

+GF+ INSTAFLEX

**The complete piping system d16 – d110
for drinking water installations**



For general application in domestic installations.

GEORGE FISCHER +GF+

+GF+ INSTAFLEX



In conjunction with electrofusion fittings, the INSTAFLEX STABI pipe simplifies pipe laying in the basement distribution system. Installation without pipe-end processing. Simply press the button and the connection is made.



INSTAFLEX – all take advantage of this modern drinking water installation system.

INSTAFLEX – the universal system

Made from polybutene (PB), the general purpose material for distribution of drinking water. Pipe in bars of d 16 to d 110, STABI pipe up to d 63 and as flexible pipe-in-sleeve from d 16 to d 25 as coils. A comprehensive range of fittings for electrofusion and socket fusion jointing and for outlet joints with compression jointing completes a piping system designed for all applications.

INSTAFLEX in application

Connecting techniques such as electrofusion, socket fusion and compression jointing permit simple and efficient installation with suitable laying aids. Planning and layout with the Dendrit PC program. Technical manual with comprehensive information. Training courses given by George Fischer specialists.



+GF+ INSTAFLEX – The complete, general purpose system from basement distributor to the individual outlet



A modern plastic piping system with perfected system components for all domestic installation applications

From the boiler via the riser pipe to the outlet, the water flows in a corrosion-proof piping system free from lime scale. In large buildings, new structures and for sanitation, INSTAFLEX complies with all the application requirements made of a modern drinking water installation.



State-of-the-art jointing technologies simplify installation

Whether for preliminary installation in the workshop or on the building site, connection of the individual components to the complete installation is optimum and time-saving:

- electrofusion jointing
 - socket fusion jointing
 - compression jointing
- permit efficient work for preliminary installation and on the building site.



Commercial and domestic users appreciate the convenience and quieter living due to reduced noise levels.



Simple graphic planning
With the future-oriented «+GF+ Dendrit domestic installation» planning software for Windows, the comprehensive possibilities of INSTAFLEX can be displayed and designed simply and conveniently.



Environmentally-friendly and quality-assured by QA system to ISO 9001

The energy balance of polybutene conserves the environment. Substantiated trials and long-term tests in the George Fischer testing institutes and by independent test centres reveal that INSTAFLEX will also ensure a reliable and hygienically safe supply of drinking water for future generations.

Design



Ideal for structural alterations, renovations and reconstruction

The general application possibilities of INSTAFLEX permit the drinking water installation to be continually adapted to changing needs. The extremely simple installation ensures economically acceptable and technically reliable solutions in all cases.

Hygienically safe

The test certificate issued by the DVGW research centre at the Engler-Bunte Institute of the University of Karlsruhe confirms that INSTAFLEX is suitable for drinking water pipelines.

Legionella-proof operation

The approved operating conditions permit thermal sterilization and therefore do not allow legionella and other bacteria any chance to develop.

Excellent sound insulation

Polybutene ensures very low acoustic velocities. Excellent sound insulation is achieved when used together with low noise valves.

Designed to last for generations

Recognised, independent test centres certify a service life of over 50 years for polybutene piping material.



Outdated facilities are converted into a modern bathroom – thanks to INSTAFLEX and PROFIMONT.



The domestic installations mouse plans and designs drinking water installations quickly and economically

+GF+ DENDRIT DOMESTIC INSTALLATIONS

The +GF+ DENDRIT WINDOWS DOMESTIC INSTALLATIONS planning software designs and calculates the entire pipe installation for domestic systems. The modular software package is user-friendly both for beginners and more experienced users. It satisfies the high demands made by demanding professionals in terms of functional capability, versatility and clarity.

+GF+ DOMESTIC INSTALLATIONS technical manual for designers and installers

Design engineers, architects and installers will find all essential information in this comprehensive guide, concerning materials, applications and system technology, processing and installation, prefabrication and building site installations.



Designers and architects take advantage of the possibilities offered by this versatile piping system.

Complete design documentation is displayed simply and quickly on the screen by mouse-click and keyboard inputs for:

- Drinking water installations
- Heating installations
- Isometrics with z-dimension
- Tendering and costing

Examples of possible piping layouts.

Appearance of the multi-storey pipework layout on the Dendrit screen.



Graphic designs made simple with

**Dendrit
WINDOWS**



Joining



The electrofusion joining system is particularly suitable for application on site.



Socket fusion joining is primarily used for efficient pre-assembly in the workshop.



The compression joint is durably leakproof, functional and suitable for use on site.

Pre-assembly in the workshop

The z-dimension method is especially useful for efficient pre-assembly in the workshop.

To take full advantage of its benefits, the installation planning must be included on an equal basis in the building planning.

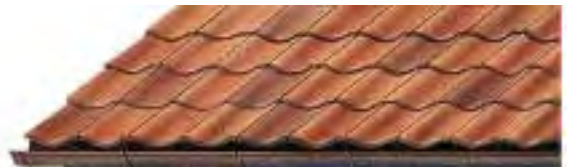


z-dimension assembly

As a basis for efficient design, scheduling and pre-assembly, the z-dimension method offers contractors considerable scope for labour-saving and cost-cutting.

As a proven basis for prefabrication of piping installations, for both large and small projects, it ensures:

- pre-assembly in series
- efficient assignment of material, labour and machines
- shorter assembly times
- adaptation to building progress
- greater independence from construction schedules
- better conditions for the completion of external structures
- better conditions for performing renovations of old buildings
- more accurate work at lower cost
- consistent high quality.



Simple work preparation and optimum connection: electrofusion jointing, socket fusion jointing and compression jointing

Electrofusion jointing

Simply slide the electrofusion socket over the pipe ends, connect the cable and start the automatic fusion process. The integrated pipe fixing makes it unnecessary to provide special support or finishing of the pipe ends. The optical fusion indicator on the fitting shows that a successful joint has been made. The electrofusion control unit identifies each type of electrofusion fitting being used from the coded plug connection and automatically performs fusion jointing for each fitting on the basis of parameters stored in its memory.



Socket fusion jointing

This reliable and homogeneous joint can be produced by machine fusion or manually. Configuration of the fitting with angle division and marking of insertion depth facilitates rapid assembly of components, above all for pre-assembly. Large fusion surfaces ensure reliable jointing of the fitting and pipe for all installation applications.



The installer is particularly satisfied with the speed and ease of installation.

Compression joints

The patented compression joint permits simple, reliable assembly on-site without using special tools. The durably leakproof compression joint, without O-rings, reduces surface pressure on the pipe by sufficient insertion depth. The joint is divided into a holding and a sealing zone.



Installation



INSTAFLEX training courses for plumbers

- Objectives:
- Product knowledge
 - Application technology
 - Processing technology
 - Jointing technology

- Locations:
- at our training centres
 - at the stockist's premises
 - at the installer's premises

Renovations and reconstructions

Framework units pre-assembled efficiently in the workshop are fitted directly on the installation wall. Distribution pipes for various storeys, outlet joints, valves and equipment holders are assembled. Only the riser then has to be connected at the building site.

Prefabricated rising mains

The high flexibility of INSTAFLEX polybutene pipes makes it very easy to prefabricate, coil and insert in the pipe shaft without difficulty.

The pipe-in-sleeve system also offers major advantages for repairs

The pipe carrying the water is very easy to replace from outside if mechanically damaged. The protective sleeve separates, protects and insulates the pipe carrying the medium from the surrounding structure.

Increased profits from more efficient and simpler installation

INSTAFLEX is designed to satisfy the high demands currently made of drinking water installations in new buildings and for renovations. As a complete, universal system with system components specially designed for this purpose, INSTAFLEX provides an ideal overall solution for all requirements. From the private home to large estates and public or commercial buildings.

The appropriate installation for every type of building



Laid in the rough concrete floor
Pipe-in-sleeve installation has proved a very simple and efficient method of laying in practice.



In the masonry (recessed mounting)
Optimum installation aids permit efficient securing of fittings in wall slots or recesses.



Basement distribution
Installation with Stabi pipe and electro-fusion fittings: rapid, rigid, reliable.



Installation on rough concrete floor
Pointing work is unnecessary for installations on loadbearing base and corresponding partition wall mounting.



Partition wall installation
Installation accessories proven in practice permit full advantage to be taken of partition wall installation modules.



Customer advice and training from George Fischer promotes the economic aspect and gains friends.

Be assured



+GF+ INSTAFLEX is environment-friendly

The base material for this modern, all-plastic system is polybutene (PB), a thermoplastic polyolefine.

Recyclable

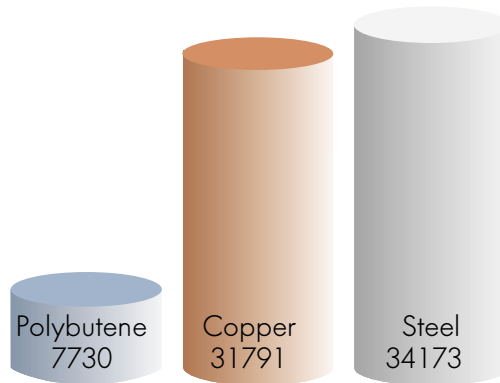
Production waste is regranulated and used again to manufacture lower grade products.

Energy recovery

Disposal by incineration together with household waste presents no problems. Since the molecular structure does not include halogens, no toxic or corrosive combustion products can be produced.

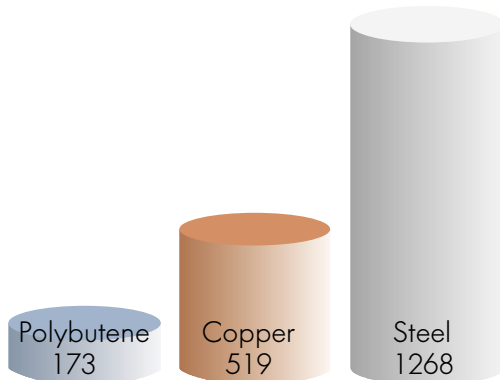
Environmental analysis of drinking water installation systems

TU Berlin (Technical University) has analysed various piping systems in a 16-family apartment block on the basis of DIN 1988.



Energy equivalent value in MJ

The energy equivalent value includes all the process energy required from the raw material until manufacture of the pipe, fittings and thermal insulation, in addition to the energy for provision of the auxiliary materials and the jointing technique.



System weight in kg



The entire drinking water installation from basement to roof with the complete INSTAFLEX system

Polybutene offers material advantages

- High long-term creep strength and dimensional stability
- Low creep (advantageous for compression fittings)
- Resistance to hot water
- High resistance to stress cracking
- Stabilized against ultraviolet light
- Pigmented against algae formation
- High flexibility at low temperatures
- Low embrittlement temperature
- High impact strength
- High abrasion strength
- Very good workability
- Thin pipe walls owing to high temperature resistance
- Larger pipe internal diameter and therefore better pipe hydraulics
- Low pipe weight

INSTAFLEX offers customer benefits

- No corrosion
- No lime scaling
- High ageing resistance
- No hygiene problems
- Homogeneous joints
- High flexibility of pipes
- Rapid, simple assembly
- Economic installation
- Customer advisory services

Continuity and quality

Approval in various European countries, production monitoring by SKZ Würzburg and stringent checks in our laboratories guarantee the quality of INSTAFLEX.

System approvals and registrations



DVGW



SVGW/SSIGE



ÖVGW



KIWA



CSTB
SOCOTEC DIRECTION
TECHNIQUE



UBAtc/BUtgb



TIN



WRcWater



Designers profit considerably from the long service life without corrosion and freedom from lime scale problems. Environment-friendliness and compliance with the relevant hygiene standards are taken for granted.




The technical data are not binding. They are not warranted characteristics and are subject to change. Please consult our General Conditions of Supply.

+GF+ and INSTAFLEX are registered tradenames/ trademarks.

INSTAFLEX – complete also in advice, training and customer care

**INSTAFLEX – for commercial building installations,
compressed air systems and other application possibilities.**


+GF+ INSTAFLEX
Technical Manual
for compressed air systems



Efficient in installation,
reliable and economical
in operation.

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George Fischer
Plastic Piping Systems



Chemical Resistance
of Polybuten Pfl.

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Ask for the
corresponding
documentation.

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