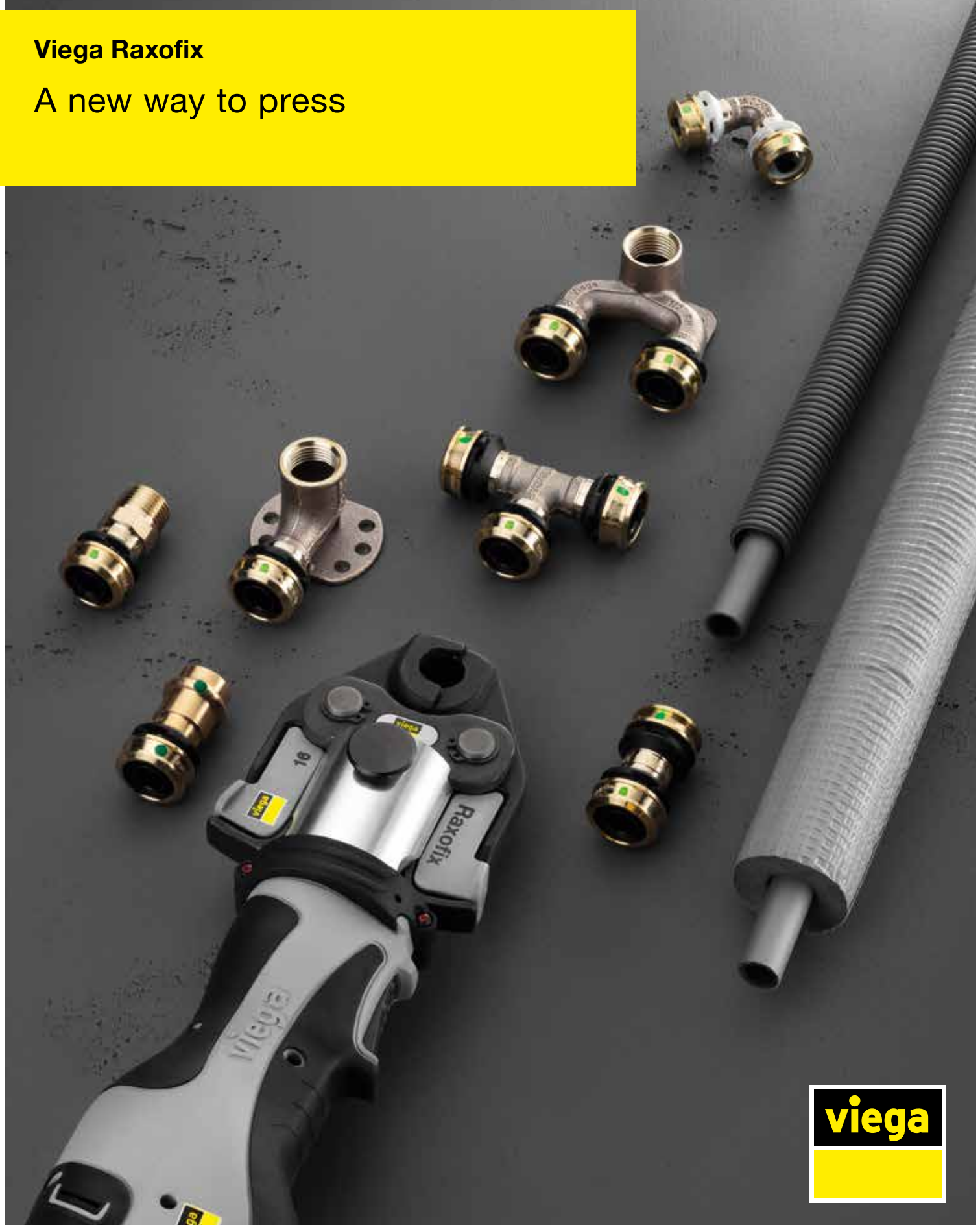
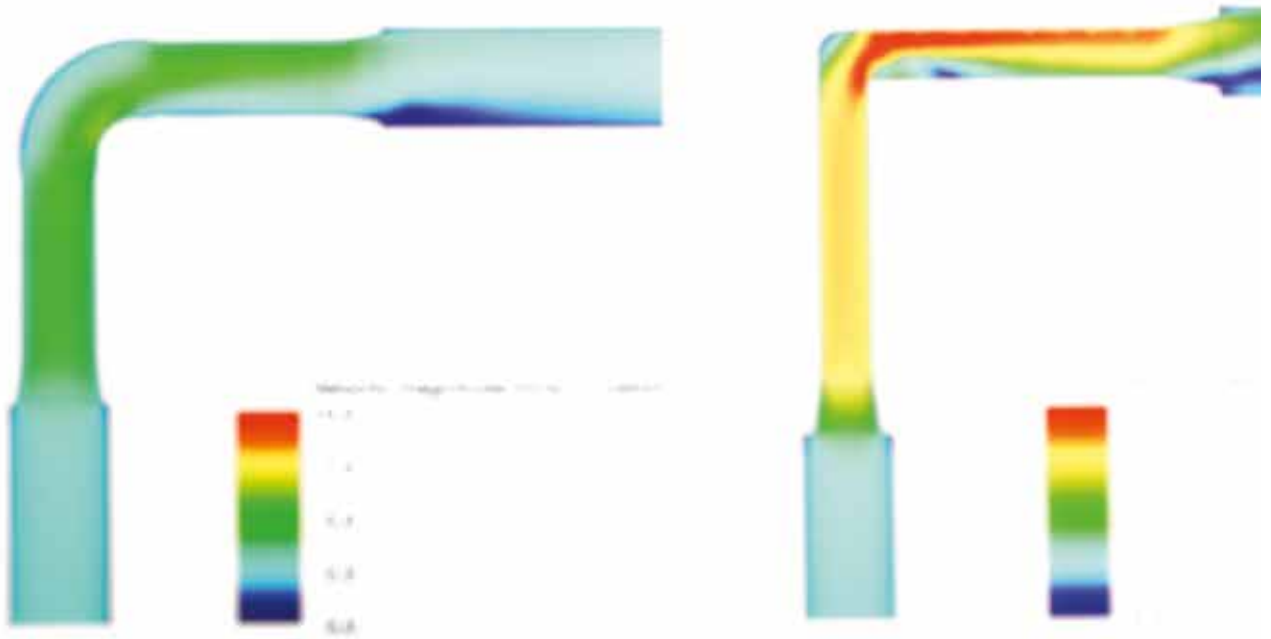


**Viega Raxofix**

A new way to press





**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 revolutionizing 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.**



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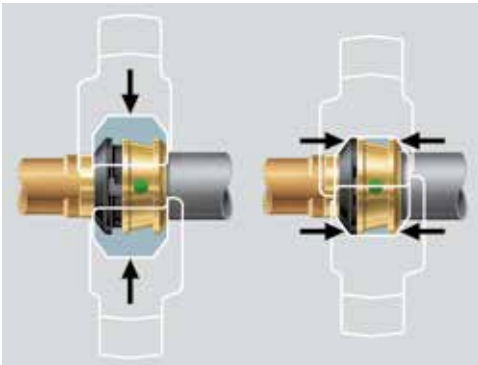
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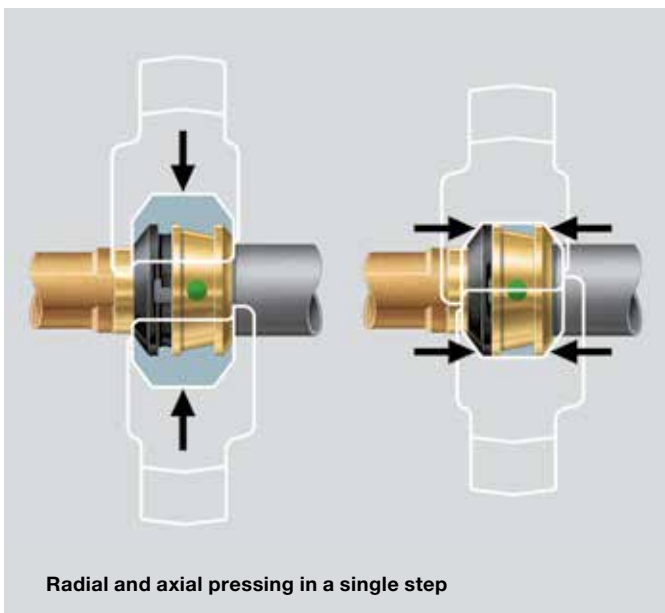
The range.





## Viega Raxofix

# RAXIAL COMBINES THE BEST OF RADIAL AND AXIAL.



### “Raxial” pressing technology without O-ring

The raxial pressing technology developed specially for Raxofix is truly innovative. It combines the key benefit of radial pressing technology – i.e. ease of implementation – with the main advantage of axial sliding sleeve technology – i.e. even pressing. Raxofix connectors are designed to convert radial movement into axial pressing. Just one step produces completely secure, homogenous pressing suitable for plastics. All with no O-ring and no time-consuming calibration, chamfering or enlarging.

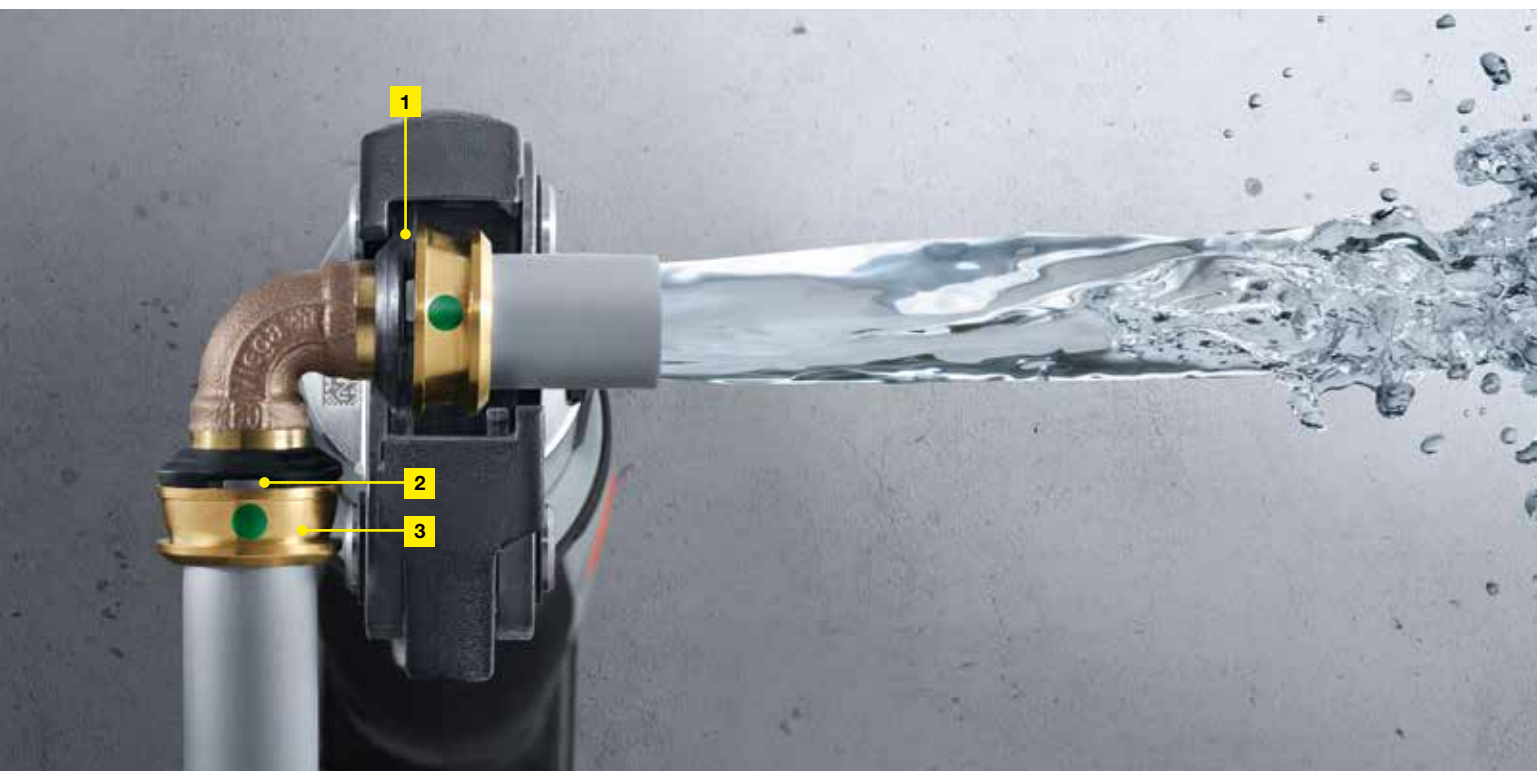
## Endlessly flexible

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

NEW



Between 10 and 63 mm



1

### Easy detection of pressing status

The position of the Raxofix sleeve is different before and after pressing. The plumber can check very easily if the connection is finished.

2

### Check insertion depth of pipe even after pressing

The inspection window shows if the pipe is inserted deeply enough. The inspection window can be checked during the assembly process and even after pressing – a big safety benefit.

3

### No loose parts – pre-assembled sleeves

No mixing up or loss of individual components.

4

### No sealing elements

A connection without any sealing element is safer – no O-ring to be damaged. The absence of a sealing element also minimizes the cross-sectional reduction in the connection.

5 6

### Streamlined radii and minimized cross-sectional area reductions

The flow rates in the Raxofix fittings are very good, the pressure losses very low. This means that smaller nominal diameters can be selected during system design. Less water wasted, a more hygienic water supply, more comfort for the end consumer!

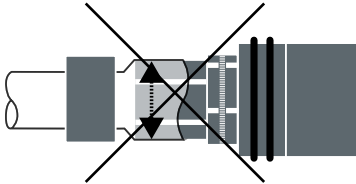


## Viega Raxofix

# EASY TO CUT, INSTALL AND PRESS.

### Speedy installation

Easy, speedy installation is a particular strength of the Raxofix system. Just three steps will give you durable, no-twist connections: cutting the pipe, installing the connector and checking the shelf, radial pressing – that's it! Unlike other systems, there is no requirement to calibrate, chamfer or enlarge pipes. This enables time savings of up to 30%.



### Safe and convenient

Unlike standard systems available on the market, Raxofix pipes and connectors are effortless to prepare and adjust before pressing. A further advantage: If a connection accidentally remains unpressed, the Viega SC-Contur will ensure this is discovered as part of a leak test. This ensures maximum safety.



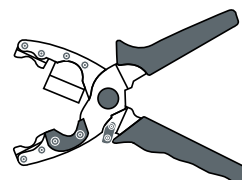
### A universal tool concept

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. You only need new press jaws. When working on hard-to-reach sections, we recommend a combination of articulated jaw and press ring, which Viega now provides for work with plastic, too. The Raxofix range includes press rings from 16 to 63 mm. Depending on size, you will either need a Pressgun Picco 6 Plus (up to 40 mm) or a Pressgun 6 Plus (up to 63 mm) to press these.



## 1. CUT

■ Cut pipe



No need for  
calibration

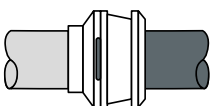


Work up to  
**30%**  
quicker



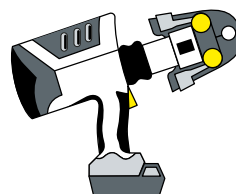
## 2. INSTALL

- No enlarging, no additional tools
- No need for calibration
- All in one – pre-assembled sleeves
- Inspection window for straightforward monitoring before and after pressing



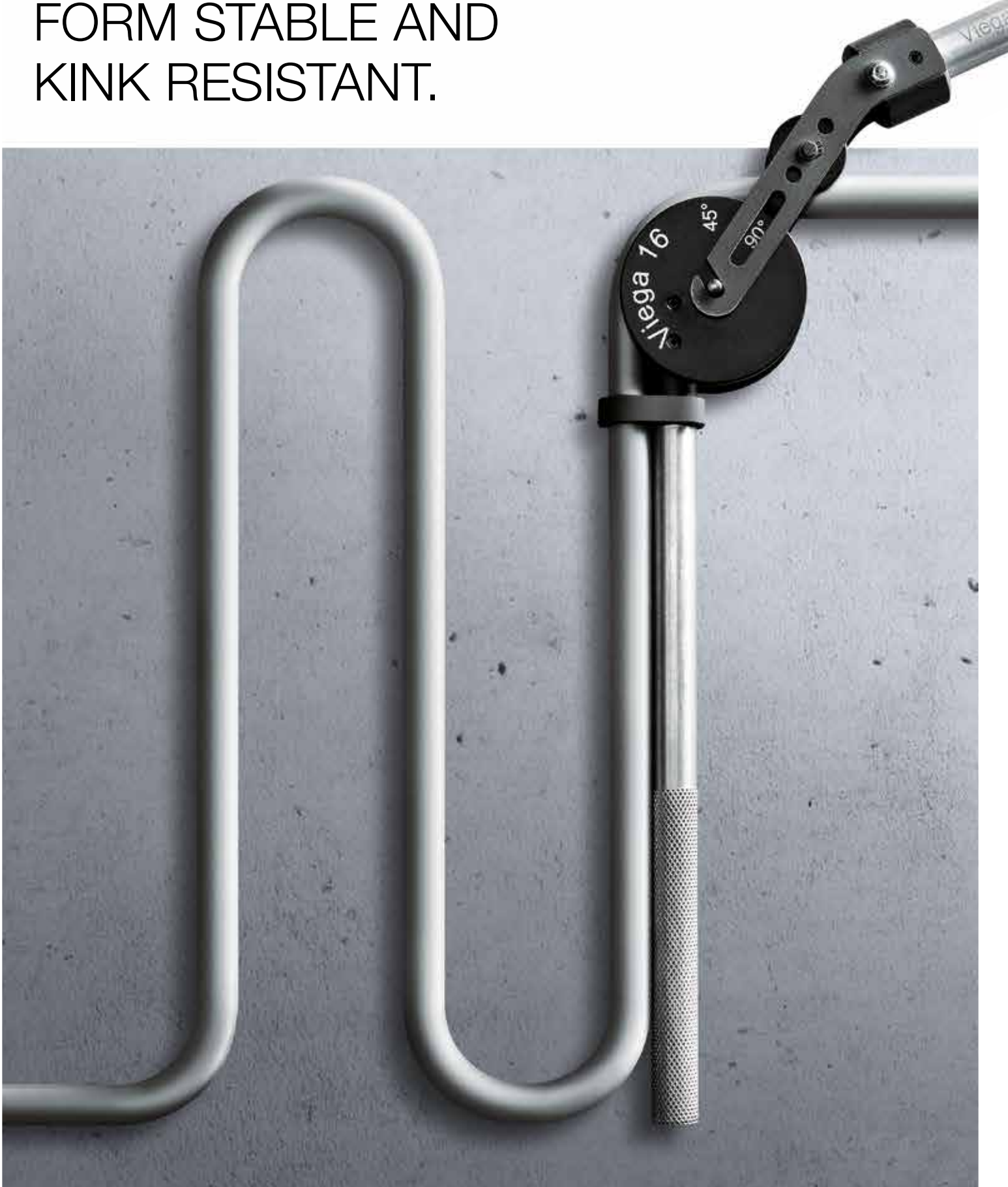
## 3. PRESS

- Optimum safety using SC-Contur
- Compatible with existing pressing machines



**Quality made in Germany**

**FORM STABLE AND  
KINK RESISTANT.**





### Extremely durable and kink resistant

All Raxofix piping uses a carefully designed structure featuring a thick-walled liner that can stand up to the toughest knocks in the business. It is reliably form stable and kink resistant even during works. That means that all Raxofix pipes up to 32 mm in size are ideal for bending freehand and installing perpendicular on the wall – at the same time. When using bending tools at a size of 16 mm, the minimum bending radius is also reduced to 2xD.

### Pre-insulated in line with standards and energy efficiency regulations

With a view to ensuring that drinking water is hygienic and that energy efficiency regulations and standards are complied with, all Raxofix pipes are available pre-insulated off the roll. As well as cutting down on the amount of work required by some considerable margin, this also meets the requirements of DIN 1988-200, which stipulates different insulation thicknesses for cold and hot drinking water depending on the installation conditions in order to maintain the quality of the water.

Furthermore, the provisions set out by the energy efficiency regulations for reducing thermal dissipation must be aligned with the need for uncomplicated and economically viable pipe installation. The multi-layer composite piping with eccentric pre-insulation is a particular highlight. Installing the piping in floors ensures compliance with the energy efficiency regulations and the compact insulation means that the installation height is significantly reduced compared to when all-round insulation is used. The height is minimized even further by the eccentric insulation being incorporated into the footfall sound insulation.

## Raxofix multi-layer composite piping

DN 10 blank

Blank  
16–63 mm

Protective pipe  
16–20 mm

6-mm all-round  
insulation  
16–20 mm

9-mm all-round  
insulation  
16–32 mm

13-mm all-round  
insulation  
16–32 mm

26-mm all-round  
insulation  
16–25 mm

Exzentroflex insulation,  
9 mm  
16–20 mm

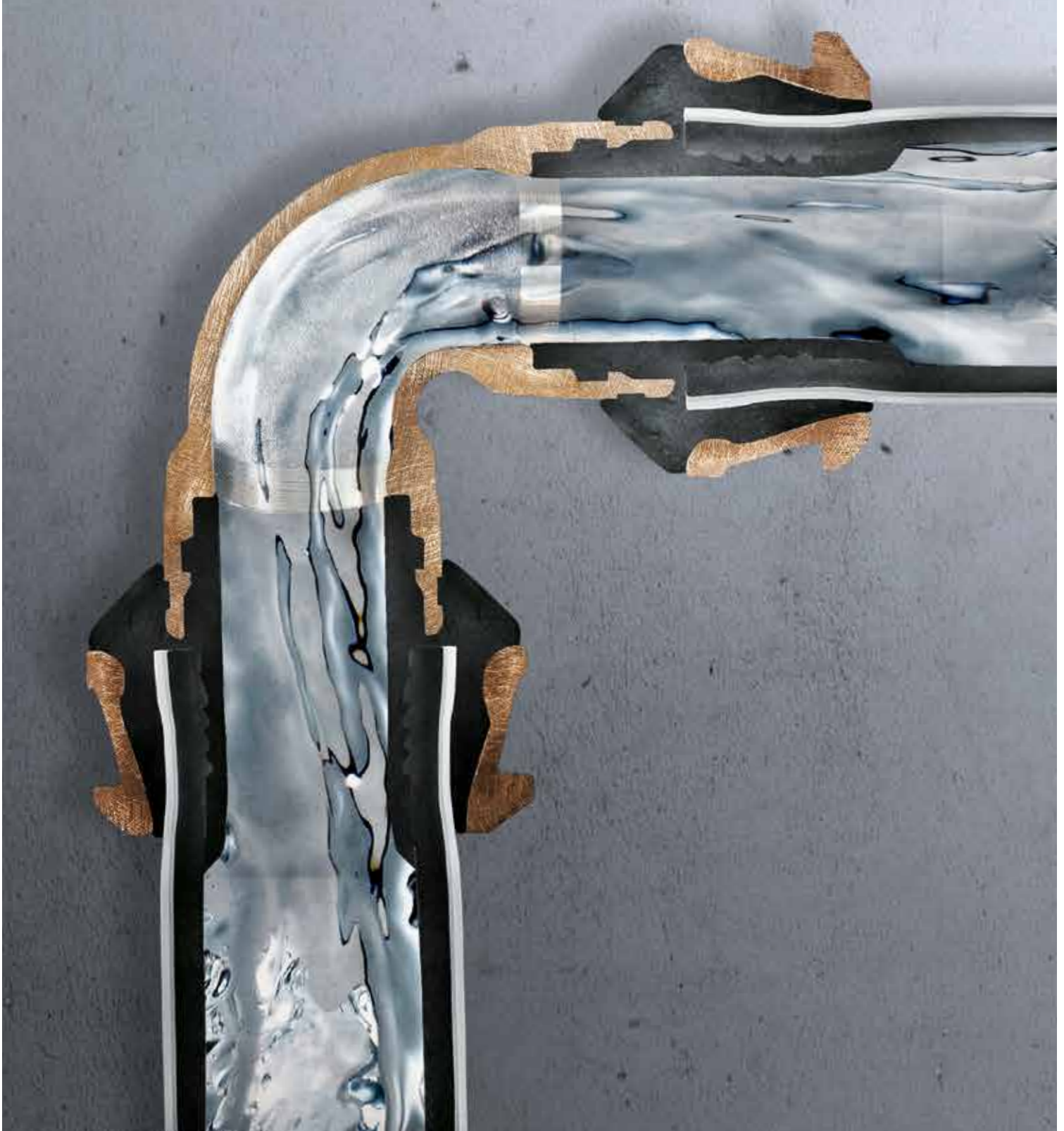
Exzentroflex insulation,  
26 mm/100%  
16–25 mm



Comparison of Raxofix pipe, 20 x 2.8 mm, with standard multi-layer composite piping, 20 x 2.0 mm

**Increases flow**

**IMPROVES  
ECONOMIC EFFICIENCY.**



### Reduced pressure losses improve comfort, hygiene and economic efficiency

Assuring the required minimum flow when several tapping points are in use is the primary goal when dimensioning a drinking water system. Ideally, the smallest possible inner diameters are used as per DIN 1988-300. The press connectors in our Raxofix range are made using a sand casting process and the supports do not feature O-rings, meaning cross-sections are only minimally restricted. This achieves the lowest loss of pressure (fig. 3) of any press system for multi-layer composite piping on the market. This helps you to reach that goal of the minimum possible inner diameter.

In practice, this provides many advantages in terms of dimensions when compared to standard press systems (fig. 1 and 2) for multi-layer composite piping. This improves economic efficiency and makes installation easier because there is less disparity in dimensions

across the floor and smaller versions of related items such as pipe fixings and taps can be selected.

There are significant advantages for the user when running the system as well: lower stagnation volumes mean better standards of hygiene for the drinking water. This also reduces delay times, i.e. the wait for warm water to arrive at the tap. Not to mention that the comfort criteria set out in VDI 6003 are also taken into account.

### Safer renovations

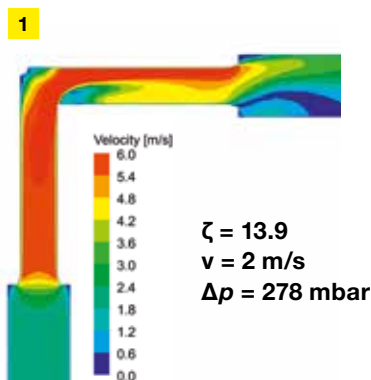
Bathroom renovations have their own set of rules. It is very rare to find helpful planning documentation relating to the existing installation when replacing piping. On top of that, renovation work often changes the situation, with newly installed double sinks and special shower heads increasing the volume of water required on that floor of the building. Despite these somewhat challenging conditions, the Raxofix system can be

relied upon to surpass standard systems. The low loss of pressure associated with the press connectors ensures a higher flow pressure given the same dimensions. Achieving the same flow rates with standard systems (fig. 1 and 2) would require larger pipes, which would in turn prolong the wait for warm water and increase operating costs.

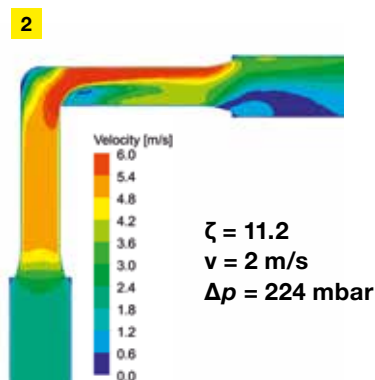


### REASONS TO USE VIEGA RAXOFIX

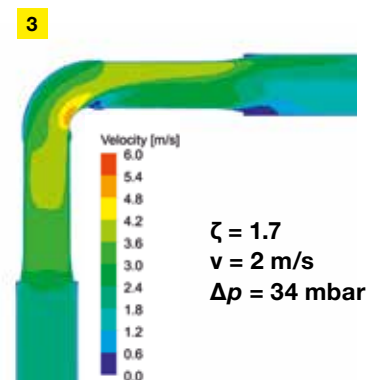
- Minimal loss of pressure
- Minimal cross-section restriction
- Economical thanks to better dimensions
- Reduced time delay thanks to lower water content
- Our combination of low cross-section restrictions and flow-friendly radii is the only way to achieve the lowest loss of pressure of any press connector for plastic pipes on the market



Extreme loss of pressure caused by angular redirections and greatly restricted cross sections.



Slightly improving the inner diameter is not enough on its own to prevent significant loss of pressure and can cause differing dimensions.



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

## Hygiene benefits

# VIEGA RAXOFIX IN DRINKING WATER SYSTEMS.



### 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 awarded DVGW certification, are food safe and hygienic, and meet all legal requirements. Raxofix is a clear continuation of this tradition – with minimal loss of pressure and system volume.

1



16 mm



16/20 mm



20 mm



20/25 mm



25 mm



### Long distances using series piping (fig. 2)

Series piping is a sensible way to protect the quality of your drinking water. After all, the order of fixtures can make an effective contribution to technical hygiene assurance. Series piping is hygienic when the tapping point in most frequent use is found at the end of the series. That way, when this tapping point is used, the water content at each upstream fixture is also refreshed. A further advantage is that using double-walled flanges between 16 and 25 mm (fig. 1) allows you to increase the number of possible fixtures.



### More tapping points using the same dimensions, thanks to the use of loops (fig. 3)

Regardless of the order of fixtures, the total water content of the levelled installation will be refreshed whenever a tapping point 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 Raxofix DN 10

# FINALLY IN REACH: INCREASED EFFICIENCY ACROSS THE FLOOR.

The new Raxofix DN 10 combines minimal water content with the low pressure losses associated with the Raxofix system. This means that the reach is extended without delay times being increased, ensuring that the planning objectives set out by VDI 6003 are catered to with efficiency.



### REASONS TO USE VIEGA RAXOFIX DN 10

- The maximum time delay as per VDI 6003 can often be complied with without structural changes
- Improved energy efficiency thanks to the reduction in circulation pipes
- No further expense caused by requiring additional water meters; simplified service charges
- Low pressure losses thanks to streamlined redirections and minimal cross-section restriction
- Connector technology without O-rings
- Compatibility with existing Raxofix tools measuring 16 mm
- Integration into Viega Viptool
- Kink-resistant plastic piping

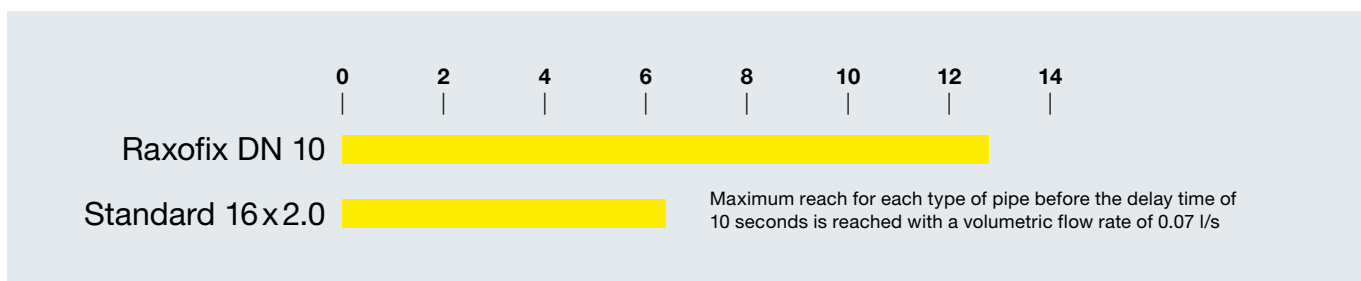


**Pipe length doubled for more flexible planning**

Compared to a standard pipe with a diameter of 16 mm, the water content is virtually halved with the new Raxofix DN 10. The reach is almost doubled as a result, making planning so much easier. The specified delay times can now be complied with efficiently – often without the need for additional riser pipes. This translates to savings on installation costs and on-going operating costs thanks to the reduction in circulation pipes as well as riser pipes. And Raxofix DN 10 even helps maintain the quality of drinking water, as the entire contents of the piping are refreshed with almost every use.

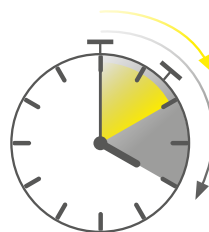
**Same level of efficiency, same old tools**

What’s even better is that no extra tools are required for the newly developed Raxofix DN 10 connectors since they are compatible with the existing Raxofix pressing tools measuring 16 mm. It goes without saying that all of the usual technical benefits boasted by Raxofix apply to the new dimensions too. The low zeta values also mean that Raxofix DN 10 has impressive flow properties. Not to mention that the lack of O-rings involved in this connection technology allows for implementation without the need for calibration.



**Reducing the size whilst reaping the benefits**

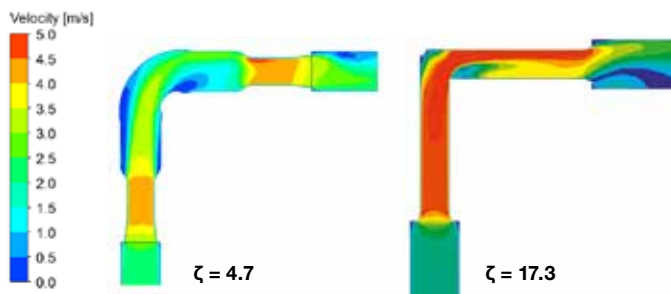
Raxofix DN 10 also comes into its own when the specified hot water delay times are to be theoretically achieved at kitchen connections with the standard dimension of 16 mm. The delay time is often almost halved, which is so much more convenient for the user who can gain access to hot water much more quickly. Low pressure losses also help here – despite the smaller dimension, the low levels typical of Raxofix systems can still be achieved. This is all down to the connector technology which features no O-rings and boasts minimal cross-sectional restriction and the streamlined redirections – made using a sand casting process – with particularly low zeta values.



Delay time with DN 10 and a 10-metre pipe: 9 seconds.

Delay time with a standard 10-metre pipe measuring 16 x 2.0 mm: 17 seconds.

Raxofix DN 10 shortens the delay time by some considerable margin compared to a standard DN 16 pipe with the same length.



The impressive flow properties of Raxofix DN 10 connectors (left) give rise to a zeta value that is only around 30% of that of a standard connector measuring 16 mm.

System efficiency

# VIEGA RAXOFIX IN HEATING SYSTEMS.

## Efficient pre-insulation

The Raxofix range covers a wide assortment of pre-insulated pipes. After all, heating pipes need to be insulated correctly to ensure energy efficiency and comply with the relevant regulations. The following versions are available: protective pipe, 6-mm, 9-mm, 13-mm and 26-mm all-round insulation and Exzentroflex insulation. The Exzentroflex insulation is so compact that it provides plenty of scope for cutting down on materials, saving time and keeping the installation height low since the eccentric insulation can be incorporated into footfall sound insulation. There is no need for additional continuous footfall sound insulation (fig. 5).



P-BA 13/2011

## Raxofix radiator connection blocks

Connecting radiators using these pre-insulated radiator connection blocks is incredibly straightforward and efficient. There is no need to waste time and money on post-insulation thanks to the insulation box. And the integrated fastening mechanism speeds up the fastening process too.

There are four pre-insulated connection blocks in the Raxofix range in total so that every type of connection is covered. The block shown in fig. 1 is ideal for connecting radiators from the wall. The blocks in fig. 2 and 3 are used for connections from the floor or wall when variable heights are required, such as when installing bathroom radiators.



No matter which type of connection block is used, it is always possible to check for leaks immediately after installation. Radiators are connected once all plastering and painting has been taken care of.

#### Pre-insulated Raxofix crossing T-piece

The T-pieces measuring between 16 and 25 mm are easy to install and make it possible to go over pipelines whilst maintaining the installation height. The associated insulation box can be combined with the 9-mm all-round insulation and eccentric insulation by removing an insulation shell element. The Fraunhofer Institute for Building Physics in Stuttgart has also certified that the floor structure with crossing T-piece and Exzentroflex insulation improves footfall sound on the basis of DIN EN ISO 140-8 with the result that, in many cases, the crossing T-piece can be incorporated into the floor structure without the need for continuous footfall sound insulation (fig. 4).



16–25 mm

The robust stainless steel connection of the connection block in fig. 2 means that it is suitable for use in public areas, for example. All other versions have an integrated Raxofix multi-layer composite pipe, which can be directly connected on one side to the Raxofix euro cone screw connection on the tap block. The connection pipes are extremely long, allowing for direct connection to the T-pieces and saving additional couplings and time as a result.



Reducing the installation height: Exzentroflex with 9-mm insulation thickness for pipes measuring between 16 and 20 mm and 26-mm insulation thickness for pipes measuring between 16 and 25 mm.



**Straightforward and flexible**  
**VIEGA RAXOFIX IN**  
**RENOVATION PROJECTS.**



**Raxofix wall lead-ins for drywall installation and pre-fabrication of bathroom units.**

**Flexibility all round**

Renovation projects tend to have their own set of rules, which are usually based on the structural requirements. Viega has developed special components tailored specifically to these types of projects with a view to offering a convenient and cost-effective solution for installations in existing settings.



**Two versions available: hot water distributor with three connections and cold water distributor with five connections.**

**Wall lead-in**

Wall lead-ins often end up proving to be more challenging than first expected. Different panel thicknesses have to be accounted for and extreme care needs to be taken to ensure effective sound insulation. The Raxofix range includes effective solutions for these challenges and many more, including the Raxofix wall lead-in with built-in sound insulation (fig. 1).

**Skirting board radiator connection piece**

The two-part skirting board radiator connection piece is ideal for connecting radiators as part of renovation projects. It can be installed into the skirting board with no trouble at all. Plus, it comes with Raxofix press connectors, allowing for radiators to be connected on either side (fig. 2). The new modular skirting board radiator connection piece is more versatile and even quicker to install. Not to mention that it can be flexibly adjusted to match the height requirements in question. An innovative connection concept guarantees a fully reliable connection, with brackets simply clicking into place on the plug adapter. The radiator connections can be rotated and their height can be adjusted. There's no longer any need to waste time on mortising (fig. 3).



So very Viega

THE PERFECT SOLUTION  
FOR EVERY SITUATION.





### Perfect solutions, intricately designed

Transit 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 articulated jaw and press ring (fig. 1) for Raxofix systems under extreme space constraints. Press rings between 16 and 63 mm are available as add-ons in the plastic piping system area. You can press up to 40 mm with the Pressgun Picco 6 Plus. The Pressgun 6 Plus is designed to press at larger dimensions, up to 63 mm.

### Repair coupling, 16 to 63 mm

Depending on the system, repairs and extensions to pipelines can involve a long and tiresome process. But with the Raxofix repair coupling (fig. 2), they take a matter of minutes. It's simply a case of cutting the pipes to size, inserting the coupling, making any adjustments and pressing. This technique can be used to bridge gaps with speed and ease.

### Raxofix adapter union

There are adapters available for extending and repairing existing Sanfix Fosta installations which enable Sanfix Fosta and Raxofix to be connected using nothing more than a press jaw. The range includes two adapter unions with a Raxofix press connection and clamp ring screw connection measuring 16 and 20 mm.



### System transitions

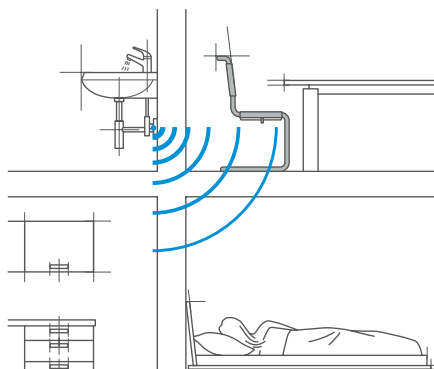
Heating and drinking water systems which use standard thin-walled plastic piping measuring 16 x 2.0 mm can be tricky to extend or repair. But the Raxofix transition coupling (fig. 3) provides the solution: the transition to the existing pipe network is straightforward and does not require any additional tools. Press connectors for all Viega metal piping systems are easy to install using the Raxofix transition adapter (fig. 4).

### Sound insulation

Noise transmitted to a building structure via pipelines can seriously impair quality of life. If claims for compensation are to be avoided, it is important for pipelines to be fixed in such a way that structure-borne noise is not transmitted when the system is in use. Tapping points must have sound insulation to ensure that noise pollution is not an issue in rooms requiring protection in accordance with DIN 4109. Raxofix mounting units fulfil these requirements (fig. 5). If there is no Viega washbasin unit in place, the Raxofix sound insulation set is used for the soundproofed installation of Viega wall plates (fig. 6).



Viega's mounting units have been tested by the Fraunhofer Institute for Building Physics and they fulfill the requirements of DIN 4109.



Requirement as per DIN 4109:  
min. sound insulation  $\leq 30$  [dB(A)]  
Installation sound level  $L_{in}$  in  
mounting unit 5321.71:  
**18 [dB(A)]**

## 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, which defines the shape of the connector or component. The models listed as “New” are part of the new Raxofix DN 10 additions, which feature impressive flow properties and almost double the reach. You can find further details by looking up the model number in the index of our product catalogue.



● 5351



● 5352



● 5302



● 5302.10

NEW



● 5301



● 5301.10

NEW



● 5304



● 5304.1



● 5302.3



● 5302.4



● 5302.5



● 5302.6



● 5303



● 5316



● 5316.01

NEW



● 5314



● 5314.11



● 5311



● 5311.01

NEW



● 5312



● 5355





● 5363



● 5313



● 5313.01



● 5313P



● 5315



● 5315.01



● 5315.9



● 5313.8



● 5313.5



● 5326



● 5317



● 5318



● 5318.01



● 5326.4



● 5318.9



● 5326.31



● 5326.32



● 5329



● 5326.05



● 5326.07



● 5326.06



● 5326.08



● 5326.09



● 5356



● 5337.5



● 5338.5



● 5339.4



● 5375



● 5335.2



2141.3



2141.4



2021.7



● 5323



● 5321.61



● 5321.71



● 5321.81



● 5325.5



● 5325



● 5325.51

NEW



2141.5



● 5325.7



5325.75



● 5325.4



5321.91



● 5325.8



● 5332.11



● 5332.31



● 2132.91



● 5315.3



● 5349



● 5397.6



● 5397.7



● 5375.31



5381.5



2277.2



● 5322.3



● 5373



2272.5



● 5332.4



5375.21P



2169



5341



2191



5331



2496.1



5396.1



2141.7



5331.2

INT 795 450-10/20-120173 · We reserve the right to effect changes.



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