

Viega systems technology for utilities

Complete house service connections from one supplier.



viega



Viega.

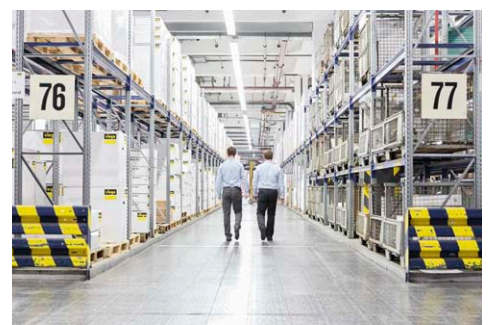
CONNECTED IN QUALITY.

Viega is convinced: Quality is everything. Without quality, everything means nothing. That is why the company strives to exceed itself each and every day. By means of regular dialogue with its customers, by developing better products and service features and by an approach to the future that does not lose sight of its past.

Viega has been connected in quality for over 115 years. It all began with the vision of revolutionising installation technology. With over 4,000 employees and ten locations, we have progressed to become a global market leader in the installation technology sector while still remaining true to our principles and setting our own high standards.

It is of importance to Viega to support its customers in their daily work. To this end, it shares its knowledge with customers all over the world, matches materials, technology and comfort, takes time for quality management and invests in research and development. The result: a perfectly coordinated system providing customers fast and reliable access to over 17,000 products.

Quality is everything. Without quality, everything means nothing.



CONTENTS

6

Geopress K underground supply lines:
Something you can count on.

8

Viega Geopress K:
Internal sealing, elastomer-free, plastic – high safety, best supply.

10

Pressing technology: Simple and safer.

12

Viega Geopress tapping valves:
A safe house service connection right from the start.

14

Viega Geopress and Geopress G: Robust, durable and corrosion-resistant.

16

Alternative energies: Bringing the future to you.

18

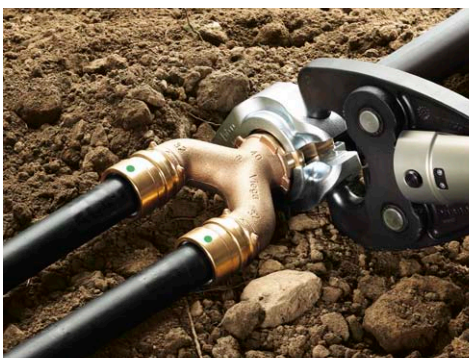
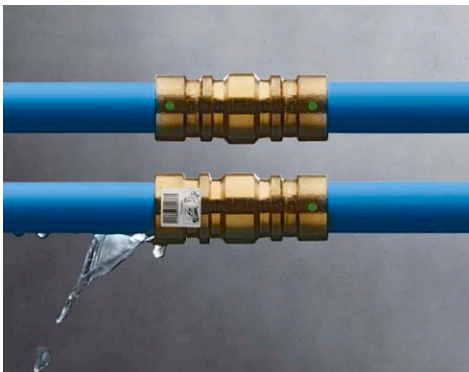
Viega Maxiplus: The down-to-earth alternative in the ground.

20

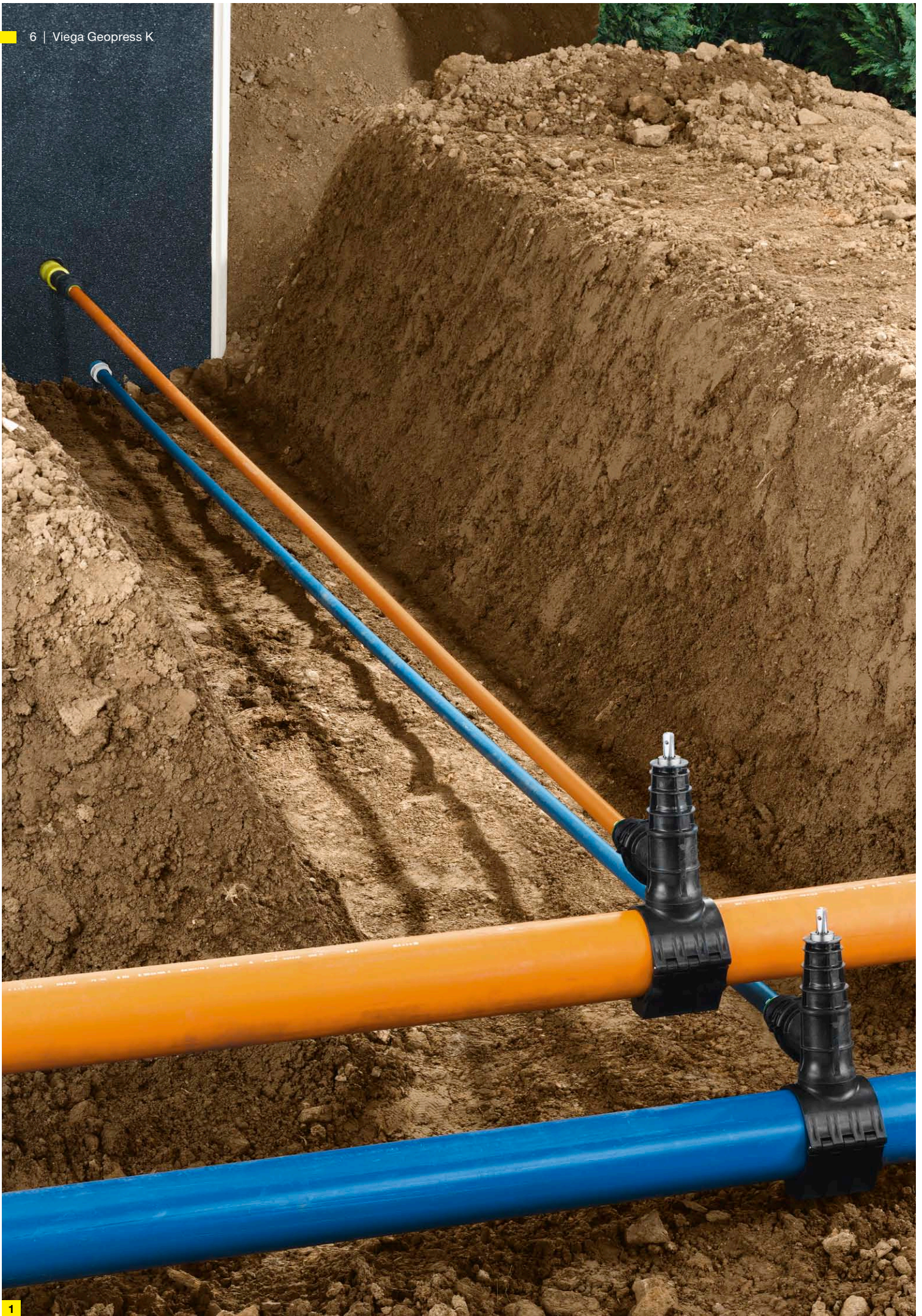
Viega Pressgun: Takes seconds to connect what belongs permanently joined.

22

The product range.







Geopress K underground supply lines

SOMETHING YOU CAN COUNT ON.

Systems that provide underground drinking water and gas supply have to be extremely robust, durable and reliable – just like Viega Geopress K. The press connector system made of high-strength plastic was specifically developed to be used underground (Fig. 1). The system combines the advantages of Viega's cost and time efficient press connecting technology with the quality and safety of the SC-Contur. A perfect connection making Viega the perfect choice for all types of supply technology.

Important factors

When pipelines are placed underground many factors have to be considered. First of all a suitable material has to be selected that can withstand the high strains it is exposed to in the ground and that can handle the medium to supply. It is therefore of utmost importance that the material is corrosion-resistant and durable. Cost-effectiveness plays another important role, especially for practical use. But it is not only the price of a connector that makes the difference but also a short time for installation and a high flexibility. If the works can be carried out without having to consider the weather conditions and if the connector covers various areas of application as gas and drinking water, the entire work will become more effective.

The solution – by Viega

There are many factors that are relevant for underground supply lines. Viega Geopress satisfies all these challenges. Thanks to the press connecting technology, the plastic press connectors are robust, reliable and very economic.

The system – versatile

Geopress K is available in sizes from d25 to d63 (Fig. 4). In combination with the various types of PE pipes, the system can be used for installations of drinking water, gas and alternative energy supply.

Geopress in diameters d25 to d63



The Geopress K product range provides an integrated installation solution for all underground supply lines with one system only.

In practice – ready to deliver

The wide range of Geopress K products makes it possible that large installations can be made for one system only to (Fig. 2). Various special solutions are available to say to compliment the large number of connectors. Special adapters ensure a trouble-free connection with other piping systems by providing internal or external threads or screw fittings. The repair coupling (Fig. 3) facilitates a quick and simple way of repairing damaged pipes. In order to do so, a short piece will be cut out of the pipe and the coupling is then slid on one end and pulled back afterwards. The gap is closed and can be pressed, whereas the operational safety is re-stored. This and many other solutions make Geopress K the ideal system to face the practical challenges of underground installations.

3



Damaged pipes can be quickly fixed using the repair coupling.

4



With Geopress K, installation works can be carried out regardless of weather conditions. They are quick and economic. In addition, problems caused by water remaining in the pipes and cumbersome phases of cooling down are a thing of the past. The connection is ready for stress and operation.

Viega Geopress K

INTERNAL SEALING, ELASTOMER-FREE, PLASTIC – HIGH SAFETY, BEST SUPPLY.

The Viega Geopress K system was developed to meet the specific demands of drinking water and gas supply pipes laid underground. It combines the advantages of an economic press connecting technology with the safety of robust and high-tensile plastic connectors. These and many other advantages satisfy all economic and assembly requirements.

Internal sealing

With Geopress K, Viega presents a press connector system that is free of elastomers and provides an internal sealing system that is perfectly suited for underground supply line (Fig. 1). These features make our connectors the perfect choice for the rough conditions in the ground. The pipe will just be pressed onto the support sleeve of the connector, thus guaranteeing a firm internal sealing and a high-tensile connection. Any leakage caused by deep grooves or scratches on the pipes surface is prevented. Also the risk of damaged sealing elements due to pollution is banned. Thus guaranteeing a reliable and tight connection even in challenging circumstances and at any time.

Robust exterior

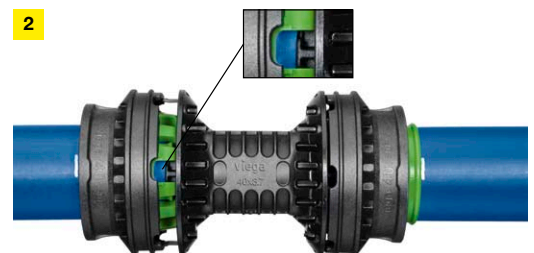
The fibre-glass reinforced plastic ensures a high durability of the Geopress K connector. This material withstands even the highest strains. On top of the world for underground usage.

Safety on first sight

The Geopress K connector is equipped with a window to control the insertion depth and a specific marker showing whether a connector was pressed correctly or not. After pressing, the window is closed and the green clamping ring on the outside of the pipe becomes clearly visible (Fig. 2). This shows a complete pressing.



With the internal sealing contour of the Geopress K connector any other sealing element becomes obsolete.

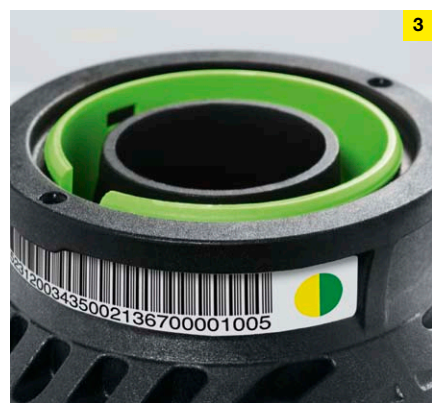


The connector's windows allow for a control of the pipe's insertion depth before pressing.



Enjoyable quality

Each Geopress K connector is equipped with a traceability code pursuant to ISO 12176-4 (Fig. 3). With this code, each element can be traced and details about manufacturer, nominal width, material, batch etc. are provided.



3

Always fitting

Geopress K can be universally used and offers the highest possible safety in connection with all types of PE pipes. PE-80, PE-100, PE-RC and PE-X pipes as well as any pipe of the SDR class 11 can be easily combined with Viega Geopress K (Fig. 4).



4



GOOD REASONS FOR VIEGA GEOPRESS K

- The internal sealing connectors circumvent the problem of deep scratches and grooves on the outside of pipes.
- The connectors are free of elastomers.
- The green pressing marker is easy to identify and provides highest safety with only one view.
- Each connector has a window for checking the insertion depth.
- The Geopress K connectors are made out of high performance plastic.
- Viega's press connecting technology enables quick installation independent of weather conditions.

Press technology

SIMPLE AND SAFER.

As with all other Viega systems, the proven press connecting technology is used for Geopress K. In combination with the newly developed plastic connectors, this guarantees not only a high-strength connection but also a safe and economic implementation.

Well-proven technology

One significant factor for the cost-effectiveness of Geopress K is the proven press connecting technology. The pipe will be cut at right angles and inserted into the connector until it can be seen in the window of the connector. Afterwards, the connector is pressed with the press tool. The green clamping ring can be clearly seen after the pressing procedure. Now the connection is tight, high-tensile and ready for stress – and only takes a few seconds. This means the time for installation can be dramatically reduced compared to other methods.

Proven quality

Next to its simple, quick and economic assembly, Viega Geopress K offers one important thing: safety. The system was certified by DVGW and admitted to be used for water and gas supply lines. With PE pipe classes PE-80, PE-100 and PE-X, Geopress K is admitted in accordance with the technical test guidelines GW 335-B3 (P) and G 5600-2 (P).



1. Cut pipe to length.



2. Place connector onto pipe. Check the insertion depth in the window and draw a safety mark on the pipe.



3. Press the connector and check the green pressing marker.



The Geopress K connector passes the “digger test” also in real life circumstances.

Tensile stress resistant

The certification of the Geopress K connector confirms that the connection will remain tight and firm even under extreme tensile stress. The clamping ring connects pipe and connector permanently – even digger shovels cannot destroy it (Fig. 1).

SC-Contur safety

Geopress K is also equipped with the proven Viega SC-Contur which guarantees that unpressed connections will be leaking. This means that any unpressed pipe will fail immediately during the leakage test (Fig. 2).

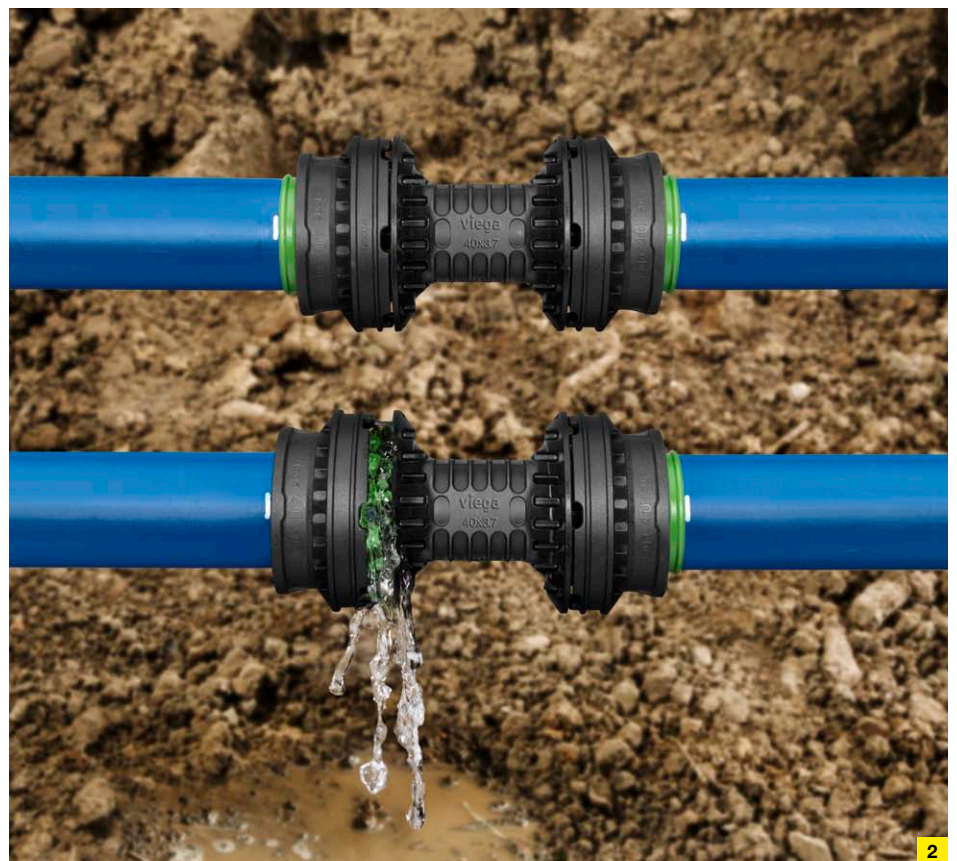
Optimal conditions

Thanks to its optimised internal geometry, the Geopress K connectors, elbows and T-pieces provide best fluid dynamics.

Visibly pressed

The green clamping ring of the Geopress K connector fulfils two functions at once. On the one hand, it ensures a connection that is tensile resistant and, on the other hand, it serves as an unmistakable marker that the connection is correctly pressed. This is because the green clamping

ring will only become visible on the outside of the pipe if the connection was pressed completely and safely (Fig. 2).



Viega Geopress tapping valves

A SAFE SERVICE CONNECTION FOR HOUSES, RIGHT FROM THE START.

The tapping valve

Market leading technology can be identified easily if it makes your work easier – just like the tapping valves of Viega. With 43 various outlets for three systems, they provide the highest flexibility for the job and are the ideal connection to Geopress K, Geopress or Maxiplex. The fittings are also made from high-strength plastic and are available for drinking water (9690TW) and gas (9690G/9692G). The material ensures enormous stability and superior durability – features that are of utmost importance for underground installations.

Sophisticated mechanics

With the tapping valve, the spot drilling of the main supply line takes only a few minutes. It is placed around the pipe like a bracket and tightly connected with the pipe using the press tool. Due to the integrated miller for PE and PVC pipes, the drilling can be carried out directly without having to use an external drilling machine. To ensure the anti-twist protection of the tapping valve, a sleeve will be inserted into the drill hole.

Telescopic stem extension

The product portfolio is extended by the telescopic stem extension. It is equipped with a tapping saddle that is designed to exactly fit the tapping valve in order to prevent the entrance of dirt and to ensure the correct alignment of the stem extension. Additional blue-yellow marking discs show the corresponding area of application. The telescopic stem extension is available in four lengths.



Geopress tapping valve 9690TW



Telescopic stem extension 9696

Gas flow monitor

To actively secure gas supply lines, Viega provides two different types of gas flow monitors: integrated into a Geopress K coupling (Fig. 2) and as a socket for the connecting piece of the tapping valve (Fig. 1). The gas flow monitor is made of metal. The functional principle of the gas flow monitor is very simple and yet effective: If, for example, the flow volume changes due to a break of the pipeline causing the pressure to fall behind the gas flow monitor, it will shut down automatically and close the

pipeline. Gas cannot escape and the risks related to this are eliminated. Once the damage of the pipeline is fixed, an overflow opening enables the pressure in the subsequent pipeline section to normalise and the gas flow monitor will reopen automatically and unblock the relevant pipeline section. This process can be accelerated by manually applying counter pressure.

1



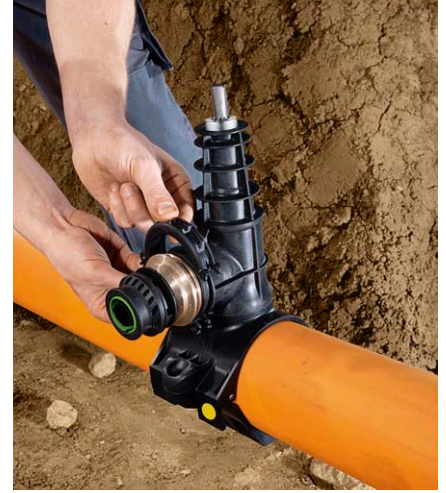
Gas flow monitor as socket 9753.2 – Type A/D, 9755.2 – Type C, 9752.2 – Type R



Applying the tapping valve.



Pressing fittings with manual tool or pressgun.



Insert and secure Geopress K connecting piece.



Laying house service connection, pressing and subsequent pressure test.



Drilling.



It was as simple as that!

2



Gas flow monitor 9753.1 – Type A/D, 9755.1 – Type C, 9752.1 – Type R

	type A/D	type C	type R
Operational excess pressure	25 mbar to 1 bar	25 mbar to 5 bar	35 mbar to 5 bar
Overflow volume flow	30 l/h at 100 mbar	30 l/h at 1 bar	30 l/h at 1 bar
Model number	9753.1/9753.2	9755.1/9755.2	9752.1/9752.2

Geopress K gas flow monitor



Ensuring drinking water quality

with gunmetal products – pursuant to the GFEA metal evaluation guideline

Viega Geopress and Geopress G

ROBUST, DURABLE AND CORROSION-RESISTANT.

Viega provides the perfect solution for each application – sometimes even more than just one. This holds true also for underground supply lines. You can select between the Geopress K system made out of plastic with the gunmetal connectors for drinking water installations or the Geopress G connectors for gas lines.

Safe material

The requirements are extremely high for all installations deployed underground. A durable load-bearing capacity and a reliable protection against corrosion are crucial for metal systems. The high-performance gunmetal used for Viega's Geopress and Geopress G systems easily complies with all these requirements and can be deployed underground without having to apply any additional corrosion protection. It provides highest protections against dezincification and tension crack corrosion.

Legal requirements

Since 2014 and in accordance with the latest German Drinking Water Ordinance (DWO), materials used for installation shall not exceed the migration requirements set out in this ordinance. Viega Geopress has been compliant with these requirements for decades and

can be used without any concerns now and into the future. This is confirmed by the certification issued by the German Technical and Scientific Association for Gas and Water (DVGW) according to which Geopress can be deployed in accordance to the DWO and the positive list of metal evaluation guideline of the German Federal Environmental Agency (GFEA) and DIN 50930-6 – and, of course, all plastic components and sealing elements comply with the legal requirements of the Guideline for the Hygienic Assessment of Organic Materials in Contact with Drinking Water and the elastomer guideline.

Connection to all types of PE pipes

Geopress is deployed with the dimensions d25 to d63 for drinking water supply, local heat and geothermal energy. Natural gas and liquid gas pipelines are connected by Geopress G d32 to d63. Both systems can be flexibly combined with all standard PE piping materials: PE-80, PE-100, PE-RC and PE-X.





The house drinking water connection is completed with a water meter mounting unit with integrated Easytop slanted seat valve.



GEOPRESS

- For drinking water, local heat and geothermal energy.
- D25 to d63.
- Including EPDM sealing element compliant with elastomer guideline issued by the GFEA.
- Green dot of SC-Contur marking.



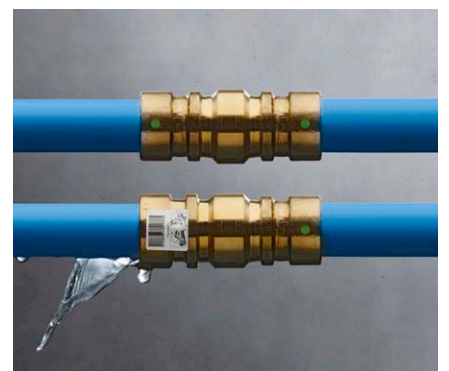
GEOPRESS G

- For natural and liquid gas pursuant to DVGW G 260.
- D32 to d63.
- Including NBR sealing element.
- Combined with protective sleeve made of gunmetal.
- Yellow dot of SC-Contur marking.



Safety factor SC-Contur

All Geopress and Geopress G connectors are equipped with the proven Viega SC-Contur which guarantees that inadvertently unpressed house service connections will immediately be detected during leakage test by causing a leakage.





Alternative energies

BRINGING THE FUTURE TO YOU.

What scientists call geothermal energy is nothing else but the heat stored in the upper earth's crust and solar energy. Energy that can heat houses and flats almost free of costs. This free energy can be generated for heating by using special geothermal carriers or heat pumps to lift up ground water. The most common systems to capture this energy are ground heat probes, baskets and collectors.

Ground heat baskets

Ground heat baskets are used to capture energy that is stored in the upper layers of earth. Geopress is used to connect the baskets with each other. Viega's high quality systems also connect the house, easy to assemble by the installer who will have no difficulties in joining the heat pump and the heating circuit of the building.

Ground heat probes

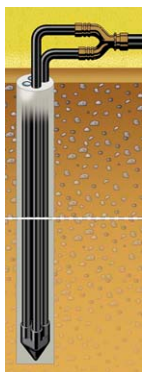
Ground heat probes require deeper boreholes as they use the energy from deeper layers of earth. Afterwards, Viega Geopress is used to integrate the various components of the system into the ground heat installation. The Y-piece (Fig. 1) is very helpful in this context as it allows for a quick connection of several probes. PE-100 or PE-X are the recommended types of pipes for this area of application. The pipes should be marked as suitable for ground heat piping.

Ground heat collectors

Ground heat collectors are laid horizontally in depths between 80 and 160 cm. Where possible, nothing should be built on these surfaces and the surrounding earth should be capable of keeping the humidity so that additional heat energy can be generated from seeping rain-water. Viega Geopress ensures a quick and easy connection of heat collectors and heat pump in the house.



Ground heat baskets capture the heat contained in the upper layers of earth.



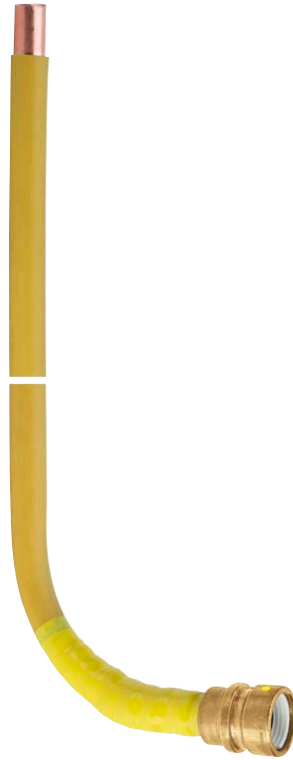
The Y-piece facilitates a quick and simple connection of several ground heat probes.

Liquid gas

Using liquid gas as a source of energy has many advantages. It is a very efficient and environmentally friendly fuel and provides flexible types of application. However, a few new standards have to be considered during the installation. The latest version of the TRF standard of 2012 states that underground house inlets have to comply with the DVGW test regulation VP 601 – which, as a standard, have to be equipped with a PE terminal. Geopress G is the perfect solution in this situation. PE-80, PE-100, PE-RC and PE-X pipes are all approved for usage without any limitations and can be safely connected with Geopress G.



Adapter 9613.1G to bridge PE and copper pipe for liquid gas systems.



Adapter 9613.5G with 90° WICU® pipe for solder-free connections of underground PE pipes with liquid gas tanks.

Easy connections

To enable an easy connection of liquid gas tanks, Viega developed its model 2613 for Profipress G and the adapters 9613.1G and 9613.5G which are perfectly tailored to fit with the Geopress G connectors. First of all, Profipress G is connected to the pressure regulating valve of the liquid gas tank. Then, the adapter ensures a smooth junction between the copper parts and Geopress G, which can be used to lay the supply pipes until the house's inlet. The entire installation job is done by using the Viega Pressgun. No additional tools or any soldering of the connection is required.



Adapter 2613 and 2611.5 for a direct connection between liquid gas tanks and Profipress.

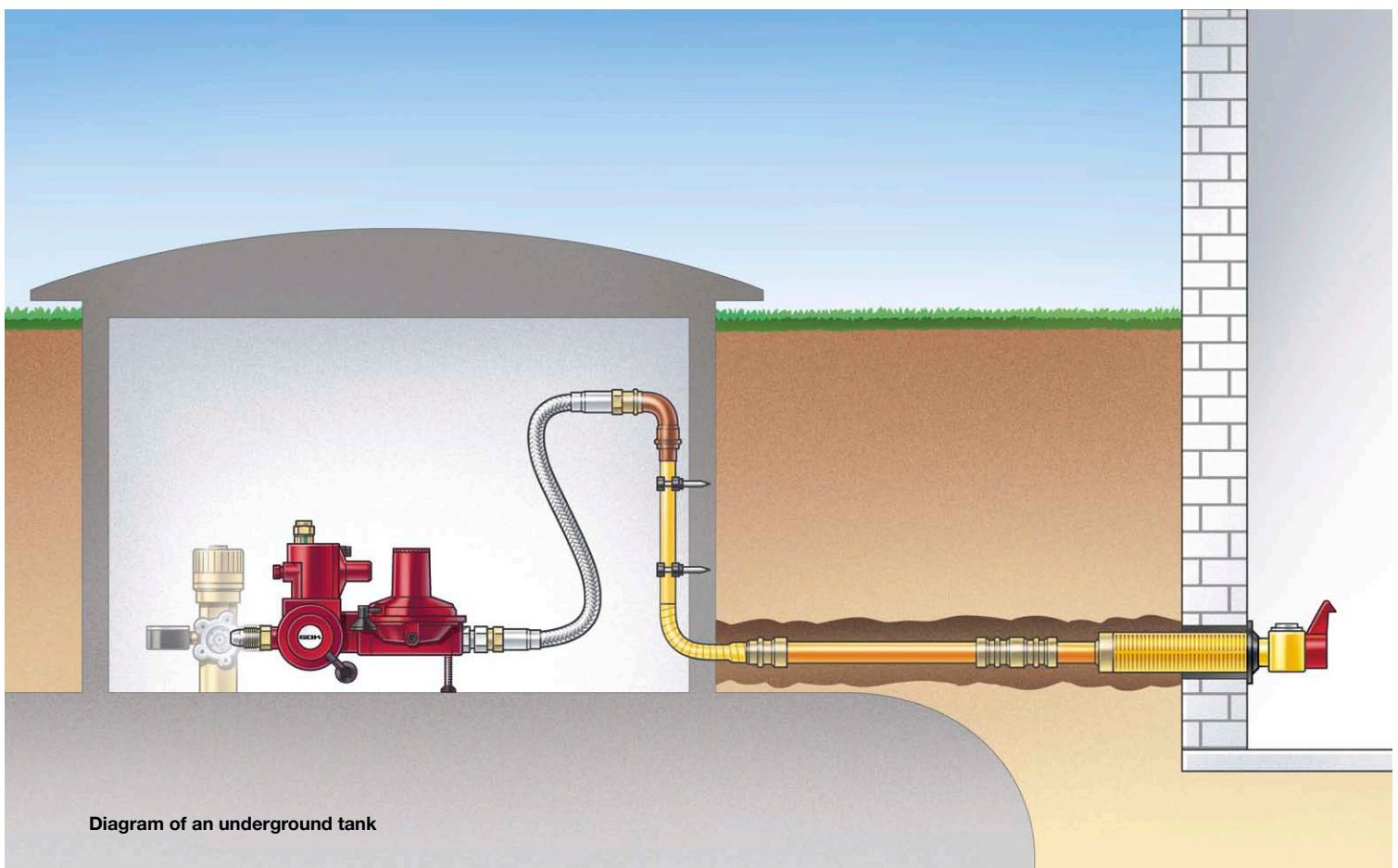
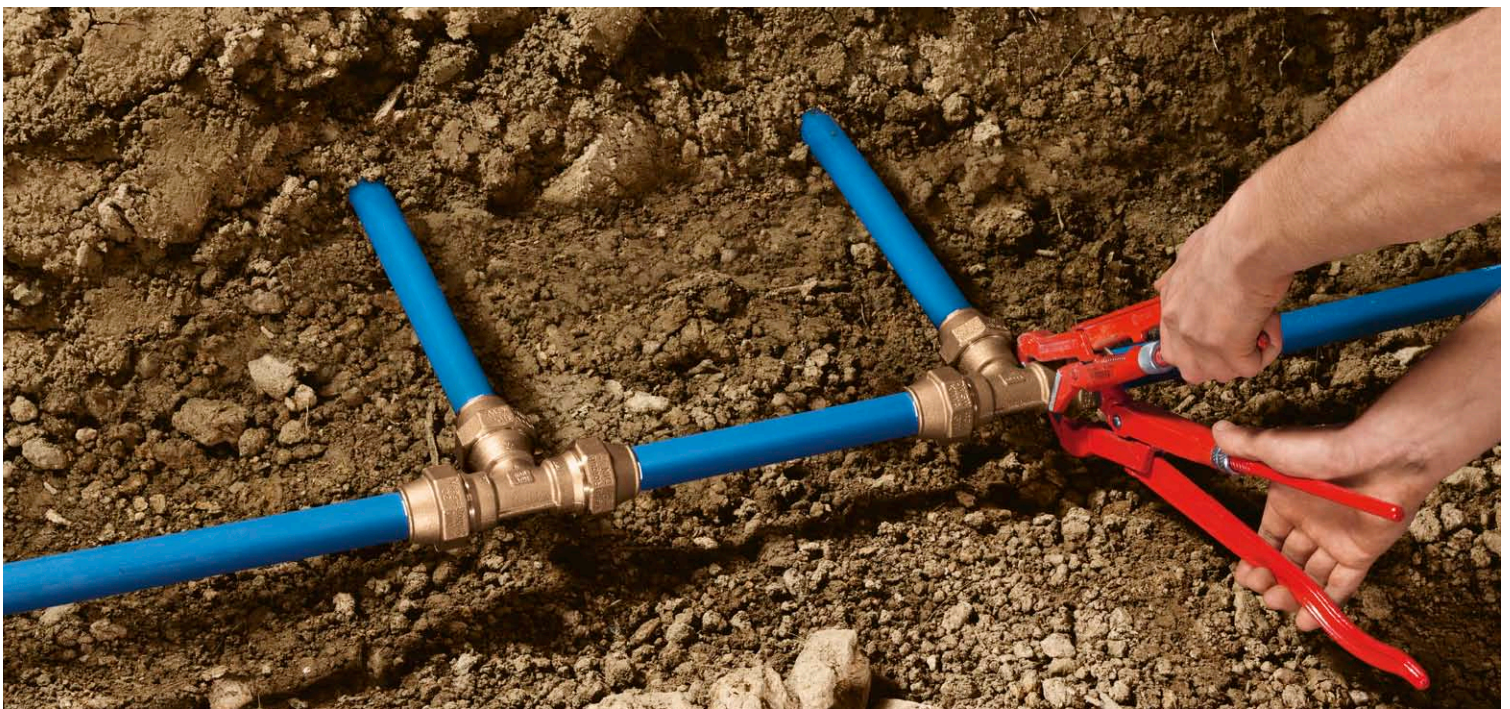


Diagram of an underground tank

Viega Maxiplex

THE DOWN-TO-EARTH ALTERNATIVE IN THE GROUND.

All good things come in threes – this also applies to connecting systems for underground supply lines. With Maxiplex, Viega completes its product range with highly economic and easy to install gunmetal clamp connectors (Fig. 1).



Viega Maxiplex provides the decisive economic advantage: The clamp connectors for the supply of drinking water can be quickly assembled with only a few tools.



REASONS FOR CHOOSING VIEGA MAXIPLEX

- Maxiplex, made out of DIN 50930-6 compliant gunmetal, complies with the Drinking Water Ordinance and is approved in accordance with the GFEA's assessment guideline for metals.
- Approved for drinking water (DIN 8076, part 1).
- Heavy, compact construction.
- Safe connection technology.
- Highly tensile, pressure and bending resistant, vacuum-tight.
- Great corrosion protection, no additional measures to protect against corrosion are required.
- Prefabricated for a quick and easy installation.
- Easy disassembly.
- Large portfolio of clamp connectors ranging from 20 to 63 mm.
- Maxiplex clamp connectors with gunmetal clamping ring for connecting to PVC U pipes.

Economically viable

The PE clamp connectors of the Maxiplex system are fabricated from high quality gunmetal and certified for usage in drinking water systems. Thanks to the easy installation and its cost-effectiveness, the system is not only suitable for complete installations in new development areas or house service connections, but also for repairs or emergency situations and interim solutions. It is designed for installations with all standard PE pipes: PE-80, PE-100 and PE-Xa. PVC U pipes can also be connected with Maxiplex. To do so, the plastic clamping ring is exchanged with a gunmetal clamping ring.



Easy installation – even under challenging weather conditions

Installing Viega Maxiplex is a breeze as only a few tools are required: Cut the pipe, deburr, insert, tighten union nut, ready. The weather does not play any role during the assembly.



Solid and safe

The base unit of the Viega Maxiplex connector is made out of high quality, corrosion-resistant gunmetal. The clamping ring inside the connector (Fig. 2) consists of grey, fibre-glass reinforced plastic and its enhanced tooth profile provides for a higher frictional force and the required tensile strength of the connector. The proven lip sealing (Fig. 3) absorbs any scratches or roughness of the pipe and guarantees a durable and reliable connection.



Viega Pressgun

TAKES SECONDS TO CONNECT WHAT BELONGS PERMANENTLY JOINED.

Viega press tools are known for their quality. They are especially impressive under the hardest working conditions. Among the most successful in Europe, their safety technology has been approved by TÜV, the German Certification Body. Longer service intervals further ensure highly economical usage.





With the powerful press tools of Viëga, underground connections are pressed within seconds.

Viëga Pressgun 5

- High performance press tool, which runs either on batteries or external electrical power.
- For all press connectors in dimensions 12 to 108 mm.
- Only 3.2 kg weight without press jaw.
- Simple one-hand operation.
- Lightweight 18 V/2.0 Ah lithium ion high-performance batteries with deep discharge protection and improved cold-start function; optionally available for higher capacity requirements: 18 V /4.0 Ah battery version.
- Utmost flexibility in each space situation thanks to the press head rotatable by 180° and the press rings with articulation.
- Integrated LED lamp for comfortable illumination of the pressing point.
- Safety standards checked by recognised authority (TÜV): tripping delay, pin retainer, maintenance display and automatic safety lock.
- Service only after 40,000 pressings or 4 years, safety lock after 42,000 pressings.



Battery-powered press machine Pressgun 5 (model 2295.2)



Press ring for Geopress K connector (model 9796.1)



Hinged adapter jaw Z 2 for d25 to d63 (model 2296.2)



Press ring for Geopress gunmetal connector (model 9696.1)



Press ring driver PT2 for Geopress K (model 9796.2)

Viega Geopress K

THE PRODUCT RANGE.

With Geopress K, Viega offers a comprehensive product range for uniform connections of underground supply lines with one single system. All connectors, couplings and adapters are available in dimensions d25 to d63.



9716



9714



9714.2



9726



9726.2



9713.3TW
9713.3G



9713.4TW



9715.1



9716.1



9720.1TW



9721TW
9721G



9715



9715.2



9715.5



9711



9712



9718



9717.1



9753.1G – Type A/D
9755.1G – Type C
9752.1G – Type R



9753.2G – Type A/D
9755.2G – Type C
9752.2G – Type R



9756



9690TW
9690G
9692G



9793TW
9793G



9794TW
9794G



































9794.1TW
9794.1G



9696

Viega Geopress and Geopress G

	<ul style="list-style-type: none"> ● 9616TW ● 9616G 		<ul style="list-style-type: none"> ● 9614TW 		<ul style="list-style-type: none"> ● 9614.2TW 		<ul style="list-style-type: none"> ● 9626TW ● 9626G
	<ul style="list-style-type: none"> ● 9626.2TW 		<ul style="list-style-type: none"> ● 9613.3TW 		<ul style="list-style-type: none"> ● 9613.4TW 		<ul style="list-style-type: none"> ● 9615.1TW ● 9615.1G
	<ul style="list-style-type: none"> ● 9616.1TW 		<ul style="list-style-type: none"> ● 9620.1TW 		<ul style="list-style-type: none"> ● 9621TW 		<ul style="list-style-type: none"> ● 9615TW ● 9615G
	<ul style="list-style-type: none"> ● 9615.2TW 		<ul style="list-style-type: none"> ● 9615.5TW ● 9615.5G 		<ul style="list-style-type: none"> ● 9611TW ● 9611G 		<ul style="list-style-type: none"> ● 9612TW
	<ul style="list-style-type: none"> ● 9622TW 		<ul style="list-style-type: none"> ● 9618TW 		<ul style="list-style-type: none"> ● 9617.1TW 		<ul style="list-style-type: none"> ● 9653.1 – Type A/D ● 9654.1 – Type B ● 9655.1 – Type C ● 9652.1 – Type R
	<ul style="list-style-type: none"> ● 9653.2 – Type A/D ● 9654.2 – Type B ● 9655.2 – Type C ● 9652.2 – Type R 		<ul style="list-style-type: none"> ● 9656TW 		<ul style="list-style-type: none"> ● 9690TW ● 9690G ● 9692G 		<ul style="list-style-type: none"> ● 9693TW ● 9693G
	<ul style="list-style-type: none"> ● 9694TW 		<ul style="list-style-type: none"> ● 9694.1TW 		<ul style="list-style-type: none"> ● 9696 		<ul style="list-style-type: none"> ● 9613.1G
	<ul style="list-style-type: none"> ● 9613.5G 		<ul style="list-style-type: none"> ● 9650TW 		<ul style="list-style-type: none"> ● 9613.2TW 		<ul style="list-style-type: none"> ● 9605

INT 768 683-02/18-117756 · We reserve the right to effect changes.



Viega Holding GmbH & Co. KG

Viega Platz 1
57439 Attendorn
Germany

Phone +49 (0) 2722 61-0

viega.com

