ambient-Series



modul technik
medical supply systems and equipment

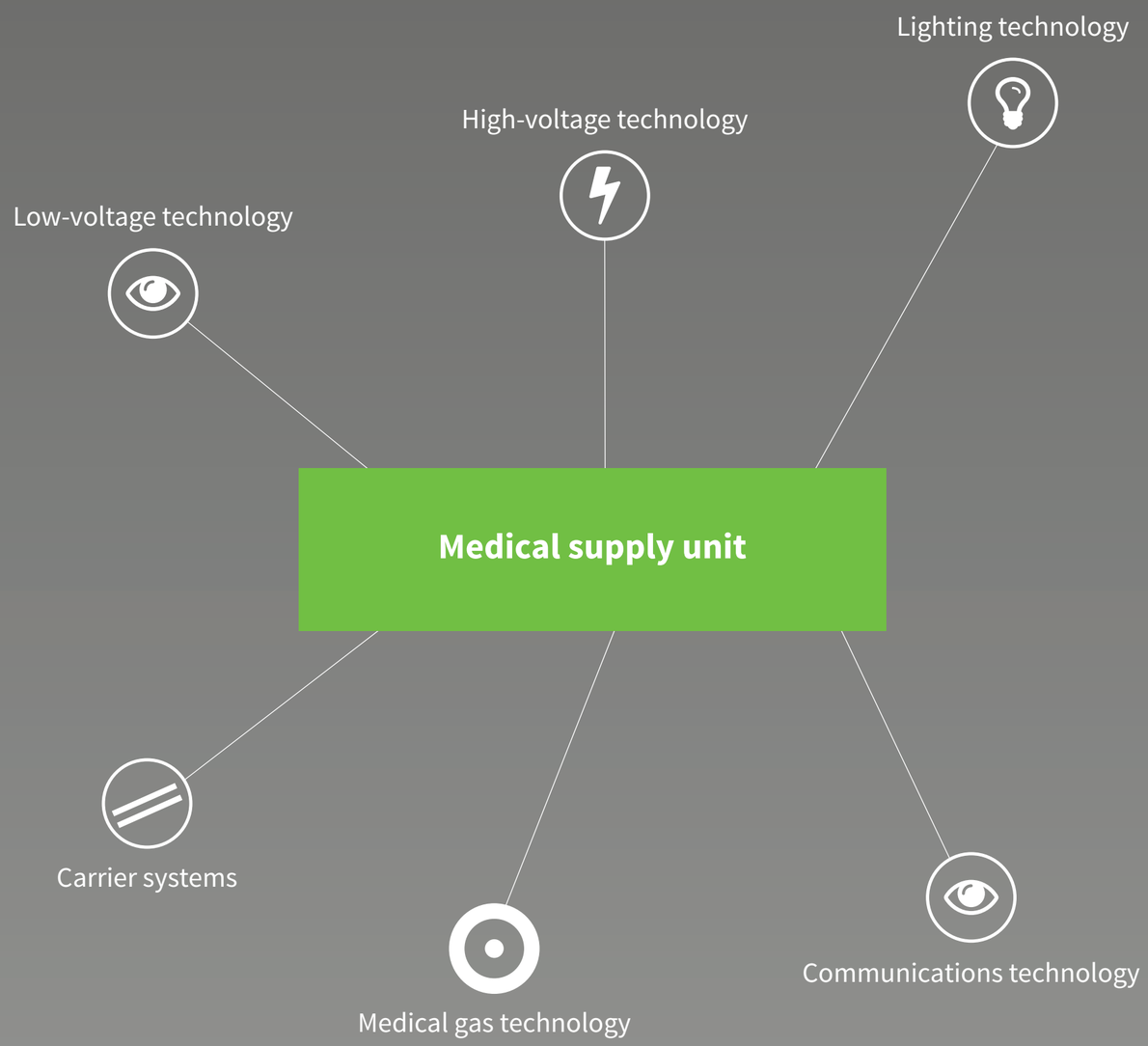


fig. 001 | Chart Medical Supply System

OUR MEDICAL SUPPLY UNITS

OUR MODULAR CONCEPT: FLEXIBLE COMBINATIONS AND TOTALLY CUSTOMISABLE!

What makes the medical supply units from **modul technik** so special? Actually everything! This is because our Class B medical products are modular in their design and can be easily and cost-effectively adjusted through combinations and customisations to the most diverse areas of application.

This is how we meet all the essential requirements for the optimum supply of the patient place with low and high voltage current, data and communications technologies and medical gases, and thereby enable the adaptation of diverse medical apparatus. Our individual design options as regards the colour, material and image motifs applied make each unit that we deliver a unique, connection-ready device.

Our ideal scenario is when we can work closely with you early in the planning phase of your facility. Then we can give architects and planners valuable and project-specific advice and assistance, saving you both time and effort.

All our basic modules are made from high-quality aluminium with its inherent long durability and ease of use. The powder coatings of all extruded aluminium profiles take specific hospital hygiene requirements into account and can be supplied in any colour you want from the RAL or NCS colour scale.

For those areas where particular comfort is to be provided, we also use wood décor and decorative graphics to transform a technical assistance device into an elegant piece of furniture. You can choose from our standard range or choose whatever you want. Whether you want atmospheric photos, artistic graphics, paintings or image-text combinations, we create all graphics in high-resolution, brilliant quality digital printing.

It goes without saying that all our products meet the “Essential Requirements” of EU Directive 93/42/EEC and are manufactured according to DIN EN ISO 11197. Our products only leave our premises after rigorous final testing for functionality and workmanship quality. This is also guaranteed by our quality management system that is certified according to DIN EN ISO 9001 and DIN EN ISO 13485.

STANDARD DESIGN

You do not have any customisation requirements and simply want to install proven and well-tested systems. Then we recommend our standard units to you which are described in more detail in an information box on many product pages. We can offer you these standard products at special conditions.

GENERAL EQUIPMENT FEATURES

GENERAL EQUIPMENT FEATURES

GENERAL EQUIPMENT HIGH-VOLTAGE TECHNOLOGY

The medical supply unit can be equipped with both earthed sockets (230 V/16 A with control light) and with CEE sockets (230 V/16 A 3 pole or 400 V/16 A 5-pole). The brand, number and electric circuit types of the installation elements and the voltage type of the supply voltage are specified depending on the project. Potential equalisation sockets can also be specified in accordance with the number of sockets.

As a preference PEHA COMPACTA safety sockets are installed.

Custom installation of additional elements is also possible. The electrical connecting terminal block is factory-installed and wired to the electrical equipment.

GENERAL EQUIPMENT MEDICAL GAS TECHNOLOGY

The medical supply unit is connected to the on-site medical gas supply at the central feed-in point. Current is usually supplied to the media either laterally, at the back or from the top directly into the respective media-specific channels or ceiling columns. The copper pipes installed inside the supply unit meet the quality requirements for medical gases according to DIN EN ISO 7396-1.

If required, the system is delivered ready for use with integrated tapping points according to DIN EN ISO 9170-1 and DIN EN ISO 9170-2. Market-available brands such as DRÄGER, GREGGERSEN, HEYER, MEDAP or other country-specific brands can be installed. Based on the specific project, the specialist planners will decide whether single or dual-circuit systems are to be used.

GENERAL EQUIPMENT MONITORING AND COMMUNICATIONS TECHNOLOGY

The connection sockets for monitors and patient monitoring devices are usually provided by the operator. In other cases we can arrange for delivery in consultation with the planners. Whereas specialist companies connect the monitor systems, we of course install all connector systems, sockets and IT inputs in accordance with manufacturer specifications. This is the best possible preparation for a fast and smooth apparatus connection after the installation of the supply unit.

GENERAL EQUIPMENT APPARATUS CARRIER SYSTEM G 1000

The apparatus carrier system (25x10 mm) is used to attach medical accessories such as flowmeters, catheter baskets, examination lights and much more. Consult our comprehensive Accessories Catalogue for a wide range of equipment options.

GENERAL EQUIPMENT LIGHTING TECHNOLOGY

There are many different lighting technology options available for the optimum lighting of the workplace and for the patient environment.

These include lamps for indirect general lighting, reading and examination lighting and lamps to provide lighting orientation. All technical data and lighting options can be found in the table on the respective product page.

Lighting modules meet the standards listed in DIN 5035 “Interior room lighting by artificial light” - Part 3, lighting in hospitals and in DIN EN ISO 11197. The lighting modules used in 2E user group rooms are generally equipped with low-stray field ballasts and are subjected to an EMC test.

Furthermore, many units can also be equipped with the bio-dynamically effective Visual Timing Light. More information on this can be found in the next chapter.

ASSEMBLY, CLEANING, MAINTENANCE AND REPAIR

ASSEMBLY

The medical supply unit can be assembled and fixed to both solid and lightweight construction walls. For lightweight construction walls an additional supporting structure is required on-site. For ceiling-suspended supply units, supporting structures are used based on the specific project.

CLEANING

The supply unit can be cleaned with standard cleaning agents and disinfected with alcohol-free disinfectants.
A high-quality electrostatic powder coating has been applied to the surface. Blank parts are made of anodised aluminium or stainless steel. The plastic components are cleaning and disinfectant-resistant.

MAINTENANCE AND REPAIR

The system must be maintained for the first time after 5 years and then after every 2 years. A contractual service agreement can be concluded for the maintenance work if required. More information can be found in the respective operating instructions.

ACCESSORIES

Our comprehensive range of accessories means you can set up your work area exactly as you want it. Consult our Accessories Catalogue to find out about the wide range of options available to you.

ambient cube



fig. 020 | ambient cube

THE BEAUTY OF SIMPLICITY

Who says functional supply solutions in hospitals must be sterile and boring? **ambient cube** proves the opposite by combining modern design with high-quality materials and functional technology to create a real eye catcher.

Take a look for yourself. As you can see, you see nothing! That is apart from fine wood surfaces, since all the electrical installation elements disappear out of view underneath the module.

As is the case with all our products, **ambient cube** can be furnished according to your specific wishes and equipped with a wide range of lighting options. You can of course also coordinate housing colours and décors individually to your own room design and to the other furniture.

ambient cube

THE BEAUTY OF SIMPLICITY

TECHNICAL DATA

(country-specific differences possible)
Further techncial data and design options on request

Electric specifications
Nominal voltage: 230 V - 240 V / 50 Hz - continuous operation
Protection class: I
Protection type: IP 20

Lighting technology
Nominal voltage: 230 V - 240 V / 50 Hz
Protection class: I
Connection type: Plug connection
Connection cross-section: 1.5mm² max.
Protection type: IP 20

Reading light (LED): Output ≙ 23 W
Reading light (T5 fluorescent tubes): Output ≙ 24 W / 2 x 24 W
Indirect lighting (LED): Output ≙ 53 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W
Night light (LED): Output ≙ 4.3 W

Operating pressure of medical gas technology
Oxygen: 5 bar
Compressed air: 5 bar
Vacuum: - 0,8 bar

General information
Media current feed: Rear, from top or side
Décors: HPL-laminate or melamine resin coating
Optimum assembly height: 1650mm (rail bottom edge)
Optional light control: DALI DIM

tab. 007

STANDARD DESIGN

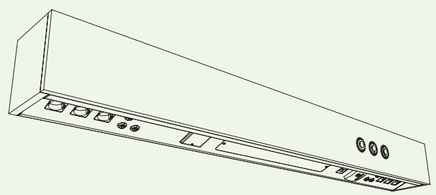
High-voltage current technology
6 mains sockets, brand Peha (COMPACTA)
6 potential equalisation sockets (POAG)

Communications technology
1 data socket, RJ 45, 2 pcs, brand Peha (COMPACTA)
2 hollow wall sockets, Ø 68mm (e.g. for nurse call button)

Lighting technology
Reading light (T5 fluorescent tubes): Output ≙ 24 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W

Medical gas technology
1 gas tapping point oxygen (O^2), brand modul
1 gas tapping point compressed air (Air), brand modul
1 gas tapping point vacuum (Vac), brand modul

General information
Rear feed
Dimensions (W x H x D): 1800 mm x 200 mm x 205 mm
Décor: R 4889 Bella Noce schoko (melamine resin-coated)



tab. 008



fig. 021 | ambient cube, individual decor

Katholisches Klinikum Koblenz-Montabaur, Germany

EXAMPLE DECORS



Bella noce schoko | *Sonoma Eiche* | *Niagara Buche* | *Himmelblau* | *Samtgelb* | *Manhattan*

ambient simplex



fig. 022 | ambient simplex

BEAUTIFUL FRONT WITH LOTS BEHIND!

Be it the fine wood décors in the various structures, fronts in a range of bright colours or elegant patterns – **ambient simplex** is streets ahead in terms of taste.

The connections for high and low voltage current, data and communications which we combine according to your requirements, are concealed behind the pull-down screen. Here the various lighting variants also ensure the best ambient light and cosy reading light options. Indirect room lighting can also be integrated on the top side.

The outlets for medical gases are accessible from the front in this variant.

ambient simplex

BEAUTIFUL FRONT WITH LOTS BEHIND!

TECHNICAL DATA

(country-specific differences possible)
Further techncial data and design options on request

Electric specifications
Nominal voltage: 230 V - 240 V / 50 Hz - continuous operation
Protection class: I
Protection type: IP 20

Lighting technology
Nominal voltage: 230 V - 240 V / 50 Hz
Protection class: I
Connection type: Plug connection
Connection cross-section: 1.5mm² max.
Protection type: IP 20

Reading light (LED): Output ≙ 23 W
Reading light (T5 fluorescent tubes): Output ≙ 24 W / 2 x 24 W
Indirect lighting (LED): Output ≙ 53 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W
Night light (LED): Output ≙ 4.3 W

Operating pressure of medical gas technology
Oxygen: 5 bar
Compressed air: 5 bar
Vacuum: - 0,8 bar

General information
Media current feed: Rear, from top or side
Décors: HPL-laminate or melamine resin coating
Optimum assembly height: 1650mm (rail bottom edge)
Optional light control: DALI DIM

tab. 009

STANDARD DESIGN

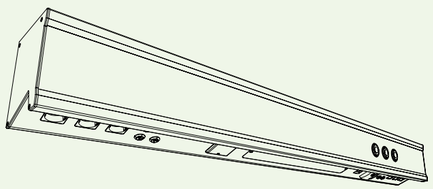
High-voltage current technology
6 mains sockets, brand Peha (COMPACTA)
6 potential equalisation sockets (POAG)

Communications technology
1 data socket, RJ 45, 2 pcs, brand Peha (COMPACTA)
2 hollow wall sockets, Ø 68mm (e.g. for nurse call button)

Lighting technology
Reading light (T5 fluorescent tubes): Output ⊠ 24 W
Indirect lighting (T5 fluorescent tubes): Output ⊠ 2 x 39 W

Medical gas technology
1 gas tapping point oxygen (O^2), brand modul
1 gas tapping point compressed air (Air), brand modul
1 gas tapping point vacuum (Vac), brand modul

General information
Rear feed
Dimensions (W x H x D): 1800 mm x 200 mm x 185 mm
Décor: R 4889 Bella Noce schoko (melamine resin-coated)

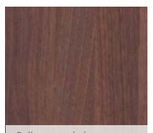


tab. 010



fig. 023 | ambient simplex, individual decor

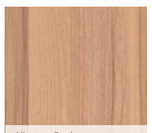
EXAMPLE DECORS



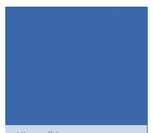
Bella noce schoko



Sonoma Eiche

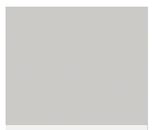


Niagara Buche



Himmelblau

Samtgelb



Manhattan

ambient light



fig. 024 | ambient light

COMFORT IN 1001 COLOURS

Light is the easiest way of creating comfort and atmosphere in a room. Seen from this perspective, **ambient light** is a true all-rounder, since the integrated LED light concept constantly creates new, luminous colour moods, which are freely selectable or which change based on a specified program cycle.

But of course it is still much more than an atmospheric design object.

Equipped with all the media connections according to your specifications, it is the central access point for patient care. Since the installation components for the communications, electric and data technologies are positioned on the underside, they are only visible at second glance, yet are accessible at all times.

In addition to the LED light on the front, this supply unit can also be fitted with various reading light and ambient light options.

ambient light

COMFORT IN 1001 COLOURS

TECHNICAL DATA

(country-specific differences possible)
Further technical data and design options on request

Electric specifications
Nominal voltage: 230 V - 240 V / 50 Hz - continuous operation
Protection class: I
Protection type: IP 20

Lighting technology
Nominal voltage: 230 V - 240 V / 50 Hz
Protection class: I
Connection type: Plug connection
Connection cross-section: 1.5mm² max.
Protection type: IP 20

Reading light (LED): Output ≙ 23 W
Reading light (T5 fluorescent tubes): Output ≙ 24 W / 2 x 24 W
Indirect lighting (LED): Output ≙ 53 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W
Night light (LED): Output ≙ 4.3 W
Ambient lighting (LED-RGB): Output 12,5 W / m

Operating pressure of medical gas technology
Oxygen: 5 bar
Compressed air: 5 bar
Vacuum: - 0,8 bar

General information
Media current feed: Rear, from top or side
Optimum assembly height: 1650mm (rail bottom edge)
Optional light control: DALI DIM

tab. 011

STANDARD DESIGN

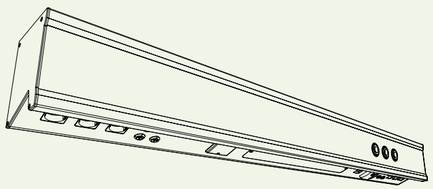
High-voltage current technology
6 mains sockets, brand Peha (COMPACTA)
6 potential equalisation sockets (POAG)

Communications technology
1 data socket, RJ 45, 2 pcs, brand Peha (COMPACTA)
2 hollow wall sockets, Ø 68mm (e.g. for nurse call button)

Lighting technology
Reading light (T5 fluorescent tubes): Output ≙ 24 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W
Ambient lighting (LED-RGB): Output ≙ 22,5 W

Medical gas technology
1 gas tapping point oxygen (O^2), brand modul
1 gas tapping point compressed air (Air), brand modul
1 gas tapping point vacuum (Vac), brand modul

General information
Rear feed
Dimensions (W x H x D): 1800 mm x 200 mm x 185 mm



tab. 012



fig. 025 | ambient light, with frontal outlets for medical gases

ambient compact



fig. 026 | ambient compact

PERFECT SUPPLY IN THE MOST COMPACT SPACE

To what extent can a medical supply unit be designed to be compact without losing any of the required media connectivity?

With **ambient compact** our developers have impressively answered this question. Its housing has the same small dimensions as ambient front. The trick. Through the positioning of additional installation elements on the front, there is space for additional media connections such high and low voltage, data and communications and medical gases. And different lighting solutions are also possible in the compact unit. This means that **ambient compact** is the ideal solution for a high supply requirement in cramped space situations.

ambient compact

PERFECT SUPPLY IN THE MOST COMPACT SPACE

TECHNICAL DATA

(country-specific differences possible)
Further techncial data and design options on request

Electric specifications
Nominal voltage: 230 V - 240 V / 50 Hz - continuous operation
Protection class: I
Protection type: IP 20

Lighting technology
Nominal voltage: 230 V - 240 V / 50 Hz
Protection class: I
Connection type: Plug connection
Connection cross-section: 1.5mm² max.
Protection type: IP 20

Reading light (LED): Output ≙ 11 W / 23 W
Reading light (T5 fluorescent tubes): Output ≙ 24 W / 2 x 24 W
Indirect lighting (LED): Output ≙ 40 W / 53 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W
Night light (LED): Output ≙ 4.3 W

Operating pressure of medical gas technology
Oxygen: 5 bar
Compressed air: 5 bar
Vacuum: - 0,8 bar

General information
Media current feed: Rear, from top or side
Décors: Powder or foil coating
Optimum assembly height: 1650mm (rail bottom edge)
Optional light control: DALI DIM

tab. 013

STANDARD DESIGN

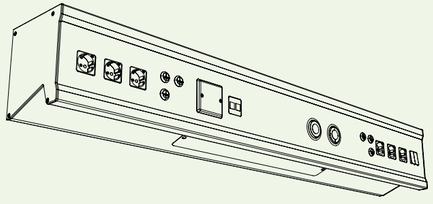
High-voltage current technology
6 mains sockets, brand Peha (COMPACTA)
6 potential equalisation sockets (POAG)

Communications technology
1 data socket, RJ 45, 2 pcs, brand Peha (COMPACTA)
2 hollow wall sockets, Ø 68mm (e.g. for nurse call button)

Lighting technology
Reading light (LED): Output ≙ 11 W
Indirect lighting (LED): Output ≙ 40 W

Medical gas technology
1 gas tapping point oxygen (O^2), brand modul
1 gas tapping point compressed air (Air), brand modul

General information
Rear feed
Dimensions (W x H x D): 1400 mm x 200 mm x 185 mm
Décor: Powder coating according to RAL colour scheme



tab. 014



fig. 027 | ambient compact

ambient junior



fig. 028 | ambient junior, robot-decor

INDIVIDUAL, COLOURFUL AND FUN

Whether a mouse group or pirate crew – already by kindergarten the little ones like to know where and to whom they belong. Why not also in hospital? With **ambient junior** you can give every child their very own space. Whether they are thematically designed rooms and wards or an individual image motif for each bed – you have a completely free hand in the design of the front panel and in the colour of the housing.

The suggestions on this page are only three examples from our standard range. We will be pleased to present others to you. Or you can create your own designs with us.

However playful the exterior may be, the interior of this medical supply unit is still very serious. The technology and the equipment options with media connections and lighting variants correspond to those of ambient front.

ambient junior

INDIVIDUAL, COLOURFUL AND FUN

TECHNICAL DATA

(country-specific differences possible)
Further technical data and design options on request

Electric specifications
Nominal voltage: 230 V - 240 V / 50 Hz - continuous operation
Protection class: I
Protection type: IP 20

Lighting technology
Nominal voltage: 230 V - 240 V / 50 Hz
Protection class: I
Connection type: Plug connection
Connection cross-section: 1.5mm² max.
Protection type: IP 20

Reading light (LED): Output ≙ 23 W
Reading light (T5 fluorescent tubes): Output ≙ 24 W / 2 x 24 W
Indirect lighting (LED): Output ≙ 53 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W
Night light (LED): Output ≙ 4.3 W

Operating pressure of medical gas technology
Oxygen: 5 bar
Compressed air: 5 bar
Vacuum: - 0,8 bar

General information
Media current feed: Rear, from top or side
Décors: HPL-laminate or melamine resin coating
Optimum assembly height: 1650mm (rail bottom edge)
Optional light control: DALI DIM

tab. 015

STANDARD DESIGN

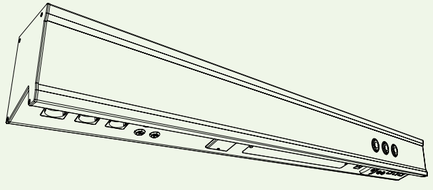
High-voltage current technology
6 mains sockets, brand Peha (COMPACTA)
6 potential equalisation sockets (POAG)

Communications technology
1 data socket, RJ 45, 2 pcs, brand Peha (COMPACTA)
2 hollow wall sockets, Ø 68mm (e.g. for nurse call button)

Lighting technology
Reading light (T5 fluorescent tubes): Output ≙ 24 W
Indirect lighting (T5 fluorescent tubes): Output ≙ 2 x 39 W

Medical gas technology
1 gas tapping point oxygen (O^2), brand modul
1 gas tapping point compressed air (Air), brand modul
1 gas tapping point vacuum (Vac), brand modul

General information
Rear feed
Dimensions (W x H x D): 1800 mm x 200 mm x 185 mm
Décor: Children's décor from standard range (digital printing)



tab. 016

STANDARD DECORS *

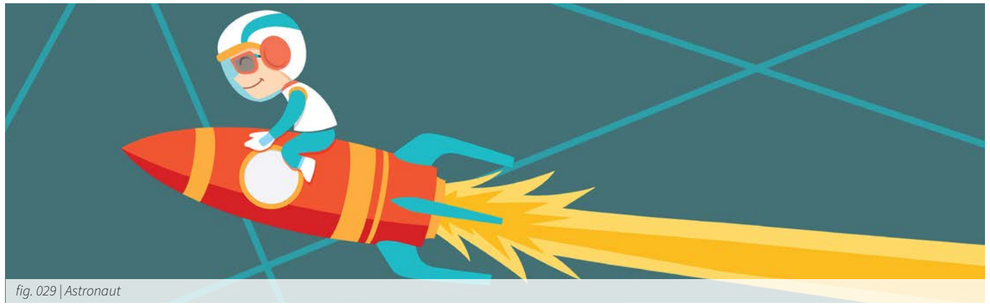


fig. 029 | Astronaut

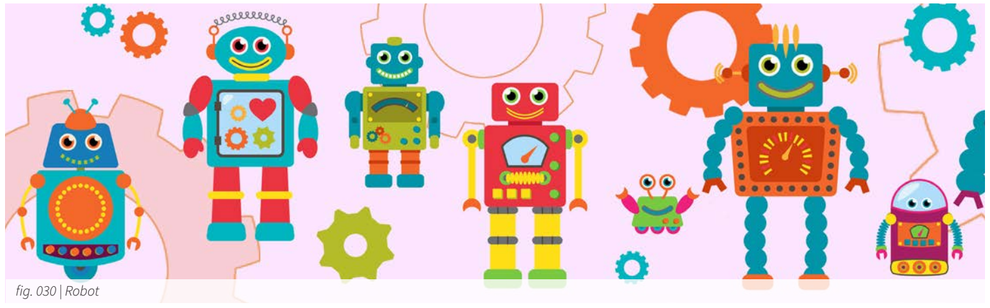


fig. 030 | Robot



fig. 031 | Superheroes

* customized designs available on request.

modul technik

Medizinische Versorgungssysteme und Geräte
medical supply systems and equipment

CE 0044

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The technical data in the catalouges as well as the weight, load and dimensions have been issued to the best of our knowledge.
Errors reserved. We reserve the right to make technical alterations for the purpose of progress.

TÜV NORD CERT GmbH ISO 9001/ISO 13485

11/2015-0E