WF		AF, BF, CF, FS, GG, I, KSU, LF, I SG, SKU	IF, KF, MF, Q,	Ungebu Pointer co Pointer e graine with cente Provi	ouples: ye only d or ring hole
	Order No. €/set	Order No.	€/set	Order No.	€/set	Order No.	€/set

de	elivered only if th	ne bushing or h formation in th	er manufacturers can be nole dimensions correle footer of this table.	CT, CX, EP, I G, JS, MS, RG, TP, WE WK, WX,	FD, FL, , NH, B, WD,	FK, FP, F GK, WF		AF, BF, CF, FS, GG, I, KSU, LF, I SG, SKU	IF, KF, MF, Q,	Pointer c Pointer c Pointer e graine with cente Provi	ouples: ye only ed or	
Ill.	surface/color	Length mm min/hour	Material/surface	Order No.	€/set	Order No.	€/set	Order No.	€/set	Order No.	€/set	
66	Brass	92/70	Aluminum, anodized, polished	335029	6,95	335081	6,75					
67	Black	92/70	Aluminum, lacquered	331255	6,95	335082	6,95					
68	Black	100/75	Brass, milled, lacquered					327644	14,95			
69	Brass	100/75	Brass, punched	217092	13,20							
70	Silber	100/75	Aluminum, punched	328068	13,60							
71	Brass	100/75	Brass, embossed, polished	335043	13,60							
72	Black	100/74	Aluminum, lacquered	329255	4,90	329795	5,50					
73	Brass	101/73	Brass, embossed, polished	327763	14,50							
74	Brass	103/72	Aluminum, anodized, polished	209945	6,95	335083	7,75	335179	8,20			
75	Black	103/72	Aluminum, lacquered	335030	7,40	335084	7,95	335180	9,30			
76	Brass	110/78	Brass, milled, polished							231942	28,50	
77	Brass	110/80	Brassguss, polished							335410	35,50	
78	Black	110/79	Aluminum, lacquered	327406	7,40			335181	7,90			
79	Black	120/90	Aluminum, lacquered	330982	13,40	335093*	11,30					
80	Black	120/90	Brass, milled, lacquered					335184	15,20			
31	Silber	120/85	Aluminum, domed, polished	334280	15,90	335086	15,90					
82	Brass	120/85	Aluminum, embossed, polished	335038	20,50							
83	Brass	120/80	Brassguss, brushed							118171	31,90	
84	Brass	121/87	Aluminum, anodized, polished	324763	7,60			335182	10,50			
85	Black	121/87	Aluminum, lacquered	335031	8,20			327577	8,60			
86	Black	122/90	Aluminum, lacquered	329341	5,40	329563	5,95					
87	Black	125/96	Aluminum, lacquered	328280	5,30			331509	6,40			
88	Brass	135/100	Aluminum, anodized, polished	335037	19,95							
89	Black	135/100	Aluminum, lacquered	327397	5,60							
90	Brass	140/100	Aluminum, anodized, polished	115505	15,50	335092	17,95		['		
91	Silber	140/100	Aluminum, domed, polished	326495	14,95	335085	14,95		٠,		order no.	
92	Black	160/120	Aluminum, lacquered	327407	11,30	334287	10,20				wn, the s in the	
93	Brass	160/100	Aluminum, anodized, polished		16,60		•		resp	nand: ective bush		
94	Brass	160/115	Aluminum, anodized, polished	335036	21,95					elivered!		
95	Brass	180/140	Aluminum, anodized, polished	335032	20,50				1			_ ;
96	Black	180/140	Aluminum, lacquered	328049	9,20	335088	12,60					
97	Brass	200/155	Aluminum, anodized, polished	330825	20,60		-,					
98	Black	200/155	Aluminum, lacquered	330826	11,75							
99	Black	220/170	Aluminum, lacquered	325956	11,90	330304	12,90					
		120,1.0			,_,	-3000	,50					
	nter bushing (ho	ole)	Minute hand:	2,8 x 3,5 mm	1	Ø 3,5 mm		2 x 2 mm**		with center	ing hole	
dim	ensions		Hour Hand:	Ø 5,0 mm		Ø 5,0 mm		Ø 4,5 mm		with center	ing hole	

*Suitable only for FT and WL cloc	:k
mechanisms!	

^{**}Rotatable square bushing



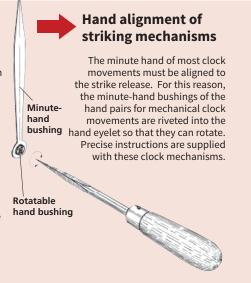


Hand installation

It is particularly important to push the hour hand fully onto the hand pinion of the clock mechanism (see sketch left). This will ensure that the minute hand does not come into contact with the hour hand. This applies particularly to hands with compensating weights.

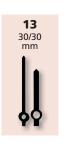
The hand mechanisms and bushings are machined to precise standards and tolerances. Occasionally, however, minor fitting difficulties may arise. Please never use force to press a hand onto its shaft or its pinion.

Hand bushings which are too narrow can be expanded with a conical reamer or a fine round file (see p. 73), bushings which are too wide can be cautiously compressed with flat pliers.







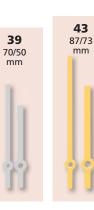
















New hands:

now in further sizes and colours!



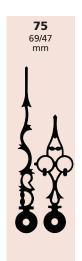








column 1

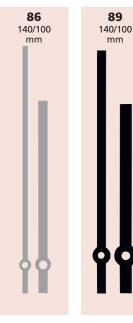


Zeiger gebuchst für SELVA-Uhrwerke

column 2



column 3





IMPORTANT

The bushing for the hands must match your clock movement. You should therefore always quote the order no. from the table - not the illustration no.! Hands for movements from other manufacturers can be delivered only if the bushing or hole dimensions corre-

	er no. from the ta	column 1		column 2		column 3			
deli	nds for movements vered only if the b nd with the inform	AS, CK, CP, CS, CT, CX, EP, FD, FL, G, JS, MS, NH, RG, TP, WB, WD, WK, WX, WZ		FK, FP, FT, FW, GK, WF, WL		AF, BF, CF, FF, FG, FS, GG, I, IF, KF, KSU, LF, MF, Q, SG, SKU, SU			
Ill.	surface/Color	Length mm Min./ Std.	Material/surface treatment	Order No.	€/set	Order No.	€/set	Order No.	€/set
4	Black	45/35	Aluminum, matt	230285	8,50				
7	Silver	30/21	Aluminum	220411	6,20				
13	Black	30/30	Aluminum	219863	4,30				
17	Black	41/27	Brass, lacquered					202957	6,95
21	Black	35/24	Brass, lacquered	118026	4,20				
25	Brass	35/24	Brass, polished	217332	4,20				
28	Brass	85/63	Brass, polished	243141	11,95				
39	Silver	70/50	Aluminum, polished	209330	14,20				
43	Yellow	80/51	Aluminum	118549	6,70				
43	Chromium (w.Ill.)	87/73	Aluminum	212691	9,95				
55	Black	55/40	Brass, lacquered	229649	5,30				
63	Black	76/51	Brass, lacquered	115294	6,90				
64	Blue	70/47	Steel, matt					214866	8,20
67	Black	105/75	Aluminum, lacquered, matt	213527	6,95				
70	White	65/45	Plastic	208791	3,95				
71	Black	90/69	Aluminum, lacquered, matt	231424	13,60				
71	Brass	90/69	Brass, polished	223719	13,60				
75	Black	69/47	Aluminum, lacquered, matt			201406	6,95		
81	Silver	47/35	Aluminum, polished	209331	6,30				
85	Black	105/75	Aluminum, lacquered, matt	221403	7,60				
86	Silver	140/100	Aluminum, polished			115515	6,40		
89	Black	140/100	Aluminum, lacquered, matt			234661	7,60		



Hand sockets for minute hands

Square hole, brass Contents: 10 items/pack

Dimensions	Order No.	Content	€/Pack
1,2 x 1,2	209156	10 Pcs	7,50
2,0 x 2,0	238395	10 Pcs	7,50
2,2 x 2,2	208711	10 Pcs	7,50
1,0 x 1,4	239305	10 Pcs	7,50
1,3 x 2,0	239306	10 Pcs	7,50
2,0 x 3,0	303048	10 Pcs	7,50
2,4 x 3,5	217455	10 Pcs	7,50
2,9 x 3,5	225413	10 Pcs	7,50



Hour-hand sockets for mech. clocks

Brass Contents: 10 items/pack

Hole-Ø	Order No.	Content	€/Pack
2,30	209157	10 Pcs	8,50
2,80	220554	10 Pcs	8,50
3,50	227479	10 Pcs	8,50
3,70	208938	10 Pcs	8,50
4,00	204663	10 Pcs	8,50
4,20	218700	10 Pcs	8,50
4,50	214281	10 Pcs	8,50
5,00	113945	10 Pcs	8,50
6,00	227905	10 Pcs	8,50





Hand bushings

for wall and table clock movements. Assortment with approx. 58 bushings in different dimensions.

118178 25,20

Anchor







Steel anchorsAssort, 9 different, pre-formed anchor blanks. **223429 26,50**

Matching pendulum hooks: Item 9, page 21.



Hand nuts

Closed version for clock movements AS, CK, CP, CS, CT, CX, EP, FD, FL, WB, WD, WK, WX and WZ. M3.5 x 0.35 mm. 10 units/pack

334649	Brass	2,90
334632	Black	3,20
118111	White	3,50



Hand nuts

Open version for AS, CK, CP, CS, CT, CX, EP, FD, FL, WB, WD, WK, WX and WZ clock movements. M3.5 x 0.35 mm. 10 units/pack

330549	Brass	5,80
334760	Black	5,80
336659	White	5,80





Hand nuts

for cuckoo and Black Forest clocks. Assortment with 25 nuts in different sizes.

118517 12,90





Assortment of hand nuts

for mechanical clock movements. A total of 12 items M2: Brass and nickel-plated.

332312 10,20



Hermle and Junghans hand nuts

	application	measure	content	Order No.	€/Pack
Yellow open	for Hermle 241, 261	2,0 mm	1 Pcs	211534	1,50
Black open	for Hermle 241, 261	2,0 mm	1 Pcs	206796	1,50
Steel open	for Hermle 241, 261	2,0 mm	1 Pcs	215509	1,50
Yellow open	for Junghans 738, 838 (with hole)	3,5 mm	10 Pcs	301823	5,80

Hand discs, domed, for large clock mechanisms. Assortments with circular and square hole, different diameters. Approx. 100 units/pack







334628 Brass

10,95

334629 Black

6,95

HANDS



2 - 14 seconds hands

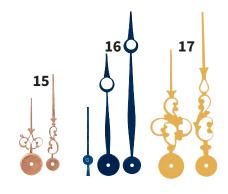
for SELVA battery clock movements Drill hole Ø 0.8 mm. Length from axis of hands to tip (can be shortened).

III.	Color	Length mm	Order No.	€
2	Brass	52	324762	1,70
3	Black	52	330762	2,20
4	Red	52	330763	2,20

Ill.	Color	Length mm	Order No.	€
5	Brass	80	212455	6,50
6	Black	80	335033	6,20
7	White	80	335034	6,20
8	Red	80	335035	6,20
9	Brass	80	324764	2,40

Ill.	Color	Length mm	Order No.	€
10	Black	80	330764	2,40
11	Red	80	330765	2,40
12	Red/Black	100	329342	2,50
13	Brass/Black	100	327281	2,20
14	Black	100	329343	2,20

Hands for small blocks



15 Pocket watch hand, Louis XVI form, red gold plated. Pair 12/9 mm long (can be shortened), with pilot hole.

334574 13,90

16 Pocket watch hand, Breguet form, blue. Pair 20/15 mm long, with pilot hole. Including seconds hand 10 mm long.

334575 26,90

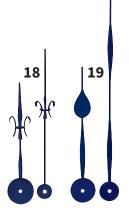
17 Pocket watch hand, Louis XV form, gold-plated. Pair20/15mmlong(canbeshortened), with pilothole.

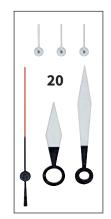
18 Pocketwatch hand, fleur-de-lysform, blue. Pair 20/15 mm long (can be shortened), with pilot hole. 334577

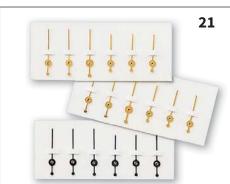
19 Pocket watch hand, pear shape, blue. Pair 25/16 mm long (can be shortened), with pilot hole. 334578

20 Pilot's watch hand set drilled for ETA movement 7750. Includes 1 each 15 mm minute hand, 10 mm hour hand, 15 mm seconds hand and 3 indication hands 3.5 mm long.

334579







21 Seconds hand for pocket watches. Assortment with six hands in two different lengths.

Color	Length mm	for waves-Ø	Order No.	€
Yellowgold	3,5 + 5	0,23/0,24/0,25	327284	14,20
Yellowgold	6+8	0,26/0,28/0,30	334571	14,20
Blue	6+8	0,26/0,28/0,30	327291	14,20



A seconds hand is included in the price for most SELVA battery clocks with a seconds movement and therefore does not need to be ordered separately (see relevant movement description). The listed prices apply to repeat orders as well as special lengths and colours.



Hand lacquer

Hands and sets of figures can be painted with this water-based acrylic paint with no problems. Outstanding coverage and dries in a short time. Existing coats of paints can simply be painted over.

Ill.	Color	Content	Order No.	Price
22	matt black	20 ml	327719	2,95
23	silver metallic	20 ml	327721	3,50
24	gold metallic	20 ml	327722	3,50







2W2 matt black

23 silver metallic 24 gold metallic

49,90









A-D Winding key

for table, wall and longcase clocks

Size	Α	В	С	D
00 □2,00		201371 2,60		
0 □2,25		234912 2,60		
□ 1 2,50		118077 2,60		
□2,75	114069 2,80	206995 2,60		
3 3,00	114070 2,80	204607 2,60		
4 □3,25	114071 3,20	208552 3,20		

Size	Α	В	С	D
5 □3,50	114072 3,20	114084 3,20	334734 10,95	
6 □3,75	114073 3,20	115547 3,20		
7 4,00	114074	115546	223194	334503
	4,50	4,50	10,95	9,95
8	114075	114085	334736	334215
□4,25	4,50	4,50	10,95	9,95
9 □4,50	114076	118533	334737	207241
	4,50	4,50	10,95	9,95
10	114077	212796		334504
□4,75	4,75	4,75		9,95

Size	Α	В	С	D
11 □5,00	114078 4,75	238489 4,75	334614 10,95	327575 9,95
12 □5,25		334640 4,75		334505 9,95
13 □5,50			334739 11,20	
15 □6,00			334740 11,40	





 Star keys

 for pocket watches, nickel-plated.

 □1.00-1.15-1.30-1.50-1.65 mm

 5151158
 6,60

 □1.05-1.20-1.40-1.60-1.75 mm

 5151159
 6,60



 Star keys

 for wall clocks, brass
 □ 3.00-3.50-4.00-4.50-5.00 mm

 114099
 9,90

 □ 3.25-3.75-4.25-4.75-5.25 mm
 114100

 9,90



For travelling clocks, nickel-plated steel With 2 ends:

□3,25 und 1,9 mm	327770	4,20
□3,50 und 1,9 mm	238362	4,20
□4,00 und 1,9 mm	238539	4,20

17,50

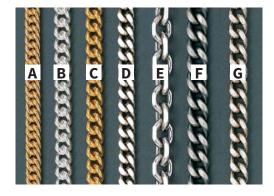
17,50



with turned, nickel-plated shaft and stamped brass handle. 14 keys, sizes 12 to 00, square 0.95 to 2.00 mm.

334612	28,90
Individual pocket watch keys	

Size	4-kant	Order No.	Price
00	2,00	5151144	2,60
0	1,90	5151145	2,60
1	1,80	5151146	2,60
2	1,75	5151147	2,60
3	1,65	5151148	2,60
4	1,60	5151149	2,60
5	1,50	5151150	2,60
6	1,40	5151151	2,60
7	1,30	5151152	2,60
8	1,20	5151153	2,60
9	1,15	5151154	2,60
10	1,05	5151155	2,60
11	1,00	5151156	2,60
12	0,95	5151157	2,60



Pocket watch chainsin different fine finishes and "braided"patterns. All are fitted with snap hooks and spring ring locks. Chains "A–F" are 30 cm, chain "G" 35 cm long.

Ill.	Beschreibung	Finish	Order No.	Price
A B	Doppelpanzer Panzerkette	gilded silver plated	335341 335342	23,90 19,90
C	Panzerkette	gilded	335343	23,20
D	Panzerkette	ground, nickeled	328433	19,80
Ε	Ankerkette	sanded, nickeled	335344	25,90
F	Panzerkette	sanded, an- tique silvered	335345	29,95
G	Panzerkette	sanded, nickel silver	328434	17,60







8 Conical hinge pins.

Øfrom approx. 0.4 to 1.5 mm, lengths from 30 to 40 mm. Assortment with 100 pins.

327573 Brass 18,90 327772 nickel silver 22,90



SMALL PARTS



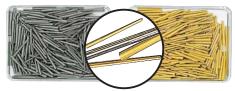
3 Conical cotter pins.

For every 20 steel and brass pins with Ø 0.3/1,27 mm, Ø 0.76/1.65 mm, Ø 1.14/1.91 mm x 25.4 mm lengths, as well as 10 brass pins Ø 1.8/2.6 x 32 mm long. 334818 72,00

Conical cotter pins(no figure).

Assortment of approx. 250 steel pins, \emptyset from 1.2 to 2.3 mm, 15 to 20 mm long.

314754 25,30



3 Conical cotter pins.

Assortments weighing appr. 28 grams. Ø from 0.5 to 1.5 mm, 5 to 12 mm long.

332308 Steel **27,90 332309** Brass **30,90**



Conical cotter pins

Assortment of 12 sizes from Ø 0.30/1.27 to Ø 1.40/1.75 mm. In each case 20 pins/dimensions.

334646 Steel **59,90 334647** Brass **75,90**



Stainless steel pins

for widely varying uses. Assortment with 10 pins, each Ø 0.8-0.9-1.0-1.1-1.2-1.3-1.4-1.5-1.6 and 1.8 mm, in each case 30 mm long.

334510 21,90



Steel wire

to produce small wire springs. Assortment with approx. 100 wires. Ø appr. 0.1–0.35 mm, appr. 26 mm long.

325931 27,90



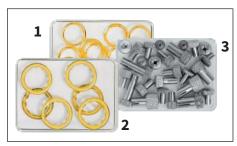
Steel wire, wire Ø 0.3 to 1 mm. Assortment with 8 rings appr. 1 m long.

334258 25,80



10 Gut strings for regulators, wall and longcase clocks with weight winding via rope rollers.

	U		
Ø	Length	Order No.	Price
0,4 mm	1,25 m	201996	4,20
0,5 mm	1,25 m	114048	4,20
0,6 mm	1,25 m	114049	4,20
0,7 mm	1,25 m	114050	4,20
0,8 mm	1,25 m	114051	4,95
0,9 mm	1,25 m	333999	5,95
1,0 mm	3,5 m	114040	14,60
1,2 mm	3,5 m	114041	15,20
1,4 mm	3,5 m	114042	17,20
1,6 mm	3,5 m	114044	18,90
1,8 mm	3,5 m	114045	22,90
2,0 mm	3,5 m	114046	26,20
2,5 mm	3,5 m	114047	34,90



112 ornamental bushingsfor Ø 12 mm winding and central holes in thin dials. Package with 12 bushings.

325263 11,20

2 ornamental bushingsfor Ø 12 mm winding and central holes in thin dials. Package with 6 bushings.

331064 4,95

3 Alarm setting-button assortment.

Nickel-plated setting buttons in different sizes and designs, both with gap and thread. Package with 100 units.

334487 29,50



Square dummies for dial winding holes that become superfluous once a battery movement is installed. Plate Ø 20 mm, square 4 x 4 mm, 12 mm long.

113910 3,95

Decorative bushingsfor winding and central holes in dials. 22 open bushings, outside Ø 9 to 10 mm, various heights. Yellow and burnished.

327154 32,50



Tel.: +358 (05) 413 2888

Assorted springs.

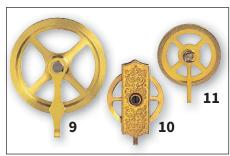
approx. 100 small tension and pressure springs for clock movements, mechanical instruments and apparatus.

334795 35,90



4 - 8 Traction ropes for wall, longcase and Comtoise clocks with weight winding via rope drums.

Ill.	Ø mm	Length	Material	Order No.	Price
4.	2,0	20,0 m	Hanf	334745	11,95
	2,0	4,0 m	Hanf	334682	3,20
5.	2,5	20,0 m	Hanf	326038	13,95
	2,5	4,0 m	Hanf	327963	4,20
	3,0	20,0 m	Hanf	325140	15,20
	3,0	4,0 m	Hanf	334766	4,20
6.	3,0	20,0 m	Polypropylen	327738	12,95
	3,0	4,0 m	Polypropylen	327541	2,60
7.	4,0	20,0 m	Hanf	334744	18,20
	4,0	4,0 m	Hanf	337776	3,90
	4,0	2,0 m	Hanf	327394	2,30
8.	6,0	20,0 m	Hanf	202181	35,90
	6,0	2,0 m	Hanf	307856	3,30



9 - 11 Cable and guide rollers

in solid, turned brass.

	III.	Outer Ø	groove width	Order No.	Price
Ī	9.	45 mm		216522	24,50
	10.	28 mm	1,0 mm	330417	13,60
	11.	25 mm	1,0 mm	226771	19,90



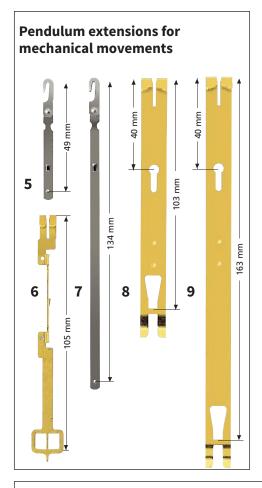
24 Cable and guide rollers of turned solid wood. Brass bushings, steel clip.
Outside Ø appr. 45.5 mm, groove width 5 mm.

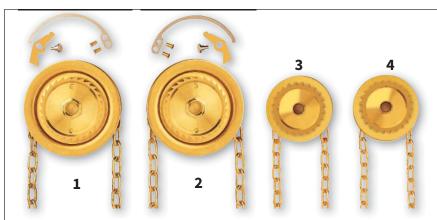
334623 28,90

Guide roller for chains, turned from solid brass. With single part forged clip. Outside Ø 38 mm. Groove width 7.6 mm.

330182 39,90







1 4 Chain wheels for longcase and wall clocks (Fig. 1. -2) or Black Forest clocks (Fig. 3-4), each including matching, brass-plated clock chain.

Ill	l.	Outer Ø	Star-Ø	number of teeth	Ratchet wheel-Ø	Hole-Ø	Aufzug nach	Locking cone set	Order No.	Price
	1.	48,5 mm	43 mm	8	32 mm	6,0 mm	left	included	233007	42,90
:	2.	48,5 mm	43 mm	8	32 mm	6,0 mm	right	included	233009	42,90
	3.	30,0 mm	25 mm	6	25 mm	4,1 mm	left		334815	22,60
	4.	30,0 mm	25 mm	6	25 mm	4,1 mm	right		334816	22,60

5 - 9 Pendulum extensions for longcase and wall clock movements, regulators, cantilever clocks etc.

Ill. Order No. Price 334054 10,60 10,50 5 334753 7 334701 17,90

Ill.	Order No.	Price
8	334709	9,60
9	334710	9,90
		-



Fig.	Pitch mm	Width mm	Wire thickness mm	Total length cm	Order no.	€/item
10	9.60	3.70	0.90	180	325130	5.20
11	10.40	3.60	0.80	180	327762	8.70
12	11.60	4.30	1.05	180	227705	9.70
13	12.20	4.80	1.00	180	323620	10.60
14	12.60	4.60	1.05	200	334661	6.70
15	12.90	4.50	1.20	200	327234	13.60
16	13.00	6.0	1.70	140	328440	17.50

rig.	mm	mm	mm	cm $^{\circ}$	Order 110.	€/Item	
10	9.60	3.70	0.90	180	325130	5.20	
11	10.40	3.60	0.80	180	327762	8.70	
12	11.60	4.30	1.05	180	227705	9.70	
13	12.20	4.80	1.00	180	323620	10.60	
14	12.60	4.60	1.05	200	334661	6.70	
15	12.90	4.50	1.20	200	327234	13.60	
16	13.00	6.0	1.70	140	328440	17.50	
* Material: Brass							

F	ig.	Pitch mm	Width mm	Wire thickness mm	Total length cm	Order no.	€/item
1	7	13.10	6.10	1.70	180	331134	28.40
1	8	13.20	5.50	1.40	180	228468	28.90
1	9	13.60	6.00	1.60	140	329818	17.90
2	0	15.10	4.90	1.20	180	330375	15.90
2	1	16.10	6.60	1.80	170	330770	29.90
2	2	16.30	6.20	1.60	160	326043	19.50
2	3	16.40	6.40	1.80	180	326587	15.20



24 - 2 for la Longo

26 Clock chains arge, English gcase clocks, steel.	of a chain link, chain illustrations in original size!

Fig.	Pitch mm	Width mm	Wire thickness mm	Total length cm	Order no.	€/item
24	14.05	6	1.6	365	312203	29.90
25	17	7	1.8	365	334498	29.50
26	18.4	6.5	1.8	365	331500	27.90

SMALL PARTS



Bezel pins

(small nails), brass-plated iron / brass. Assortment of approx. 50 g.

334648

12,20





Assortment with approx. 200 screws in different sizes.

203491 Panhead, Brass 22,90 334489 countersunk, Brass 19,95



Turned washers assortments with a total of some 100 washers of various dimensions.

222276 Steel 20,90 **221619** Brass 22,90



Miniature screws

for wrist and pocket watches, instruments, models etc. Storage box with approx. 250 screws in a very wide range of shapes and sizes.

334495 12,95



Assorted miniature screws.

Slotted screws from M0.6 to M1.4 in different lengths and materials for clocks, instruments and optics. Appr. 1,000 miniature screws in trade box.

326048 21,90



232686 19,90



8 Casket clasp made from

brass-plated steel. For nailing and screwing. 34 mm wide, 20 mm high. Unit.:

334611 2,95

Suitable pins and small screws: Nos. 334648 and 203491/334489



Casket clasp

of brass-plated steel. For nailing and screwing. 19 mm wide, 6.5 mm high. Unit.:

334613

0.60

Suitable pins and small screws: Nos. 334648 and 203491/334489

Hinge of brass-plated steel. 12 x 20 mm. For nailing. 1 units/pack. 334592

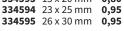
0.60



Hinges

of brass-plated steel. In various sizes For screwing. 1 unit each/ pack.

334593 15 x 20 mm 0,80 334594 23 x 25 mm 0,95



Suitable pins and small screws: Nos. 334648 and 203491/334489



Split washers for large clock movements, instruments, apparatuses etc. Assortment of 25 items.

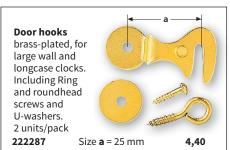
327037 10.50



Door hooks

brass-plated, for table and wall clocks. With ring and round-headed screws and washer. 2 units/pack

334813 Size **a** = 11 mm 2,50 118039 Size **a** = 17 mm 2.95 222286 4,20 Size $\mathbf{a} = 22 \text{ mm}$





approach	thread	Order No.	2 pcs/Pack
24 mm	М3	334685	13,90
32 mm	М3	327391	14,50

Burnished case leveller

with knurled screw Plate 50 x 14 x 1.6 mm. screw M3.5 x 19 mm. 2 units:

249196 13,60





Brass case leveller with burnished knurled screw Plate 57 x 14 x 1 mm,

113939 26,90





Regulating nuts

for pendulum clocks Assortment with 6 nuts and 3 acorns of different sizes and types.

334702 33,90





8,80



Hook for longcase weight sleeves, polished and protectively lacquered brass. M4 inside thread. Unit.:

118068

3,50

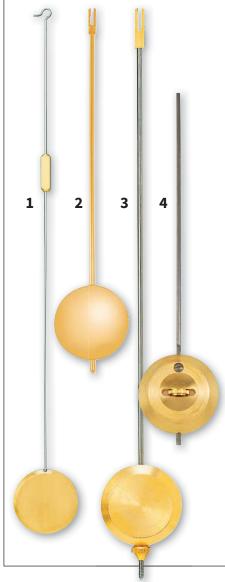


Cap nut for longcase clock weight sleeves. Polished, painted brass. M4 inside thread. Unit.:

219936

2,50

SMALL PARTS



1 Pendulum

For French pendulums with silk thread suspension. Solid brass pendulum bob Ø 28 mm, movable brass guide piece, steel wire with hooks, can be shortened. Total length 20 cm. Blank, unpolished.

334686 10,90

2 Pendulum

with sliding lens Polished brass bob Ø 32 mm, brass rod 18 cm long. With slotted hooks.

334497 17,50

3 Pendulum

3 Pendulum for French pendulums with loose pendulum hooks. Overall length 24 cm, pendulum bob Ø 35 mm. Blank, unpolished.

318483 27,90

4. Pendulums

for French pendulums with setting nut inset into the bob. Bob Ø 35 mm, rod length 26 cm (can be shortened).

328261 33,90

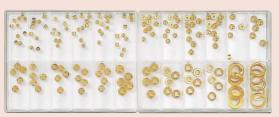
Hard brass bushings



Bearing bushings

for alarm, wall and table clock movements. Assortment of 120 items of graded sizes.
Drill-hole Ø 0.25 to 2 mm.
In compartmented plastic box.

37,90



Bearing bushings

11 Bushings for regulator, pendulum and other large clock movements. Assortment with 225 units sorted, boring Ø 0.30 to 6.50 mm. In compartmented plastic box.

7170701 109,00



Bearing bushings

for large clocks. 2 each, brass bushings with boring Ø 3 – 4 – 5 – 6 – 7 and 9 mm. 12 units/pack

334509

34,90

Brass bearing bushings

For Black Forest wooden plate movements. 20 units, inside Ø 1.1×6 mm, 4 units inside Ø 1.9×6 mm and 4 units inside Ø 3.9×5 mm long. 28 units/pack

113957

18,90





Pawl set

Assortment with 3 springs in each of 8 different shapes and sizes.

322204

29,90

..

for wall and table clock movements. Brass wire Ø 1.4 mm with end bushing, appr. 77 mm long. Bushing boring Ø 2.8 mm. With brass hammer Ø 6 x 12 mm long, no insert, specially for bells and sound springs.

334572

15,50



Strike mechanism hammers

of brass With plastic insert specially for striking on gong rods. 6.5 x 8 x 16 mm

314923

3,90





7,50

Universal pawls for large clocks, approx.

each left and right.

325980

40 mm long, semi-fin-

ished. Pack with 3 units

Pawl wheels, hard brass, 2 mm thick. Usable on both sides. Unit.:



Rope hook of burnished steel wire. Unit.:

314276 0,90



Rope hooks for heavy clock weights, steel, wire Ø 3.2 mm. Unit.: 331376 1,75



for home clocks. Solid versions for heavy weights, 1.5 mm brass plate. Unit.:

Chain hooks

233054 1,60 Chain ends for home clocks. Solid design, 1.5 mm brass plate. Unit.:

233057 1,50





29 - Brass-plated iron sheet. Each 16 hooks (0.8 mm thick) and 16 rings (0.5 mm thick). 325397 7,6



30 - Round stock Ø 2 mm. Each 12 hooks and 12 rings.

Iron brassed 211256 Iron burnished 200141

5,70 5,30

WATCHSTRAPS



MADE ● ● • IN GERMANY

Finest watch straps, whose traditional "made in Germany" craftsmanship meets the highest quality demands. Conscientious selection of the finest leather, vegetable tanning and love fpr the product turn Happel straps into reliable and lasting companions. Manufactured like welted shoes (according to the traditional Swiss full-bugg process), the resulting straps are particularly comfortable to











Colour	Bandwidth	Order no.	€ / item
Black	14 mm	461314104	21.90
Black	16 mm	461316114	21.90
Black	18 mm	461318114	21.90
Black	20 mm	461320114	21.90
Black	22 mm	461322114	23.90









WATCHSTRAPS

Robust, comfortable, versatile -

watch straps for every day!



Stop width:	Bandwidth		Order No.	Price
18 mm	18 mm	Stainless steel	245670	9,90



Closure band with safety catch, stainless steel, polished / satined, solid appearance, stop width 20 mm, bandwidth 18 mm. 334193



Milanaise band, satined, stainless steel.

Stop width:	Bandwidth		Order no.	Price
20 mm	18 mm	Stainless steel	245709	29.90
20 mm	20 mm	Stainless steel	245702	29.90
18 mm	16 mm	Stainless steel	245708	29.90
20 mm	20 mm	Stainless steel black, PVD coated	245710	64.90





Closure band black, solid appearance, matted / polished, black PVD coated. Stop width 24 mm, bandwidth 22 mm. 245658

64,90



Closure band with pressure button, stainless steel, matted / polished, stop width 24 mm, bandwidth 22 mm.

313186 36,90



Closure band, stainless steel, polished / matted, black PVD coated, solid appearance, stop width 22 mm, bandwidth 20 mm.

245660 61,50



Flex metal band,

with Stainless steel glossy finish, easy to shorten, springy impact 18-20 mm wide.

336429 16,50



Closure band with safety catch, stainless steel, polished / sand-blasted, steel colour, stop width 20 mm, bandwidth 18 mm.

245682 9,90



Flex metal band, stainless steel 20-22 mm (with interchangeable lug ends), bandwidth 20 mm

245789 18,80



Closure band with pressure button, stainless steel, polished / matt, solid appearance, stop width 24 mm, bandwidth 22 mm.

245654



stop width 22mm, bandwidth 20mm.

245733 59.90





Flex metal band with interchangeable lug end, stainless steel, matt / polished, coated in yellow PVD, stop width 18-20 mm, band width 18 mm.

245791 29,90



Closure band, stainless steel, coated in yellow gold-coloured PVD and polished, stop width 20mm, band width 18mm.

336415 30,90





Silicone - rubber bands

For sport watches, black, very supple, particularly durable. Stainless steel folding clasp with safety clip. Easily adjustable.

Stop width	Order No.	Price
20 mm	245854	21,90
22 mm	245856	21,90



For sport and utility watches, black, with reptile stamp Comfortably supple, durable. Satin-finish stainless steel buckle.



Mit roter Ziernaht (w. Ill.): Stop width Order No. Price				
Stop width	Order No.	Price		
18 mm	336411	14,95		
20 mm	336410	14,95		
22 mm	337754	14,95		

 Mit weißer Ziernaht:

 Stop width
 Order No.
 Price

 20 mm
 331760
 14,95

 22 mm
 336416
 14,95



Silicone wrist bands

black, smooth, supple, always suitable Stainless steel buckle

Stop width	Order No.	Price
18 mm	245857	14,95
20 mm	245858	14,95
22 mm	245859	14,95
24 mm	245860	14,95



Silicone - rubber bands

18 Silicone rubber strap for sport and custom watches, black, with black decorative seam. Satin-finish stainless steel buckle. Very supple, therefore comfortable to wear. 20 mm wide.

313141 14,50





SMALL PARTS / METALS

Drilled round brass

Length appr. 60mm.

 Ø	Content	Order No.	€/Pack
1,00 mm	2 Pcs/ Pack.	4691201	11,80
2,00 mm	5 Pcs/ Pack.	4691205	29,50
2,25 mm	5 Pcs/ Pack.	4691206	29,50
4,00 mm	2 Pcs/ Pack.	4691209	15,80
5,00 mm	2 Pcs/ Pack.	4691210	15,80

Length approx. 330 mm.

Length appr. 330 mm.

Ø	Content	Order No.	€/Pack
2,00 mm	2 Pcs/ Pack.	4691027	7,80
3,00 mm	2 Pcs/ Pack.	4691028	7,80
4,00 mm	2 Pcs/ Pack.	4691029	9,80
5,00 mm	2 Pcs/ Pack.	4691030	11,80



Round brass assortment

With approx. 30 bars, from Ø 0.5 to 2.5 mm, 110 mm long.

327155 18,95

Brass wire

Ø	Length	Content	Order No.	€/Pack
0,50 mm	5 Meter	1 Pcs	4691101	4,90
2,00 mm	1 Meter	1 Pcs	4691104	5,90

Brass plate, 200 x 200 mm.

Stärke	Content	Order No.	€/Pack
0,50 mm	1 Pcs	336389	15,95
1,00 mm	1 Pcs	336390	21,90
1,50 mm	1 Pcs	4691313	29,90
2,00 mm	1 Pcs	336391	39,90
2,50 mm	1 Pcs	4691315	49,90
3,00 mm	1 Pcs	4691316	59,90
4,00 mm	1 Pcs	215830	69,90





Spring links for wristwatches.

Assortment with 20 links respectively in 18 different sizes from stop width 8 to 24 mm. Stainless steel, tube Ø 1.5 mm, sprung ends with dual flange.

334520 37,9





38,90

Stainless steel flat head screws.

Assortment with 20 screws respectively in 18 different sizes from M1 x 1.5 mm to M1.4 x 3.0 mm.

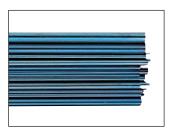
325119

Hardened pivot steel wire, blued.

Length appr. 80mm. Raw material for producing plates, screws, pins, bearings, hinges, pillars and much more besides. 5 items per pack.

Ø	Order No.	€/Pack
0,4 mm	4690401	3,60
0,5 mm	4690402	3,60
0,6 mm	4690403	3,60
0,7 mm	4690404	3,60
0,8 mm	4690405	3,60
0,9 mm	4690406	3,60
1,0 mm	4690407	3,60
1,1 mm	4690408	3,60
1,2 mm	4690409	3,60
1,3 mm	4690410	3,60

Ø	Order No.	€/Pack		
1,4 mm	4690411	3,60		
1,5 mm	4690412	3,60		
1,6 mm	4690413	3,60		
1,7 mm	4690414	3,60		
1,8 mm	4690415	3,60		
1,9 mm	4690416	3,60		
2,0 mm	4690417	3,60		
2,5 mm	4690418	3,60		
3,0 mm	4690419	3,60		
3,5 mm	4690420	3,60		
4,0 mm	4690421	3,60		



Pivot steel wire, hardened and blued. For replacing shaft pins. Appr. 110 mm long. 12 units/pack

€/Pack	Order No.	Ø
8,60	327156	appr. 0,40–2,00 mm
12,50	336385	appr. 2,25–4,00 mm
15,90	336386	appr. 4,10-5,00 mm





Pin removal kit

with band holding block of impervious plastic and one pin each in Ø of 0.7, 0.8 und 1.0 mm to squeeze out pins.

335883 17,90





for stainless steel bands A total of 500 assorted pins, Ø 0.8 and 1.0 mm, each in these lengths: 100/112/114/116/18 and 20 mm. In compartmented plastic box.

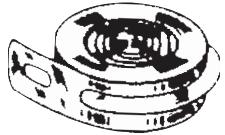
115017 31,90



Hole punch

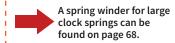
with pressure spring for easy punching of additional holes in watch straps. Anodized aluminium handle 2 exchangeable, case-hardened punching inserts for hole Ø appr. 1.6 and 2.6 mm. With plastic punching underlay. Total length 13.5 cm.

335940 16,90



Tension springs for large clocks Hole-punched end





Width mm	Thickness mm	Length ap- prox. mm	Ø mm	Order no.	€ / item
3.2	0.26	520	18	335437	7.50
4.0	0.23	500	18	335438	7.90
4.2	0.30	1000	27	335412	8.50
8.0	0.20	1350	30	335413	11.90
9.0	0.25	900	26	335439	7.90
10.0	0.28	1140	28	2437220	14.90
10.0	0.30	1350	32	2437225	14.90
10.0	0.30	1800	40	335414	14.50
10.0	0.40	1500	40	335440	14.90
11.0	0.25	750	23	335441	11.90
11.0	0.30	1400	33	335415	14.90
12.0	0.35	1150	32	2437342	13.20
12.0	0.35	1500	35	335454	13.20
12.0	0.40	1200	36	2437349	14.90
12.0	0.40	1500	38	2437374	19.50
13.0	0.42	1100	34	335416	13.50
14.0	0.30	1250	30	335417	14.90
14.0	0.35	1150	32	335418	13.50
14.0	0.45	1650	46	2437500	14.90
15.0	0.35	1250	29	335419	14.20
15.0	0.45	1300	35	335420	14.20
16.0	0.27	950	22	335421	14.20
16.0	0.40	1700	44	335422	17.95
17.0	0.25	950	24	335423	12.60
17.0	0.28	1180	28	2437575	15.40
17.0	0.30	1300	32	335424	16.20
17.0	0.35	1450	36	2437590	17.95
17.0	0.40	1200	37	2437600	17.95
17.0	0.40	1500	38	2437610	17.95
17.0	0.40	1900	47	335425	17.95
17.0	0.45	1650	45	2437635	17.95

		ı	1	1	
Width mm	Thickness mm	Length ap- prox. mm	Ø mm	Order no.	€/item
18.0	0.30	1250	30	2437650	17.95
18.0	0.30	1600	36	2437655	22.90
18.0	0.35	1350	33	335426	16.20
18.0	0.35	1500	37	2437692	17.95
18.0	0.38	1600	45	2437712	17.95
18.0	0.38	1250	36	2437668	17.95
18.0	0.40	1500	38	2437670	17.95
18.0	0.40	1900	45	2437713	17.95
18.0	0.42	1600	42	335444	17.95
18.0	0.45	1200	37	2437744	17.95
18.0	0.45	500	42	335443	17.95
18.0	0.45	1760	45	2437739	17.95
18.0	0.50	1500	45	2437710	17.95
19.0	0.30	1250	30	2437775	16.20
19.0	0.30	1450	35	335445	17.50
19.0	0.38	1600	45	2437797	19.50
19.0	0.40	1350	37	2437785	21.50
19.0	0.40	1600	41	335453	22.90
19.0	0.40	1900	45	335452	17.95
19.0	0.45	1650	45	2437795	17.95
20.0	0.25	1250	30	2437821	19.50
20.0	0.30	1250	30	2437820	20.60
20.0	0.30	1700	40	2437879	29.50
20.0	0.35	1650	39	2437822	23.50
20.0	0.40	1900	46	335427	23.50
20.0	0.42	2000	45	2437840	23.50
20.0	0.45	1500	40	335446	23.50
20.0	0.45	1650	45	2437855	23.50
21.0	0.30	1250	32	335428	20.60
22.0	0.30	1600	37	335447	29.50
24.0	0.40	2000	48	335429	23.50
24.0	0.45	1500	42	335448	23.50
	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	18.0 0.30 18.0 0.30 18.0 0.35 18.0 0.35 18.0 0.35 18.0 0.38 18.0 0.38 18.0 0.40 18.0 0.40 18.0 0.42 18.0 0.45 18.0 0.45 18.0 0.45 18.0 0.45 18.0 0.45 18.0 0.50 19.0 0.30 19.0 0.30 19.0 0.38 19.0 0.40 19.0 0.40 19.0 0.40 19.0 0.40 20.0 0.25 20.0 0.30 20.0 0.35 20.0 0.42 20.0 0.45 21.0 0.30 22.0 0.30	Miles Mile	National National	Wildti Hill mm prox. mm b Hill Order Ho. 18.0 0.30 1250 30 2437650 18.0 0.30 1600 36 2437655 18.0 0.35 1350 33 335426 18.0 0.38 1600 45 2437712 18.0 0.38 1250 36 2437668 18.0 0.40 1500 38 2437670 18.0 0.40 1900 45 2437713 18.0 0.42 1600 42 335444 18.0 0.45 1200 37 2437744 18.0 0.45 1200 37 2437744 18.0 0.45 1500 45 2437739 18.0 0.45 1760 45 2437739 18.0 0.45 1760 45 2437739 18.0 0.45 1760 45 2437710 19.0 0.30 1250

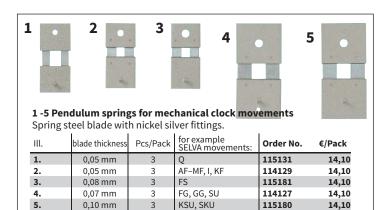


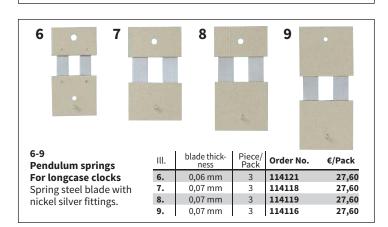
Tension springs for alarm clocks Looped end

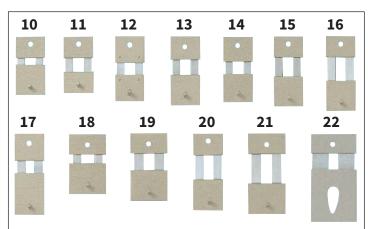
Width mm	Thickness mm	Length ap- prox. mm	Order no.	€ / item
4	0.3	670	2436168	7.60
5	0.3	2100	2438700	12.50
5	0.35	650	335430	8.95
6	0.3	800	335431	8.20
6	0.4	1000	303805	8.60
7	0.25	1500	335449	9.90
7	0.3	1000	2436478	8.90
7	0.45	1200	335432	9.60

Width mm	Thickness mm	Length ap- prox. mm	Order no.	€ / item
7.5	0.2	1500	331151	10.50
7.5	0.32	950	335450	13.90
7.5	0.4	1100	2436550	11.20
8	0.4	1000	335433	11.50
8	0.5	1300	335451	11.20
9	0.4	1000	335434	11.50
9	0.45	1300	335435	12.50
10	0.4	1000	335436	13.50

PENDULUM SPRINGS







10-21 Pendulum springs for wall and table clock regulators and cantilever clocks. Spring steel blade with nickel silver fittings.

	III.	blade thickness	Pcs/ Pckg.	Order No.	€/ Pack
Ī	10.	0,04 mm	5	115127	23,50
	11.	0,04 mm	5	115151	23,50
	12.	0,05 mm	5	114115	23,50
	13.	0,04 mm	5	114112	23,50
	14.	0,04 mm	5	115132	23,50
	15.	0,05 mm	5	115128	23,50
	16.	0,06 mm	5	115129	23,50
	17.	0,05 mm	5	114111	29,50

Ill.	blade thickness	Pcs/ Pckg.	Order No.	€/ Pack
18.	0,06 mm	5	115138	23,50
19.	0,06 mm	5	114113	23,50
20.	0,06 mm	5	115130	23,50
21.	0.06 mm	5	114114	23.50

22 22 Pendulum springs for Comtoise

clocks.
0.10 mm spring steel blade with nickel silver fittings. 3 units/pack

326044 38.95

24 23



Fig. pendulum springs 1-36 in original size

23-24 Pendulum springs for URGOS brand mechanical clock movements.

Plastic fittings with spring steel blades. 1 units/pack

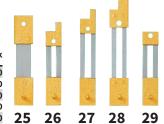
III.	Dimen- sion L	Blades thick	Order No.	€/ pack
23	19 mm	0.10 mm	115178	19.90
24	32 mm	0.10 mm	115179	21.70

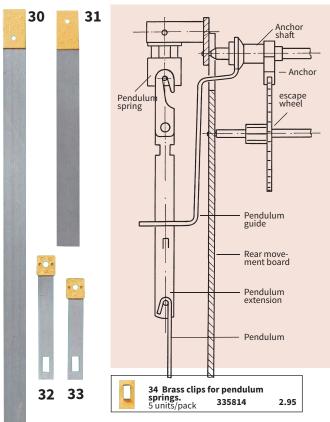
Order quickly and easily right now:

25-29 Pendulum springs for pendulums, spring steel blades

with brass fittings

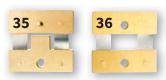
III.	blade thickness	Piece/ Pack	Order No.	€/Pack
25.	0,05 mm	5	115146	41,50
26.	0,05 mm	5	115171	41,50
27.	0,05 mm	3	115172	24,90
28.	0,06 mm	3	115185	24,90
29.	0.06 mm	3	115170	24,90





30-33 Pendulum springs for wall and longcase clocks Spring steel blades with brass or plastic fittings.

			. '	. •	
Ill.	blade thick- ness	Pcs/Pack	Material	Order No.	€/Pack
30.	0,10 mm	1	Brass	115183	8,30
31.	0,10 mm	3	Brass	115137	24,90
32.	0,05 mm	5	Plastic	336498	19,00
33.	0,04 mm	5	Plastic	115163	19,00



35-36 Special pendulum springs

for large clocks.						
Fig.	Blades thick	items / pack	Order No.	€/ pack		
35	0.05 mm	1	334604	32.90		
36	0.04 mm	1	334603	32.90		



37 Assortment of fittings

for suspension springs One top and bottom fitting each in the sizes I, II and III as well as one each actu-ator in sizes I, II, EH and EK. Ground brass with blued steel screws

139.00



39 Pendulum assortment for "Hermle" (FHS) brand mechanical pendulum clock movements 10 items

Tel.: +358 (05) 413 2888



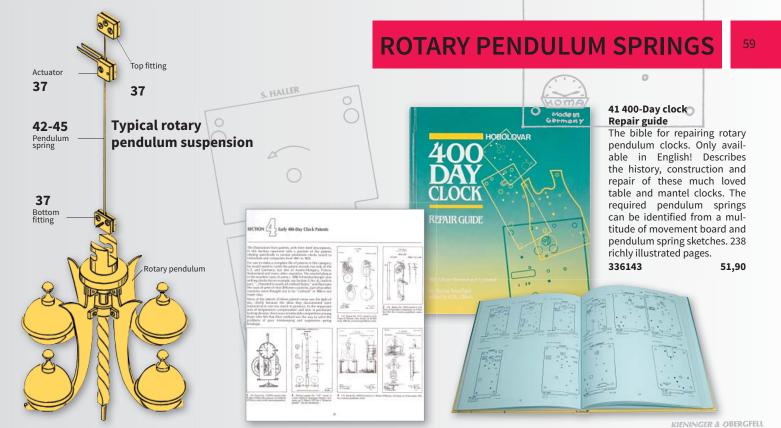
38 Pendulum springs specially for wall clocks, regulators, cantilever clocks, table clocks, pendulums etc. 18 assorted parts.

320736



40 Pendulum springs specially for larger home clocks, longcase clocks etc. 12 assorted parts.

320737 84.90



42 Rotary pendulum springs for 12-month clocks

In each case, assembled completely with top and bottom fittings, plus actuator. Wire width 0.6 mm.

Brand	Type/ Construction year	suspension spring No.	Material	Wire strength mm	wire length a mm	distance b mm	Order No.	€/Pcs
S. Haller	Standard / 57	39	Nivarox	0,050	85,0	7,0	334521	39,90
S. Haller	Standard / 70	42	Nivarox	0,075	120,0	10,0	334522	39,90
S. Haller	Mini / 70	43	Nivarox	0,080	86,0	9,0	334525	39,90
S. Haller	Midget / 70	44	Nivarox	0,045	68,0	7,0	334526	39,90
Henn	Standard / 54	32	Nivarox	0,095	127,0	11,0	334527	39,90
Hermle	Standard / 53	25a	Nivarox	0,110	131,0	13,0	334528	39,90
Hermle	Mini / 54	25b	Nivarox	0,060	92,0	7,0	334529	39,90
Hermle	Electronic	53b	Bronze	0,080	85,5	7,5	334530	39,90
Hermle	Standard / 80	67	Bronze	0,080	85,6	7,5	334531	39,90
Hermle	977 / 81	21-237	Bronze	0,080	85,5	7,5	334532	30,90
Hermle	987 / 83	21-250	Bronze	0,050	81,5	20,4	334533	30,90
Hermle	977.2 / 85	21-269	Bronze	0,035	81,5	24,5	334534	30,90
Hermle	977.26 / 85	21-270	Bronze	0,035	65,0	18,7	334535	30,90
Hermle	977.26 / 85	21-277	Bronze	0,035	65,0	20,6	334536	30,90
Hermle	2300.003 / 89	21-283	Bronze	0,035	81,3	26,4	334537	30,90
Hermle	2300.003 / 89	21-283	Bronze	0,050	81,3	26,4	334538	30,90
Herr	Mini / 53	28a	Nivarox	0,060	98,0	9,0	334539	39,90
Herr	Mini / 54	28b	Nivarox	0,060	98,0	12,0	334540	39,90
Herr	Mini / 56	28c	Nivarox	0,070	98,0	10,0	334541	39,90
Kern	Mini / 57	12c	Nivarox	0,050	86,0	7,0	334542	39,90
Kern	Midget / 58	12e	Nivarox	0,055	79,0	7,0	334543	39,90
Kern	Mini / 61	12f	Nivarox	0,055	86,0	8,0	334544	39,90
Kern	Standard	55	Nivarox	0,050	102,0	27,0	334545	39,90
Kern	Mini / 61	59	Nivarox	0,048	80,9	22,0	334546	39,90
Koma	Standard / 52	13b	Nivarox	0,070	124,0	10,0	334547	50,90
Koma	Standard / 56	13c	Nivarox	0,070	124,0	9,5	334548	50,90
Koma	Mini / 54	14a	Nivarox	0,058	111,0	9,0	334549	50,90
Koma	Mini / 65	14b	Nivarox	0,056	111,0	9,0	334550	50,90
Koma	Midget / 57	38a	Nivarox	0,053	73,0	8,0	334551	39,90
Koma	Mini / 80	66a*	Nivarox	0,040	61,6	17,3	334552	39,90
Koma	Mini / 80	66a lang**	Nivarox	0,040	61,6	17,3	334553	39,90
Kundo	Standard / 49	1	Nivarox	0,080	126,3	14,8	334554	39,90
Kundo	Standard / 55	3c	Nivarox	0,080	126,0	14,0	334555	39,90
Kundo	Junior / 53	5a	Nivarox	0,060	92,0	11,0	334556	39,90
Kundo	Junior / 54	5b	Nivarox	0,060	91,0	7,5	334557	39,90
Kundo	Junior / 56	5e	Nivarox	0,060	92,8	7,5	334558	39,90
Petersen	Standard / 54	18c	Nivarox	0,085	130,0	13,0	334560	39,90
Schatz	Standard / 54	9	Nivarox	0,082	120,0	11,5	334561	55,90
Schatz	1000-Tag / 54	10a	Nivarox	0,055	92,0	5,5	334562	55,90
Schatz	Mini / 53	10c	Nivarox	0,055	68,5	7,5	334564	55,90
*= Short actua	itor **= Long ac	tuator						

ABSOLUTELY NECESSARY TO OBSERVE: Rotary pendulum springs may not under any circumstances be kinked, bent or twisted within themselves. Only with absolutely perfect springs can a good timekeeping result be achieved.

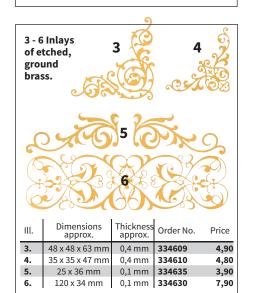
42 + 44 43 - 44 Nivarox spring wires for 12-month clocks Assortments with 10 wires in different, customary sizes. 43 43 Assortment no. 1: Wire thicknesses 0.05 to 0.10 mm, - width 0.6 mm, - lengths from 160 to 184 mm. 334518 46.50 44 43 Assortment no. 2: Wire thicknesses 0.03 to 0.14 mm, - width 0.6 mm, lengths from 70 to 184 mm. 45 334519 46.50 45 Bronze spring wires for 12-month clocks Range with 1 wire each of 0.05, FR N 0.06, 0.07, 0.08 and 0.09 mm length overall. Wire length 150 mm, - width 0.6 mm. 334693 11.95 0

DECORATIVE PARTS



1 - 2 High-quality decorative parts of fine-cast brass, antique-painted and protectively lacquered, with outstanding detail work.

Ill.	Dimensions approx.	Height approx.	Order No.	Price	
1.	105 x 18 mm		334809	16,90	
2.	72 x 12 mm		334810	14,95	



Ornamental disc

of etched, ground brass. Ø 55 mm: 0.5 mm thick. Can also be used as screen for pendulums.

334703 11,60





7 - 8 Hollow-stamped ornamental parts of brass. lacquered in old gold and patinated With fixing nails. 4 items/pack.

Ill.	Dimensions approx.	Height	Order No.	Price
8.	Ø 20 mm	2,2 mm		16,90
9.	Ø 28 mm	3,0 mm		17,50

Hollow-stamped decorative part, brass-plated with

antique appearance Ø 43 mm, height 7 mm. 2 items/pack.

334806 5,20



Hollow brass spheres

with turned foot and inset wooden screw. Ball Ø 45 mm. Tip or eagle solid cast brass.



Hollow brass sphere Height without screw: 106 mm

113934 37,90



Hollow brass sphere With eagle Height without screw: 114 mm 334641 44,50



of high-quality, antique-coloured cast brass. Inset wood screw.

Ill.	Ø x Height approx. (without screw)	Order No.	Price
9.	13 x 27 mm	334725	12,90
10.	19 x 37 mm	213989	14,20

11 Ornamental turret

of solid, high-quality cast brass With inset woodscrew.

Fig.		Ø x height approx. (without screw)	Order no.	Price
	11	2243mm	329611	38.50



12 Ornamental eagle, patinated brass casting 51 x 52 mm. With inset woodscrew.

219157 13,5

13 Ornamental eagle, antique-coloured brass casting. With inset wood screw. 64 x 59 mm. 334724 32,90



18 Decorative rosette in patinated cast brass. Ø 26 mm, appr. 4 mm high. 2 items/pack.

329612 13,90

Ornamental knobs of solid, polished cast brass.

With inset woodscrew.

334581 (25 x 24 mm) **19,90 334580** (19 x 18 mm) **16,90**



Brass spheres,

Turned, polishes and zaponvarnished (gold coloured). Including Tapped screws M3 x 10 mm. 12 units/pack.

Bullet-Ø	Order No.	Price
10 mm	334730	22,90
12 mm	334731	25,50
15 mm	327813	28,60

Decorative knobs

2 items, of solid, protectively lacquered brass.

10 x 10 mm		6,60
Ø x Height appr. (without screw)	Order No.	Price



Decorative part
with sun motif.
Cast-on lobe
for a
pendulum bar
Ø 50 mm,
approx. 5 mm high.
Dial:
334723 11,90



14 - 16 Cast brass ornamental parts

These decorations are finely cast from old and precisely machined models and have outstanding detailing and surface quality. Outstandingly suitable both for restoring old clock cases and building new clocks.

Ill.	edge length approx.	Height approx.	Order No.	Price
14.	43 x 43 x 57 mm	5 mm	334606	9,90
15.	52 x 52 x 75 mm	4 mm	334607	11,90
16.	70 x 70 x 94 mm	4 mm	334608	13.90

17 Ornamental part with sun motif

cast brass. Also suitable as a pendulum bob. Ø 63 mm, appr. 8 mm high.

249752 13,90



Hinges in polished brass 2 units/pack Ø 4.5 x 30 mm high.

334691 16,50



Hinges in burnished brass. 2 units/pack Ø 4.5 x 30 mm high.

334754 8,95



1 - 5 Ornamental strips to decorate clock casings, small furniture and much more besides. Carefully milled and carved wood, untreated. Can be stained, lacquered, bronzed or gilded as desired.

Length x Breite x Dicke approx.	Order No.	Price
600 x 21,5 x 6 mm	334511	12,50
600 x 25 x 5,5 mm	334512	7,90
600 x 28 x 5,5 mm	334513	23,50
600 x 31 x 5,5 mm	334514	17,50
600 x 45 x 8,5 mm	334515	19,50
	x Dicke approx. 600 x 21,5 x 6 mm 600 x 25 x 5,5 mm 600 x 28 x 5,5 mm 600 x 31 x 5,5 mm	x Dicke approx. 600 x 21,5 x 6 mm 600 x 25 x 5,5 mm 600 x 28 x 5,5 mm 600 x 31 x 5,5 mm 334513 334514



Hook lock

of brass Complete with key shield, lock plate and key. Key shield 24 x 12. mm, lock plate 8 x 46 mm, depth 17.5 mm.

334812 32,50





Corner foot, antique-coloured

brass casting. Edges

38 X 38 cm, approx. 14 mm high. 1 pair

334055 19,90



Corner foot, polished brass casting. Edge length 45 x 45 x 13.5 mm high 1 pair

334808 23,50



Mounting for cantilever clock and regulator casings, with loose turned parts, untreated.

Crown	Trim	Order No.	Price
Walnut veneered	turned	239500	92,00



Mounting for cantilever clock and regulator casings, with fitted ornamental strips of solid wood, untreated.

Crown	Trim	Order No.	Price
Limba plywood	placed	334804	41,90



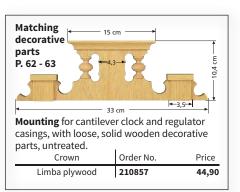
Mounting for cantilever clock and regulator casings, with loose, solid wooden decorative parts, untreated.

Crown	Trim	Order No.	Price
Limba plywood	weightiv	211329	52,50

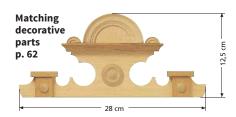


Mounting for cantilever clock and regulator casings, with loose turned parts, untreated.

Crown	Trim	Order No.	Price
Walnut veneered	turned	204437	92,00

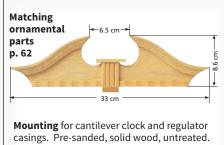


DECORATIVE

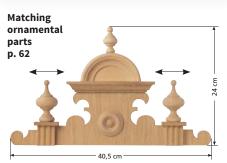


Mounting for cantilever clock and regulator casings, with loose turned parts, untreated.

Crown	Trim	Order No.	Price
Walnut veneered	turned	206856	59,90



Order No. Trim 334803 Eiche. weightiv placed 49.95



Variable regulator mounting

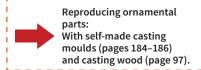
Beechwood veneered and presanded with loose, turned decorative parts. The two consoles at left and right can be glued together over a distance of 23.5 - 28 cm (centre/centre) for optimal adaptation to a casing. The overall width of 40.5 cm can be reduced to 33 cm.

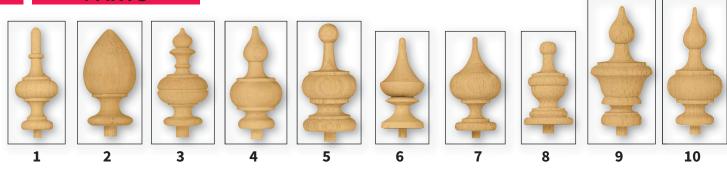
330970 75,50

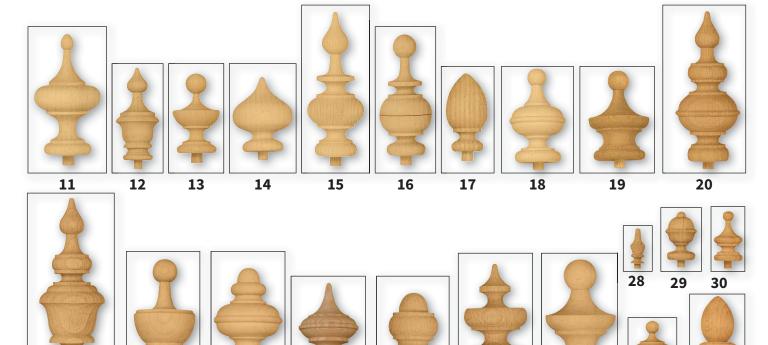


Lower part for regulator casing. In African nutwood. Presanded, otherwise untreated. Upper surface 16.6 x 11.6 cm, lower surface 7.4 x 6.7 cm Overall height 8 cm.

210858 61,90







1-29 Turned wood ornamental parts

22

21

Untreated, although presanded. Can be stained or lacquered. Beechwood parts can be stained as nutwood. (Stated lengths do not include dowels)



24

23



25





26



27



31

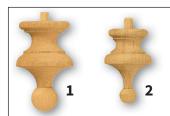


39

32

		Ве	ech	0	ak
Ill.	Ø x Length approx.	Order No.	€/Pcs	Order No.	€/Pcs
1.	29 x 72 mm	334633	6,50	_	_
2.	33 x 65 mm	334783	5,50	_	_
3.	35 x 66 mm	334784	7,50	_	_
4.	35 x 64 mm	315689	5,90	_	_
5.	37 x 72 mm	331676	7,60	_	_
6.	31 x 60 mm	334727	6,95	_	_
7.	35 x 63 mm	334785	7,60	_	_
8.	34 x 57 mm	334786	5,50	_	_
9.	40 x 79 mm	334677	7,20	334787	10,50
10.	38 x 74 mm	334676	6,60	_	_
11.	44 x 82 mm	115604	10,80	_	_
12.	30 x 63 mm	334728	7,95	_	_
13.	32 x 54 mm	334788	6,30	-	_
14.	44 x 54 mm	334680	6,20	_	_
15.	39 x 97 mm	334790	8,70	_	_
16.	36 x 80 mm	334675	6,60	_	_
17.	29 x 53 mm	334789	4,80	_	_
18.	40 x 67 mm	334791	10,90	_	_
19.	43 x 64 mm	116351	10,90	_	_
20.	49 x 103 mm	334678	10,50	334705	9,95

		Ве	eech	0	ak
Ill.	Ø x Length approx.	Order No.	€/Pcs	Order No.	€/Pcs
21.	49 x 120 mm	239389	11,80	_	_
22.	44 x 76 mm	334674	8,30	_	_
23.	50 x 71 mm	334792	12,80	334706	15,90
24.	44 x 64 mm	334793	7,90	334707	9,95
25.	48 x 52 mm	334681	5,90	334794	5,90
26.	46 x 71 mm	334679	7,70	_	_
27.	52 x 81 mm	334668	12,90	_	_
28.	10 x 22 mm	334660	1,70		
29.	20 x 30 mm	334777	4,20		
30.	25 x 33 mm	248878	4,50		
31.	18 x 31 mm	334778	4,50		
32.	30 x 48 mm	334726	6,95		
33.	30 x 51 mm	113935	4,80		
34.	20 x 40 mm	118731	4,80	_	_
35.	20 x 42 mm	334659	3,95	334762	5,95
36.	25 x 22 mm	334779	3,20	_	_
37.	30 x 45 mm	334780	5,50	_	_
38.	28 x 40 mm	334781	3,95	_	_
39.	29 x 45 mm	334782	6.40	_	_



1 - 2 Turned wooden decorative parts, specially for Viennese regulator casings. African nutwood, untreated.

Ø x Length approx. Order No. €/Pcs 52 x 82 mm 218819 1. 15,90 43 x 68 mm 334805 14,95

3 - 23 Wooden decorative parts

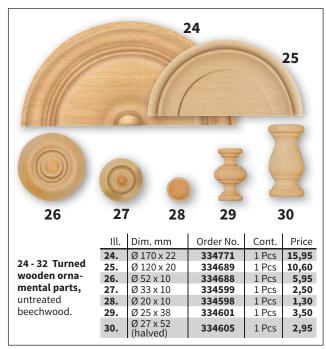
Pre-milled, stamped in metal forms. For restoring and decorating wooden casings, furniture etc. These beechwood parts are untreated and can therefore be stained, lacquered, bronzed or gilded. Please use only dissolvent stains!



Ill.	Dim. mm	Order No.	Content	Price
3.	65 x 100 x 7	334770	1 pair	9,95
4.	70 x 70 x 8	327894	1 pcs	7,50
5.	52 x 32 x 6	334768	1 pcs	4,50
6.	Ø 22 x 6	334767	1 pcs	3,95
7.	20 x 57 x 5	223333	1 pair	7,30
8.	49 x 49 x 7	334769	1 pcs	4,60
9.	115 x 38 x 3	334687	1 pcs	5,95

Ill.	Dim. mm	Order No.	Content	Price
10.	140 x 20 x 3	334796	1 pcs	6,50
11.	34 x 34 x 6	224467	1 pcs	4,20
12.	Ø 33 x 9	206950	1 pcs	4,50
13.	Ø 43 x 9	208636	1 pcs	4,50
14.	Ø 28 x 2,5	210426	1 pcs	3,70
15.	Ø 60 x 9	216480	1 pcs	5,20
16.	50 x 140 x 8	218379	1 pair	13,50

Ill.	Dim. mm	Order No.	Content	Price
17.	Ø 50 x 6	328052	1 pcs	4,80
18.	50 x 30 x 6	334500	1 pcs	4,30
19.	Ø 60 x 5	334501	1 pcs	5,95
20.	Ø 55 x 6	334502	1 pcs	5,20
21.	88 x 39 x 6	334684	1 pcs	5,70
22.	Ø 50 x 6	334588	2 pcs	12,95
23.	73 x 66 x 7	334589	2 pcs	11,50





Swallow

of lime-tree wood, carefully hand-carved. Can be stained, lacquered, bronzed or gilded as desired. 150 x 70 x 12 mm 1 item / pack

334591 21,90



With antlers for cuckoo

clocks. Hand-carved, untreated wood. Height approx. 14 cm.

Fir tree

desired.

Order No.

334620

334619

approx. 40 x 80

approx. 50 x 100

of lime-tree wood, carefully hand-carved. Can

be stained, lacquered,

bronzed or gilded as

20,90

30,90

334493 29,90



Vine / oak leaves

of lime-tree wood, carefully hand-carved. Can be stained, lacquered, bronzed or gilded as desired. 1 item / pack

Ill.	Dim. mm	Order No.	Price
31.	70 x 40 x 8mm	334590	8,70
32.	55 x 55 x 8mm	334587	8,95
32.	80 x 80 x 10 mm	334586	10,75

33 Pilasters for regulator and cantilever clock casings Turned, presanded wood, untreated. Ø 3.5 x 60 cm , central rod can be shortened. Beechwood 1 pair

334772



Wooden decorative part. Pre-milled, stamped in metal forms, beechwood. 58 x 64 x 6 mm

4,60

115605



18,50

33

51 x 60 x 12 mm 334801 15,20

INTEGRATED WEATHER INSTRUMENTS







Made in Germany

1 - 3 TFA weather instruments

In very chic retro style. Brass-coloured. Work capsule Ø 56 mm, with installation clamping ring for hole Ø 65mm. Made in Germany Outer Ø 70 mm, installation depth approx. 18mm.

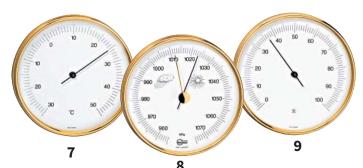
Ill.	Instrument	Order No.	Price
1.	Thermometer	337835	11,90
2.	Barometer	337834	28,50
3.	Hygrometer	337836	11,90



4 - 6 TFA weather instruments

Silver-coloured dial with sun grinding and black printed scale. Domed acrylic glass with polished, chromium-plated closure ring. Work capsule Ø 56 mm. Including Integration clamping ring for hole Ø approx. 62 mm. Outer Ø 81 mm, installation depth approx. 18 mm.

III.	Instrument	Order No.	Price
4.	Thermometer	335157	11,50
5.	Barometer	335156	26,90
6.	Hygrometer	335158	12.20



7 - 9 BARIGO

Precision weather instruments

White dial with black printed scale. Domed genuine class with polished brass ring. Full metal work capsule Ø 47 mm. Including Integrating clamping ring for hole Ø appr. 55 mm. Outside Ø 86 mm. Installation depth approx. 17 mm



Ill.	Instrument	Order No.	Price
7.	Thermometer	335153	46,90
8.	Barometer	335155	84,50
9.	Hygrometer	335154	49,90

Wine cellar climate meter

Helps to maintain optimal temperature and atmospheric moisture in wine cellar. Polished brass. Ø 102 mm, 24 mm thick.

335520 62,00



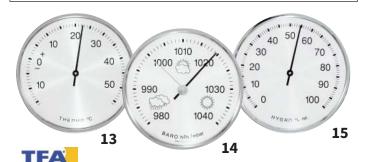




10 - 12 TFA weather instruments

Printed, brass-coloured dial with circular grinding. Domed glass with polished, gold-coloured flange ring. Work capsule \emptyset 56 mm, with installation clamping ring for hole Ø 62 mm.

Ill.	Instrument	Outer Ø	depth approx.	Order No.	Price
10.	Thermometer	108 mm	12 mm	335149	10,90
11.	Barometer	108 mm	18 mm	335150	28,50
12.	Hygrometer	108 mm	12 mm	335151	11,90



Ill.	Instrument	Outer Ø	depth approx.	Order No.	Price
13.	Thermometer	81 mm	18 mm	335147	9,60
14.	Barometer	81 mm	18 mm	328314	24,50
15.	Hygrometer	81 mm	18 mm	335148	10,90

Barometric devices

should be adjusted at the display site to the respective seal level, e.g. By comparison with locally available, adjusted instruments. A guide is supplied with the instrument.



Wrist and Pocket watches undergoing repairs - a manual for clock makers and clock Indispensable lovers. help during repairs to small clocks, with a multitude of suggestions and examples for occurring

tasks. With approx. 870 commented illustrations and a CD-ROM. Approx. 320 pages, format 17 x 24 cm.

336161 53.00

1 Maintenance of pendulum clocks with spring drive from German industrial production from 1860 to 1940.

The author has been occupied with these large

clocks in particular for some years. As a rule, these can be acquired at favourable prices, but almost always require repair. The problems arising are illustrated, the repairs broken down into work stages and described in detail with pictures and sketches. The necessary tools and consumables are also explained. An instructive book for both beginners and experienced clock collectors. 344 pages with many black and white images, format 15 x 21 cm.



336155 34,90



H. Sievert,

"Leitfaden für die Uhrmacherlehre" (Guide for the study of clockmaking)

Reprint of the 1938 edition. This is one of the most important professional horological publications of all. Understandably written with many explanatory illustrations. It discusses wrist and pocket watches, pendulum clocks and the first electric clocks. The examination section has 289 expert questions and corresponding answers. Tables of wheel and drive sizes for wrist and pocket watches, cylinder escapements and pendulum lengths for large clocks. 548 pages with many black and white images and sketches. Format 15.8 x 21.5 cm.

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337760



Michael Ph. Horlbeck,

Lexicon of clock brands

Ultimate reference work with more than 400 clock brands and text and pictures of their best-known products. 306 pages with many b/w illustrations.

336140 14.99

Klaus Dinger,

DIE DEUT

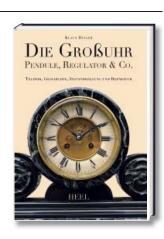
UHRENA

IM PORTR

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P. Brain/l. Wimmer-Olbort, **The Germans** "Uhrenmarken im Portrait" (A

Portrait of Watch Brands) An enchanting picture and reading

volume. With this standard word, the editorial staff of the specialist magazine "Armbanduhren" (Wrist Watches) have created a richly illusrated guide through the German wrist watch landscape, in which more than 100 watchmakers - ranging from lone fighters, family enterprises and medium-sized companies to the subsidiaries

of international holdings - are portrayed with their most important creations. 144 pages With 365 colourful illustrations.

> 336185 19.99



H. Jendritzki,

"Reparatur antiker Pendeluhren" (Repairing antique pendulum clocks)

A "must" for everyone interested in pendulum clocks. Reprint with an incredible wealth of information. The little and larger tips and tricks about handling and repairs remain unsurpassed. 160 pages with appr. 350 diagrams.

336164 39,80



Klaus Menny,

"Die Uhr und ihre Funktion" (Clocks and their function)

A standard work for all collectors and clock lovers. The technology of mechanical clocks from its origins until today is comprehensively represented and offers an outstanding introduction to the topic. A multitude of illustrations accompany the expert text. 128 pages with appr. 200 diagrams. Format 15 x 21.5 cm.

336150 14,99



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BOOKS



Fritz v. Osterhausen "Das Große Uhrenlexikon" (The great lexicon of clocks)

With more than 2,800 catchwords from he various professional fields of - largely mechanical - clockmaking. Contains terms from the fields of clock technology, tools and machines, processing and production processes and many short biographies of important German and foreign clockmakers, 376 pages with over 350 illustrations. Format 17.5 x 24.5 cm.

336184 29,95



A detailed look at pocket watches!

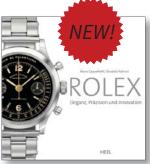
Helmut Mann,

"Porträt einer Taschenuhr" (Portrait of a pocket watch)

Detailed description of a typical precision pocket watch. All elements and assemblies of a precision pocket watch, the structure of its calibre and the protective mantle, viewing glass and decorations are analysed. 80 pages with approx. 80 diagrams.

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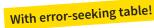
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clockmaker at his work table)

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A treasure chest of information on fault analysis, repair and cleaning of a very wide variety of large clocks. Detailed descriptions of repair methods, even for the inexperienced repairer. 192 pages with more than 250 detailed sketches and a fault finding table. Format 17.5 x 24.5 cm.

336165 43,90

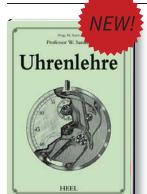


Erwin Kühn,

"Grundriss vom Aufbaueiner Uhr" (Basics of the structure of a clock)

The workings of a mechanical clock are technically complex and require explanation and detailed examination. This reprint of a professional book dating back to 1949 exhaustively and understandably describes the various components of large and small mechanical clocks and watches and their functions, often aided by large, informative illustrations. The special value of this work is the simplicity of its explanations, which permit even beginners in mechanical clock technology to grasp its information. Includes a section on calculations to determine wheel and drive sizes. A timeless standard work. Approx. 200 illustrations on 200 pages.

337761



A learning bock for interested professionals!

Professor W. Sander

"Uhrenlehre" (The Study of Clocks)

Reference book reprinted from the 1923 original edition: Gives an elementary portrayal of the most important mechanical, physical and technological principles of building clock movements to all clock enthusiasts who repair their timepieces themselves. 324 pages with approx. 152 diagrams.

337764 19,99

R. Lavest

"Grundlegende Kenntnisse der Uhrmacherei" (Fundamental knowledge of clockmaking)

The very understandable language, contents and illustrations of this book (reprinted from 1945) portray everything worth knowing about the inner workings of clocks: It mention not only the names of clock components but also - albeit only in an elementary but nevertheless adequately precise way - their purposes and functions. A wonderful piece of contemporary history that should be missing from the library of any clock lover or enthusiast. 144 pages, many illustrations and diagrams.

336179 17,99





Tel.: +358 (05) 413 2888



"Das ABC des Uhrmachers" (The watchmaker's ABC)

This highly competent reprint of a professional work first published in 1955 was then regarded as an informative lexicon for daily use in watchmaker shops and work places and has lost nothing of its modernity today. 264 pages.

337766 19,99





Everything for the workplace: Tools, accessories and practical helpers!





Complete workshop set

Workshop set in a box, ideal for battery and strap changes. Ideal combination including original Swiss watchmaker's knife by VICTORINOX.

The set includes:

- Case opener with wide adjustable grippers
- Plastic tweezers for button cells
- Fine tweezers AA
- Spring bar range from 8 to 19 mm
- Magnifying glass 2.5x
- Screwdriver 1.0 1.2 and 1.6 mm with spare blades
- Spring bar tool
- Original Victorinox Swiss Army Knife

337238







1 BERGEON spring winder

For large clock main springs. Sturdy, hammered lacquered frame with 3 interchangeable mounting spindles for different spring diameters as well as a double-sided spindle for locking the spring end hook. With lock for both winding directions. Frame length approx. 14 cm.

224055 289.00



2 Demagnetising device

The electronically generated, high-frequency magnetic field acts in seconds. Ideal for watchmaking tools, watch movements as well as small parts made of steel or iron. 230 V / 50 Hz. 6 x 11 x 3.5 cm

4360502 75.90

3 Demagnetisers

Tweezers, screwdrivers and other small tools and parts are demagnetised in a very short time (very important in watchmaking and precision mechanics). Conversely, if desired, steel or iron parts can also be magnetised. Appr. 5 x5 x3 cm.



334237





4 Repair kit

6-piece set for cleaning, machining, positioning of parts, circuit boards etc. in watchmaking, precision engineering and electronics. With hooks, blades, brushes, forks, needles and scrapers. Max. 18 cm long.

335983 6.95

5 Working plate

With 6 compartments and protective bell. Ideal for the safe storage of small parts when repairing clocks, fine precision devices, models, etc. Made of plastic.

. Ø 10.3 cm, 7 cm thick.

4212001 5.95





6 Press

For marking of watch crystals and backs. Painted steel cast frame, set of 6 plastic pressure pieces (concave and plan) for Ø up to 40 mm.

325932

26.90

7 piecepressure piece set (not shown) for large wristwatch and pocket watch cases. Suitable for press 9. Total 8 nylon round discs with Ø of approx. 40 to 55 mm.

326431 14.50



8 BERGEON working surface

Made of green, medium-hard plastic, extra thin, self-adhesive. 320 x 240 mm.

4210030 19.99

27.90

9 working surface

From 1 mm hard Astralon plastic, eye-friendly colour. Protects the tabletop. Good value 300 x 240 mm.

4210021 14.99

10 support set

For easy and secure mounting of mechanical movements when inspecting, repairing and lubricating. The brass brackets are clamped onto the circuit board of the movement with knurled support screws. Set with 3 supports.

238033





11 Rivet anvil

Made from hardened steel. 15 different holes as well as different width slots. Plan ground surfaces. Appr. 43 x37 x19 mm.

327591 11.90



12 Small anvil

Cast steel with polished work track. Ideal for riveting, hammering etc. 12.2 x 3.9 x 2.6cm, about 400 g in weight.

4420288 27.90



13 Hand remover

For gentle removal of large clock hands. Hardened steel bracket with screw spindle. Max. passage 7 mm.

318903 7.95



14 Rivet anvil

Made from hardened steel. With 36 holes Ø 0.4-3.6 mm. Plan ground surfaces. 7.6 x 0.9 x 2.3 cm

335859 10.90



1 Loupe magnifying glass in leather case

10x magnification

4230532 14.90



2 Headband magnifier with 3 magnifications

1.5x - 2.5x - 3.5x.

For use like a normal glasses, also ideal for spectacles-wearers Super lightweight and stable. Weighs only 30 g.

Fast replacement of the magnifying glass inserts. Supplied in a storage cartridge with cleaning cloth.

337239 14.99



Full view!







4 Watchmaker's magnifying glass 2.5x magnification. 329499 1.95



TOP SELLER!

5 Magnifying glass with clip for attaching to glasses (left / right). 3.5 x magnification.

328150 4.95



9 Watchmaker's magnifying glass

With adjustable and detachable LED spot. Super bright and super light! Plastic mount with Ø 21 mm lens, 10x magnification. Incl. two 3V replacement batteries.

Weighs only 10 g!

218006 13.90



10 Exceptionally lightweight headband mag-

Comfortable to wear for working without fatigue Equipped with a practical Velcro fastener. Weighs only 55 g. Approx. 4.0 x magnification

335987 65.90



11 Universal headband magnifier

With folding additional double lens and retractable magnifying glass. Equipped with a practical Velcro fastener. Magnification 1.8-4.8 x in 4 steps. Weight only approx. 110 g.

334339 21.95



6 Hand remover

for wristwatches and pocket watches. Hardened steel with plastic jaws to protect the dial. Total length 9.8 cm.

331187 16.90



7 Hand remover

for wristwatches and pocket watches. Lever mechanism made of steel, spring loaded punch Total length 10.6 cm.

335976 16.90



12 Professional headband magnifier

With super bright LED spotlight. Lightweight and practical, with 2 built-in LED lamps. Easily adjustable head band. Change the lenses with a click. Supplied with 4 magnifying lenses(1.2x - 1.8x - 2.5x - 3.5x).

4230488 39.95

Please order at the same time:

2625010 4 x Varta Mignon LR3/AAA

0.95 each



With holding plate for plastic watch glasses from Ø 10-45 mm. Aluminium drum with brass grips and plastic turning han dle. Ø 40 mm.



37.50





327808

334622

for small watches. Assortments with approx. 100 rings

Ø appr. -30 mm. 4.95

Ø appr. -50 mm. 9.95

1 Case opener

For wristwatches and pocket watches with pressed-on back. Sharp steel blade with ergonomic plastic handle. Comfortable in the hand. Total length 8 cm.







2 Case opener

For wristwatches with screwed-on back up to Ø approx. 50 mm. Adjustable steel grippers.

4220201 7.90

3 Case opener
For wristwatches and

pocket watches with press-on backs. Fixed, nickel-plated blade with plastic handle. Total length 11.5 cm.

335969 2.95





5 Case opener

For pocket and

wristwatches with pressed-in back. Fixed, stainless blade with anodised handle. Total length 11.2 cm. SWISS MADE.

336007 28.95

6 Case opener

For wristwatches with screw back. Fully adjustable universal tool with 4 different inserts of hardened steel for different back designs. In plastic box. For housing Ø up to approx. 40 mm. Total length 14 cm.



For cases Ø up to approx. 40 mm, total length 14 cm **335854 17.95** For cases Ø up to approx. 60 mm, total length 17.5 cm **335916 27.50**



7 Insertion cushion

Protect case and glass of wristwatches and pocket watches when opening and closing, changing batteries etc Padded, covered with artificial leather.

Ø 50 mm, metal mounting **327809 10.90** Ø 75 mm, plastic holder **335902 14.95**



8 Pin remover

For connecting pins in metal straps For straps with a width up to 20 mm. Solid plastic housing, adjustable base plate, threaded spindle with ejector pin.

335882 13.95



9 Pin removal kit

1 Pin removal kit with strap holding block

made from sturdy plastic and 1 punch each Ø 0.7, 0.8 and 1.0 mm.

335883 17.90



11 Holder for wristwatches

Ideal aid when you open the back, change the battery, plastic jaws with steel spindles. Clamping range approx. Ø 20-45 mm.

335968 5.60



13 Case holder

For large wrist- and pocketwatches as well as plug-in units up to Ø 60 mm. Solid aluminium jaws with 4 interchangeable plastic pillars, steel guides and spindle.

335901 26.90



15 Workpiece holder

For quartz watches. 4 plastic pillars with spring tension. Max. span approx. 35 mm.

335881 9.95



10 Pin remover

Solid metal frame with steel supports; slotted strap holder in plastic, stamp with 6 inserts from Ø 0.4-2 mm, screwdriver for threaded pins. Frame: 6.2 x 7.5 x 8 cm

335993 37.95



12 Holder for small watch cases

Solid plastic jaws with 4 interchangeable plastic pillars, steel guides and spindle. For case Ø of 12-45 mm.

335967 13.95



14 Case holder

For wristwatches and plug-in units up to Ø 42 mm. Solid frame with 4 individually adjustable plastic pillars, steel screw spindles with knurled heads.

335941 22.50



16 Workpiece holder

for wristwatches and pocket watches. Graduated aluminium jaws with steel screw spindle. Reversible. Maximum span approx. 70 mm

335880 9.90



1 CELLSIUS toolbox

The artificial leather box contains:

Case opener with polished steel blade; watchmaker's magnifier; tool to press out metal strap pins; spring bar tool with ejector pin and yoke; anti-magnetic gripper tweezers made of polished stainless steel; plastic tweezers to grip button cells; 1 precision screwdriver 0.8, 1.0, 1.4 and 1.6 mm wide; empty box for loose small parts. $30 \times 3.7 \times 13.5$ cm

335856 49.95



2 Angle tweezers with guide pin, total length 15.5 cm.

335950 3.95

3 Tweezers with fork-shaped tips. Ideal for holding and positioning small screws. Stainless steel. Slot width 0.7 mm, total length 12.5 cm.

334276 5.50

4 Tweezers (forceps No. 3) with fine tip. Total length 12 cm. **336000**

5 Working tweezers with medium-fine tip. Total length 12 cm.

2.60

335979 2.60

6 Folding tweezers

Facilitates the difficult gripping, holding and positioning of small parts. 3 Spring steel grippers hold the part firmly. Knurled grip. Total length 11.7 cm.

334274 3.95



7 Tweezer set 5-piece

Watchmaker tweezers, 1 each No. 00, 3, 3c, 5 and AA. Anti-magnetic, stainless, hardened and precision ground steel. Approximately 11.5-12.5 cm long. In plastic bag.

4240900 11.90



8 Tweezer set 4-piece

1 each of watchmaker tweezers No. 3 and AA (pointed), No. 7 (pointed bent) and No. 2A tweezers (flat round). Anti-magnetic, hardened and precision ground steel. 12-12.5 cm long.

336005 9.90



9 Precision tweezer set

3-piece, finely polished stainless steel. Set of 3 tweezers: No. 2, very slender and pointed, 12 cm long; No. 3, medium slim and pointed, 12 cm long; No. 4, very slim and pointed, anti-magnetic, 11 cm long.

335872 19.90



10 Tweezer set for watch making and precision mechanics, 7 piece, i each of 00, 2A, 3C, 5, 5A, 6 and 7. Anti-magnetic, acid-resistant, hardened and precision ground steel. Approximately 11-12 cm long. In a wooden case.

328670 25.90





12 Magnifying glass tweezers

for difficult work. 3x magnification. Ø 25 x 80 mm long.

335980 4.95



13 Square pin with plastic handle

Ideal for turning minute hand sockets for exact alignment of the hand to half hour or full hour stroke.

Square 1.5-5.5 mm, approx. 18.5 cm long. **227777 6.60**

14 Mini hammer

Steel with plastic insert and knurled handle. Total length 20 cm, weight approx. 85 g, ideal as a supplement to pin removers 4 + 7.

335884 9.90

15 Mirror

For working in difficult-to-view large clocks, devices, etc. Ø 22 mm, total length 16.5 cm.

334275 3.95



16 Spring bar tool

For fast removal and insertion of spring bars on watch straps. Sturdy, nickel-plated holder with pin and fork inserts. Incl. 2 spare forks and pins.

Total length 13 cm.

4229011 29.90

Also order matching accessories:

4229012 Insertion pin Ø 0.8 mm / blade width 1.2 mm
 5.90 4229013 Insertion blade, blade width 4.0 mm
 5.90



17 Spring bar tool

To remove and install the spring bars in watch straps. Holder with hardened pin and fork ends. With printed mm and inch scales for measuring the width of the strap. Total length 14.8 cm.

335970 4.95



1 Hearing aid cleaning kit

Care set for simple hearing aid cleaning, 5 important tools included, small and handy storage box including space for spare batteries.
Suitable for all hearing aids

ncluded:

- 1 x storage box
- 1 x Cerumen removal brush
- 1 x Cerumen-removal angle
- 1 x sound and ventilation channel stick
- 1 x battery compartment opener
- 1 x battery replacement magnet

327966 11.90

2 BERGEON special tweezers
For button cells. Plastic with very flat tips for the smallest batteries. With inserted steel blade
To open screwed battery covers.
12.5 cm long.
4240659
19.95



3 Battery tester

Analogue display with red/green threshold mark. The device is operated by the residual voltage of the battery under test.

- Measuring ranges up to 1.5 V for silver oxide batteries (low/high drain)
- Measuring ranges up to 1.5 V for alkaline manganese and zinc carbon batteries (round cells)
- Measuring ranges up to 3.0 V for lithium batteries

With separate, manually switchable load resistor. 6 x 11 x 5 cm

4351015 63.90

4 Screws for battery retaining springs Assorted, with 100 screws of the most common sizes and varieties.

334488 9.9





Hearing aid batteries -Top quality from RAYOVAC and POWER ONE by Varta

Type	Brand	Order no.	€ / 6 pcs.
10	Rayovac	2370010	5.40
13	Rayovac	2370013	5.40
312	Rayovac	2370312	5.40
675	Rayovac	2370675	5.40
10	Power One	330137	5.40
13	Power One	330138	5.40
312	Power One	330139	5.40
675	Power One	330140	5.40

Lithium cells by CELLSIUS - for watches, calculators, cameras, small electronic devices etc.

Type	Order no.	€ / 6 pcs.
CR 1220	2349051	1.80
CR 1616	2349063	2.30
CR 1620	2349054	2.00
CR 1632	2349050	2.30
CR 2016	2349055	1.50

Type	Order no.	€ / 6 pcs.
CR 2025	2349056	1.50
CR 2032	2349057	1.50
CR 2430	2349062	2.60
CR 2450	2349072	3.30
		<u> </u>



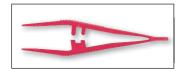
Information on battery disposal can be found on page



5 Universal battery tester

Tests all common batteries for movements, photo flash units and hearing aids, calculators, radios etc. 13 different measuring positions for different loads depending on the type of battery and equipped with a rotary switch. Separate measuring compartment for button cells. With 2 permanently fixed test tips and instructions for use. $6.4 \times 10 \times 3.6$ cm

325979 17.50



6 Plastic tweezers

For gripping touch-sensitive button batteries. Length 12.5 cm.

336006 1.00



7 Button cell tweezers

Made of sturdy plastic. Ideal for the safe handling of small button cells (no danger of discharge!). Total length appr. 11.5 cm.

335885 2.60





8 VARTA Battery tester

Practical and user-friendly battery tester. Tests all important batteries, rechargeable batteries and button cells. Results can be read on the LCD display. Fitted with 2 button cells (LR44).

327965 9.90



9 Battery finder

Helps to identify button cells from clocks, computers, cameras, etc. With holes for all common sizes. The correct battery number can be read off directly. White plastic, Ø 14.5 cm.

330366 8.60



Button cells -

	lop quality froi		
Туре	Order no.	€/pc.	
301386	2325301	4.60	
303357	2325303	4.60	
309	2325309	2.50	
315	2325315	3.00	
317	2325317	2.00	
319	2325319	2.40	
321	2325321	2.00	
329	2325329	2.50	
335	2325335	6.50	
337	2325337	4.60	
341	2325341	4.60	
344	2325344	4.60	
357	2325357	4.60	
362	2325362	1.60	



aita			
уре	Order no.	€/pc.	
64	2325364	1.40	
70	2325370	2.00	
71	2325371	1.80	
73	2325373	2.50	
77	2325377	1.50	
79	2325379	1.90	
881/391	2325381	3.70	
884/392	2325384	2.20	
389/390	2325389	3.70	
94	2325394	3.80	
95	2325395	1.95	
96	2325396	2.70	
97	2325397	2.70	
99	317146	2.00	





1 Screwdriver set

Slot screwdriver with 7 colour-coded precision screwdrivers in a very solid design. Blade width: 0.6/0.8/1.0/1.2/1.4/1.6/ 2.0 mm. In divided pocket.

335982 33.90

2 Screwdriver set

Phillips screwdriver for working on watches, calculators, instruments etc. chrome, colour-coded shank with ball bearing mounted rotary knob, hardened blades. Set of 4 with Ø 1.5/2/2.5/3mm. Total length 11 cm.



336012

20.90



Screwdriver sets

Slotted/Phillips PH screwdriver set, 13

Slotted 0.8-2.6 mm; Phillips PH 1.2 - PH 3. T-profile screwdriver set, 10pcs. With T3/T4/T5/T6/T7/T8/T9/T10.

For precision mechanics professionals! Fits in every pocket. Brass handle, anchoring the blades in the case, size marking, chrome-vanadium hardened.

335873 Slotted / Phillips 24.90 337343 T-profile / Torx 18.90





TOP SELLER!

7 Screwdriver set

9 Colour-coded screwdrivers, handle and ball bearing mounted head made of chrome-plated brass. Interchangeable blades made of special steel. Blade widths 0.6 / 0.8 1.0 / 1.2 / 1.4 / 1.6 / 2.0 / 2.5 and 3.0 mm. In a practical rotating base with 19 spare blades as well as 2 spare clamping screws in the middle section.

4250001



Mini TIN milling cutter

Drilling and milling in one, e.g. for enlarging holes: Deburring, rounding off and cleaning interior cut-outs. Up to 6x longer service life thanks to titanium nitride coating. For fine work in model making, precision mechanics, electro-

nics, optics and other areas. For metal, wood and plastic. 5-piece: Ø 2.0 - 2.3 - 2.6 - 3.0 - 3.2 mm

337342 9.99



4 Conical hand reamers

Made of silver steel, 5 flutes, with corrugated plastic handle. 6 piece set, Ø 2-6 mm.

45.90 335953



5 Conical hand reamers

5 flutes, with corrugated plastic handle. 6 piece set, Ø 0.15 to 1.4 mm. In plastic bag.

327485 18.60





Securely hold unusual workpieces, with a total of 8 insertable steel pins. Sturdy aluminium jaws with steel screw spindle and guides. Max. span approx. 60 mm, pin height approx. 8 mm. Handy wooden handle. Can be clamped in a vice.

335866 19.50

10 Bit box

Handy aluminium case with 80 bits for various safety and standard screw heads. Including 17 extra-long bits for recessed

screws. Easy grip ratchet handle with left/right switching. 20.5 x 6 x 15.5 cm



6 Watch opener big size

Less effort required thanks to lever effect: This is the universal case opener for screwed-on case backs. For backs with a span of up to approx. 58 mm. 5 different pin forms or opener claws: suitable for case backs with edges, indentations, holes or grooves. Flexible: adjustable for almost all watches up to the maximum span of 58 mm.

Material: Plastic, metal.



BERGEON SPECIAL



BERGEON 1791 has been the largest partner for watchmakers and goldsmiths for more than two centuries. Highest precision and top quality are features of all BERGEON products. Work like professionals with the most ergonomic and long-lasting tools from this traditional Swiss com-





Screwdriver set

9 pieces with rotatable head .50 - 0.60 - 0.80 - 1.00 - 1.20 - 1.40 -1.60 - 2.00 - 2.50 mm. Shaft made of stainless steel. Head made of synthetic material POM, self-lubricating.

Blades: Stainless steel, hardened. Rotatable base Ø 67 mm with marked compartments for spare blades.

314720 139.00



Screwdriver set

These screwdrivers with an elastomer covering provide the ideal contact between the tool and the working hand. 10 pieces with rotatable head Ø 0.50 - 0.60 - 0.80 - 1.00 - 1.20 - 1.40 - 1.60 - 2.00 - 2.50 - 3.00 mm.

202988

229.00



Single screwdriver s

Ergonomic, stainless steel/Delrin plastic, very light, with rotatable, self-lubricating eight hex head. Black shaft very grippy, with replaceable stainless steel blades.

202989	0.5 mm	24.9
202990	0.6 mm	24.9
202991	0.8 mm	24.9
202992	1.0 mm	24.9
202993	1.2 mm	24.9
202994	1.4 mm	24.9
202995	1.6 mm	24.9





4263106

Watchmaker's magnifying glass With 2.5x magnification, supplied without wire holder.

211109 21.00



Loupe magnifying glass 4 x With ancillary lens 12 x Triplet lens. Two-piece magnifying glass with screwed ring.

4230312 24.90





Round crystal setter and remover

For plastic watch crystals, universal from Ø 10 to 45 mm, with 16 self-tensioning gripping arms made of brass that open and close by turning the black handle, with a mounting plate for setting the crystal.

4400011 99.90



Wire holder

The flexible spring wire is simply placed around the head, also suitable for spectacle wearers.

4230501 4.60





Special brass forceps

Tips without blow. For work on sensitive steel parts and highly magnetic parts, also for working with acids and pickling agents.

BERGEON SPECIAL



Metal oil block

Made of metal, 4 fixed inserts, countersunk Ø 8-11 mm. Oil cups with agate stone inserts and hinged lid. An insert for sunflower mark or Rodico.

4340082 179.00



Oil-pike

High-quality polished stainless steel tips with ergonomic handle and coloured rings. Good adhesion of the drop to the tip. Precise positioning of the oil drop (half drops also possible).

212651 36.90



Precision oiler

Automatic precision oiler. Application: Wherever a precise amount of oil has to be exactly positioned, e.g. watchmaking, apparatus construction, precision mechanics, electronics. These oilers guarantee a simple and precise regulation of the oil quantity by means of a side eccentric screw. All parts are replaceable.

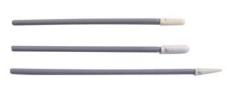
4341061 99.00



Instrument case

Case for instruments with 23 storage containers. 2 round containers: Ø 40 mm. 21 round containers: Ø 21 mm. Size: 260 x 105 x 25 mm

236209 49.95



Swabs

Flexible polypropylene shank (length approx. 7-8 cm). For cleaning or dabbing with a slight grinding effect. Acid and solvent resistant. Contents 10 pieces.

4332411 7.00



Precision vice

Precision work The guide plate supplied is embedded at the work place or screwed on. The vice can be attached simply by turning the clamping lever at the side. With round anvil Ø 12 mm.

4510041 299.00



Bergeon hand setter

For wristwatch and pocket watch hands, metal lever with 2 plastic inserts.

4263154 19.90

Hand remover Presto Form 1

For wristwatch hands The mandrel pin supports the remover on the seconds hand or cannon pinion The two plastic punches rest on the dial and prevent it scratching.





Rodico - hard finish

For cleaning pins, wheels, etc., to remove fingerprints on boards, dials, hands, etc., and to remove surplus oil on stones. Contents 2 pieces.

4332353 13.80



pocket watch hands, lever form, plastic with ground steel core, width 10 mm, set of 2 pieces.

4263104 64.90



Case opener Jaxa XL

To securely position in the case recess, 3 adjustable clamping jaws on the handle or adjustable with a knurled nut. The maximum clamping range is 62 mm, incl. 12 inserts, plastic base.

223393 250.00



Press for versatile use

To push in or push out the pins, screw and unscrew the watch strap screws. Base also holds watches with leather or metal straps in the correct position. Two further support plates to regulate the support height. Also for watches with large cases. With 6 mandrels and 10 screw blades.

313776 229.00

WATCHMAKER'S TOOLS



1 Super safety and special bit set

Unscrew anything with this set . 75-piece set with many special bits. Normal bits (25 mm) and deep-hole bits (80 mm). Bits in durable industrial quality. Incl. magnetic holder. Everything that is needed.

337428 59.00



2 Step drills

Conical drill tool made of high-quality HSS steel. Ideal for drilling and finishing thin sheets, plastics etc. Does not rip! 9 steps Ø 4-12 in mm increments with laser-marked diameter information visible during drilling. With centring point for tapping. Shaft Ø 6 mm.

324732 27.90

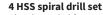


Titanium-nitride coated for a 6x longer life than conventional HSS drill bits. 11 Drill Ø 1.5-6.5 mm, increasing by 0.5 mm as well as 1 drill each \varnothing 3.2 and 4.8 mm. Highest level of precision and cutting speed with extremely high toughness! In plastic cassette case with hinged lid.

335972 13.90



6x longer service life!



Titanium-nitride coated for a 6x longer life than conventional HSS drill bits. 19 Drills Ø 1-10 mm, increasing by 0.5 mm. Highest level of precision and cutting speed with extremely high toughness! In sheet metal case with hinged lid.

335973 25.90



5 Pin holders with slide

Professional quality. With ribbed, nickel-plated brass handle. With collet chuck and locking slide. Clamping range up to 0.8 mm, length 110 mm. 4512033



6 Pin holders

2-sided. Knurled, nickel-plated handle with hexagonal ends, hardened collets. Clamping range Ø 0.7-1.3 mm and Ø 1.7-3.0 mm. Length 10.5 cm.

332255



7 Needle file holders

16 mm wide clamping jaws with blow. Finely ground steel with knurled handle and through hole. Length 11.5 cm.

4512001

Order quickly and easily right now:

15.90

4.95

8 Right-hand cutting precision drill of **HSS steel,** Shaft and drills with the same

HSS drill, ground, 3 pcs.

336004

4512603	וווווו כ.ט ש	0.10
4572604	Ø 0.4 mm	8.70
4572605	Ø 0.5 mm	8.70
4572606	Ø 0.6 mm	8.70
HSS drill 10	pcs. with 2 drills each	
336003	Ø 0,5–0,9 mm	17.90
HSS drill 12	pcs. with 2 drills each	
335964	Ø 1,0-1,5 mm	9.90

Ø 1,5-2,0 mm

9.90



9 HSS spiral drill set

20 pieces in cassette. 2 drills per size, Ø 0.3-1.2 mm.

335899 10.50



10 Diamond cutter set

Ideal for fine milling and grinding work in precision mechanics and modelling. 20 Diamond grit coated milling cutters with different profiles. Shaft Ø 2.35 mm, total length approx. 45 mm. In plastic case.

335896 10.60



11 Tool holder

With T-handle and switchable ratchet, parallel gripping jaws for Ø from 2.4-5.5 mm. Ideal for holding drilling and tapping tools, reamers, etc. Chrome-plated all-steel design. 8.2 cm long.

335981 17.20



12 Hand drills

For fine drilling work. Clamps drill up to Ø 1 mm. Length 10 cm.

4570101 18.90



13 Pin holders

For clamping fine tools and workpieces. With 2 hardened steel collets and knurled brass handle. Clamping range: Ø 0,1−3 mm.

332256 11.50



14 Hand drill handle

For holding drills, reamers, countersinks, workpieces, files, etc. Quick chuck for Ø 1-9 mm.

246194 23.50



335919



15 + 16 Pin holders Nickel-plated brass.

4444050

Ø 0.1 to 1.0 mm clamping 4.95 Ø 1.0 to 2.0 mm clamping 5.60

WATCHMAKER'S TOOLS



1 Bearing bushings for alarm, wall and table clock movements. Assortment with 120 units sorted by size, bore \emptyset 0.25 to 2 mm. In compartmented plastic box.

334751 37.90



2 BERGEON Reamers

For the reaming of defective board holes to the bushing Ø. SWISS MADE.

4422615	Reamers Ø 1.20 mm	29.95
4422616	Reamers Ø 1.97 mm	29.95
4422617	Reamers Ø 2.47 mm	29.95
4422618	Reamers Ø 2.97 mm	29.95
4422619	Reamers Ø 3.47 mm	29.95



3 File set

Coated with diamond grit, this is also suitable for particularly hard materials such as steel, glass, ceramics, tiles, etc. Profiles: Round, triangular, square, half-round and flat. With non-slip, rubberised handle. Length of cut approx. 7 cm, total length 17.5 cm. In storage box.

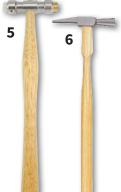
335897 21.50



4 Mini file Set, 13 piece

For very fine work. Includes handle with integrated storage sleeve and pocket clip, 6 steel files and 6 diamond-coated files in various profiles. Cutting length 4 cm, total length with handle 17 cm.

335906 25.50



5 Soft hammer

Nickel plated steel head with brass and plastic inserts to protect the workpiece.
Total length 24 cm.
Weight approx. 120 g
335894
14.50

6 Watchmaker's hammerMade of nickel-plated
steel, handle mounted.
Approximately 23 cm long,
weight approx. 70 g. **4420303 19.95**

SWISS MADE

7 Loose BERGEON hard brass bushings

For dimensions see sketch. Package with 10 pieces.

A mm	B mm	C mm	Flume No. €/ Pack
0.30	1.50	2.00	7170031 6.90
0.40	2.00	2.00	7170033 6.90
0.45	2.00	2.00	7170034 6.90
0.50	2.00	2.00	7170036 6.90
0.55	1.50	2.00	7170037 6.90
0.65	2.00	2.00	7170038 6.90
0.75	2.00	2.00	7170039 6.90
0.85	2.00	2.50	7170040 6.90
0.95	1.20	2.50	7170041 6.90
1.00	2.00	3.00	7170042 6.90

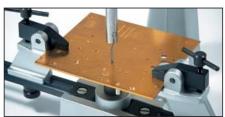
A mm	B mm	C mm	Flume No. €/ Pack
1.25	2.00	3.00	7170045 6.90
1.30	2.00	3.00	7170046 6.90
1.40	2.00	3.50	7170047 6.90
1.50	2.00	3.50	7170048 6.90
1.80	2.00	3.50	7170052 6.90
1.90	2.00	3.50	7170053 6.90
2.00	2.00	4.50	7170054 6.90
2.40	2.00	4.50	7170057 6.90
2.75	2.00	4.50	7170058 6.90

3.00 3.00 5.50 **7170026 6.90**

A = bore diameter B = bushing height

C = outer diameter





8 BERGEON press

Ideal tool to replace defective bearings in watch movements and fine mechanical devices. Ream out a defective hole effortlessly and accurately and then press-in a hard brass bushing. Rugged cast aluminium frame, finely ground steel spindle with hand wheel, 2 arms with adjustable clamping jaws. Suitable for boards from 50-220 mm and movements with pillar height up to 70 mm. Frame height 20 cm, weight 2.4 kg.

335840 699.00

9 Professional digital caliper

Made of stainless, hardened stainless steel. Extra large, scratch-resistant digital display. Suitable for external, internal, depth and stop measurements. Measuring range 0-150 mm / 0-6 ", accuracy: 0.01 mm / 0.004". With on / off switch and reset button as well as locking screw. In storage case with spare battery.

328671 31.90





10 Diamond files

Inexpensive needle file, coated with 100-diamond grit. Ideal for machining hard materials such as steel, glass, ceramic, marble, tiles, etc. 10 files with different shapes and profiles, cutting length 5 cm, total length 14 cm. With plastic-coated handles. In divided pocket.

335986 36.90



TOP NEW ITEMS



USB high speed charger

Protect your mobile phones, smartphones, tablets and other USB deks from overload and short-circuits. The intelligent charging control automatically detects the connected device and uses the optimal charging current. So your device is automatically charged in the best and fastest way - protecting the battery! Very low stand-by consumption, automatic control of output voltage. Very compact. Output 5 V / max. 6800 mA, suitable for all devices.

337315 29.99



Holder for watch straps

Perfect for holding watch straps during repair or when changing the battery - without having to remove the strap. With a pressure piece to protect the case.

337739 18.90



Elder mark

The original elder mark rods from the Black Forest are used throughout the world. Perfect quality over many decades. For de-oiling or degreasing oilers and watch pins

 4332351
 Elder mark rods, contents approx. 10 pcs.
 8.90

 4332352
 Elder mark discs, contents approx. 12 pcs.
 17.90

In tests with comparable workshop products, mechanics opt a Super Lube in 7 out of 10 cases.

One for all!

Super Lube

Replaces up to 17 different products! Can be used with as few chemicals as required on as many materials as possible. A workshop winner for more than 40 years. Loosen and lubricate, clean, protect and care - everything is possible with Super Lube. In one can you will find: Aluminium cleaner and care products, antenna grease and lubricant, interior spray, adhesive lubricant, high pressure grease, V-belt spray, contact and electrical protection medium, mounting paste, MOS 2, rust and dirt loosener, acid protection and terminal grease, lock and cylinder lock grease, lubricant with PTFE, silicone spray, white greases and pastes, chain spray, Bowden cable spray. Content 75 ml.

337164 6.99

Thread cutting made easy!





Thread cutting die and suitable taps



Tool steel. DIN right-hand thread, metric. The thread cutting dies have an outer diameter of 8 mm and are packaged singly. The blank for the threads should have a diameter about 0.3 mm arger than the desired thread. The taps have a round shaft diameter of 1.0 mm and are packaged in twos.

Thread Ø	Pitch	Drill hole Ø	Cutting die Order No.	€ / pc.	Thread tap Order No.	€ / pc.
0.30	0.08	0.25	4 577 030	49.90	4 576 030	19.90
0.40	0.10	0.30	4 577 040	39.90	4 576 040	19.90
0.50	0.12	0.40	4 577 050	39.90	4 576 050	19.90
0.60	0.15	0.50	4 577 060	39.90	4 576 060	19.90
0.70	0.17	0.60	4 577 070	39.90	4 576 070	19.90
0.80	0.20	0.70	4 577 080	39.90	4 576 080	19.90
0.90	0.22	0.80	4 577 090	39.90	4 576 090	19.90
1.00	0.25	0.80	4 577 100	39.90	4 576 100	19.90
1.20	0.25	1.00	4 577 120	39.90	4 576 120	19.90
1.40	0.30	1.10	4 577 140	39.90	4 576 140	19.90
1.50	0.30	1.20	4 577 150	79.90	4 576 150	19.90
1.60	0.35	1.30	4 577 160	79.90	4 576 160	19.90
2.00	0.40	1.90	4 577 200	79.90	4 576 200	19.90

Accessories:



Holder for thread cutting die

With two lever arms.

4576310 24.90



Holder for taps

Adjustable, with 2 lever arms and clamping for square sectioned profiles from 2.0 to 5.0 mm, corresponding to tap Ø 1.0 to 5.0 mm .



Countersink set

Supplied in a case, 6 double-sided countersinks in Swiss quality: Ø 1.7+1.8 mm, Ø 2.1+2.3 mm, Ø 2.7+3.0 mm, Ø 3.4+3.8 mm, Ø 4.1+4.7 mm, Ø 5.0+5.8 mm

4444245 79.90



KWM by Flume - Brass bearings, made in Germany Highest quality and dimensional accuracy.

The KWM press-in bearing system includes press-in bearings in conjunction with special reamers and press-in tools for the rational repair of worn-out journal bearings in all types of watches, counters, switching and tariff clocks, manometers, dial gauges and all technical drives. Known throughout the world, proven over decades!

Here you will find the dimensions of the most common KWM bearingsand accessories for manual use. Many other dimensions of the L, C and KL bearings are available online.

> MADE • • **IN GERMANY**

KWM bearings for large clocks marked L. Contents 20 pcs. per package. Price per piece only €0.59, package price: €11.90

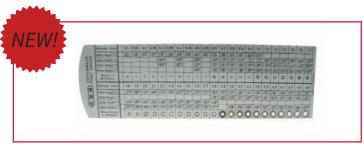
Order no.	Bearing	Bore x height x Ø in mm	€ / Pack
7172009	L 09	B 0.5 - H 1.4 - D 1.82 mm	11.90
7172010	L 10	B 0.6 - H 1.4 - D 1.82 mm	11.90
7172011	L 11	B 0.7 - H 1.4 - D 1.82 mm	11.90
7172012	L 12	B 0.8 - H 1.4 - D 1.82 mm	11.90
7172013	L 13	B 0.9 - H 1.4 - D 1.82 mm	11.90
7172014	L 14	B 1.0 - H 1.4 - D 2.72 mm	11.90
7172016	L 16	B 1.2 - H 1.4 - D 2.72 mm	11.90
7172017	L 17	B 1.3 - H 1.4 - D 2.72 mm	11.90
7172018	L 18	B 1.4 - H 1.4 - D 2.72 mm	11.90
7172019	L 19	B 1.5 - H 1.4 - D 2.72 mm	11.90
7172020	L 20	B 1.6 - H 1.4 - D 2.72 mm	11.90
7172021	L 21	B 1.8 - H 1.4 - D 2.72 mm	11.90
7172022	L 22	B 2.0 - H 1.4 - D 3.52 mm	11.90
7172032	L 32	B 0.5 - H 1.9 - D 1.82 mm	11.90
7172033	L 33	B 0.6 - H 1.9 - D 1.82 mm	11.90
7172034	L 34	B 0.7 - H 1.9 - D 1.82 mm	11.90
7172035	L 35	B 0.8 - H 1.9 - D 1.82 mm	11.90
7172036	L 36	B 0.9 - H 1.9 - D 1.82 mm	11.90
7172037	L 37	B 1.0 - H 1.9 - D 1.82 mm	11.90
7172038	L 38	B 1.1 - H 1.9 - D 2.72 mm	11.90
7172039	L 39	B 1.2 - H 1.9 - D 2.72 mm	11.90
7172040	L 40	B 1.3 - H 1.9 - D 2.72 mm	11.90
7172041	L 41	B 1.4 - H 1.9 - D 2.72 mm	11.90
7172042	L 42	B 1.5 - H 1.9 - D 2.72 mm	11.90
7172043	L 43	B 1.6 - H 1.9 - D 2.72 mm	11.90
7172044	L 44	B 1.8 - H 1.9 - D 2.72 mm	11.90
7172045	L 45	B 2.0 - H 1.9 - D 3.52 mm	11.90
7172065	L 65	B 1.00 - H 1.4 - D 1.82 mm	11.90
7172109	L 109	B 2.00 - H 2.7 - D 3.52 mm	11.90



Premium PVC box (without contents)

Practical, secure, robust. Made of special plastic, sliding cover made of stainless steel, 60 compartments for your own assortment.

119.00 332347



Journal dimensions

To determine and measure the journal of the bearing and the reamer sizes.





Hand reamer holder

For reaming without a press-in unit, length 115 mm.

4422503 49.90 Reamers

4422531	Reamers Ø 1.18 mm	Length 35 mm	39.90
4422532	Reamers Ø 1.78 mm	Length 35 mm	39.90
4422533	Reamers Ø 2.69 mm	Length 35 mm	39.90
4422534	Reamers Ø 3.48 mm	Length 37 mm	39.90
4422535	Reamers Ø 4.66 mm	Length 39 mm	39.90
4422536	Reamers Ø 5.85 mm	Length 40 mm	39.90
4422537	Reamers Ø 8.64 mm	Length 40 mm	39.90

GRINDING & POLISHING



1 HATHO Mira cloth buffing

Made of very fine cotton, 50 layers, sewn. Excellent paste absorption, work surface roughened. Approximately 100 x 15 mm (Ø x B). Set each with a "Yellow" buffing cloth and a "white" gloss polishing cloth.

329025 9.50 Suitable mandrel: Item 7 + 8 on this page.



2 Emery wood assortment

With different profiles and grain sizes: 4 pieces flat, 3 pieces half-round, 2 pieces round, 1 piece triangular. Emery approx. 20 cm long.

335857 21.20

3 Watchmaker brush

With four rows of natural bristles. Total length 26 cm.

4332002 9.95

4 Brass wire brush

With 4 rows of wire bristles. Specifically designed to clean metal surfaces and to shine wax stained wood parts. Total length appr. 22 cm.

335951 9.95





5 + 6 Brush and polishing sets for cleaning and polishing work in watch making, precision mechanics, modelling, electronics and jewellery production. Shaft-Ø 2.35 mm, length 43 mm.

5 Fine polishing set, 8-piece contains 2 x yarn, flannel, felt and soft leather discs. Ø 22 mm. For speeds up to 15,000 rpm.

335903 13.95



7+8 Work holding spindles for circular brushes, polishing discs and buffing discs with wooden or plastic hubs. Shaft Ø 6 mm.

7 Conical mandrel, cone diameter 5 to 10.5 mm, total length 65 mm. 17.95 336011

8 Cylindrical mandrel, for hub bore Ø 6 mm. Clamping capacity max. 28 mm, total length 70 mm. 336010 12.95

6 Round brush set, 10-piece contains 2 each nylon bristles hard, medium and soft as well as 2 each brass and steel bristles. Brush Ø 21 mm. For speeds up to 10,000 rpm

335904 13.95



9 Scratch brush

With brass bristles and sliders, Ideal for fine cleaning work on metal cases, trim parts etc. 2.5 x 6 cm.

4.20 329854



Circular brushes with wooden core

10 Wavy steel wire

Øapprox.85x15 mm wide. Drill hole Ø approx. 6 mm. For max. 2800 rpm.

335955

11 Wavy brass wire

Ø approx. 85 x 15 mm wide. Drill hole Ø approx. 6 mm. For max. 2800 rpm.

25.90

25.60 335954

12 plush disc

with plastic core, Ø approx. 80 x 30 mm wide. Conical bore Ø approx. 6-10 mm. For max. 3500 rpm.

329026 17.20



4546146 19.90

Flat, coated with goat leather. Dimensions 6 x 6 mm, length 120 mm.

19.90 4546147

Bergeon Quality

14 Protective cover for Leather file

4346316 7.90 6 mm 4346317 12 mm 7.90



15 Felt buffing cloth

For polishing precious metals and plastics. With a patented breaking flange that can be broken away ring by ring when worn. This gives these buffing cloths optimal stability. Moulded wooden core with hole-Ø 6 mm. Outer diameter approx. 110 mm. For speeds of 800-1400 rpm.

19.40

16 Diamond grinding / cutting wheel set 8-piece. Contains 1 disc, coated on both sides, Ø 16, 20 and 25 mm x 0.6 mm wide as well as one disc with a diameter of 16, 20 and 25 mm x 0.6 mm wide on both

sides. Including 2 pick-up pins Ø 2.35 mm x 50 mm long.

335905 15.90



17 RAKSO steel wool

Ideal for fine sanding and application of waxes on wooden surfaces. 8 cushions, a total of 200 g.

334834 Fine (00) 5.50 334833 Very fine (000) 5.95



18 Fine knit glove YUMEN

11.20

With reinforced fingertips for safe grinding and polishing, pack of 12.

	€ / Pack
Size 6	23.40
Size 7	23.40
Size 8	23.40
Size 9	23.40
Size 10	23.40
	Size 7 Size 8 Size 9

Improved quality!



19 Glass fibre pencil

4332255

With plastic handle, inserts made of glass fibre bristles (replaceable), bristle length adjustable, rotary pencil shape. Perfect for fine cleaning work on watch cases, wheels, drives, trim parts, etc. Length 120 mm.



20 Glass fibre inserts

New in pack of 24! Glass fibre inserts Ø 4 mm, matching the glass fibre pencil.

GRINDING & POLISHING

1 Multi-function work chamber

Practical, useful, compact and versatile: The illuminated work station for those who want cleanliness when the are working The work chamber provides optimal conditions for light and visibility and protects against dust and dirt during polishing, grinding and drilling operations. The compressed air nozzle can be used to direct the dust directly through the cover wall from the workpiece into an extraction system.

- Extremely compact housing with many useful functions
- Swivelling LED illumination
- Compressed air nozzle with variable airflow for direct dust removal
- Vacuum port for direct connection to an extraction system
- Folding magnifying glass, approx. 13 cm in diameter
- Protective polycarbonate shield
- Comfortable armrests on both sides for relaxed working
- Working area (size approx. 26 x 16 cm with approx. 0.6 cm high edge), Waterproof and easy to clean
- overall dimensions (height x width x depth): Approx. 30 x28 x25 cm.



499.00











Professional unit for use at home. Compact design, practical work, safe and easy

2 Polishing motor with dust catchers

Compact, powerful polishing motor with two dust collectors and polishing spindles. Very quiet, precision-made. Speed 500-7000 rpm, 125 watts, weight approx. 3 kg 379.00

325966



Dialux polishing bar

Blue	For polishing steel, stainless steel. Use with high gloss polishing discs.	4546222	7.95
Yel- low	For refreshing (pre-polishing) copper, brass, aluminium, chrome, plastic. Apply with solid cotton discs.	4546223	7.95
Red	For gold. Use with high gloss polishing discs.	4546224	7.95
White	Perfect for mirror gloss with silver. Also for almost all other materials (except chrome and titanium)	4546225	7.95
Green	For polishing metal alloys such as white gold, platinum, chrome and stainless steel, also for silver. Use with high gloss polishing discs.	4546226	7.95
Grey	Coarse removal of surface, brings stainless steel to high gloss. Apply with flannel or cotton discs.	4546227	7.95

3 Professional polishing motor

Hand piece with vibration-free rotation and low noise. Motor with high torque and electronically controllable power. Automatic protection against over voltage. The control unit has the option of foot and hand

Right / left rotation selectable. 230 V / 50 HZ. 85 watt.

Included:

- Control unit with space-saving housing
- Foot switch for infinitely variable speed regulation
- Hand piece (208 g) with collet chuck 2.35 mm and storage
- Spare carbon brushes for hand piece



JEWELLERY

1 Set of pliers

Set of 4: one round, pointed and flat nose pliers without cutter, 1 side cutter. Polished steel with PVC-coated handles, double leaf spring, box joint 12 cm long.

4430900 23.95

2 Saw blades

for fine sawing work. Torsion-resistant frame with wooden handle. Adjustable for blade lengths up to 15 cm. Projection 7.5 cm.



Precise sawing!

3 Fretsaw blades for metal

Extra tough watch making and jewellery quality. A total of 6 x 1 dozen saw blades 13 cm long.

330155

16.50

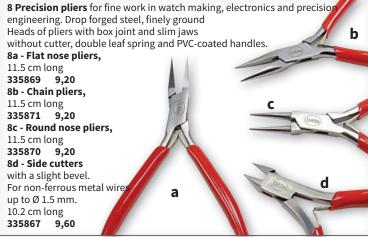
4 Fretsaw blades for metal and wood 5 x 4 Fretsaw blades for wood and 2 saw blades for metal. A total of 22 saw blades 13 cm long.

336008 10.90

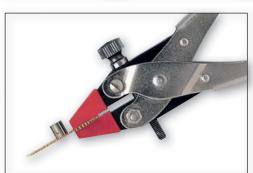


5 Pearl silk scissors

Extra-light model, laser ground for the perfect cut right up to the tip. 10.5 cm long. 336162 19.99



The right tool for every application!



9 Parallel flat-nose pliers

With plastic jaws made of steel with nickel-plated handles with return spring and locking screw. Optimal holding for sensitive workpieces. Length appr. 168 mm.

4430311 49.90



10 Sheet metal shears

With polished head for fine cutting work. Cutting length 30 mm, Total length 18 cm.

335965 18.95



11 Basic Course Jewellery design with pearls

What kinds of pearls are there? What types of pearls and wires can be combined? What other materials are there and how can they be used effectively? This book helps to find answers to these questions and provides a wide range of basic design principles.

144 pages, 21,5 x 25,4 cm.

336162 19.99

Improved quality in stainless steel!



320486



6 Carabiners Top quality, stainless steel, 10 pcs / pack

Order no.		€/Pack
320484	white, 9 mm	8.90
320485	white, 11 mm	8.90
320486	white, 13 mm	9.90
320484	yellow, 9 mm	8.90
320485	yellow, 11 mm	8.90

yellow, 13mm





7 Spring washer with collar Top quality, stainless

Top quality, stainless steel, 10 pcs / pack

Order no.		€ / Pack
323229	white, 6 mm	12.90
323230	white, 8 mm	12.90
324259	yellow, 6 mm	12.90
324260	yellow, 8 mm	12.90



12 Instructional booklet Jewellery with pearl silk

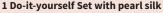
Using many drawings alongside an accompa-

nying text, the knot work on chains and bracelets is explained clearly and easily. 32 pages, DIN A5.

336192 11.20

The Ultimate Do-it-yourself Jewellery Set: Sufficient to make 20 individual chains and bracelets. The complete basic equipment for beginners, a perfect supplement for professionals.





with the comprehensive range of pearl silk on cards, all the required accessories such as clasps, tools and adhesive materials as well as a detailed step-by-step guide to the basic techniques of pearl chain knotting, this set is the perfect basis and entry into creating your own jewellery workshop. To start immediately, you only need semi-precious stones or pearls.

Content with a total of 99 parts:

- 1 Brochure "Jewellery with Pearl Silk", 48 pages
- 24 Cards of pearl silk (mixed colours, thicknesses and materiality)
- 20 Binding rings (various sizes, Sterling silver and gold-plated)
- 20 Squeeze capsules (various sizes, Sterling silver and gold-plated)
- 20 Domes (various sizes, Sterling silver and gold-plated)



- 4 Snap closures (sterling silver and gold-plated)
- 2 Ball clasps (sterling silver and gold-plated)
- 1 Bead board
- 1 Pearl silk cutter
- 1 Economy flat round nose pliers
- 1 Shellac
- 1 Bead cord glue
- 1 Tea light
- 1 Pearl thread tweezers
- 1 Reamer

322904 99.95







Stainless steel, round, Ø 5.0 mm white, 30 pcs / pack, yellow, 20 pcs.



yellow

€ / Pack 5.70 9.80 Order no.

3224-101199 white 3224-101200 vellow

€ / Pack 9.80 9.80

pack

3 Pinch capsules

Brass, outer Ø

each 20 pcs./

approx. 3.0 mm,



330521

20.90





With 3 channels for stringing, scales and small compartments. Sturdy, flocked plastic version.

23 x 32 x 1.5 cm

249357 12.50





Quality made in Germany. 19 Strings, nylon coated, length: 9.15 m

321933 Ø 0.30 mm 7.99 321935 Ø 0.45 mm 7.99 321936 Ø 0.53 mm 7.99



9 Pearl silk assortment

7 Ideal additional items:

making jewellery

es, hard cover.

350 tips, tricks and techniques for

An indispensable reference work with

the answers to all questions. 160 pag-

With 2 m each of white natural silk thread Ø 0.45 / 0.5 / 0.6 / 0.65 and 0.7 mm, each with a threaded needle.



Quality Made in Germany!

2 Leather punch pliers 250 mm

70% power savings thanks to patented lever technology Ergonomically shaped plastic handles, interchangeable punching tools, 6 mandrels. Further accessories online.

322004	For round holes Ø 2.0 - 2.5 - 3.0 - 3.5 - 4.0 - 4.5 mm	29.90
322008	For oval holes (lengthwise to tape)	39.90
326051	Oval holes (transverse to tape)	39.90

3 Complete set of cold enamels

Perfect for many creative jewellery ideas! The set is a cold-curing two-component epoxy resin system for coatings with a similar effect to glass enamel. Features: Excellent scratch resistance, minimum own colour, hardly any after-yellowing even under intensive light, cures at room temperature.

The cold enamel complete set consists of:

- 100 g of resin C and 40 g of hardener V20L This results in a small set Colourless cold enamel.
- 10 ml dyestuffs each in the Following colours: yellow, bright red/ orange, amber, dark red, turquoise blue These dyestuffs are used The transparent colouring of colourless cold enamel.
- 5 ml each colour paste in the following colours: white, black, blue, red, yellow The colour pastes are used for covering/ opaque colouration of cold enamel.
- 5 ml Thix 1384 additive This is an addition to thicken the cold enamel, so That curved or sloping surfaces can be coated.

321803



All components also available individually online as accessories.

Wear earrings despite a nickel allergy! Protects against allergic reactions! **Protects against discolouration!**



1 Flutees protective sleeves for stud earrings

It does not matter if the symptoms such as itching or burning are due to a nickel allergy or not. With Flutees you can reliably avoid any contact between the stud and the hole in your ear!

Included:

5 Pair Flutees protective sleeves in a sterile packaging

321598	Germany	14.95
321600	BeNeLux	14.95
221602	Austria	14 95







- 1. Insert the stud into the protective sleeve and twist the sleeve
- 2. Insert the stud with protective sleeve into the hole in your ear
- 3 Secure the stud and protective sleeve by sliding the closure



Practical sets consisting of 2 magnetic locks (with crystals) and 2 extension chains of approx. 80 mm. Easy to put on, suitable for all necklaces. Closes every chain in a flash and looks classy. Brass, nickel-free.

Contents: 2 closures and 2 extensions.

337089 gold colours 39.90 337090 silver colours 39.90



5 Magnetic closure with extension

Practical extension and a useful help thanks to the fine magnetic closure being included in one device. The carabiner is hooked into the jewel, the practical magnetic closure gets rid of cumbersome handling and makes closing and opening into children's play. Thanks to the intelligent extension chain, the chain can be extended optimally! Suitable for all chains, practical and safe, no more time-consuming fiddling around when dressing and undressing with jewellery. Length: approx. 85 mm, stainless steel, length of the extension chain: 55 mm

331892 silver colours 19.95 331893 gold colours 19.95



Professional cleaning! The right solution for every stain!

PolyWatch high-performance Diamond polishing for glass

- Removes small and medium scratches from watch crystals
- Versatile for watches, smart phones/ mobile phones, cars, furniture, household, windows etc.
- novel and patent-pending
 Diamond polishing technology

mmi - 08 STH

Professional quality!

- Simple and effective: Repairing instead of replacing
- suitable for all qualities of glass
- enough for about 30 to 40 applications
- complete set with everything you need for the application
- contents: 2 x 0.5 g

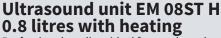
334236



2-component system:

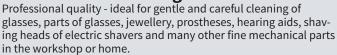
Step 1 - The High Rech diamond repair polish removes the scratches Step 2 - The high-performance diamond finish polishes to a high gloss finish For best results use with a micro-motor / felt disc.





VORHER

NACHHER



With a stainless steel housing, stainless steel oscillating tank (protects the items to be cleaned), noise-inhibiting stainless steel lid, controllable heating (20-80°C) and timer (1 to 15 min). Ultrasonic power 60 Watt, 0.8-litre tank. Heating capacity max. 140 watts, total power 180 watts. Weight 2.2 kg. $200 \times 110 \times 160$ mm

Includes basket and lid.





poly**Watch**



CLEANING





1 Ultrasonic cleaning unit S1

Compact, affordable device for jewellery, glasses, contact lens accessories, meatl watch straps, small mechanical components, coins and much more. Modern design with blue LED interior lighting. With 3-minute timer, plastic housing with stainless steel bath 15 x 8.5 x 3 cm, contents 0.6 l. With basket insert and jewellery holder. 230 V / 50 W, oscillation frequency 42 kHz.

308783 48.90

2 Ultrasonic unit Emmi 05P

Compact design with detachable bath - therefore easier handling! 0.5 litre,

175 x 80 x 40 mm 50 watt

337295 119.90







3 Edelma Silver dipping bath

Removes the unsightly black oxide coating on silver and brass parts in seconds.

4630231 10.95 300 ml 4630232 1,000 ml 27.90



Specially designed for derusting sensitive watch movements and instrument components. Does not attack brass and other non-ferrous metals! Content 284 ml.

332281

284 ml (100 ml: 7.02)

19.95



5 High-tech spectacles cloth

Cleans spectacles, lenses and other optical glasses as thoroughly as never before! No fluff any more, all dirt easily removed. Washable, outstanding cleaning power is retained. 100 % polyester. Maxi-size 20 x 25 cm.

334920 5.95

Always a full view!

6 Glasses foam

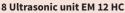
Ideal for fast and thorough cleaning of glasses and frames. Foams without propellant gas. Content 150 ml.

334835 9.95 7 Glasses spray

New! Now also available as a spray without alcohol. A perfect shine for your glasses.

336948 4.99





With stainless steel housing, Stainless steel oscillating tan and adjustable heating. 1.2 litre tank with heating and Timer, max. 80 watt, incl. basket and lid, Dimensions:

238 x 138 x 195 mm

330962 299.00



9 ELMA Suprol pro

A CHC-free rinsing fluid for parts that have been trated with s cleaning solvent (Item 10). Water-repellent, quick-drying. 2.5 litres.

309383 59.90



For watch parts. This high-yield concentrate is diluted 1: 9 with water. Parts must then be rinsed in distilled water and subsequently treated in Suprol pro (Item 9).

Suitable for ultrasonic baths.

334120 0.5 litre (100 ml: 3.99) 19.95 4610037 1.0 litre (100 ml: 3.59) 35.90 319609 2.5 litre (100 ml: 3.19) 79.95





11 ELMA Clean 75

Alkaline cleaning concentrate with ammonia. Cleans equipment, workpieces and jewellery. Non-ferrous metals are significantly brightened. Not suitable for zinc and aluminium. Dosage: 5-10 % in an ultrasonic bath, 10 % in an immersion bath. 1 litre

4610902 (100 ml: 3.59) 35.90

12 ELMA Clean 85

Jewellery cleaning concentrate for precious metals and fashion jewellery. Alkaline and acid-free and odourless and biodegradable. Dosage: 5 % in an ultrasonic bath, 10 % in an immersion bath. 1 litre 4610900 (100 ml: 3.69) 36.90



13 Platina WF 2 watch rinsing solution

A ready-to-use, water-free post-rinse solution for dismantled watch movements and fine mechanical devices, free of chlorinated hydrocarbons and CFCs, dries residue free. 2.5 litres.

334941 (100 ml: 2.11) 52.90



14 Platina watch cleaner

Aqueous, high-yield concentrate (1:20) for cleaning disassembled large clocks, precision mechanics, etc. Removes oily and greasy residues. After-rinse with distilled water and "Platina wf 2" (Item 13). In a practical dosing bottle. Suitable for ultrasonic equipment. 1 litres.

334926 (100 ml: 2.85) 28.50



15 Platina wf 1 watch cleaner

Water-free, ready-to-use cleaning solution for dismantled clock movements and precision mechanics, free of chlorinated hydrocarbons and CFCs. Removes oily and greasy residues. After-rinsing with Platina wf 2 (item 13). 2.5 litre

329841 (100 ml: 2.39) 59.90









1 SILVER LIFE silver plating medium

Real silver in a solution both for repairing damaged areas of silver and silver-plated objects as well as for silvering smaller metal parts. 100 ml. With instructions.

334347

24.90







2 Silver clean plate

Cleans silver, gold and jewels, copper, bronze, stainless steel and silver plated parts in seconds.without rubbing. Works in an ordinary salt water bath. Cleans both large and small parts without chemicals, scratching or odour. Does not damage valuable surfaces. 18.8 x 15.6 cm.

With instructions.

334874 10.95



3-4 jewelry baths

Clean precious jewellery gently and give a new shine by simply immersing it. Can content 150 ml. With dipping sieve.

239013 Gold bath 7.95 239016 Silver bath 7.95



7 White Wizard

white magician. Odourless, non-toxic stain removal paste - proven over many years! Suitable for clothing, carpets, vinyl, shoes, sofas, etc. Removes grease, oil, ink, coffee, tea, lipstick, chocolate, blood, make-up, paint, rust and much more. Biodegradable. 283 g can.

334820

10.50



54 in 1 Jewellery Care Cloth

One cloth, four applications! Look after different materials with just one cloth. The four different coloured parts of the cloth ensure the best possible shine!

Jewellery Care Cloth:

Anthracite for silver, turquoise for pearls and stones, purple for gold and platinum, grey for re-polishing and finishing.

Watch cleaning cloth:
Purple for cleaning gold and platinum, natural for chrome and (stainless) steel, pink for stones and pearls, grey for polishing and finishing. Dimensions 350 x 350 mm, made in Germany.

322021 7.90



8 Silver care cloth

For silver and silver plated items, specially impregnated for gentle cleaning and polishing. 30 x 24 cm.

239018 5.95







9 Cleaning gloves

The most convenient way to bring a high-gloss shine to jewellery, cutlery and collectibles. The tarnish protection is renewed during polishing. Impregnated.

4634106

19.95

The patented aid for broken screw heads!



Gives the tool grip and hold! One drop is enough to give the screwdriver a better "bite" when the screw slots are slack. Increases the sticking friction between the metallic surfaces by up to 500%. Also ideal for Allen, cross slot and hexagonal screws and nuts. Skin-friendly and non-toxic. Simply wipe off after use. A must in any workshop! Content 20 g.

10 QUIXX Repair System

Scratch remover. Paint traces, scrapes, scratches in all varnishes - also metallic! - Remove: Easily and with an effectiveness that is almost incredible! Simply apply paste and polish - your varnish will shine like new!

Set with 2 tubes of 25 g, 2 polishing cloths and fine abrasive paper for special applications. The only care product of this kind with

A TUV seal of approval.

334886 13.95













TOWN TALK SPECIAL





Impregnated with a unique anti-tarnish protection. Gives jewellery a brilliant and lasting shine. Different sizes.

> 315533 450 x 300 mm. 9.99 315603 300 x 240 mm. 7.99 315534 175 x 125 mm. 4.99 315535 140 x 70 mm. 2.99





A perfect shine and the best possible protection for your valuable items - for over a hundred years, Mr. Town Talk has stood for high-quality, environmentally-friendly cleaning products and the best tarnish protection for jewellery, watches and household goods. The best quality from the north west of England, packaged in a unique, typically British design. Welcome to our world, gleaming polished.



Silver polish

The silver cleaning agent acts against any traces of tarnishing and helps silver achieve a new gloss again.

125 ml 315523 9.99 315522 250 ml 14.99



Duo cleaning cloth for silver

The practical cleaning duo: Polishing and cleaning cloth in one. One side is impregnated with a tarnish protector, the other is of the finest cotton. Size: 450 x 350 mm.

315608 9.99

Polishing spray for silver

Simply spray on and polish with the cloth supplied! The tarnish protection is complete. Contents 250 ml.

315521 11.99



Silver cleaning kit

Incl. mini silver spray with tarnish protection (contents 50 ml) and fa ine polishing cloth (180 x 180 mm)





Silver nostalgia set

Incl. 8 gloss polishing cloths for jewellery, cutlery or other objects as well as a special silver polishing cloth. Packed in a typical British nostalgic tin.

336872 14.99



Immersion bath for silver

Practical and easy to use: Immerse your piece of jewellery in the bath for approx. two minutes and polish it with the cloth supplied - ideal for simple jewellery cleaning at home. Contents 225 ml.

TOP SELLER!

315438 9.99



Microfibre cloth

Ideal for cleaning gold, silver, platinum. Different sizes.

315537	450 x 300 mm	9.99
315538	175 x 125 mm	4.99
315539	140 x 70 mm	2.99

Silver polishing gloves

Impregnated with a special mixture of detergent and anti-tarnishing agent. Contents 1 pair.

14.99

315528



TOWN TALK SPECIAL











Duo cleaning cloth for gold

The practical cleaning duo: Polishing and cleaning cloth in one. One side is impregnated with a tarnish protector, the other is of the finest cotton. Size: 450 x 350 mm.

315608 9.99



Dipping bath for gold

Practical and easy to use: Immerse your piece of jewellery in the bath for approx. two minutes and polish it with the cloth supplied - ideal for simple jewellery cleaning at home. Contents 225 ml.

315437 9.99





Cleaning cloth for watches

Ultra-fine, super-soft microfibre cloth for the gentle cleaning of watches crystals, cases etc. Washable up to 40°, without any chemicals at all. Size: 180 x 180 mm.

321888



Cleaning cloth for spectacles and touch screens

This exceptional cleaning cloth with its anti-smearing effect made of ultra-fine, soft high-tech microfibre not only brings clear vision to spectacles, but also to touch screens and other screen surfaces like iPads, iPhones, smart phones, e-books and tablets. Absolute brilliance. A "little miracle". Size: 180 x 180 mm.

321897 7.99

Cleaning kit for pearls

14.99

x 180 mm)

337095

With an anti-smear effect!







Polishing agent for stainless steel

This superb stainless steel cleaning agent from Mr Town Talk is suited to a variety of objects and surfaces made of stainless steel. From pots and pans to sinks, this polish cleans everything in your household and leaves behind nothing other than a glowing shine. Contents 250 ml.

315526 9.99

Polishing agent for brass and copper

This unique polish by Mr Town Talk cleans and polishes your brass and copper ware in a flash and lets it shine again.

Simply apply with a dry cloth, rinse and polish with a soft cloth. Content 250 ml.



WATCH CARE





1 Dial repair set

Recommended by watchmakers! Excellent scratch resistance, hardly any inherent colour, minimal yellowing (even under intensive light), curing at room temperature. Cold-hardening 2K epoxy resin system with resin, hardener and white coloured paste.

327265 29.95

2 Enamel-Fix

For repairing damage to enamel and varnish (bath and shower trays, refrigerator, stove and other household appliances). Environmentally friendly as this product is solvent-free. Can be diluted with water. Temperature resistant. Contents 20 ml, white.



238843



3 Enamel repair paste

White. For the repair of damage to dials. Apply, then gently warm until it flows. Contents approx. 10 g.

4640031 21.90



4 Vaseline grease in jet bellows with a fine spout

Traditional watchmaker's lubricant. High quality. For all open sliding points such as ratchets, cams, pins, hammers, teeth and levers in large clocks. Suitable for all steel / steel and steel / brass bearings. Acid-free and resin-resistant. Application range from -10 °C to room temperature.

327574

5 Service oilers for point-accurate oiling

With very fine dosing cannula. Contains fully synthetic clock oil Clock 859. Long lasting lubrication for all steel / steel and steel / brass bearings in clocks from alarm clock size and greater. Extremely large temperature range. 4 ml.

4341083 25.90

6 Synthetic large clock oil Clock 859 (not shown) in a glass bottle.

334945 5 ml 19.95 334946 10 ml

7 Service oiler with No. 3-5 watch oil for point lubrication of mechanical movements, instruments, model railways etc. 8 ml.

335975

Oil the precise spot and lubricate!



8 Oil-pike

For large clock movements and instruments. Handy tool with a flattened tip. Total length 15 cm.

4341021 6.60



9 Oiler assortment

With 4 oilers from Ø 0.3 to 0.7 mm.



For the lubrication of large clock winding mechanisms, spindle arms etc. Content 10 ml.

327663



14 Uhrenol No. 3-5 Classic watch oil

for medium to large movements for pin holes without stones as well as spring coils. Not suitable for battery-powered and small watches! Content 50 ml.

334916 28.90



Special oil for softening of gummed-up bearing surfaces In large movements. With very fine dosing cannula. 4 ml.

334925 29.90



tics. Content 3.5 ml.

4621021

15 Clock 859-8 + PTFE watch grease

With excellent friction behaviour. Specially for metallic sliding bearings in clock and watch movements, precision instruments, plotters, printers, etc. High pressure recording capability, excellent ageing and adhesion qualities. Content 7 g.

237021 36.50



teeth, jewel bearings and tension spring coils.

Type 1-3: For metal and jewel bearings in small watches. For journal bearings up to Ø 3 mm, also for cylindrical gear

Part synthetic. Replaces the earlier watch oils 1-5 with its considerably wider range of application. It is far superior in terms of wear and ageing resistance as well as its temperature characteris-

Type 3-5: For metal bearings in fine mechanical devices, alarm clocks, large clocks. For journal bearings Ø 1-5 mm and tension spring coils.

334915 10.95



16 Silicone sealing grease

For sealing crowns and pushers as well as base coverings on wristwatches and pocket watches. Excellent as lubricant for all synthetic seals. Approximately

329262 5.20

24.90



12 J.D. Windle's clock oil

13.95

No synthetics, 100% mineral. Medium viscosity especially for grandfather clocks, wall clocks, table clocks, antique travel clocks, brass musical instruments, marine instruments, measuring devices in fine mechanics. No clumping / sticking. Prevents oxidation and corrosion, low odour and environmentally friendly.

320859 50 ml 29.95 320860 100 ml 49.95

J.D. Windle's Turret Clock Oil

Especially for larger grandfather clocks, decorative clocks turret clocks. Very high viscosity, excellent thermal stability, ideal for environments with widely varying humidities. Long-lasting anti-wear oil. Contents 100 ml

320856 100 ml

High strength

UHU

1 UHU REPAIR ALL Powerkit

Universal 2-component epoxy resin compound that bonds, fills and seals: for hobby work, model building, water pipes, etc. Resistant to water, oil and household chemicals, temperatures from -30 to +100°C. Processing time 4 min., hard after 10 min. Cures extremely hard. Can be drilled, sawn, sanded, polished and painted. Contents approx. 60 g.

334825

9.95







TOP SELLER!

2-component epoxy resin high-strength rapid adhesive. Excellent for metal glass, porcelain, ceramics, stone and plastics. Set with binder, hardener, mixing tub, spatula and detailed instructions. Content 35 g.

4640109 11.90



334837



7 Special iewel adhesive

Suitable for the bonding of glass, similite and synthetic stones with metal, porcelain, ceramics and many hard plastics. More information on-line. Professional quality, 2-component adhesive, contents 2 x 50 g

330100 29.99



adhesive

10 g.

11.95

334830

11 UHU ultra-fast universal

Solvent-free, no troublesome

stinging vapours. Ideally suited

to many plastics, metals, rub-

ber, porcelain, wood etc. super

fast reaction time. Content

10 Special adhesive for Rubber bands

Quick drying special adhesive for the bonding of cords, tapes and collars made of rubber etc. or enclosing metal with leather. Medium viscosity, colourless, cold curing for the highest performance required with ultra-fast superglue. Professional quality, contents 20 ml.

326112 16.95



3 UHU Max Repair Extreme

For all materials, without solvent. For almost all applications indoors and outdoors. Bonds porous and non-porous materials, transparent, water-resistant, fills gaps and can be painted over. Temperature resistant from -40 to +120°C. 20 g tube.

334888 7.50



8 Double-sided adhesive mounting tape

Made of PE foam, 1 mm thick. Excellent adhesion with high temperature and weather resistance. For many applications in the household and workshop. Ideal for attaching dials and decorative parts. Bridges uneven bonding surfaces. 20 mm wide, 10 m long.



12 Adhesive remover Special thinner for removal of ultra-fast adhesive spots. Many other adhesives and coatings can also be dissolved or separated. Adhesive stains are removed, bonds are dissolved - even with cyanoacrylate adhesives (ultra-fast adhesives) and 2-component adhesives.

326113 25 ml 9.90 326926 100 ml 17.90



4 UHU Ultra-fast Mini Ad-

Extremely strong ultra-fast adhesive- portioned in 1 g tubes, in a practical storage case. Optimum quality for every application, 3x seal fresh. Thanks to its consistency, the adhesive flows into the smallest corners and gaps. Dishwasher-proof and water-resistant (with proper application).

334832 4.95



327537

9 UHU Balsa cement Crystal-clear fast curing special

adhesive for modelling, hobby and household repairs. Highstrength bonding with wood, glass, metal, textiles, cardboard, paper, plastics. Resistant to water, oil, diluted acids and alkalis. 35 g tube.

334824 4.50



5 Ultra-fast adhesive non blooming

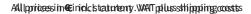
Without any blooming effect: For all work where no white film may be deposited, as is usual with ultra-fast adhesives. Perfect for all visible repair areas. Low odour, dries transparent, high adhesive strength. Contents 20 ml.

334038 19.95



13 Fashion jewellery adhesive

Transparent and colourless, dries crystal clear, good strength, rapid drying: For many applications (fashion jewellery , modelling, decoration etc.). Suitable for metal, glass, ceramic, porcelain, stone, leather, wood, felt, textiles, cork, paper, cardboard, card, plastics such as Plexiglass (acrylic glass) and cellulose acetate. For more information on-line. Contents 30 g.



BONDING/CLEANING



1 HYPO TUBE adhesive

With very fine steel spout for difficult gluing tasks, such as bonding and sealing clock glasses, sticking small hour markings or decorations etc. Soluble with benzine or alcohol. Content 9 ml.

4640204

10.90





adhesive and sealant for metal, plastic, ceramic and wood compounds. Hardens without shrinking, fills gaps, easy to apply and can be overpainted, solvent-free. Temperature resistant from -40 to +90 °C. 85 ml tube. Grey.



8 WEICON Flex+bond

Elastic, extremely strong adhesive



2 PolyWatch plastic polish 5 g

Proven a million times throughout the world,

No. 1 among the watch crystal polishes for acrylic glass.

- Also gives professional quality results where there are deeper scratches
- Serial winner in product tests carried out by international iournalists.
- TÜV certificate demonstrates proven effectiveness: PolyWatch is the world 's first and only scratch-remover for watch crystals to receive the TÜV seal of approval for "proven effectiveness".
- Easy and quick application
- Superior effect thanks to plastic deformation technology

4546228





Residual elasticity, durable and versatile. Specially for repairs on plastic parts and fibre composite materials as well as metal, wood, glass and ceramic parts. Easily portionable, temperature resistant from -50 to +120°C, processing time 20 min., curing time 3 hrs, final strength after 36 hrs. Cures virtually shrink-free, can be mechanically processed and over painted. Content 57 g.

334829 7.90



3 Screw loosener

Easy and simple to use: The screw loosener loosens fixed, rusted or glued screws completely and troublefree. Practical, useful and effective. Contents 10 ml, supplied with 3 cannulas. Content 10 ml.

327208 19.90



4 Wooden cleaning blades

For cleaning bearings in large clocks.

1 bundle (approx. 20 pcs.), made of resin-free, Indian Haldu hardwood.

321389	Ø 2 mm	4.90
321390	Ø 3 mm	4.90
321391	Ø 4 mm	4.90
321392	Ø 5 mm	4.90



5 Original elder mark

These elder mark rods/discs from the Black Forest are used throughout the world. Perfect quality over many decades. For de-oiling or degreasing oilers and journals in watches.

4332351	Elder mark rods, 10 pcs.	8.90
4332352	Elder mark discs, 12 pcs.	17.90



The all-rounder! 6 Ambassador **EMR fine**

De-rusting, rust protective and metal gloss paste.

Removes rust, corrosion and combustion residues with absolute reliably, safely and

quickly. Makes metal bright again in no time, gives a new, radiant shine, temporarily protects from moisture and rust.by means of a transparent, dry protective film. Can be used on cold and hot metal parts. Contents 1000 ml.

4546229 45.90



Two-component plasticine for fast, permanent repair of wooden parts. For repairing cracks, drill holes, broken out and broken off wooden parts and seals joints. Temperature resistant from -35 to +120 °C. Can be mechanically machined and painted. Adheres to wood, metal, ceramics, glass, many plastics. Content 56 g.

334943 16.50



7 Cleaning sticks

Proven over many years to clean, prevent grease or oil contamination or remove adhesives. 100% lintfree microfibre.

Contents 100 pcs.

321474 One side with a rounded end, length 15 cm 5.50 321475 One-sided with a pointed end, length 7 cm 5.50 321476 Double rounded ends, length 8 cm



In resealable bags, contents 30 pcs. Low lint, ideal for degreasing sensitive surfaces. 70% isopropyl alcohol, 30 % deionised water - clean room. Perfect, thorough surface cleaning.

1 Universal cleaning spray

Solvent-free cleaner, excellent for removing paints, adhesives, grease and other impurities that are easily dissolved. Textiles and carpets are treated by rubbing with a dry cloth. The cleaner is so mild that it does not attack.plastics. Also suitable as brush cleaner and label remover. 400 ml can.

334851 8.95

2 Spray oil 88

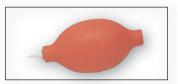
High-quality fine mechanics oil with additives for better high-pressure and ageing resistance as well as improved corrosion protection. Reliably lubricates fine mechanical parts. Surface active, silicone- and acid-free, does not resinify. For fine mechanical bearings, gearboxes, springs, valves, flaps, slides, locks, etc. Contents 100 ml.

319066 9.50

3 LIQUI MOLY rust remover

Outstanding properties, also penetrates into the tightest of fits. Prevents squeaking and keeps moving parts permanently running smoothly. Prevents corrosion and oxidation. Does not attack plastics and rubber. Content 300 ml.

334924 5.60



4 Rubber blower

For blowing-out, de-dusting and drying clock movements, instruments, small drives, relays etc. With one-way valve.

328188

Uhrenglas SAMBAS Polituri sergi perent jampa de trenta le management de la companya de la compan

5 Watch glass polish

Removes scratches, cleans and maintains plastic crystals on watches, mobile phone screens etc. 5 g.

334823 7.95



5.95

6 WEICON compressed air spray

Can be used universally, quickly and reliably removes dust and lint from delicate surfaces and hard to reach places. Ideal for clock movements, instruments, optics, HiFi and video devices, keyboards, in modelling. CFC-free. Content 400 g.

4650036 11.9

7 WEICON Spray Cleaner S

Cleans and degreases all metals, glass, ceramics and most plastics until completely residue-free. CFC-free. 500 ml.

334910 8.9

8 WEICON Electrical Cleaner

Rapidly volatile spray for residue-free cleaning and degreasing of electronic components, but also mechanical clock movements, measuring devices, tools, switches, sensors etc. Content 400 ml.

334850 15.20

9 WEICON Chrome Silver-Spray

Brilliant, weather-resistant corrosion protection, adheres securely to metals, glass, stone, wood, cardboard and most plastics. High gloss (chrome effect) due to high-purity metal pigments. CFC-free. Content 400 ml.

334917 17.90

10 WEICON brass lacquer spray

Simply spray - and the old gloss shines through in a silky brass sheen. Adheres securely to metal, ceramic casting compounds and other solid surfaces. Content 400 ml.

334921 17.20 330167



TOP SELLER!

11 LIQUI MOLY Quick Cleaner

Sprays away oil, grease and dirt quickly and completely. The treated parts are thoroughly cleaned and degreased. Content 500 ml.

334906

8.90



12 Label remover

Improved quality! Removes self-adhesive labels, stickers and glue residue quickly and effectively. Spray the surface, let it briefly react, then simply peel off the label or wipe off any residue. Content 200 ml.

4650042



Nickel test
A useful
test for the
detection
of nickel in

9.95

of nickel in metals, alloys and galvanic coatings. More information at www. selva.de

326114 17.90



14 Silicone grease

Simply more practical and easy to use: Silicone grease, 35 g, from the tube. For sealing crowns, glass, case backs, sealing rings etc. Medium viscosity.

330167 15.90



15 NEVR-DULL High gloss polishing wadding

For all unpainted metal. Acts immediately, removes oxidation, does not scratch and leaves no residue.

142 g can

334871 8.99



16 Polishing cream

Can be used universally for all metals including precious metals and plastics. Especially suitable for hand polishing. Content 125 g.

334870 8.95



17 UHU enamel repair agents

Liquid, white repair agent for repairing scratches, chips and other damage to enamel surfaces. Resistant to dilute caustic solutions, hot water (up to 90°C), etc. 23 g brush bottle.

0 334831 6.95

SOLDERING / WELDING







2 MINIFLAM Hand Torch

With a very pointed flame that reaches a temperature of up to 1,600 $^{\circ}$ C. Ideal for heating, brazing, deforming and other repair work. The air supply for flame regulation is controlled at the burner head. With 70 ml gas bottle. Burning time / bottle max. 4 hours Ø 4 cm, 20.5 cm high.

326618 85.90





336016 399.00

Suitable gas / oxygen bottles:

8 Gas bottle

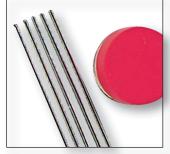
For the MINIFLAM units, Items 1 and 2. Content 70 ml.

326617 15.60

9 Oxygen bottle

For the MINIFLAM unit, Item 1. Content 1,000 ml (gaseous), 10 bar.

327441 15.60



10 Silver solder with flux

For iron, steel, copper, brass, bronze. 5 rods Ø 1 x 250 mm long. Melting point approx. 600°C.

325972 47.5



Oxyge

11 Technoflux Soldering Protection

Effectively protects and insulates metals, glass, plastic, wood, precious and semi-precious stones, lacquer and textiles against heat during soldering and welding. 120 g tube.

328465 11.95



foil cutting etc. With piezo ignition, 20 ml butane gas tank. Accessories: Solder, drip tray, fork spanner, stainless steel stand. In a sturdy plastic case with moulded insert.

335947 46.90



Working with wood: Everything about carving, pyrography, turning & sawing!



Micro-lathe

Turning in small dimensions for a thousand things for use in model building. Powerful, adjustable drive (1,000-5,000 rpm) Ball-bearing mounted spindle with continuous bore (10 mm) for series production of small parts. Four-point driver with centre point and 10 mm shank. Stable, tool support.adjustable in height and to all sides Tailstock with centring tip. Sturdy bed made of a thick walled aluminium profile. Incl. six clamping jaws and one face plate (for larger work pieces). 220 - 240 volt, 100 W, 50/60 Hz. Distance between centres 250mm, centre height 40mm

337422

165.00

Matching accessories:

	9	
337424	Turning chuck with 4 jaws	29.99
337425	Turning chuck with 3 jaws	44.90
337426	Drill chuck with mandrel	12.90
337427	5-piece HSS wood turning set	39.90







Carving set

For smaller, detailed projects. 6 different knife shapes with handy, crowned wood handles. Overall length approx. 16 cm **335920**



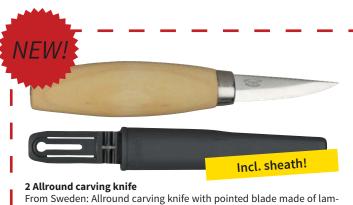
WOODWORKING



1 Proxxon motor carving machine MOS

Robust and powerful for all types of wood. Ideal both for new carving work as well as the repair of furniture and antiques. Also for lino cuts, for fine paint removal and working on plaster. Gearhead made of die-cast aluminium with multiple ball and thrust bearings. 220-240 V / 65 W, 10,000 strokes per minute. Total length 23.5 cm, weight only 675 g. Incl. high-quality bimetallic blades, 1 each of U-shaped, V-shaped and flat blade. In a sturdy storage case.

123.90 335876



Order the right books too:

inated carbon steel. Spindle-shaped handle made of oiled birch wood. Incl. sheath. Handle length: 11 cm. Blade length 6 cm.

29.99



A precision tool for the finest sanding and the smallest corrections to work pieces. For all wood types, steel, non-ferrous metals, precious metals, plastics (also Plexiglas and glass fibre)

Powerful drive with 220-240 V motor, 140 W. Housing made of glass-fibre-reinforced polyamide. Aluminium table, adjustable from 50° incline downwards to 10° incline upwards. With angle stop and sanding discs, 2 each of K 80, 150 and 240. Sanding plate with glued-on silicon film for easy changing of self-adhesive sanding discs. Adjustable sanding speed approx. 250-800 rpm. Fitted with dust extraction for connection to vacuum

Sanding disc Ø 125 mm, table 98 x 140 mm, sanding height 62.5 mm. Dim.: 300 x 140 x 160 mm, weight approx. 3 kg.

179.00

6 high-quality corundum sanding wheels (not shown)

Self-adhesive. For all types of wood, non-ferrous metals, steel, plastics, cork, rubber and minerals. Ø 125 mm. Including Silicone film for storing and reinstating used discs. 5 pieces / pack.

335921	Sanding discs K80	10	0.50
335922	Sanding discs K150	10	0.50
335923	Sanding discs K240	10	0.50

Polished brass body with wooden insert. Adjustable planer blade 13 mm wide. Ideal for the finest modelling work. 7.5 x 4 x 1.3 cm

335861 15.90





8 KIRSCHEN carving knife

Quality tool with hand-made wooden handle. Particularly suitable for small figures, notch cut decorations and marquetry work. Blade length approx. 4.5 cm.

203557 15.95



3 Schubert, A Carving Manual

336146

A comprehensive introduction to the art of wood carving. Detailed instructions, numerous step-bystep illustrations for making useful objects, ornaments, lettering and figures. All you need to know about wood, tools, your workshop; techniques such as notch, hollow and flat carving; surface finishing such as bleaching, wood staining, painting and gilding. Over 300 colour illustrations. Appr. 160 pages, format 19.5 x 26.5 cm.



4 Carving - The Basics book

www.matinkulta.fi

Explains this traditional art from the ground up. Comprehensively and informatively covers suitable carving woods, requiredtools, the most common techniques. Numerous step by step photos. The techniques presented can be practised immediately. More complex objects in the second part of the book, with design drawings and sample templates. 146 pages with a large number of colour illustrations, Format 21,5 x 28,5 cm.



9 Sauheitl/Olbert, Carving -**Animals & Crib Figures**

Shows step by step how these popular carvings are created. Detailed photos illustrate every step. With a detailed, in-depth basic section, tips on motif selection and suitable wood types as well as the final surface treatment. 94 illustrated pages, Format 20 x 27 cm.

19.95

336180 19.90

16.99

336141

The best materials for restoration work: Cast and carved wood as well as ceramic casting compounds Drilling, milling, grinding, carving - everything is possible



336357 500 ml **22.95 336361** 1,000 ml **40.60**



3 Assortment of fret saw blades for metal and wood. 20 saw blades for wood and 2 saw blades for metal, each 13 cm long.

336008 10.90

4 Fretsaw board with clamp. 17 x 6.5 cm. **335841 4.95**

Order the right books too:



5 P. Forrester, A Handbook of Woodworking

comprehensive step-bystep guide that takes you through all the basic areas of woodworking: Cutting forming, and jointing possibilities, surface treatment and sophis-

ticated techniques such as veneers, wood carving and turning. Chapter with wood projects with material lists and detailed instructions. Exemplary work by wood designers as suggestions. 256 pages, 650 colour photos and illustrations. Format 15.5 x 20 cm.

7 Liquid Wood

Liquid carving wood offers the advantage that blanks can be pre-cast in silicone, latex or plastic moulds and after the curing for 30-50 minutes can be carved or worked as required to form individual replicas, such as masks, figures, reliefs, etc. With detailed processing instructions.

336290 500 ml **337337** 1.000 ml

22.90 41.90





NOTE: Casting wood and carved wood can be stained, varnished or painted. You can achieve a particularly beautiful wood effect with wax stains (page ???) or coloured wood lacquers. You will find these on page ???..

8 Universal Working Plate

With lateral lamps and adjustable supports for safe processing of small parts. With 2 screw clamps for mounting on the tabletop. Made of solid wood. 56 x 30 cm.

335842 29.95





9 Opinel pruning saw 28 cm

A classic from Opinel! Folding pruning saw. Saw blade can be locked using the Virabloc system by turning the safety ring. Two-sided milling for fantastic performance. Length of saw blade: 28.5 cm. Handle length: 16.5 cm.

337417

29.99

29.99



6 Fritz Spannagel, The Turning Workshop

Nowhere are the foundations of turning more detailed than with Spannagel. The well-known standard work for turners, factory teachers, interior designers and carpenters as well as the many hobby turners was out of print for many years. It has now been reissued on account of the great demand. This manual is an indispensable aid for all those involved. 320 pages with 1258 diagrams. Format 22 x 29.7 cm.





10 Working with wood - the foundations

The ultimate work book: From A to Z ,compre-

hensive, detailed, easy to understand. Numerous pictures, step-by-step instructions, inspiring ideas, expert tips and tricks. 264 pages, hard cover.

336160 14.90 336148 36.80 337338 29.99

WOODWORKING



1 Pyrography Starter Set

Package contents: 1 Pyrography burner, 230 V / 25 W, 1 bracket for parking the burner, 6 fine nibs in various designs, 4 special branding irons, 9 decor branding irons. 1 styrofoam cutter with adapter insert, detailed instructions. In a practical plastic storage box.

335931 21.50



2 Burny-Star L Pyrography Station

With high-quality, infinitely adjustable transformer from 450 to 740°C and burning pistons with 3 burning tips. Incl. storage and operating instructions. Operating voltage Primary 220-240 V / 50 Hz to 60 Hz, secondary 1.6 V for burning piston. Max. 30 W heating control by LED.

335847		99.95
335848	Additional branding shaft	25.90
335849	Burning Set	13.50



3-5 Wooden boxes

Pre-sanded, untreated pinewood for pickling, painting, decorating. Especially for the installation of 18-part music works (More information at www. selva.de).

335055	3 Treasure Chest	9.95
329842	4 Rectangular wooden box	9.95
335054	5 Wooden box with acrylic glass	6.60

Order the right books too:



7 Pyrography - Basic Course

Modern designed book for the popular creative techniques. Detailed basic course, many new ideas and motif templates. 80 pages, hard cover.

337340 14.99



8 Template folder for pyrographynew Ideas

Numerous templates in different sizes offering a great variety of designs and combination possibilities. Wood, leather and cork become unique decorative items with the burnt-in embellishments. Great motifs from the animal and plant world as well as different fonts. Format DIN A4.

336136 9.90



9 Pyrography - naturally beautiful and surprisingly modern!

Pyrography design in a trendy natural look - this book contains a wealth of innovative ideas: From a candlestick to a wall clock. Appr. 64 pages, format 19.7 x 25.2 cm.

336182 14.99



10 Template folder for pyrography naturally beautiful

More than 100 templates for flower motifs, maritime, characters, signposts, children's motifs and much more, specially drawn for pyrography, includes this masterpiece by Alexandra Häfele. The folder contains: 15 pages of templates, 1 sheet of copy paper, detailed pyrography instructions.. Format DIN A4.

336144 16.95



6 StarTec multifunction station

Pyrography, soldering and modelling station in one! Using different pin attachments, the device can be used for pyrography with various line thicknesses, for modelling wax or plastic and for soldering or hot cutting of polystyrene. Technical data: 220-240 V electronically accurate temperature selection, infinitely adjustable from 50-500°C; heating control by LED; piston 24 V / 20 $\,$ W, GS tested. Housing: 15.5 x 6 x 9.5 cm Included: 14 tips, externally heated; 7 stamp inserts; Cutting and modelling knife attachment; piston tray; detailed instructions.







1 Carving hobby box

Complete set for building a sailing boat - with all materials, original Opinel knives, drills, instructions, tins.

337416 29.99



2 My carving workshop

Book + carving knife: Illustrated tips and tricks for carving and working with a knife. Incl. an original Opinel knife with rounded tips and a retaining ring. For children and adults, 80 pages, 200 colour photos.

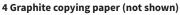
337415 19.99



3 Copy paper white

For transferring motifs on wood, metal, stone, glass, ceramic, plastic, cardboard etc. 10 sheets DIN A3 (30 x 42 cm)

334845 12.40



For transferring motifs onto glass, ceramics, porcelain and metal. 10 sheets of DIN A4 (21 x 30 cm).

334844 4.20



7 Jig saws - basic knowledge

How do you create great wooden objects with a jig saw and a fret saw? All the answers and a lot of ideas, tips and tricks can be found in this book. 192 pages, soft cover.

337341 12.99

Order the right books:



5 Nesting boxes and feeding all year round

Whether hard-working bees, nocturnal fliers or permanent guests, this book offers lots of ideas and suggestions to welcome animal visitors. All models are suitable for animals and designed to meet the specific needs of the individual animals. Appr. 128 pages, format 20.5 x 26.5 cm.



6 The Big Book of Wooden Figures

Here everyone can find a nice idea to copy - both for beginners, who can learn how to deal with wood and the fret saw, as well as advanced hobbyists who want to try new things. 144 pages with numerous step-by-step instructions, coloured images and templates. Format 21.5 x 28.5 cm.



8 PEBARO fret saw blades

With quick release system. Easy clamping without any effort and without a key, always the same tension. 36 x 14.5 cm (23.5 cm including handle).

327043 22.99

SHARPENING

GRAEF. Chofs Choice TOP SELLER!

1 Diamond sharpening block

With inserted double-sided sharpening plate medium / super fine. High-quality diamond coating for gentle sharpening of knives, tool blades, scissors, etc. Suitable for both wet and dry grinding. Holding block with non-slip rubber feet.

Abrasive surface 15 x 6.2 cm.



335874 34.95



2 Sanding pads

A superpractical tool! Cut strips of conventional emery paper or sandpaper. Clamp with the clamping fixture - and you have a universal, pointed grinding file for fine detail work. Handy plastic handle. Sanding surface approx. 2.5×12 cm, total length 27.5 cm.

335957 8.95



3 Ingenious knife sharpener

Ingeniously simple, brilliant value: Taylor's Eye for sharpening and stropping steel and ceramic knives. 3-stage. Pull blunt blades 3-4 times through the tungsten-carbide sharpener, then comes the fine sharpening stage with the fine ceramic rods by pulling the blade. through 2-3 times. For a particularly fine edge, blades can be ground directly with the diamond bars. Non-slip rubber material for safe working on the table. Dimensions: 20 cm.

337420 21.30



4 Grinding stone / oil stone

Two-sided fine/medium. Use either dry or with oil or water. Excellent for honing knives and tools. Dimensions: 10 x 5 cm.

337418 10.90

337419 Sharpening oil for honing stone **4.95** (Not shown)

Everything for the perfect finish!





5 Diamond knife sharpening machine

Sharpening and polishing with one tool for all smooth and toothed household, leisure and commercial knives, thanks to a 20 $^\circ$ cut. Perfect results thanks to patented angle guides in the three sharpening, grinding and polishing phases. High stability with rubber feet. 230 V / 75 W, Dimensions: 250 x 112 x 110 mm

330778 235.00



6 Universal abrasive block cleaner

Elastic hand grinding pads, universal abrasive for cleaning, rust removal, removal of scratches.

4546148	80 grit	8.95
4546149	120 grit	8.95
4546150	240 grit	8.95



7 Grinding tool for screwdrivers

Holding device for screwdrivers, self-clamping, for sharpening the blades by hand.

4546074 8.95





8 Abrasive tool for an engraver

Holding device for the engraver by means of a clamping screw, for grinding the engraver by hand. Professional quality by BERGEON. (Without grinding stone)

4546077

129.95





9 Base with grindstone for use with the grinding tools. Average grit Professional quality by BERGEON.

4546078 89.95



1 Angle clamp

For exact 90° clamping of work pieces with different thicknesses. Also ideal for light clamping work. For mitres and T-joints. Zinc die-casting with steel spindles. Max. clamping range 75 mm.

335931 9.95

2 Screw clamp

extremely use both stationtool and mobile. Robust, 90 wide clamping jaws mm made special of plashold the workpiece absolutely secure. Max. clampwidth 100 mm. The steel spindle with woodhandle and en guide rods ensures excellent stability. With table ment to any worktop of

ing clamps for easy up to 55 mm thickness.

4 Needle rasp

5 Tweezer set

14 cm.

335971

336014

For working on wooden parts, best

quality. 6-piece set with different

shapes and cross-sections. Length

6-piece, stainless tweezers: With fine tip for hard-to-reach places; wide

blade for photos, paper, transparencies; locking device for holding small

parts; cross-clamping device and cut; cranked tip and cut; wide tip and

cut. Appr. 11.5 cm long.

The two guide rods can be removed to clamp conical work pieces.

336015



3 Working tweezers with LED lighting ideal for modelling, repairs, hobbies. Brings light into dark corners. Total length 9.5 cm. Including 3 AG3/LR41 button cells

335933 4.60



6 Large tweezers set

6-piece. Work tweezers made from stainless, fine milled steel: 2 Gripping tweezers with medium Tip 15.5 or 17.5 cm long, 1 x cranked tweezers 17.5 cm long, 1 x gripping tweezers with locking device 16.5 cm long, 1 x cross-clamping tweezers 16,5 cm long, 1 x No. 3 working tweezers. 12 cm long. In plastic bag.

14.95

335860



USEFUL & PRACTICAL



7 ORBI-FIX - the convenient multi-purpose pliers

For holding and guiding nails and screws, for cutting and stripping wires, for gripping, holding and crushing. Black oxide finished special steel with easy to grip insulated handles. Total length 16 cm.

335949 24.50



8 KNIPEX "Mini-Cobra"

28.90

30.90

11.95

Professional quality in the smallest format. Ideal pocket tool for workshop, household and hobby. Comfortable fine adjustment by pressing a button for 11 positions for spanner sizes up to 27 mm. Oil quenched chrome-vanadium electric steel, gripping surfaces with special hardened teeth, so very hard wearing. With non-slip plastic-coated handles. Length 12.5 cm.

243122 25.50



9 Hammer pliers

An indispensable aid for household, hobby and professional use combines 5 important tools in one: Combination pliers, water pump pliers, wire cutter, hammer, nail puller. Forged from solid, matt chromed. Hammer track hardened. Soft plastic handles, glued firmly. Easy handling, space saving. Belongs in every tool box. 25.5 x 9 cm.

335956





TOP SELLER!

10 Ball joint vice

for difficult work. Cast iron body with flat clamping jaws, ball joint with quick fixing in any working position. Jaw width 75 mm, clamping width approx. 55 mm. Can be attached to work tables up to 50 mm thick. With 2 additional rubber protection jaws.

USEFUL & PRACTICAL





1 BESSEY VarioClippix Clamp

Continuously variable span up to 5.5 cm with constant clamping force. Superpolyamide with movable plastic jaws for gentle clamping. Handles with soft insert. Total length 12.5 cm.

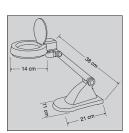
335909



Handy table lamp with magnifying glass Ø 89 mm, 3 dioptres, "eye" with

12 dioptres. With cover. 18 LEDs for uniform illumination. 220-240 V / 3.6 W. Stable plastic housing, illuminated head positioning via 3 joints. Power cable 140 cm long, on/off switch. Energy efficiency

335944



52.90

quality.

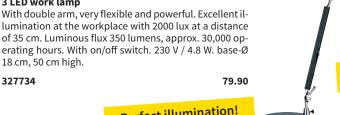
8 Battery Checker Energy Check LCD

For all common batteries, button cells and rechargeable batteries. Easy to handle, instantaneous measurement results in the LC display with indication of the remaining voltage as well as residual capacitance each measured under load. Ideal for household and workshop. Including 9 V block battery.

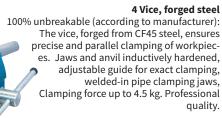
335928 54.90

No power consumption

in standby mode!



Perfect illumination!



331113 Jaw width 125 mm 159.95 331114 Jaw width 150 mm 189.95

5 MICRO-Press MP 120

335946

3 LED work lamp

18 cm, 50 cm high.

327734

Precision tool for watch making, precision mechanics and modelling: Pressing-in, pressing-out, riveting, embossing, edging, bending. With 5 cylindrical punches (Ø 3-6 and 8 mm), 1 half-ball profile (Ø 3 and 9 mm) as well as a 90°edge prism for bending sheet metal angles. With adjustable, hardened turret plate. Pressing force 1,000 N (100 kg), maximum stroke of the rack with punch 65 mm, over turret plate 50 mm. Solid steel boom with 120 mm projection, steel base plate 80 x 190 mm, with mounting holes.









6 BESSEY Clippix pointed spring clamp

Long, pointed clamping jaws with material-friendly inserts for fine clamping in tight narrow spaces. Max. span approx. 5 cm, large projection of approx. 5 cm, total length 11 cm. 2 units/pack

6.90



7 Precision microbits

Set of 9 different bits (T3-T6, PH 00 and 0; flat 1.4; star 2.0; triWing 0) for common screw connections on small electronic appliances. Handy, rubberized handle, extension piece. In a practical storage case. Handle length 9 cm.

335898 11.20

9 different inserts!

9 Timer socket

Safe, automatic power disconnection after preset operating time (15 / 30 minutes, 1 / 2 4 / 8 hours). Ideal for example for heating fans, pumps, irons, IT devices and chargers, lighting etc. Simplest operation, no power consumption in standby mode. 240 V, Max. switching power 2500 W / 10 A.

3335929 14.95



11 MICRO screwdriver set

5 blades made of high-alloy nickel-chromiummolybdenum steel for extreme hardness and toughness. Chrome-plated, with black oxidised tip. Ergonomic, impact resistant grip made from high quality plastic. Rotatable centring button with finger depression. Slot: 1/2/3 mm. Cross slot: PH 0-3/0/1-2. Torx: T5 / 6 / 8 / 10 / 15. Hexagonal 1.5 / 2 / 2.5 / 3 mm. Set in base.

335934 33.90

Tel.: +358 (05) 413 2888



WOOD CARE









2

1 CLOU Zapon varnish

Glossy varnish for lacquering ornamental objects made of metal used indoors Protects against tarnishing, oxidation and discolouration. 250 ml.

13.50

2 CLOU Spraymat Zapon varnish

A high-quality, colourless protective lacquer for metal parts. Prevents tarnishing and dulling. Content 300 ml.

3 CLOU Spraymat nitro lacquer

Colourless, silk matt. As the final coating for pretreated wood surfaces. Content 300 ml.

334936 15.95

4 Wax stain

Ready to use for problem-free dyeing of raw wood surfaces without additional lacquer coatings. Silk mat gloss, excellent covering power. Content 250 ml.

328466	Dark oak / dark walnut	11.95
334939	Medium oak	11.95
328310	Mahogany	11.95
334938	Medium walnut	11.95
334940	Black	11 95

Colour shades (miscible):



Dark oak walnut Dark







Medium oak







5

6

5 CLOU Liquid beeswax

Natural pure beeswax dissolved in water. Suitable for all types of wood. Creates a silk gloss, breathing surface and emphasises the natural wood character. Conforms to DIN EN 71 Part 3 (suitable for children's toys). Content 750 ml.

334860 19.95

6 CLOU wood wax

For raw wood in interior areas, colourless. Provides a very smooth, grippy and water-repellent coating. Dries quickly. Also suitable for the renovation of already waxed surfaces. Content 250 ml.

334858

7 CLOU Shellac matting

Blond. For normally stressed wooden surfaces indoors, e.g. furniture, toys, interior fittings etc. Content 125 ml.

334860 19.95

Antique look within minutes!



8 Bronzing set

Natural patina is produced after years of atmospheric effects, but can also be achieved quickly with bronzing pickling. Suitable for metal surfaces made of copper and copper alloys, bronze, brass and gunmetal and brassed iron parts, e.g. trim parts, handles etc. contains nitric acid and selenium compounds R25. Contents 100 ml bronzing pickle, 20 ml Paint cleaner, 20 g steel wool, 1 brush and 1 protective glove. With instructions.

331817 11.95 Brown 301493 Black 11.95



9 Anti-oxidation spray (not shown)

To protect metal surfaces against moisture. Applications: Metal surfaces, tin seams on tiffany lamps, lead glass, metallic lamp parts, mirror frames, pewter figures and decorative objects made of metal. 300 ml.

336254 10.25



10 Diamond Clean Anti-scratch

Furniture polish. Refreshes matt gloss, covers scratches, scratches and stains, removes water and alcohol marks on both matt and polished surfaces. Contents 100 ml.

334872 Light 9.95 334873 Dark 9.95



11 CLOU Antique wax

Low-odour bee-wax solution for raw and pickled wood surfaces. Results in smooth, easy-grip and visually very appealing surfaces. Content 250 ml.

334859 13.95



12 Highly heat-Metal protective

Highly heat-resistant, black lacquer ("surface lacquer") mixed with aluminium powder, glossy, with heat-insulating effect and good adhesion properties on glass, metals, grills, ovens, pipes and much more. Excellent covering power, fast drying, effective corrosion protection. Contents 250 ml.





1 CURATOR Restorer

For wood surfaces. Removes dirt, wax, grease, etc. very gently and brings back the original surface. Excellent for cleaning old wooden signs. Very economical in use, non-toxic, odourless and non inflammable.

319872 120 ml 17.90 222124 284 ml 34.95

2 CLOU wood paste

In practical tube. Can be thinned with water, ideal for repairing damaged wooden surfaces in the inner area.. Can be sanded, planed, filed, drilled, sawn and pickled after hardening

Content 50 g.

334931 Natural 5.95 334932 Medium oak 5.95 334933 Walnut 5.95



4 CLOU **Antique Wax**

For the care of antique furniture, colourless. Made of pure bee wax and other tried and tested raw materials. Protects and cares for antique furniture and other wooden items. Content 200 ml. Made in Germany

334838 10.90



5 Cotton gloves

For polishing and caring for sensitive components. Pack with 12 pairs, Size 10.

21.90 334884 334868



6 CLOU Holzwurm-Ex F

Highly effective, proven woodworm control, colourless. Content 120 ml.

334861 10.95



7 RUJA **Furniture care**

For cleaning, refreshing and maintaining wood and varnish

surfaces. Easy to apply with a cloth Stains and scratches disappear, the treated area gets its old shine back.

Also suitable for antiques, marble, natural and artificial stone as well as artificial leather. Content 500 ml.

334919 15.95

8 RUJA Tausendsassa

Powerful universal concentrate for stainless steel, plastics, furniture etc. removes grease, dirt and much more. Material-friendly, environmentally compatible, easily biodegradable. Cleans quickly, easily and thoroughly. To use, dilute 1: 3 to 1: 4 with

11.90



TOP SELLER!

9 ART DECO

Sheet metal effect spray

Decorative, fast-drying acrylic varnish with a gold or silver look. Optimal effects on black or white background. Items can be primed with acrylic matt white or black. Suitable for indoor and outdoor use. Not polystyrene resistant When used externally, over paint with Zaponlack for protection. 400 ml.

331823 Gold 12.95 336291 Silver 12.95



Ready-to-use, transparent lacquer for the presentation of raw wood parts. Dries within a short time. The wood grain is displayed to particularly good effect. Maintains special structural effects even with larger wood surfaces. Can also be coated with matt or gloss varnish. Also ideal for polyester casting and liquid carving wood as well as the model building blocks p. 129. Colours can be mixed. For lighter colours, simply dilute with water. Free of pollutants and solvents, also suitable for children. Colours: light blue, light red, red brown, light green, egg-yolk yellow and silk matt white. 6 x 50 ml.

10 Universal decor paint spray

Fast-drying protective coating for parts made of wood, metal, casting and modelling materials, wax, plastic, glass etc. Colourless, universally usable, water and weather resistant. 400 ml.

334892 gloss 9.90 334893 silk matt 9.90 334894 9.90 matt



334855 19.60

This varnish is also very well suited to bricks and casting wood.



yellow

















11 Wax putty rods Specially for the repair of matt wooden surfaces.

329138 light oak 9.90 334847 dark walnut 9.90 334848 Black 9.90

For precise machining of metal!

4 PROXXOI The Precise laboratorie tricians and with extre speed is i 20,000 rpm made of strail guide. 22 Sp. rpm he. 3 Without work pieces!

4 PROXXON micro milling cutter MF 70

The Precise vertical milling machine for laboratories, opticians, jewellers, electricians and model makers. For working with extremely small cutters. Spindle speed is infinitely adjustable (5,000 - 20,000 rpm). With step clamping jaws made of steel. Axes with play-free dovetail guide.

220–240 V / 100 W.

220–240 V / 100 W. Spindle speeds 5,000 - 20,000 rpm. Table 200 x 70 mm, total height 37 cm.

335844

299.00

PROXXON

Accessories for table drilling machine and micro milling machine:

6 PROXXON precision machine vice

Milled steel. Jaw width 46 mm, span width 30 mm. Particularly suitable for micro-milling machine item 4 and coordinate table item 1, page 79. With matching nuts and fastening screws





335846 49.95



7 PROXXON Carbide cutter set

With 2 spiral grooves and fish tail cut (allows immersion in undrilled work pieces). Suitable for grey steel and malleable cast iron, brass, aluminium, glass, carbon fibre and plastics. Ø 1.0 / 2.0 / 3.0 mm, shaft Ø 3.0 mm. In the wooden block.

35845 25.90

8 PROXXON dividing attachment

For micro milling machine MF 70. For machining circular work pieces, producing radially offset bores and milled parts, milling key surfaces, 4 and 6 edges,

etc. precise parts by Nonius on the base body. Clamping chuck with reversing jaws (Ø 1,5-32 mm inside, Ø 12-65 mm outside), feed passage 11 mm. With mounting holes as well as matching nuts and mounting screws for mounting on the micro cutter MF 70, as well as the coordinates table KT 70. 72 x 64 x 38 mm In the wooden box.



219934 112.00



PROXXON Machine vice

Jaws: 50 mm wide, 10 mm high. Max. clamping width 34 mm. 5 x 3.5 x 10.5 cm

4570004

5 PROXXON Step clamping jaws

With 2 stepped blocks, 2 clamping jaws, 2 threaded bolts with nuts,T-shaped sliding block and washers. Fits MICROMOT KT70.





ELECTRIC POWER TOOL



1 PROXXON table drilling machine

TBM 220, with three idle speeds: 1,800, 4,700 and 8,500 rpm for more than three times the torque in the lower engine speed range. Sleeve stroke 30 mm. Tool holder with 6 triple slotted and hardened precision steel collets (each 1 piece Ø 1,0 / 1,5 / 2,0 / 2,4 / 3,0 and 3,2 mm). This requires a 3/8" thread for screwing a keyed chuck (please order separately, item 3). Work table (12 x 22 x 3 cm). Parallel guided stop with scale. Solid, hard chromed steel column (Ø 2 x 28 cm). Boom with spindled guides and clearance. High-quality drive unit: VDE-tested 230-volt motor (85 Watt). Overall height: 30 cm.

335991 175.00

Incl. 6 clamps!

3 RÖHM Drill chucks

For tool shank Ø 0.5-6 mm. Industrial design with high runout accuracy. 3/8" thread. With drill chuck key.

4570004



PROXXON Precision lathe FD 150/E

Light, stable and precise. 2-stage belt drive

and additional electronic controls enable spindle speeds of up to 5,000 rpm. For high torque in the lower speed range for larger work pieces and the correct cutting speed even with the smallest parts. For facing off, longitudinal turning, hollow turning, taper turning, parting and drilling. Complete with three-jaw chuck and rotating lathe centre. Precision-mounted main spindle with continuous 8.5 mm bore.

Other technical data:

220–240 Volt, 50/60 Hz. Tip width 150 mm. Tip height 55 mm. Adjustment track cross slide (X) 40 mm, upper slide (Z) 60 mm. Size $360 \times 150 \times 150$ mm.

337169 499.00



12 Turning steel set

Made of high-quality, cobalt-bearing HSS steel. Ready ground. 1 each of boring, roughing, cutting and pointing steels (also for finishing), 1 side steel on the right and left. 6 x 6 x 60 mm 6 pieces in a wooden box.

331583 65.95



10 Multicollet set

With 1 each of pliers with Ø 2-2, 5-3, 4-5-6 and 7 mm. With clamping nut M16 x 1. For the main spindle of the FD 150/E. In a wooden box.

335932

99.90

335926

0/short. For the tailstock in the fine turning machine FD 150/E.

11 RÖHM Gear rim drill chuck Clamping range 0.5-6.5 mm. Indus-

trial design with high true running

accuracy (approved up to 10,000

rpm). Complete with pin B 10 x MK

27.90

ELECTRIC POWER TOOL



Belt grinding machine BS/E

Ideal tool for restoration and sanding work in narrow spaces. Quiet and durable DC special motor with high torque. Gear head made of die-cast aluminium for high stability and precise ball bearing fits. Infinitely variable speed control with full-wave electronics. 220-240 V / 100 W abrasive belt 10 x 330 mm (available grinding surface 10 x 110 mm). Grinding speed 300-700 rpm Length 350 mm.

337431 119.00



In the world! With a 50-mm-rubber pad. For perfect surfaces,

even if it gets tight: For finishing bare surfaces, cleaning, removing rust, for the "last cut" after painting. Special high-torque motor, quiet and long lasting. Smooth transmission and infinitely variable speed control for low and constant

speeds also at high pressure. Incl. case with original inal equipment for immediate use: Rubber pad with Velcro fastening, polishing sponge (medi um-hard), 12 grinding wheels K 2000 and NIGRIN polishing emulsion (75 ml) as well as a microfibre cloth. 220-240 V / 100 W 800-2,500 rpm. Length 270



335938 119.00



4 PROXXON precision mechanics vice FMS 75

With ball joint that can be swivelled and turned on all sides. Steel jaws with prisms and detachable rubber protective cover for sensitive workpieces. Strong lever suction foot for lightning-fast mounting on smooth, non-porous workbenches. Jaw width 75 mm, span width 70 mm.

37.90 4510033



PROXXON micro coordinate table KT 70

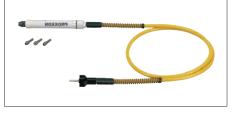
For MICROMOT drill stand and table drill TBM 220. Hand wheels with adjustable scale ring. High-strength aluminium, with play-free adjustable dovetail guides. Adjustable ruler, facilitates positioning. Table: 200 x 700 mm, height 43 mm, incl. 2 step clamping jaws.



335843 99.90

3 PROXXON MICROMOT bending shaft 110 / P

Turned aluminum handpiece with double ball bearing steel shaft and ball bearing mounted shaft end. Highly flexible soul (no hot running with tight radii). For holding MICROMOT steel collets,



thread M8 x 0.75 for drill chucks. Including 6 steel collets Ø 1.0-3.2 mm. Total length 100 cm. Without machine holder!



PROXXON precision drilling grinder FBS 240/E

Universal precision tool for drilling, milling, grinding, polishing, brushing, parting and engraving. Speed is infinitely adjustable from 5,000 to 20,000 rpm, with almost the same torque in the lower speed range - especially important for fine drilling, brushing and polishing. Spindle lock and quick-ac-

tion chuck (Ø 0,5-3,2 mm). High-quality, balanced, low-noise motor (230 V / 100 W). Housing made of glass fibre reinforced nylon. Complete with 40 high-quality insert tools in a practical plastic box. Length: 21.5 cm. Weight 450 g.





5 PROXXON industrial drilling grinder IBS / E

For drilling, milling, grinding, polishing, cutting, engraving and signing. Quieter, high-torque motor 220-240 V / 100 W with continuous full-wave control from 5,000 20,000 rpm. Ball-bearing mounted, lockable steel spindle with high true running accuracy, stable gear head made of die-cast aluminium, main housing of glass fibre reinforced polyamide. With 34 insert tools, shank Ø 2,35 mm, 6 3-slotted steel tensioning pliers Ø 1-3,2 mm.



ELECTRIC POWER TOOL

Optimal eye protection!



8 Protective glasses made of plastic

With anti-fog lenses and a flexible all-round protection. Provides optimal protection for the eyes when grinding and working with hazardous substances. With adjustable rubber band.

336001

7 Super-cut fret saw blades (not shown)

made of high-quality special steel for high cutting performance and long service life. Total length 130 mm. Contents 12 pcs.:

For soft and hard wood, plastic, acrylic glass, soft non-ferrous metals:

335935	Coarse toothed (14 teeth / 25 mm.)	4.60
335936	Normal toothed (17 teeth / 25 mm.)	4.60
335937	Fine toothed (34 teeth / 25 mm.)	4.60

For hard materials (iron):

337679	Normal toothed (36 teeth / 25 mm.)	4.75
337680	Fine toothed (41 teeth / 25 mm.)	4.75
337681	Very fine toothed (50 teeth / 25 mm.)	4.75



PROXXON cutting device

For precise parting of small workpieces made of metal, wood and plastic. Suitable for angle cuts through 45° rotatable round table. Incl. 5 ceramic-bonded cutting discs. With integrated clamping device. 220-240 V / 85 W. cutting speed 20 m / sec.

99.90

Replacement cutting disc for Ø 50 mm

337678 1.80

3 PROXXON Bench Circular Saw KS 230

Quiet, stable machine with 220-240 V / 85 W motor, saw blade speed 5,000 rpm. Power transmission by toothed belt. Milled work plate made of die-cast aluminium (16 x 16 cm), adjustable length stop with scale, angle stop with degrees, ABS body. Including "Super-Cut" saw blade (Ø 58 mm) for softwood up to 8 mm thickness. Cutting capacity: Wood up to 8 mm; plastic including Pertinax up to 3 mm and non-ferrous metals up to 1.5 mm. VDE tested. Dim.: 24 x 8 x 18 cm 4 saw blades for bench circular saw. Drill hole Ø 10 mm.

4 saw blades for bench circular saw hole Ø 10 mm.



Super-Cut Ø 58 mm, 80 teeth. Ideal for wood, Pertinax and plastic.

HSS Ø 50 mm, 100 teeth. Ideal for particularly fine cuts.

335852 11.25



PROXXON

2-speed Scroll Saw DSH

Ideal device for mould making, precision mechanics, modelling, toy manufacture (puzzles), designers, architects (models), joiners (reworking of antique furniture). For standard saw blades with cross pin, also for normal fret saw blades without pin. Cutting capacity in wood 50 mm, plastic 30 mm, non-ferrous metals 10 mm. For parting Plexiglass, GRP, foam, rubber, leather or cork. Incl. bellows with adjustable air nozzle. Stable table (360 x 180 mm), tiltable by 45 ° for mitre cuts. Firm stand, works without vibration. Incl. saw blades 5 each of coarse and fine. Powerful brushless 2-speed motor (205 W), number of strokes 900 or 1400 rpm. Saw stroke 19 mm. **337432** 229.00

Saw blades specially designed for Scroll Saw DSH, contents: 12 pcs.:			
337682	With cross pin, coarse toothed (10 tooth / 25 mm)	5.70	
337683	With cross pin, normal toothed (18 tooth / 25 mm)	5.70	
337684	With cross pin, finely toothed (25 tooth / 25 mm)	5.70	
337685	Round without cross pin, cutting on all sides	4.90	



ELECTRIC POWER TOOL



7 PROXXON Drilling and milling machine

Complete set - highest precision and perfect, versatile equipment! The ball-bearing mounted unit with electronic speed control (5,000-20,000 rpm) is capable of hard continuous use. 34 tools in industrial quality leave nothing to be desired: Grinding pins, micro-drills, fine milling cutters, cutting saw blades, brass brushes, grinding and cutting discs as well as a tool carrier and 6 hardened collets are all included. The housing is made of GRP-reinforced nylon, a radiator fan ensures optimum motor cooling. Power consumption 40 W

Length 22 cm. Everything fits very clearly in the practical case Incl. power supply.

335989 76.90





PROXXON engraving set

Engraving machine (12-18 V, 20,000 rpm, ball bearing), power supply unit, test-glass, templates / instruction booklet. With 6 high-quality insert tools of different shapes.

335990 45.90

Accessories for PROXXON engraving set

5 Small diamond ball cutter
386291 Ø 1 mm
6 Large diamond ball cutter,
386292 Ø 1.5 mm
Grinding tool tapered tip
386294
Grinding tool rounded tip

386293





13 MICROMOT Power Supply NG 2 / E 14 MICROMOT 50 Milling Machine

Safe power source for PROXXON MI-CROMOT low voltage devices. With electronic speed regulation, heat-resistant housing. 220-240 V, delivers 2.0 A at 16 V idle and 12 V operating voltage.

335889 31.50

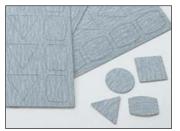
Also shown: Micromot 50 drilling and milling machine - unbeatably useful. Operated at low-voltage for safety.

337686 29.90



Super fine sanding device for linear sanding. Ideal for machining recesses, slots, corners. Durable 12-18-V motor with 8,000 strokes/min. Housing made of glass fibre reinforced polyamide. Including 4 straight and 4 angled grinding inserts with different shapes as well as 3 sheets of self-adhesive abrasive paper 180, 240 and 400 grit. On each sheet 5 x 4 different shapes are pre-punched. Length 16 cm, weight 130 g. Suitable power supply unit: Item 13 on this page.

335890 29.95



19 Replacement sanding paper for the PROXXON Pen Sander PS 13. In each case 3 sheets with 20 punchings in different forms. Silicon carbide, self-adhesive.

329138 180 grit **7.20 334847** 240 grit **7.20 334848** 400 grit **7.20**



15Graphitecopyingpaper(notshown) For transferring motifs onto glass, ceramics, porcelain and metal. 10 sheets of DIN A4 (21 x 30 cm).

334844 4.20

16 White copy paper (not shown). For transferring motifs on to wood, metal, stone, glass, ceramic, plastic, cardboard etc. 10 sheets DIN A3 (30

334845 12.40





x 42 cm).

Approx.100 great motifs!

Glass engraving - fascination in glass Explains tools, first steps and techniques. 61 pages, including 16 pages with a total of about 100 motifs. Format: 21 x 29.5 cm.

336153 12.90



9 Holder for glass-cutting tools

With shaft Ø 2,35 mm. Easy opening by pressing a button. Length 15 cm.

335875 3.5

10 Special grease pen (not shown)

For drawing designs on glass. Length 17.5 cm.

336002



11 Glass engravingdiamond stylus set 1 each of Ø 0.8/1.0/1.4/1.6/2.3 mm and 1 x flame

336238 19.95



5.20

12 Glass rubber

For roughening for engraving and re-polishing engraved surfaces.

336239 4.50

Order quickly and easily right now:

www.matinkulta.fi

Tel.: +358 (05) 413 2888

1 compartment case with snap-on lid.

Crystal clear polystyrene. Ideal for storing small parts. 12 compartments each 24 x 24 x 16 mm. External dimensions: 157 x 54 x 19 mm

336033 4.20

2-4 small parts boxes

Glass-clear polystyrene, with snap-on lid.

Fig	Order no.	Interior dimensions	€ / pc.
2	330811	59 x 50 x 11	1.75
3	336032	49 x 35 x 10	0.60
4	336031	54 x 54 x 17	1.30

5 Triangular cup

Made of plastic, simplifies the picking and back filling of small parts in spare part boxes. Contents 2 Pieces.

4213001



...

6 Small parts box

Made of green polystyrene with crystal clear lid, stackable. Ensures order in the workshop, household and office. 10 compartments each 49 x 39 x 14 mm. External dimensions 205 x 104 x 16 mm Without content.

Everything in the best

1

325292 6.20



Work plate with cover

Optimally stored: The work plate offers trays for oil cups, oilers, elder mark and small tools. Plastic, self-adhesive, with transparent dust cover. Dimensions: 350 x 250 x 62 mm

4210001 49.90





5

for batteries incl. battery tester

Perfect for storage

of small parts!

Loosed rechargeables and batteries lying around can cause short circuits and will discharge faster. So protect your batteries and rechargeables in the convenient storage box for up to 24 x AA, 16 x Micro AAA and 4 x 9 V E-block batteries and rechargeables.. Dimensions: 173 x 138 x 63 mm Incl. wall bracket and battery tester with LC display.

337316 14.99



Mixing pot set

337345

Mixing and storage set in one. Quick, clean, without the hassle of cleaning the inserts. Arrangement and storage of extremely small parts or for mixing for example paints and glues. Set with 2 rings and 10 plastic inserts. Ø 36 mm, height 15 mm.

337344 5.90

2.50

Plastic inserts, pack of 20 (not shown) Separately for mixing pots

TUMBLING®



Tumbling, also called sliding grinding, is the machine polishing process for almost every surface. The mix of machine, abrasive, compound and water allows you to work on almost any surface, smooth grinding, polishing, cleaning, smoothing, deburring or rounding edges. Just as in the nature sand and water grind coarse rock fragments to form smooth, finely

rounded pebbles, you can work on your surfaces with the products offered here: The machine offers an enormous reduction in work and time, a result which is often better, is more gentle on the material, is more friendly to the environment and human health than manual processing.



Lortone 33B Tumbler Machine

Well suited for alarm clock movements or parts. Including 2 drums each with 0.8 l capacity. Drum dimensions: Ø 114 x H 135 mm. Drum weight: 470 g 230 Volt / 50 Hz. 70 watt.

4310460 299.00



Cleaning concentrate Compound C

For base and noble metals when used with ceramic chips. The "C" medium s excellent for polishing, smoothing, shining, deburring, cleaning and degreasing. The combination of cleaning, brightening and corrosion protection is the ideal basis for all mixing processes. Good gloss and buffering effects even optimise the processing of sensitive parts. Does not attack the special drum! Mixing ratio approx. 10 ml per litre of water. Contents 1 litre

4546267 1 litre **24.9 4546268** 5 litres **99.9**



Drip tray

Made of plastic for the separation of material to be tumbled and polishing. particles Dimensions: 445 x 255 x 105 mm

4310420 49.90



Lortone QT12 Tumbling Machine

For all standard clock movements (except floor clocks). Includes a drum with 4.3 l capacity. Drum dimensions: Ø 190 x H 218 mm. Drum weight: 2325 g 230 Volt / 50 Hz. 115 watt.

4310463 499.00



Barrel grinding particles (ceramic chips)

These are used for the wet polishing of metal alloys. They are also suitable for polishing heavy work pieces since the tendency to damage is greatly reduced. Ceramic bodies achieve the best results when their edges are rounded and the surface is smooth. The ceramic chips with diagonal cut have a diameter of 2 mm and a length of 6 mm. In this case, the slanted section is a significant factor for the tumbling result in corners, recesses and in places which are difficult to access. The filling capacity of the drums is: Number of litres of filling = quantity in kg of ceramic chips.

4546272 2 kg **24.90 4546273** 5 kg **99.90**



Tel.: +358 (05) 413 2888

Separating screen

For separation of material to be tumbled and polishing particles. Vibrating screen with punched holes Made of stainless steel.

Dimensions: 460 x 200 x 125 mm **4310445 129.90**





Whether radio, quartz or manual winding - great brands, reliable timepieces!



EUROTIME radio watch

In metal housing, black-plated. With LCD display for time, weekday/seconds, date/month, time zone. The entire dial is completely illuminated at the press of a button! Housing Ø 42 mm.

337743 59.90





LACO automatic watch Aachen

With Laco 21 automatic movement, satinised stainless steel housing, flat sapphire glass, digits/hands with SuperLuminova luminous material, brown leather strap, 5 bar. Ø 42 mm. Made in Germany.

335321 298.00



TOP SELLER!



JEAN JACOT Outdoor belt watch

With carabiner, compass, fold-out magnifying glass. Silver-coloured metal housing, satirised. Black dial with luminous indexes and photo-luminescent hands. 44 x 85 x 17 mm.

335211 44.00

To aid orientation, all wristwatches are pictured on the following pages at their approximate original size.



LACO automatic pilot watch Bielefeld

With LACO 21 automatic movement, pattern B "BIELEFELD", satinised stainless steel housing, with sapphire glass and sapphire glass base, numerals and hands with Superluminova luminous material, black PVD plating, black leather strap with rivets, 5 bar. Ø 42 mm. Made in Germany.

337806 348.00





Laco – from passion for the legend. German watches since 1925. Unique quality, outstanding workmanship and high precision make these watches stand out. Handmade in Pforzheim. A Laco is more than a watch. It is an expression of character.

MADE IN GERMANY







LACO Quartz Chronograph Detroit

Stainless steel, black dial with rivet look, hands and digits with Superluminova luminous material, date at 3 o'clock, quality quartz movement, 5 bar, black nylon strap. Ø 40 mm. Made in Germany.

337800 248.00

LACO Quartz Chronograph Trier

Stainless steel housing polished/satinised, hands and digits with Superluminova luminous material, black calfskin strap with two rivets on each strap side, 5 bar, Ø 42 mm. Made in Germany.

337533 248.00

LACO automatic pilot watch Sydney

With LACO 21 automatic movement, pattern B, satinised stainless steel housing, with sapphire glass and sapphire glass base, black PVD plating, digits and hands with Superluminova luminous material, black stainless steel strap PVD plated, 5 bar. Ø 42 mm. Made in Germany.

337808 448.00









LACO Quartz Chronograph

Special edition, limited model (100 no.) blue lustrous dial, luminous indexes, luminous hands. Stainless steel housing, army green nylon strap, 5 bar. Ø 42 mm. Made in Germany.

330985 199.95

LACO Quartz Chronograph Montréal

Polished/satinised stainless steel housing, golden rosé hands and digits, brown leather strap, 5 bar. Ø 42 mm. Made in Germany.

337534 248.00

LACO automatic marine watch Valencia

With LACO 21 automatic movement, stainless steel housing with sapphire glass and sapphire glass base, dial completely luminous with Superluminova luminous material, date at 6 o'clock, railway minute scale, calfskin strap brown, 5 bar. Ø 42 mm. Made in Germany.

337805 298.00

LACO automatic pilot watch Neapel
With LACO 21 automatic movement, pattern A "NEAPEL",
satinised stainless steel housing , with sapphire glass and
sapphire glass base, dial black, hands and digits with Superluminova luminous material orange, black leather strap with
rivets, 5 bar. Ø 42 mm. Made in Germany.

337803

348.00



A journey with a Zeppelin was always one of the most elegant ways of travel and has lost none of its fascination even nowadays. Just like the Zeppelin airships, the watches in this range will also captivate you with their technical refinement and timeless beauty.

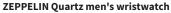


MADE IN GERMANY

ZEPPELIN Quartz Alarm Chronograph

Classical shape with 12-h stop function. Polished, elaborately handmade stainless steel housing with the typical ZEPPELIN rings on the housing edge. Tachymeter scale, date, alarm, Chrono-sec-, min and h hands. Mineral glass, 5 bar. Brown leather strap with white decorative quilting and pin buckle. Ø 42 x 11 mm.

335193 299.00



From the 100 years of ZEPPELIN series. Elaborately handmade stainless steel housing, satinised. Silver-coloured dial with black numerals/indexes, black hands, small dial for second, freely selectable time display, tachymeter scale. Mineral glass, screwed stainless steel base, 5 bar. RONDA works 6203 B – Swiss Technology. Large date. Brown, embossed leather strap with contrasting lockstitch seam and stainless steel pin buckle. Ø 43 x 12.5 mm.

335212 229.00



ZEPPELIN automatic men's wristwatch

Handmade stainless steel housing, polished. Light beige dial with black digits and hands, "open heart". Small seconds, mineral glass, screwed stainless steel base with glass insert, 5 bar. Brown, padded leather strap in reptile look with stainless steel pin buckle. Ø 41 x 13 mm.

335277 249.00



ZEPPELIN LZ 129 wristwatches

Hindenburg Ed. 2 Polished stainless steel housing; silver-coloured dial with black numerals and hands; quartz movement; central seconds, date and weekday display, moon phase. Plastic glass, screwed stainless steel base; 3 bar. Black, embossed leather strap with stainless steel pin buckle.

335304 (ladies Ø 36 x 10 mm) **279.00 335331** (men's Ø 40 x 11 mm) **279.00**



ZEPPELIN Hindenburg LZ 129 lady's watch PVD gold-plated polished stainless steel housing. Silver-coloured dial with black numerals. Date and second counter in addition to display of weekday, calendar week and moon phase. Plastic glass, stainless steel base, 5 bar, SWISS MADE quartz mechanism. Brown, embossed leather strap with pin buckle. Ø 36 x 10 mm.

335244 299.00









ZEPPELIN automatic men's wristwatch

Polished stainless steel housing. Elegant, right-blue dial with power reserve in addition to 24-hour display; simple white indexes and hands. Mineral glass; automatic mechanism, 26 stones. Screwed stainless steel base, 3 bar. Blue, embossed leather strap with pin buckle. Ø 40 x 12 mm.

335246 479.00

ZEPPELIN automatic men's wristwatch

Polished stainless steel housing; beige dial with power reserve and 24-hour display, simple black indexes and hands, automatic mechanism, 26 stone; mineral glass. Screwed stainless steel base, 3 bar. Dark brown, embossed leather strap with pin buckle. Ø 40 x 12 mm.

335333 479.00

ZEPPELIN automatic men's wristwatch LZ 127

Handmade housing in satinised stainless steel with the typical ZEPPELIN rings on the housing edge. Mineral glass, screwed glass base, 5 bar. Automatic calibre 821 A with 21 stones, central seconds, date. Black dial with golden rosé numerals, photo-luminescent hands. Black, embossed leather strap with contrasting lockstitch seam and stainless steel pin buckle. Ø 40 x 13 mm.

335236 199.00

The lightness and the style of the Italian way of life is what brings the **LZ120 Rome** watch series into the foreground. With their elegant curved housing, the delicate strap edges and the slightly cambered dials retaining warm colour tones, the LZ120 Rome watch family, which has purposely been kept classical, brings this lifestyle to your wrist.







ZEPPELIN Quartz Chronograph LZ 120

337816

with moon phase, housing in polished stainless steel, Swiss ETA G10.962EO mechanism, white dial with black numerals and digits, dark brown leather strap. 5 bar. From the LZ120 Rome series. Housing Ø 41 mm.

349.00

ZEPPELIN Quartz Watch LZ 120

with small seconds, polished stainless steel housing, Swiss Ronda mechanism, dial beige, digits rosé-coloured, leather strap brown, 5 bar. From the LZ120 Rome series. Housing Ø 41 mm.

337817 249.00 337818

ZEPPELIN Quartz Watch LZ 120

with small seconds, polished stainless steel housing, Swiss Ronda mechanism, dial night blue, digits white, leather strap cognac with crocodile embossing, 5 bar. From the LZ120 Rome series. Housing Ø 41 mm.

249.00

All prices in € incl. statutory. VAT plus shipping costs







JUNKERS Quartz Watch with Hesalit glass

with special arched Hesalit glass. Polished stainless steel housing, Swiss Ronda mechanism, dial beige, digits black, green luminous dots, 3 bar. From the Bauhaus series. Housing Ø 40 mm.

337890 199.00

JUNKERS Quartz Chronograph with Hesalit glass

with special arched Hesalit glass. Polished stainless steel housing, Swiss Ronda mechanism, dial beige, digits black, green luminous dots, 3 bar. From the Bauhaus series. Housing Ø 40 mm.

337888 279.00

JUNKERS Automatic watch

With power reserve, with special arched Hesalit glass and glass

base. Beige dial, black digits, green luminous dots, 3 bar. From the Bauhaus series. Housing Ø 40 mm.

337889 479.00

SPITZBERGEN F13

This edition pays tribute to the adventurous flight made by the JUNKERS F 13 across the northern ice under extreme Arctic conditions.

JUNKERS Automatic Watch Spitzbergen F13

Satinised stainless steel housing. Automatic mechanism cal. 821A with 21 stones. Original Superluminova-coated dial, illuminated blue at night with black numerals and silver-coloured Junkers appliqué. Special crown with embossed Junkers logo. Stainless steel base with glass window, 5 bar. Elaborately worked, black leather strap with contrasting lockstitching and pin buckle Ø 40 x 13 mm

335198 279.00









Especially flat, polished stainless steel housing; white dial with golden rosé numerals and hands; quartz mechanism with 5 stones; small seconds; date display. Mineral glass, 5 bar. Brown leather strap with decorative stitching; stainless steel pin buckle Ø 40 x 7 mm flat.

335334 259.00

With date display, glass base, satinised stainless steel hous-

ing, black dial with white luminous numerals (Superluminova), 5 bar. Housing Ø 40 mm.

337887 229.00



JUNKERS Quartz Watch Iron Anni D Aqui

With freely selectable second time zone, satinised stainless steel housing, with crown protection, Swiss Ronda mechanism, relief dial in corrugated metal design, silver-coloured, rosé-coloured digits, brown leather strap, 10 bar. Housing Ø 42 mm.

337827 199.00



JUNKERS Quartz Chronograph

Housing in satinised stainless steel, beige dial, silver-coloured numerals and digits, dark brown leather strap. 5 bar. From the South America series. Housing Ø 42 mm.

337822 279.00



JUNKERS Quartz Watch

With freely selectable second time zone, satinised stainless steel housing, with crown protection, Swiss Ronda mechanism, night-blue dial, digits with Superluminova luminous material (illuminate blue at night) night-blue leather strap with crocodile embossing, 10 bar. From the Mountain Wave Project series. Housing Ø 40 mm.

337824 189.00



JUNKERS Automatic Watch Iron Anni Cockpit

Stainless steel housing, with glass base, black dial, beige digits (illuminate green at night) date and day display, strap made of certified organic leather, 5 bar. Housing Ø 42 mm.

337825 279.00



The Messerschmitt legend started with the long-distance world record made by a Messerschmitt ME 108 in 1935. It reached its interim peak with the Messerschmitt KR200 cabin roller, which is nowadays recognise as a symbol for the years of econom-

ic wonder in which generalised motorisation started in Germany. This legend lives on with the watches made by manufacturer Aristo Vollmer from Pforzheim.





MESSERSCHMITT Quartz Pilot Watch ME 209 collectors model – World speed record

Sandblasted stainless steel housing. Black dial with photo-luminescent digits, indexes and hands, red secondhand, tachymeter scale, with the side view of a Messerschmitt ME 209. Quartz mechanism. Date and central second counter. Mineral glass, screwed stainless steel base, 5 bar. Brown, padded leather strap with contrast seam, stainless steel pin buckle. Ø 42 x 10.5 mm.

335291 169.00



MESSERSCHMITT 262 Quartz Watch

Brushed stainless steel housing, screwed base, aluminium look dial, Swiss Ronda quartz mechanism, date, vintage brown leather strap with lockstitch seam, luminous hands and digits, 5 bar. Housing Ø 42 mm.

337689 165.00

Order the matching book at the same time:



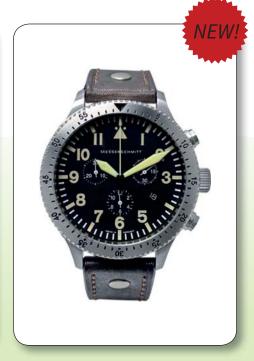
Time and precision

Find out all about the beginning, development of and current Pforzheimer watchmaking industry. Which were the most important brands in the 20th century? What do watch component manufacturers make? Which watch brands are still available today? Book of course includes chapter about LACO and Aristo Vollmer. 352 pages, hardcover.

337877 34.95







MESSERSCHMITT Retro Series Tachometer

Sanitised stainless steel housing, screwed base, Swiss Ronda quartz mechanism, black leather strap, 5 bar. Housing Ø 38 mm.

337690 198.00

MESSERSCHMITT P.1101/99 Pilot Quartz Watch

Matt stainless steel housing, sandblasted, 12-sided bezel, Swiss Ronda quartz mechanism, date, black leather strap, 5 bar. Housing Ø 36 mm.

337691 99.00

MESSERSCHMITT Retro Quartz Chronograph

Matt stainless steel housing, rotating bezel with minute division, stop function with 1/1 seconds up to 12 hours, cumulative time measurement, date, screwed base, Swiss Ronda quartz mechanism, luminous hands and digits, black vintage leather strap, 5 bar. Housing Ø 43 mm.

337693 225.00







MESSERSCHMITT Night & Day Quartz Watch

Matt stainless steel housing, rotating bezel on both sides, screwed base, date display with quick correction, 24-hour display, Swiss Ronda quartz mechanism, luminous hands and digits, central red seconds, 5 bar, housing Ø 43 mm.

337694 225.00

MESSERSCHMITT Cabin Roller Cult Watch with Sunray Dial

Polished stainless steel housing, screwed base, date display with quick correction, Swiss Ronda quartz mechanism, extra-soft black leather strap, 5 bar. Housing Ø 38 mm.

337695 169.00

MESSERSCHMITT Bauhaus Chronograph

Polished stainless steel housing, arched mineral glass, stop function with 1/1 seconds up to 12 hours, 30 minute counter, date, cream dial, leather strap with brown crocodile embossing, extra-padded, 3 bar. Housing Ø 42 mm.

337697 245.00



REGENT – timeless, constant, reliable. Just the watch for me. The successful German brand for more than 30 years.



REGENT Men's Quartz Wristwatch

Polished/sanitised stainless steel housing with edge protection, link strap, can be shortened, with safety folding clasp, polished/satinised; white dial with applied, silver-coloured digits and indexes; silver-coloured hands. Sapphire glass, screwed stainless steel base, 20 bar. Central second, date and weekday display Ø 37×10 mm.

335269 89.90



REGENT Men's Quartz Wristwatch

Matt stainless steel housing with polished bezel. White dial with Arabic digits, photo-luminescent hands and hour points, mineral glass with date magnifier. Stainless steel base, 5 bar. Flexible stainless steel strap polished/matt. Ø 37 x 10.5 mm.

333966 59.90



REGENT Lady's Quartz Watch

Polished, gold-plated stainless steel housing. White dial with black Arabic counters, gold-coloured hands, date display. Mineral glass, stainless steel base, 5 bar. Black leather strap with reptile embossing. Ø 37 x 10 mm.

335241 44.90



REGENT pull strap clock

Extremely practical - clocks with pull straps, can be shortened. Easily-readable digits, with date, quartz mechanism, steel housing and strap. 5 bar.

337903 (men Ø 35 mm) **337904** (ladies Ø 25mm) 39.90 39.90



REGENT skeleton clock

With manual winding - made in Germany. Stainless steel housing, polished, with glass base, black leather strap, with crocodile embossing, 5 bar. Housing Ø 38 mm.

335310 Brown leather strap, gold-plated housing **337901** Black leather strap, chrome-plated housing

228.00 228.00



Clocks for him and her!



REGENT radio wristwatch, bicolour steel

Polished/satinised stainless steel strap, stainless steel housing, 3 bar, digital date display, easily-readable Arabic digits, luminous hands.

337626 (men Ø 40 mm) **128.00 337627** (ladies Ø 30 mm) **128.00**







REGENT Quartz Wristwatch, white steel

Polished/satinised stainless steel strap, folding clasp, Stainless steel housing, date display (men's), 10 bar.

337629 (men Ø 39 mm) **337630** (ladies Ø 29 mm) 49.90 49.90

DUGENA – quality and compelling design at a good price – German watch tradition since 1917.



The DUGENA watch

Solid, robust and functional. Best quality at the best price. Absolutely reliable, absolutely DUGENA. Stainless steel housing, SAPPHIRE glass, bass centrally screwed. Housing Ø 39 mm, 10 bar.

337659	Quartz, black leather strap	99.95
337660	Quartz, stainless steel strap	139.00
337661	Automatic, stainless steel strap	239.00



DUGENA Quartz Watch

Masculine, sporty, conspicuous This watch can accompany you in all your activities - waterproof up to 300 m (30 bar). Stainless steel housing and straps, hardened mineral glass, screwed base. Housing \emptyset 40mm.

337662 (blue) 109.00 337663 (black) 109.00





DUGENA titanium clock

Housing and straps made of titanium (antiallergic, very light) waterproof up to 5 bar.

337653 (men Ø 39.5 mm) **139.00 335330** (ladies Ø 28 mm) **139.00**

Information on waterproofing:

Housing ID or dial	Washing/ rain/splashes	Showering	Bathing	Swimming	Diving without equipment
None	X	X	X	X	X
3 bar (3 ATM / ~30 m)	✓	X	X	X	X
5 bar (5 ATM / ~50 m)	✓	X	√	X	X
10 bar (100 ATM / ~100 m)	✓	✓	✓	√	X
20 bar (200 ATM / ~200 m)	✓	√	✓	√	✓











DUGENA

Quartz Lady's Watch

Elegance meets comfort. Long service life, lasting classical beauty. These ceramic watches fit smoothly and likely to your wrist, adapt to your body temperature and never get too cool or too hot. Housing and strap ceramic/stainless steel, strap can be shortened, hardened mineral glass, up to 3 bar. Size 20 x 35 mm.

335274	Black/gold	169.00
337655	Black/silver	169.00
337656	White/silver	169.00



DUGENA Radio Lady's Wristwatch

Gold-plated stainless steel housing, SAPPHIRE glass, brown leather strap, 3 bar. Housing Ø 32 mm.

335276 169.00

DUGENA

Radio Lady's Wristwatch

Stainless steel housing, SAPPHIRE glass, black leather strap, 3 bar. Housing Ø 32 mm.

337654 149.00





DUGENA radio watch

PVD-coated stainless steel housing, hardened mineral glass, black leather strap, 3 bar. Housing Ø 31 mm.



CERTUS

The French brand has been presenting strong watches for every occasion since 1978 - at an optimum price to performance ratio





CERTUS Men's Wristwatch Bicolor, with date, 5 bar. Housing Ø 38 mm.

337643 89.00



CERTUS Men's Wristwatch Blue dial, with date, 10 bar. Housing Ø 38 mm.

CERTUS Men's Wristwatch Sporty, black dial, with date, leather strap, 5 bar Housing Ø 38 mm.

59.00

99.00

337645

337644 69.00



CERTUS Men's Wristwatch

337648

Dark blue dial, with date, luminous digits, 10 bar. Housing Ø 37 mm.

CERTUS Men's Wristwatch Black metal strap, black dial, with date, 3 bar. Housing Ø 41 mm.

Milanese strap!



CERTUS Men's Wristwatch

Dark grey dial, with date, 5 bar. Housing Ø 39 mm.

337647 59.00

Order quickly and easily right now:

337649

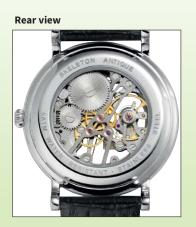
Jean Jacot

Mechanical timepieces - reliable and precise - at top prices!



JEAN JACOT men's wristwatch with manual winding Gilded, polished stainless steel housing. Silver-coloured, partially embossed dial with gold-coloured indexes and digits in addition to photo-luminescent hands. Manual winding mechanism, 17 stones. Second counter. Mineral glass, stainless steel base, 5 bar. Black, embossed leather strap with pin buckle. Ø 40 x 10 mm.

335208 89.00



Details





JEAN JACOT Men's wristwatch with manual windingStainless steel, skeletonised dial, glass base, Roman numerals, 5 bar. Housing Ø 39.5 mm.

37720 89.00



JEAN JACOT men's wristwatch with manual winding Stainless steel, easily-readable dial, black leather strap. 5 bar. Housing Ø 39 mm.

337722 White **89.00 337724** Bicolour **89.00**



JEAN JACOT Men's automatic watch

Stainless steel housing and strap, DG 2813 automatic mechanism with magnifying glass above date, rotating bezel, blue dial, luminous index, 10 bar. Housing \varnothing 42.5 mm.

337721 179.00







"Music in the Frauenkirche" wristwatch addition

The design of the dial is based on the theme of "music in the Frauenkirche" The musical notes represent the first bars of Halleluja of George Frideric Handel's Messiah. Swiss Ronda quartz mechanism, dial with sun-brushed look, semicircular original sands tone from the ruins of the Frauenkirche. Black, lightly padded leather strap with crocodile embossing.

337538 337541	1 Lady's watch, Ø 38 mm, white 2 Lady's watch, Ø 38 mm, gilded	116.00 142.00
337539	3 Men's watch, Ø 42 mm, white	116.00
337540	4 Men's watch, Ø 42 mm, gilded	142.00





23. Edition Dresden Frauenkirche Watch

Limited edition, with Swiss Ronda quartz mechanism, collector's item. Matte black stainless steel housing, with original sandstone from the Frauenkirche, black calfskin strap, 3 bar. Ø 35 mm.

337542 79.00







Anniversary watch 10th Church Concentration

The watch for the occasion of the 10th anniversary of the Frauenkirche consecration in 2005. The dial shows the Frauenkirche clock tower. Four cut stone segments are incorporated in the round dial. Stainless steel housing, brushed, with "10 years consecration- Frauenkirche Dresden", with Swiss Ronda quartz mechanism, black, smooth leather strap. Ø 38 mm.

337547 169.00

STRICTLY LIMITED EDITION WATCH!







24. Edition Dresden Frauenkirche Watch

Limited edition, with Swiss Ronda quartz mechanism, collector's item. Golden rosé stainless steel housing, dark blue dial with sun-brushed look, with original sandstone from the Frauenkirche, dark blue calfskin strap with crocodile embossing, 3 bar. Ø 36 mm.

26. Edition Dresden Frauenkirche Watch

Limited edition, with Swiss Ronda quartz mechanism, collector's item. Golden rosé stainless steel housing, black dial with sun-brushed look, rosé digits, with original sandstone from the Frauenkirche, black calfskin strap, 3 bar. Ø 36 mm.

25. Edition Dresden Frauenkirche WatchLimited edition, with Swiss Ronda quartz mecha-

Limited edition, with Swiss Ronda quartz mechanism, collector's item. Silver stainless steel housing, silver dial with sun-brushed look, rosé digits, with original sandstone from the Frauenkirche, dark brown calfskin strap, 3 bar. Ø 36 mm.

337543 99.00 337546 115.00 337545 115.00



Smartanalog watches with multifarious functions:

- cableless synchronisation via Bluetooth
- 4.1 with the Smartphone
- compatible with Android 5.0 or higher and iOS 9 or higher
- Kronaby App enables access to various functions
- automatic local time setting
- limitation of messages possible to specified persons
- soft reminder if you have been inactive too long

- calls can be simply rejected
- vibration alarm
- setting off second time zone possible
- step counter, calorie analyser, distance covered
- timer function, vibration alarm
- camera operation possible
- smartphone finder
- GeoTag button to save location
- Walk-Me-Home function sends constant signal to a selected contact





337675 375.00



ROSENDAHL

High quality functional designs by Rosendahl, with clear lines and creative extras, developed in Denmark since 1984.





2 + 3 ROSENDAHL quartz wristwatches

Matted stainless steel housing, large digital time display (hours/minutes) date at the press of a button. Arched mineral glass, screwed stainless steel base, 5 bar. Black PU strap with butterfly clasp.

335308 (men's Ø 32 x 42 x 8.5 mm) **335309** (ladies Ø 28 x 38 x8.5 mm)

149.00 149.00

Jean Jacot



JEAN JACOT pocket watch

Gilded housing with double hinge; skeletonised dial, white dial ring with Roman numerals, black antique hands, 30 cm chain. Ø 53 x 16 mm.

335324 279.00



JEAN JACOT pocket watch

Chrome-coloured, polished housing with double hinge; skeletonised dial, white dial ring with Roman numerals, black antique hands, 30 cm chain. Ø 53×16 mm.

335323 279.00



JEAN JACOT skeleton pocket watch

Gilded housing, polished. Mechanical skeleton mechanism with blued screws and hands, 2nd time zone, day/night display, skeletonised dial with Roman numerals. Small second counter. 30 cm chain. Ø 54 x 13 mm.

335281 289.00



JEAN JACOT pocket watch

Bicolour chrome/rosé spring-loaded housing, polished with emblems, glass cut out in rear, manual winding. White dial with Roman numerals, black spade hands. Central second counter. 30 cm chain. Ø 50 x 12 mm.



JEAN JACOT pocket watch

335328

Polished stainless steel housing, silver-coloured, partially-embossed dial with blue Roman numerals, small second counter at 6 o'clock, blue spade hands, manual winding, 30 cm chain. Ø 50 x 12 mm.



JEAN JACOT pocket watch

Chrome-plated, polished double-hinge housing with ribbed surfaces and emblems; metal couvette with "Tempus Neminem Manet" engraving. Silver-coloured, partially engraved dial with blue Roman numerals, open balance wheel; blue hands, skeleton mechanism with manual winding, 30 cm chain. Ø 53 x 16 mm.

335327 145.00



JEAN JACOT pocket watch

Gilded, spring-loaded housing, five-cut embossed silver-coloured dial with Arabic digits, black hands, central seconds. Manual winding mechanism. 30 cm chain. Ø 51 x 12 mm.



JEAN JACOT pocket watch

Bicolour spring lead housing, polished with coin border and emblems. Silver-coloured dial with Roman numerals, black Breuget hands, central seconds. Skeleton manual winding mechanism, glass cutout. 30 cm chain. Ø 51 x 16.5 mm.



JEAN JACOT Quartz Pilot Wristwatch

Housing in satinised steel. Black dial with Arabic digits, photo-luminescent hands, central seconds. Date. 25 cm steel chain. \emptyset 47 x 10 mm.

335229 79.00 335188 75.00

POCKET WATCHES





JEAN JACOT pocket watch

Chrome-plated, quartz mechanism, black Arabic dial with luminous numerals & hands, with leather chain & leather pouch. Housing Ø 43 mm.

337731 79.00



JEAN JACOT pocket watch

Chrome-plated, Swiss Ronda quartz mechanism with moon phase, silver dial, Arabic. Housing \emptyset 50 mm.



JEAN JACOT pocket watch

337732

Gilded, with $\overset{\circ}{2}$ quartz mechanisms for 2 time settings, Arabic and Roman numerals. Housing Ø 47 mm.

99.95



JEAN JACOT pocket watch

Mechanical manual winding mechanism, double gilded hinges, skeletonised, mechanism visible from rear, metal couvette with "Tempus neminem mane" engraving, dial with blue Roman numerals. Housing Ø 52 mm.



JEAN JACOT pocket watch

Quartz mechanism, polished chrome-plated housing. Silver dial with rosé-coloured digits (Arabic). Housing Ø





JEAN JACOT pocket watch

Quartz mechanism with small seconds, chrome-plated housing, matt. Anthracite dial, blue digits, Arabic. Housing Ø

337783 99.90



JEAN JACOT pocket watch

With moon phase. Swiss Ronda quartz mechanism, chrome-plated housing, silver dial, blue digits, Arabic. Housing \emptyset

337781 129.00

POCKET WATCHES

REGENT



REGENT pocket watch

IPG-gilded, polished stainless steel housing, open balance will from rear, mechanical skeleton mechanism with 17 stones, enamelled white chapter ring with Roman numerals, black hands, central second counter. 30 cm chain. Ø 50 x 13 mm.

335313 158.00



REGENT pocket watch

Antique silver-plated spring lid housing with floral scrolls, manual winding, silver-coloured, partially embossed dial with black digits, black hands, central second counter. 30 cm chain. Ø 41 x 11 mm.

335311 178.00



DUGENA quartz pocket watch

Satinised stainless steel housing with flat mineral glass. Rail station dial, typical black hour/minute hands, red seconds. 23 cm chain. Ø 43 x 9 mm.

335314 89.95



DUGENA quartz pocket watch

Chrome-plated, polished spring lid housing, with ribbed surfaces, lid additionally decorated with emblems, white dial with black, Arabic digits; black hands, central second and date display. 30 cm chain.

Ø 50 x 14 mm.

335316 119.00



Pocket watch stands

Stable base, underside coated with felt. Dimensions: Base diameter 5.7 cm, overall height 9.4 cm. Max. watch Ø 60 mm.

336086 gilded 39.00 336085 chrome-plated 34.90



Real glass dome with hooks

Internal Ø 68 mm, internal height from hooks to base 85 mm. Wooden base with black piano lacquer finish. Overall height 12.5 cm. Without pocket watch.

324766 16.90

13.6 x 2.5 cm. Without watch. Stands in polished

Stands with bicolour design - therefore ideal for

47.90

49.90



lid with magnetic closer and drawer

for keeping pocket watch chains etc.

Without watches. Drawers: 6 x 7.5 x 1

49.90

cm. External: 25 x 20.5 x 7 cm.

334359

both gold and silver watches.

brass finish.

336026

336025

WATCHWINDER



MTE watchwinder 2-fold

For two automatic watches. Operation with 230 V / 3 V power supply (included in delivery!) or 2 x 1.5 V mono cells (e.g. for operation in safe). Ø 11 cm, 17 cm high.

4360629 166.00





1 + 2 PICCOLO watchwinder

Square, practical, super design. Up to 4 watchwinders (for one watch each) can be supplied with power without cables in series or in parallel with only one power cable. Each module can be programmed independently. Three rotation modes, four speeds, Plexiglas cover. Please order the power supply separately

317256	1. Watchwinder black	99.90
317257	2. Watchwinder carbon	99.90
317259	Power supply for Piccolo (not illustrated)	19.90



Primus watchwinder incl. power supply

For two automatic watches. Door with magnetic lock, two inspection and dust protection windows, three rotation modes, four speeds. Incl. power unit.

Dimensions: 14 x 24 x 19 cm.

322776 129.90



San Diego 3 watchwinder incl. power supply

For three automatic watches, 12 programs for almost any calibre, programming using LCD controller. Incl. drawer for up to 5 further watches. High-gloss black lacquer, recessed inspection window, soft velour lining inside, five different rotation patterns, three rotation modes, caring interval switching, quiet. Incl. power unit. Dimensions: 38 x 26 x 19 cm.

379.00









6 - 9 watchwinder

Optimal for operation in safe, does not require power supplies, battery operation possible. Watchwinder for one watch, clockwise and anticlockwise rotation.

330747 3. Watchwinder carbon

330748 4. Watchwinder black leather

330749 5. Watchwinder white leather 330750 6. Watchwinder brown leather 149.00 149.00 149.00

159.00

Please order together: Varta Mono LR20 (pack of 2) 2625003 6.80/pack

WATCHWINDER



Inexpensive watchwinder for automatic watches

Electric motor, dust protection cover, forwards or backwards movement. Operated with mains adapter (incl.). Practical clasp for all watch sizes. $21 \times 12.5 \times 12.5$ cm.

334358 56.90



Satin Carbon Expert Watchwinder

For battery operation smartly-designed watchwinder, programmable interval motor, scratchproof, carbon look, dustproof. Dimensions: 200 x 110 x 145 mm.

337347

149.00

Please order together: Varta Mono LR20 (pack of 2) **2625003** 6.80/pack



BOXY WATCHWINDERS are simply practical: You can either use them individually or stack them - up to 6 Boxys can be connected to form one system using the Boxy centre or the baseplate. Only one power supply is required.

Modern design, scratchproof surface, touch sensor, interval motor with three run directions, individually programmable rotations per day, anti-dust cover, also suitable for heavy watches, quiet, low mechanical wear.







318289 Small baseplate 2





BOXY Center

For up to 6 Boxy watchwinders, with additional drawer for 3 watches. Colour: black, surface wood/lacquer. Dim.: approx. 223 x 175 x 150 mm.

318285

89.00

99.90

WATCH BOXES



Watch case for 6 watches

MADE IN GERMANY. Made of high-quality black imitation leather in noble nappa look, fitted with 6 sprung watch clips, sewn-in pocket and lockable closure. Drawer size, single: 4.5 x 9 x 7.5 cm. Overall size: 29 x 10 x 8.5 cm.

336046 89.90



Watch case for 12 watches

Incl. high-quality, sprung watch clasps. Lockable closure, 100% MADE IN GERMANY. Material: imitation leather in noble nappa look with soft haptics. Colour: black/beige. Dimensions: $29\times20\times8$ cm.

337831 119.90



Fine watch box for 10 watches

In Elm wood look. Very finely-manufactured watch cushions (5 x 7.5 x 4 cm) for 10 wristwatches top. Bungee cord pocket for jewellery etc. on the inside. Drawer with 5 compartments @ $4.8 \times 14 \times 2$ cm for watches and straps below. Size: $30 \times 18.5 \times 10.5$ cm.

331886 69.90



Watch case for 10 watches

Especially suitable for wide watches, wide ribs between clasps, for 10 extra-wide watches incl. high-quality, sprung watch clasps. Lockable closure, sewn-in pocket in lid, 100 % MADE IN GERMANY. Material: imitation leather in noble nappa look with soft haptics. Colour: black/beige. Dimensions: 29 x 20 x 8 cm.

337830 119.90



Watch case for 3/5 watches

Especially suitable for wide watches, wide ribs between clasps. Lockable closure, for 3 watches incl. watch clasps in high-quality sprung steel incorporated in inside material, sewn-in pocket, 100% MADE IN GERMANY. Material: Luxury with a sporting touch - fine-grained Italian imitation leather, colour: black.

337828 For 3 watches - size: 18.5 x 10.5 x 8.5 cm. **337829** For 5 watches - size: 29 x 10.5 x 8.5 cm.



Attractive watch case for 9 watches

For displaying or hanging 9 wristwatches. Housing in high-gloss elm wood look with sand-coloured velvet lining. Very finely-manufactured watch cushions (4.5 x 3.3 x 6.6 cm). Brass-coloured fittings, lockable real glass door.

336029 69.90

WATCH BOXES





Collector's case with 12 compartments

Collector's case/jewellery case, compartment size approx. 35 x 35 mm, lockable closure, 100 % MADE IN GERMANY. Material: fine Italian real leather. Colour: black/beige. Dimensions: 15.5 x 12.5 x 3.5 cm.

337832 59.90





Jewellery case

Italian chic and classic modern - jewellery case with 2 ring cushions, 2 roomy drawers (one of which divided), 9 small compartments (approx. 35 x 35 mm) lockable closure, large mirror with elegant, robust carry handle, 100 % MADE IN GERMANY. Material: Imitation leather in noble nappa look. Colour: black/beige. Dimensions: 22 x 14 x 11.5 cm.

337833 99.90



Transparent lid for 6 watches

337853 69.95





Watch case for 4 watches

Lockable watch case. Material: Leather/felt. Colour: grey. Dimensions: 29 x 10 x 9.5 cm.

337858

119.95



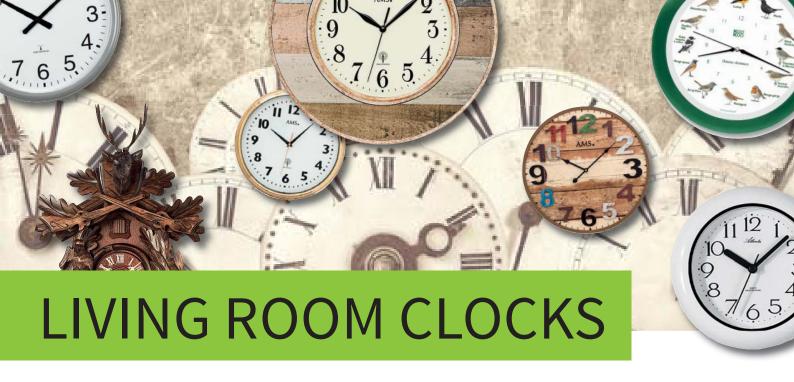


With LED lighting!

Glass lid with 12 LED spots, watch cushion,

1 covered battery compartment, on/off switch on rear. Material: Fine synthetic/velour. Dimensions: 18 x 17 x 9 cm.

337856 dark brown/light brown black/red 99.95 99.95



Make your home a real eyecatcher with our decorative and practical clocks!

Wall clock with large display

Wall clock with time display (not shortened!) Three selectable display formats, 7 possible languages, setting of brightness, contrast and greyscale. Automatic switch-

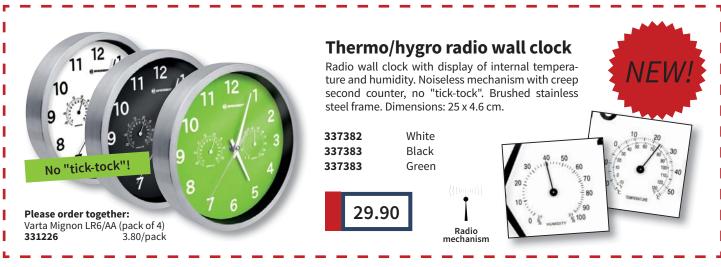
on and switch-off function to save power. Material: hypoallergic plastic. Matt display, does not reflect! Time, day and daytime saved on power failure. Wall mounting or standing. Incl. 5 V adapter. Colour: black. Dimensions: $24 \times 15.5 \times 2$ cm.

337485

94.90

Easily readable! Super-obvious!





LIVING ROOM CLOCKS



Single hand scale bar clock from 1640

MADE IN GERMANY. With solid wood frame and wooden wheel mechanism. A spindle with a cosily-swinging scale bar regulates the clock mechanism. 12-hour mechanism using pull cord, with natural stone weights. The original version of this clock was built in around 1640.

Size: 16.5 x 38.5 x 13 cm.

335377

199.90





Construction set (without weights)

Contains all the necessary parts including stainer and extensive, illustrated building instructions. Please order the natural stone weights extra.

335185 Construction set 169.00

Matching weight set in natural stone

Weight set

Please order separately to the above construction set.

334615

Order quickly and easily right now:

27.90

As finished clock or construction set!





Long pendulum wooden wheel clock

With hook anchor gearing, wooden housing. Wooden wheel mechanism with

dual-roller pull cord. Long pendulum can be dismantled into 3 parts. Solid cast weights, wooden hands, Roman numerals. All wooden components ready-stained. Runtime: approx. 24 hours. Dimensions approx. 33 x 19 x 18 cm, overall height with pendulum 119 cm.

335406 Completed clock 335187 Construction set

298.00 219.00



Black Forest home clock

MADE IN GERMANY. Reproduction of a typical black forest wall clock from the early 18th century. The housing consists of wooden panels with turned frame posts. The precisely-manufactured wooden clockwork mechanism with dual-roller pull cord, Black Forest hook-anchor gearing with sedately-swinging long pendulum and solid cast weights has a runtime of around 24 hours. All wooden components readystained. Size: 20 x 31.5 x 17.5 cm.

335387 Completed clock 335186 Construction set

375.00 275.00





www.matinkulta.fi



LIVING ROOM CLOCKS



AMS skeleton wall clock Grenoble

AMS.

Impressively clear and stylish. Frame made of solid, polished brass, 7-day chain winding mechanism with single strokes on a bell at every full hour. Size: 14 x 25 x 11 cm, height with pendulum approx. 68 cm.

335350 166.00

You can place this fantastically beautiful skeleton clock as a decorative eyecatcher in your house! The mechanical 7-day clockwork mechanism in brass works in an open housing. Single hourly strokes on brass bell. The imposing iron frame is decorated with brass spigots.

Size: 14 x 25 x 11 cm.

Height incl. pendulum approx. 68 cm.

335365 139.90



Hermle

HERMLE skeleton table and wall clock Fribourg

MADE IN GERMANY.
An eyecatcher in your hall or living room. Open, matt-black lacquered iron frame. 7-day spring clockwork mechanism in brass. Single stroke on polished brass bell at every full hour. Short pendulum in polished brass.
Size: 14.5 x 22 x 8.5 cm.

336235

View into the clockwork mechanism!



AMS skeleton wall clock Belfort

MADE IN GERMANY. An eyecatcher in your hall or living room. Open, matt-black lacquered iron frame. 8-day chain winding mechanism in brass. Single stroke on polished brass bell at every full hour. Long pendulum with patinized brass disc, cast iron weight. Size: $14.5 \times 22 \times 8.5$ cm. Overall height incl. pendulum 61.5 cm.

335381 109.00

PENDULUM CLOCKS



pendulum clock Wooden housing with walnut look / aluminium support. Alumin-

ium front rim and chapter ring. Mineral glass. Dimensions: 22 x 60 x 7 cm.

337403



AMS radio table clock Dimensions: 17 x 16 x 6 cm.

337405 110.00



JVD quartz regulator Innsbruck

Fine, rustic solid wooden housing, light oak. Fitted with quartz mechanism, bing bong stroke can be switched off. White dial with Arabic digits, spade hands, brass lattice pendulum. Dimensions: 31 x 66 x 12.5 cm.

335390 169.00



AMS radio pendulum clock Bozen

Oval glass plate with gold-coloured border, satinised, silver/gold-coloured dial with black numerals. Accurate quartz pendulum mechanism with polished brass pendulum. Dimensions: 50 x 19.5 x

335400 82.00



Radio regulator Freiburg

Solid, cherrywood-coloured wooden housing, glazed side panels, door with arched glass and magnetic closure. Radio pendulum mechanism with 4 selectable stroke versions: Westminster melody with hour counting at every full hour • Only Westminster melody on full hour • Notre Dame melody with hour counting . Only hour counting (no melody). With stroke storage. Dimensions: 28 x 70 x 15 cm.

335382 199.00



AMS radio pendulum clock Meran

Wooden rear wall in beechwood veneered with 2 brass bars on top, polished brass pendulum. White dial with gold-coloured digit ring, black Arabic digits and black hands, with mineral glass lid. Fitted with precision radio clockwork. Dimensions: 22 x 62 x 8 cm.

335378 148.00

Order simultaneously for Pos. 1-5 g: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack

Order simultaneously for Pos. 6 g: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack

Varta Mono LR20 (pack of 2) 2625002 3.80/pack



(((((|1)))) Radio mechanism

AMS radio pendulum clock Florenz

MADE IN GERMANY. Solid, walnut-coloured stained wooden housing. 4/4 Westminster bing bong mechanism with automatic night switch-off. Size: 28 x 64 x 10 cm.





Thermometer on rear! (((((|1)))) Radio mechanism

AMS radio Oslo wall clock

Wood decor in country house style. Champagne-coloured dial, acrylic glass lid. Dimensions: Ø 35 x 4 cm.

335397

Order simultaneously for Pos. 1-6g: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack





Quartz wall clock Wooden housing walnut decor with natural stone add-ons. Printed mineral glass. Dimensions: 28 x 40 x 6 cm.

337401 139.00



AMS Siesta radio wall clock

With additional temperature display. Weatherproof wall clock with rotating metal housing styled like an old station clock. One side shows the "accurate radio" time, the other shows the current temperature. Weatherproof, patinised metal housing with mineral glass lid, antique white dial with black indexes and hands. Dimensions: approx. 18 x 38 x 10 cm.

335391

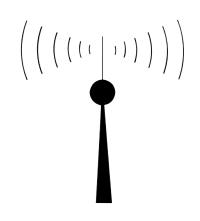




TOP SELLER!

Hamburg radio wall clock Metal housing in vintage style. Dimensions: Ø 32 x 5 cm.

RADIO WALL CLOCKS





DUGENA radio wall clock

With room temperature display and hygrometer. Metal housing. Dimensions: Ø 25 x 4.2 cm.

335375 52.90



A la Campagne radio wall clock

Wooden housing, cherrywood colour. Real glass lid with silver-coloured metal ring. Dimensions: Ø 30 x 4.5 cm.

334340 55.00



AMS Ducky radio wall clock

With digital temperature display. Waterproof, silver-coloured. Variable suspension methods: using 4 suckers on the rear, using drawbar eye for wall mounting or with table stand (included). Dimensions: \emptyset 17 x 6 cm.

335356 36.9



TFA radio wall clock

Quiet clockwork, green LED lighting (continuous operation or automatic switch-on or switch-off by a light sensor). Dimensions: Ø 30.8 x 4.3 cm.

337386 29.90



TFA radio wall clock

Silver plastic housing. Dimensions: Ø 33 x 4.2 cm.

337385 24.90



AMS radio wall clock

Brass metal housing. Mineral glass.

337389 Ø 32 x 5 cm. **59.00 337388** Ø 23 x 9 cm. **49.00**

Order simultaneously for Pos. 1-7 g: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack





AMS radio wall clock

Digital display of time, date, weekday, temperature, humidity. Silver plastic housing. Dimensions: 37 x 23 x 3 cm.

59.00



AMS radio wall clock

Analog/digital display of time, date, weekday, temperature. Wall and table versions. Dimensions: 21 x 24 cm.

337391 59.00



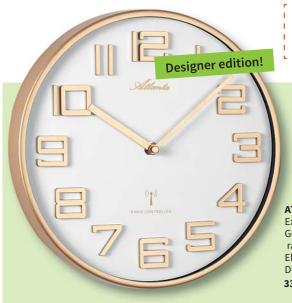


ATLANTA radio wall clock in cockpit style

Creep seconds, fluorescent digits and hands.

Dimensions: 25 x 25 cm.

330981 Black 49.90 327010 White 49.90



Order simultaneously for Pos. 1-6g: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack

ATLANTA radio wall clock

Exclusive designer edition! Gold-coloured metal housing, raised digits.

Elegant & exquisite. Dimensions: Ø 26.5 cm.

332033 79.90 TFA radio wall clock

No "tick-tock"!

With low-noise sweep clockwork: no "tick-tock". Brushed aluminium frame, glass lid. Dimensions: Ø 30 x 4.5 cm.

WALL CLOCKS



AMS Garda wall clock

Silver-coloured lacquered, ultra-flat plastic housing with white dial, black digits and hands. Accurate quartz clockwork. Incl. 3 V lithium cell. Ø 30 cm, 3 cm flat.

335401 23.90



Quartz wall clock

With creep seconds, gold-coloured ABS housing, real glass Dimensions: Ø 30 cm.

337412 18.90



Quartz wall clock

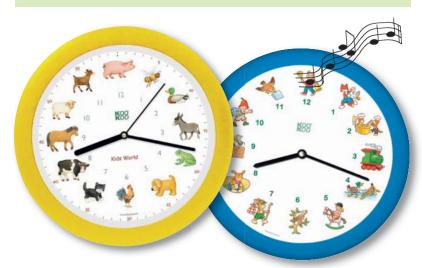
With creep seconds, plastic lid. Dimensions: Ø 23 cm.

337411 16.90



Allows the call of a native songbird to be sounded every full hour. With colourful illustrations. The original calls of 12 songbirds were recorded directly in their natural surroundings. Allow yourself to be woken by the call of the bluethroat at 7 o'clock in the morning, or be reminded of the midday break by the oriole. One darkness falls everything goes quiet - a sensor automatically switches off in the dark. With precise radio clockwork. Ø 34 cm.

335369	Real wood	79.00
337409	Green	69.00
337410	Aluminum (not illustrated)	79.00



KOOKOO "My Little Farm" wall clock

With creep seconds. An animal makes its natural sounds for around 10 seconds at every full hour. Original sounds recorded in natural surroundings. Quartz mechanism. Plastic housing. Ø 34 cm.

335370 59.90

KOOKOO children's song wall clock

With creep seconds. A verse of one of Germany's most popular children's songs is sounded every full hour. Original recording with flute and zither. Plastic housing. Quartz mechanism. With night switch-off. Ø 21 x 4.5 cm.

335380 44.90

Order simultaneously for Pos. 1-6g: Varta Mignon LR6/AA (pack of 4) 3.80/pack

Horse wall clock

Silver-coloured plastic housing. Quartz mechanism with creep seconds. Dimensions: Ø 25 cm.







My First Clock - construction set

With 32 high quality components, transparent clock housing, coloured cog wheels, handles, pendulum, spring housing. Strikes every $\frac{1}{4}$ hour (can be switched off). Assembly is child's play, and is clearly illustrated using a large poster. Ø 20 x 3 cm.

330613 24.9



ATLANTA Fan Alarm

With fans singing "Olé, Olé, we are the Champions...". Stands solidly on football boots. Dial lighting on contact, original football design.

326692 39.90



ATLANTA Fan Alarm

With fans singing "Olé, Olé, we are the Champions...". LED blink effects for stadium atmosphere, creep seconds, original retro design.

326693 29.90







TICKI TACK child's alarm

Learn to tell the time whilst playing with Ticki Tack, the teaching alarm for children. I am the fun-filled, friendly "Ticki Tack" alarm clock with the super-quiet quartz mechanism - even though my alarm rings really loudly and I can wake absolutely anyone! Of course I am mainly for children who want to learn to tell the time, but I'm also there for anyone who has stayed young at heart. Quartz clock: super-quiet - alarm clock: with double bell alarm - can wake even the sleepiest of sleepyheads - movable arms and legs: just like a doll - creep seconds: no ticking! Robust plastic housing with metal double bell. Dimensions: $21 \times 16 \times 6$ cm.

335262 Ticki Tack, green **24.95 335263** Miss Ticky, pink **24.95**

ALARM



TFA radio alarm clock

With intelligent "tick-tock" stop! The second counter stops if the alarm is activated! Analog display, along with snooze function, crescendo (increasing volume), background lighting. Colour: grey/white.

337468 19.9



TFA nostalgic double-bell alarm clock

Noiseless quartz mechanism with creep seconds. Alarm with double bell made of metal, snooze function. Background lighting turned on simply by touching front glass. Incl. detailed instructions. Metallic brown plastic housing, double bell made of metal. $8.5 \times 12 \times 5.5$ cm.

335297 23.50



BINGO radio alarm clock

Black plastic housing, 2 separate alarm signals which increase in volume, temperature display, weekday and date. Automatic background lighting with light sensor. Easy to operate. 8 x 8 x 3.2 cm.

335261 21.00



REGENT radio alarm clock

With extra-quiet radio clockwork. Stable, black plastic housing in flat design, alarm off switch on top. Cosy, switchable continuous night lighting (switches on when sensor detects no more light). Rising alarm signal, combined snooze/light button, without second counter. 9 x 9.6 x 4.1 cm.

335299 49.90



TFA quartz alarm clock

Large, easily readable digits, fluorescent hands. Very simple and fast alarm time setting - simply turn the knurled acrylic glass lid. Extra-loud alarm clock with slumber function, completely noiseless sweep clockwork, background lighting. Stable plastic housing black/silver. $10.5 \times 11.5 \times 7$ cm.

335200 23.50



ATLANTA radio alarm clock with bell signal

With highest accuracy, bell signal with snooze function and background lighting. Black plastic housing with gold-coloured front frames. $11 \times 11 \times 5.8$ cm.

326811 49.90 ₃₃₅₂₉₈ 27.50



TECHNOLINE quartz alarm clock

Crescendo alarm, snooze function. lighting at the press of a button. With creep seconds, therefore no annoying ticking. Photo-luminescent hands. Bronze-coloured plastic housing. 9 x 8.3 x 4 cm.

335214 19.95



ATLANTA radio alarm clock

With creep seconds, highest accuracy, with snooze function and background lighting. Simple black plastic housing, white dial with easily-readable digits. \emptyset 11.5 x 4.5 cm.

326809 37.90

Order simultaneously for Pos. 1-9 g: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack



TFA Sunrise radio alarm clock

Super-quiet radio clockwork with creep seconds. Background lighting switches on if alarm is lifted up for approx. 5 seconds. Analog display with fluorescent hands. Alarm clock with snooze function. Very simple alarm time setting. Black plastic housing. $10 \times 10.5 \times 4.8$ cm.

Time to get up!

Order simultaneously for Pos. 1-5 g: Varta Mignon LR6/AA (pack of 4) 3.80/pack



TFA radio alarm clock

With combined digital and analog display. Digital, precise minute alarm setting, snooze function, all-round background lighting, fluorescent hands. Dimensions: 91 x 41 x 115 mm.

337466 Black/red 34.90 337467 White/green 34.90



FlipMe radio alarm clock

Radio alarm clock, extremely simple to operate: Alarm on the "ON" side - alarm is activated. Turn it over to the "OFF" side - alarm is switched off. Integrated touch bars for comfortable blue LCD background, crescendo alarm (increasing) incl. date and weekday display. Rotating display for ON and OFF position. Dimensions: 8.5 x 8.5 cm.

337457 34,90

TFA Charge-It radio alarm clock with USB charging function

With colour display, charging functions for mobile devices via two USB ports, micro-USB charging cable with lightning adapter. Display of date and written weekday in 6 languages, alarm function with snooze function, time for quick strike function, internal temperature and humidity, two brightness stages, various alarm functions. Incl. power plug, USB cable, Apple lightning cable.

337247





TFA BOOM radio alarm

With loud sound (100 dB), extremely simple operation, two separate alarms, snooze function, weekday, date and brightness display, automatic background lighting with light sensor, vibration alarm. Brightness, alarm sound frequency and volume adjustable. Dimensions: 110 x 65 x 122 mm.

337465 59.90

TFA speaking radio alarm clock

With time announcement: Announcement can be selected every hour or at the touch of a button. Alarm clock with snooze function, weekday and date display. Volume can be set loud + auiet.

Dimensions: 124 x 68 x 126 mm.





Radio mechanism



Touch technology!





Clever LED table alarm clock with practical touch technology: Clap, whistle or shout something - the time is then displayed alternately with the date and temperature. Energy-saving mode, continuous operation also optionally possible, 3 alarm times can be set, dimmable, including adapter.

Cube shape, size 6.5 x 6.5 cm.

331961	White	35.90
331962	Beechwood	35.90
331963	Black	35.90

Pyramid shape, size: 12 x 7 cm.

331964	Walnut	39.90
331965	Anthracite/marble	39.90
331966	Black	39.90

Please order together:

Varta Mignon LR03/AAA (pack of 4) 2625010 3.80/pack



Time to get up!

Vibration alarm with flash

Please order together:

331226

Varta Mignon LR6/AA (pack of 4)

Curvy design, loud alarm tone (90 dB), alarm using LED flash - built-in USB connection for charging smartphones and other small electronic devices! The "Wake 'n Shake Curve" vibrating alarm stands out due to its huge LED display (11 x 5 cm) and very large display, 4 alarm facilities (vibration, flashing light and bell in combinations) and adjustable lighting and brightness. Duration of bell: 1 hour, snooze 5 up to 60 minutes; incl. vibrating cushion with 2 m cable and power supply. (can also be operated with CR2032 batteries). Dimensions: 18 x 9.5 x 5 cm.

337487 59.90



3.80/pack



TFA radio alarm clock Siesta

With nap function. Radio clock with highestpossible accuracy, nap timer, alarm with snooze function,

> setting facilities, background lighting. Black plastic housing. 14 x 6.5 x 6.5 cm.

335317 19.90



Particularly inexpensive!

TECHNOLINE projector alarm

Particularly inexpensive. Anthracite/silver-coloured plastic housing; radio clock with manual setting options; 12/24 hour time display; time zone setting; date and weekday in 5 languages; internal temperature display in °C/°F; projection of time and temperature with adjustable projection direction, can be rotated 90°; alarm clock function with snooze function, background lighting at the press of a button. With power supply. 12.9 x 9.2 x 3.4 cm.

11.50

11.50



Red 337461



9



ΑΤΙ ΑΝΤΑ Waterproof radio bath clock

With radio clockwork and temperature display, with adjustable foot for standing up. Ø 17 cm.

330554 45.00





ATLANTA Waterproof bath clock Quartz mechanism. Ø 17 cm.

327942 27.90

Retro kitchen clock with timer More than just a wall clock: Frames in

337462

337463

BRESSER

Black

White

brushed stainless steel, no irritating light reflections thanks to convex glass lens, plus integrated egg timer / timer up to 1 hour. Noiseless quartz mechanism, 19 cm large dial. Dimensions: 32.2 x 23 cm.

337449

Order simultaneously for Pos. 2, 3, 5 g: Varta Mignon LR6/AA (pack of 4) 3.80/pack



ATLANTA timer

Plastic white with digital display, can be fixed with magnet or stands up. Maximum setting 99 hours, 59 minutes and 59 seconds. With clock function, display can then count up or count down. Up to 4 memory times can be set. Incl. batteries. Dimensions: 85 x 65 mm.

329290 17.90



Electronic timer with stopwatch

Ideal for sport, leisure time, household and job. Timer and stopwatch in one! Simple to operate, easily readable. Max. runtime: 99 mins, 59 secs, memory function. With magnet and battery. 4.8 x 8.8 x 0.8 cm.

335346 12.50



Mechanical 120 minute timer

White plastic housing with spring mechanism and 2 holding magnets. An additional adhesive surface is available for permanent installation. Can be suspended or stood up. 7 x 7 x 4 cm.

CUCKOO CLOCKS

- manufacture clocks
- traditionally made in the Black Forest
- high-quality carving work
- numbers, hands and dial in wood

1: Eschach cuckoo clock

MADE IN GERMANY.
Wooden housing with elaborate carved leaf and bird motifs.
Cuckoo, dial and hands are also made of wood. 7-day chain windup mechanism with cuckoo call and gong strike on half and full hour. With stroke storage.
Approx. 50 cm high.

2: Furtwangen cuckoo clock
MADE IN GERMANY. Traditional
Black Forest style right down
to the smallest detail: Wooden
housing with carved hunting
motifs, seven-day chain windup
mechanism, cuckoo call and
gong strike on half and full hour.
With stroke storage.
Approx. 48 cm high.

336405

386.00

336407

386.00





Schiltach cuckoo clock

Solid wooden housing (stained walnut), 1-day chain windup mechanism, automatic night switch-off. 22-voice Swiss music mechanism, child figures dance and mill wheels turn. Lumberjack moves with cuckoo call. Made in Germany. Dimensions: approx. 30 cm high.

336400 379.00





TOP SELLER!

Edelweiß cuckoo clock

Wooden housing (stained walnut), decorated with coloured edelweiss/violets. 12 melodies, automatic night switch-off, quartz pendulum mechanism. Dimensions: approx. 22 cm high.

337472

89.99



Solid wooden housing (stained walnut), quartz mechanism, automatic night switch-off. Made in Germany. Dimensions: approx. 30 cm high.

336402

99.95



TOP SELLER!

Todtmoos cuckoo clock

Wooden housing in antique stain, 6-leaf shield, 1-day chain windup mechanism, stroke switch-off. Made in Germany.

Dimensions: approx. 32 cm high.

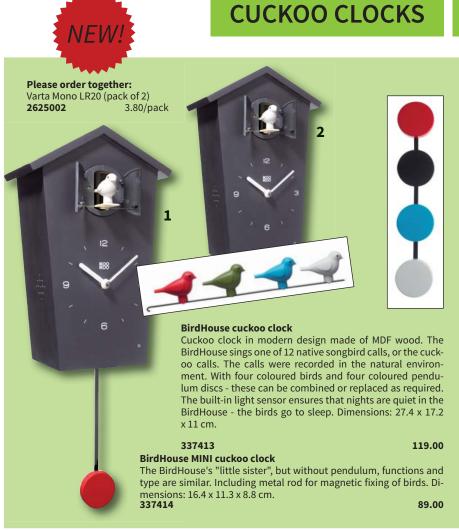
336396



Bahnwärterhaus cuckoo clock

Signalman's clock - bound by tradition. Wooden housing (stained walnut),12 melodies, waterfall noise and echo, automatic night switch-off using light sensor, quartz mechanism. Made in Germany. Dimensions: approx. 33 cm high.

337476 199.00





Schwarzwaldhof cuckoo clock

With movable walker and rotating mill wheel. In the tradition of the world-famous Black Forest farms. Wooden housing (light oak, front face natural lacquered),12 melodies, waterfall noise and echo, automatic night switch-off using light sensor, quartz mechanism. Made in Germany. Dimensions: approx. 29 cm high.

337475 229.00



Cuckoo clock

Wooden housing, lacquered birch, roof made of real wooden tiles. 12 melodies, waterfall noise and echo, automatic night switch-off using light sensor, quartz mechanism. Made in Germany. Dimensions: approx. 22 cm high.

337473 169.00



Heidi-House cuckoo clock

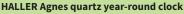
Made with loving care. Wooden housing (cherrytree lacquered), automatic night switch-off using light sensor, quartz mechanism. Made in Germany. Dimensions: approx. 26 cm high.

YEAR-ROUND CLOCKS



Order simultaneously for Pos. 1-6g: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack





MADE IN GERMANY. Classical model in high-quality manufacture. Polished brass base, classical brass dial with etching print, 4/4 Westminster and bing bong strike with night-time volume lowering and switch-off. With crystal glass dome. Ø 15 x 23 cm high.

336228 169.00



HALLER Amara quartz year-round clock

MADE IN GERMANY. Valuable, handmade beauty. Base and dial made of porcelain with flower motifs, black spade hands, metal columns 2-colour white/brass. Crystal glass dome. Ø 17 x 23 cm high.

336223 133.00



HALLER Céline quartz year-round clock

MADE IN GERMANY. Fine appearance in black and white! High-quality dial made of diamond-turned brass, metal hands. Columns and bass made of polished brass, rotating pendulum brass-coloured metallised. Crystal glass dome. Ø 15 x 23 cm high.

336234 149.90





HALLER Felice quartz year-round clock

MADE IN GERMANY. A precious beauty from handmade production. Base and dial in fine porcelain, crown and pendulum made of polished brass. Brass columns dual colour white/brass. Crystal glass dome. Ø 17 x 23 cm high.

336226 269.00

HALLER Lisa mini quartz year-round clock

MADE IN GERMANY. Only 17 cm high - a real eyecatcher. Elaborately designed, cobalt-blue porcelain base with restrained gold decor. Brass-coloured columns and rotating pendulum, white dial, crystal glass dome. Ø 11 x 17 cm high.

334333 116.00

HALLER Ira year-round clock

MADE IN GERMANY. Polished brass base, brass columns, metal hands, diamond-turned brass ring, cambered metal dial, crystal glass dome. Ø 15 x 23 cm high.

331001 139.00





HERMLE skeleton table clock

Modern designer table clock with wooden housing and mechanical 14day skeleton clockwork. Dimensions: 18 x 9 x 11 cm.

337454	 Black 	99.95
337452	2. Red	99.95
337453	3. Grey	99.95
337455	4. Walnut	99.95











ATLANTA radio table clock

In solid glass housing, silver-coloured. Dimensions: 13 x 16.5 cm.

327929 89.00



ATLANTA radio table clock

In metal housing. Dimensions: 18 x 17 cm.

327387 Gold 110.00 Radio mechanism





331989

Black

15.90

AMS Vienna designer radio table clock

MADE IN GERMANY. Gold-coloured metal housing with cut mineral glass between brass columns. Fitted with precise radio insert clockwork. Dimensions: 19 x 14 x 6 cm.

336227 89.90



JVD Gent quartz table clock.

Solid wooden housing, cherrytree colour. With quartz pendulum mechanism and Westminster melody, brass-coloured pendulum. Dimensions: $24.2 \times 30.5 \times 9$ cm.

336231 69.90



Incl. battery. Dimensions: 7.5 x 8 cm.

TO TACULIX

CLOCKMAKERS WILL BE IMPRESSED BY THE NOBLE HORACULIX CLOCK CONSTRUCTION

SET! With around 100 components, you can learn fine mechanics and its complex interplay from A-Z - and build a stylish and valuable table clock MADE IN GERMANY!



336940 black lacquered oak



336938 oiled natural oak

1200.00

1200.00



HORACULIX - an exciting clock project for working at home!

- No previous knowledge necessary: each working step is described in detail and illustrated
- With toolset for starting construction immediately
- Quality "Made in Germany". Clockwork & housing are manufactured in Baden-Württemberg.
- Allow yourself to be impressed by the unobstructed view into the
- clockwork and the acoustic complication.
- When finished it is a functioning, precise and high-value table clock!

FITTINGS:

- Hermle 0130-677 brass clockwork
- Housing: MDF with oiled real wood oak veneer.
- Size: 175 x 160 x 110 mm.
- incl. building instructions, 123 pages + auxiliary template
- incl. overview of all components and tool list











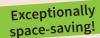






WEATHER INSTRUMENTS

No more nasty surprises: Always keep the weather in view!



Professional Weather Centre 5 in 1

With 256 colour display. Extensive information in compact construction: 5 in 1 outside sensor for wind speed, wind direction, humidity, temperature and precipitation quantity, can easily be read off the colour display or from history data thanks to internal memory facilities. Use your collected measurement data to calculate an extremely reliable local weather forecast for the coming 12 hours (shown as a graphic). Alarm function on reaching individually programmable highest and lowest values, special alarm for frost warning. Additional features: room climate indicator, radio-controlled time and date settings, alarm function, changing colour display on

temperature changes. Included in delivery: extensive installation material (also for masts) all adjustable feet, base station, multi-sensor, power supply for reception station, operating manual. LxBxH: 442 x 395 x 150 mm.

337271

149.00

Please order together: Varta Mignon LR6/AA (pack of 4) **331226** 3.80/pack



WEATHER INSTRUMENTS

Weather sphere

Built using an idea by Johann Wolfgang von Goethe, the TFA weather sphere shows air pressure changes quickly and precisely. If the air pressure increases (weather is improving) the water column in the swan neck falls, if the air pressure decreases (weather is getting worse) it will rise. The glass ball is simply filled with distilled water to one third of its height. Dyes (foodstuff dyes) in various colours are included in delivery. Ø 10.4 x 18.5 cm.

335500

16.50



Dves are supplied in várious colours





With frost alarm!

TFA CASA radio weather station

This weather station, with its black plastic housing an integrated base, measures the temperature and humidity for inside and outside (cableless up to 50 m free field, can be extend-



ed to 3 transmitters). Temperature / inside: $0-45 \, ^{\circ}\text{C} \, / \, +32-+113 \, ^{\circ}\text{F}$ – outside: -40–+70 °C / -40–+158 °F – Humidity 20–90 %. With frost alarm and maximum and minimum values, also with various symbols for weather forecast. Radio clock with alarm and snooze function and background lighting are also integrated. Extensive instructions and an outside transmitter are also included. Dimensions: 14 x 10.5 x 1.5 cm / Base depth: 4.5 cm

335515 58.00

Please order together:

3.80/pack Varta Mignon LR6/AA (pack of 4) 331226 Varta Mignon LR3/AAA (pack of 4) 2625010 3.80/pack







TFA SPRING radio weather station

Display of external temperature (-40 to +60 °C) and humidity using cableless external transmitter (433 MHz) with range of up to 60 m (free field). Internal temperature (0 to +50 °C) and humidity, trend displays, highest and lowest values, temperature alarm, animated weather forecast with symbols and air pressure trend, dewpoint, radio clock with alarm and snooze function, calendar, coloured background lighting. Incl. mains plug. Simple, anthracite/silver-coloured plastic housing for standing or hanging. Dimensions: 21 x 14 x 2.5 cm.

69.90

If there is a power cut these batteries will function as backup batteries:

Varta Mignon LR6/AA (pack of 4)

331226

3.80/pack





Radio thermometer

Outside temperature via cableless outside transmitter, range up to 100 m (three field) internal temperature, permanent display of daily highest and lowest values with manual reset, background lighting. For standing or hanging.

Dimensions: 82 x 25 x 152 mm. 2 x 1.5 V AAA batteries (not included)

Please order together:

Varta Mignon LR03/AAA (pack of 4) 3.80/pack 2625010

Background lighting



Radio thermometer with radio

Cableless transmission of outside temperature via transmitter with maximum 100 m range (free field), display of internal temperature, max./min. function, radio clock with alarm and snooze. For standing or hanging. Dimensions: 158 x 73 x 27 mm.

337241

Please order together:

Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack









Does not just show all important weather data (internal temperature, humidity) but simultaneously functions as a radio clock with automatic time changeover, with alarm function, date and weekday display. Colour display individually configurable, brightness can be regulated, large snooze button. LxBxH: 230 x 75 x 60 mm. Incl. power supply and battery 337273

50 Juniandan 60

Thermo Hygrometer

For regulating internal temperature and humidity for a healthy interior climate with comfort zones, precise hair-synthetic hygrometer, glass lid, does not require battery. Ø 120. Made in Germany.

337246 22.95 For rapid temperature checks for simple temperature measurements in liquids, powdered and plastic materials.



Digital probe and folding thermometer in pocket format. Probe sensor 60 mm, waterproof IP 65, precision +/- 0.5 $^{\circ}$. Dimensions: 116 x 38 x 20 mm. Incl. batteries. Measurement range -50 °C / +300 °C.

337248 (white) 29.95 337290 (black) 29.95 337291 (red) 29.95

WEATHER INSTRUMENTS



NEV

Infrared thermometer

For contactless measurement of surface temperature. Measurement duration 1 second, switchable between °C/°F, heavy-duty metal housing, precision +/-2 °, measurement range -33 ° to +220 °. Incl. 2 x LR 44 button cells incl. metal box.

337244 39.99



Weather house with Black Forest scene

Rain or dry? This popular weather house can answer this question with its integrated humidity sensor! A rope made of catgut strings, which reacts to changes in the humidity, is fitted inside. If the weather is going to be good, the lady appears in her Black Forest traditional dress, if it's going to rain her companion appears. Lovingly designed wooden housing. Temperature information in -20–+50 °C / 0–+120 °F. Size: 21 x 18 x 8.5 cm.

335507 23.60



Nostalgic internal-external thermometer

Metal, painted white, lovingly decorated with butterflies. Thermometer display from -30 $^{\circ}$ C to +50 $^{\circ}$ C. Size: 9.2 x 2.5 x 49.5 cm.

335523 10.90





Probe thermometer

Super price to performance ratio: digital probe thermometer with long sensor (140 mm). Precision +/-1 $^{\circ}$. Dimensions: 26 x 16 x 245 mm. Incl. batteries. Measurement range -50 $^{\circ}$ C / +300 $^{\circ}$ C.

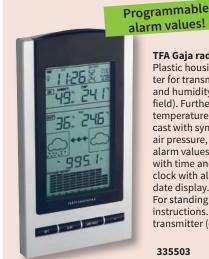
337249 12.95



Weatherproof TFA solar window thermometer Vision Solar

- a real eyecatcher! Easy to fix to the outside of a window - simply removed to clean the window. Plastic housing, clear functional design. Comfortable readoff of external temperature in addition to highest and lowest values (automatic reset). Time display, automatic background lighting when dark. Incl. instructions and rechargeable buffer battery. $12 \times 13 \times 2.7$ cm.

335502 29.90





TFA Gaja radio weather station

Plastic housing. Incl. 1 external transmitter for transmitting external temperature and humidity, range: up to 100 m (free field). Furthermore: display of internal temperature and humidity, weather forecast with symbols and air pressure trend, air pressure, dewpoint, programmable alarm values, highest and lowest values with time and date of saving. Radio clock with alarm, snooze function and date display. LED background lighting. For standing and hanging. Incl. detailed instructions. 10 x 18 x 3 cm. Incl. external transmitter (only 1 transmitter possible)

335503 52.00

Please order together:

 Varta Mignon LRG/AA (pack of 4)
 331226
 3.80/pack

 Varta Mignon LR3/AAA (pack of 4)
 2625010
 3.80/pack



TFA NEO PLUS radio weather station

External temperature and humidity via cableless external transmitter (868 MHz). Range approx. 100 m (free field). Internal temperature and humidity. Maximum and minimum values. Weather forecast with symbols and air pressure trend. Radio clock with date display. For standing up or hanging on the wall. Simple installation since no cable is necessary. Incl. external transmitter (only 1 transmitter possible) Incl. detailed instructions.

Silver-coloured plastic housing. 9.5 x 15.7 x 2 cm.

335505

Simple installation!

Please order together: Varta Mignon LR3/AA (pack of 4)

Tel.: +358 (05) 413 2888

2625010

3.80/pack



Increased safety in house and home: Clever technology provides assistance at low prices!



Glass breakage alarm Safety FirstThe ideal instrument for scaring off burglars. Any vibration on a window-

pane immediately sets off an extremely loud alarm (approx. 120 dB), which lasts for one minute. Safeguards windows of up to 4 \mbox{m}^2 and is suitable for all windows/terrace doors made of glass in residential buildings, offices, storage halls etc. Simply glue onto the window and activate with the on switch. Dimensions: Ø 7.2 x 2 cm.

15.95

Please order together: Varta Mignon LR03/AAA (pack of 4)





Arm safe

Pickpockets are everywhere; your money, credit cards, mobile phone and keys are often unsafe in your pocket or in your wallet! The arm safe is safely hidden under the jacket sleeve and can protect you against theft and loss! Simply pull it over your wrist and safely stow your valuables in the two compartments (Velcro and zip).

Also ideal for sporting activities. You will no longer have to worry about where you should hide your money, your keys, credit cards, mobile phone or smartphone. Optimised size for all smartphone models. The size can be individually adapted to the model using the Velcro strip.

Washable up to 30°C.

337209





Helps you to sleep peacefully Usable indoors or in protected outdoor areas, e.g. under porch roof. Fitted with a flashing LED light and a camera lens. Battery-operated (2 x 1.5 V AA). (batteries are not supplied) Screws and rawlplugs for wall fixing are supplied. Including 2 stickers "VIDEO SURVEILLANCE"

337210 9.99

Please order together:

Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack



Camera dummy, small

Deceptively realistic. For scaring off burglars. Usable indoors or in protected outdoor areas, e.g. under porch roof. Fitted with a flashing LED light and a camera lens. Battery-operated (2 x 1.5 V AA). Screws and rawlplugs for wall fixing are supplied. Including 2 stickers "VIDEO SURVEILLANCE"

337210 9.99





Dog warning sign

Even if you don't have a dog, this easily visible warning sign will scare off burglars. Sign made in breakproof, weatherproof and UV-resistant plastic. With four holes in the corners for simple mounting. Dimensions: 14 x 21 cm.



With stand and power supply. Recording of video and sound at the press of a button onto SDHC card (card not included). Dimensions: Ø 42 x 92 mm (camera), 130 x 90 x 27 mm (monitor).

337219 199.00 Radio Alarm System 3000

Radio alarm system consisting of plug-in indoor siren incl. flashing light and emergency battery, 2 remote controls incl. battery, petsafe movement sensor and opening sensor. Ideal for apartments and smaller detached houses. 100 dB(A)/1m siren to scare off burglars and warn residents. With input/ output delay, presence/ absence mode and panic function. Requires total 3 no. AA alkaline batteries for the sensor. Dimensions indoor siren:

3337218 99.95

Please order together:

90 x 90 x 80 mm.

Varta Mignon LR6/AA (pack of 4)

331226

Practical accessories online!

0

3.80/pack



Electronic watchdog for frightening off potential burglars. Consists of signal unit and remote control. The sensor integrated in the signal unit detects movement even through walls and triggers a realistic dog barking noise (max. 100 105 dB(A)) through the large 17 cm power loudspeaker. Bell, gong or siren noise also selectable. Power supply: 12 V = via power supply (signal unit); 3-V button cell CR2032 (remote control). Incl. power supply, remote control with battery and warning sticker. Size: 15.8 x 17.3 x $\,$ 11.6 cm (signal unit)

No chance for burglars!

Deceptively realistic!

Erasco safe tin

Looks like a normal foodstuffs tin, but inside is an ideal hiding space for a range of valuables. Singly

screw the cover onto the bottom side of the tin and you immediately have a completely inconspicuous hiding place. Ideal for home and travel use . Size: Ø 75 x 114 mm. 337220







Dummy Keypad

Ideal for scaring off potential burglars, simply fix near your front door. Simulates that the door is secured using electronic number code security. The keypad automatically lights up green at dusk. Dimensions 8.5 x 8.5 x 2.3 cm, 94 g. incl. 2 x AAA batteries.

337217 15.95 337207 9.99



Inexpensive security for windows, doors, caravans etc. In-

stalled in just a few seconds. Simply attach using the supplied

double-sided adhesive tape to the door or window frame and

switch on. Soon as the door or window is opened a loud sig-

nal alarm will be output (85 dB). incl. 3 x 1.5 V LR44 batteries.

Door and window alarm



Door wedge with alarm function

Protects against unwanted intrusion into apartment and house. Simply push the tip of the wedge under the door - ready! Also ideal for travel. If someone attempts to open the door the metal plate is pushed downwards, which immediately triggers a very loud alarm (100 dB). At the same time the door is reliably blocked. The wedge can withstand considerable force thanks to its anti-slip coating. Sensitivity of alarm function can be regulated in 3 stages. Incl. 9 V block battery.

337206 19.9





FAKE TV PLUS - the 2nd generation

Realistically simulates the light effect of a working television ideal for larger living rooms or floor levels above 20 m² area. Burglars avoid houses if they appear to be occupied. Don't leave your house looking abandoned. Cannot be distinguished from real television light. 12 extremely bright LEDs in four colours ensure deceptively realistic light effects.

Exceptionally economic in consumption, requires only approx. 2% of the power required by a real TV. If required, switches on automatically at dusk. Individual runtimes using external timer.

Made of breakproof plastic. Operated using power supply included. Dimensions: approx. 8 x 6.5 x 6.5 cm.

336043 45.95



upwards as soon it is pushed open from the outside. The clamping force which results makes it impossible to open the door from outside. Despite this the door blocker, which is only a few centimetres in size, is simple to remove again Thanks to its compact and light construction, the "DoorJammer" is portable but still extremely effective - and does not require a battery! Supplied in practical storage bag. Size: 4 x 12 x 8 cm.

331643 29.95



Lockable door handle chain

More safety in just one step. Fits the door handle ideally thanks to the retaining ring. Lockable, which means it can be unlocked using the key through the door gap both from inside and from outside! Also suitable for metal and glass doors! Chain length with eye: 35 cm. 2 keys are supplied. Solid chain in 5-star quality. 5-year manufacturer guarantee.

337208 24.99

SECURITY



Check your consumption – save money!

Energy cost measuring device

Calculate electrical device energy costs with your individual power tariff.

- -cost forecast (per day, month, year)
- -current power consumption (watts)
- -display of maximum power consumption
- -display of overall energy consumption (kWh total) White plastic housing. Dimensions: $7 \times 12.5 \times 3.5$ cm.

335945 19.90



flowerpot, doormat or any other normal hiding place for your second key - experienced burglars will find them all. They definitely won't know this deceptively realistic lawn sprinkler which can be used as a waterproof key hideaway.

Simply push it into a flower bed. If the door slams shut behind you or you forget your key, you will no longer be standing in front of a locked door. Saves expensive locksmith work and therefore money and irritation. Waterproof housing with screw closure. Protects your key against rust. For keys up to 8 cm long and 3.5 cm wide. Included in delivery: 2 no.

337215 9.99





Clock safe

Beat the burglars!

The clock safe is a fully functioning wall clock with a "secret compartment". The ideal hiding space for your valuables, jewellery, cash etc. Simply lift up the clock face. Three storage compartments are hidden inside. Clock with quartz mechanism. Battery-operated (1 x 1.5 V AA). Diameter: 24.9 cm; depth 6.7 cm.

337216 17.99

Please order together: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack





Pocket alarm

Guaranteed to be heard! The pocket alarm is the perfect companion when you're out and about. Simply attach it to your keyring, also easy to fix to rucksacks, handbags etc. thanks to the carabiner hook. Sound level: 100 dB. Makes any attacker flee quickly. Incl. 2 button cells.

37213 12.99

Alarm pocket torch

Provides double safety thanks to the built-in, loud alarm function and a 1 watt high-performance LED. This alarm is extremely practical and uncomplicated to use thanks to its functional one-hand operation.

If you want to light up a dark path, simply press the button downwards and the torch will switch on. To switch the torch off, simply press the button again briefly. If an attacker is following you, you can blind him with the torch. At the same time you can press the button for 6 seconds and an extremely loud alarm will sound. Incl. batteries (3 x AAA microcells), strap, holster

with belt loop. Size: 14.5 x 3.5 x 3.5 cm.

336052 29.95



Electronic door handle alarm

Secures any door simply but effectively. Operation is child's play! Simply fit the door handle alarm with a 9 V block battery, switches on and hang it to any door handle or knob - finished! Even the slightest movement on the handle or the door will trigger a loud alarm, which reliably signals that somebody is trying to break in. You can also select an intimidating dog barking noise

as a warning. Adjustable alarm sensibility: alarm sound level: 106-113 dB, electronic dog barking noise: 98-112 dB. Dimensions: $11 \times 7 \times 3.5$ mm.

336066 27.50

Cleverly hidden!

Please order together: 1x Varta 9 Volt Block (1 no.) 2625018 4.9

Safe wall light

An ideal hiding place. The lamp is fully functional and illuminates using 6 LEDs. Simply press the middle of the cover to switch it on or off. To fill it, remove the plastic cover. Fixing material included in delivery.

Power supply: 3 x 1.5-V Mignon

cells. Dimensions: Ø 20 cm.

336080 11.90

Please order together: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack



Tel.: +358 (05) 413 2888

Smoke detectors can save your live!

Smoke detector with fixed fitted 10-year long-life lithium battery.

- Sensor: photo-electronic
- Warning tone: 85 dB(A) (at 3 m distance)
- Check button: checks sensitivity, battery and warning tone
- Mute button:

reduces sensitivity than 5 minutes

- Batteries: 3 x 3-V lithium, permanently fitted
- Temperature range: +5 °C to +45 °C
- Humidity: 20 % to 80 %
- LED operating display
- Tested to EN 14604:2005
- Extended test to VdS 3131

(equivalent to Vfdb 14-01),

- Complies with requirements in DIN 14676
- Simple installation
- Removal block prevents unauthorised dismantling
- Colour: white
- Size: Ø 10.8 x 3.4 cm.

336054

23.90





NEW!

Order at the same time!

Magnetic fixing

For simple, quick and easy installation, for example of smoke detectors between Ø 7 cm and Ø 15 cm and weight below 250 g. Thanks to the 3M self adhesive pad, installation without tools, without drilling, without dirt or dust, therefore no danger of drilling through supply lines or cables during installation. Suitable for all smooth, horizontal surfaces, not for vinyl wallpaper, woodchip wallpaper, loose plaster, polystyrene.

337221 4.99



Order at the same time!

Smoke detector test spray

The test spray is ideal for safety checking that smoke detectors are functioning properly. A function test which does not glue up the electronics is initiated by the spray. This ensures that the detector or switch is working properly. The spray does not contain any solids and evaporates without residue. This means that the device's functionality is not impaired in any way. Safe and simple to use, and cares for the electronics. 250 ml.

337223 19.99



Fireproof document case

Every year, fires in the house, apartment, office etc. cause huge damages. Protect your most important documents against fire. Survives temperatures of above 500 °C, reliably protects your important documents such as passports, contracts, certificates, cash etc. against fire damage. The document case is manufactured from tightly woven fibre glass fibres. This is a very light material, which is also used in aircraft, ship and special construction. Keep your documents in the case and put it in a safe place. This is an inexpensive safety product which pays for itself immediately in fires and allows you feel safe during the working day. Size: 37 x 27.5 x 1 cm.

336050 16.90



Leak detection spray

Used for quick, easy and reliable finding of leaks (cracks or porous locations) in pressure lines. The leak detection spray does not form any dangerous compound with carbon dioxide (CO₂), propane, butane, acetylene, oxygen, coal or natural gas. Can be used anywhere where work is being carried out with compressed air, natural or liquid gases, or where leaks can occur on fittings, unions and connections, and also to provide increased safety levels in compressed air brakes and gas pipelines.

337224

Carbon monoxide detector

This high quality Figaro gas sensor with 7 years lifespan warns of any poisonous CO using an 85 dB alarm tone. Supplied with permanently fitted 3 V lithium battery. Suitable for wall insulation or for standing up (mounting accessories and stands included). Also ideal for travel. Tested to stringent standard EN 50291:2001.

- Sensitivity/alarm threshold: carbon monoxide (CO)
- Alarm sound level: 85 dB (A) / 3 m
- Size: 6.5 x 10 x 3 cm.

331090 46.90





CC-3000 gas detector

TÜV-tested gas detector detects even the smallest quantities of escaped natural and liquid gases (butane, propane, methane, natural or coal gas) and outputs a warning with an intense alarm tone and an optical alarm display. The alarm is triggered using high quality sensors even at an extremely low gas concentration - and therefore well below the lowest explosion point of the gas. The gas detector is ready for operation immediately after the power supply included in delivery is plugged into a mains socket. Extremely practical: the detector can also be connected to a 12 V on-board electrical system (via screw terminals) in cars, camper vans, caravans or boats.

324251 59.90

NEW

SECURITY



Stop sign parking aid

Your personal parking guide! Simply arrange the 1.30 m high parking aid in a position in your garage or your carport which provide you with the ideal parking position. As soon as your car touches the plastic rod it moves slightly and the LEDs in the stop sign will flash. Once the parking aid stops moving the flashing stops automatically. The parking aid rod is movable and made of plastic so that it cannot damage your car's paintwork. Good visibility day and night using two extra-bright LEDs and additionally integrated reflectors. The anti-slip foot ensures secure positioning. The stop sign parking aid can be dismantled in seconds and stored in the smallest of spaces. Including batteries.

336034 14.90

Headlamp with 7-fold LED

Changing tyres on night roads, jogging safely even in the dark, repairs in difficult-to-access locations - no problem at all with this headlamp! 3 light intensities can be set: 1/3/7 LEDs.
Adjustable holder, convenient headband. Ultra-bright, extremely long lighting duration, low battery consumption.
Incl. 3 microcells.

336027

9.95









GoPark electronic parking disc

You will never need to worry about displaying your parking disc or setting the correct parking time again! This practical device is always in use and detects when the car is parked by monitoring the engine vibrations. The correct arrival time is then automatically displayed. **GoPark** fulfils all the road traffic regulation requirements in Germany!

No cables – long battery life – approved by the Federal Motor Transport Authority – additional E1 certification by CEert. Incl. batteries. Dimensions: Ø 9.7 x 2.8 cm.

335347 38.90



"Caution video" sticker

Simply apply to glass surfaces windows) and increase the deterrent effect. Self-adhesive, with extremely high adhesive force for a long-lasting hold. Size: each 10 x 10 cm. Contents 5 no.

337214 4.99

LED multifunction safety lamp

Nightlight with infrared movement sensor (16 LEDs), torch - always ready to have at the right place (two LEDs), automatic emergency light during power failures, convenient charging at

the mains plug (by induction). White plastic housing. Dimensions: 6.5 x 13.5 x 3.5 cm

336069 26.90







Anti-slip light strip 2 in 1

For safe steps Ensures a firm grip thanks to its rough surface. Steps and other stumbling blocks can quickly and safely be made less dangerous. Special feature: The luminous stripes in the middle of the adhesive strip provide additional safety and orientation in the dark.

For indoor and outdoor use. Good bonding properties, high weather and UV resistance. Also practical for slippery ladder rungs.

Dimensions: 3 m x 5 cm. Can be individually cut to size.

337257 9.99



Anti-slip carpet tape

Sliding carpets are a common stumbling block! The anti-slip carpet tape provides a secure hold for your carpets and rugs, and gives you firm hold under your feet. Simply apply the adhesive tape to the rear of the carpet - job done. Can be individually cut to size. Size: 2 m x 4 cm

337258 4.99



3 in 1 car protective blanket

Protect your expensive car upholstery from dirt, liquids, animal hairs or, for example, when transporting garden waste etc. This protective blanket is a real all-rounder: whether it's on the rear seat or in the boot, this blanket adapts itself perfectly. Scratchproof.

With seatbelt cut out for belting your dog up.

Easy application. Can be stowed in a small space when not being used. Suddenly roll the carpet up in the car (suspended from the headrests). Universal size. Washable at 30°C. Suitable for: estate cars, hatchbacks, vans, limousines.

337255 49.99









Digital boots scales

Handy, super-cheap and fits inside every boot - a worthwhile investment. Weighing capacity: up to 40 kg. Tare function. Automatic switch-function, background lighting. Incl. battery. Dimensions: 9.3 x 3.5 x 1.7 cm.

336058 10.50

No more searching - this key fob is a great help!



Key finder
Simply give a brief
whistle and your lost
key will reveal itself with
the beeping noise and a
flashing LED.
Black plastic housing
with aluminium sign and
keyring.
Incl. battery.

Dimensions: 6.3 x 2.9 x 1.2 cm.

336051 10.90

Aluminium design folding stepladder

Certified by the TÜV Sud, three-step aluminium folding stepladder. 10 year manufacturer guarantee, capacity up to 150 kg. Anti-slip thanks to rubberised, extra-wide steps and plastic caps on the feet.

Can be folded super-flat down to only 127 x 44 x 5.5 cm.

337269











OUTDOOR



tools housed in the pliers shanks are accessible from outside. Frequently-used tools such as blade and scissors can be opened with one hand. All tools are automatically locked after opening. The handles are fitted with black Gator-Tex grip inserts to provide anti-slip. The pliers head is fitted with a hard metal cutter which can be replaced. Including nylon case. Length closed 11 cm, blade length 6 cm. Weight approx. 276 g.

337518 159.00



Gerber "Skeleton" multi tool

Thanks to the integrated spring, the pliers can be easily folded out and then comfortably used. Nine external tools, including scissors, sore, blade, bottle opener and screwdriver. All tools can be fixed, easy to unlock on the handle after use. Skeleton-type grip, with stable nylon case which can be worn along or across the belt. Length closed 10 cm, blade length 5.3 cm. Weight approx. 273 g.

337517 49.99



Bounty Hunter Metal Detector

A dream for treasure hunters - the metal detector with metal filter function can detect all types of metal, for example all types of coins, antiquities, jewellery, silver, gold. 8-inch coil enables deep detection and simple point location. Unwanted metal is eliminated. Low weight, ergonomic design, soil tuning function, analog display. Even works in dirt, rock, shrubs and mud - the coil can even be immersed in water! Extension functions which enable super-simple operation and a high level of comfort.

337514 179.00



Gerber Mini-Tool

Everything under control with the together mini-tool: pliers with wire cutter plus further tools such as scissors, knife, bottle opener, file, tweezers, screw-driver also included. Ring for fixing, for example to your keyring. Stainless steel. Length closed 7 cm, blade length 3.5 cm. Weight approx. 65 g.



Game and monitoring camera

For excellent photo and video recordings with a high 10 megapixel resolution in the day (colour) and at night (black/white). Recordings can be saved on SD card. HD video recording at 12 80 x 7 20 pixels possible. Water repellent housing, integrated IR flash for photos in the dark (cannot be seen by animals or people). Trigger automatic using movement sensor. Heavy duty for outdoor use. Standby time in battery operation: up to 4 weeks. Incl. installation belt, remote control and cable. Range 15 m. Dimensions: 36 x 89 x 146 mm. Weight 336 g.

337513 119.00

Digital night vision device

With recording function incl. saving facility as photo or video on SD card (up to 32 GB or up to 28 hours recording). Simple operation with one hand. Integrated infrared lighting for problem-free observation even in complete darkness - range up to 100 m. Close-up setting from 1 m, tripod connection thread. Up to 5 hours observation possible with one set of batteries. Incl. nylon transport case, carrying strap, 1 GB SD card, cable, batteries. Magnifi-



cation 3x, lens Ø 14 mm. Dimensions: approx. 134 x 9 x 47 mm. Weight 250 g.

337512 149.90



Anything that Boeing, Airbus etc. put into flight you can build yourself!



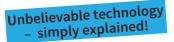






V8 engine teaching packet

V8 engines are unique: their power, their sound and the vehicles which they drive are legendary. Now find out what's under the bonnet - you can build a fully functioning model of an 8-cylinder engine in around 2 1/2 hours. Over 250 components (click or screwed together without glue!), hear the powerful V8 sound thanks to the sound chip, transparent engine housing, simulated sparks. Incl. richly-illustrated manual. For children over 14 years of age. 336109





Crankshaft, pistons, valves ... everything moves!



1 engine model Porsche 6-cylinder Boxer engine

Now you can reconstruct the legendary 6-cylinder Boxer engine from Porsche. (approximately 3 hours work). With 290 components, you can build a detailed, fully functioning engine model (completely without glue) in which all the parts move just like in the full-scale original, incl. simulated sparks and the original Porsche sound. Scale 1:4. With extensive illustrated manual. For children over 14 years of age.

336114

169.00

-Zylinder Boxermoto

Please order at the same time: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack



2 4-cylinder engine

100 component construction set (approx. 2.5 hours) completely functioning model (completely without glue) with sound chip for original sound, simulated sparks. Transparent housing allows all movements to be seen. With richly-illustrated manual.

337478 89.95



Please order at the same time: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack





3 Porsche 911 -

50 years of sports car culture

Everything you need to know about the most famous sports car in the world. Extensive with around 700 (!) coloured illustrations on 256 pages.

336183 9.99



4 engine classic

Optimum supplement: 70 combustion engine classics on 320 pages, hardcover.

337504

39.95

Order quickly and easily right now:

www.matinkulta.fi

Tel.: +358 (05) 413 2888

Lärmpegelmesser loise Level Meter K 5

Metalldetektor

selber bauen



2 Storm warning

The storm warning system - for everyone who doesn't want to get left out in the rain. Only people who have been warned in time can make provisions. The device (construction set, simple to build) detects the electromagnetic signals made by a storm in the 500 kHz frequency range, and can therefore detect when a storm is approaching. Three warning stages show how far away the storm is. You should take the last safety precautions when the red LED illuminates at the latest. Required: soldering iron/solder. For children over 14 years of

337497 34.99

Please order at the same time: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack



3 Alarm system

Construction fun against un-

wanted intrusion: the alarm

system reacts to variations

in the air pressure caused by

opening and closing windows

and doors. All electronic com-

ponents are included in the

construction set, the com-

ponents only have to be sol-

dered to the pre-fitted PCBs

in a few simple steps. For chil-

Please order at the same time:

Varta Mignon LR6/AA (pack of 4)

331226

34.95

3.80/pack

dren over 14 years of age.

4 Sound level meter

Noise makes us ill - and the sound level meter warns you if noises are becoming a permanent nuisance. Only a few components need to be soldered together thanks to the ready-fitted PCBs. Four LEDs for the current noise level, volume-controlled running light, for programs for special functions. Incl. disco mode and four-channel hubbub switch. For children over 14 years of age. (Soldering iron/ solder required)

34.99

Please order at the same time: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack

5 Metal detector

The construction set for finding (precious) metals or surveying electric power lines or water pipes in the wall - with acoustic signal. Constructed in just a few steps (even without soldering experience). Adjustment regulator for sensitivity, LEDs provide information about the type of metal detected. Maximum searching depth 15-20 cm. For children over 14 years of age.

336118 32.95

Please order at the same time: 1x Varta 9 volt block (1 no.) 2625018

age. Size: 160 x 110 x 30 mm

I You can find soldering irons on page 171.



6 Potato plot construction set

1 Bat detector

You think you can't hear a

bat's call? Use the detector

(construction sec) to go on a

voyage of discovery and make

the bat's ultrasound call au-

dible. Other devices output

ultrasound as well - you'll be

surprised how many inaudi-

ble sound sources surround

us. Your ears will be given

super forces. Just a few parts

to solder yourself and wire up

the components. For children

Please order at the same time:

1x Varta 9 volt block (1 no.)

34.99

over 14 years of age.

336110

2625018

What? No batteries? The potato clock is lots of fun for old and young! Find out how a digital clock can obtain its energy just from potatoes. Find out which other "materials" you can use to power your clock! Contains copper and zinc cables, digital clock (5 x 1.5 cm), connecting wires, beakers and, of course, detailed descriptions of how to carry out the experiments no potatoes included, though!

324767 14.95 **Exciting experiments with natural batteries.** How to learn technology through play. All electronic components are included.

7 Power from fruit and vegetables

How does electricity work, and why can also be found in fruit and vegetables? Exciting experiments are possible using the electronic components in the box, and they show how much energy there is in fruit and vegetables - for example a lemon can be turned into a battery which can drive a digital clock, or a cucumber can illuminate an LED. With easy-to-understand illustrated manual and extensive experimental equipment. For children over 8 years of age.





1 Space Journey Adventure 7-in-1

Renewable energy is revolutionising the world - you can save solar energy in a condenser using the ISS space station construction set, and this will move the space shuttle when connected. Can also be driven via the solar module. Contents: 66 components for space station and six different shuttles.

336128 24.95



The hydraulic robot arm is simply controlled by water pressure - without a motor, without a battery. In this case the robot is extremely flexible, the gripper can be activated so that objects can be raised and lowered. The robot is composed of 229 components and is constructed with the aid of illustrations, recommended for 10 years and above.

334354 59.90



4-wheel drive with fuel cell!



The first completely ecological four-wheel-drive car in the world, a well thought out model right down to the smallest detail where cylinders, pistons and crankshaft can be seen moving. It can be made to move truck to 5 minutes with the addition of only 2 to 3 drops of salt water. All movable parts are visible through the blue-transparent plastic. The all-wheel drive power of the 8-cylinder V engine is enchanting. A magnesium-air battery provides the power to the vehicle in connection with salt water. Salt water is converted into electrical energy. Wide off-road tyres Ø ca. 50 mm, Size: 12 x 10 x 9 cm

336106 27.90

Spare platelet set

Drive unit with 5 further magnesium platelets (approx. 20 hours operating duration) as accessories. Incl. air cathode and fleece.

336309 6.95 Order quickly and easily right now:



4 Bob Car

Magnesium membranes are activated by a couple of drops of salt water the chemical reaction which ends use creates electricity which drives the motor which in turn allows the Bob car to run without interruptions for up to 4 hours. For children over 8 years of age. Contents: 29 components.

Spare platelet set

Drive unit with 5 further magnesium platelets (approx. 20 hours operating time) as accessories. Incl. air cathode and fleece.

336309 6.95









5 14-in-1 Solar Robot

14 different models can be built with only one construction set (more than 200 components). The solar panel provides the energy for movement - no batteries required. The "Roll-e" is a real quick-change artist. With two difficulty levels. Size approx. 15 x11 x11 cm.

334353 29.95



6 Air Car

Compressed air car as construction set - completely fascinating. "Fill it up" with "air" for just 1 minute, and the car will whizz off with a high speed of 15 km/h at a maximum range of 50 m. 100% emission-free, 100% amazing. Size: approx. 31 x19 x11 cm.



1 Humanoid robot

This robot does what you tell it to - up to 36 different movements in sequence using simple programming. Go round obstacles, kick a ball, dance, turn left and right, hold simple objects in the hand, guard rooms using the alarm mode ... (unfortunately it can't yet tidy up ;-) - technology which excites. Artificial intelligence which is great fun. With logbook. Not for children under 3 years of age.

337496

129.00

Please order at the same time: Varta Mignon LR6/AA (pack of 4) 331226 3.80/pack



2 Electric and solar racer

Whether a solar racer or propeller car - these cars are a real eyecatcher. Solar module, electric motor, switch, connecting cable - all electronic construction elements and a base-

plate with gears, axles and wheels in addition to templates for optical tuning are included. Any other material required can be found in any household. The manual also supplied shows you how to construct the racer. Recommended for children over 8 years of age.

337494 19.99



3 VHF radio construction set

Receive local and national VHF radio stations with this selfbuilt VHF radio. Best reception performance due to selected electronic components and telescopic aerial. Construction set

in original retro look, high quality components, good sensitivity. With PCBs and all additional components, reception range: 87.5 MHz up to 108 MHz. Size of completed radio: 160 x 110 x 30 mm For children over 14 years of age. (Soldering iron/solder required)

337633 29.99



5 Soldering iron LG12

For all soldering work, e.g. the "Alarm unit", "VHF radio" and "Weather warning system" construction sets. Thermostat for exactly 250°C, extremely short heating time, practical soldering location lighting, easy-to-use and light. 12-18 V, 1 A.

337507

Replacement soldering iron tip (not illustrated) for soldering iron LG12

337508

9.99

6 Power supply for soldering iron (not illustrated)

Specially made for low voltage devices such as the Proxxon soldering iron. Safe power source, housing made of especially heat-resistant Noryl. Folding tray bracket on housing. 220–240 V. Supplies 2.0 A at 16 Vidling and 12 Voperating voltage. Insulation-protected in acc. w. Class 2. (without electronic speed controller, not required for soldering iron)

337528 27.90



4 Soldering workshop

From the first soldering exercises right up to a completely self-built fully-unctioning radio: the complete package with soldering set, radio construction set and logbook. For children over 14 years of age.

337499



COLLECTORS MODELS



The miniature model of the **Porsche 911 S Coupé** from the 1972 and the **Porsche Cabrio 356A** from 1955 made by SCHUCO at a scale of 1:18 is really something for enthusiasts. With working steering and doors which open; the bonnet and the boot can be opened up, which provide you with a great view of the perfectly-reproduced engine.

Schuce Highest quality of workmanship



3 SCHUCO model MB L6600 Isetta Auslief.

The Mercedes Type L6600 lorry was a new star amongst lorries in post-war Germany at the end of the Fifties Schuco reproduces this classic Laurie, loaded with two BMW Isettas in a limited edition of 1000 models at scale 1:43. The Isetta from BMW with its unmistakable front door is simply a cult vehicle. Made in diecast zinc.

337169 99.95



4 + 5 + 6 SCHUCO model Piccolo assembly boxes

The Piccolo assembly boxes have been on the market since 1957 - and still cause considerable enthusiasm. This also applies to the younger "brothers" of the assembly box from the classic panelling period the, **Piccolo Porsche 356, Porsche Junior** and the **Piccolo Bulldog**. In addition to removal of the wheels and the wheel axles, the tyres can also be removed from the wheel rims. A super present, nicely packed in boxes.

336964	4 Porsche 356A	19.95
336966	5 Bulldog	19.95
336127	6 Porsche Junior	22.95



Open all doors and flaps

159.95

139.95

1 Porsche 356A

2 Porsche 911 S Coupé

7 SCHUCO model Opel Blitz Horex 1:43

Schuco reproduces the absolutely reliable Opel Blitz, which was produced 130,000 times in the HGV factory in Brandenburg between 1935 and 1944, as a platform truck loaded with two Horex Reginas, in a limited edition of 1000 models at scale 1:43.

336072 79.95



8 SCHUCO model Lanz with threshing machine 1:32

The legendary tractor model, which played a pivotal role in motorisation of agriculture in post-war Germany, is provided with a memorial as a scale of 1:32 by Schuco. The Lanz Bulldog with a thresher made by Ködel & Böhm is used as a model. With functioning steering and opening doors.

337171 119.95



The new version of the classic "Micro-Racer" is available in no less quality and function than the Schuco original from 1954. The "new" **Porsche 356** Micro-racer" and the **VW Beetle** as assembly boxes continue to fascinate thanks to the extremely elaborate and precise clockwork mechanism and their outstanding quality. In order to underline both the entitlement and the history, the new versions are supplied in a reproduction of the original packaging of the time.

336967 9 Porsche 356 **69.95 336126** 10 VW Beetle **79.95**

1 SCHUCO model VW T1 Bus

The Volkswagen T1, also known as the "Bulli", is probably the most important small transporter in the history of Volkswagen, and is considered to be the German economic wonder of post-war times. The miniature model of the VW T1b bus at scale 1:18, which is limited to 1000 models, stands out due to its high degree of detail, opening doors and flaps which provide an excellent view of the perfectly reproduced interior.

337167

169.95



Order at the same time: VW bus - history of passion The standard volume on the T1 and T2 VW buses Approx. 200 coloured illustrations, 136 pages.

337275

19.95



Schuce High level of detail, perfectly reproduced



2 SCHUCO model Kreidler Florett Super 1:10

The Kreidler Florett Super was a reworking of the extremely successful Kreidler Florett motorcycle. This reworked version is however, identical to its original right down to the smallest detail. The only differences are a larger headlight, baggage rack, rear light with integrated brake light and a slightly increased price. SCHUCO has constructed this extremely successful motorcycle including all the structural differences at its usual excellent quality at a scale of 1:10. 19.5 x 10 x 5 cm



3 Hanomag Kommissbrot

The Hanomag 2 was a small car made by German manufacturer Hanomag in Hanover, and thanks to its unique shape it was given the nickname "Army bread". It was the first car manufactured on a production line in Germany, and was produced from between 1925 in 1928. Schuco reproduces this legendary small car as a sports car in a limited edition of 1000 models at scale 1:43. Made in diecast zinc.

337168



4 SCHUCO model VW Brezelkäfer

The first series-manufactured VW Beetle ran off the production line in 1946 and, in just a short time, became a bestseller and a symbol of the economic wonder. Thanks to the divided small rear window with central bar which made it look rather like a pretzel, it was given the nickname "pretzel beetle". The one millionth beetle was built only nine years later on 05 August 1955. Limited addition of 1000 models at scale 1:43.

337170 37.95

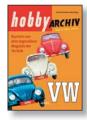


5 SCHUCO model VW Beetle 1600 Última Edición

The VW beetle 1600 Última Edición in the colour of "snap orange" is a one-off production - and one of the last VW beetles, built in July 2003. This is a particularly special reminiscence about what is probably the most well-oved and significant car made in West Germany. Schuco reproduces the "last" VW beetle at a scale of 1:18. The models in the 1:18 edition stand out due to their high degree of detail, opening doors and flaps which provide an excellent view of the perfectly reproduced interior.

337171 119.95

Order the accompanying book at the same time:



VW Hobby Archive

The legendary technical magazine (reprint) from the 50s and 60s. An exciting journey through time. 384 pages.

337274 19.99



German cars

Whether Isetta, Porsche 911 or VW beetle - here are the best models from 1945 onwards. All in colour. 256 pages.

337276



Porsche 1900-1971

Probably the most legendary book about Porsche sports cars. Volume 1, 1900-1971, 472 Pages, approx. 650 illustrations. Volumes 2 and 3 available online!

Transrapid construction set

One of the greatest technical inventions of the previous century is now available as a construction set: the Transrapid magnetic levitation monorail, whose magnetic forces allow a maximum speed of up to 430 km/h to be achieved. In this unique construction set, magnetic strips are fitted to the side planking which provides the train with permanent uplift, so that it can also achieve high speeds during its journey. The impressive Transrapid technology is built up using 150 components, and it makes the electromagnetic principle visible in a fascinating way.

Dimensions train: approx. 28 x 37 x 30 cm, dimensions: track ap-



Experiments for weather researchers

Research all the weather conditions through experimentation, for example: create an artificial storm, make your own rain, make a sundial, create clouds, conjure up a rainbow and much more. 15part experiment case for all weather researchers. With manual. For children above 8 years old.

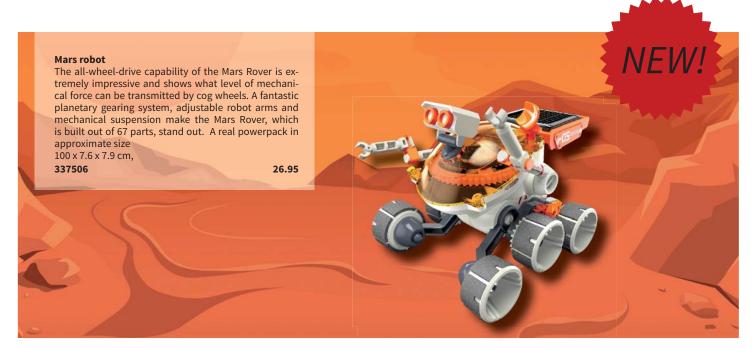
337479

Please order at the same time: 1x Varta 9 V block battery (1 no.) 2625018

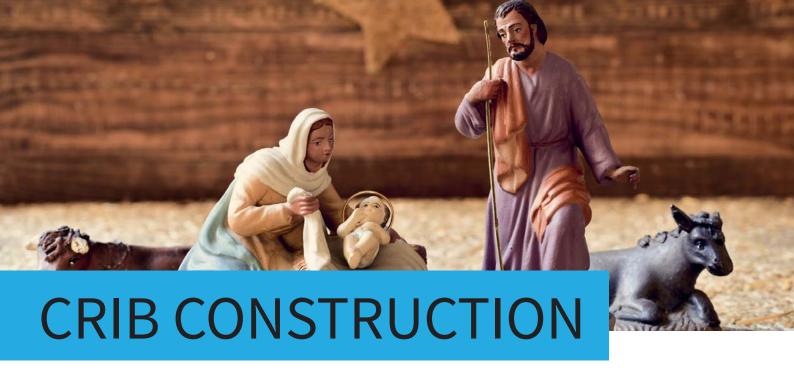
Building and tuning racer drones yourself

All the information you require to build a lightning-fast racer drone yourself. Easy to understand, stepby-step instructions. How an FPV system is integrated or a camera is installed - everything is explained on around 192 pages.

337503 29.99



RACERDROHNEN SELBER BAUEN & TUNEN



Crib and landscape construction: Lots of fun for old and young!

Hochalm crib construction set

Complete construction set incl. coloured wood, ruined stones, sand and greenery. Size: 600 x 200 mm. Suitable for figures of between 7 and 12 cm. Elaborately 2-coloured wood (old and weathered) therefore appears extremely authentic. 337437

119.00



Order at the same time:



Wooden tiles

Ideal supplement to the Hochalm major construction set. Contents: 30 no., irregular sizes and widths. (sufficient for approx. postcard size). Hand-hammered, broken ends, made to look old. Especially suitable for making old buildings, sheds or complete cribs.



Hochalm roofing tiles

Ideal supplement to the Hochalm major construction set. Contents: 25 no. (sufficient for approx. postcard size). Material: Real spruce wood, coloured to look old, weathered, hand-hammered. Size: approx. 40 x 22 cm.

7438 5.9



TOP SELLER!

Crib glue

For handicraft construction of small miniature models, cribs, landscape or diorama construction. Elastically hardening. Low viscosity, high transparency, especially suitable for mixing with glitter, sawdust etc. 250 mL bottle. **334852**

11.90

337439

Crib construction in theory ...



1 Do-it-yourself traditional crib

6 reproduced artistic cribs in Alpine style are explained as a construction set stage for stage and with numerous illustrations. 64 pages.

336188





Build 2 cribs

Handicraft tips and tricks from everyday practice on 93 pages with 140 illustrations. The basic book!

336191 16.90



by Peter Schrettl. 50 motifs following detailed plans, over 300 crib pictures and drawings, construction specifications and plans help you in your modelling. Local and oriental cribs, and also stylish and old cribs from the 19th century, are divided into four sections. Precise descriptions without unnecessary technical jargon make this book stand out. 208 pages. Format 22 x 28 cm.

336137 24.90



4 do-it-yourself Tiroler box crib

by Peter Schrettl. Illustrated throughout. Describes how a Tiroler box crib is constructed in a simple manner. On top of this you can find out how to paint and illuminate a suitable background with a starry night sky. With drawings, photos and motive descriptions for several cribs. 112 pages.

336156 19.90

... and in the practice!



7 quarry stone floor slabs Contents: approx. 300 g (around 2 hands full). Colour: ochre/sand. just a few millimetres thick, suitable for floors, paths etc., size approx. 30 to 60 mm. Slabs sufficient for an area of around A4 size.

337441 6.95



6 floor tiles Contents: 200 no., size: 18 x 15 mm. Around 64 no. are required for the size of a postcard.

336098 14.50



9 wall set 150 cm Contents: around 285 no., stone-coloured, colourgrey. Size: 200x100x100 mm 336104



10 bricks, brick red Contents: 80 brick-red bricks, different textures.

337440 11.30



8 ruin stones Contents: 250 no., rectangular, size:

5 ruin floor slabs Contents: 120 no., size: 20 x

a postcard.

20 x 10 x 10 mm

336096

20 mm. Around 35 no. are required for the size of

14.50

11 floor tiles Contents: 100 floor tiles and a bag of sand. Coloured (sand/ochre)

337442 11.30



12 square bricks Contents: 50 no., ready-coloured. Size: 10 x 10 x 10 mm.

337446 5.90



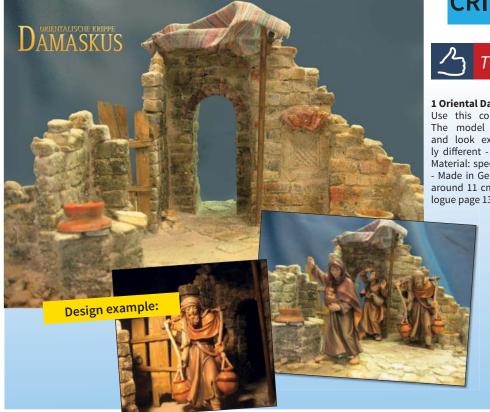
13 mixed bricks Contents: 100 no., mixed: rectangular, square, rounded

336099 14.50

Order quickly and easily right now:

www.matinkulta.fi

Tel.: +358 (05) 413 2888





1 Oriental Damascus crib - construction set

Use this construction set to build your Christmas crib. The model components are ready-coloured like stones and look extremely realistic. The stone texture is mostly different - hardly any stone is the same as its neighbour. Material: special plaster/cement mixture. Hand-made product - Made in Germany. Especially suitable for crib figure sizes of around 11 cm. (e.g. crib figure latex mould set, 12-part, catalogue page 138).

Package contents:

Baseboard 30 x 30 cm (you determine the height yourself), 1 archway, 125 rectangular ruin stones, 25 square ruin stones, 30 square floor slabs, 50 small floor tiles, 15 rounded stones, 1 oriental lattice window, 5 x 4-row walling modules, 2 pots/bowls, 350 g quartz sand, approx. 100 g broken stone, 3 long wooden tiles, 1 holder, decorating material, 3 wooden beams approx. of centimetres, 1 circular column 25 cm, 2-colour. Detailed instructions.

It is best to use crib glue to glue the model components together:

334852 250 ml bottle **11.90**



2 rocks for landscape construction Contents: approx. 500 g. For realistic landscape design.
 337444
 6.95

NEW!

3 rounded bricks Contents: 120 no., ready-coloured. Size: 20 x 10 x 10mm

337447 15.80



4 small ruin archways Contents: 3 no. archways or window modules

337445 13.50



5 river gravel yellow Contents: 300 g. **337355**



6 red rock, red-brown Contents: 300 g. **337356**

3.95

3.95



7 grey quartz, white-grey Contents: 300 g. **337357**



8 Rock ballast, grey Contents: 300 g. **337358**



9 Basic set 333 Ruin stones

3.95

Contents: 333 Britain set (14 different stones) coloured like stone, realistic texture of weathered stone. With buttresses, roofing tiles, floor slabs, rectangular and rounded stones, supporting stones etc.

337443 34.90



All prices in € incl. statutory. VAT plus shipping costs

Equipment for landscape and crib construction





1 Liquid snow

In order to decorate fine, slender objects with a winter outfit you can use this liquid snow. In this case the snow mass can be applied directly out of the bottle, e.g. on further branches, and then be distributed using a brush if required. Also suitable for very detailed objects. 250 ml bottle

334854 7.95



4 Sprinkling material for the design of model landscapes. 100 ml



b) Spring meadow 336281 2.95 336282 c) Roadside verge 2.95 336283 d) Forest meadow 2.95 336284 e) Farmland 2.95





7 Crib glue

For handicraft construction of small miniature models, cribs, landscape or diorama construction. Elastically hardening. Low viscosity, high transparency, especially suitable for mixing with glitter, sawdust etc. 250 mL bottle.

334852 11.90

9 Model landscape glue (not illustrated)

For surface design. Non-drip, transparent, runs evenly. Ideal for the application of sprinkling material. 100 ml bottle

334827 3.30



10 3-part set

Bucket, milk churn and troughs in galvanised sheet metal, suitable for 8-13 cm figures. Bucket approx. 2 cm high; milk churn approx. Ø 2 x 3.5 cm; trough approx. 5 x 4 x 2 cm.

336295 15.90



2 Icicle medium

Is directly applied to the object to be decorated from the bottle and hardens crystal-clear within 2 to 3 hours. Toxin-free! 30 ml.

334853 3.95



5 Liquid water

Rivers, lakes or even puddles are first painted in matte paint, the edges are then sprinkled with sprinkling material and then filled with liquid water. 250 ml.

334826



8 White masonry plaster

Fine, self-adhesive material - excellently suitable for application to services in-house models made of wood or carton which have to be decorated with evenly applied rough plaster. Once dry, the facades can be painted over with any colour. 150 mm can.

334862 5.95



For individual lighting, ready-assembled, with plug, cable and mini-bulb. Incl. mini replacement bulb and soldered cable. Cable length approx. 40 cm. For connecting to transformer or battery with 3.5 - 4.5 V voltage.

336294 14.50



3 Snow powder set

Powder is sprinkled out of the handy sprinkler onto a base material which has been prepared with glue. Package contents: 1 sprinkler with powdered snow 100 g, 1 bottle of model and landscape glue 105 g, 1 dotting sponge, 1 mixing cup, detailed instructions.

336307 3.95





6 Wooden tiles for crib construction

Approx. 40 x 30 mm. Around 40 items produce a roof area of around 15 x 24 cm, around 100 items produce a roof area of around 39 x 29 cm with an overlap of between 3 and 5 mm.

336306 336281	Natural, approx. 40 no. Natural, approx. 100 no.	12.90 25.90
336333	Stained, approx. 40 no. Stained, approx. 100 no.	13.90
336335	Stallied, applox, 100 lio.	27.90



9 Casting mould set clay bricks

6 moulds for making clay bricks from SEL-VA casting compound (Page 136, Pos. Individual brick size: 2.5 x 1.5 x 0.6 cm Roofing tiles: 3.3 x 3.4 and 3.3 x 2.4 cm. Castle tiles are adapted in terms of size in different shapes.

336371 22.90



12 Burning torch with wall holder

Suitable for wall mounting. Ready assembled with plug. Cable with milli-bulb, cable length approx. 35 cm For connecting to transformer or battery with 3.5 - 4.5 V voltage.



1 LED strips

For lighting consisting of 3 LEDs, (warm, bright light) with plug. Simple insulation (adhesive strips). Very flat, easy to hide. Size: LED strips approx. 7 cm long, connecting cable approx. 90 cm long. Suitable for lighting transformer 336312.

336314



10.90





336315

Especially suitable for building a campfire or a flame torch etc. Cable length: 60 cm. Suitable for lighting transformer 336312 and battery box 336296.

336313 4.60



4 Tree trunk

with indirect LED lighting. Can be used standing or lying, incl. power cable with plug approx. 55 cm long. Approx. 8 x3 cm.

336336 14.95



5 Lantern made of tin for a crib, fitted with LED.

4.5 x 2 x 2 cm, cable length approx. 55 cm.

336330 12.95

6 LED cable + plug

For permanent background or internal lighting. LED 3.5 V ready-mounted with cable (approx. 60 cm) and plug. Suitable for DC transformer no. 336312 or battery box 336296.

337374	Colour warm white	9.90
337375	Colour blue	9.90
337376	Colour green	9.90
337377	Colour orange	9.90
337378	Colour red	9.90



7 Cabling set 5 m braid each with 3

plugs and coupling parts 336280 11.20

8 Connection set

Battery cap with switch and 3 plug connections for 4.5 fold flat battery or battery box (Pos. 4). Including Extension cable 60 cm. For connecting electrical crib accessories up to 4.5 V.

336278





9.90



14 "Table/bench" set

Perfect for decoration -

made in Bavaria:

Bench and table made of wood. Size bench: approx. 69 x 24 x 29 mm; size table approx. 66 x 43 x 39 mm.

337372 9.90

15 "Wood" set Chopping block made of wood (suitable for 12 cm

figure size) size approx.: 50 x 35 x 40 mm (high chopping block without axe, wooden base made of wood and moss, size approx. 70 x 17 x 32 mm, broom.



5-fold distributor for up to 5 mini-bulbs (3.5 V / 0.2 A). As an alternative, up to 50 LED lamps (3.5 V / 20 mA) can be connect-Safety-approved. Size: 6 x 2 x 4 cm, cable length: 150 cm.

336312 20.95

10 Battery box

For fitting with 3 x AA mignon batteries. Without batteries. Suitable for connection set (336278).

336296 4.95

11 Lighting set reflector Scope of delivery: 1 x reflector Ø 23 x 16 mm with E10-threaded bulb. 1 x bulb holder without web, E10 thread, red. 1 Extension cable approx. 60 cm.

336303





12 Spare mini-bulb set, clear 3 x E10 threads, 3.5 V, 2 x E5.5 thread, 3,5 V.

336302 7.95

13 Spare mini-bulbs set, coloured 5 no. E10, 3.5 V. 1 each in white, red. blue, green, yellow.

336305





16 "Garden implements" set

Fork, flail and rake (suitable for 12 cm figure size), natural wood.

GALVANISING











GALVANISING -

A surface finishing process with long tradition.

Galvanising is understood to be the coating of an object with the thin metal layer with the aid of electrical current. You can use galvanising to finished jewellery, cutlery, your child's first tooth, a rose, through partially or completely gilding. You can also use galvanising to protect objects against rust.



1 Galvanising basic set

For gilding and silver-coating metals. In the case of pad galvanising, the electrolyte is applied using a sponge under voltage. This process is used for larger objects or also objects which should only be partially refined. Contents: 1 galvanising rod, which is operated using two 1.5 V baby cells, 1 stainless steel anode terminal, 4 mini-sponges, 30 ml each gold and silver electrolyte, 15 ml metal cleaning agent, 1 copper part for testing. With instructions.

331313 39.95



2 Galvanising supplementary set

In the immersion bath galvanising process the complete object is immersed in a bath. This process is suitable for objects up to around the size of a baby shoe.

Contents: Each 1 immersion bath, copper anode and grating, 2 connecting cables, 1 m contact wire, 4 resistors, 30 ml of copper electrolyte (alkaline), 250 ml copper gloss electrolyte (acidic), 30 ml nickel electrolyte, each 1 copper and nickel anode terminal, 5 mini-sponges. With instructions.

331320



3 Galvanising, a fascinating hobby

The book contains 32 pages describing the basics, various techniques and process of galvanising in detailed text and pictures. Format DIN A5.

336196 7.40



4 Power supply

100-240 V / 3-12 V = 600 mA, 7.2 W,7 plug connections, also suitable for other small devices.

335918 14.95

WHICH SET FOR WHICH PURPOSE?

Basic set alone:

– gilding and silver-coating of metal objects.

Basic set with supplementary set:

 gilding, silver-coating, copper-coating, zinccoating and nickel-coating of all metal and non-metal objects.

Single article not illustrated:

5 Galvanising rod with accessories: 1 Stainless steel terminal 4 mini-sponges and 1 set instructions 336372 23.50

6 Spare anode terminals for Pos. 2+4.

334122 Copper anode terminal 4.95 334123 Nickel anode terminal 5.95

7 Mini-sponges for anode terminals Pos. 2, 4+5 Set of 5, various colours.

334122 4.95

8 Anodes, angled, for Pos. 4.

336269 Copper anode 5.95 334171 Pure nickel anode 9.95

9 Zinc accessory set

Angled with zinc anode, zinc terminal for manual galvanising device, 2 mini-sponges and instructions.

10 Conductive silver lacquer

Treat nonmetallic objects with conductive lacquer before galvanising. After this, copper-coat them using copper gloss electrolyte.

336383 15.95

11 Conductive lacquer thinner 336379

5.25

12 Ferrograph conductive lacquer In expensive alternative to conductive silver lacquer.Can also be processed using the airbrush procedure.

336384 16.90

13 Electrolyte

(metallic salt solution for galvanising).

336373	Gold	30 ml	16.20
336380	Gold	100 ml	49.95
336374	Silver	30 ml	9.95
336381	Silver	100 ml	29.50
336375	Nickel	30 ml	5.60
334119	Nickel	100 ml	15.95
336265	Zinc	250 ml	12.50
336378	Copper	30 ml	5.95
334121	Copper	250 ml	16.95

14 Copper gloss electrolyte (acidic)

Has to be used for nonmetallic objects after application of conductive lacquer and before gilding/ silver-coating. With additional substances for glossy surface without polishing. 250 ml.

336267 9.95

15 Metal cleaning agent

For cleaning surfaces before galvanising and polishing afterwards. 50 ml.



Discover the wide range of offers for plastic design!

Real plasticine concreteThis high-quality "real plasticine concrete" is free of toxins when compared with other plasticine concretes - and therefore also suitable for children. Perfect for making practical objects like bowls, caskets, door signs, candle stands and figures out of the plasticine mass. Real plasticine concrete is excellent for modelling and is very stable in shape. Can also be used outdoors once fully hardened. The material can be coloured using colour pigment powder (order nos.: 336263 and 336264)

337570 1,000 g 11.95 337571 2,500 g 21.50

from 11.95



Suitable book Order at the same time:

Creative with plasticine concrete

Lots of tips and ideas for working with plasticine concrete. 64 pages, softcover **337600**





Casting is child's play!

Creaform – the casting compound with only 8 minutes drying time!







Body moulds - child's play:

- Pour Creaform into a container and mix water in.
- Stir the compound well.
- Immerse your hand in the compound completely and keep it still until the compound hardens and becomes solid.
- Pull your hand out of the mould job done!

After this, the mould can be filled with Artelin or casting resin - and you now have a decorative, self-made sculpture.



Dries in only 8 minutes!



1 Creaform casting set, small

Contains the most important materials required for casting, for example your own hand. Contains the completely toxin-free Creaform casting compound (450 g) and high-quality, white ceramic powder (1000 g) for filling up the mould and also a detailed set of instructions. Packed in a stable plastic container which can also be used as a casting mould. You can make a perfect casting within the shortest possible time (max. 1 hour).

336279 19.95

2 Creaform rapid moulding compound

with a drying time of around 8 minutes! The finished mould can be filled with casting compound immediately. "Creaform" consists of natural raw materials and is well skin-tolerant (neutral pH value)! Ideal for the manufacture of prototypes, for quick copying of reliefs and figures, for casting body parts, or partial moulds of a face. Can be used with or without moulding cast boxes. Suitable casting compounds for the mould: Artelin, polyester resin, casting wood or wax. Incl. detailed instructions.

500 g 336362 16.90 1.000 g 336363 29.90



Formaform-inexpensive moulds!

3 Formaform casting compound

Synthetic, rubber-elastic mould-making compound. The moulds can be re-melted so that the material can be reused. Ideal as an entry into the casting hobby, for the manufacture of prototypes, for quick copying of reliefs and figures. Is melted in a water bath or in a wax melter and then poured over the casting model. Hardens by cooling down, and can then be removed. Suitable casting compounds for the mould: polyester resin, casting wood. Incl. plasticiser and instructions for use. 1250 g

336258 25.90



4 Water bath heater 1 l

Ideal for melting candle casting wax and "Formaform", but also chocolate or sugar mass. The materials do not become too hot and therefore do not burn. Double-walled aluminium vessel with closable water inlet pipes and ergonomically-shaped plastic handle. Suitable for all heating and cooking hobs (except induction hobs) or gas flames.

336289 29.90

Order quickly and easily right now:

Ideal for beginners - can always

be remelted!

www.matinkulta.fi

Tel.: +358 (05) 413 2888

Casting using the dipping method

With formalate - latex milk









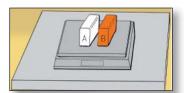


1 Formalate latex casting milk

Immediately ready-to-use latex milk, simple to use. For elastic but still extremely dimensionally-stable tubular moulds. Dries and hardens in the air. Ideal for the manufacture of simple tubular moulds (hollow moulds). The model to be moulded (figures, objects etc.) is glued to a plinth (e.g. a wooden panel, and then dipped into the latex mass. A thin skin layer is then formed around the figure. The dipping process must be repeated 3 to 4 times after a short drying period until a stable, stretchable tubular mould has been created. The latex mass can also be applied by brush as an alternative. Suitable casting compounds for the mould: Artelin, polyester resin, wax and casting wood. Incl. instructions.

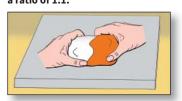
336364	300 g	10.95
336365	800 g	25.90

Silicon compound – silicon casting mass



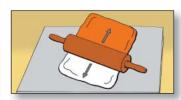
... or apply by brush

Weigh off components A and B at a ratio of 1:1



Knead both materials carefully together.

Hardens in only 5 minutes!



Roll out the silicon compound to make a flatbread shape. Allowed to react for one minute. The compound is now ready for moulding.





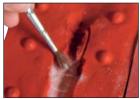


2 Silicon compound

Modellable rapid casting compound. A fully-functioning mould can be created within just a few minutes by using this universal rapid casting compound, which can immediately be filled with a casting compound. Silicon compound can be applied to any object or any base material without requiring a release agent. The light, dry casting compound is mixed at a ratio of 1:1 and can then be directly applied to the casting object. The material hardens within 5 minutes. The completed mould can be filled with any casting compound such as wax, polyester resin, casting wood, liquid carving wood or ceramic casting materials. With detailed instructions for use.

336311 29.95

Casting auxiliary agents and accessories:





3 Special shape powder

Protects model and mould, ensures clean contours. Particularly suitable for latex and silicon moulds. 75 g

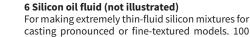
336358 2.50

4 Silicon-rubber crosslinker (not illustrated)

336346 20 ml 336345 100 ml

5 Air vent (not illustrated)

Reduces bubble formation. 20 ml. 336358



ml bottle 336259 4.20





7 Silicon separating cream

Is applied to the ready-hardened silicon mould during mould construction, and the newly-mixed silicon for the second half of the mould is then poured on top. This prevents both halves of the mould adhering together.



8 Mould separating agent

On water basis. Without solvents, therefore particularly suitable for painted and sensitive surfaces. Residues can be washed off with water later on. Protects the moulds against aggressive substances when working with polyester casting resin. 100 ml bottle

336367 4.20

9 Mould separating wax (not illustrated)

Liquid, solvent-free paraffin wax. A thin wax film is applied and then carefully polished using a soft brush. Not suitable for sensitive surfaces, 50 ml.

327554 4.95

Simply make silicon moulds yourself!

With Silcotin-HB – make tin casting moulds



1 Silcotin-HB, heat-resistant silicon

For making one or two-part moulds in moulding boxes. Any casting compound can be moulded in these moulds, which our heat-resistant up to 400°C for brief periods, but low-melt materials such as lead or tin are preferable. With crosslinking liquid.

327553 1000 g 336350 49.95 336349 5000 g 219.00



With Silicolan NV -Make reliefs, mouldings and figures!



With Silicoval MVE –

Make multi-part negative moulds!





2 Silcoval MVE

Universal, condensation cross-linking RTV silicon-rubber compound. Can be cast with medium elasticity and high tear-resistance. Especially suitable for making complex single and multi-part negative moulds in which decorative candles, figures, precision parts and artistic reliefs (even those with undercuts) can quickly and safely be moulded. Silcoval is mixed with a cross-linker. Can be used to cast all normal casting compounds: plaster, ceramic casting compounds, polyester casting wood, PU casting resins and candle wax. With cross-linking fluid and detailed instructions.

336286 500 g 40.50 1000 g 69.90 336287



Low-viscosity, easily flow and casting-capable silicon for an elastic, hard-wearing, dimensionally stable mould. For making moulds of reliefs, mouldings and figures. Silicon is mixed with a cross-linker and can then be used immediately.

Suitable casting compounds for the mould: Artelin, wax or frostproof casting compounds. For filling with polyester resin or casting wood the mouldmust first be provided with a sink with wax and subsequent treatment with mould separating agent. With crosslinking liquid.

336347 500 g 29.95 336348 1000 g 49.95



Order the appropriate book at the same time:

Making moulds yourself

Mould-making technology has changed considerably over the past few years, which can mostly be attributed to improvements in mould making compounds. A special modular system with a range of different accessory chemicals makes it possible for a silicon mixture to vent, thicken or be accelerated in its hardening. This book about mould-making technology consists of more than 200 pages and is supplemented with many informative illustrations which make the subject of mould-making even more interesting and easy to read.

336174 16.99

Copying objects with moulding sand

Sand moulding box - Make your casting mould simply & quickly using moulding sand. Suitable for models made of hard materials, for example metal, plastic, wood, ceramics, porcelain.





1 Sand moulding box

Made of high quality plastic. With mould closing parts (columns), lancets and tamping wood. For approx. 2 kg moulding sand. Size: 15×10 cm.

336255

55 29.90

2 RAKSO steel wool

Ideal for fine-sanding and polishing over tin surfaces 8 pads, total 200 g.

334834 Fine (00) **5.50 334833** Very fine (000) **5.95**





3 Moulding sand Bag with 1 kg.

336354 6.95

Melting tin - comfortable, quick & safe!



4 Big Dipper tin melting station

230 V / 500 W electric melting trough with a filling capacity of 500 ml (max. 2500 g pure tin or 3500 g decorative tin). On stable foot stand, fitted with 150 cm power cable. The temperature can be infinitely variably adjusted using a regulator and a thermostat so that a melting temperature of between 120 and 450°C can be set. Including casting ladle with 60 ml capacity and detailed instructions.

336298 155.00

5 Working underlay

Heat-resistant up to 1100° C, non-toxic, odourless, dust-free. $33 \times 22 \times 1.5$ cm

335974 14.50





6 Tin crucible

336266

60ml, for approx. 300 gpuretinor 400 gdecorative tin. **336356 21.00**

7 Burner for Crucible Pos. 6

336355 21.9

8 Special tin brush (not illustrated) for working finally-detailed parts.

9 Mould powder (not illustrated)

Protects the mould, ensures clean contours and smooth surfaces on castings. 75 g.

336358



Powder the mould



10 CLOU Spraymat cellulose lacquer

A high quality, colourless protective lacquer for metal parts. Recommended as protection for bright and patinised tin components. Content 300 ml.

326082 15.95

11 Anti-oxidisation spray (not ill.) for protecting metallic services

against the influences of moisture. 300 ml.

336254 10.25





All prices in € incl. statutory. VAT plus shipping costs

Casting compounds - concrete and Artelin



1 The big creative book of concrete

Extensive companion for all types of concrete with a wide range of design possibilities: Whether creative or plasticine concrete, concrete paste or decorative concrete - the book explains everything from A-Z. Super ideas, practical tips! 128 pages, hardcover

337531 16.99



2 Concrete workbook/ideas book

Allow yourself to be inspired by the possibilities we show here and be amazed about what is possible with concrete. This is because concrete is really not a grey mouse which needs to hide! Leaf metal and acrylic paint give it a fresh complexion in a matter of moments. Including: detail basic instructions (such as techniques on mould-making, mixing concrete, making voids, incorporating materials), videos covering the most important basic instructions, many pictures of work operations, 45 ideas to reproduce. 144 pages.

337531 16.99





3 Artelin casting compound

Inexpensive, on a ceramic basis, becomes hard within 30 minutes and extremely hard at high moulding accuracy. Extremely suitable for delicate models, gift tags, reliefs, small figures and technical mouldings. After hardening, engraving, milling, scraping, filing, drilling, sawing and grinding in addition to surface treatment with all conventional paints, lacquers, glazes and patinas is possible.

336260	1 kg	6.95
336261	5 kg	24.95
336262	25 kg	94.50





4 Casting compound dyes

Mixed in during mixing of the casting compound. The addition of between 1 and 3% allows you to produce all colour nuances yourself (skin colour up to intensive terracotta, or even anthracite and black). 100 g can.

336263	Terracotta	4.95
336264	Anthracite/black	4.50





4 CreaStone casting concrete

CreaStone is a new type of toxin-free, immensely versatile concrete casting compound which is suitable for making bowls, candle stands, flower vases and objects for model and landscaping construction. In addition to standard

moulds, plastic bowls placed inside one another and plastic covers etc. (from your kitchen!) can also be used. The moulds can be cast without the use of a release agent. However, you will produce finer results if you do use a release agent. The concrete compound requires between 2 and 3 days for complete hardening, depending on strength, and after this you can paint, lacquer and decorate it with all possible types of paint.

336316	1 kg	6.95
336317	2.5 kg	14.95
336318	8 kg	42.50

5 Concrete separating agent (not illustrated) 100 ml container.







6 Beginner set concrete sphere

Consisting of: 1 bag CreaStone 600 g, 1 balloon, 2 plaster bandages, 1 bottle terracotta sealant 20 ml, 1 patinising brush Gr. 10, 1 pair disposable gloves, 1 instructions for use.

336325 11.95

Toxin-free concrete casting powder forecasting fine objects such as jewellery pendants, bowls, chess and crib figures, dials, floor tiles, tiles and many more. Made in high-quality phosphate cement in connection with finally-sieved marine sand. A smooth external service without holes is produced

if no separating agent is used for the moulds. If the casting compound is filled into moulds to which separating agent has been applied (order number 336319), no typical concrete holes will occur.

337554	1.5 kg	10.95
337556	3 kg	17.80
337557	8 kg	44.50







fine concrete.

337566 6-fold 6.50 337567 12-fold 7.50

You can find fantastic products for surface design on Page ???



4 Concrete colour

For painting the fine grooves in concrete; practical: can be applied direct out of the paint bottle. Bonds excellently with concrete and dries with a matt finish.

337561	White	3.35
337562	Black	3.35
337563	Silver	3.35
337564	Gold	3.35





5 Concrete jewellery pendant set

This set contains everything you need to quickly and perfectly make magical jewellery pieces in the classical bronze look yourself. Incl. concrete stones, 6 jewellery pendant moulds, brown leather strap, 6 attachment eyes, 2 mixing cups, stirring spatula, bronzing effect pigment gold and copper, colourless matt covering lacquer, lacquering brush, instructions.

337565 24.50

6 Casting mould sets

How to do it: Put a small quantity of concrete in a large plastic bowl and allow to stand for around 15 minutes. Now place the small bowl in the mix and weight it down (e.g. fill it with water). Then fill the intermediate bowl thus formed up to the edge of the mould with concrete compound, allow to dry, remove the moulding bowl The concrete bowl is ready.

Half shell mould set, 2-part

336320	120/160 mm	5.95
336321	140/180 mm	7.90
336322	160/200 mm	9.80

Heart half shell mould set, 2-part

	, _ p	-
336320	60/100 mm	3.50
336321	100/140 mm	4.50





7 Round leather laces Ø 2 mm, contents:

2 units:

337568 Medium-brown 337569 Black



Chess – the game of kings!





1 Chest figure set King Arthur

with total 9 latex moulds (7 x 1 figure +2 pawns) approx. 135mm high. Required material Artelin or CreaStone ca. 1200 g.

336339 29.99

2 Chess figure set China

with total 9 latex moulds (7 x 1 figure +2 pawns) approx. 103 mm high. Required material Artelin or CreaStone ca. 1200 g.

336340 29.95



6 Latex figure set Crib figures 17 cm

Highly-detailed figures, 12 items. Approx. 17 cm high. Material requirement: 3000 g casting compound

36288 37.90



7 Latex figure set Crib figures 11 cm

12. Max. 11 cm high Material requirement: 1200 g casting compound

336256 37.90

Cold glaze – especially recommended for restoring furniture, clocks, clock dials and picture frames!

8 Cold glaze beginner set

Contains all the most important basic materials for creating unique decorative effects. After mixing the two components (1:1), a transparglaze with which lack-type high-gloss effects can be achieved is created. The glaze can also coloured using the tinting colours included, or mixed with the gold powder. Pack-contents: each 50 ml resin and hardener, 2 mixing cups à 30 ml, 4 mixing rods and 5 tinting colours 1,5 ml in red, yellow, blue, white and black, 1,5 ml pigment powders and 6 toothpicks. With detailed structions.



336299

9 Cold glaze 2-component material (not illustrated)

Properties as described in Pos. 8, however in different container sizes. Please order tinting colours etc. extra.

336369 100 ml **11.90 336370** 200 ml **20.95**

10 Cold glaze thinner (not illustrated)

Use of this thinner results in an extremely low-viscosity cold glaze, e.g. for impregnating lampshades etc. 50 ml.

336257 4.20





3-4 Chess figure mould sets

Consisting of $\bar{7}$ silicon-rubber moulds, 4 Mould boards, 1 painting template, 2 rubber bands, 1 precise casting and manufacturing instructions. King figure height: 104 mm.

336272 Romans **139.90 336271** Teutons **139.90**



5 Chessboard mould

 335×335 mm. Required material Artelin or CreaStone ca. 1900 g.

336341 18.90



9 Handicraft package farm animals I

With a total of 5 different latex moulds, approx. 35-45 mm high, incl. casting compound, painting template, paintbox and brush.

336337 28.50

10 Handicraft package farm animals II

Supplementary package with a total of 5 different latex moulds, approx. 35-45 mm high, incl. casting compound, painting template, paintbox and brush.

336338 28.50

Order the appropriate book at the same time:



11 Coating with cold glaze

This book presents the multifarious application possibilities offered by this liquid plastic, and explains them using a wide range of decorative parts. The book provides you with the necessary know-how and explains exciting techniques. 120 pages with many images and illustrations.

336139 13.50





1 SELVA crystal polyester resin XOR

Crystal-clear 2-component resin. For making transparent,

crack-free castings with casting objects (e.g. prepared beetles, fish, butterflies, shells, figures, coins, photos, stones, electronic components etc.). Can be used immediately after mixing the 2 components. Protect casting objects with protective lacquer before casting (please use only preparation spray, see Pos. 6). Finish: Clean down with sanding paper and polish with polishing cream (see Pos. 5). Including product information with precise instructions for use and information about the use of preparing chemicals.

202597	500 ml	21.50
336366	1000 ml	38.90

Auxiliary agents for casting resin:

3 Preparing spray (not illustrated)

Makes dried flowers and plant sections durable and resistant, protects against decay, mould formation, moisture and climatic influences. Always apply to plant sections which are to be cast in casting resin. 300 ml spray can

336253 9.95

4 Polishing cream (not illustrated)

For cast resin parts. 60 g.

336344 4.95

337593





5 Resin tinting colours

For tinting polyester resins and intensive colouring of cold glazes. Strongly pigmented (which results in intensive colouring), light-stable, can be mixed. Each contains 10 ml.

1	2	3	4	5	6	7	8	9	10
337584		1 /	cherry re	nd trans	naront				4.95
337585			dark blu						4.95
337586		3 l	olue-gre	en, tran	sparent				4.95
337587		4 9	gold-yel	low, trar	nsparent	t			4.95
337588		5 Ì	oright re	d, opaq	ue				4.95
337589		6	oink, op	aque					4.95
337590		7 1	nedium	blue, or	paque				4.95
337591		8 l	emon ye	ellow, o	paque				4.95
337592		9١	white. o	paque					4.95

10 black, opaque



Order the appropriate book at the same time:

Einbetten in Kunstharz

2 Embedding in epoxy resin

This book provide you with a way into the unique world of plastic techniques. It provides you with everything you need to know about carrying out professional experiments and working with this epoxy resin, which is similar to glass. With numerous design examples and step-by-step instructions. 168 pages.

336166 16.99



6 Resin cleaner/remover

This cleaner can be used to remove spilt resin drops and adhesions from the working surface without any problems. Contents: 100 ml.

337582 2.95



7 Green PAG polishing cream

Wax-free cream for high-gloss polishing of almost complete castings which were previously sanded down with sanding paper. The result is a crystal clear surface as smooth as a mirror. Contents: 50 ml.

337583 6.75





10 Artestone figure casting compound

We recommend an extra-hard casting material which is less likely to break for casting figures. Perfect for figures. The material can be tinted using coloured pigment powder (order numbers 336263 and 336264).

337572 1000 g 9.95 337573 5000 g 39.95



9-15 Latex mould

Fully plastic figure moulds made of latex - especially suitable for the use of Artestone. The moulds are very hard-wearing and can be used more than 50 times



		* * *
337574	9 Cleopatra, 100 mm	4.95
337575	10 Nofretete, 100 mm	4.95
337576	11 Buddha, 85 mm	4.95
337577	12 Shiva, 100 mm	4.95
337578	13 Siam, 105 mm	4.95
337579	14 Venus, 200 mm	8.90
337580	15 Aphrodite, 165 mm	8.90

4.95

CREATING SURFACES

Gilding – a handicraft with long tradition!

Gilding is a handicraft with a long tradition! It's not only objects which look far more refined, lettering and backgrounds are also made more valuable. Wafer-thin metals like gold, silver or copper can be quickly and decoratively applied to a wide range of materials. You can also work with inexpensive leaf metals as an alternative to real gold: hammered gold (brass) or aluminium/silver.

To start gilding you require surprisingly little in the way of materials and tools. You can create metallically-reflecting surfaces with the wafer thin metal films in away which is not possible with gold bronze colours and lacquers.





1 ART DECO Gilding size

Special glue for sizing leaf metals. On water basis. 50 ml.

334325

4.50

2 Cellulose lacquer

To protect objects gilded with leaf metals. For use outdoors. Contains: cellulose nitrate, solvent. 50 ml.

334843

7.90



TOP SELLER!

3 Antique gold lacquer

High-quality bronze gloss lacquer, excellent coverage with brilliant gloss look. Adheres to almost every material, also suitable for restoration. 60 ml.



334865

9.20



4 Gold wax

This creamy metal gloss creamcan be brushed on, dabbed, wiped or applied as a thick, relief-like filling coat on wedge and picture frames with a brush, sponge, cloth or fingers very delicately for fine colour shadowing on candles, decorations, Christmas tree and jewellery pendants, greetings cards. Depending on the application thickness, the cream dries within 6-10 hours with a solid gloss finish. Toxin-free. 50 ml.

334869 9.95



5 Gilding brush

Crafted round-oval, black goats hair, plastic wedge, with coloured wire on rough wooden handle. Size 0

336275 12.50



6 Sizer

Pure squirrel hair, glued normally in carton. Size 2.

336274 16.50

Real leaf gold:



7 Sizing oil Mixtion Lefranc

Special adhesive for leaf gilding. 75 ml.

334890 19.95

8 Ducat double gold

Real, 23-carat leaf gold for indoors and outdoors Is processed using sizing oil Pos. 7. 10 sheets at 80 x 80 mm.

334934 28.90



9 Brush set, 5-part

Super quality at low price! Round tip, reddish Toray hairs, seamless silver ferrule. Sizes: 2/4/6/8 and 10.

336276 25.95



10 Bristle brush set

In practical zipped case.

8 round brushes long: Size 1/2/3/4/5/6/8 and 10. 8 flat brushes long: Size 1/2/3/4/5/6/8 and 10.

334839 14.



11 Universal primer

Especially suitable for priming carton, wood, polystyrene, leather, metal ceramics, porcelain, ceramic casting compounds and many other plastics. 125 ml.

334903 6.50

Tel.: +358 (05) 413 2888

leaf metal:





12-13 Leaf metals

made of copper/zinc alloys. Glued on using special adhesive (see Pos. 6-7). 14 x 14 cm.

336352 12 gold, 25 sheets **5.60 336353** 13 silver, 11 sheets **5.60**



14 ART DECO leaf metal effect spray

Decorative, rapid-drying acrylic lacquer with an appearance similar to leaf gold or silver. Optimum effects on black or white base material. Objects can be primed with white or black acrylic matt paint in advance. Can be used indoors and outdoors. Not suitable for polystyrene! Lacquer with cellulose lacquer as a protection before using outdoors. 400 ml.

331823 Gold **12.95 336291** Silver **12.95**





15 Antique paint primer oxblood

Classic blood red primer for pre-painting painting base materials to be treated with leaf gold, gold wax or gold lacquer. Closes off wood pores and evens out the surface. Excellent adhesion of gold lacquer. For all surfaces indoors. Water-soluble. 50 ml.

334867 4.20

Order quickly and easily right now:

www.matinkulta.fi

CREATING SURFACES



1-5 Metallantik Liquid

This low-viscosity "noble metal tincture" can easily be applied on painting based materials made of wood, porcelain, ceramics or ceramic casting compounds pre-treated with "oxblood" (antique primer) so finely and thinly that even finely-detailed relief bases can effectively be painted over - without affecting the texture of such artworks. Antique primer ensures excellent adhesion of this tincture at the same time, which can be worked after complete drying using, for example, the PAG polishing cream (order number 337583, see page ???) so that the gold gloss provided by this tincture is considerably enhanced.

337594	1 Silver	4.95
337595	2 Yellow gold	4.95
337596	3 Old gold	4.95
337597	4 Ducat gold	4.95
337598	5 Copper	4.95

Bonds to metal, wood, glass,

1	
2	
3	
4	

Paint sprays – highly-pigmented and compatible with polystyrene!

6 Aero Design

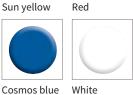
Decorative objects, living accessories and model construction - sake the can, hold 30 cm away from the object, spray, job done! Aero design spray bonds to metal, wood, glass, porcelain, plastic, textiles, paper, stone and polystyrene! Paint application is even, provides good coverage due to its high pigmentation and is rapid-drying. Suitable for indoors and outdoors. The sprays are low-odour, environmentally caring and do not contain any dangerous solvents or heavy metals. 150 ml spray can







May green



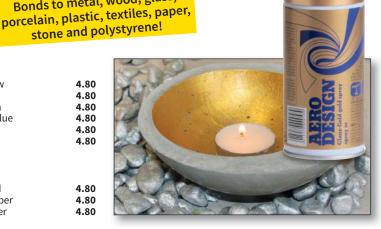


Colour spray: Sun yellow 334875 4.80 334876 Red 4.80 May green Cosmos blue 4.80 334877 334878 4.80 White 4.80 334879 334880 Black 4.80

Metallic spray:







Wood glaze – the colour kick for any wood!

7 Wood glaze set

Gloss gold

Ready-to-use, transparent glaze for use on rough wood parts. Dries on solidly within a short time. Woodgrain is especially enhanced. Provides special texture effects even on larger wood surfaces. Can also be painted over with matt or gloss lacquer. Also extremely suitable for polyester casting liquid carving wood in addition to the model bricks on Page 129. Paints can be mixed together. Simply thin with water for lighter colours. Toxin and solvent-free, also suitable for children. Colours: light blue, light red, red-brown, light green, buttercup yellow and silk-matt white. 6 x 50 ml $\,$



Order the appropriate book at the same time:



8 Refining surfaces The workbook covering copper, gold leaf and marble look. 80 pages, hardcover 337332

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