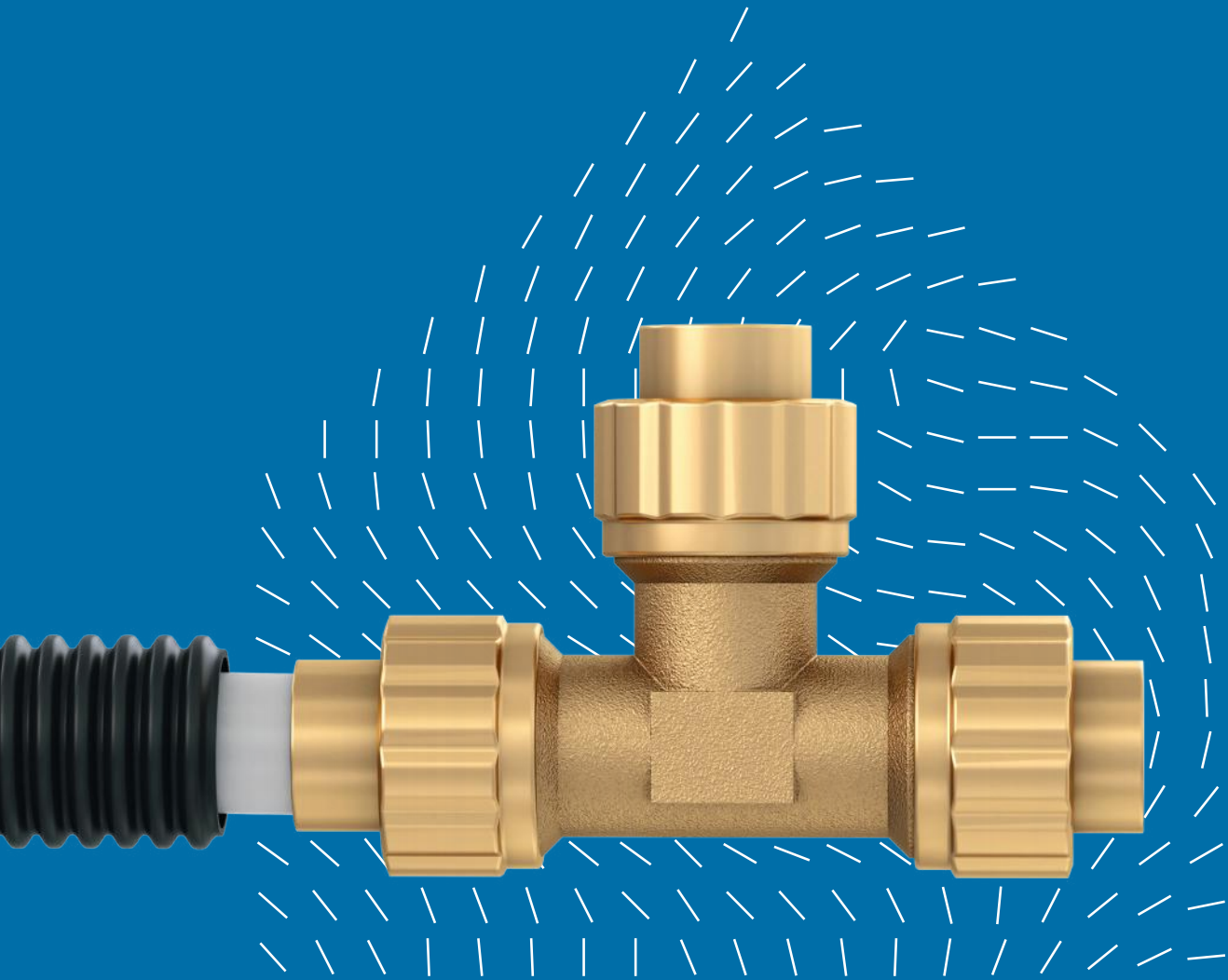


GF Building Flow Solutions

# JRG Sanipex

The world's first plastic pipe-in-pipe  
drinking water installation system



+GF+



## JRG Sanipex

# Forever young

### System Description

JRG Sanipex is the world's first plastic pipe-in-pipe drinking water installation system. For more than 40 years, JRG Sanipex has been constantly updated to reflect the latest technology and the needs of the market.

The JRG Sanipex cone grip union connection guarantees a secure, water-pocket-free connection at full flow. It can be removed at any time and requires no additional sealing materials.

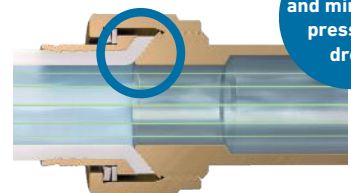
The pipe-in-pipe technology allows the pipes to be laid directly into the concrete or other building structures (e.g. timber constructions) and the PE-X pipes within the conduit can be replaced if needed. This means that JRG Sanipex pipes, which are housed in a protective pipe, can be replaced in the event of mechanical damage occur. If the Sanipex distributor is visible or easily accessible, d12 and d16 pipes (DN8 / DN12) laid in a single-line system can be replaced without damaging floors or tiles furthermore.

In addition, the perfectly harmonized system components effectively prevent noise pollution.

**Conventional system**  
with water pockets

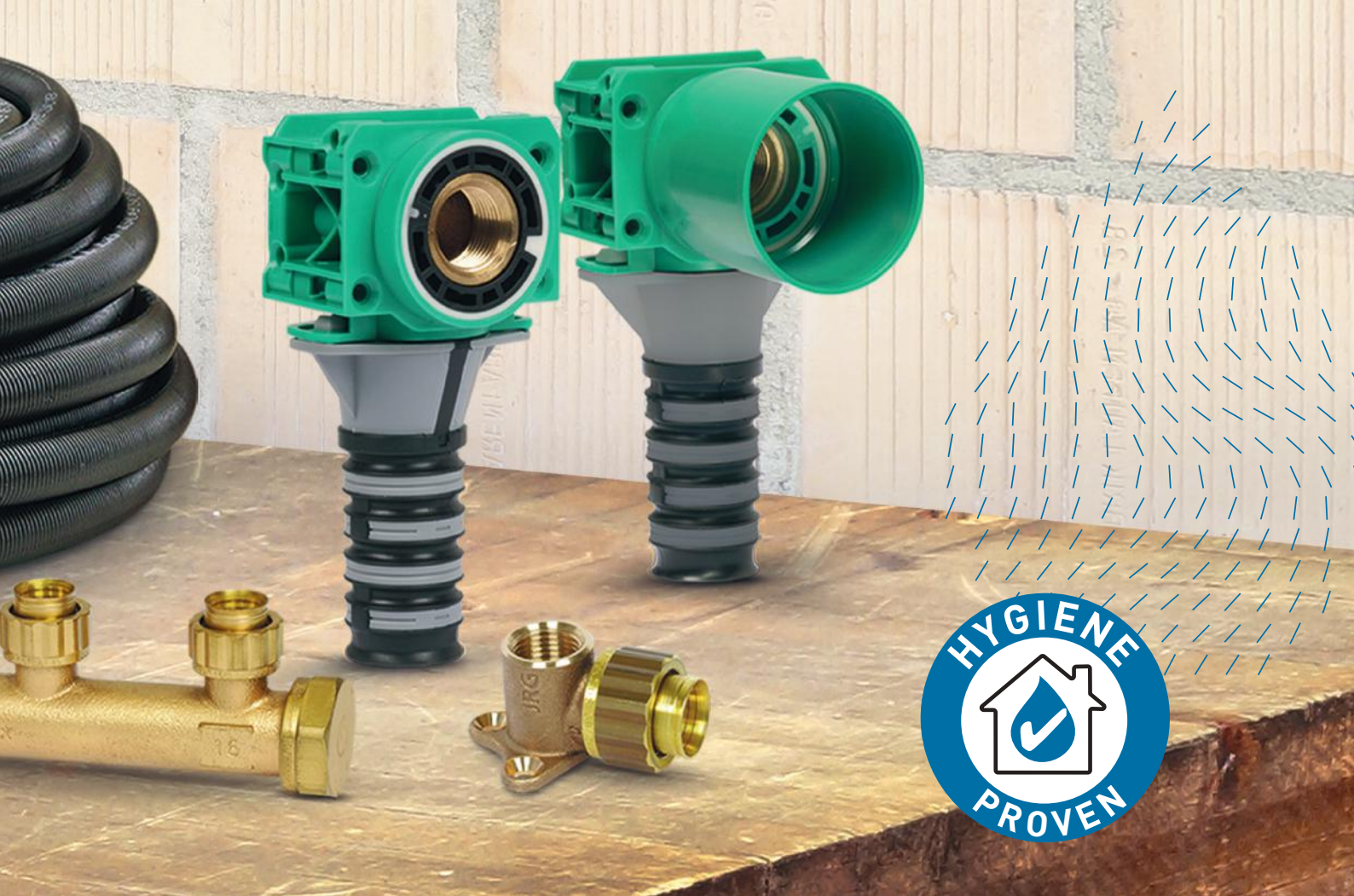


**JRG Sanipex**  
water-pocket free



Low noise and minimum pressure drop





# Advantages

## + Plumbers

### **Interchangeability**

Thanks to the pipe-in-pipe system, the water-carrying inner pipe can be replaced without damaging walls and floors

### **Removable and reusable connections**

Can be easily removed and reinstalled without additional fittings

### **Installation possible without external power supply**

Using simple hand tools, connections are possible in all dimensions

### **Hygienically impeccable connection without additional sealing material**

Full piping cross-section without water pockets thanks to the connection technology; highly corrosion and limescale resistant

### **Flexible pipe routing**

Versatile system with PE-X / multi-layer composite pipes and multifunctional assembly and installation aids

## + Home owners and planners

### **Highly safe and hygienically impeccable**

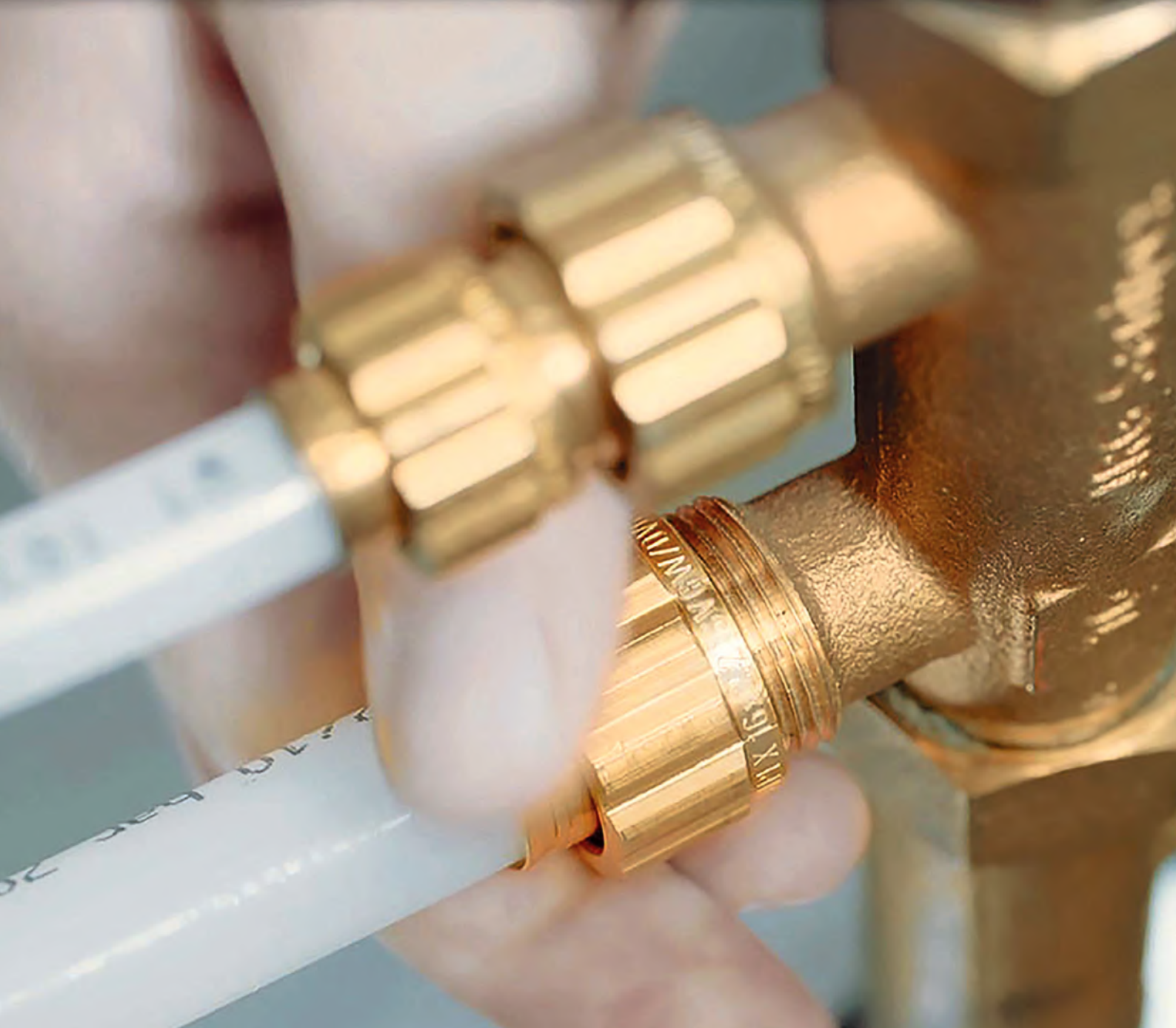
Proven connection technology free of water pockets and breeding ground for legionella and bacteria

### **Flexible use**

Key application for building services, hot and cold water distribution, heating / air conditioning and watermist sprinkler systems

### **Comfort**

Lowest pressure losses and noise pollution due to the cone grip union connection



## + Specifications

Materials	PE-Xa, PE-Xc, PE-Xc / AL / PE-X, gunmetal
Dimension range	d12 – d32
Connection technology	Cone grip connection
Operating pressure	Up to 16 bar
Operating temperature	0°C to +95°C
Pipe dimension	d 12, 16, 20, 25, 32 DN 8, 12, 15, 20, 25
Application range	Cold and hot water, HVAC, compressed air, watermist sprinkler systems
Installation	Surface and concealed conduits from distributor to tapping points
Pipes	JRG cross-linked polyethylene (XL-PE) pipes JRG Sanipex MT multilayer composite pipes
Fittings/system components	Gunmetal and plastic
Technology	Pipe-in-pipe system



# System components

## + Materials

### PE-X pipes

PE-X pipes consist of three-dimensionally cross-linked polyethylene. The cross-linking significantly improves creep strength, low-temperature toughness and stress-crack resistance, and thus ensures a safe supply of top-grade drinking water in your installation for decades to come. Their low weight and resistance to aggressive water, corrosion or deposits is a distinguishing feature of our PE-X pipes. Due to their flexibility, they are very easy to install and especially suitable for all cold and hot water applications.

### Multilayer composite pipes

Multilayer composite pipes combine the advantages of plastic and metal. Thanks to the flexibility of plastic and the strength of metal, the pipes are ideally suited to withstand the wide range of temperatures and pressures in both cold and hot water systems. The structure of the pipe consists of five layers: Extruded PE-X inner layer, bonding agent, longitudinally butt-welded aluminium pipe, another adhesive layer and extruded PE-X outer layer. PE-X was developed by renowned manufacturers for building technology applications and is approved for use with foodstuffs and drinking water.

### Fittings

All water-bearing valves and fittings are made of gunmetal. They are sandcasted and state-of-the-art in flow, noise reduction and hygiene.

In addition, they are highly corrosion resistant.



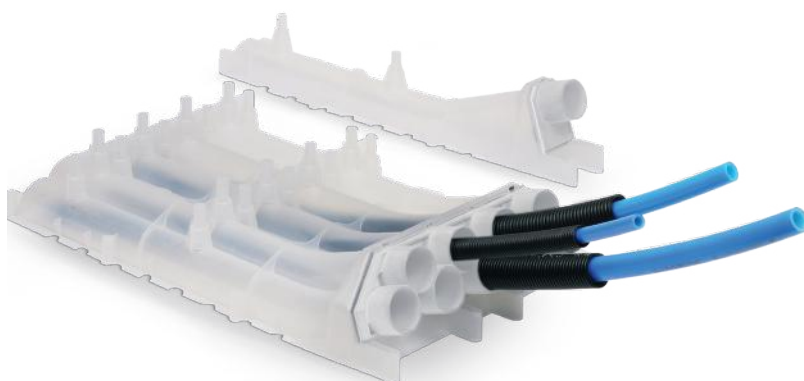
## + Concealed boxes

- Pipes can be replaced through the box body
- Optimized for lightweight and timber constructions
- Can be installed in any position and direction



## + Shuttering box

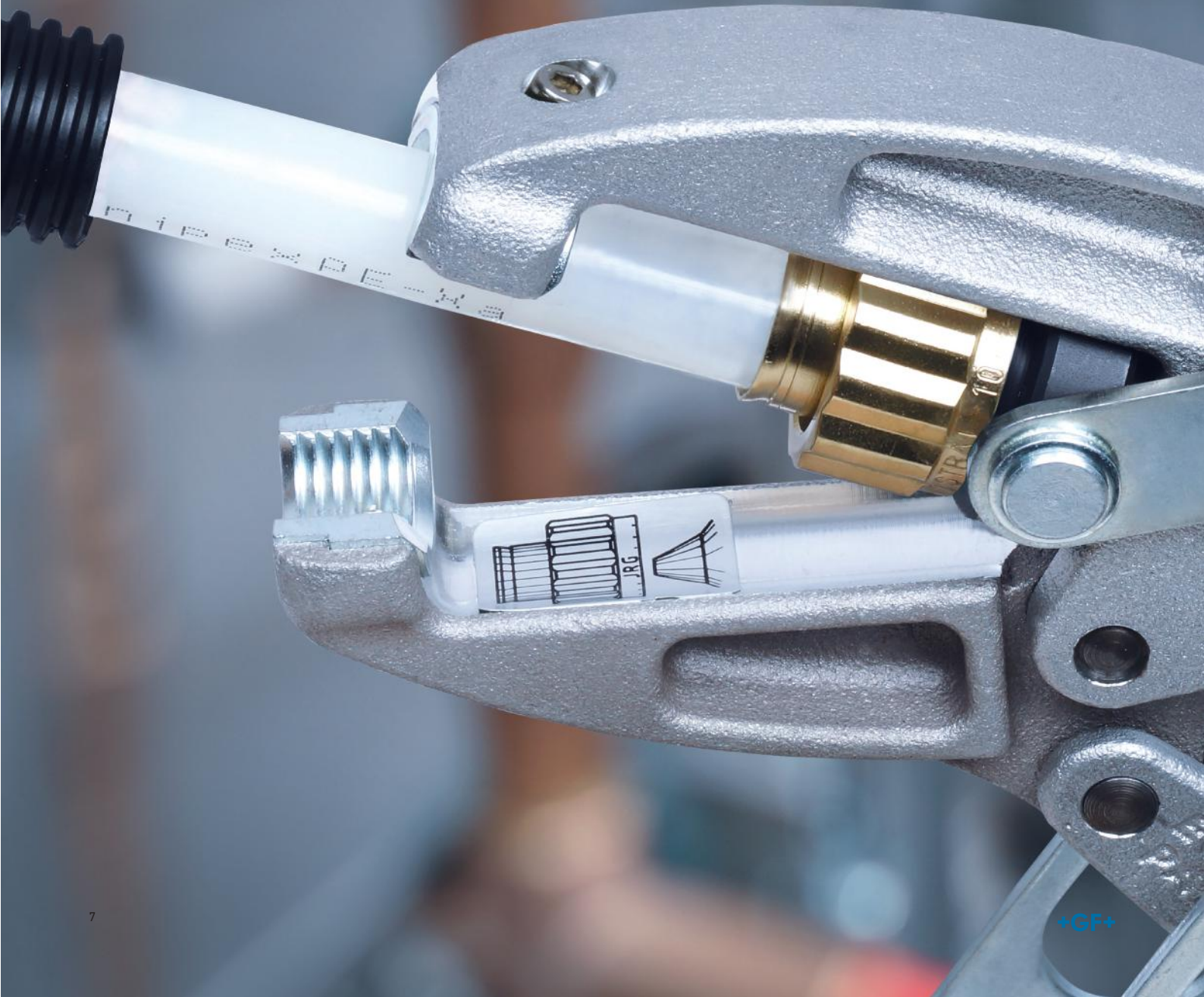
- Available in single and multiple versions
- Transparent material, which allows the plumber to check the insertion depth of the pipes
- Nails already pre-assembled to the installation aids
- Installation aids universally suitable for pipes (with protective conduits) d12, d16 and d20



## + Tools

- Efficient assembly of PE-X and multilayer composite pipes
- Simple hand tools, no external power needed





# Leading with Water

**Uponor Corporation**  
Ilmalantori 4  
00240 Helsinki  
Finland

[www.uponor.com](http://www.uponor.com)