

Viega Raxofix

An innovative system for joining
PEX & multilayer pipe.



viega



Viega.

CONNECTED IN QUALITY.

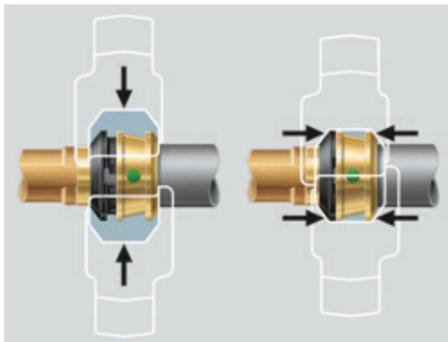
Viega is convinced: Quality is everything. Without quality, everything means nothing. That is why the company strives to exceed itself each and every day. By means of regular dialogue with its customers, by developing better products and service features and by an approach to the future that does not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

Viega has been connected in quality for over 120 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.



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Viega Raxofix

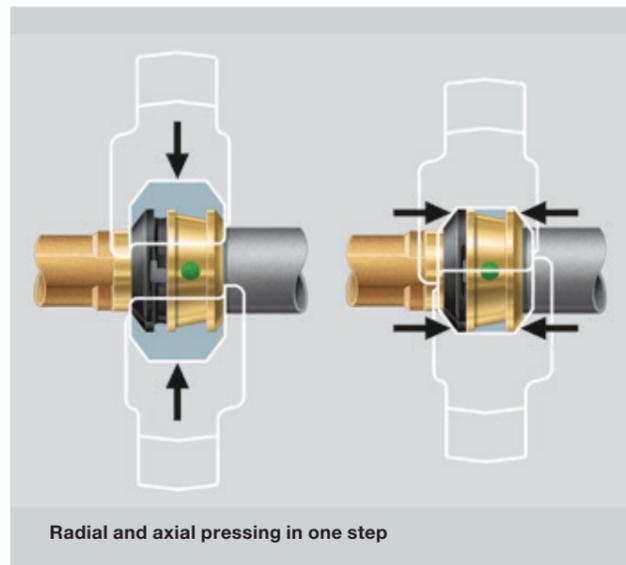
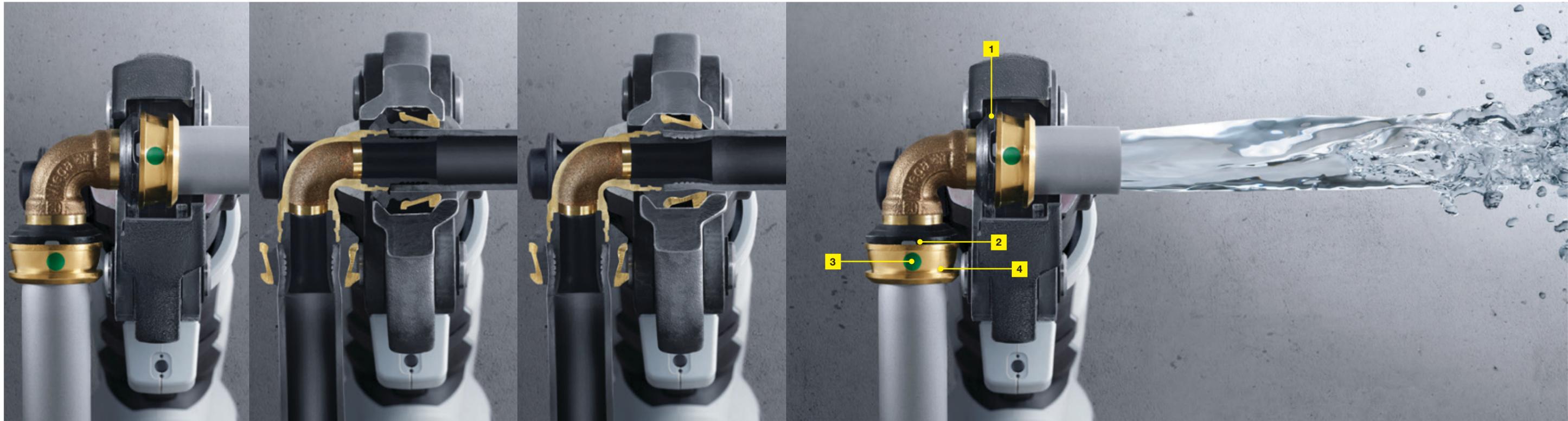
RAXIAL COMBINES THE BEST OF RADIAL AND AXIAL.

Endlessly flexible

To get it right whatever the conditions on site and connection requirements, Raxofix comes with a full range of fittings for drinking-water installations.



Complete range from 16 to 63 mm



Radial and axial pressing in one step

“Raxial” pressing technology

Viega’s revolutionary Raxofix press connectors in combination with jaws are designed to axially slide the sleeve and radially compress it simultaneously. Just one step produces completely secure, homogenous pressing suitable for PEX and multilayer pipes. All with no O-ring and no time-consuming calibration, chamfering or expanding.

Quick assembly – simple and quick installation is a special strength of Raxofix, which only requires three easy steps to achieve permanent connections.

Consistent tool concept – the purchase of additional jaws will enable you to use Viega’s pressguns across various other Viega product ranges. Transition fittings connect different Viega systems using the same pressing tool.

Silicon Bronze – High quality silicon bronze with less than 0.1% lead content as an impurity.

1 Easy detection of pressing status (Fig. 1)
The position of the Raxofix sleeve is different before and after pressing. The installer can very easily check if the connection is finished.

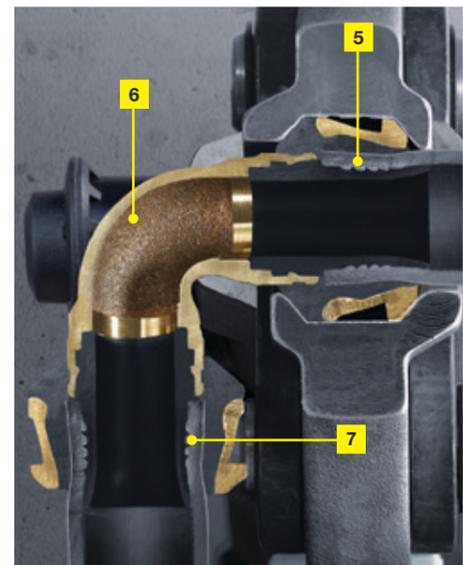
2 Check insertion depth of pipe even after pressing (Fig. 2)
The inspection window shows if the pipe is inserted fully. The inspection window can be checked during the assembly process and even after pressing – a big safety benefit.

3 Smart Connect Feature (Fig. 3)
Like all Viega piping systems, Raxofix fittings are designed to leak under test, if fittings are unpressed.

4 5 No loose parts (Fig. 4)
Pre-assembled sleeves. No mixing up or loss of individual components.

No O-rings (Fig. 5)
A connection without any sealing element is safer – no O-ring to be damaged. The absence of a sealing element also minimises the cross-sectional reduction in the connection.

6 7 Optimism curvature (Fig. 6) and minimised cross-sectional area reductions (Fig. 7)
Raxofix fittings are sand-cast. This optimises the flow rates in the fittings, resulting in less pressure loss. A benefit is smaller nominal diameters can be selected during system design: less water wasted, a more hygienic water supply, reduced wait time for hot water supply.



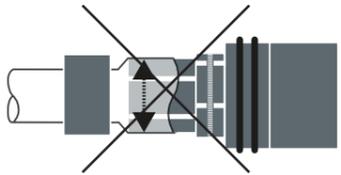
Viega Raxofix

EASY TO CUT, MOUNT AND PRESS.

Speedy installation

Quick and simple installation is one of Raxofix's key strengths. It only takes three steps to achieve a permanent connection: 1. Cut the pipe to length, 2. Mount the fitting and check insertion depth through the viewing window. 3. Press the fitting.

Compared with other systems, radially pressed pipes do not have to be calibrated, chamfered or enlarged. This speeds up installation time by 30%.



Safe and convenient

Unlike standard systems available on the market, Raxofix pipes and connectors can be effortlessly prepared and adjusted before pressing.

A further advantage

Should a pressing step be accidentally omitted, the Viega Smart Connect Feature will ensure this is discovered as part of a leak test. This means maximum safety.



A universal tool concept

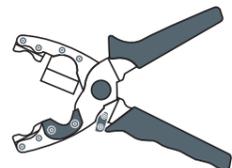
Raxial pressing is completely revolutionary, and yet it does not require any new tools. You can continue to use our tried-and-tested Viega Pressguns. All you need is new press jaws. When working on hard-to-reach sections, we recommend a combination of a pinching jaw and a press ring, which Viega now provides for work with plastic systems, too. The Raxofix range includes press rings from 16 to 63 mm. Depending on size, you will either need a Pressgun Picco (up to 40 mm) or a Pressgun 6, 5 or 4B (up to 63mm).

Up to
30%
time saved



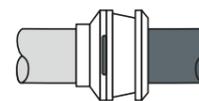
1. CUT

- No reamer required
- No rounding



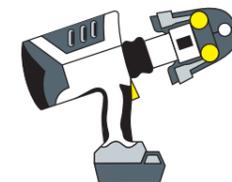
2. MOUNT

- No expanding, no additional tools
- All in one – pre-installed sleeve
- Easily monitor insertion depth through an inspection window before and after pressing



3. PRESS

- Optimum safety using Smart Connect Feature
- Compatible with existing Viega Pressguns
- No regular tool calibration required
- Gauge tool not required to check fitting is pressed correctly





Raxofix multi-layer composite piping for potable water and heating systems: dimensionally stable



Raxofix piping: flexible and kink-resistant

Viega pipes are made in Germany and meet the highest standards of pressure and temperature stability. All PE-Xc pipes in the Raxofix system are manufactured with a black PE-Xc base pipe and a coloured outer layer to denote the pipe's use. The pipes have thick walls which create a high level of kink resistance compared to standard piping. This means the pipes are resistant to damage while being weaved through wall studs. Pipes can be redirected freehand with a radius of 5 times the outer diameter and their stability can then be improved using a pipe bracket.

The 100% plastic pipes with a grey outer layer are suitable for connecting and distributing hot and cold potable water from the riser pipe to the tapping point. Hot potable water can be identified using the red pipes and is clearly separated from

cold water on the construction site, so no mix-ups will occur even over the course of several years. The WC can be connected to rain water or reclaimed water using the pipes with green or lilac outer layers.

Our multi-layer composite piping

All Raxofix multi-layer composite piping uses a carefully designed structure featuring a thick-walled liner that can stand up to the toughest knocks in the business. It has reliable dimensional stability and kink resistance even while being worked on. That means that Raxofix pipes up to 32 mm in size are ideal for bending freehand. When using bending tools at a size of 16 mm, the minimum bending radius is reduced to 2xD.

Made in Germany

Quality made in Germany

FLEXIBLE AND KINK-RESISTANT.

For all applications



Hot potable water



Potable water



Rain water



Reclaimed water

Increases flow IMPROVES EFFICIENCY.

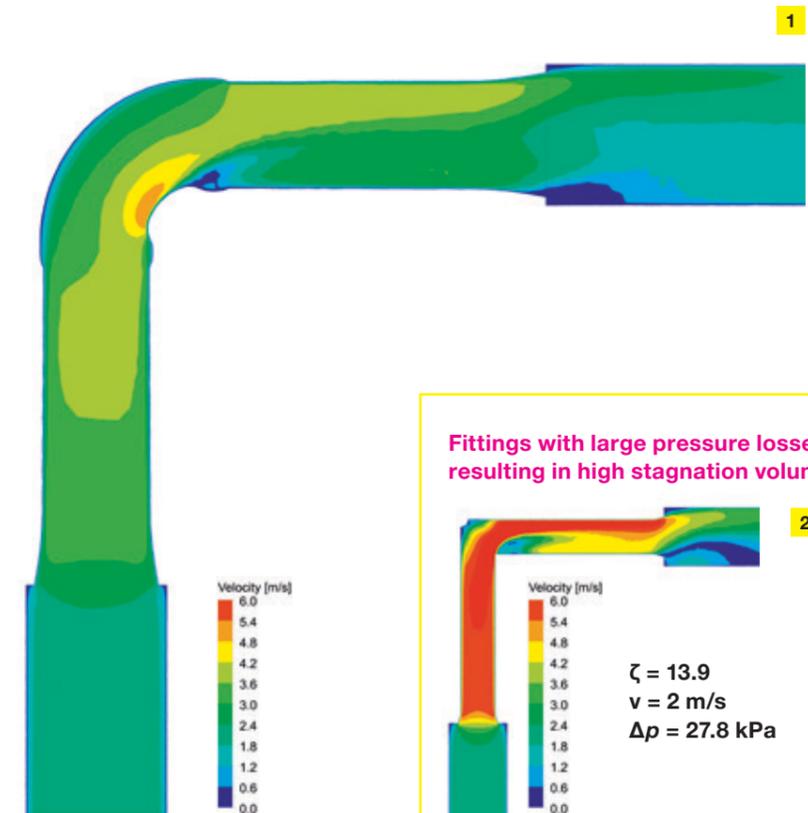


- i REASONS TO USE VIEGA RAXOFIX**
- Simple and fast installation
 - Minimal pressure loss
 - Minimal cross section reduction
 - Economically smaller pipe sizes possible due to excellent flow rates
 - Reduced wait time for hot water due to small pipe sizes
 - The combination of flow friendly radii and low cross section reduction, achieves the lowest pressure loss of any press connector for PEX and multilayer pipes on the market
 - High quality silicon bronze with less than 0.1% lead content as an impurity

Reduced pressure loss for better economy
Ensuring the required minimum flow when several fixtures are in use is the primary goal when installing a potable-water system, ideally using the smallest possible inner diameters. The press connectors in our Raxofix range are made by means of a sand casting process, and the internal barb do not feature O-rings, meaning cross-sections are only minimally restricted. This achieves the lowest loss of pressure (Fig. 1) of any press system for 100% PEX or multi-layer composite piping on the market. This will help you achieve the smallest possible inner diameter.

Smaller dimensions for improved economy
In practice, this provides many advantages in terms of dimensions compared to standard press systems (Fig. 2 and 3) for multi-layer composite piping. This leads to improved economy and easier installation because there is less disparity in dimensions between the floor distribution piping and the pipe work connecting to the fixtures.

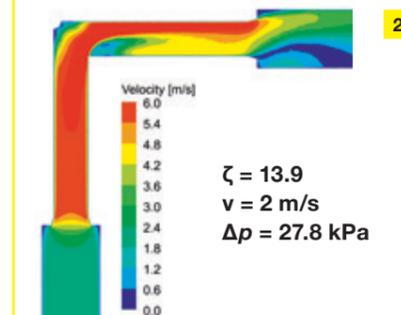
Lower water volume, improved convenience
There are significant advantages in operating the system as well: lower stagnant volumes mean better standards of hygiene for the drinking water. This also reduces delays, i.e. the wait for warm water to arrive at the tap.



$\zeta = 1.7$
 $v = 2 \text{ m/s}$
 $\Delta p = 3.4 \text{ kPa}$

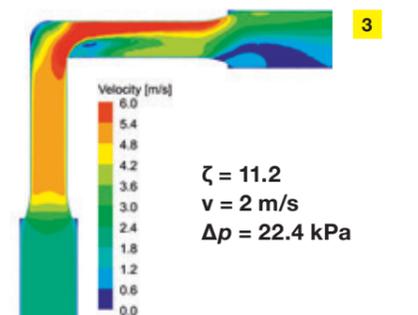
Combining flow-friendly radii with minimal restrictions of the cross sections, as Viega Raxofix does, is the only way to minimise loss of pressure and ensure improved dimensions

Fittings with large pressure losses cause pipe upsizing, resulting in high stagnation volume.



$\zeta = 13.9$
 $v = 2 \text{ m/s}$
 $\Delta p = 27.8 \text{ kPa}$

Extreme pressure loss caused by irregular shape and greatly restricted cross sections.



$\zeta = 11.2$
 $v = 2 \text{ m/s}$
 $\Delta p = 22.4 \text{ kPa}$

Slightly improving the inner diameter is not always enough on its own to prevent significant pressure loss.

Hygienic benefits

FLOW-OPTIMISED DAISY CHAIN FITTINGS IMPROVE DRINKING WATER.



16 mm / 20 mm



16 mm / 20 mm / 25mm



16 mm / 20 mm



16 mm / 20 mm / 25mm

The Raxofix range is extensive and ideal for flexible installations within a bathroom and kitchen. Transition from the Propress pipe riser with copper piping with parts that insert directly into the T-joint or simply transition to each fixture. Directly connect a tap using a Raxofix connector, install a simple connection for a wash basin using a 19BP fitting. All of these items are available with a connection for individual feeder pipes or with two connections in order to hygienically connect each fixture into a loop-and-series system.

Long distances using series piping (Fig. 1)
Series piping is a sensible way to protect the quality of your drinking water. The order of fixtures can make an effective contribution to technical hygiene assurance. Series piping is hygienic if the fixture in most frequent use is found at the end of the series. That way, when this fixture is used, the water content is refreshed at each upstream fixture.

More fixtures using the same dimensions, thanks to the use of loops (Fig. 2)
Regardless of the order of fixtures, the total water content of the looped installation will be refreshed whenever a fixture is used. The volume flows are distributed, slowing flow speed and thereby significantly reducing loss of pressure. In comparison to T-joints and series installations, this hugely increases reach, allowing you to connect several bathrooms in a hotel or hospital, for example. Water is regularly refreshed, even if only one room is connected.



Viega's specialist double-walled flanges make it easy to use a loop-and-series system



Viega expertise in drinking water

Drinking water is key to life. It is so important that we use this resource responsibly. Viega drinking-water systems have long been doing just that. They have been issued the WaterMark Certification, are food-safe, hygienic and meet all legal requirements. Raxofix is a clear continuation of this tradition – with minimal pressure loss and system volume.

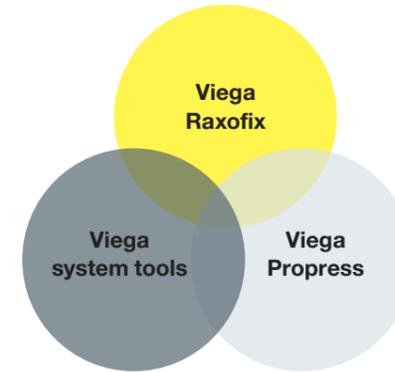
Low stagnation is a key factor for high-quality drinking water. This is why series-and-loop systems are generally recommended.



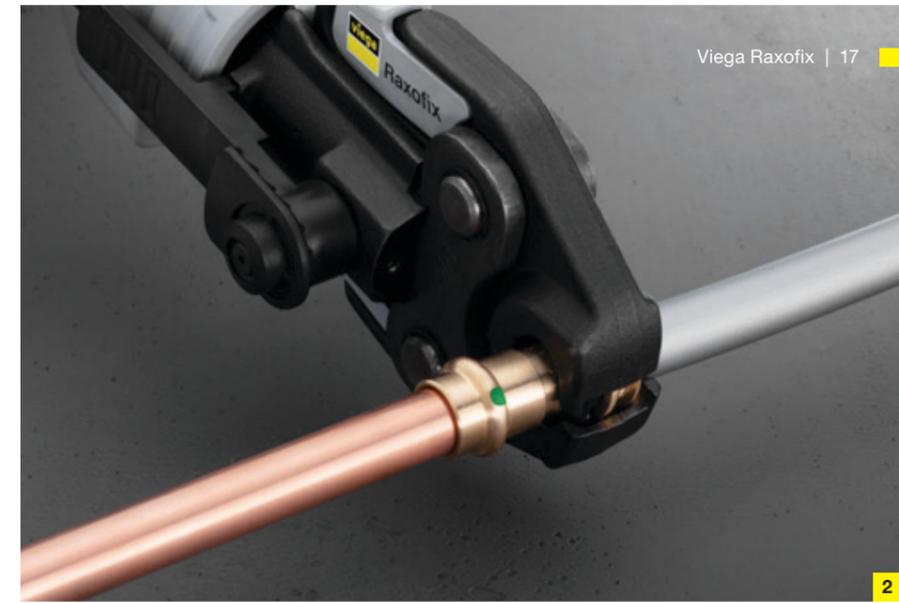
So very Viega
EFFORTLESS TRANSITION BETWEEN
DIFFERENT VIEGA SYSTEMS WITH
THE SAME PRESS TOOL.



Raxofix transition fittings for easy connection with Propress



The Viega systems are ideally matched and complement each other according to the requirements of the construction site



Perfect solutions, intricately designed

Want to transition to a pipe from another system? Extreme space constraints on your installation? Or high demands on your sound insulation? Viega has the right components, all within the Raxofix range.

Press ring

We recommend a combination of pinching jaw and press ring (Fig. 1) for Raxofix systems under extreme space constraints. Press rings sized 16 to 63 mm are available as add-ons where plastic piping systems are used. You can press Raxofix fittings up to 40 mm with the Pressgun Picco. The larger Pressguns are designed to press at larger dimensions, up to 63 mm.

System transition

Need to transition from an existing copper system? Viega Raxofix have transition fittings to enable direct transition with one fitting and the same Viega tool. All you need is Raxofix and Propress jaws. Need to branch off a copper line? That's easy, just use a Propress tee and a Raxofix to copper tail adapter which can be pressed into the Propress tee branch (Fig. 3).



Viega Pressgun 5 for sizes up to 63 mm



Viega pinching jaw and press ring

Viega Raxofix THE RANGE.

Here, we provide an overview of the individual items in the Raxofix range to give you an idea of just how wide-ranging the real-world applications can be. The number listed is the model number and defines the shape of the connector or component. You can find further details by looking up the model number in the index of our product catalogue.





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