GEBERIT

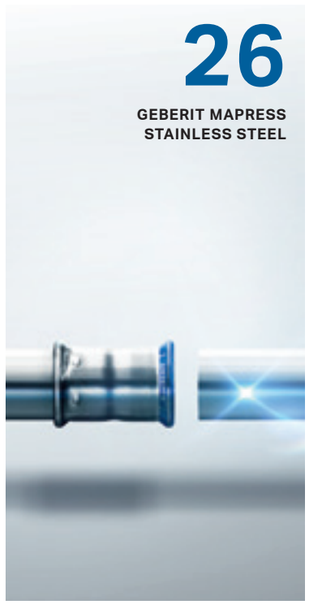
GEBERIT SUPPLY SYSTEMS

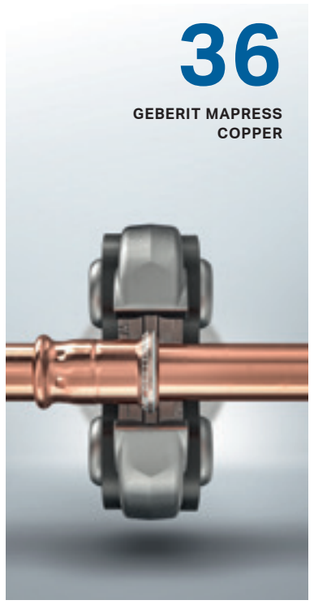
SO THAT EVERYTHING RUNS SMOOTHLY

KNOW HOW INSTALLED

LIFELINES **FOR MODERN BUILDINGS**

A modern building works like a complex organism that has to be supplied with water, heat, energy and air Geberit delivers the solutions that allow its functions to work reliably and consistently. Potable water, heating, cooling and gas, compressed air and other media – Geberit supply systems for residential buildings, industry and public buildings provide the confidence your customers expect from you.





CONTENTS

GEBERIT'S SYSTEMATIC APPROACH TO TECHNOLOGY

A RELIABLE CONNECTION **THAT IS FIT FOR THE FUTURE**

Supply pipes have to carry out a wide range of tasks in one building and meet complex requirements in safety and hygiene. They supply us with hygienically perfect drinking water and pleasant heating power. They transport gas safely to its point of use and must satisfy the highest safety standards in special applications.

ALWAYS ROOM FOR IMPROVEMENT

Geberit is the market leader in the area of sanitary technology in Europe. This is particularly true in the field of supply systems. Hardly any other company in this sector invests as much year after year in continually optimising existing systems and in developing new technologies and products as Geberit.

TAILORED SOLUTIONS FOR SAFE AND CLEAN DOMESTIC INSTALLATION

With different products for different tasks, Geberit provides suitable solutions for the private, semi-public, public and industrial sectors. Geberit's piping systems made of plastic and metal solve almost all tasks in domestic installation. Custom-fit adapters ensure reliable and permanent connections within a Geberit supply system, as well as between different product materials.

QUICK CONNECTIONS FOR YOUR SUCCESS

As a pioneer in pressing technology, Geberit revolutionised pipe installation over 50 years ago and has continued to improve it ever since with innovations like the Geberit Mapress pressing indicator.

THE PERFECT ADAPTER WITH GEBERIT MASTERFIX

For a reliable connection to valves and installation elements, Geberit MasterFix provides a connection technology without the need for tools and without hemping. Even in dark or narrow installation situations, MasterFix ensures reliable installation, as the adapter noticeably locks into place, both visibly and audibly. When using the Geberit MasterFix, pipelines can easily be detached again – even after a long period of operation.

Audible, noticeable, visible: Geberit MasterFix checks if the installation is complete to ensure reliable connections.

GEBERIT PRESSING AND CONNECTION SYSTEMS

CONNECTED
QUICKLY AND RELIABLY

Your customers expect reliable and durable pipe joints. They value quick and economical work on the building site. The Geberit Supply Systems, which have been used successfully for decades, enable you to achieve both goals.

SPEED MEANS COST-EFFECTIVENESS

The pipe and/or fitting change shape when they are pressed with a pressing tool developed for this purpose. Geberit press connections create solid mechanical connections which are permanent and lengthways non-positive. The resilience of the deformed seal rings ensures that the fittings are permanently and hydraulically leakproof. Corrosion-resistant, stainless-steel claws on the inside of the fitting ensure high tensile strength. Pressing and insertion are quick connection methods which save a lot of time in comparison to traditional methods such as soldering or welding. As open flames are not required, many time-consuming protection measures can also be dispensed with.

IT'S VISIBLY SECURE

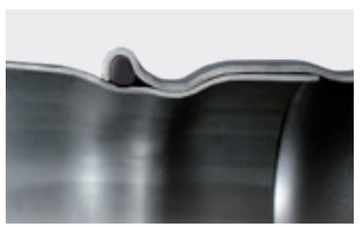
Geberit Supply Systems have different mechanisms for ensuring correct processing.

Correct insertion depth
With the Geberit Mepla, the pipe is inserted until it reaches a stop position on or in the fitting. It is easy to see the correct connection.

Tool guide
In all pressing systems, the pressing jaws are designed in such a way that it is almost impossible to position the tool incorrectly. This reduces or prevents failed pressing sequences.

Pressing indicator
Let us not forget press connections. Unpressed Geberit Mapress fittings are therefore identified straight away by the coloured pressing indicators. The coloured pressing indicators at the ends of the fittings are easy to remove after the pressing procedure.

Leaky if unpressed
If the Geberit Mepla and Geberit Mapress fittings are not firmly pressed, they will certainly be leaky when subjected to a pressure test with air or water. Defined leak paths ensure that connections which have not yet been pressed are detected reliably. You and your customer can therefore be assured that no nasty surprises will suddenly jump out at you later on and that everything will stay reliably leakproof.



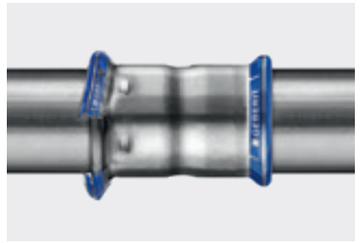
Mechanically stable and hydraulically leakproof: the pressed joint.

[1] Only applies to seal rings CIIR, black, typically used in technical building systems.

- Tailored economical solutions for a wide range of installation projects
- Reliably detect unpressed fittings thanks to a defined leak path
- Geberit pressing tool for quick and reliable progress
- Perfectly coordinated tool components

The Geberit pressing tool ensures permanently reliable connections.

Defined leak paths make unpressed fittings immediately visible in the pressure test.



Coloured indicators identify unpressed Mapress fittings even before the pressure test.

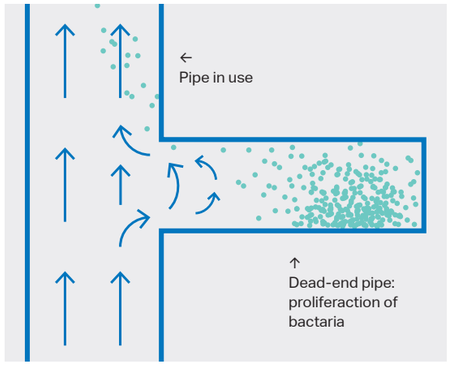
GEBERIT HYGIENE SYSTEM

PRESERVING QUALITY DRINKING WATER

Drinking water is our most valuable natural resource. People use and consume it every day as a matter of course and count on it to be of good quality. The protection and provision of this precious resource is a vital aspect of the sanitary installation and an essential task for all those responsible for it. This is precisely why Geberit works on its solutions day in, day out to ensure that drinking water is always readily available both now and in the future.

OPERATOR RESPONSIBILITY

Responsibility for water quality in the domestic installation lies with the operator of the building. In the event of extended stagnation periods (periods without water supply), the water can warm up and give bacteria the time to multiply. This can pose a number of health risks – particularly for vulnerable people. The primary culprits among water-related, potentially infectious bacteria are: *Legionella pneumophila* and *Pseudomonas aeruginosa*.



Geberit's know-how can effectively help to prevent bacteria growing to harmful concentrations:

- Correct planning, design and commissioning
- Correct operation
- Preventing stagnation
- Avoiding unfavourable temperatures

1 FLUSH REGULARLY

Geberit hygiene flush units offer an automated flushing solution that prevents prolonged stagnation in the piping system.Management of multiple hygiene flush units with the possibility of networking.

2 CORRECT INSULATION

Drinking water pipes must be insulated for energy and hygiene reasons.

3 TESTED CONSTRUCTION PRODUCTS

Geberit Supply Systems and products for drinking water hygiene fulfil hygienic requirements and are certified by the German Technical and Scientific Association for Gas and Water.

4 REGULAR MAINTENANCE

The system components are regularly maintained and inspected.

←
Automatic regular flushing with the Geberit hygiene flush units. The Geberit Control app provides operational safety by logging the flushing events.

5 DIMENSIONING

Pipe diameters that are dimensioned for the actual consumption rather than being too big enable optimal water replacement.

6 CLEAN START

Always use hygienically perfect drinking water for the initial filling.

7 CLEAN SYSTEM COMPONENTS

Pipes and fittings from Geberit are protected against dirt by their packaging and other measures such as protective caps.

8 NO UNUSED PIPES

Looped drinking water pipes and a frequently used sanitary appliance at the end.

9 EXTINGUISHING WATER PIPES

Backflow into the drinking water installation is prevented by suitable extinguishing water connection points.

10 SAFE HOT WATER TEMPERATURES

Hot water temperatures below 55°C are to be avoided in central water heater systems.

SYSTEMATICALLY
AVOIDING STAGNATION

Regular rinsing of the piping system and installations is key to avoiding problems with drinking water hygiene. For this to be achieved in an efficient and resource-saving manner, a multi-stage hygiene flush management system can be used, which is oriented to suit individual needs.

★

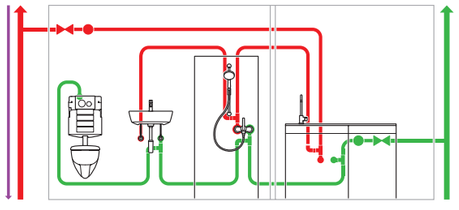
STAGE 1
CORRECT PIPING

1. Optimised pipe installation

- Smallest possible pipe diameter
- Looped pipe installation on the floor with a frequently used consumer at the end of the pipe
- Thermally decoupled pipe layout on the floor
- Separate boxes for hot potable water (PWH, PWH-C) and cold potable water (PWC)
- Proper insulation of the pipelines (PWH, PWH-C, PWC)

Benefits

- Low pipe contents
- Short draw-off times
- Low risk of stagnation
- Reduction of the thermal load on the cold-water pipe



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STAGE 2
REGULAR FLUSHING

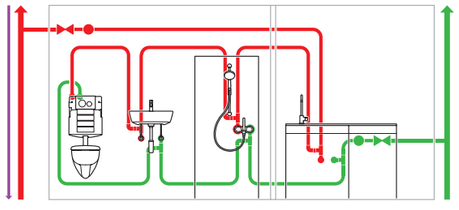
1. Optimised pipe installation
2. Automated water replacement via hygiene flush unit

In addition to stage 1:

- Use of an automated flushing device to ensure water replacement when not in use

Additional benefits

- Flushing programmes as required (time or interval programme)
- Ability to also flush hot water
- Configuration, function test, recording and maintenance via the Geberit Control app
- Planning flexibility afforded by different solutions for automated water replacement
- Connection to building automation via digital I/O



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STAGE 3
CONTROLLED RINSING

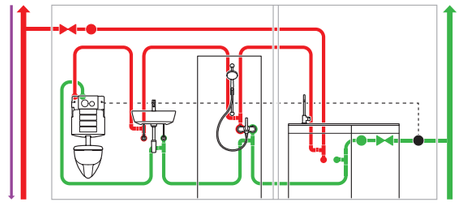
1. Optimised pipe installation
2. Automated water replacement via hygiene flush unit
3. Targeted water replacement through the use of sensor technology

In addition to stage 2:

- Observation of temperature curve and actual stagnation period

Additional benefits

- Temperature-controlled flushing programme
- Water replacement ensured by means of volume measurement
- Ability to record the measured water volume



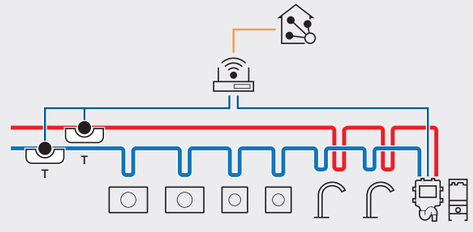
★★★★

STAGE 4
IN THE FUTURE: CLEVER RINSING

1. Optimised pipe installation
2. Automated water replacement via hygiene flush unit
3. Targeted water replacement by means of analogue sensor technology
4. Optimised operation through networking

In future, the networked Geberit Hygiene System will bundle all information flows and offer seamless integration into the building automation system.

Products marked with the Geberit Connect symbol are suitable for use in the networked system.



GEBERIT SERVICES

A STRONG PARTNERSHIP FOR EACH DELIVERY

Quality and innovation as well as reliability, partnership and personal consultation are all incredibly valuable. We aren't only running at top speed in terms of developing high-quality products, but we also offer you the services and support that you need to be successful. This is even possible on-site or at the building site if required.

PERSONAL CONSULTATION AND SERVICES

We are happy to help. On the service telephone, in a personal conversation or on site – Geberit is there to offer you help and advice. From specialist information and technical consultation right up to support for any questions relating to planning, we offer comprehensive and straightforward assistance. We will assist throughout the whole construction project if required. And even if something stops working, you can rely on the support of Geberit.

EXPERTISE FOR YOU

Geberit's comprehensive training programme supports the sanitary industry in preparing for the challenges of the future. We share our knowledge with you in our seminars, via webinars or directly at your building site and therefore contribute to the shared success. We also provide helpful media – from the handbook to the installation video – to help answer your questions and to assist in a wide range of tasks.

DIGITAL PLANNING SUPPORT

Successful sanitary projects start with good planning. With the Geberit ProPlanner planning software, the practical app Geberit Pro, as well as numerous other tools, we have many options for supporting you in your day-to-day activities.

GEBERIT BIM PLUG-IN

PLUG-IN AND PLAN

GEBERIT BIM PLUG-IN FOR AUTODESK REVIT®

The Geberit BIM Plug-in can be downloaded free of charge from any Geberit website **www.geberit.com/bim** or from the Autodesk app store **www.apps.autodesk.com**.

Digital planning and construction using the BIM method has br ought about fundamental changes in the construction industry. The holistic and model-based approach means that planning and construction processes can also be optimised and accelerated within the sanitary industry. Geberit's aim is to create simple and innovative solutions that offer sanitary engineers, architects and contractors added safety and greater cost-effectiveness. And with the new Geberit BIM Plug-in for Autodesk Revit®, another important step has been taken in the right direction.

STRAIGHTFORWARD SANITARY PLANNING

Finding up-to-date, complete and valid BIM content that is easy to manage is often a challenge in itself. The Geberit BIM Plug-in offers a reliable, integrated solution that meets all the needs for a straightforward and correct planning process.

AS CURRENT AS IT GETS

The direct connection to the Geberit product information management (PIM) system ensures that the user only uploads tested and approved BIM objects. This prevents the opportunity for planning errors caused by faulty or invalid BIM content.

WORLDWIDE PLANNING APPLICATIONS

The ability to select a specific language and region allows the Geberit BIM Plug-in to be used worldwide. What's more, local product catalogues also ensure that only products that are available locally are used.

MANUFACTURER-NEUTRAL TENDERS

Public projects are often tendered on a manufacturer-neutral basis. This is why Geberit BIM content can be changed to generic designations with a simple click in the built-in parameters. Once the tender is over, this can be reset so that the time-consuming replacement of objects in the BIM model is no longer necessary.

LIGHTWEIGHT AND HANDY BIM OBJECTS

Geberit relies on highly simplified, parametric geometries with all the metadata that is relevant for planning in the background. This avoids overloading CAD systems from the outset and allows for efficient planning. Despite their highly simplified geometry, Geberit BIM objects meet the requirements of all planning and construction phases, right through to facility management.

FLEXIBLE INSTALLATION

The Geberit BIM plug-in offers a whole host of advantages for efficient, model-based prefabrication with the greatest possible freedom when it comes to the arrangement of the components to be prefabricated:

- All fittings equipped with the article-specific Z-dimensions
- Segmenting length wizard for splitting the pipe runs into deliverable lengths
- Numbering wizard for the free designation of components and individual section
- Model-based tendering with Geberit article numbers possible
- Exportable overview list for easy labelling and connection of parts on the building site

↑
Easy installation due to continuous and clear labelling of the cut-to-length pipe sections.

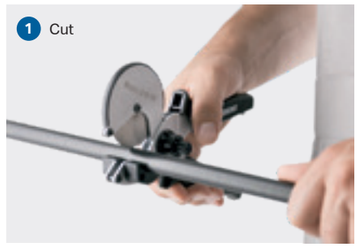
- Flexible, bendable and yet inherently stable
- Clean, safe, easy to process
- Reliable press connection
- Quick and secure adapters to other systems such as Geberit Mapress

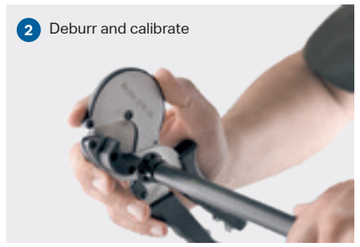
THREE LAYERS FOR DRINKING WATER AND

GEBERIT MEPLA

STAY IN SHAPE WITH MORE FLEXIBILITY

The Geberit Mepla multilayer pipe system combines the advantages of metal and plastic. They therefore ensure fast progress at the building site and comply with all the necessary standards and regulations.





HEATING

More corrosion-resistant and lighter than metal pipes, more inherently stable and robust than plastic pipes – easy and safe to process: Geberit Mepla combines the advantages of both types of pipe. Stable, bendable and able to form a barrier against diffusion: Geberit Mepla also remains leakproof when subjected to pressure far in excess of the standard testing pressure of 1.1 MPa (11 bar). The outer plastic layer made of polyethylene (PE-RT of the second generation) protects against corrosion and mechanical damage. The central aluminium layer makes the pipe stable and bendable. The inner layer, which is likewise made of PE-RT, is corrosionresistant and food-safe. Geberit Mepla can therefore be used for all drinking water qualities without previous analysis of the drinking water.

SAFE INSTALLATION OF DRINKING WATER AND HEATING

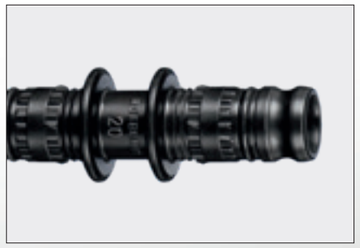
With Geberit Mepla, you only need one single system for the drinking water and heating supply. Pipe dimensions from 16 to 75 mm and a selection of around 300 fittings made of polyvinylidene fluoride (PVDF/PPSU) and gunmetal offer a solution for almost any installation task. All pipe dimensions are permitted for use in the heating installation from 0 to 80 °C, in the drinking water installation from 0 to 70 °C and for operating pressures from 1 MPa (10 bar). Clever connections such as the cross fitting have proven their worth in day-to-day applications such as radiator connections for a connection to two parallel pipes without intersecting. The Geberit MeplaTherm system pipe is the economical alternative for heating installations.

THE ECONOMICAL SYSTEM

The Geberit MasterFix adapter establishes quick connections to the Geberit sanitary elements. Special fittings simplify the transitions of Geberit Mepla to the metal Geberit Mapress system. Installing series-connected or circular pipes is especially economical with the Geberit MasterFix T-piece.

LEAKY IF UNPRESSED

GEBERIT MEPLA



Unpressed Geberit Mepla fittings leak visibly when subjected to leak tests with water. Water flows out of the unpressed connections. This occurs even at a low water testing pressure and during leak tests at up to 15 bar. The pressure test cannot be completed successfully unless all the connections have been pressed.

HIGHSTABILITY
The particularly thick aluminium layer in Geberit Mepla multilayer pipes ensures a high level of stability and extraordinary mechanical strength. Using high-quality polyethylene and aluminium combines the benefits of plastic with those of metallic piping systems.

SMOOTH SURFACES FOR MINIMUM ADHESION
The inner plastic layer of Mepla pipes, the high-quality PE-RT, has a surface roughness of only 0.7 µm. It is more difficult for limescale and biofilm to adhere to the smooth surface.

PRESSING JAW GUIDE
The defined jaw guide on the fitting ensures that the pressing jaw is positioned in exactly the right position during pressing and cannot slip. This prevents failed pressing sequences which therefore guarantees a secure, long-lasting connection.

IDEAL FOR COLD WATER PIPES
Cooling pipes can be installed with Geberit Mepla without too much effort, as special processing is not required for corrosion protection.

SAFETY FOR HIGH LOADS
The tremendous tensile strength of the Mepla press connection ensures a reliable, long-lasting connection. The quality of the press connection is constantly checked and exceeds the values demanded in the standards many times over. This guarantees a high standard of reliability, even in piping systems subjected to high loads.

FORMS A BARRIER AGAINTS DIFFUSION
Oxygen cannot diffuse through the aluminium layer meaning that Geberit Mepla is therefore the ideal solution for heating applications.

LARGE DIAMETER
Geberit Mepla is available up to a dimension of d75 and can therefore be used in a broad range of applications. Larger construction projects can consistently be installed with Geberit Mepla.

EQUAL BENDING PROPERTIES
The weld seam is crucial for the quality of the pipe. The homogeneous longitudinally welded aluminium layer in Mepla pipes with its smoothly formed weld seam guarantees the highest possible degree of safety and quality. As a result, the aluminium layer does not overlap. The pipe has the same bending properties in all directions.

RELIABLE INSERTION DEPTH CONTROL
The insertion depth remains visible at all times. This ensures that the pipe is correctly pushed onto the fitting during installation and can then be correctly pressed. The piping system can therefore be premounted. When the system is ready to be pressed, each connection can be checked immediately to ensure that each pipe is in the correct position.

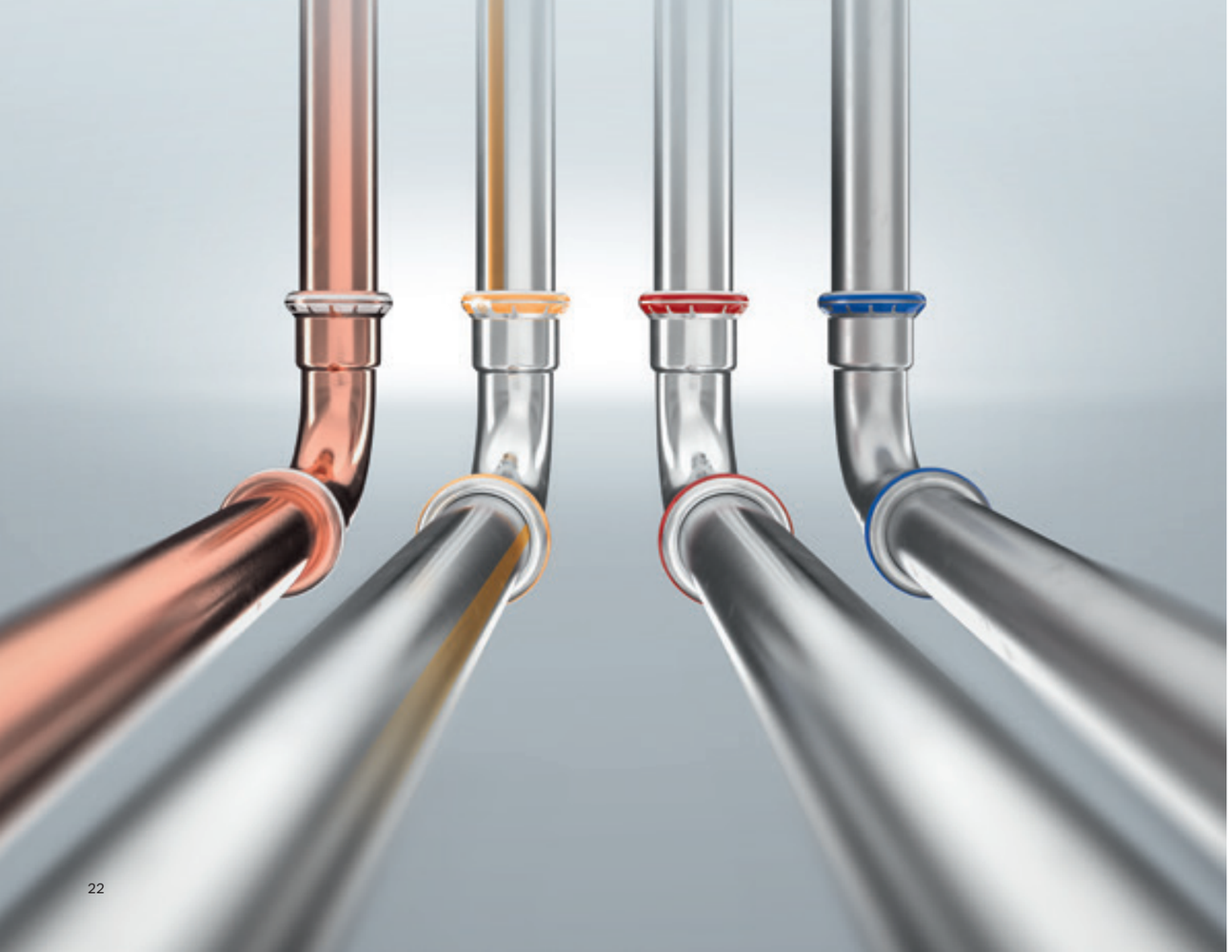
EASY ANDRELIABLE INTSALLATION
Special cams on the plastic fittings and retaining rings on the metal fittings achieve a high level of fitting retaining force in the pipe and prevent the fitting slipping out of the pipe during installation. The pipe system is therefore easy to install, align and then press.

FLEXIBLE ADJUSTMENT
Thanks to the good bending capacity, the installation can be adjusted flexibly to the on-site conditions. Pipes in the dimensions of d16 and d20 can be bent effortlessly by hand and using a bending machine up to d50. Installation is easier and fittings can be saved. This saves time and money for the installation.

FEWER FASTENING POINTS
The special composition of Mepla pipes with the thick aluminium layer reduces the extent to which the pipes expand in response to temperature fluctuations. This means fewer fastening points are required during installation than with conventional plastic pipes.

HYGIENICALLY PERFECT
Geberit Mepla fittings and pipes have suitable protective caps which facilitate hygienically safe storage or an installation break.

- Different product materials for a wide range of requirements in technical building systems and industry
- Geberit pressing technology for reliable leakproof connections
- A large number of national and international approvals



GEBERIT MAPRESS

STABLE CONNECTION QUICKLY PRESSED

For the last 50 years, the name Mapress has stood for a technologically advanced piping system with economically superior and more intelligent connection technology. Geberit Mapress has already paved the way for generations of plumbers who are now abandoning complex connection technologies in favour of simple and reliable pressing. With the wide range of robust product materials, the comprehensive product range, as well as the numerous combination options, Geberit Mapress sets itself apart from the rest due to its universality and is now indispensable in the day-to-day activities of the sanitary industry.

THE GROUNDBREAKING SYSTEM

Different Geberit Mapress systems provide customised and economical solutions for different installations in residential buildings and project construction, as well as special applications and industrial pipe installations. Mapress is available in stainless steel, carbon steel or copper. Thanks to the large spectrum of pipe dimensions, fittings in different product materials and with different seal rings, Geberit is able to provide solutions not only for technical building systems but also for almost all applications such as solar and industrial plant engineering. Geberit Mapress is also offered for shipbuilding in the product material CuNiFe, which is not described in greater detail here.

GEBERIT MAPRESS SEAL RING

The media that can be transported in Geberit Mapress supply systems depend on both the product material and the selected seal ring. Geberit Mapress therefore offers special O-rings for different liquid and gaseous media which cover almost all applications in technical building systems and industry, leaving hardly anything to be desired.

CLEAN CONNECTION

Geberit Mapress systems can easily be connected anywhere. With a large selection of suitable adapters, Mapress is easy to connect to other Geberit Supply Systems. Thanks to the Geberit MasterFix adapter, Mapress can also be securely screw-locked without tools with the Geberit installation systems.

CIIR, BLACK
General applications in technical building systems and industry

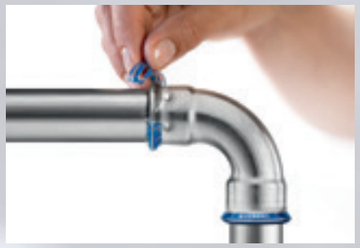
FKM, BLUE
High temperature and chemical resistance

HBNR, YELLOW
The specialist for gas applications

FKM, WHITE
The expert for saturated steam applications

FPM, RED
For sprinklers and extinguishing water pipes

GEBERIT MAPRESS



EASY CONNECTION
Making the connection couldn't be easier: The whole deburred pipe is inserted into the fitting and the insertion depth is marked with a pin. The pressing jaw with the groove is close-coupled on the predetermined pressing contour and the pressing procedure is performed with permanent pressing. The pin marking is useful for checking the insertion depth retroactively. The risk of an error during the pressing operation is virtually zero.

MECHANICAL STRENGTH
The coordinated components lend the Geberit Mapress system a very high level of strength. Operating pressures of 25 bar and more can therefore be achieved. This enables a wide range of applications which extends far beyond the drinking water and heating installations in technical building systems.

DETECT UNPRESSED FITTINGS WITH THE SEAL RING
The contour seal ring provides the pressing indicator with additional safety. Due to its special contours, unpressed connections leak during the pressure test. This therefore prevents any subsequent damage during operation.

PROTECTION AGAINST DUST AND DIRT
The pressing sockets of the metal fittings are fitted with protection plugs which offer protection against dust and dirt on the building site and therefore ensure hygienically clean installations from the start. The protection plugs are transparent for general applications and yellow for gas application fittings.

FOR PERMANENT FIXTURE AND HIGH LEVEL OF SAFETY
During the pressing sequence, the seal ring is given a precise, pre-defined shape. During this process, the ring absorbs additional energy for permanent and reliable tightness. As a result, the Geberit Mapress pressing system has been working for 50 years.

QUICK VISUAL CHECK OF THE PRESSING OPERATION
The pressing indicator on all Geberit Mapress fittings can be removed manually after the correct pressing operation, and it indicates unpressed connections before the pressure test. The colour of the pressing indicator enables clear identification of the material. For clear identification, the Geberit logo and the dimensions are printed on the pressing indicator.

PIPES WITH HOMOGENEOUS MATERIAL STRUCTURE
A special thermal treatment process ensures a homogeneous material structure, including weld seams without band edges. The seams are also smoothed mechanically. This results in the pipes and fittings behaving uniformly during pressing and when used.

COMPACT FITTING DESIGN
The compact fitting geometry takes up little space, which results in narrower fitting combinations. Geberit also offers numerous fittings which are coordinated to the respective application.

RELIABLE PRESSING SYSTEM THANKS TO SMOOTH SURFACES
The extremely smooth surface is a prerequisite for added system safety and guaranteed long-term tightness. Particularly when supporting the seal ring in the inside of the fitting, the clean weld seam is key to the system's permanent tightness and to cutting susceptibility to corrosion. The weld seams are smoothed with a mechanical treatment and the roughness values are therefore well below those stipulated by the European standards.

- For extremely high requirements in terms of hygiene and load bearing capacity
- Can be chemically and thermally disinfected
- Extremely high corrosion resistance and excellent hygiene characteristics
- Suitable for different – even aggressive – media

GEBERIT MAPRESS STAINLESS STEEL

POLISHED PERFORMANCE FOR HIGH REQUIREMENTS

Geberit Mapress Stainless Steel is the versatile installation system which meets high technical requirements. The product material demonstrates its performance capability in the drinking water supply, in complex industrial applications and in installations with extremely high hygienic requirements, such as those in hospitals or laboratories.

HIGH MOLYBDENUM CONTENT

The Geberit Mapress Stainless Steel 1.4401 system has a minimum molybdenum content of 2.2 %. This value is higher than the usual standards and therefore ensures an extremely high corrosion resistance as well as excellent hygiene characteristics.

VERSATILE AND RELIABLE

If you are faced with the challenge of overcoming high hygiene requirements, high temperatures and pressures or aggressive liquids, then Geberit Mapress Stainless Steel is the right choice for you. It is suitable for drinking water installations in living areas, in areas particularly sensitive to hygiene, and for industrial buildings and applications.

HYGIENICALLY PURE ALL THE TIME

Geberit Mapress Stainless Steel is suitable for thermal and chemical disinfection if this is prescribed by directives and regulations or if the supply network is already contaminated. The pressing sockets on the pipes and fittings are delivered with a leakproof plug already fitted. It offers reliable protection against dust and dirt until processing.

APPROVED FOR SPRINKLER SYSTEMS

You can use Geberit Mapress Stainless Steel for “wet”, “wet/dry” and “dry” sprinkler systems. The system has received VdS approval and other important international approvals.

A COMPREHENSIVE SYSTEM

With eleven nominal widths and around 500 fittings and adapters, Geberit Mapress Stainless Steel offers a comprehensive range of application options. The Geberit Mapress Stainless Steel fittings are identified by the blue indicator ring.

As system pipes, CrNiMo steel 1.4401 is provided for diverse applications and CrMoTi steel 1.4521 is offered as an economical alternative for drinking water installations. Geberit Mapress Stainless Steel pipes are bendable up to a dimension of 108 mm.

The wide range of adapters and transitions to other Geberit piping systems optimises the economical use of product materials. The Geberit MasterFix adapter ensures a quick, toolfree and reliable screw connection to the Geberit sanitary elements.

The Geberit Mapress Stainless Steel pipes 1.4521 offer an interesting alternative when requirements stipulate economical but nevertheless reliable drinking water installations. The product material is identifiable by the green protection plugs and the green line.

Geberit Mapress Stainless Steel fittings for a range of application ranges, such as gas applications with yellow seal ring.

NEW

- Ideal combination of cost-effectiveness and corrosion resistance
- Optimal solution for heating and cooling systems in technical building systems and industrial applications
- Extensive product range specially tailored to heating and cooling applications

GEBERIT MAPRESS THERM

COST-EFFECTIVE AND **CORROSION-RESISTENT**

Condensate and moisture on piping systems cannot always be avoided in cooling and heating systems. This is where Geberit Mapress Therm offers the ideal solution, combining a high level of corrosion resistance with real value for money.

DANGER OF EXTERNAL CORROSION

The risk of external corrosion in piping systems for cooling systems and underfloor heating is huge. In cooling systems, temperature differences between the pipe contents and the outdoor area lead to condensation on the pipe. When laying floors, wet, cement-based building materials, inadequate drying times and the unintentional ingress of plaster or patio water can all present a hazard. Geberit Mapress Therm offers the ideal solution for both of these application scenarios at a comparably consistent pricing level without requiring extensive rework.

EASY RECOGNITION

Geberit Mapress Therm is clearly recognisable by its orange markings and the ‘non-potable water’ warning sign.

FOR HEATING AND COOLING CIRCUITS

Geberit Mapress Therm is available in dimensions of d15 to d108 mm and offers a comprehensive product range that is specially designed for cooling and heating applications.

Suitable for inlet flow and return pipes for underfloor heating

Additional marking with the ‘non-potable water’ warning sign

Proven billions of times over: Geberit Mapress Therm works just like any other Mapress system. No new tools are required.

- For closed circuits, compressed air systems as well as “wet” sprinkler and extinguishing water pipes
- High resistance to pressure
- Easy and safe processing

GEBERIT MAPRESS CARBON STEEL

CLOSED CIRCUITS
RELIABLY PRESSED

Geberit Mapress made of non-alloy carbon steel is the economical solution for closed installations without oxygenation capacity. The typical application ranges include heating systems, cooling water systems, solar systems, sprinkler systems, extinguishing water pipes or compressed air networks.

JACKETED OR ZINC-PLATED

The Geberit Mapress Carbon Steel system pipes and fittings are made of non-alloy steel 1.0034. The pipes are available in different designs: outside zinc-plated (12 to 108 mm) or with a cream-white plastic jacketing (12 to 54 mm), which is particularly suitable for a visually unobtrusive surface mounting. For extinguishing water and sprinkler systems, Mapress Carbon Steel pipes are also available in non-alloy steel 1.0215, inside and outside zinc-plated (15 to 108 mm).

The Geberit Mapress Carbon Steel fittings are outside zinc-plated and also finished with a protective chromate conversion coating. The red colour of the pressing indicator signals the product material carbon steel.

FAST CONNECTION

The pressing procedure is not only straightforward, but also fast. In fact, it is around twice as fast as welding or soldering. Why? Primarily because the connection requires virtually no preparatory work and the pressing procedure itself is faster. Cut to length, debur, attach fitting, press – done.

NO OPEN FLAMES

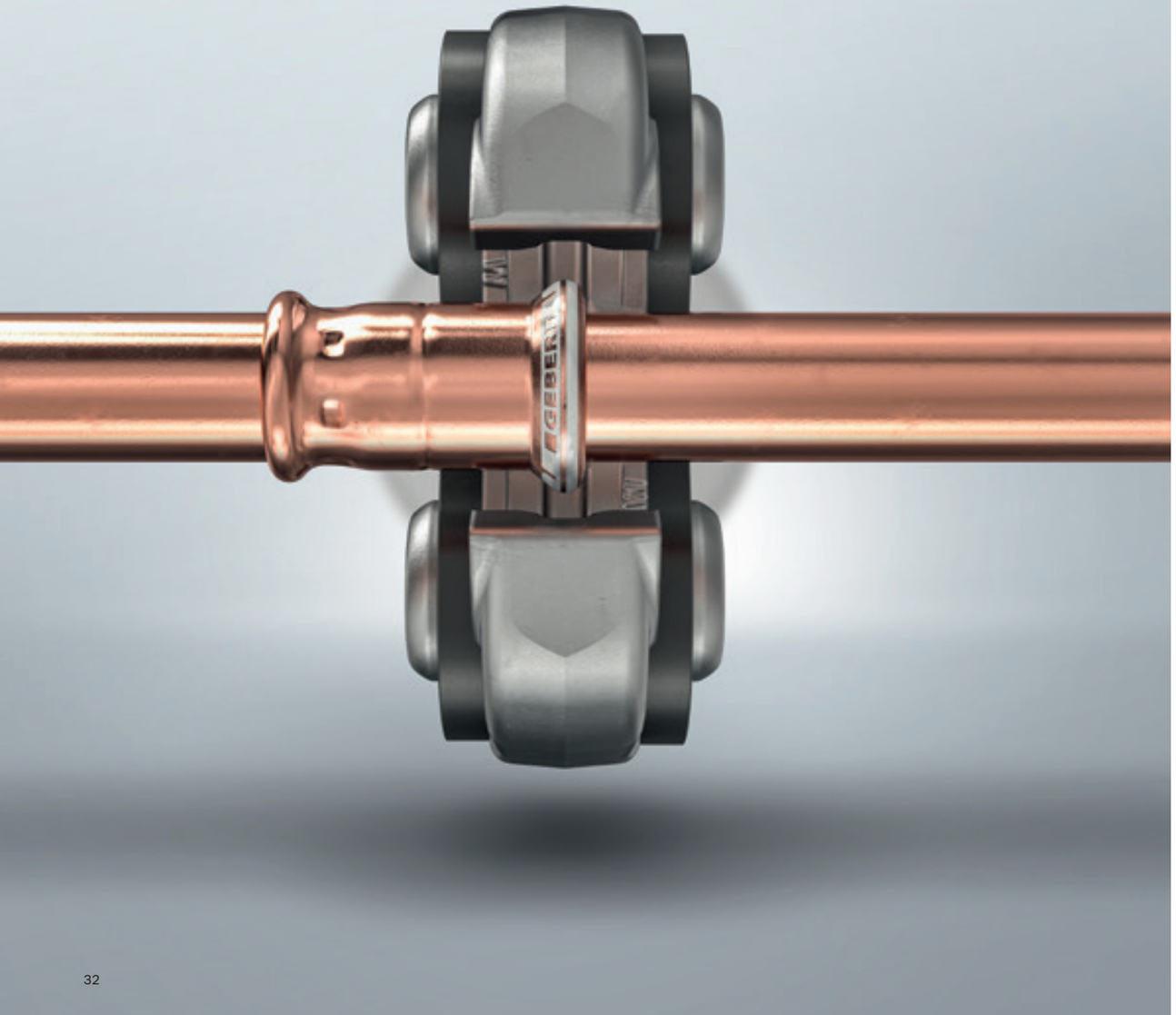
The strength and tightness of the press connection is achieved by cold deformation of the pipe and fitting. An open flame, which is required in cases such as soldering or welding, is not required in this case. As a result, no additional protective measures need be taken when carrying out renovations or repairs.

BEST CONNECTIONS TO OTHER SYSTEMS

Over 400 fittings are available for a diverse range of application solutions. Suitable adapters ensure quick, easy and reliable connections to Geberit Mepla for an economical connection to heating radiators, for example.

Always the right pipe. Geberit Mapress Carbon Steel pipes are offered with PP-jacketing, outside zincplating or inside and outside zinc-plating.

- Pressed quickly without open flame compared to soldered joints
- Robust connection through cold deformation of pipe and fitting
- Safety thanks to clear detection of unpressed connections
- High pressure and temperature resistance



GEBERIT MAPRESS COPPER

ROBUST CLASSIC WITHOUT SOLDERING

Robust, convenient and hygienic. This is why many plumbers regularly use copper. With Geberit Mapress fittings, you benefit from the contemporary connection technology, which is processed reliably without soldering and therefore without fire risk.

VERSATILE APPLICATIONS

In drinking water installations, heating and cooling water systems, as well as gas and compressed air pipes – copper is found on many building sites even today. Geberit Mapress Copper is also suitable for special applications with increased requirements.

SAFE PROCESSING WITHOUT AN OPEN FLAME

Pressing rather than soldering – Geberit Mapress Copper is also based on this principle. This increases safety on the building site, as an open flame is not used. Complex fire protection measures are therefore not required.

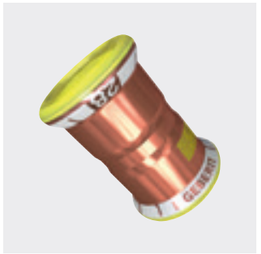
FAST CONNECTION

The pressing procedure is not only straightforward, but also fast. In fact, it is around twice as fast as soldering. Why? Primarily because the connection requires virtually no preparatory work and the pressing procedure itself is faster. Cut to length, debur, attach fitting, press – done. The strength and tightness of the press connection is achieved by cold deformation of the pipe and fitting. The pressing indicator and defined leakage paths also ensure the highest level of safety when pressing and in operation. Leaks are reliably detected during the visual check and the subsequent pressure test.

COMPREHENSIVE RANGE OF COPPER WITH BEST CONNECTIONS

The Geberit Mapress Copper fittings are made of high-quality copper with the alloy CU-DHP and are identified with white pressing indicators. Geberit Mapress Copper is approved for temperatures of up to 120 °C (180 °C for solar applications) and pressures of up to 1.6 MPa (16 bar). The fitting range covers all conventional dimensions from 12 to 108 mm. We recommend the use of copper pipes in compliance with DIN 1057 for processing with the Geberit Mapress Copper fittings. The Mapress Copper fittings can be used with soft (R220), half-hard (R250) and hard (R290) copper pipes.

The Geberit Mapress Copper transition with MasterFix adapter establishes the connection to Geberit cisterns and elements for washbasins. It can be quickly and easily screwed without tools.



Geberit Mapress Copper fittings for a range of application ranges, such as gas applications with yellow seal ring.

PIPE-IN-PIPE HOT WATER CIRCULATION SYSTEM

SAVE ENERGY
INCREASE EFFICIENCY

Hot water pipe and circulation line in one: the Geberit pipe-in-pipe hot water circulation system will help to complete your work faster when installing a drinking water system and provides your customers with a hot water solution that saves valuable energy.

HYGIENIC AND ENERGY SAVING

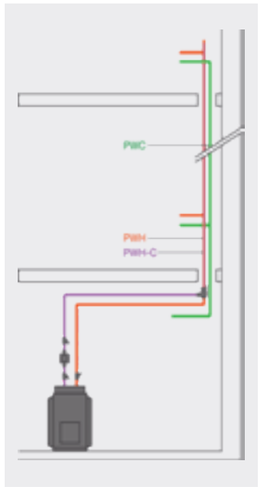
Instead of two pipes installed in parallel for the inlet and return flow of the hot water, the pipe-in-pipe hot water circulation system uses a pipe inside a pipe. The return flow inside the hot water pipe has two fundamentally positive effects. On the one hand, the hot water cools down much less, which reduces energy losses; on the other hand, the heat emitted to cold water pipes installed in parallel is reduced so that the risk of microbial contamination in the cold water is significantly decreased. The pipe-in-pipe hot water circulation system allows you to comply with standard temperature specifications more easily.

SMALLER INSTALLATION WORKLOAD AND LOWER MATERIAL REQUIREMENT

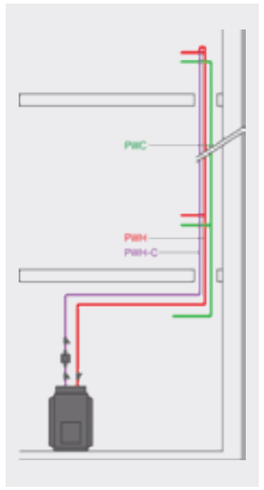
The installation workload on the building site is significantly reduced. After all, instead of two pipes, you only install one for the circulation. This also saves space in the supply duct. The set for the pipe-in-pipe hot water circulation system can be assembled easily and without special tools. It is suitable for Geberit Mepla as well as Geberit Mapress Stainless Steel and Geberit Mapress Copper and consists of a connecting fitting, a head piece and the PE-Xc inner pipe, 14 x 1.5 mm. The outlet dimension per floor is at least d22 for Geberit Mapress and at least d32 for Geberit Mepla.

ECONOMICALLY SUPERIOR IN EVERY RESPECT

No fastening to the building structure, no insulation and no separate fire protection feed-through: along with the energy cost savings, the pipe-in-pipe hot water circulation system offers noticeable cost benefits. Your customers in the residential construction sector will also appreciate that rentable areas, particularly in larger residential buildings, are increased due to the reduced space requirement in the duct.



Conventional circulation:
separate pipes for hot water inlet and return flow.



Pipe-in-pipe hot water circulation system:
saves material, space and energy.

1× HOT WATER RISER PIPE OVER 9 FLOORS WITH GEBERIT MAPRESS

	Conventional circulation	Pipe-in-pipe hot water circulation system
Pipes	R 750	920 €
Insulation and fastening	1.300 €	790 €
Total material	1.850 €	1.710 €
Installation workload*	1.070 €	760 €
Manufacturing costs	2.920 €	2.470 €
Energy requirement due to heat loss **	2.600 kWh/a	1.300 kWh/a
Energy costs due to heat loss ***	182 €	91 €

* Assumption: average hourly rate for fitter (assistant) € 45.–
** Assumption: 7 W/m
*** Assumption: energy costs 7,0 cent/kWh

NEW

Pipe-in-pipe hot water circulation system can be planned with Geberit ProPlanner.

- Alternative to conventional circulation line with two sections
- Improved drinking water hygiene
- Reduced energy requirement for water heating
- Economical installation through single-section technology

GEBERIT TOOLS

PRESSING TOOLS **FOR ADDED CONVENIENCE**

Low weight, fast work and much more: convenience, power and many other advantages. This is what the Geberit pressing tools have to offer. Ideal for processing Geberit pressing systems.

CONVENIENT PROCESSING

The Geberit pressing tools are compact, lightweight and provide a high level of convenience. The head on the Geberit ACO 103plus means that it is also easy to press in narrow spaces. Easy handling and low weight are particularly noticeable when performing overhead work.

IMPROVED PERFORMANCE

With the new brushless motor in the Geberit pressing tool ACO 203plus, the Geberit Mepla, Geberit FlowFit, Geberit Volex and Geberit Mapress piping systems can be pressed up to 10% more quickly[1)]. In addition, up to 40% more pressing operations[1)] are possible per battery charge.

CHARGE RECHARGEABLE BATTERIES LESS OFTEN

The Geberit pressing tools are driven electrohydraulically. The battery-operated pressing tools are fitted with modern lithium-ion batteries. Thanks to the long battery running time, the Geberit pressing tools require charging less often and, due to short charging times, they can be put back into operation more quickly. In addition, two 1.5 Ah rechargeable batteries are always contained in battery-operated pressing tools in a case. This means it is possible to work with one rechargeable battery while the second is being charged.

BLUETOOTH(R)INTERFACE FOR THE NOVOCHECK APP

You can now access all essential device parameters and operating data, display device statuses, or even make basic settings from the convenience of your smartphone. The NovoCheck app can be used in parallel for multiple pressing tools, which simply involves connecting the relevant devices via the Bluetooth® interface.

[1)] When compared to the predecessor model Geberit pressing tool ACO 202

An integrated pressing point light in the Geberit ACO 203plus, ECO 203 and ACO 203XLplus ensures good visibility in dark corners.

A slim, non-slip handle ensures reliable and ergonomic operation.

- Compact and lightweight with high performance
- Also suitable for restricted construction situations
- Slim, non-slip handle for reliable handling
- Electrohydraulic drive
- Good visibility in dark corners thanks to integrated LEDs [2)]
- Easy maintenance thanks to the brushless motor [3)]

[2)] Geberit pressing tool ACO 203plus / ACO 203XLplus / ECO 203
[3)] Geberit pressing tool ACO 203plus /ACO 203XLplus

GEBERIT TOOLS

PRESSING JAWS AND **PRESSING COLLARS**

The Geberit pressing collars with snap mechanism and the service-free Geberit pressing jaws ensure quick processing and a reliable connection when installing supply systems.

Also for easy overhead installation

Special adapter jaw for pressing large Mapress pipe diameters

GEBERIT PRESSING JAWS FOR SMALL DIMENSIONS

NO SERVICE THROUGHOUT THE ENTIRE SERVICE LIFE

High pressing performance without external maintenance. The service-free Geberit pressing jaws ensure a balanced distribution of force which lasts throughout the entire service life. Even after prolonged and intensive use, the corrosion resistant surfaces keep the tool in top quality.

PRESSING OPERATION WITH MAXIMUM PRECISION

The Geberit Supply Systems fitting and pressing jaw are perfectly matched to one another, ensuring durable and reliable connections.

GEBERIT POWERTEST

The Geberit PowerTest provides you with information about the condition of your Geberit pressing jaw. Pressing the Geberit PowerTest indicates whether or not the pressing jaws can continue to be used by showing discolouration (in the case of Geberit Mapress and Geberit Mepla).

FOR LARGE DIMENSIONS

FOR LARGE DIMENSIONS

From dimension d63 for Geberit Mepla, d42 for Geberit Mapress and d50 for Geberit Volex, pressing collars are used for pressing rather than pressing jaws. Regardless of how the pipes are aligned, these are held firmly onto the pressfitting by a snap mechanism, thereby ensuring easy and reliable handling. The Geberit pressing collars and Geberit adapter jaws require regular service.

COMPACT DESIGN

Thanks to the small, compact but extremely robust design, processing is convenient even in narrow spaces.

RELIABLE APPLICATION

The adapter jaws can be easily hooked onto the pressing collars because the user can see the connection area clearly, and so will know when the Geberit adapter jaw is engaged correctly.

TECHNICAL DATA

	Geberit ACO 103plus	Geberit ACO 203plus	Geberit ECO 203	Geberit EFP 203	Geberit ACO 203XLplus	Geberit hydraulic device Compact CP700G
Compatibility	[1]	[2]	[2]	[2]	[2] / [2XL]	[4] / [2]
Characteristics						
LED pressing point light	✓	✓	✓		✓	Hydraulic
Bluetooth®	✓	✓			✓	With hydraulic quick coupling type CEJN 217
Brushless motor		✓			✓	
Swivelling head	✓			✓		With USB 2.0 port
Power supply	Recharchable battery	Recharchable battery	Mains	Mains	Recharchable battery	Recharchable battery

Technical data

Nominal force (kN)	19	32	32	32	32	100*/32**
Protection degree	IP20	IP20	IP20	IP30	IP20	IB43
Cable length (m)	-	-	5	5	-	2.5
Power consumption (W)	240	450	450	450	450	200
Operating temperature	-20 – +60 °C	-20 – +60 °C	-20 – +60 °C	-20 – +60 °C	-20 – +60 °C	-20 – +60 °C
Sound pressure level at user's ear	75.5 db(A)	76.5 db(A)	78.5 db(A)	78 db(A)	76.5 db(A)	78 db(A)
Vibration emission value (m/s)	≤ 2.5	≤ 2.5	≤ 2.5	≤ 2.5	≤ 2.5	≤ 2.5
Weight (kg)	1.7	2.8	3.2	3	3.8	4.6***

* With Geberit pressing cylinder with adapter jaw [4]
** With Geberit pressing cylinder [2]
*** Without the hydraulic cylinders

THE PRESSING TOOLS FOR GEBERIT MEPLA

	d16	d20	d26	d32	d40	d50	d63	d75	
Geberit Meplahand-operated pressing pliersCompatibility [1]	✓	✓	✓						
Geberit pressing tool ACO 103plus **Compatibility [2]**	✓	✓	✓	✓	✓				Geberit Mepla pressing jaw [1]
Geberit hand-operated pressing tool MFP 2 Geberit pressing tool ACO 203plus Geberit pressing tool ECO 203 Geberit pressing tool EFP 203 Geberit pressing tool ACO 203XLplus	✓	✓	✓	✓	✓	✓			Geberit Mepla pressing jaw [2]
							✓	✓	Geberit Mepla pressing collar [2] Geberit adapter jaw ZB 203 [2] or ZB 203A [2]

THE PRESSING TOOLS FOR GEBERIT MAPRESS

	d12	d15	d18	d22	d28	d35	d42	d54	d66.7	d76.1	d88.9	d108	
Compatibility [1] Geberit pressing tool ACO 103plus	✓	✓	✓	✓	✓	✓							Geberit Mapress pressing jaw [1]
Compatibility [2] Geberit hand-operated pressing tool MFP 2 Geberit pressing tool ACO 203plus Geberit pressing tool ECO 203 Geberit pressing tool EFP 203 Geberit pressing tool ACO 203XLplus	✓	✓	✓	✓	✓	✓							Geberit Mapress pressing jaw [2]
						✓	✓	✓	✓				Geberit Mapress pressing collar [2] [3] Geberit adapter jaw ZB 203 [2] or ZB 203A [2]
Compatibility[2XL] Geberit pressing tool ACO 203XLplus										✓	✓	✓ / ✓	Geberit Mapress pressing coller [2XL] [3] Geberit Mapress adapter jaw ZB 221 [2XL] / ZB 222 [2XL]
Compatibility [4] Geberit hydraulic device Compact CP700G										✓	✓	✓	Geberit pressing cylinder with adapter jaw [4]
	✓	✓	✓	✓	✓	✓	✓	✓	✓				Geberit pressing cylinder [2] with Geberit pressing jaw [2]

- Higher than average innovative capacity thanks to ongoing investment in our own development and research projects
- Reputation for outstanding expertise in numerous fields
- Uncompromisingly high quality and production standards

AN ORIGIN STORY FOR THE FUTURE

FOR THE SANITARY TECHNOLOGY **OF TOMORROW**

Geberit aims to improve people's quality of life over the long term with innovative solutions in the area of sanitary technology. To do this, the company is constantly developing its products, systems and solutions and, as the market leader in sanitary technology, is continuously setting new standards.

On average, Geberit invests two percent of sales into its own research and development and applies for around 20 new patents every year. Geberit's innovative capacity is based on existing know-how and the ongoing research activities in fields such as hydraulics, statics, hygiene, acoustics, materials and fire protection.

SYSTEMATIC APPROACH

A customer requirement or brilliant idea is often the starting point for developing a new product. Meticulous, systematic work then follows, because the innovation process at Geberit does not leave anything to chance. This is why, for example, the required characteristics of the product material that will later go into series production are defined at a very early stage. If such a product material does not yet exist, the product material engineers get to work and – in close cooperation with plastic producers, universities and test institutes, of course – develop a new product material themselves. Although this involves a great deal of time and effort, this procedure has proven worthwhile in

50 YEARS IN THREE MONTHS

As soon as the first prototypes for a new product are available, they are put through their paces. To do this, tough tests are carried out in the sanitation laboratory to simulate a product life of 50 years within three months. Only the best product solutions survive this hardness test. At the Building Technology and Acoustics Laboratory, the static and acoustic characteristics of individual products as well as whole systems are tested. Here, experts investigate how a particular innovation or improvement behaves in conjunction with other sanitary technology components.

Testing is carried out by the application engineers once the scientists and engineers have given a new innovation the green light. Series production is not contemplated until the product has proved successful in the market within the scope of numerous test installations.

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