

IDENTIFICATION

MADA Marx Datentechnik
competence & experience in RFID

Introduction & Contact Persons

MADA Marx Datentechnik GmbH



„The whole is more than the sum of its parts.“

This citation of Aristotle describes the content of our new catalogue in a wonderful way. We are very proud of the clear and detailed presentation, but even more it shows the diversity of MADA and its products, services and innovations. Furthermore, it reveals the perfect complementarity of the different products and how they match perfectly.

Our aim is to provide you, our partners and customers, an extended service offer besides RFID media. Thereby you can compile all necessary components and supports depending on the project's requirements. MADA is not the general store with all kinds of products, but your reliable and independent full-service provider with own products and ideas in all aspects of the topic identification.

Enjoy reading and greetings from Black Forest!

Best regards,

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General Manager

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MADA Marx Datentechnik



Experience Identification

Since more than 35 years, MADA represent quality and competence in the field of contactless card systems. As an independent full-service provider we develop and produce identification media as well as the correspondent systems in the most different types of technologies for worldwide leading companies.

Our strength is the customer-oriented and made-to-order production of identification media such as badges, high-quality key-fobs and long-lasting wristband transponders, as well as the encoding and implementation of the corresponding software and hardware systems. Own developments for visitor management, encoding or card printing including the related personalization round off our business spectrum and activities.

MADA offers the complete know-how from one hand – starting with the draft up to the delivery we execute manufacturing processes in-house. This guarantees maximal quality as well as short delivery times. Benefit from our comprehensive business range and our long-time experience. Competent consultancy and personal contact is our highest aim.

Satisfied customers are our best reference! The innovative and multifunctional products are established successfully on the market since many years and play a part in innumerable companies and enterprises to guarantee a smooth and successful flow in all assignments of tasks – rely on our experience and convince yourself by our references and products.

‘We don’t only want to prove our quality, but also make you feel and live it.’

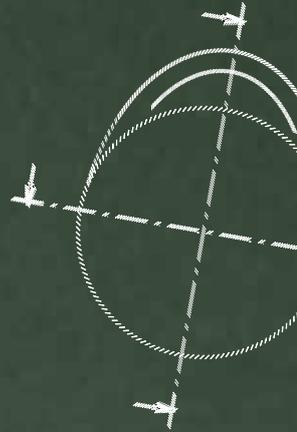
Our new construction at the location in Villingen-Schwenningen was finished in 2015 and is the symbol for a new forward-looking era of MADA. Thereby, it was not only achieved more space for a significant expansion of production capacities, but also a completely new scope of activity: **‘MADA.college’**. So far, MADA has brought its knowledge directly to the employees on site. Now the new building provides space for in-house trainings and consulting programs and contributes to another opening of our company in the direction of our partners and customers.



New Training Program

MADA.college

* Optimized Content,
Including NFC and LEGIC Connect



RFID?!

Was ist das?

>> CUSTOMER VOICE:

„A highly informative event/training, which is useful and reasonable for beginners as well as for professionals, if you're a job starter or a general manager, to achieve a safe handling of RFID in a great, relaxed atmosphere.“

Michael Gordalla
General Manager
HEYDEN-SECURIT GmbH



The topics become more and more complex; a consolidated knowledge of technical connections is indispensable. And nowadays, this does not only concern the developers in laboratories but also the client on-site expects already in time a competent and professional consultation about the potential problems concerning his project.

With its new training classrooms, MADA offer a completely new training program about different card technologies with current topics. In response to many requests we have extended our offer to an entire seminar program. The first seminars are applied to the current contactless technologies of MIFARE and LEGIC, divided into the particular target group: Sales or engineering.

Besides the regular trainings it is furthermore possible to arrange individual appointments and training content. Like this, we can offer you a seminar which perfectly meets your specific requirements. The practical part about it: Of course you can perform your training project-related and therefore have a person in your premises who can support you in case of problems and questions.

“An investment in knowledge pays the best interest.”

Benjamin Franklin

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Selection of Training Courses – Dates and Prices on Request:

Basic Training RFID	
Module I	<ul style="list-style-type: none"> • Introduction to RFID Technology • Norms / Frequencies / Specifications • Distinctive Feature • Differences LF / HF Systems
Module II	<p>Overview of the Following RFID Technologies:</p> <ul style="list-style-type: none"> • LEGIC <ul style="list-style-type: none"> - Safety Concept - Master Token System - Transponders • Mifare <ul style="list-style-type: none"> - Safety Concept - Mifare classic: Overview & Structure - Mifare DESFire: Overview & Structure
Module III	<ul style="list-style-type: none"> • Overview of further Transponder Systems • Sales-Specific Questions • Practice: Read Out/Declaration of Identification Media

Intensive Training LEGIC	
Module I	<ul style="list-style-type: none"> • Introduction into LEGIC Technology • Overview Transponder Media and Reader Technologies • Safety Concept LEGIC • Master Token System
Module II	<ul style="list-style-type: none"> • Memory Structure • Write / Read Authorizations in Detail • Compatibility Reader – Transponder
Module III	<ul style="list-style-type: none"> • Master Token Zone Concept • Differences & Migration Scenarios LEGIC prime / LEGIC advant • LEGIC Cross-Standard-Transponder-Chip • LEGIC Mobile Access Technology • LEGIC Connect (Trusted Service & Mobile ID) • Practice: Read Out/Declaration of Identification Media

Intensive Training Mifare DESFire	
Module I	<ul style="list-style-type: none"> • Introduction into MIFARE Technology • Overview Transponders and Readers • Mifare classic: Memory Structure, MAD, Data Access, Safety • Mifare Hack
Module II	<ul style="list-style-type: none"> • Introduction into Mifare DESFire • Intensification Mifare DESFire / Mifare DESFire in Detail <ul style="list-style-type: none"> - Mifare DESFire: Overview & Structure - Data Organization and Structure - Memory Structure - Configuration Possibilities - Encryption Mechanisms - Key Diversification & Mifare DESFire Safety Aspects • NEW: Mifare DESFire EV2 Overview and Innovations • Mifare SAM AV2
Module III	<ul style="list-style-type: none"> • Adjacent Technologies • Practice: Read Out/Declaration of Identification Media

Plastic Cards / Chip Cards



ID Media in Credit Card Format

visual ID card and multifunctional RFID cards according to ISO

Plastic & Chip Cards Directly Ex Works from your Independent Manufacturer

Everybody knows them – everybody uses them! Whether as employee badge during daily working life, as access control card in the business environment or as a customer- or member card. Plastic cards are with us every day and therefore the application possibilities of modern plastic cards are almost unlimited, as well as their requirements for technique and optical individualization. As an independent full-service provider we develop and produce ISO-compliant plastic cards with many different options and completions in our in-house card production.

Shape and measurements correspond to the internationally valid **ISO 7813**. The customer-specifically produced cards consist of several synthetic layers (foils) – that's why they are also called multi-layer cards. Front- and backside can be printed, personalized and designed individually. To protect the printed design it is covered with an overlay foil and is therefore protected under laminate to avoid abrasion and scratches.

Design and Printing

MADA has an in-house printing department and therefore guarantees a fast and flexible handling via **digital, offset or screen printing**. Our employees create proofs according to your requirements and are also able to process your printing data and preliminary drafts. Use your ID card as advertising media and information area at the same time. We will be happy to provide advice!

Personalization and Encoding

Personalization in form of **photos, texts or numberings** can be applied at any time. The personalization can be effected via your own purchased printing system or directly by the personalization service at MADA. Of course all personal and encoding information are treated strictly confidential. Optionally we can personalize protected under laminate!

Characteristics of Plastic Cards According to ISO:



- **Card Measurements: 85,6 mm x 54,0 mm**
- **Card Thickness: 0,78 mm +/- 0,08 mm**
- **Corner Radius: 3,18 mm**
- **ISO/IEC 7810 Compliant (Credit Card Format)**
- **Laminated Multi-Layer Card**
- **Compounded of High-Quality PVC Foils According to Individual Customer Request**
- **High-Polished or Matt Surface**
- **Suited for Supplementary Printing with all Common Card Printers**



Intelligent Plastic Cards – RFID & Contact Chips

the individual card for any application purpose – secure and multifunctional

RFID Cards

RFID – Radio Frequency Identification – describes a wearless technology for transmitter-receiver-systems for contactless and automated identification. An RFID-system consists of a transponder (e.g. ISO check card) with standardized transmission protocols as well as of a reading device to read-out this identification.

The range of RFID cards varies in dependence of the used chip technology between approx. 2 cm and 7m. Time registration- and access control systems or payment applications are counted among the common usage examples.

As an independent manufacturer we offer you a wide range of RFID cards with individual options directly ex works. Also chip combination (HF/HF and HF/LF) in one card, the so-called "combination media Multiband" are available from one source. For this, we develop specially adapted antenna designs with maximum adjustment of the individual systems.

Our RFID cards can be delivered with all options and features. Contact us in this regard and we will be happy to provide advice!



- ISO 14443/15693 Compliant
- Laminated Multilayer Card
- Compounded of High-Quality PVC Foils According to Individual Customer Request
- High-Polished or Matt Surface
- Suited for Supplementary Printing with all Common Card Printers
- Available in all Common Chip Variations and Combinations

Contact Chip & Processor Chip Cards

Contact-based chip cards, also called micro-processor chip cards, memory cards or smart cards, become more and more important by their range of functions – especially in combination with RFID technology. Whether in payment- or healthcare sector, for customer loyalty or for access generation for employees.

The chip module, the data carrier of the contact-based chip card, which position is internationally standardized by **ISO7816**, can be read-out or written with data via the contact area. Functions and types vary from easy read-only chips to operating system-based highly complex processor chips respectively smart cards with integrated encryptions.

Besides the memory, the implanted chip of processor chip cards also has a CPU as well as a EE-PROM for data encoding. The chip operating system controls and allocates these resources in terms of data transfer and converting and memory management.

We can furnish all our cards with contact chips, either as smart card or in combination with a common RFID technology. In case of questions regarding feasibility or chip availability, we will be at your disposal.



- ISO/IEC 7813 and 7816 Compliant
- Laminated Multilayer Card
- Compounded of High-Quality PVC Foils According to Individual Customer Request
- High-Polished or Matt Surface
- Suited for Supplementary Printing with all Common Card Printers
- Individually Combinable with all Common RFID Technologies

See Page 25 for our selection of storage RFID chips, processor and contact chips and chip combinations (combination media Multiband) as well.

Combination Media Multiband

specially adjusted antenna design for special requirements

- Antenna Design Avoid Negative Coupling and Interferences
- Combination of High- and Low Frequency Systems
- Requirement-Specific Antenna Designs
- Active / Passive System Coupling

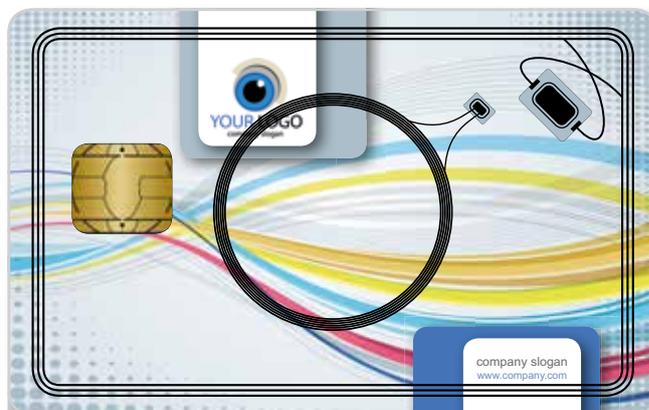
If two RFID modules with antennas adapted to their frequency are combined in one medium, the resonance frequency of both antennas will shift. Thereby an ideal use of these modules is not guaranteed anymore. MADA solved this problem by specially adjusted antennas which result in the requested resonance frequency in case of combining them. Thus, an ideal utilization of the RFID combination media is achieved.

Inductive, Magnetic, Barcode

The contactless reading principle is "state of the art" in the meantime and offer huge advantages over solutions with magnetic stripe, barcode or inductive, which have been used so far. Due to economic reasons it might makes sense not yet to replace an existing and proven system, such as time recording via magnetic card, in case of a new introduction of access control with a contactless ID card (e.g. with LEGIC). To facilitate the change to contactless systems we offer you a combination card. Conditioned by the different technical and physical constitution of the individual ID media, a combination is not always possible or reasonable.

Combination RFID Systems

Besides the combination of common identification systems also different contactless systems can be combined. Because of the different frequencies the combination of a high-frequent system (**13,56 MHz**) with a low-frequent system (**125 kHz**) is practicable without any problems.



- ISO/IEC 7810 Compliant
- Several Data Systems in one Card
- Specially Adjusted Antenna Designs for Interference-Free Performance
- Available in Almost all Common Chip Variations and Combinations
- 125 kHz + 13,56 MHz Combinations
- Combinable with Barcode, Magnetic Stripe or with Inductive Technology
- In-House Development Antenna Designs with Maximum Adjustment



You haven't find the right combination so far ?

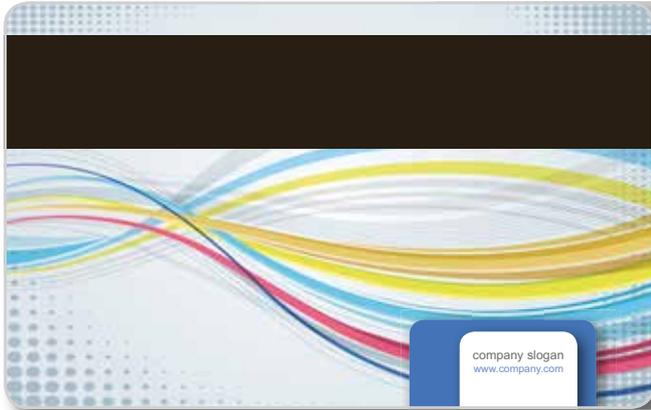
We are able to develop especially for you – your requirements are our motivation!



Plastic Cards – Options & Completion

for each requirement the right solution

Magnetic Stripe:



- According to International Standard
- ISO 7810 + ISO 7811
- 1024 Bit Allocated to three Tracks for Data Storage
- LoCo 300 Oe (brown)
- HiCo 2750 Oe (black)
- HiCo 4000 Oe (black)
- Temperature Resistance: - 10°C to + 55°C

Barcode, QR-code, Datamatrix:



- All Common 1D Barcodes, e.g.:
Code 39, Code 128, 2/5 interleaved, EAN13,...
- All Common 2D Barcodes, e.g.:
QR-Code, DataMatrix, PDF417,...
- Available as Printing or Laser Inscription
- Printed on or Under Laminate
- Available with or Without Data Blocker

Cuttings and Perforations (Round or Slot Holes):



- Round Hole: \varnothing 3 mm or 4 mm
- Slot Hole: 14,5 mm x 3,5 mm
- Positions and Placing Specially Adjusted to Antennas and Coils
- Ideally Suited for Mounting to Clips or to Key-Straps



You are searching for an individual solution away from standard?

As an independent manufacturer with our own construction and development department we will be at your disposal.

Plastic Cards – Options & Completion

for each requirement the right solution

Re-writable Plastic Cards – Thermo Re-Write:

- Full-facing TRW, as Edge-to-Edge or Partial Stripe
- Arbitrary Measurements and Positioning
- Blue or Black Dyeing
- Erase and Re-Write with Special TRW Card Printers
- Ideally Suited for Visitor- or Student Badges
- Re-Writable up to 50 Times
(Approximate Value: Depends on Condition of Card)



Signature Panel:

- Special Signature Fields:
Writable via Pen
- Color: White Covering or Transparent
- Arbitrary Measurement and Positioning
- Available Full Facing,
Edge-to-Edge or Partial Stripe



Longlife – The Polycarbonate Card:

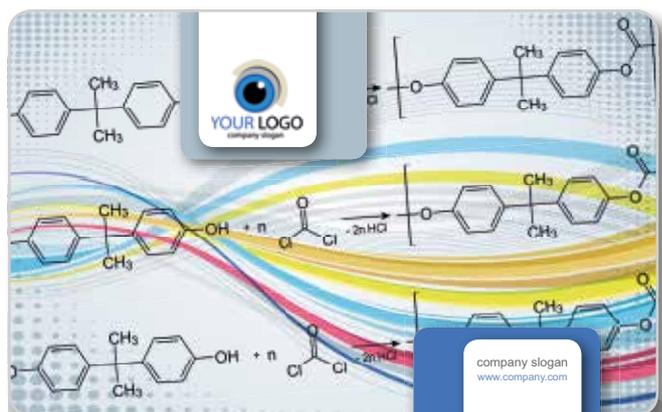
This card provides high stability and long durability for different requirements.

The card impresses by its extreme breaking- and bending strength as well as by its thermal robustness up to **+100°C**. The size of it corresponds to ISO7813 (by default, the card is thicker). The Polycarbonate card is compatible with most of the common RFID inlays and furthermore it is suitable for chip implantation.



Application Fields:

- Fleets
- Fuel Cards
- Student- and Personal Badge
- Customer Cards



- Thermal Robustness up to **+100°C**
- Tenfold Breaking- and Bending Strength
- Completely Printable and Customizable via Retranfer Method
- Compatible with TRW & Printable Monochrome via Thermotransfer

XXL – Extended Cards

ideal for accreditation, events and pricing



124 mm x 86 mm

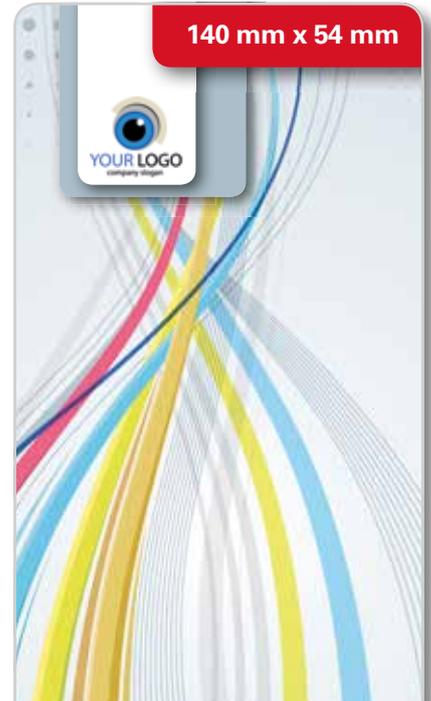
XXL – Xtended cards from MADA are the ideal media in the field of accreditation, events and pricing. The cards are produced in the usual credit card quality with protected high-resolution printing under laminate and can be processed with all options.

- **Multilayer Card in Credit Card Quality**
- **All Options and Features Available**
- **Subsequent Print and Personalization Possible**

Formats (Others on Request):

- 124 mm x 86 mm
- 110 mm x 54 mm
- 140 mm x 54 mm

- **Adapted to all Common Large Format Card Printers**



140 mm x 54 mm



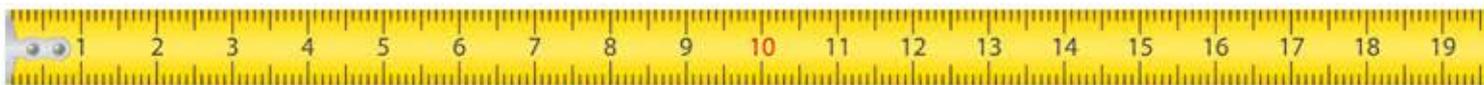
85,6 mm x 54 mm



110 mm x 54 mm



Ideally suited for subsequent printing and personalization via Magicard Rio Pro Xtended card printer!



More than just a Card Supplier – MADA is a Card Manufacturer of Passion

PRINTING

After your confirmation of proof, our innovative printing machines go into action: Offset, digital offset, screen printing. Samples are possible before series production. Just contact us in this regard!

– INHOUSE –



DESIGN

After placing of order our well-trained customer service creates a proof for the desired RFID medium (card, key-fob etc.)

– INHOUSE –



PERSONALIZATION

You would like to have numbered, personalized and/or encoded RFID media? Our laser- and personalization departments are specialized on these options and effect your orders promptly and reliably.

– INHOUSE –



PRODUCTION

All components are united. Then your RFID media are produced with the latest production machines, laminators and die-cutters individually and in part fully-automatically.

– INHOUSE –



DISPATCH

Your cards are packaged carefully and dispatched on schedule!

– INHOUSE –



FINAL CHECK

All RFID media are tested by a 100% final check.

– INHOUSE –



EXPRESS

What if my order needs to be effected immediately?
Ask for our express service: express@mada.de



RFID Transponders



Key-Fob classic

the all-rounder in the scope of key-fobs – absolutely robust and break-proof



- 34,5 x 43,5 x 5 mm
- ABS Novodur Synthetic
- Waterproof Housing
- Ultrasonic Welded
- Tamper-Proof

Printing:

- **Printing Area Frontside:**
ø 28 mm
- **Digital Offset Under Laminate**

Individualization:

- **Text & Consecutive Numbering**
- **Photos, Graphics, Logos**
- **Barcode, Datamatrix**
- **Laser Inscription**
- **Engraving**
- **Encoding**



The **key-fob classic** with ultrasonic welding of the lid-part is absolutely robust, stable and break-proof. It satisfies all exigent and multifunctional needs. Optionally it can be finished with engraving or laser inscription. It is waterproof and therefore is suitable for leisure facilities. Opening the key-fob is not possible without demolition.

Make use of the endless possibilities of design and personalization and convince yourself of the forgery and manipulation protection.

More Exclusivity by Injection Molding

Use the injection molding to integrate your logo or slogan directly into the surface of the housing. For this, the **key-fob classic** provides free designable areas on the backside.



Individualization / Safety



RAL Color	Description
	Transparent
□ RAL 9016	Traffic White
■ RAL 1016	Sulfur Yellow
■ RAL 1023	Traffic Yellow
■ RAL 2008	Bright Red Orange
■ RAL 3000	Flame Red
■ RAL 3016	Coral Red

RAL Color	Description
■ RAL 4006	Traffic Purple
■ RAL 6018	Yellow Green
■ RAL 6024	Traffic Green
■ RAL 5018	Turquoise Blue
■ RAL 5017	Traffic Blue
■ RAL 5003	Sapphire Blue
■ RAL 5004	Black Blue

RAL Color	Description
■ RAL 8007	Fawn Brown
■ RAL 7035	Light Grey
■ RAL 7001	Silver Grey
■ RAL 7024	Graphite Grey
■ RAL 9017	Traffic Black

Key-Fob ceVo/ceVo+

revolutionary key-fob for all demands



ceVo stands for classic evolution and describes the further development of the established **transponder classic**. **ceVo** is available in two model variants. It has a massive frame of polished stainless steel which fit to the transponder's contours shapely.

Besides ultrasonic welding and water resistance, **ceVo** convinces by its metal detectability and can therefore be used problem-free in sensitive areas, like e.g. in the food industry. **ceVo** and **ceVo+** are available with all common chip variations and combinations.

ceVo:

- Frame of polished stainless steel
- Plane front- and backside
- Ultrasonic welded and absolutely waterproof
- Numbering via laser inscription (one- or double-sided)

ceVo+:

- Frame of polished stainless steel
- Ultrasonic welded and absolutely waterproof
- Numbering via laser inscription (one-sided)
- Individually printable lid-part on the frontside

Individualization / Safety



RAL Color	Description
	Transparent
□ RAL 9016	Traffic White
■ RAL 1016	Sulfur Yellow
■ RAL 1023	Traffic Yellow
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RAL Color	Description
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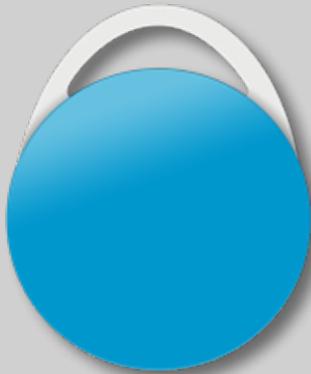
- 36,5 x 45,0 x 5,2 mm
- Massive Frame of Polished Stainless Steel
- Polycarbonate
- Waterproof Housing
- Ultrasonic Welded
- Tamper-Proof

Printing (ceVo+):

- Printing Area Frontside: ø 28 mm
- Digital Offset Under Laminate

Individualization:

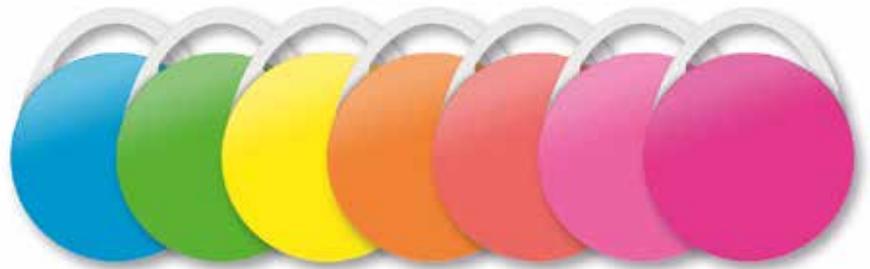
- Text & Consecutive Numbering
- Photos, Graphics, Logos
- Barcode, Datamatrix
- Laser Inscription
- Engraving
- Encoding



- 34,5 x 43,5 x 5 mm
- Massive Frame of Polished Stainless Steel
- Polycarbonate
- Concave Construction
- High-Polished Surface in Effect Finish
- Waterproof Housing
- Ultrasonic Welded
- Tamper-Proof

Individualization:

- Text & Consecutive Numbering
- Laser Inscription
- Engraving
- Encoding



The **ceVoNEO** is a supplement to the **ceVo** key transponder and offers an extension of the color palette with seven neon shades as well as a high-gloss surface. The **ceVoNEO** is also available in four classic colors. Thus, there is something for every taste.

Like the **ceVo**, the **ceVoNEO** is ultrasonically welded and thus waterproof. It is available in all common chip variations and chip combinations.

ceVoNEO:

- Polished stainless steel frame
- concave front and back
- ultrasonically welded and completely waterproof
- customized numbering in the form of lase (one- or two-sided)



Individualization / Safety



Pantone Description

- Pantone 801C Neon Basic
- Pantone 802C Neon Basic
- Pantone 803C Neon Basic
- Pantone 804C Neon Basic
- Pantone 805C Neon Basic
- Pantone 806C Neon Basic
- Pantone 807C Neon Basic

RAL Color Description

- RAL 9016 Traffic White
- RAL 2002 Vermillion
- RAL 5017 Traffic Blue
- RAL 9017 Traffic Black



The new Key-Fob **ceVoBLE** elegantly combines the two worlds of **RFID** and **Bluetooth Low Energy** technology

In addition to the electronics for the Bluetooth wireless technology, an RFID chip has also been integrated in the well-known ceVo key chain design. In addition to the button, a multicolored status LED is now available as interaction with the user.

The display, for example, whether an entry is allowed or denied, is thus already possible on the key fob. Due to the range of several meters, which can also be reduced according to project requirements, comfortable long-range solutions can be realized elegantly and always in combination with the well-known RFID technologies (LEGIC, MIFARE, HITAG, EM, etc.).

In addition, by pressing the key differently (short, medium, long), a special reader, e.g. be selected and addressed during an entry and exit.

All data transmission is AES-encrypted at all times.

BLE technology is optimized for energy-efficient transmission of small amounts of data. Depending on requirements and user intensity, a battery life of several years is possible, whereby the battery change can also be carried out by the end customer.

Technical Specifications BLE (Bluetooth Low Energy)	
standard:	IEEE 802.15 BLE 4.0 Single Mode
frequency:	2.402 – 2.485 GHz
output:	0 dBm (Class 3 / 1mW), RF power adjustable
operating temp.:	-15 °C – +45°C
BLE software:	Battery life optimized Bluetooth protocol implementation including various Bluetooth profiles
encoding:	128 bit key length AES
TAG-ID:	16 Byte individual TAG-ID (READ only, AES encoded)
data storage:	1024 Byte (read/write, AES encoded)
Scanner-ID:	3 pc., Selection via keyboard shortcut

Individualisierung / Sicherheit



Technical Data:

- 36,5 x 45,0 x 8,0 mm
- Solid frame in polished stainless steel
- Ultrasonically welded cover part (printing)
- tamper-proof
- Multi-colored status LED
- Simple battery change
- Extremely long battery life
- Bluetooth Low Energy (BLE) integration
- RFID integration
- Integrated button

Printing (ceVo*):

- Printing Area Frontside: ø 28 mm
- Digital Offset Under Laminate

Individualization:

- Text & Consecutive Numbering
- Photos, Graphics, Logos
- Barcode, Datamatrix
- Laser Inscription
- Engraving
- Encoding



The digital ID card: ID.mobile

Mobile solutions for your access control with ID.mobile

The app is available for iPhone iOS and Android mobile phones and transmits the user permissions securely, either via the Bluetooth or NFC standard to the respective reader. Based on the LEGIC technology platform Connect, you can load, activate and use any ID card for different applications on your mobile phone.



Key-Fob eXis

exclusive and multifunctional key transponder of stainless steel



The exclusive and high-quality **key-fob eXis** is made of massive stainless steel and synthetic. The waterproof and ultrasonic welded lid-part is printable on both sides with a diameter of 23 mm. Thanks to the robust manufacturing it can't be opened without demolition.

Key-Fob eco

robust universal key-fob

This robust key-fob is made of high-quality synthetic and absolutely stable and break-proof. The optional lettering is effected via laser inscription and therefore wear-free.



- 32,0 x 52,5 x 4,3 mm
- ABS Synthetic Material
- Robust Housing

Individualisierung:

- Text & Consecutive Numbering
- Laser Inscription
- Engraving
- Encoding

RAL Color	Description
■ RAL 1004	Golden Yellow
■ RAL 3000	Flame Red
■ RAL 6024	Traffic Green
■ RAL 5003	Sapphire Blue
■ RAL 7035	Light Grey
■ RAL 9017	Traffic Black



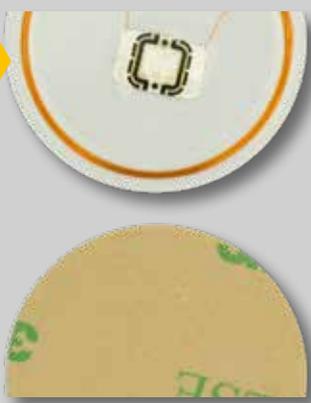

- 32,0 x 55,0 x 6,6 mm
- Polished Stainless Steel
- Waterproof Housing
- Ultrasonic Welding
- Tamper-Proof

Printing:

- Printing Area Frontside & Backside : ø 23 mm
- Digital Offset Under Laminate

Individualization:

- Text & Consecutive Numbering
- Photos, Graphics, Logos
- Laser Inscription
- Encoding



- **Material: PVC**
- **ø 27 mm ± 0,10 mm**
- **Thickness: 0,60mm ± 0,05 mm**
- **Self-Adhesive 3M foil**
- **Protection Class: IP68**
- **Available as 125 kHz or 13,56 MHz Variant**
- **Storage Temperature: -25°C to +50°C**
- **Operating Temperature: -25°C to +50°C**

Individualization:

- **Laser Inscription**
- **Encoding**



MADA stickers can be used in many different solutions. By their robust composition and the one-sided adhesive area they can be fixed to almost any surfaces where RFID is needed. Antenna and chip are fixed in the laminate. This guarantees water resistance (IP68). A personalization can be effected via laser inscription.

A substantial advantage of it is the fast fitting of media with an RFID transponder. There is no need to implement the sticker with much effort, but it can be fixed to a medium quickly and easily.

Flexible Examples of Use:

- NFC Tag of Mobile Service
- Storage, Logistics and Transport
- Refitting to a Multifunctional Medium
- Access Control via Mobile Phone

MADA standard types:

- Legic MIM256
- Legic MIM1024
- Legic ATC4096
- Mifare Classic 1K S50 4Byte UID
- Mifare DESFire 4K EV1 V5 70pF (others on request)



Ideally suited for path-/time control, storage, logistics and transport!

Watchstrap Transponder comfort

highly flexible transponder with convenient wearing comfort – waterproof and tamper-proof



The housing of our **watchstrap transponder comfort** is made of high-quality and robust Novodur synthetic which has an extreme shock- and breaking strength. Its ultrasonic welding with the lid-part guarantees absolute water resistance and protection against forgery. The conjunction of housing with the bracelet is effected by resistant stainless steel spring bars, which reflect positively the adaptivity of this transponder.

Antiallergic Bracelet:

The elegant, conically produced bracelet forms an optical unity with the housing and fits perfectly to the ergonomic forms of the wrists. The overall composition of housing and flexible bracelet therefore offers absolutely comfortable and neutral wearing. The watchstrap transponder is completely antiallergic.



Individualization / Safety:



Colors – Housing:

Description	Pantone
■	Pantone 101C
■	Pantone 1655C
■	Pantone 200C
■	Pantone 341C
■	Pantone 2945C
■	Pantone Black C

Colors – Bracelet:

Color	Description
■	Yellow
■	Orange
■	Red
■	Green
■	Blue
■	Black

- 32,5 x Bracelet Length x 8 mm
- ABS Novodur Synthetic
- Waterproof Housing
- Ultrasonic Welding
- Tamper-Proof

Printing:

- Printing Area Frontside: ø 28 mm
- Digital Offset Under Laminate

Individualization:

- Texts & Consecutive Numbering
- Photos, Graphics, Logos
- Barcode, Datamatrix
- Laser Inscription
- Engraving
- Encoding

Bracelet:

- Length: 220 mm / 250 mm
- Width: 16 mm
- Polyurethane PU
- Stainless Steel Lock and Spring Bars
- Antiallergic

Watchstrap Transponder classic

shapely watchstrap transponder with Nylon/Perlon



- 32,5 x 41,5 x 8 mm
- ABS Novodur Synthetic
- Waterproof Housing
- Ultrasonic Welding
- Tamper-Proof

Printing:

- Printing Area Frontside:
ø 28 mm
- Digital Offset Under Laminate

Individualization:

- Texts & Consecutive Numbering
- Photos, Graphics, Logos
- Barcode, Datamatrix
- Laser Inscription
- Engraving
- Encoding

Bracelet (optional):

- Length: 280 mm
- Width: 16 mm
- Nylon/Perlon
- Stainless Steel Chromed



The housing is made of high-quality and robust Novodur synthetic and corresponds to the quality standards of our **watchstrap transponder comfort**. Shock- and breaking strength as well as ultrasonic welding guarantee long durability and absolute water resistance. This provides higher protection against forgery for the operator and also for the user of a leisure facility, especially in case of CASH applications. The **watchstrap transponder classic** is ideally suited for the use in sauna, saline baths and pools.

Bracelet Made of Nylon/Perlon:

The watchstrap transponder can optionally be delivered with a high-quality **Nylon/Perlon** bracelet. Braided and with a width of **16 mm** guarantee a comfortable wearing of the transponder. The metal buckle is chromed and welded. It is available in the length of **280 mm**.

For matching Nylon/Perlon bracelets in a width of 16 mm please take a look at page 39: ribondo system

Individualization / Safety:



Colors – Housing:

RAL color	Description
□ RAL 9016	Traffic White
■ RAL 1016	Sulfur Yellow
■ RAL 2008	Bright Red Orange
■ RAL 3000	Flame Red
■ RAL 4006	Traffic Purple
■ RAL 6024	Traffic Green
■ RAL 5017	Traffic Blue
■ RAL 7035	Light Grey
■ RAL 9017	Traffic Black

Colors – Bracelet:

Color Description
■ Yellow
■ Orange
■ Red
■ Green
■ Blue
■ Black

Overview Technologies



HF Memory Chips – 13,56 MHz:

HF-Memory Chips LEGIC prime / advant – 13,56 MHz

LEGIC MIM256

LEGIC MIM1024

LEGIC MIM1024 -SUPERTAG-

LEGIC ATC256-MV410

LEGIC ATC1024-MV110 - ISO15693

LEGIC ATC4096-MP311 - ISO14443

LEGIC CTC4096-MP410 - ISO14443

LEGIC CTC4096-MM410 - ISO14443/15693

HF-Speicherchips MIFARE classic / Ultralight – 13,56 MHz

MIFARE 1k S50 - ISO14443 - 4 Byte NUID

MIFARE 1k S50 - ISO14443 - 7 Byte UID

MIFARE 4k S70 - ISO14443 - 4 Byte NUID

MIFARE Ultralight C50pF

HF-Speicherchips MIFARE DESFire – 13,56 MHz

MIFARE DESFire D41 4k ev2 - 70pF

MIFARE DESFire D81 8k ev2 - 70pF

MIFARE DESFire D81 8k ev2 - 20pF

MIFARE DESFire D41 4k ev2 - Speed offline

MIFARE DESFire D81 8k ev2 - Speed offline

Tag IT Plus 2048 - ISO15693

I-Code SLI S20 - ISO15693 (auch SLX)

LF Memory Chips – 125 kHz:

LF-Memory-Chips – 125 kHz

HITAG 1

HITAG 2

HITAG S 2048

ATA 5577 (Temic 5577)

EM 4200 „Read only“

EM4450

Combination Media Multiband:

HF Combi Cards – 13,56 MHz

LEGIC MIM1024 / ATC4096-MP311 - ISO 14443

LEGIC MIM1024 / MIFARE 1k S50 - ISO 14443 - 4 Byte NUID

LEGIC MIM1024 / MIFARE 4k S70 - ISO 14443 - 4 Byte NUID

LEGIC MIM1024 / MIFARE DESFire D41 4k ev1

LEGIC MIM1024 / MIFARE DESFire D81 8k ev1

LEGIC ATC1024 / DESFire D41 4k ev1

LEGIC ATC1024 / DESFire D81 8k ev1

LEGIC MIM256 / Induktiv 65 Bit

LEGIC MIM1024 / Induktiv 65 Bit

MIFARE 1k S50 - ISO 14443 / Induktiv 65 Bit

MIFARE 4k S70 - ISO 14443 / Induktiv 65 Bit

MIFARE DESFire D41 4k ev2 / Induktiv 65 Bit

HF/LF Combi Cards – 13,56 MHz / 125 kHz

LEGIC MIM256 / HITAG1

LEGIC MIM256 / HITAG2

LEGIC MIM256 / EM 4200

LEGIC MIM256 / ATA5577

LEGIC MIM1024 / HITAG1

LEGIC MIM1024 / HITAG2

LEGIC MIM1024 / EM 4200

LEGIC MIM1024 / ATA5577

MIFARE 1k S50 - ISO 14443 / HITAG1

MIFARE 1k S50 - ISO 14443 / HITAG2

MIFARE 1k S50 - ISO 14443 / EM4200

MIFARE 1k S50 - ISO 14443 / ATA5577

MIFARE 4k S70 - ISO 14443 / HITAG1

MIFARE 4k S70 - ISO 14443 / HITAG2

MIFARE 4k S70 - ISO 14443 / EM4200

MIFARE 4k S70 - ISO 14443 / ATA5577

MIFARE DESFire D41 4k ev2 / HITAG1

MIFARE DESFire D41 4k ev2 / HITAG2

MIFARE DESFire D41 4k ev2 / EM4200

MIFARE DESFire D41 4k ev2 / ATA5577

MIFARE DESFire D81 8k ev2 / HITAG1

MIFARE DESFire D81 8k ev2 / HITAG2

MIFARE DESFire D81 8k ev2 / EM4200

MIFARE DESFire 8k ev2 / ATA5577

Selection of stock articles –
other chip variations and
combinations on request!

Information: info@mada.de

All MIFARE DESFire EV2 products still available as EV1 version!

Processor Chips & Contact Chips

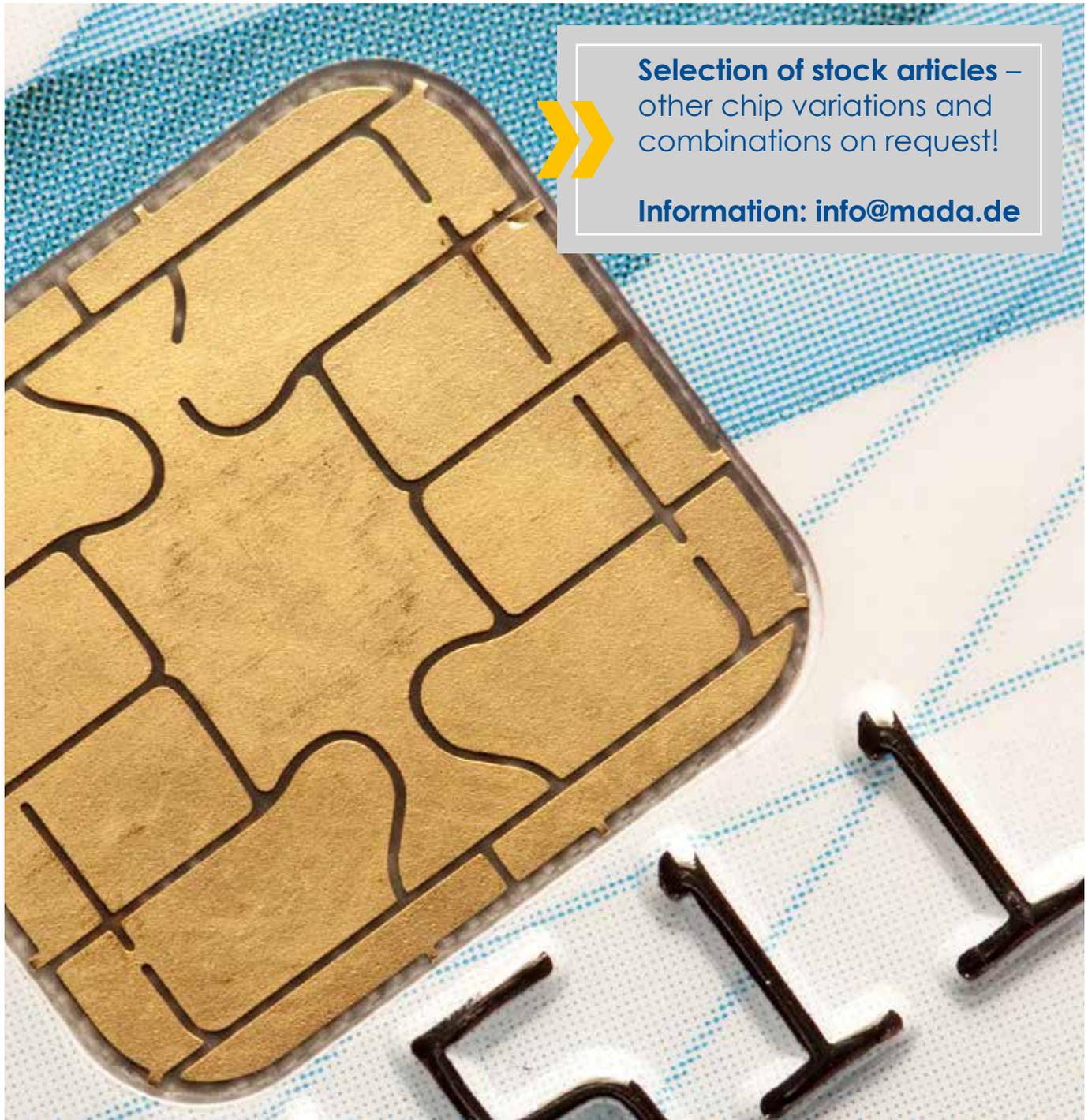
selection and combinations

Types of Processor Chips:

Description
Gemalto ID-Prime .NET 510 v3+
SLE66CX680PE incl. CardOS 4.4
Gemalto Cyberflex Access 64k v2c
NXP J2A080GX0 JCOP v 2.4.1

Types of Contact Chips:

Description
SLE5542, 256 Byte EEPROM
SLE5528, 1024 Byte EEPROM
24LC02, I ² C-Bus, 2k-Bit (256 Byte)
24LC16, I ² C-Bus, 16k-Bit (2048 Byte)
FM24C02, 2k-Bit (256 Byte)



Selection of stock articles –
 other chip variations and
 combinations on request!

Information: info@mada.de



- Modular Wide Range Solutions for Different Applications
- Solutions for Automatic Door Opening, Entrances, Logistics and Many More
- Combinable with HF Systems (13,56 MHz)
- EPCglobal and ISO 18000-6C Compliant



Manufacturer & Description

Manufacturer: Impinj, Inc. // Chiptyp: Monza M4D

Monza 4D Memory Structure

Storage Area Monza 4D	Description
User	32 Bit
TID (Tag Identifier Memory)	S/N: 48 Bit Extended TID Header: 16 Bit Company/Model No.: 32 Bit
EPC (Electronic Product Code)	128 Bit
Passwords	Kill/Access 64 Bit

- **Frequency: 860 – 960 MHz**
- **Reading Distance: 2 to 7 Meters**
(Depending on the Reader)
- **Combination Cards UHF with HF Systems (13,56 MHz) Possible:**
E.g. LEGIC Prime + UHF or MIFARE DESFire + UHF
- **Scope of Applications: Wide Range Application for Parking Access, Automatic Door Opening (Forklifts), Hands-Free Applications**



Visual Security





Visual Security and Exclusiveness by Duogram™ und Hot Stamping

We expanded our product range for you and can now offer high-quality and individually visual safety features – **hot stamping, safety foils, holograms** and **Duograms™** as well as **Datafoil™ technology** from one source.

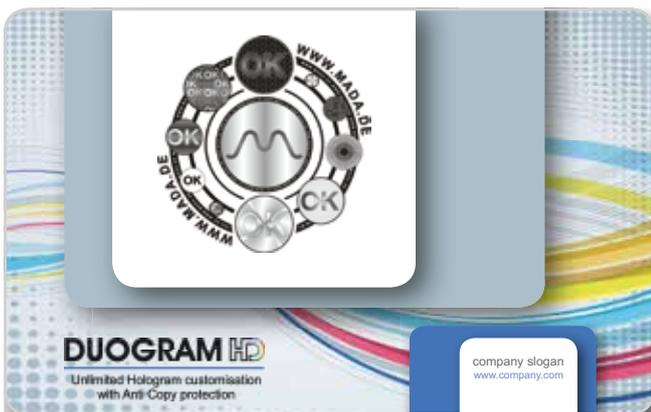
With the so-called **Duogram™** we provide a new and unique opportunity to protect your cards from counterfeit and manipulation. The **Duogram™** is a safety feature from the latest picture technology which is applied to the card via hot stamping.

This surface finishing combines visually variable and high-resolution safety features of a hologram, such as e.g. kinetic effects or micro logos with chrome-, metallic- or effect foils, as well as detailed imprintings and forms. To achieve even more individuality and authentication, a separate effect can additionally be created for every viewing angle.

There are no limits to your creativity. **Duogram™** and holographic illustrations can be generated in arbitrary forms and shapes and imprinted customer-specific as 2D or 3D graphic. The resulting effects are not only unique, but also increase the protection from copy and counterfeit. The imitation is not possible by using simple methods.



Duogram™:



- Highly Secure Visual Safety Feature
- Maximal Reduction of Manipulation and Counterfeit
- Integration of Kinetic and Visual Effects
- Low Costs for Initialization and Tools
- Freely Selectable Imprinting Form & Completion
- Duogram™ Foils: Gold, Silver, Transparent

Flatfoil (Contour Stamp):

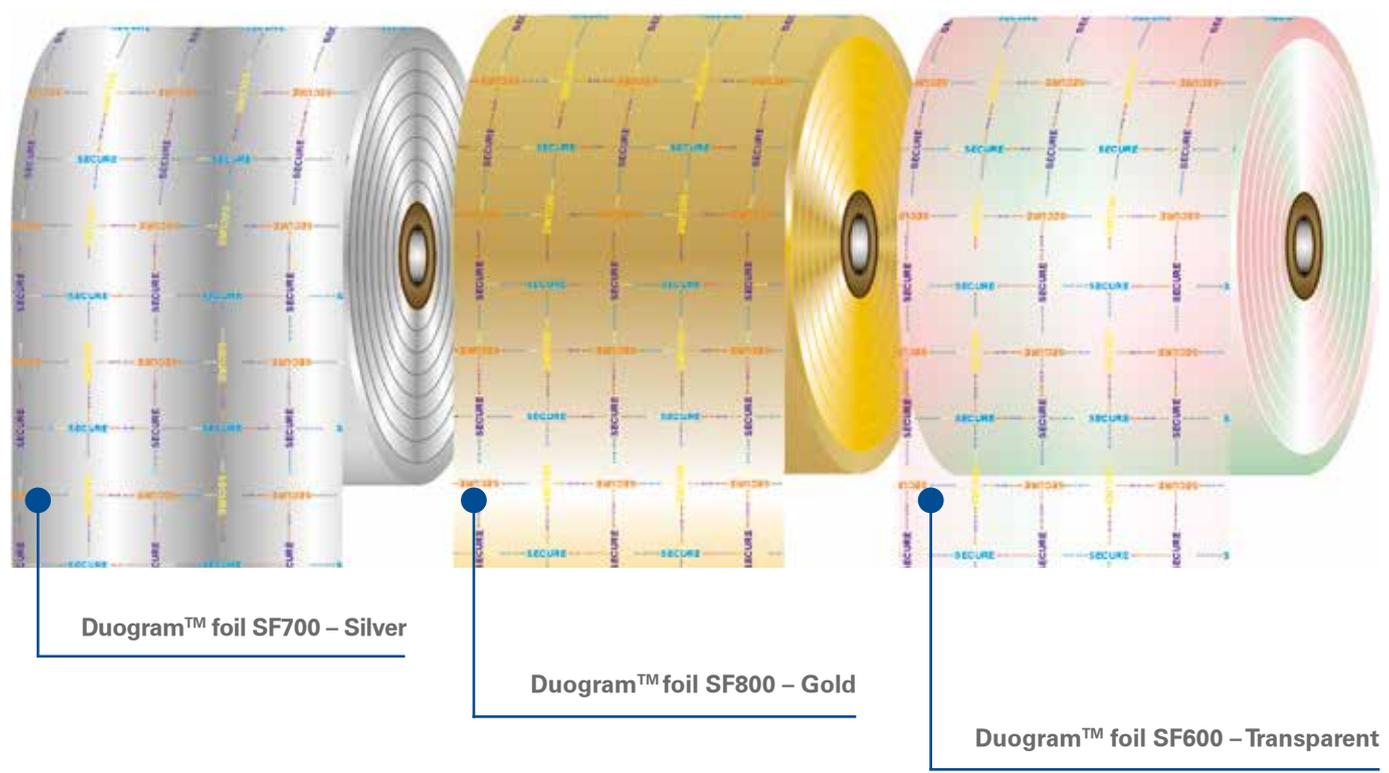


- Safe Visual Security Feature
- Reduction of Manipulation & Counterfeit
- Plane Hot Stamping with Effect Foils
- Low Costs for Initialization and Tools
- Freely Selectable Imprinting Form & Completion
- Large Selection of Standard Foils

Standard Security Foils

large selection of standard security foils for all requirements

Duogram™ Foils:



Diffraction Foils and Metallic Color Foils for Flatfoil & Hot Stamping:

Description	Preview (Schematic):
Diffraction Foil Silver – „MOSAIC“	
Diffraction Foil Silver – „PIXEL“	
Diffraction Foil Silver – „WAVE“	
Diffraction Foil Silver – „PLANE“	
Metallic Color Foil – „GREEN“ / „PURPLE“ / „BLUE“ (More on Request)	

Safety Printing Technologies (Selection)

maximum safety for your plastic cards by different printing methods

OVI – Optical Variable Ink:

OVI consists of visually variable pigments whereby the coloring changes depending of viewing angle and/or light irradiation. OVI colors can neither be copied nor imitated with commercial printers. These colors can be verified quickly and easily without visual utilities.



- Changing Coloring Depending on Viewing Angle
- Increase of Protection Against Forgery
- Additional Microscopic “Flakes”
- Copyable only Monochrome

Metallic Pigment Color:

It is effected via screen printing and contains parts of Silver, Gold, Aluminium or Bronze and gives the card a metallic effect. This color is also anti-copyable, but not a security color. By overprinting the metallic pigment color with glazing colors, almost all metallic colors can be generated via offset printing.



- Increase of Exclusiveness
- Contains Metallic Pigments e.g. Gold, Silver...
- Available in Different Gradations
- Glazing Overprinting Possible

UV Fluorescent Print:

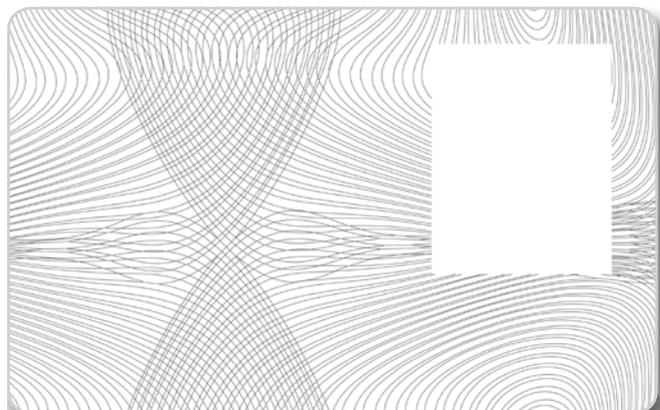
By illuminating the card with light of special wavelength (e.g. ultraviolet light, black light) logos or design characteristics become visible which usually are not recognizable. UV print is not reproducible.



- Only Visible under Ultraviolet Light
- Not Reproducible / Copyable
- Realizable via Screen- and Offset Printing

Micro Text, Guilloches & Iris Printing:

The extremely fine, geometric lines, forms and texts cannot be reproduced or copied with commercial printers. Details, like e.g. micro texts, can only be recognized with visual aid (magnifying glass).



- Not Copyable with Commercial Printers
- Details are only Visible with Visual Aid
- Optionally Available with Color Gradient (Iris Print)

Service



Personalization and Inscription (on and under Laminate):

- **Visual Personalization on / under Laminate**
- **Consecutive Numberings**
- **Variable Texts and Graphics**
- **Photos, Names and Numbers**
- **Subsequent Personalization via Retransfer or Thermotransfer**
- **Almost Freely Designable**
(Design Partially Depending on Chip Position)



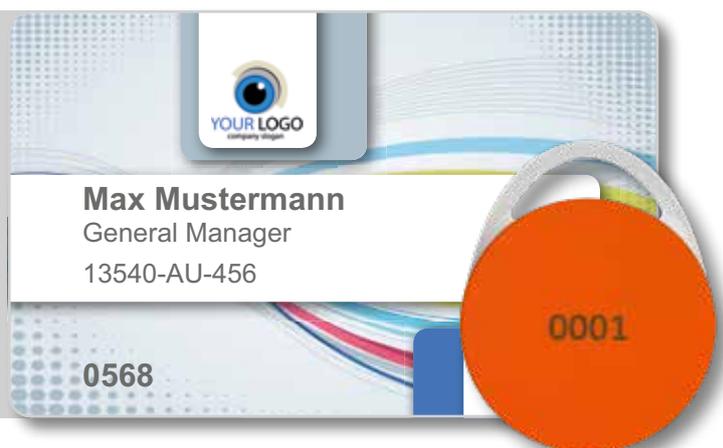
Encoding and Safety:

- **Customer-Specific Encoding of all Media**
- **Barcode, Magnetic Stripe, RFID, Contact- and Processor Chips**
- **Multifunctional Application for e.g. Access, Time Control, Canteen on one Medium**
- **Different Encryption Technologies**
- **Delivery Directly Ex Works – Optionally Including Visual Personalization**



Laser Inscription:

- **Individual Laser Inscription on Laminate**
- **Consecutive Numberings**
- **Variable Texts, Graphics and Logos**
- **Monochrome Inscription into Laminate**
- **Requires Special Transponder- / Card Construction**
- **Long Durability for Heavy-Duty Use**
- **Tamper-Proof**



Everything from one source! Make use of our wide experience & services. Save time and effort. We will gladly provide technical clarifications and sampling!



ribondo system





ribondo System – New Comfort for your Wrist:

With the new ribondo system we present a professional and high-quality solution for locking system- and wardrobe bracelets for the field of swimming pools, fitness and leisure, sauna wellness and much more.

Compared to conventional solutions, **ribondo** stands out by its excellent manufacturing quality with maximum color fastness combined with highly flexible and ergonomic characteristics. The bracelet **ribondo** is available in 2 versions: **Nylon/Perlon** as a finely braided bracelet with high dimensional stability as well as the version made of **synthetic**, which meets even extreme quality- and hygiene standards thanks to its high-quality antiallergic premium synthetic. Therefore, it is also suited for sauna and salt-water baths. Both types have a stainless steel lock which provides for maximum hold and easy opening and closing.

ribondo is an all-in-one system for self-assembly. The corresponding locking- and key-rivets, key-boxes with optional laser inscription (numbering) as well as assembling aid provide for a perfectly coordinated complete solution and designed for maximum robustness. The wide selection of modern colors completes our product range.

Stainless Steel Lock

Key-Rivet

Key-Box with
Optional Laser Inscription

Antiallergic Premium
Bracelet Made of
High-Quality Synthetic

Locking-Rivet

for: Locking- and Wardrobe Systems
Public Organization
Sauna & Wellness
Fitness & Leisure
Swimming Pools



ribondo Synthetic Bracelet

premium synthetic bracelets for maximum requirements – antiallergic and robust



Thanks to its high-quality and antiallergic production quality, the new generation of **ribondo premium synthetic bracelets** provides for new hygiene standards and maximum wellbeing in swimming pools, leisure and wellness facilities.

The highly flexible but extremely tear-resistant bracelet fits perfectly to the wrist ergonomics and ensures maximum hold and wearing comfort with its robust stainless steel lock. The material guarantees long durability with maximum color fastness. Compared to conventional bracelets the color is maintained.

Currently, 6 different and modern colors are available.

Accessories:

- Bracelet Loop
- Locking- and Key-Rivet
- Key-box with Optional Laser Inscription
- Riveting Pliers



Color Description	
■	Yellow (Similar Pantone 101C)
■	Orange (Similar Pantone 1655C)
■	Red (Similar Pantone 200C)

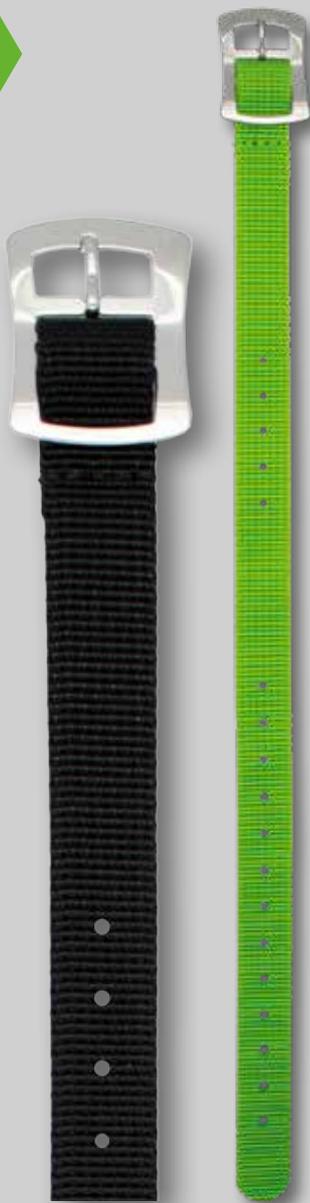
Color Description	
■	Green (Similar Pantone 341C)
■	Blue (Similar Pantone 2945C)
■	Black




- 265 x 12 mm
- Maximum Color Fastness
- Highly Flexible and Ergonomic
- High-Quality Stainless Steel Lock
- Extremely Robust, Long-lasting and Tear-Resistant
- For Extreme Quality- and Hygiene Standards
- Antiallergic Premium Bracelet Made of High-Quality Synthetic (PU)

ribondo Nylon/Perlon Bracelet

our all-rounder with improved production quality



- 280 x 12/16 mm
- High-quality, Finely Braided Bracelet Nylon/Perlon
- High Dimensional Stability and Tensile Strength
- Improved Manufacturing Quality



By the material mix of Nylon and Perlon, our **ribondo Nylon/Perlon bracelets** guarantee extreme dimensional stability and high tear-resistance. The finely braided material with improved production quality ensures comfortable wearing by its flexibility. Hot-stamped holes and welded tails guarantee a reduction of fray and tear-out of the individual fibers. Therefore, hygiene standard and durability are raised.

Currently, 6 different and modern colors as well as 2 widths (12 mm and 16 mm) are available.

Accessories:

- Key- and Locking-Rivet
- Key-Box with Optional Laser Inscription (for Width of 12 mm)
- Riveting Pliers

Color Description

- Yellow
- Orange
- Red

Color Description

- Green
- Blue
- Black

ribondo System

new comfort for your wrist

ribondo System – Bracelets 12 mm Width:

ribondo System

Order Number	Description	Graphic
141400300	Synthetic Bracelet with Metal Lock 26,5 Length, 12 mm Width Including Bracelet Loop, Color: Black	
141400301	Synthetic Bracelet with Metal Lock 26,5 Length, 12 mm Width Including Bracelet Loop, Color: Blue	
141400302	Synthetic Bracelet with Metal Lock 26,5 Length, 12 mm Width Including Bracelet Loop, Color: Red	
141400303	Synthetic Bracelet with Metal Lock 26,5 Length, 12 mm Width Including Bracelet Loop, Color: Green	
141400304	Synthetic Bracelet with Metal Lock 26,5 Length, 12 mm Width Including Bracelet Loop, Color: Yellow	
141400305	Synthetic Bracelet with Metal Lock 26,5 Length, 12 mm Width Including Bracelet Loop, Color: Orange	
141400330	Bracelet Loop, Color: Black (Minimum Order Quantity 100 pcs)	
141400331	Bracelet Loop, Color: Blue (Minimum Order Quantity 100 pcs)	
141400332	Bracelet Loop, Color: Red (Minimum Order Quantity 100 pcs)	
141400333	Bracelet Loop, Color: Green (Minimum Order Quantity 100 pcs)	
141400334	Bracelet Loop, Color: Yellow (Minimum Order Quantity 100 pcs)	
141400335	Bracelet Loop, Color: Orange (Minimum Order Quantity 100 pcs)	
141400014	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 12 mm Width, Color: Black	
141400034	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 12 mm Width, Color: Blue	
141400024	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 12 mm Width, Color: Red	
141400044	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 12 mm Width, Color: Green	
141400054	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 12 mm Width, Color: Yellow	
141400094	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 12 mm Width, Color: Orange	



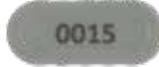
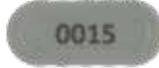
ribondo System – Bracelets 16 mm Width:

Order Number	Description	Graphic
141400013	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 16 mm Width, Color: Black	
141400033	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 16 mm Width, Color: Blue	
141400023	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 16 mm Width, Color: Red	
141400043	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 16 mm Width, Color: Green	
141400053	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 16 mm Width, Color: Yellow	
141400094	Nylon/Perlon Bracelet with Metal Lock 28 cm Length, 16 mm Width, Color: Orange	

ribondo System – Accessories (12 mm & 16 mm Width):

Order Number	Description	Graphic
141400360	ribondo Locking Rivets Including Locking Counter Piece	
141400370	ribondo Key Rivet Including Locking Counter Piece	
141400390	ribondo Riveting Pliers	

ribondo System – Accessories (12 mm mm Width):

Order Number	Description	Graphic
141400350	ribondo Key-Box Color: Grey, Only for 12 mm Bracelet	
139000056	Consecutive Numbering on Key-Box via Laser Inscription	
139000057	Variable Numbering on Key-Box via Laser Inscription	
141400392	ribondo Gadget for Inscription of Stroke Rate	



Card Accessories



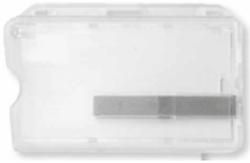
Card Holder, Dispenser and Card Cases:

Order Number	Description	Graphic
140110000	<p>Card Casing Transparent Horizontal with Long Hole</p> <p>Material: Vinyl Transparent Dimensions: 94 mm x 76 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,25 mm</p>	
140110010	<p>Card Casing Transparent Upright Format with Long Hole</p> <p>Material: Vinyl Transparent Dimensions: 61 mm x 102 mm Orientation: Portrait Format: Credit Card Format Card Thickness: Up to 1,25 mm</p>	
140320000	<p>Card Holder with Central Cutout for Takeout</p> <p>Material: Polycarbonate (PC) Dimensions: 91 mm x 57 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,10 mm</p>	
140350000	<p>Card Holder With Cutout for Takeout</p> <p>Material: Polycarbonate (PC) Dimensions: 91 mm x 57 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,10 mm</p>	
140330000	<p>Card Holder Transparent with Retaining-Strap in Landscape Format</p> <p>Material: Polycarbonate (PC) Dimensions: 91 mm x 63 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,10 mm</p>	
140340000	<p>Card Holder Transparent for Fixation of a Pushbutton-Clip</p> <p>Material: Polycarbonate (PC) Dimensions: 91 mm x 57 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,10 mm</p>	
140240010	<p>Lockable Card Holder in Landscape Format</p> <p>Material: Polycarbonate (PC) Dimensions: 64 mm x 98 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,15 mm</p>	
140240030	<p>Release Tool for Lockable Card Holder (140240010)</p>	

Card Accessories

protection, safety, comfort & individualization for your identification media

Card Holder, Dispenser and Card Cases:

Order Number	Description	Graphic
140390000	<p>Card Holder Transparent with Integrated Extractor in Black and Retaining Strap in Landscape Format</p> <p>Material: Polycarbonate (PC) Dimensions: 92 mm x 62 mm Orientation: Landscape Format: Credit Card Format</p>	
140210000	<p>Card Holder Transparent Hard w. Retaining-Strap in Landscape Format</p> <p>Material: Polycarbonate (PC) Dimensions: 91 mm x 62 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,40 mm</p>	
140220000	<p>Card Holder Transparent Hard w. Retaining-Strap in Upright Format</p> <p>Material: Polycarbonate (PC) Dimensions: 91 mm x 57 mm Orientation: Portrait Format: Credit Card Format Card Thickness: Up to 1,10 mm</p>	
140230000	<p>Card Holder Transparent Hard Without Retaining-Strap</p> <p>Material: Polycarbonate (PC) Dimensions: 91 mm x 57 mm Orientation: Landscape Format: Credit Card Format Card Thickness: Up to 1,10 mm</p>	



Yo-Yos, Grippers and Other Accessories:

Order Number	Description	Graphic
14171000X	<p>Synthetic Card-Yoyo Round with Push-On Clip and Silver Sticker</p> <p>Dimensions: ø 32 mm Run-out length: 86,4 cm String: Nylon Color: 1=Black / 2=Red / 3=Blue</p>	
141720000	<p>Card-Yoyo Robust Black/Chrome with Push-On Clip, Reinforced Vinyl-Strap and Nylon-String</p> <p>Dimensions: ø 38 mm Run-out length: 59 cm String: Nylon Color: Black</p>	
14173000X	<p>Synthetic Card-Yoyo with Carbine Fixation and Transparent Vinyl-Strap</p> <p>Dimensions: 35 mm x 55 mm Run-out length: 75 cm String: Nylon Color: 1=Black / 2=Red / 3=Blue</p>	
141100010	<p>Suspender Clip</p> <p>70 mm with fabric-reinforced and flexible vinyl-strap, white transparent with metal press button and nickel-plated suspender clip</p>	
141100020	<p>Suspender Clip with Press Button</p> <p>for 140340000 40 mm with flexible nylon-strap, white transparent with nylon press button and nickel-plated suspender clip</p>	
141110001	<p>Gripper</p> <p>plastic card holder with silicone profile for unperforated cards of 0,75 mm thickness</p> <p>Dimensions: 17 mm x 25 mm Card thickness: 0,75 mm +/- 15% Color: Black</p>	
141200010	<p>Key-Ring</p> <p>Dimensions: ø 21 mm</p>	
14174000X	<p>Lanyard with Safety lock</p> <p>this lock opens in case of pulling on the lanyard</p> <p>Length: 96,5 cm Width: 10 mm Color: 1=Black / 2=Red / 3=Blue</p>	

General Information



Provision of Printing Data

please consider the following details relating to provision of printing data

Accepted File Formats

Digital data is required in **1:1 scale**. In general, we accept PDF files created with Adobe Acrobat Distiller version 4.05 or higher, as well as **TIFF, EPS, PS** and **JPEG** (in high quality 100%). For processing and adapting printing data if necessary we charge the actual effort per every 15 minutes started.

Basically, other data formats are only accepted after prior consultation.

Open Data

We process layout data of all common DTP programs, e.g. **Adobe InDesign & Illustrator** (up to version CC) or **Corel Draw** (up to version X6). To provide open printing data, please use the function "pack" respectively "collect for output" to generate a file with all pictures, graphics and font types which are needed for the layout document.

In case of EPS or other vector data, all fonts have to be converted into paths or the fonts used have to be provided. Image data has to be embed or be attached.

Please note that open data is only needed if modifications have to be made. In this case, please contact us and we will create a correspondent quotation.

Fonts

To avoid problems with font types, please convert fonts into paths or include any fonts used into the PDF. TrueType fonts have to be converted into curves/paths. Proved open data, use only Postscript fonts which are provided when sending the printing data. Please do not use potential font modifications such as bold, italic, shaded etc. as this could cause print image irregularities.

Pictures & Colors

The color mode for offset and digital offset is CMYK (no RGB or LAB). HKS, Pantone or other special colors build closed color systems, which are only partially compatible to the 4-color-print (CMYK mode). It is possible to achieve an approximation to the color concerned. Depending on color values, the approximation sometimes can be realized better, sometimes inferior. Therefore, a reproduction of the color values in CMYK mode is limited.

To achieve best printing results, pictures should have a resolution of 300 dpi, line drawings 1200 dpi. Pictures should not be compressed. Please do not save ICC profiles.

Final Format & Trimming

Please create your printing PDF without cutting marks or other markings. These are added automatically by our production software.

The document format for all card printing data is **88,6 mm x 57 mm**. This format already contains the additional trimming of 1 mm all around.

Please avoid small margins (smaller than 2,0 mm) and pictures or texts which are too close to the edge, as cutting tolerances are possible. We recommend a margin of at least 4 mm.

Data Transmission

E-Mail: Data volume up to 20 MB can be sent via E-Mail.

FTP-Server: In case of larger data we offer the upload on our FTP server. Just ask for your access data and inform us after having uploaded your data in written form indicating the file's name.

Data carrier: CD, DVD, USB stick

Proofs

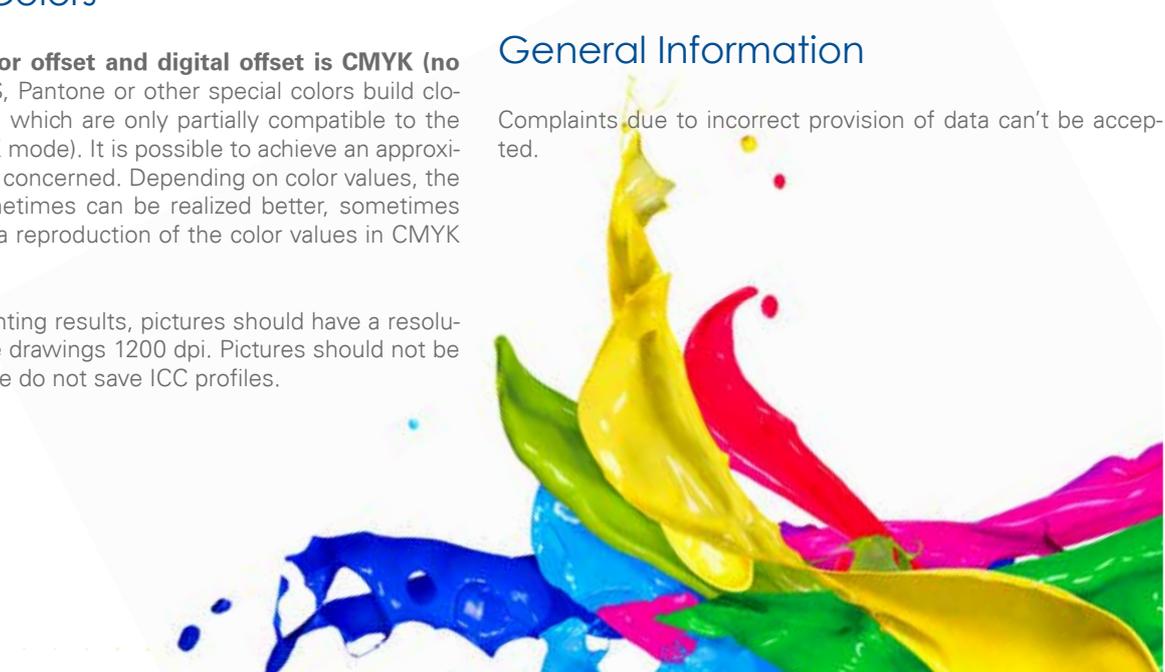
After being processed by our RIP the printing sheets are issued as form proofs and checked according to printing- and fabrication-relative specifications.

You will receive a content-related binding form proof (printing release). The shown colors can't be regarded as binding – it serves as control of position and completeness of contents.

If you furthermore require a color-binding digital proof, just let us know.

General Information

Complaints due to incorrect provision of data can't be accepted.



Data Protection & Order Processing

your personal data in safe hands



Earmarked Use of Data

We observe the principle of earmarked data use and utilize, process and save your personal data only for the required purpose. The disclosure of this data to third parties is not made without your explicit prior approval, provided that this is not necessary for order execution. Also the transmission to national institutions and authorities entitled to receive information is only effected within the framework of legal duty of disclosure or in case of judicial decisions.

We also take the intra-corporate data protections very seriously. We committed our employees and the companies providing a service to secrecy and compliance of data protection.

Right to Information and Revocation

You are entitled at any time to receive information about your data saved at MADA. You can arrange to disable, correct or delete them at any time. The granted approval for data use from your side can also be revoked at any time from you without indication of reasons. For this purpose, please contact the address indicated in masthead. For further questions in regard of data protection and data processing we will gladly be at your disposal at any time.

Please note that the data protection regulations and handling of data protections can change day-to-day. Therefore we recommend gathering information about changes of legal regulations and practices of companies regularly.

Correct Handling of PVC Cards

instructions for operation purposes, safety and durability

As an independent full-service provider with in-house, highly modern PVC card production we guarantee maximum quality in all production processes as well as the utilization of high-quality materials and semi-finished products.

Multilayer cards with relative technology e.g. RFID or contact chip from MADA have a long durability in case of correct, careful and especially purposeful handling. Depending on form

and completion, they can resist high temperatures and environmental requirements.

To guarantee stability, printing image and technical functions in the long term, it is also necessary to be aware of the correct card handling. The following instructions help you to maximize the durability of your cards and to protect them visually and technically.



Please use your plastic card only for the intended purpose.



Protect your cards with appropriate dispensers or card holders!



Don't bend, twist or buckle your card!



Never punch the card by yourself – use our service!



Keep the magnetic stripe away from magnetic radiation!



Don't try to open a door mechanically with plastic cards!



Avoid direct solar radiation and high temperatures (more than 50°C)!



Please don't use your card as ice scraper or bottle openers!



Don't ever wear plastic cards unprotected in your wallet or separately in your trouser pocket!



Don't put an open and unprotected plastic card behind the windshield!





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RFID Multiband Analyse-Kit



The new RFID analysis tool

fast and easy RFID analysis with protocol function for all common **125 kHz** and **13.56 MHz** RFID transponders



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