KWC

Professional

Comfort & hygiene for the healthcare and nursing sector

Experience perfection

KWC Professional

Experience perfection

KWC Professional, as part of the KWC Group Management AG, focuses on smart equipment for sanitary rooms in (semi-)public and commercial facilities. We turn what has previously been impossible into reality for our customers and implement it innovatively in practice. Working together, we develop complete sanitary room solutions that are aesthetically pleasing.

Contents

In hospitals and care facilities, hygiene, safety and ergonomics are essential. Our products, specially designed for the healthcare sector, take these aspects into account in terms of functionality and material selection. Read on to find out more about our state- of-the-art tap technologies and fitting elements.

Healthcare - Our contribution

Hygienically sensitive areas in hospitals and healthcare facilities require special attention in planning and design. The hygiene, functionality and ease of cleaning of the sanitary room equipment are of vital importance for patients and medical staff. The product solutions used in the healthcare sector must therefore meet specific requirements.

The ultimate goal is to reduce the transmission of germs

Infections often occur through hand contact, contaminated objects or even water. It is therefore important to reduce the risk of infection to a minimum for both patients and medical care staff by using functional tap technology and hygienic materials.

In addition to the hygienic aspects, convenient operation and ease of care are important product features that promote a safe and smooth daily routine in medical facilities.

Application areas

- Patient rooms
- Treatment rooms
- Surgical areas
- Sluice rooms
- Cleaning rooms
- Visitor washrooms

Requirements

- Ensuring hand, surface and drinking water hygiene
- Ensuring protection against scalding
- Barrier-free access
- User-friendliness
- Durability/robustness
- Ease of care
- Economy/sustainability
- Property-specific solutions

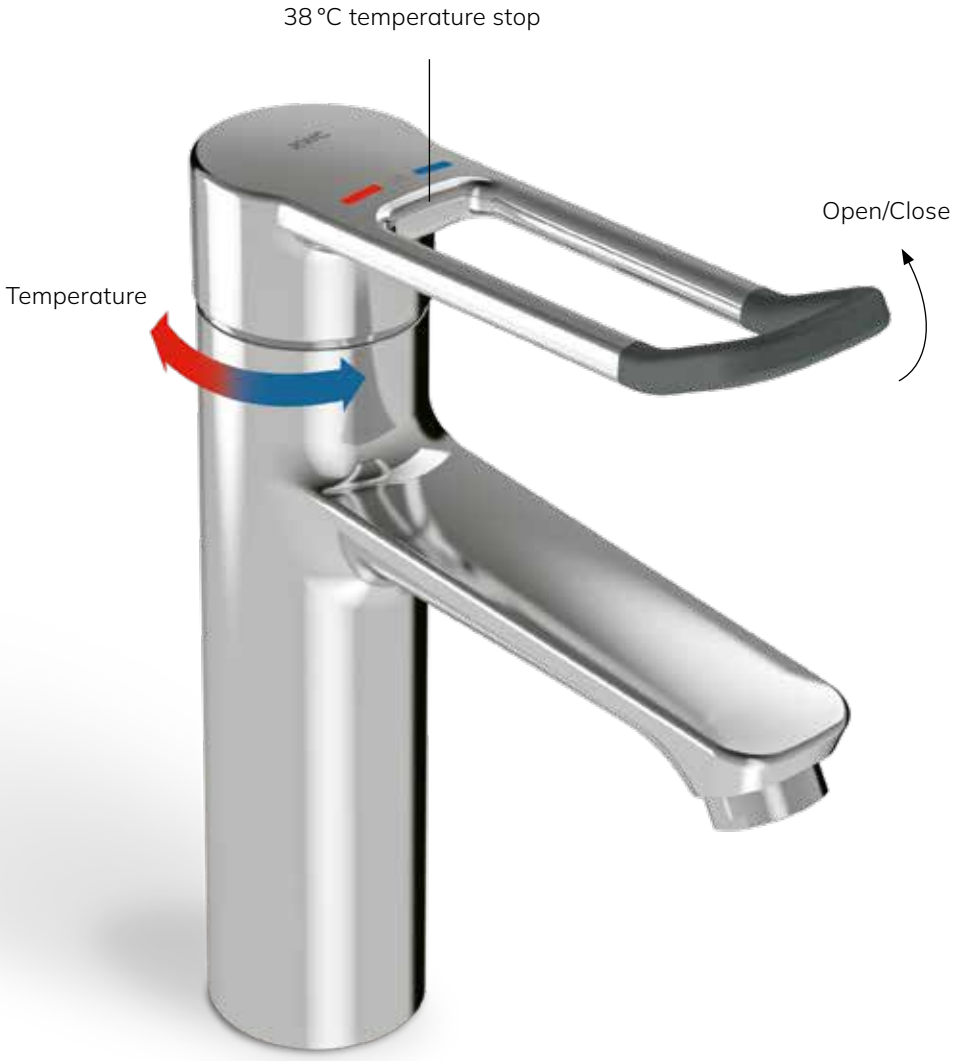
Bathing comfort for multiple generations

Barrier-free washrooms

Form and functionality for all

When it comes to planning care facilities and hospitals, our understanding of the relationship between people and architecture is well respected. We provide innovative taps, washbasins and functional equipment elements that have been specially designed for barrier-free sanitary facilities, taking into account the needs of people with physical impairments without stigmatising users.

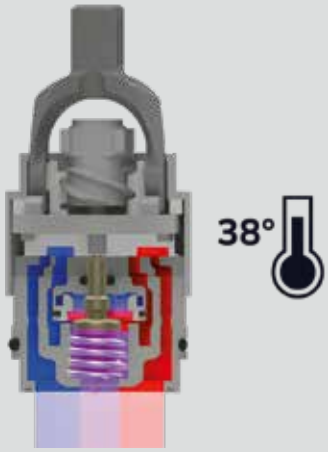
Products in the room:
F4LT-Med thermostatic single-lever pillar mixer on MEDCARE washbasin,
MEDCARE dispensers for liquid soaps and disinfectants,
F4LT-Med wall-mounted mixer for showering
(here in combination with hand shower and shower pole),
CONTINA support and grab rails and folding shower seat



Scald protection & drinking water hygiene

F4 thermostatic single lever mixer

The F4 thermostatic single lever mixer is ideal for patient bathrooms. The innovative washing and shower fittings with built-in thermostatic cartridges ensure convenience and safety when washing and showing, as well as providing active scald protection.



Active scald protection [1]
At the core of the F4 taps is "THERM inside" – a thermostatic cartridge that ensures that the selected temperature remains constant over the entire settings range, regardless of pressure and load changes in the drinking water installation. The maximum water temperature can be limited via an adjustable turn-proof temperature stop.

On pillar mixers, it is therefore **not necessary to use an under-table thermostat** as scald protection.

Legend

1) 38° THERM INSIDE
THERM inside thermostatic cartridge

2)
Decoupled water line

3)
Safe-Touch housing

Ni
No nickel coating

Pb ≤ 0,2%
Low-lead brass alloy

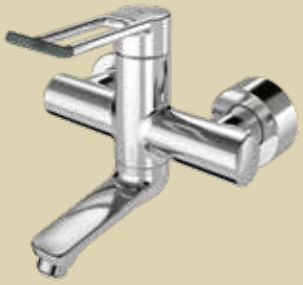
Simple, intuitive operation
The ergonomically shaped lever cap on the F4 taps is easy to grip thanks to its bracket design and the slight curvature at the front, even if the user has limited manual dexterity. In accordance with the two-sense principle, the basalt-grey coating on the end of the lever also provides visual and tactile orientation for all users.

Drinking water hygiene [2]
Excessive temperatures in the cold-water range may cause microbial contamination in the drinking water installation. To minimise this risk, and therefore to ensure perfect drinking water hygiene, the F4 single lever mixer wall-mounted mixers have thermally insulating components in order to reduce the transmission of heat from the tap housing to the cold water line. Decoupled from the housing, the volume-reduced, smooth water flow consists of low-lead brass (lead proportion ≤ 0.2%), and has no nickel coating.

Self-emptying spout
The swivelling spout is self-emptying after closing the tap and is equipped with a laminar jet controller.

Safety [3]
The wall-mounted mixers for washing and showering also come with anti-scalding Safe-Touch housing.

Surface hygiene
The tap bodies are characterised by their water-repellent, smooth surfaces with reduced gaps and are particularly hygienic and easy to clean.



F4LT-Med thermostatic single-lever wall-mounted mixer

F4LT1005 / 2030066753

- With a thermostat-controlled mixer cartridge and active scald protection
- Fail-safe against backflow
- Adjustable, turn-proof temperature stop
- Self-emptying spout with laminar jet controller
- Anti-scalding Safe-Touch housing

F4LT-Med thermostatic single-lever pillar mixer

F4LT1002 / 2030066749

- With a thermostat-controlled mixer cartridge and active scald protection
- Fail-safe against backflow
- Adjustable, turn-proof temperature stop
- Laminar jet controller

Variant

F4LT1008 / 2030068119
(with connection pipes)

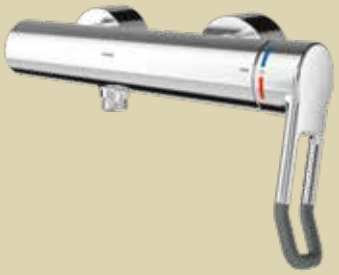
F4LT-Med thermostatic single-lever pillar mixer

F4LT1003 / 2030067801

- With pop-up waste set
- With a thermostat-controlled mixer cartridge and active scald protection
- Fail-safe against backflow
- Adjustable, turn-proof temperature stop
- Laminar jet controller

Variant

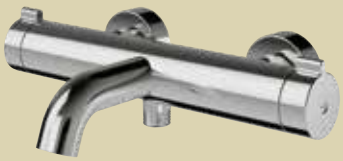
F4LT1009 / 2030068120
(with connection pipes)



F4LT-Med thermostatic single-lever wall-mounted mixer

F4LT2003 / 2030066757

- With a hand shower connection
- With a thermostat-controlled mixer cartridge and active scald protection
- Adjustable, turn-proof temperature stop
- Fail-safe against backflow
- Anti-scalding Safe-Touch housing



F4MT-Med thermostatic bath mixer

F4MT2001 / 3600000189

- With active scald protection
- Turn-proof temperature stop, set to 38°C at the factory
- Handles on the side for regulating water volume and temperature, integrated diverter for bathtub and hand shower
- With the option of manual thermal disinfection

Hand shower

ACXX2007 / 2030051216

- Low aerosol formation with anti-limescale system
- With rain jet
- Chrome-plated plastic

Shower bracket

ACXX2008 / 2030051217

- With hand shower holder with push button for adjusting the height
- Chrome-plated brass

Integrated recessed grips
The recessed grips, which are integrated either at the side or at the front of the washbasin, allow the pleasant warmth of the material to be felt. They offer users optimal grip to pull themselves up and be supported.

Two-sense principle
Versions with colour strips are available as a visual aid for users. The flush-fitting basalt grey recessed grips help visually impaired users recognise the washbasin.

Easy to clean & hygienic
The seamlessly moulded washbasins are made of high-quality mineral cast material (MIRANIT) with a smooth, non-porous surface that is easy to clean and disinfect.

Safe & convenient
The soft, rounded shapes and corners reduce the risk of injury. Depending on the version, the washbasins have convenient storage surfaces at the sides and rear.

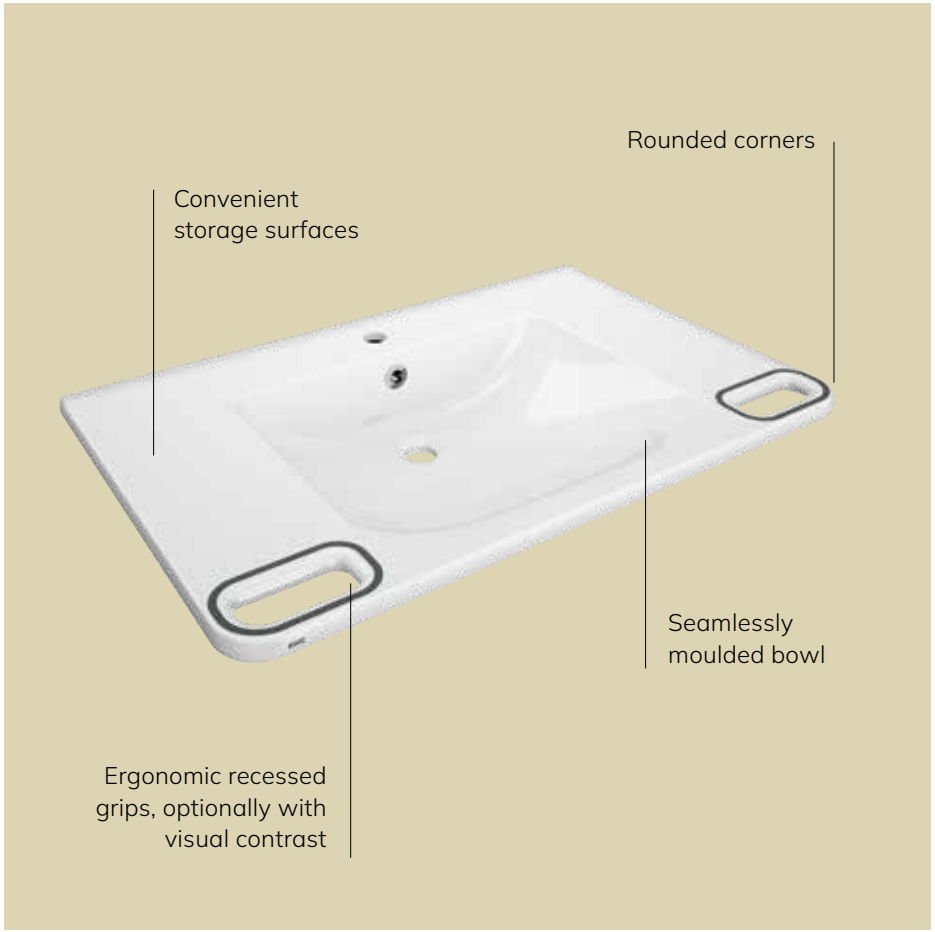
Barrier-free washbasin comfort

MEDCARE - Seamlessly moulded ease-of-use

Many patients in hospitals and care facilities want to remain independent and not be reliant on nursing staff while washing. The bathroom fixtures should be able to meet this requirement.

The MEDCARE washbasins specially designed for barrier-free bathrooms take into account the needs of people with physical and visual impairments. The soft-flowing and slender shape of the wheelchair-accessible MEDCARE washbasins makes the bathroom easy to use.

An elbow-operated dispenser system for liquid soaps and disinfectants completes the washing station in the patient bathroom. The MEDCARE dispensers with a short stainless steel lever and basalt grey colouring of the spout harmonises with the other MEDCARE equipment and colour markings in the healthcare product range.



MEDCARE dispenser

MEDC05S I 3600003340

- for liquid soaps and disinfectants
- with operating lever 169 mm
- for 500 ml standard Euro-bottles to be provided by the client

Variant

MEDC10S I 3600003343
(with operating lever 170 mm, for standard Euro-bottles 1000 ml)

The choice is yours

Wide range for the right solution

The comprehensive MEDCARE washbasin range offers 20 designs in various widths. The washbasins come with or without grab rails and are available as single washbasins or customised multiple washbasins. Further versions with overflow allow the basin to be filled with water.

All MEDCARE washbasins can be optimally combined with the F4LT-Med thermostatic single lever mixer taps from the KWC Professional range of taps. Depending on the washbasin variant, it is possible to install free-standing or wall-mounted taps.

ANMW0044 / 2030072430

- With tap hole
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
650 x 150 x 550 mm (W x H x D)

Variant

ANMW0045 / 2030072431
(without tap hole)

ANMW0054 / 2030072438

- With tap hole and overflow
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
850 x 150 x 550 mm (W x H x D)

Variant

ANMW0055 / 2030072439
(without tap hole)

ANMW0056 / 2030072440

- With tap hole
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
850 x 150 x 550 mm (W x H x D)

Variant

ANMW0057 / 2030072441
(without tap hole)

ANMW0038 / 2030070763

- With recessed grips at the sides and seamlessly embedded colour strips
- With tap hole and overflow
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
650 x 150 x 550 mm (W x H x D)

ANMW0042 / 2030072428

- With recessed grips at the sides and seamlessly embedded colour strips
- Without tap hole
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
650 x 150 x 550 mm (W x H x D)

ANMW0039 / 2030070764

- With recessed grips at the sides
- With tap hole and overflow
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
650 x 150 x 550 mm (W x H x D)

Variant

ANMW0040 / 2030072426
(without tap hole)

ANMW0041 / 2030072427

- With recessed grips at the sides
- With tap hole
- Alpine white colour, temperature resistant up to 80 °C

Variant

ANMW0043 / 2030072429
(without tap hole)

ANMW0046 / 2030070523

- With recessed grips at front and seamlessly embedded colour strips
- With tap hole and overflow
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
850 x 150 x 550 mm (W x H x D)

Variant

ANMW0048 / 2030072432
(without tap hole)

ANMW0050 / 2030072434

- With recessed grips at front and seamlessly embedded colour strips
- With tap hole
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
850 x 150 x 550 mm (W x H x D)

Variant

ANMW0052 / 2030072436
(without tap hole)

ANMW0047 / 2030070524

- With recessed grips at front
- With tap hole and overflow
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
850 x 150 x 550 mm (W x H x D)

Variant

ANMW0049 / 2030072433
(without tap hole)

ANMW0051 / 2030072435

- With recessed grips at the front
- With tap hole
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
850 x 150 x 550 mm (W x H x D)

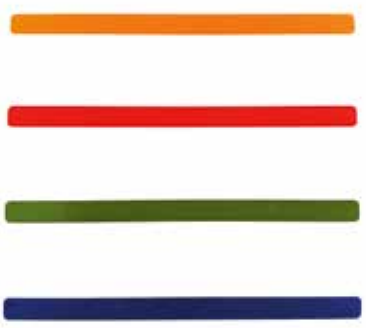
Variant

ANMW0053 / 2030072437
(without tap hole)

MEDCARE multiple washbasins

- With up to four bowls, variable spacing
- With/without tap hole
- With/without overflow

Dimensions
900–3000 x 150 x 550 mm (W x H x D)



Colour range
In addition to the standard "Umbra grey", other RAL colours can be supplied on request. Below are some examples.

Barrier-free line of washbasins

VARIUScare

The soft, rounded outline of the wash-basins in the VARIUScare line surrounds a modern, flat bowl which makes it easy to wash your hands. The washbasin rim, which has a pleasantly warm feel, has an integrated, all-round gripping edge that allows users to pull themselves up and be supported on all sides. The VARIUScare single washbasins are available in three sizes, optionally with or without a colour strip.

Colour strips for visual orientation
The colour strip is seamlessly embedded in the washbasin rim to visually orient the washbasin using the two-sense principle.

Ergonomic washbasin outline
The easy-grip washbasin rim allows users to pull themselves up and be supported on all sides.

Reg. no.
P1B080

ANMW500 / 2030020956

- With colour strip seamlessly embedded in the washbasin rim
- With integrated, all-round gripping edge
- With tap hole
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
650 x 120 x 550 mm (W x H x D)

Variants

ANMW502 / 2030020959
550 x 120 x 450 mm (W x H x D)

ANMW504 / 2030020962
450 x 100 x 350 mm (W x H x D)

ANMW501 / 2030020958

- With integrated, all-round gripping edge
- With tap hole
- Alpine white colour, temperature resistant up to 80 °C

Dimensions
650 x 120 x 550 mm (W x H x D)

Variants

ANMW503 / 2030020961
550 x 120 x 450 mm (W x H x D)

ANMW505 / 2030020963
450 x 100 x 350 mm (W x H x D)

Everything well in hand

MEDCARE equipment elements

Stability and user friendly are the central topics for barrier-free sanitary facilities.

The support and grab rails in basalt grey impress with their pleasant feel and easy-to-grip ergonomic diameter of 32 mm. In addition to grab rails in various lengths, the range also includes a 90° angled grab rail and hinged WC grab rail.

On the angled grab rail with hand shower holder and on the hinged WC grab rail with flush button, the functional components in white give users visual orientation in line with the proven two-senses principle.

An elbow-operated dispenser system for liquid soaps and disinfectants completes the MEDCARE range of accessories for various washing stations in the healthcare sector.
(plaese see page 15).

Stability & Usability
The accessible shower area is a combination of the following:
F4LT-Med thermostatic wall-mounted mixer, hand shower and MED-CARE angled grab rail with integrated hand shower holder and folding shower seat in basalt grey.

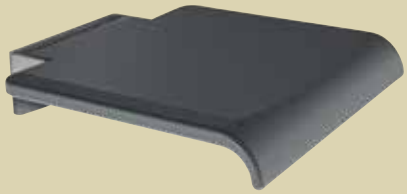
MEDCARE angled grab rail

MEDC0005 | 3600003772

- 90° angled grab rail, right-hand version
- with hand shower holder in contrast colour white

Variant

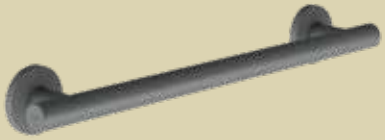
MEDC0006 | 3600003774
(Left-hand version)



MEDCARE foldable shower seat

MEDC0013 | 3600003783

- with integrated reinforcement frame and wall bracket made of stainless steel
- oad capacity up to 150 kg



MEDCARE grab rail

MEDC0002 | 3600003769

- grab rail, length 600 mm
- Befestigung mittels Edelstahlzylinder und Rosetten für verdeckte Montage

Variants

MEDC0001 | 3600003768
(Lenght 300 mm)

MEDC0003 | 3600003770
(Lenght 750 mm)

MEDC0004 | 3600003771
(Lenght 900 mm)

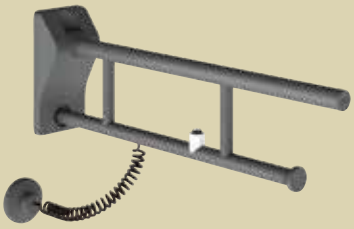
MEDCARE angled grab rail

MEDC0007 | 3600003775

- 90° angled grab rail, right-hand version

Variant

MEDC0008 | 3600003776
(Left-hand version)



MEDCARE folding support rail

MEDC0011 | 3600003781

- with electronic flush actuation and integrated toilet roll holder
- functional components in contrast colour white

Variant

MEDC0009 | 3600003778
(without electronic flush actuation)

Hygiene saves lives

Safe surgical & medical sanitary facilities

Custom hygiene and ergonomics

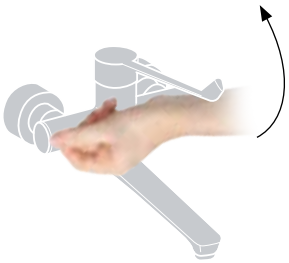
Virtually nowhere are hygiene and safety as important as they are in hospitals and nursing facilities. Not only in terms of protecting the sick and vulnerable, but also the medical and nursing staff themselves.

For this reason, we have developed our products together with specialists in hygiene, as well as experts in the operation and management of hospitals and care facilities.

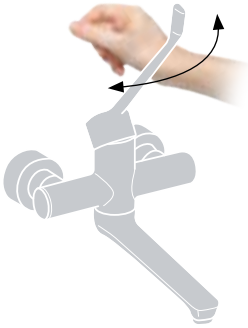
In addition to protecting against infection, we also focus on user safety, convenient operation, as well as the efforts required and benefits during installation and operation. Washbasins and taps that are used in surgical and medical sanitary facilities must therefore meet specific requirements.

Products in the room:
F4LT-Med thermostatic single-lever wall-mounted mixers, VARIUSmed multiple washbasin for surgical sanitary facilities, MEDCARE dispensers

Open/Close



Temperature control



Reduce the transmission of germs

F4 single lever mixer

Before every operation, the care team in the theatre must thoroughly clean their arms and hands right up to their elbows to avoid any possible transfer of germs and bacteria onto the patient.
For these hygiene-critical areas of operation, the F4 line of taps has been expanded to include thermostatic single lever mixers for touch-free operation and touch-free, electronic versions.

Hands-free operation
The F4 thermostatic single lever mixers feature an ergonomic arm lever with a wide control surface (paddle), which is operated using your forearm or elbow.

Active scald protection & safety
"THERM inside" provides active scald protection, as with all single lever mixers in the F4 line. The wall-mounted mixers' Safe-Touch housing protects against burns in the event of contact with skin.

Optimised drinking water hygiene
The design of the F4 wall-mounted mixers for surgical areas also ensures perfect drinking water hygiene, with the reduced-volume water line that is decoupled from the housing.

Touch-free operation with hygiene options
The electronic F4ET wall-mounted mixers with stagnation-free solenoid valve cartridge increase hygiene further still with activated hygiene flushing [4] 24 hours after the last use, and the option of manual thermal disinfection [5].

4) 
5) 

F4LT-Med thermostatic single-lever wall-mounted mixer

F4LT1025 / 2030072408

- For surgical sanitary facilities and sluice rooms
- With thermostat-controlled mixer cartridge and active scald protection
- Adjustable, turn-proof temperature stop
- Fail-safe against backflow
- Self-emptying, **long** spout with laminar jet controller
- Anti-scalding Safe-Touch housing

F4LT-Med thermostatic single-lever pillar mixer

F4LT1010 / 2030072403

- For medical sanitary facilities
- With thermostat-controlled mixer cartridge and active scald protection
- Fail-safe against backflow
- Adjustable, turn-proof temperature stop
- Laminar jet controller

Variant

F4LT1011 / 2030072405
(with connection pipes)

F4LT-Med thermostatic single-lever pillar mixer

F4LT1015 / 2030072404

- For medical sanitary facilities
- With pop-up waste set
- With a thermostat-controlled mixer cartridge and active scald protection
- Fail-safe against backflow
- Adjustable, turn-proof temperature stop
- Laminar jet controller

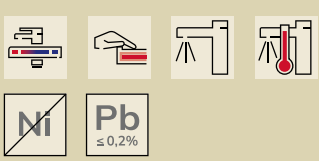
Variant

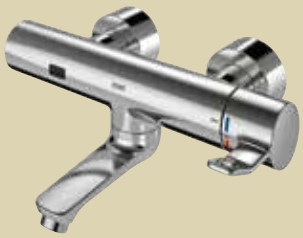
F4LT1016 / 2030072406
(with connection pipes)

F4ET-Med electronic thermostatic wall-mounted mixer

F4ET1002 / 2030072425

- For surgical sanitary facilities and sluice rooms
- Touch-free, opto-electronic control
- Activated hygiene flush, 24 hours after last operation
- Self-emptying, **long** spout with laminar jet controller
- Anti-scalding Safe-Touch housing

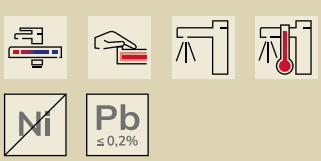




F4ET-Med electronic thermostatic wall-mounted mixer

F4ET1001 / 2030072424

- For medical sanitary facilities
- Touch-free, opto-electronic control
- Activated hygiene flush, 24 hours after last operation
- Self-emptying spout with laminar jet controller
- Anti-scalding Safe-Touch housing



F4LT-Med thermostatic single-lever wall-mounted mixer

F4LT1024 / 2030072407

- For medical sanitary facilities
- With thermostat-controlled mixer cartridge and active scald protection
- Adjustable, turn-proof temperature stop
- Fail-safe against backflow
- Self-emptying spout with laminar jet controller
- Anti-scalding Safe-Touch housing

MEDCARE dispenser

MEDC05L I 3600003339

- for liquid soaps and disinfectants
- with operating lever 223 mm
- or 500 ml standard Euro-bottles to be provided by the client

Variant

MEDC10L I 3600003341
(with operating lever 230 mm, for standard Euro-bottles 1000 ml)

VARIUSmed multiple washbasins
The seamless multiple washbasins, with their variable number of bowls (between one and three) and custom design, allow the wash-room equipment to be adapted to the setting.

Ingenious bowl geometry
Their ergonomically shaped, large bowls with a reduced projection in the tap area offer clinical staff comfortable conditions for cleaning and disinfecting their hands and arms. The ingenious geometry of the washbasins with a slight incline prevents liquids from dripping onto the floor.

Hygienic surface
The all-round, non-porous gel coating effectively prevents bacteria and microorganisms from sticking.

MEDCARE Dispensers
The range includes elbow-operated dispenser for liquid soaps and disinfectants with long arm lever for physician and operating theatre sanitary facilities or unclean work areas.

Custom ergonomics and hygiene

VARIUSmed surgical multiple washbasins and general purpose utility sinks made from MIRANIT meet strict hygiene guidelines in hospitals and care facilities.

The seamless washbasins with a non-porous surface and ergonomic bowls offer clinical staff comfortable conditions for cleaning and disinfecting their hands and forearms. Moreover, the material, surface and shape of the line's general purpose utility sinks make them ideal work equipment for medical facilities.

VARIUSmed multiple washbasins

- With up to three bowls, variable spacing
  Centre-to-centre distance of the bowls, min. 700 mm
- Alpine white colour, temperature resistant up to 80 °C
- Coated with gelcoat on all sides

Dimensions
700–3200 x 230 x 550 mm (W x H x D)

VARIUSmed cleaning sinks
The general purpose utility sinks come with one or two bowls as well as storage areas adapted to the space and usage requirements.

The generously sized, seamlessly moulded bowl with large inner radius is particularly user-friendly and easy to clean.

VARIUSmed general purpose utility sinks

- With up to two bowls, variable spacing
- Alpine white colour, temperature resistant up to 80 °C
- Coated with gelcoat on all sides

Dimensions when using
stainless steel brackets
800–3200 x 375 x 600 mm (W x H x D)
Centre-to-centre distance of the bowls, min. 800 mm

Dimensions when using
MIRANIT brackets
950–3200 x 375 x 600 mm (W x H x D)
Centre-to-centre distance of the bowls, min. 950 mm

Public sanitary facilities | Materials


Haus E
Station D

Hygiene & safety in all areas

F5 single lever mixer

F5L-Therm single lever mixer with hygiene options
Thanks to the pre-assembled or optional hygiene units, the thermostatic single lever mixers from the F5 line provide additional hygiene options, such as automatic and individually adjustable water hygiene flushing and the start of thermal disinfection programs for ensuring drinking water hygiene.

A bidirectional remote control is optionally available for setting the respective function parameters, such as flushing time and flushing interval, and for exporting the statistics data. The correspondingly saved operating parameters are available to the operator to monitor and manage the drinking water installation system and to ensure transparency when it comes to hygiene measures.

F5L-Therm shower fitting with built-in hygiene unit

Thanks to its large setting range, the integrated "THERM inside" thermostatic cartridge also has excellent mixing behaviour and provides thermostatic protection from scalding in the F5 line. The ergonomic, non-slip lever also functions as a pointer for the mixer markings.

F5L-Therm washbasin taps can be combined with hygiene units for in-wall installation (shown here) or wall mounting. A function block with solenoid valve cartridges is connected on one side to the fitting base and on the other side via cables to the electronic control unit, which is positioned underneath the washbasin.

Custom wash place concepts

EXOS. system line

EXOS. washbasins and accessories
High-quality single washbasins or customised multiple washbasins – including barrier-free versions – offer individual equipment options and are the ideal solution to spatial design challenges in public sanitary facilities. The EXOS. washbasins in mineral granite (MIRANIT) impress with their flexibility, quality and modern styling. The gently sloping basins blend seamlessly into the smooth washbasin countertop. The accentuated basin contour is harmony with the striking design of the matching accessories for the range.

The range of accessories extends from soap and paper towel dispensers to waste bins, toilet roll holders, disinfectant dispensers and much more. The wall-mounted and recessed-mounted solutions are characterised by the combination of high-quality materials such as stainless steel and glass.

The touch-free EXOS. disinfectant dispensers can also be combined with the premium free-standing mounting stand in stainless steel.

MIRANIT

Stable yet flexible

MIRANIT stands for a stable compound consisting of approximately 80% natural minerals – such as marble powder, sandstone and quartz sand – and approximately 20% high-quality unsaturated polyester resin. Due to its excellent fluidity, the resin-bonded mineral material can also be used to create products of almost any shape with a minimal material thickness as well.

The smooth, non-porous, hygienic gel coat surface repels dirt, comes in the Alpine white colour as standard, and is temperature-resistant up to 80 °C as well as being especially easy to care for. Possible surface damage can be mended with special repair kits.

Advantages of MIRANIT as a material

- High-quality material from a single cast, free from glue seams and joints
- With all-round, non-porous, hygienic gel coating that effectively prevents bacteria and microorganisms from sticking
- Pleasant, warm feel
- Highly resistant to chemical and physical stresses, e.g. use of disinfectants
- Higher stability in terms of impact and shatter-resistance compared to sanitary ceramics

Stainless steel

Special solutions made of high-quality, robust material

Stainless steel has four material properties that make it ideal for special hospital areas or wards with increased safety requirements. This material is robust, easy to care for, hygienic and can withstand the toughest demands.

Stainless steel hygiene wash places with integrated tap control and soap and disinfectant dispensers are available as complete units for space-saving installation.
The stainless steel product range for hospitals is rounded off by customised surgical washing troughs for one to four washing places as well as removable wall outlets and spouts.

Material number 1.4301 (AISI 304) is used in accordance with DIN EN 10088. The formula 18/10 stands for up to 18% chrome and up to 10% nickel. This composition gives the material its special properties. It is insensitive to moisture and most acids, and is characterised by hardness, toughness, hygiene and high tolerance to heat and cold.

Dirt and grease can be washed off easily from the smooth, non-porous surface. Scratches and nicks on covers soon lose their hard-edged contours and blend into the surface.

Advantages of stainless steel as a material

- Stainless (rust only appears as a result of external influences)
- Largely resistant to all common acids used for cleaning
- Hygienic thanks to its excellent options for disinfecting against bacteria and viruses
- Resistant to mechanical stress
- Easy to clean even when heavily soiled
- 100% recyclable

Standards | Guidelines | Requirement premises

With regard to drinking water hygiene, fittings and sanitary room design, clear requirements have been formulated in various regulations as ‘generally recognised rules of technology’, which must be taken into account during planning and operation. Hand, surface and drinking water hygiene as protection against infection and hazard-free sanitary room equipment are the overriding premises. The following selection does not claim to be exhaustive.

Important note: Information on deviating local regulations, guidelines and specific regulations of the respective federal states can be obtained in particular from the health authorities and home supervisory authorities. [27].

Drinking water

- The protection and improvement of drinking water quality is defined in terms of human health. Water intended for human consumption must be of such a quality that its consumption or use is not likely to cause harm to human health, in particular through pathogens.[1, 9, 11]
- If the technical action value for legionella of 100 CFU/100 ml (colony count at 22 °C) is reached, the operator must immediately initiate corrective measures. [9, 41]
- In the current Drinking Water Ordinance, the lead limit value is 0.01 mg/ml. From 12.01.2028, the limit value will be lowered to 0.005 mg/l (equivalent to 5 µg/l). [9]

Hot water temperatures at the tap must be at least 55 °C - Prevention of legionella

- Temperatures at the outlet of the hot water supply ≥ 60 °C and a maximum temperature drop of 5K in the circulating hot water network must be maintained. [15, 43]
- Hot drinking water must reach at least 55 °C at the tap. [13, 15, 16, 43, 48]

Sanitary fittings with scald protection support hazard-free sanitary room equipment

- The 2019 judgement by the Federal Constitutional Court provides clarity for the first time in the application of standards and guidelines and assesses the implementation of scald protection in the healthcare sector as mandatory and not as a recommendation! This also applies to existing facilities! [13]
- Compliance with the maximum water temperature of 38 °C or 43 °C at tapping points in hospitals, schools and retirement homes [3, 13, 15, 31, 26, 27, 41, 43, 48] is a necessity; this also applies to the surface of the tap.
- In the event of pressure and load changes in the pipe network and cold water failure, thermostatic tap technology provides reliable user comfort and protection against scalding. [8, 13, 15]
- Mixer taps with mechanical limitation of the temperature stop are not permitted. [13, 15]
- To ensure protection against scalding at washing and showering areas, only thermostatic taps may be used in hospitals; preferably as one-hand operation with an extended lever arm.
  [3, 13, 15, 26, 27, 31, 41, 43, 48]
- Only wall-mounted taps are permitted to support surface hygiene. [27, 41]
- Fittings for hand-contact-free elbow actuation must be used at doctors' washing facilities. [27]
- Avoid laminar spray regulators without air admixture and aerosol formation in shower heads. [27, 41]
- The basin and tap must be coordinated. The flow jet must not hit the drain directly. [27, 41]
- Automatic drain and shower hose emptying after the closing process. [7, 14, 27, 41]

Cold water must remain cold, max. 25 °C

- To reduce the temperature-related proliferation of microorganisms (biofilm). [15, 36, 41]
- Effectively delay heat transfer through thermal separation, through local, structural and technical separation of cold and hot pipes. [15, 36, 41, 46]
- 30 seconds after a tapping point is fully opened, the temperature of the cold drinking water must not exceed 25 °C. [9, 15, 36, 41]

Water must flow - reduction of water stagnation (contamination)

- Water exchange every 72 h, so that a complete water exchange takes place in the pipe network. [3, 15, 27, 36]
- This can be done manually by the operator or caretaker or by using taps with automatic hygiene flushing. [3, 15, 27, 36]
- Regular water exchange must be ensured through flushing schedules. [45]

Avoid backflow

- Use a suitable safety device, especially for appliance connections; shower and bath mixers with a connected hand shower are at risk of being sucked back. [7, 14, 26, 27, 36, 41]
- If hose showers are used, protection in accordance with liquid category 5 must be provided. [7, 14, 26, 27, 36, 41]

Sanitary equipment elements

- Movement areas and clearances [26]
- Shape, design and dimensions, see Table 1 to Table 4 in section 11.5. [27]
- Washbasins without overflow [27, 41]

Surface hygiene - care & cleaning

- Smooth, abrasion-resistant, cleaning and disinfectant-resistant, easy-to-clean surfaces [27, 40]

Barrier-free user ergonomics

- Different functional areas with special washing processes and workflows require barrier-free or hand-contact-free handling and intuitive operation of the equipment. [20, 21, 22]
- Application of the principles for barrier-free construction [20, 21, 22]

Selection of materials in contact with drinking water

- Ensuring water quality by using plastics, metallic and non-metallic materials against the background of reducing microbial contamination (biofilm), corrosion and brass alloy components. [1, 9, 15, 36, 38, 41, 42, 44]

Commissioning

- Avoid leaks and penetration of foreign substances [45]
- Pressure testing, flushing & commissioning of drinking water installations pressurise [45]

Operation, inspection, maintenance and servicing of drinking water installations

- Observe the regulations and manufacturer's instructions [6, 28, 34, 35]

Drinking water hygiene tests & monitoring

- Regular water tests are required by law in hospitals and nursing homes, which must be carried out at specified sampling points and recorded. The type, scope and frequency are regulated by the hygiene plan based on the room log. [9, 13, 25, 35, 36, 37, 39, 41, 43]
- Monitoring and documentation of the operating parameters pressure, temperature & volume flow [36]

Sustainability

- The planner must take into account the water and energy requirements of the drinking water installation and is obliged to minimise these. [3, 15]
- Vandalism-inhibiting sanitary room equipment [29]

List of references & sources see page 38-39 | Status January 2025

List of literature & sources: Standards and guidelines EU & GE (Germany)

EU

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2. **EN 806-1**:2001-12 General information
3. **EN 806-2**:2005-06 Planning
4. **EN 806-3**:2006 Calculation of internal pipe diameters - simplified method
5. **EN 806-4**:2010-06 Installation
6. **EN 806-5**:2012-04 Operation and maintenance
7. **EN 1717** Protection of drinking water against contamination in drinking water installations and general requirements for safety devices to prevent drinking water contamination due to backflow; German version; (DIN/ÖNORM/SN; SIA 385.351)
8. **EN 1111**:2017-10 Sanitary taps - Thermostatic mixers (PN 10) – General technical specification; German version; (DIN/ÖNORM/SN; SIA 385.072)

DE

9. **TrinkwV 2023** Drinking water ordinance on the quality of water intended for human consumption
10. **AVBWasserV** Ordinance on General Terms and Conditions for the Supply of Water (General Terms and Conditions for the Supply of Water – AVBWasserV)
11. **Infection protection law** Act on the Prevention and Control of Infectious Diseases in Humans
12. **ArbStättV** Ordinance on Workplaces (Arbeitsstättenverordnung - ArbStättV)
    In addition to the technical regulations of DIN EN 1717 & DIN EN 806, apply as 'Generally recognised rules of technology' the national supplementary standards, VDI guidelines, ZVSHK leaflets, DVGW worksheets, BTGA practical guidelines, RKI guidelines and recom mendations & application and transitional regulations of the Federal Environment Agency (UBA), Hospital Construction Ordinance (KhBauVO) and guidelines of the German Society for Hospital Hygiene (DGKH)
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DIN 1988-100…600 Technical rules for drinking water installations…; Technical rules of the DVGW

14. **DIN 1988-100**:2011-08 Protection of drinking water, preservation of drinking water quality
15. **DIN 1988-200**:2012-05 Type A installation (closed system) - planning, components, equipment, materials
16. **DIN 1988-300**:2012-05 Determination of the pipe diameters
17. **DIN 1988-500**:2021-05 Pressure boosting systems with speed-controlled pumps
18. **DIN 1988-600**:2021-07 Drinking water installations in conjunction with fire extinguishing and fire protection systems
19. **DIN 4109-1**:2018-01 Sound insulation in building construction; Part 1: Minimum requirements
20. **DIN 18040** Barrier-free construction; planning principles;
21. **DIN 18040-1**:2010-10 Publicly accessible buildings
22. **DIN 18040-2**:2011-09 Apartments
23. **DIN 18195** Waterproofing of buildings - terms
24. **DIN 18534-3**:2017-07 Waterproofing with liquid applied waterproofing materials in combination with tiles and slabs (AIV-F)
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VDI 6000 Sheet 1-7:2024-07 Sanitary technology; sanitary rooms

26. **VDI 6000 Sheet 1**:2024-07 Sanitary technology; sanitary rooms – Basics
27. **VDI 6000 Sheet 5**:2024-07 Sanitary technology; sanitary rooms – Healthcare and care
28. **VDI-MT 3810 Sheet 1**:2023-03 Operation and maintenance of buildings and technical building systems – Basics
29. **VDI 6004 Sheet 3**:2009-05 Protection of technical building equipment; vandalism and destruction
30. **VDI 6008 Barrier-free living spaces**
31. **VDI 6008 Sheet 1**:2012-12 General requirements and planning principles
32. **VDI 6008 Sheet 2** 2012-12 Options for sanitary technology
33. **VDI 3810 Sheet 2* VDI 6023 Sheet 3**:2020-05 (Double guideline)
34. **VDI 3810 Sheet 2**: Operation and maintenance of buildings and technical building systems; drinking water installations
35. **VDI 6023 Sheet 3**:2018-08 Hygiene in drinking water installations - operation and maintenance
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39. **Federal Environment Agency, Recommendation of the Federal Environment Agency.** Systemic testing of drinking water installations for Legionella according to the Drinking Water Ordinance - sampling, test procedure and indication of the result. 2022.
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41. **RKI-Guideline** for Hospital Hygiene and Infection Prevention, 2024
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43. **Worksheet DVGW W 551**:2004-04 (Legionella) Drinking water heating and drinking water pipework systems - Technical measures to reduce the growth of legionella - Planning, installation, operation and renovation of drinking water installations
44. **Worksheet DVGW W 551-8**:2024-04 Hygiene in drinking water installations - Part 8: Requirements for drinking water analysis for the assessment of drinking water quality for the use of metallic materials.
45. **ZVSHK Information leaflets / technical information** on pressure testing, flushing, commissioning, hygiene of drinking water installations
46. **BTGA Practical guide** How do I keep cold water cold? May 2023
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