

## Viega Smartpress

Advanced multilayer piping system  
with minimal pressure loss.



**viega**





**Viega.**

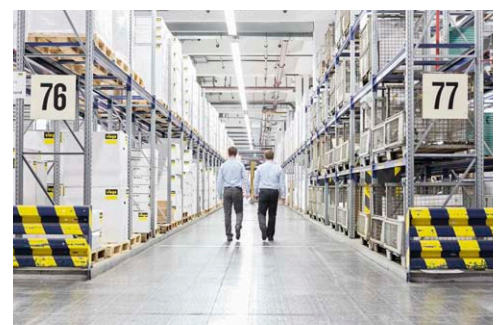
# CONNECTED IN QUALITY.

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 10 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

Viega Smartpress: The multilayer pipe revolution.

8

Viega Smartpress connectors: Engineered for minimal pressure loss.

10

Viega Smartpress pipe: Retains its shape and resists buckling.

12

Viega Smartpress in drinking water installations: Unconditional drinking water hygiene.

14

Viega Smartpress in heating installations: Diversity that can be warmly recommended.

16

Connectors made of polyphenylsulfone (PPSU):  
Combines outstanding efficiency with maximum safety.

18

Viega Pressgun: Takes seconds to connect, permanently.

20

Viega press rings: Reliably pressed, whatever the situation.

21

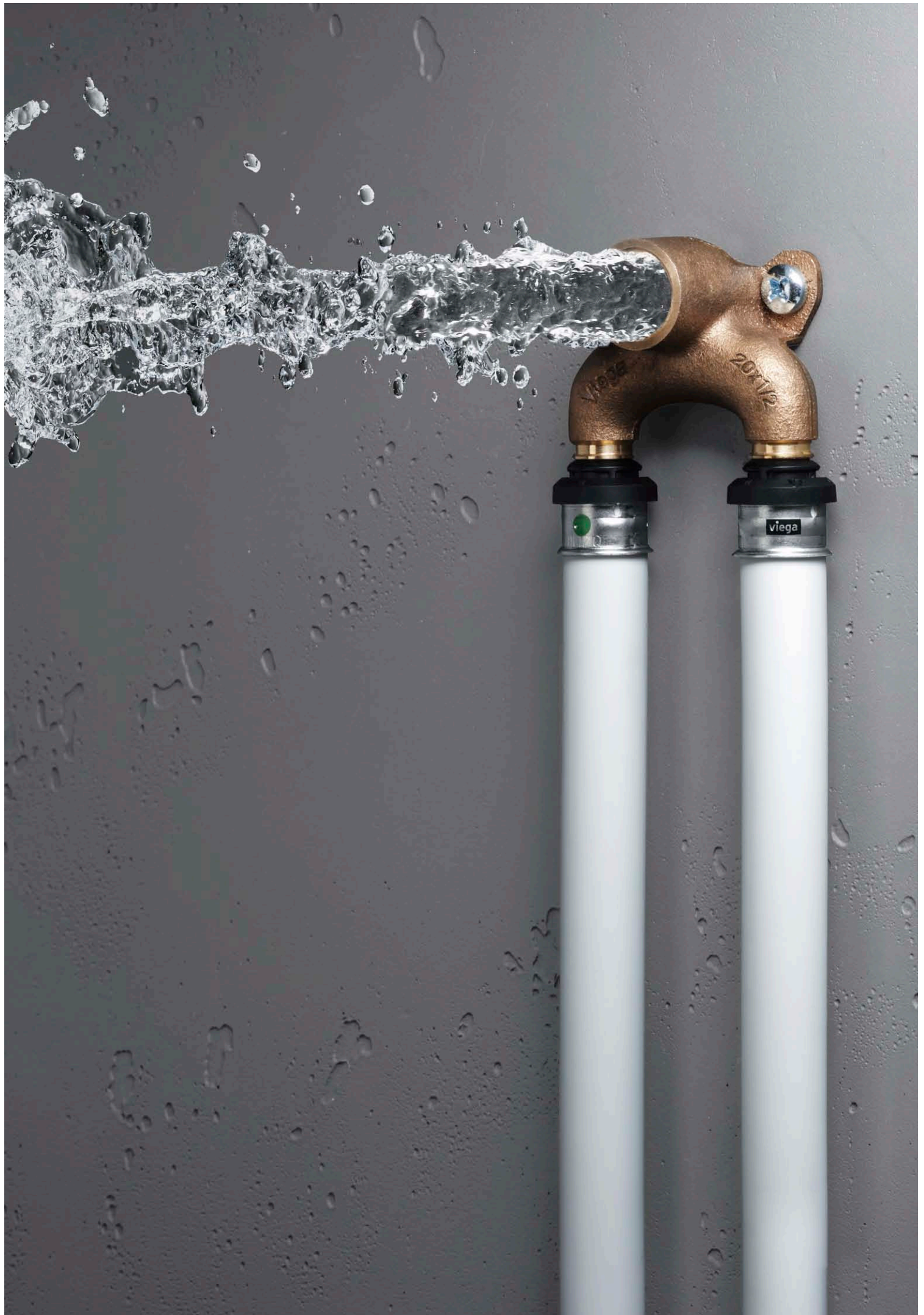
Viega hand press tool: Efficiency, not to be dismissed out of hand.

22

Viega Smartpress: The product range.





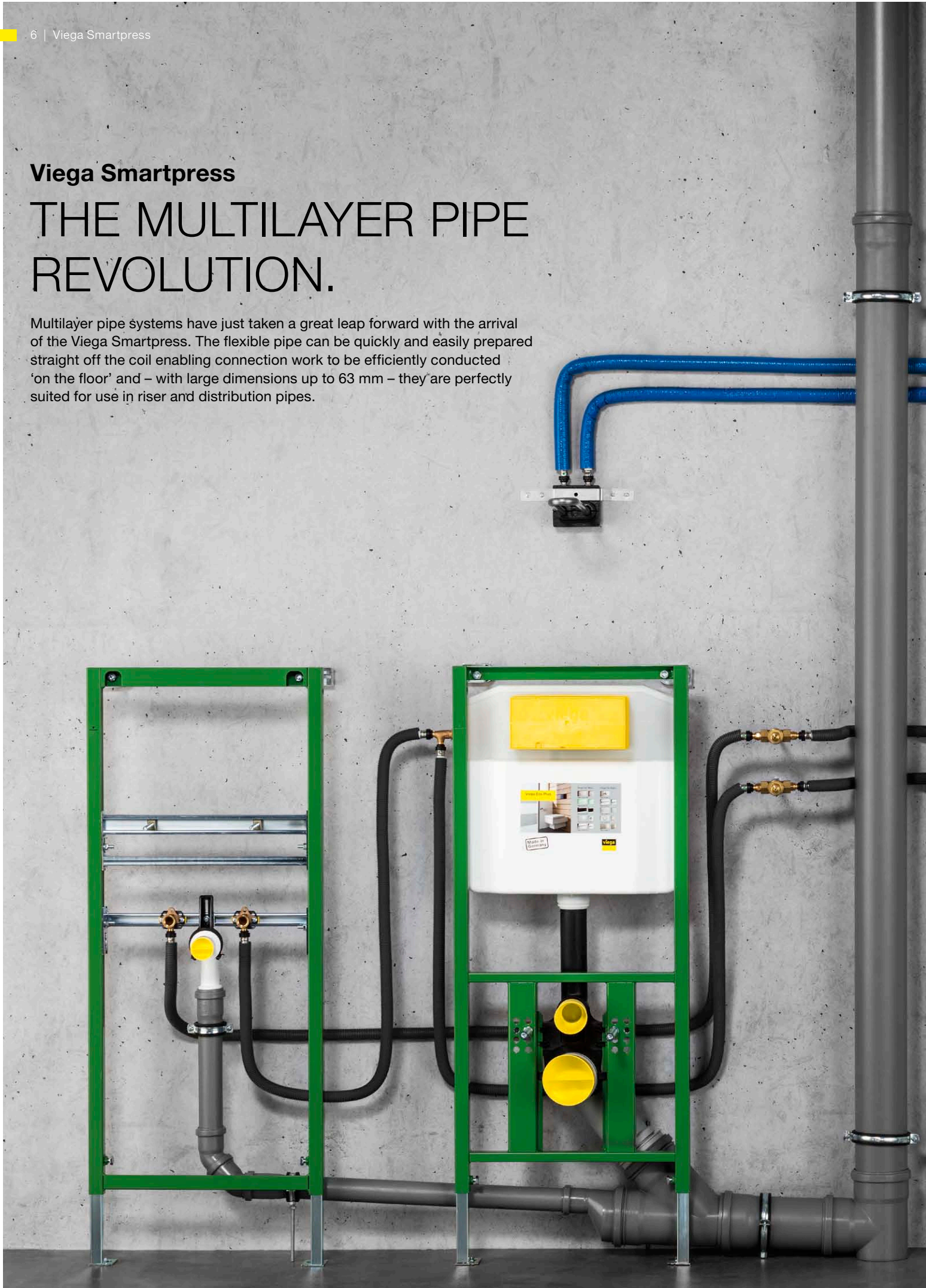




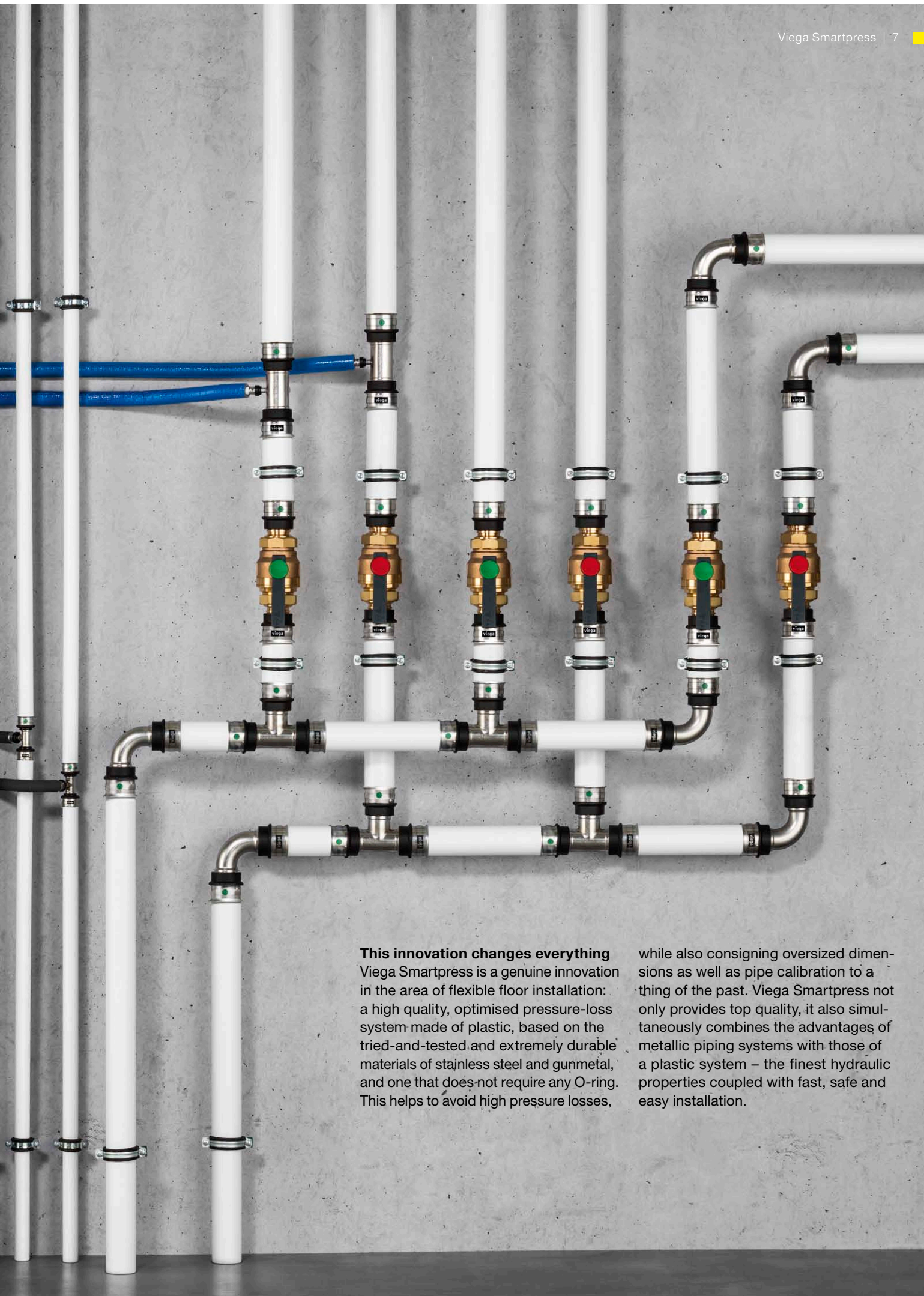
## Viega Smartpress

# THE MULTILAYER PIPE REVOLUTION.

Multilayer pipe systems have just taken a great leap forward with the arrival of the Viega Smartpress. The flexible pipe can be quickly and easily prepared straight off the coil enabling connection work to be efficiently conducted 'on the floor' and – with large dimensions up to 63 mm – they are perfectly suited for use in riser and distribution pipes.







**This innovation changes everything**

Viega Smartpress is a genuine innovation in the area of flexible floor installation: a high quality, optimised pressure-loss system made of plastic, based on the tried-and-tested and extremely durable materials of stainless steel and gunmetal, and one that does not require any O-ring. This helps to avoid high pressure losses,

while also consigning oversized dimensions as well as pipe calibration to a thing of the past. Viega Smartpress not only provides top quality, it also simultaneously combines the advantages of metallic piping systems with those of a plastic system – the finest hydraulic properties coupled with fast, safe and easy installation.



## **Viega Smartpress connectors**

# ENGINEERED FOR MINIMAL PRESSURE LOSS.

Viega Smartpress is the next major step in drinking water installation. The Viega Smartpress connector combines know-how gathered over many years, tried-and-tested technology and high quality, corrosion resistant and durable materials in a single connector. The result is an innovative piping system, which enables safe drinking water and heating installations to be made through a combination of fast processing with minimum pressure losses.



**Safe and reliable installation without an O-ring**

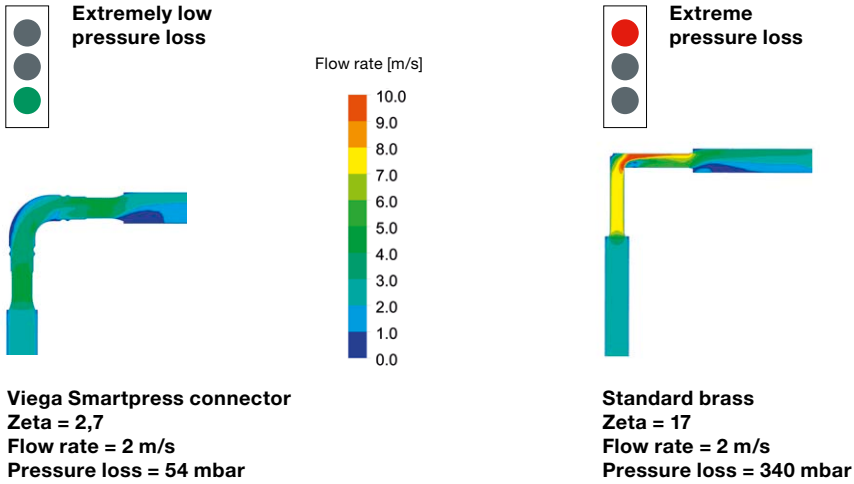
None of the Viega Smartpress connectors in dimensions 16 to 63 mm require an O-ring. A major advantage during installation: This is because, complex calibration is no longer required (Fig. 1). Any unintentional damage to the O-ring, the greater susceptibility for damage and the reduced internal diameter are all disadvantages that now no longer apply because the need for an O-ring has been dispensed with. This in turn speeds up installation while also making it permanently reliable. Naturally, the Viega Smartpress connectors also come with the patented SC-Contur (Fig. 3), which immediately and reliably highlights any positions that have inadvertently remained unpressed.

**Optimum flow properties**

All Viega Smartpress connectors – in dimensions from 16 to 63 mm – have an uninterrupted optimum flow rate. Large reductions of cross-sectional areas caused by support bodies with integrated O-rings and sharp separation edges in the internal geometry are now no longer with us (Fig. 2). This enables installation to be optimised during the planning procedure, while also saving hard cash through lower material requirement, because of the smaller dimensions involved. Leaner dimensioning can also help to guarantee shorter output times and greater reserves to cope with consumption peaks.



**Time-consuming calibration no longer required: simply shorten, plug-on, press and it's done.**



**Tried-and-tested Viega quality: All connectors have been optimised for perfect flow rate properties.**



**Double wall panel for installation of ring and series pipelines.**



**Maximum safety: The SC-Contur feature reliably highlights any unpressed connections.**

## Viega Smartpress pipe RETAINS ITS SHAPE AND RESISTS BUCKLING.

The Viega Smartpress pipe excels with maximum dimensional stability while - at the same time - offering lots of flexibility. In smaller dimensions up to 32 mm, it can be easily bent by hand and matched perfectly to the individual installation conditions. Viega Smartpress pipes are also available in dimensions of 16 to 63 mm. To guarantee premium quality, all the system components and all the Viega Smartpress pipes are made by Viega itself – and, naturally, they all fulfil all normative specifications, while also having the necessary certifications.

### Maximum stability

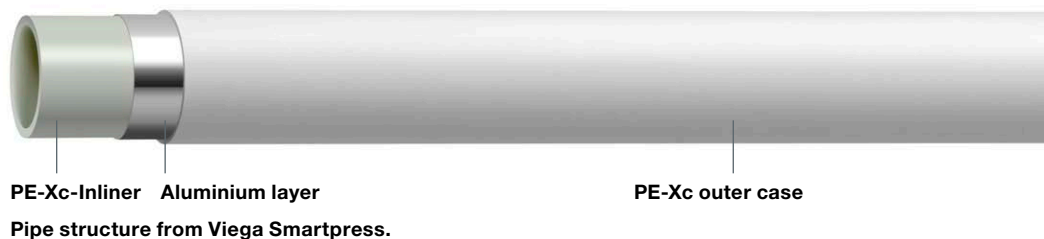
Viega Smartpress multilayer pipes are made of a PE-Xc-Inliner, a layer of aluminium and a PE-Xc outer case. With its perfectly matched material layers made of high-strength plastic and assorted aluminium alloys, it provides outstanding processing coupled with low self-aligning characteristics, minimum bending radii and enormous buckling resistance.

### 100% oxygen seal

The butt-welded aluminium layer serves as a diffusion barrier which in turn helps to prevent oxygen penetrating through the pipe wall and into the medium. This means that all Viega Smartpress multilayer pipes are ideally suited for use in heating installations.

### Special flexibility

Because of the excellent flexural properties involved, the Viega Smartpress pipes can be used flexibly while also providing an advantage, when things get tight, for example, in installation shafts or for pre-wall installations. With bending radii of only  $2x d$ , many moulded components are no longer required.



The bending tool can be used to easily create perfect radii.





Particularly in confined installation shafts with lots of corners, the highly-flexible, non-kinking Viega Smartpress pipe really shows what it is capable of.

### Well-reasoned compatibility

Along with the Viega Smartpress pipes, the Pexfit Pro and Pexfit Fosta pipes already on the market can also be used with the new Viega Smartpress connectors. This in turn means that existing installations can be repaired or expanded without any additional adapters.



### REASONS FOR VIEGA SMARTPRESS

- Elbows, couplings and T-pieces made of stainless steel, threaded connections made of gunmetal
- Optimised flow rate internal geometry enables smaller dimensioning
- Corrosion resistant connectors in dimensions from 16 to 63 mm
- Connector technology without any O-rings
- Calibration no longer required – up to 30% faster
- Compatible with pipes from Viega Pexfit Pro and Viega Pexfit Fosta systems
- Excellent flexural properties with high buckling resistance
- Pressing also possible with Viega Smartpress press rings

Plain  
16–63 mm



Black protective  
pipe for dimensions  
16–25 mm



Blue/red protective  
pipe for dimensions  
16–20 mm



6-mm all-round  
insulation for  
dimensions  
16–20 mm



9-mm all-round  
insulation for  
dimension 25 mm



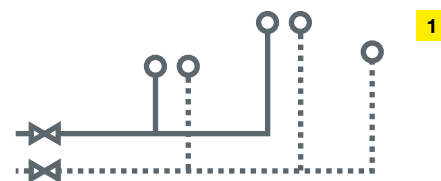


## **Viega Smartpress in drinking water installations**

# UNCONDITIONAL DRINKING WATER HYGIENE.

With a full range, Viega Smartpress always offers a perfect solution for not only every possible construction-site situation, but also for the various requirements placed on a drinking water installation. This applies regardless of whether the installation plant involved is a modern ring or series one, or a classical T-piece or distributor installation plant. Naturally, Viega Smartpress also complies with stringent requirements and legal regulations for the preservation of drinking water quality.





Double wall plate  
6725.7



Connection T-piece  
6726.4



T-piece  
6717

### State of the art: T-piece installation

The customary type of installation for drinking water installations is still the T-piece installation (Fig. 1), in which each outlet point is connected through a branch line. Whereby, in terms of preservation of the drinking water quality, the branch line here should always be kept as short as possible. A comprehensive range of T-pieces made of properly hygienic stainless steel as well as wall plates and connection elbows made of the tried-and-tested Viega gunmetal, are available for installation. All Viega Smartpress press connectors come with the patented SC-Contur, which immediately displays any inadvertently unpressed connections detected during the leakage test.

### The future of drinking water installation: Ring and series pipelines

A constant exchange of water in the drinking water installation is made available through series (Fig. 2–3) and ring systems (Fig. 4). This means that, not only in particularly hygienically-sensitive buildings – such as hospitals and care facilities, but also in standard housing construction, the regular withdrawal of water at only one outlet point can help to keep the risk of stagnation and germination low.

The series installation is suitable for both cold and hot water, and it also provides a complete exchange of water when the consumer connected at the end of the series is then operated. Ideally, this is the

one used most. If the most-used consumer is not located at the end of the room, it can still be connected as the “last in line” through an elaborate connection (Fig. 3). The optimised flow-rate Viega Smartpress connectors and the double wall panels in dimensions from 16–25 mm greatly increase the range available in the installation process. By contrast, the ring installation is particularly well-suited for cold water because of its hydraulic properties. Irrespective of the actual consumer used, the pipe volume is always completely exchanged (Fig. 4). At the same time, the pressure losses are also minimised by splitting up the volumetric flow coupled with the associated reduction in flow rates.

## Viega Smartpress in heating installations

# DIVERSITY THAT CAN BE WARMLY RECOMMENDED.

It goes without saying, that Viega Smartpress, with its high quality connectors and flexible, while at the same time dimensionally stable pipes, is ideally suited for heating installations. It not only saves costs and time here, but with its optimum adapters, the cross T-piece and a pre-insulated pipe, it also offers intelligent components that are perfectly matched to each other and therefore which master any connection variant involved.

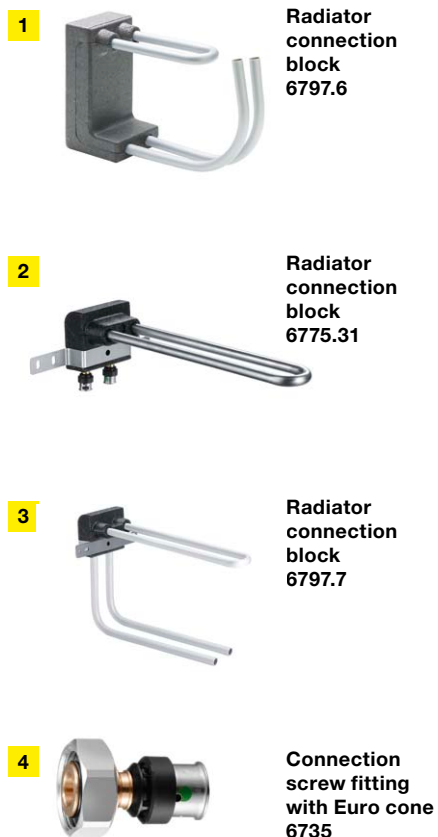




### Never found wanting for the ideal connection

With a total of three pre-insulated connection blocks, Viega Smartpress really can deal with any connection required – it doesn't matter if they come out of the wall or the floor. The block in Fig. 1 is suitable for connecting radiators with pipework coming out of the wall only. The blocks in Fig. 2 and Fig. 3 are for use where pipes exit either the floor or wall and where variable heights are required, e.g. for the assembly of bathroom radiators. The connection block in Fig. 3 is made of robust stainless steel, making it particularly well suited for installations in the public area.

All the connection blocks have an integrated Viega Smartpress multilayer pipe, which can be connected straight onto the tap block using the Euro cone screw fitting (Fig. 4). Extra long connection pipes enable direct connection to the T-pieces and save the need for any additional couplings along with a great deal of time. Thanks to the U-shaped, closed connection pipes, a leakage test is possible on all models without any additional measures, immediately after installation.



### Cross T-piece

For particularly efficiently installed radiator connections, pre-insulated connection blocks (Fig. 1, 2, 3) are available along with pre-insulated cross T-pieces. They enable pipeline routing, without any additional need for fixing T-pieces into place or complex post-insulation – and the crossing over of supply and return flows, without having to increase the floor structure.

### Manifold installation

A stainless steel manifold with matching connection screw fittings is available (Fig. 6) for central distribution of heat to the radiators. This in turn means that radiators can be connected without any additional connectors into the floor inexpensively and safely (Fig. 5).



# Connectors made of polyphenylsulfone (PPSU) COMBINES OUTSTANDING EFFICIENCY WITH MAXIMUM SAFETY.

To complete the Viega Smartpress range, Viega is now offering connectors made of PPSU. The elbows, T-pieces, manifolds and coupling in dimensions 16, 20 and 25 mm come with a base unit made of top quality PPSU with a typical internal geometry for plastic connectors, and they are particularly suitable for use in heating installations.

## **SC-Contur but no O-Ring**

The PPSU connectors are produced from indestructible and hygienic plastic. In combination with the tried-and-tested Viega SC-Contur, this guarantees maximum safety for drinking water and heating installations. The pre-assembled press sleeves made of stainless steel ensure uniform and torsion-consistent pressing of the pipe and sealing contour without O-ring to provide a 100% tight connection. Pipe fitment without the need for calibration, widening or deburring also increases installation speed and thereby greatly enhances efficiency.



### Suitable for each connection

Thanks to the simple and continuous structure made of PPSU, the connectors are an ideal augmentation. For heating installations in commercial construction with low flow speeds, the PPSU connectors in dimensions ranging from 16–25 mm are an efficient alternative.



Elbow 90°  
4716



Coupling  
4715



T-piece  
4718



Manifold  
4733

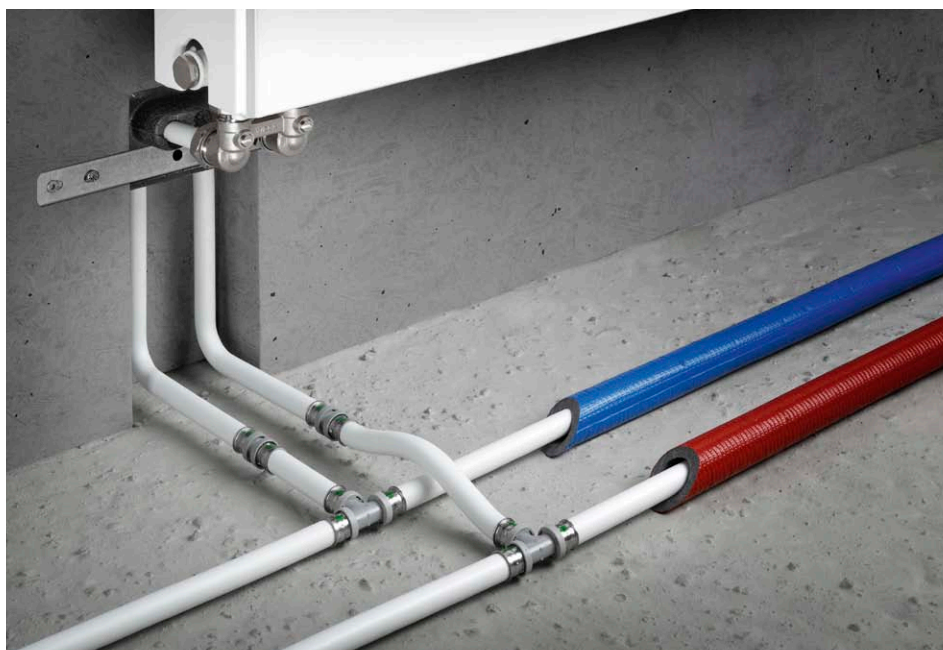
### Safety with every connector

For installation, the connectors made of PPSU also count on tried-and-tested Viega press technology. Next to fast and simple installation, it also comes with decisive advantages through the unique Viega SC-Contur. This displays any unpressed connectors detected during a leakage test immediately, thereby it is taking care for 100% safety.



### PPSU – For maximum safety

PPSU provides not only economic advantages, it also convinces on account of many of its special features: The corrosion-resistant plastic provides high thermal resistance across a wide temperature range from -100 °C to +180 °C – and therefore in excess of all limits that apply, e.g. in heating applications. Its extreme resistance capability and stability also ensure that it withstands daily use on the construction site. Last, but not least, PPSU has also shown its value not only in heating applications, but also in many additional, thoroughly complicated application areas such as aeronautics and medical engineering.



Viega Pressgun

TAKES SECONDS TO CONNECT,  
PERMANENTLY.







Viegga press jaws and press rings.



Viegga Pressgun 5 set case including accessories (also available as Pressgun Picco set case).



Press technology accessories in practical set case, 2796.4.

The Viegga Pressgun 5 and Viegga Pressgun Picco excel on account of their top quality and enable convenient and easy installation under the toughest of conditions. For Viegga Smartpress, the tried-and-tested press jaws from Viegga Pexfit and Pexfit Pro can easily be used. With their German Technical Inspection Agency (TÜV) certifications and long service intervals, Viegga Pressguns are one of the most reliable, efficient and therefore most successful press tools in Europe.

#### Commonalities

- Easy operation with one hand through ergonomic gun shape
- Optionally available with mains operation or with the latest generation 18 V/2.0 Ah lithium ion rechargeable battery, with optimised cold-start function and an exhaustive-discharge protection device
- Rotatable through 180° press head and press rings with hinged function make it so much easier to access difficult to reach areas
- LED lamp for simple pressing in difficult lighting conditions
- German Technical Inspection Agency (TÜV) approved safety technology: activation delay, pin lock, maintenance display and automatic shut-off valve after reaching the maximum number of pressings



#### SPECIAL FEATURES OF VIEGGA PRESSGUN 5

- For press connectors made of metal in dimensions 12 to 108 mm
- For press connectors of the plastic pipeline systems in dimensions 16 to 63 mm
- Only 3.2 kg weight (without press jaw)
- Long maintenance intervals after 40,000 pressings or 4 years
- Automatic shut-off valves after 42,000 pressings



#### SPECIAL FEATURES OF VIEGGA PRESSGUN PICCO

- For press connectors made of metal in dimensions 12 to 35 mm
- For press connectors of the plastic pipeline systems in dimensions 12 to 40 mm
- Only 2.5 kg weight (without press jaw)
- Small structural dimensions for assembly in pipe shafts and pre-walls

## Viega press rings

# RELIABLY PRESSED, WHATEVER THE SITUATION.

Be it in confined shafts or in a pre-wall situation – installation, where space is at a premium, means that conventional press jaws quickly come up against a major challenge. Therefore, Viega, with its combination of hinged adapter jaws and press rings offers a solution that enables safe and fast pressing in every given situation.



### So simple, yet so ingenious

A simple operating principle: firstly, the press ring is placed around the connector, then – with the hinged adapter jaw and a Viega press machine – the connector is then pressed. It is as simple as that! The press ring itself can be easily fitted to difficult to reach positions. The hinged adapter jaw, with a radius of almost 180°, provides infinite flexibility. In combination with the rotatable press head of the Viega press tools, there is no longer such a thing as an unreachable connection.

### Infinite options

The press ring set for Viega Smartpress enables all the connectors in dimensions of 16 to 32 mm to be reliably pressed whether Pressgun 5 or the smaller Pressgun Picco is used. For both tools, a corresponding hinged adapter jaw is separately available.



## Viega hand press tool

# EFFICIENCY, NOT TO BE DISMISSED OUT OF HAND.

It is not always the case that an electric press tool has to be used for every pressing task. For smaller installations or repairs, Viega also offers hand press tools that in terms of safety are every bit as good as their electrical colleagues.

### Fast, easy, efficient

Viega hand press tools excel on account of their high quality and durability. They enable Viega Smartpress connectors in dimensions of 16, 20 and 25 mm to be quickly and reliably pressed by hand. This in turn means that smaller installations can be realised much more efficiently. The force required here is minimised by a multi-stage ratchet system. Faulty pressings can be effectively prevented through the installed positive pressing.



Hand press tool  
2782.5



Hand press tool set 16–20 mm  
4780.4



### SPECIAL FEATURES OF VIEGA HAND PRESS TOOLS

- For Viega Smartpress connectors in dimensions 16, 20 and 25 mm
- Max. 2 kg weight



Easy pressing with hand press tools of 16–25 mm.

## Viega Smartpress

# THE PRODUCT RANGE.

The following overview of individual elements from the Viega Smartpress product range specifically illustrates the wide range of possible uses. The specified number is the model number and describes the shape of the connector or component. More detailed information is available from the model number index in the product catalogue.



4716



4718



4715



4703



4705



4704



4704.1



4704.1



4705.5



2703



2705



2704



2705.5



6716



6726





6718



6717



6726.4



6711



6712



6714



6714.1



6713.P



6713



6793



6776



6715



6715.2



6715.G



6725.5



6725.7



6724.3



6723



6724



6724.1



6724.2



6723.1



6724.4



6735



6763



6770



4733



4756



6775.31



6797.6



6797.7



6749



6777



2799.7



2784.7



2796.1



2782.5



4780.4



4780.3



5341



5331



5331.2

INT 750 336-7/17 -117610 · We reserve the right to effect changes.

**V** Viega Holding GmbH & Co. KG

Viega Platz 1  
57439 Attendorn  
Germany

Phone +49 (0) 2722 61-0

viega.com

