

## ELGEE Plus Branch Fitting

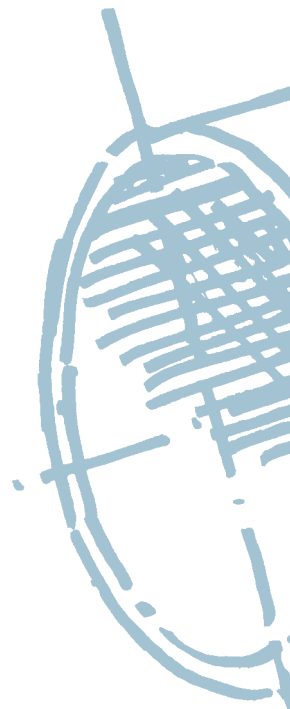


**A major innovation**

**for new installations, rehabilitation, repair**

**and network extensions**

**GEORG FISCHER +GF+**  
Piping Systems



**Are you looking for innovative and complete solutions?**

The new Elgef Plus from Georg Fischer offers gas and water distribution engineers completely new solutions for making large diameter branch connections  $\geq d 90$  mm.

Based on the requirements and wishes of our customers the innovative and advanced complete system has been developed for new installations, renovation, repair and under pressure branch connections on existing mains.

**... another plus with ELGEF Plus.**

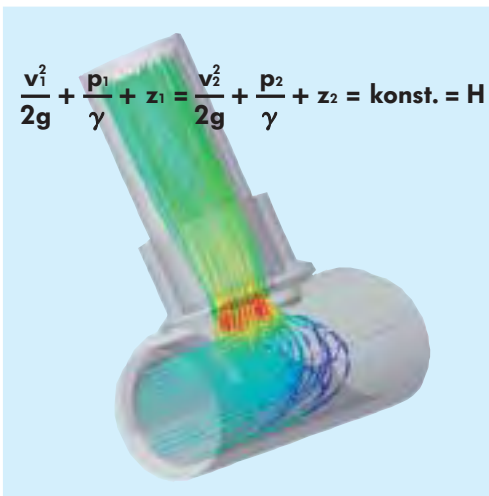
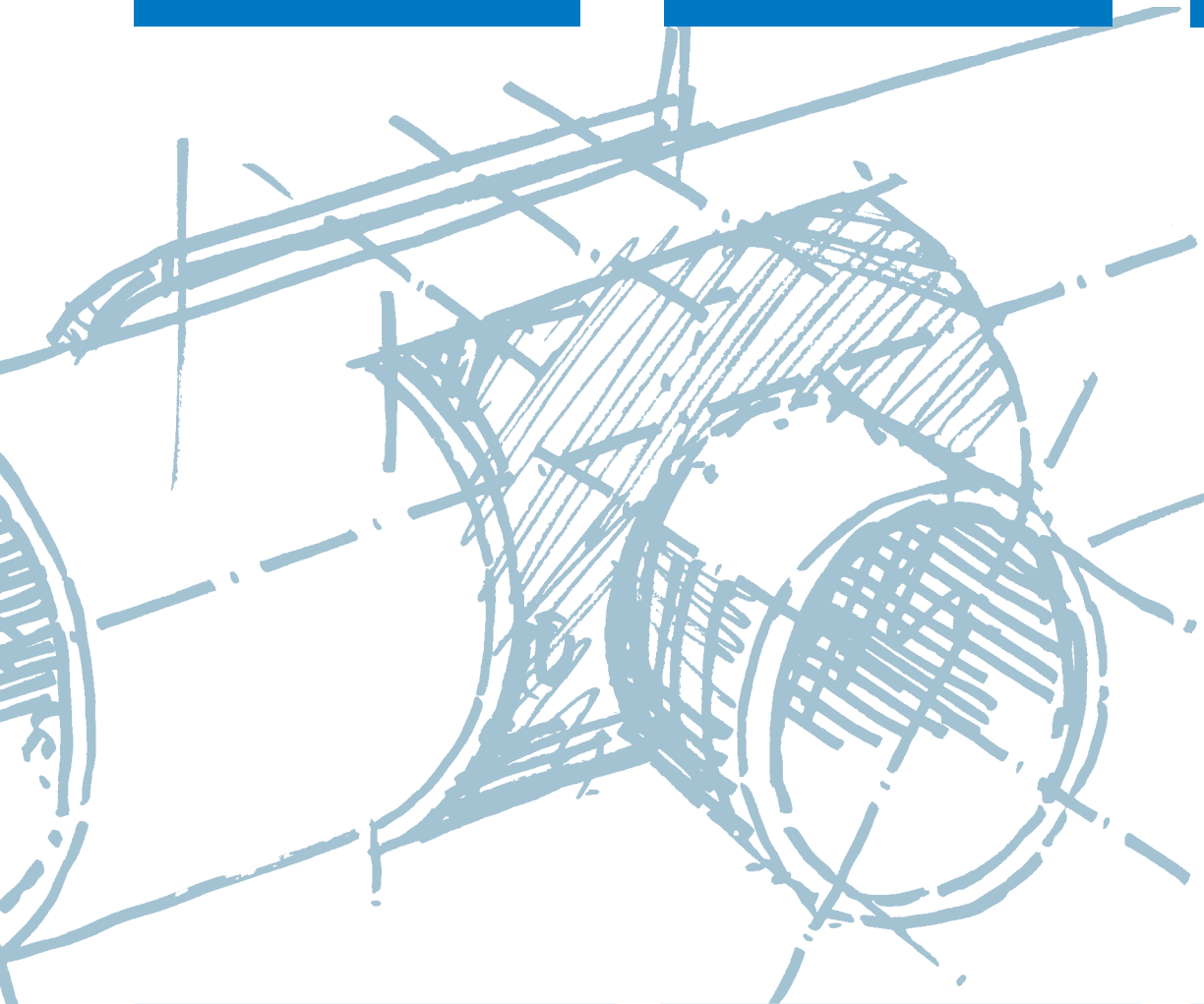
Your Needs

+

Our Know-how

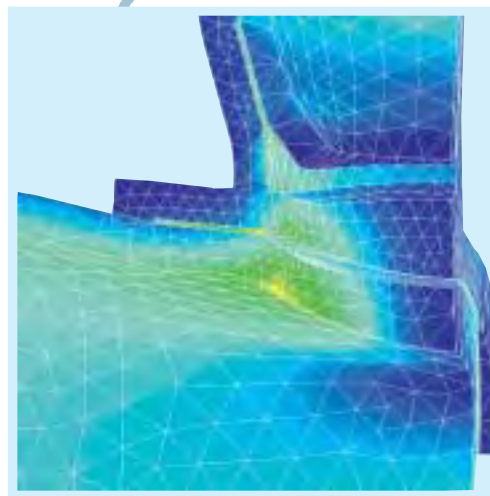
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Innovation



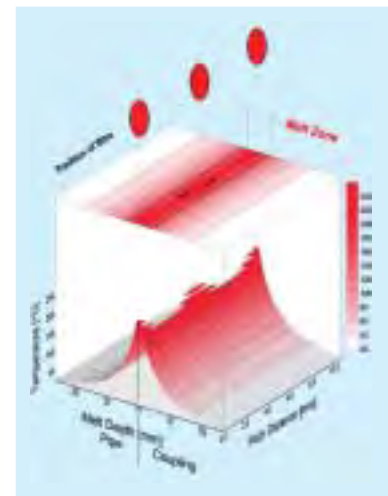
### Hydraulic Design

State of the art computer generated flow and pressure analysis calculations have been used to optimise the flow and pressure characteristics.



### Geometric Design

In order to optimise the geometric design of the fitting computer generated simulations (FEM) were used to calculate stresses likely to be encountered under real-life operational conditions. This ensures that the final product operates safely with low material stresses. The result is a long and maintenance-free working life well exceeding current requirements.



### Electrofusion Design

The electrofusion element design ensures that each part of the jointing surface receives an equal amount of heat energy. Fully protected heating wires are in direct contact with the fusion surface ensuring a high quality fusion.

# ELGEF Plus Branch Fitting

with integrated electrofusion outlet

Simplified assembly  
due to guide lugs

Optimised clamping  
with 3 self tapping  
screws

No additional  
assembly tools needed  
because of the  
integrated clamp

Excellent quality of  
the fusion due to  
optimised heating  
element with 180°  
contact with mains  
pipe

Highest performance  
due to use of PE 100  
material throughout

Unlimited  
possibilities due to  
modular design  
with electrofusion  
branch outlet

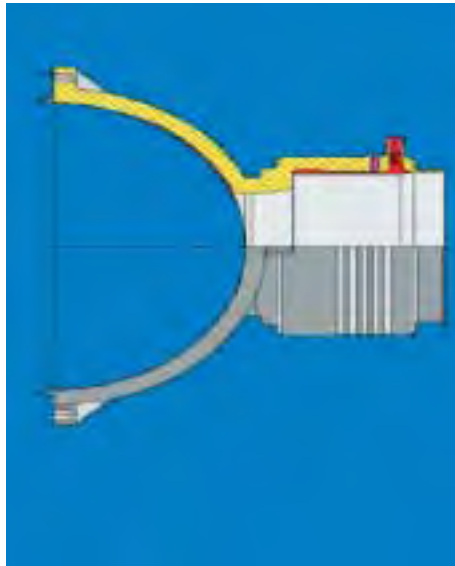
PE snap hinge for  
easy assembly



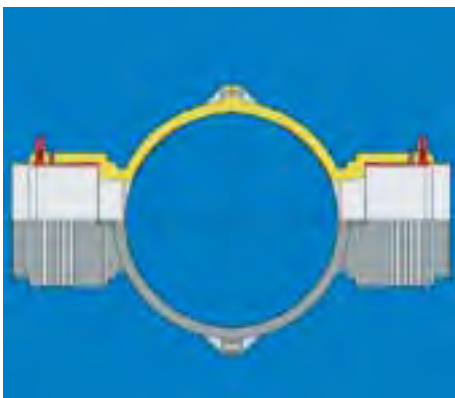


**Flexibility and economy with the modular System**

The Elgef Plus branch fitting provides the base for various branch connections. The installer can choose the components required and connect them directly in the trench. The result is a minimum of stock and a high level of flexibility and economy.

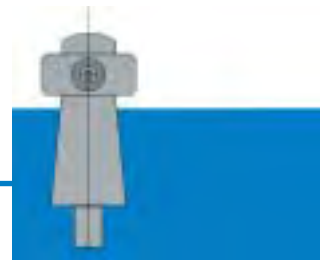


Elgef Plus Branch Fitting



**Two Saturn branch fittings easily provide a cross**

The modular system offers the unique possibility of a cross connection. If required, outlets can be of different sizes and branch connections.



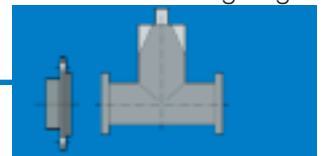
Hydrant



Pipe spigot, spigot fittings



Flange adaptor with loose backing ring



Gate valve with flanged connections



Gate valve with PE spigot ends



PE ball valve



Brass and steel transition adaptors



Stop-off adaptor



Cap/Repair fitting

# The Elgef Plus Branch Fitting – the multi talent on site...



Efficient and safe jointing with MSA electrofusion control units

## Extremely economical construction of pipeline branches

A triple saving in comparison with a T piece can be achieved:

- No need to shut down or cut main pipe and interrupt supply
- Less fittings required resulting in savings with material costs
- The branch fitting can be installed more easily and faster and therefore installation costs are lower

## No limitations for the live main

The Elgef Plus branch fitting is ideal for live branch connections to PE mains carrying gas up to 10 bar and water up to 16 bar pressure.



... Flanged gate valve

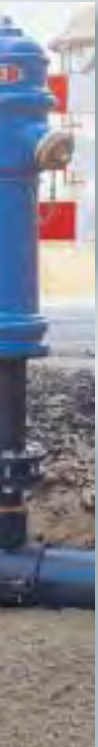


... Full plastic solution: plastic gate valve



... Spigot outlet gate valve





... Hydrant fittings



... Network extension



... Repair fitting

# Without shut down of live mains and networks: Tapping under pressure or without pressure

## No shut down of main lines during installation of a branch

- minimal installation expenditure
- no reconnection after shut down or by pass of main
- no quality problems in jointing due to moisture in the fusion area

**Time and costs are saved with improved installation and fusion quality**



Tapping Tool  
**TTS 90-125 P** for tapping live mains:  
water up to 16 bar  
gas up to 10 bar



**Calyx drill** for pressureless tapping  
– efficient pipe laying



## Tapping tools TTS 90-125

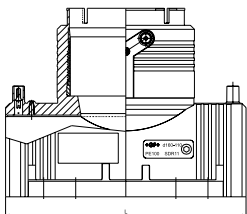
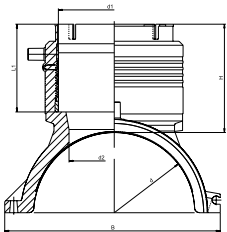
The newly developed TTS tools ensure a quick and safe installation under site conditions. The Waga MULTI/JOINT 3000 adapter prevents damage to the joining spigot.

The tapping tools enable the branch connection to be installed extremely effectively and economically.



## ELGEF Plus Branch Fitting

Complete with lower part, 4 mm terminal pins, limited path fusion indicators  
PE100 SDR 11 (ISO S5), 10 bar gas / 16 bar water



d-d1	Code	H	L	L1	B	d2
110-90	<b>193 135 009</b>	101	220	81.5	164	65
110-110	<b>193 135 010</b>	107	220	87.5	164	65
125-90	<b>193 135 019</b>	101	220	81.5	179	65
125-110	<b>193 135 020</b>	107	220	87.5	179	65
160-90	<b>193 135 039</b>	102	240	81.5	215	65
160-110	<b>193 135 040</b>	108	240	87.5	215	86
160-125	<b>193 135 041</b>	129	240	98.5	215	86
180-90	<b>193 135 049</b>	102	260	81.5	237	65
180-110	<b>193 135 050</b>	108	260	87.5	237	86
180-125	<b>193 135 051</b>	129	260	98.5	237	86
200-90	<b>193 135 059</b>	102	260	81.5	253	65
200-110	<b>193 135 060</b>	108	260	87.5	253	86
200-125	<b>193 135 061</b>	129	260	98.5	253	86
225-90	<b>193 135 069</b>	102	260	81.5	287	65
225-110	<b>193 135 070</b>	108	260	87.5	287	86
225-125	<b>193 135 071</b>	129	260	98.5	287	86
250-90	<b>193 135 079</b>	102	260	81.5	312	65
250-110	<b>193 135 080</b>	108	260	87.5	312	86
250-125	<b>193 135 081</b>	129	260	98.5	312	86

## Drills for Branch Fitting Tapping Tool



d	Code	SID	kg	Description
65	<b>799 150 410</b>	1	0,3	PE drill, swarf-free 65 mm, High Tech PE drill with adapter part to prevent dislodging and M20 threading. Special cutting geometry and drill construction for safe, swarf-free drilling.
86	<b>799 150 411</b>	1	0,5	PE drill, swarf-free 86 mm, High-Tech PE drill with adapter part to prevent dislodging and M20 threading. Special cutting geometry and drill construction for safe, swarf-free drilling.
65	<b>799 150 424</b>	1	0,3	PE drill, 65 mm, Economic PE drill with adapter part to prevent dislodging and with M20 threading. Robust drill for fast, safe use with small drill torque.
86	<b>799 150 425</b>	1	5,5	PE drill, 86 mm, Economic PE drill with adapter part to prevent dislodging and with M20 threading. Robust drill for fast, safe use with small drill torque.

## Branch Fitting Tapping Tool TTS 90-125 P, for non- pressure and pressure applications



This tool is suitable for Tapping with ELGEF® Plus Branch Fittings in conjunction with a valve. This unit can be used on mains with diameters from d 90 - 400 mm with outlets d 90 - 125 mm (mains dimensions DN 80 - DN 300 and outlet dimensions DN 80 - DN 100) in non-pressure or under pressure conditions (Water up to max. 16 bar, Gas up to max. 10 bar operating pressure). The tool is equipped with 3 different connection elements: WAGA coupling for PE spigot ends and for valve connections under pressure, flange adapter when tapping under pressure and exchangeable distance sleeves for non-pressure tapping.

d	Code	SID	kg	Description
90-400 (90-125)	<b>799 150 401</b>	1	59,4	Tapping tool TTS 90-125 P compl. solution for under pressure tapping and non-pressure. Basic tool with spindle L = 1100 mm, 3 distance sleeves 90-125, adap., 2 WAGA coupling 90-125, 2 flange joints 90-125, trans. box and small parts. Without drill.
90-400 (90-125)	<b>799 150 395</b>	3	12	Tapping tool TTS 90-125 P Basic, tool for pressure and non-pressure tapping, tool with spindle L = 1100 mm and small parts. Without distance sleeves, adapter, WAGA coupling, flange joints, transport box and drill.
90	<b>799 150 403</b>	3	4	WAGA coupling 90 for use on 90 mm spigot ends.
110-125	<b>799 150 404</b>	3	6	WAGA coupling 110-125 for use on 110-125 spigot ends.
90	<b>799 150 405</b>	3	4	Flange adapter 90 for use with 90 mm flange ends.
110-125	<b>799 150 406</b>	3	6	Flange adapter 110-125 for use with 110-125 mm flange ends.
90	<b>799 150 397</b>	3	0,5	Distance sleeve 90 for Branch Fittings with outlet d 90 mm.
110	<b>799 150 398</b>	3	0,8	Distance sleeve 110 for Branch Fittings with outlet d 110 mm.
125	<b>799 150 399</b>	3	1,1	Distance sleeve 125 for Branch Fittings with outlet d 125 mm.
	<b>799 150 393</b>	3	14,5	Transport case, large. Safe transport for tool TTS 90-125 P, Accessories and small parts.
90-125	<b>799 150 429</b>	3	0,5	Adapter for distance sleeves 90-125, for non-pressure tapping with Branch Fittings with outlets d 90-125 mm.



The technical data is not binding and not an expressly warranted characteristic of the goods. It is subject to change. Please consult our General Conditions of Supply.

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