

# **FUSIONTECH AUSTRALIA**

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## **PE100 POLY BALL VALVES**

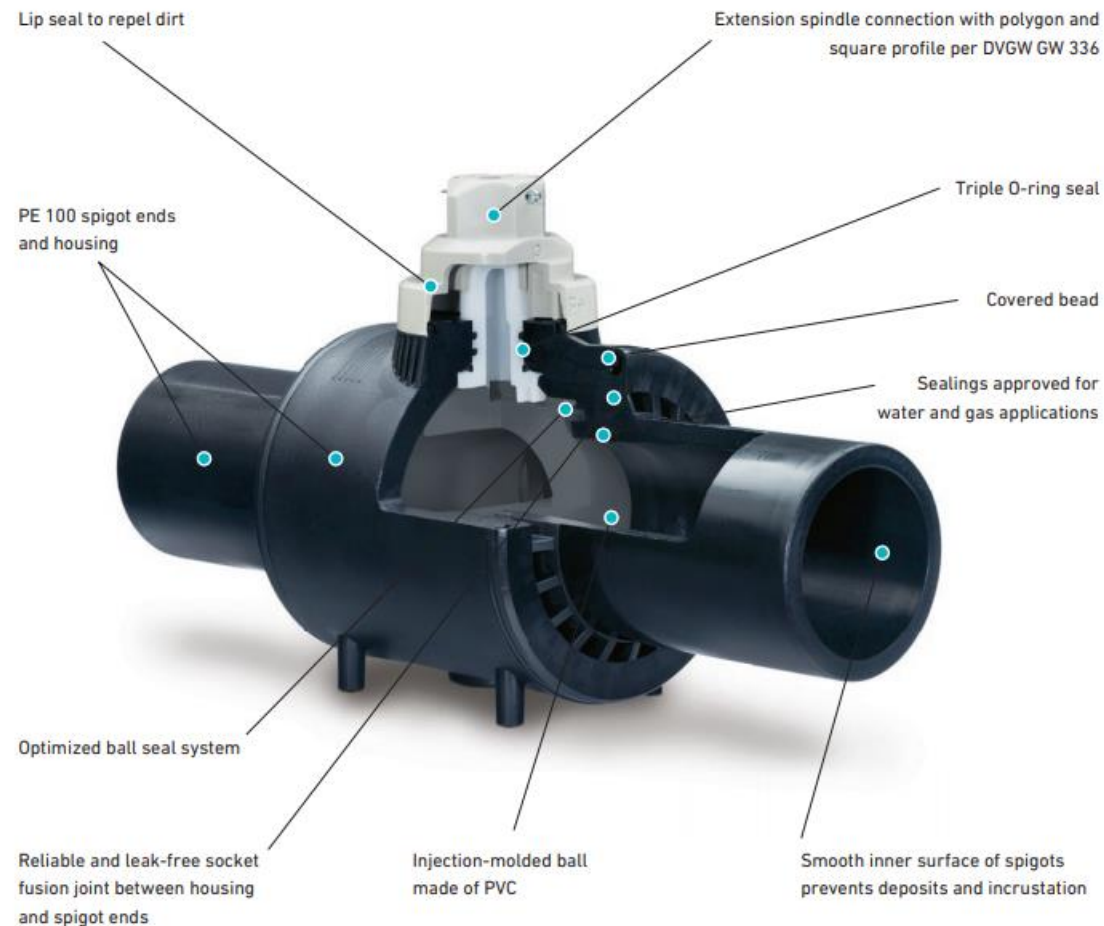


## **ELGEF Plus Ball Valve**

The ELGEF Plus ball valves from GF Piping Systems have been specially designed for underground gas and water distribution piping systems. Made entirely of plastic, they are corrosion resistant and maintenance free. This ensures a service life of well over 50 years. The ball valves can be easily connected to other components of the modular ELGEF Plus system.



# Maintenance-free, flexible and corrosion-resistant





## Highest level of quality and reliability

GF Piping Systems focused on two main aspects during the product development: safety and system compatibility. The result is a comprehensive range of products with numerous connection options and diverse accessories. The ELGEF Plus ball valve (d20–d110 mm) is an absolute lightweight and its handling is not at all complicated. Thanks to the homogenous, reliable and leak-free jointing method of electrofusion, the complete piping network can be constructed in PE materials.



### Safety

- Effective ball seal for a safety reserve
- Robust stops in open and closed positions
- Valve position (open/closed) is indicated
- Low actuating torque for easy operation
- Triple O-ring seal to cover extreme operating conditions.
- Traceability barcode (d20–d110 mm) for complete traceability of all valve components & materials
- DVGW approval for gas (d20-d225 mm) and water applications (d20-d110 mm)



### Simplicity

- Maintenance-free
- Easy connection of extension spindle according to the uniform standard DVGW GW336
- Easy installation with electrofusion or butt fusion technology
- One product for gas and water applications



### Efficiency

- Full compatible with components from the ELGEF Plus modular system
- Higher cost efficiency due to corrosion-free operation
- Minimal flow losses due to smooth ball surface
- Same physical and chemical characteristics of all piping components in the network (homogenous PE materials in pipe network)

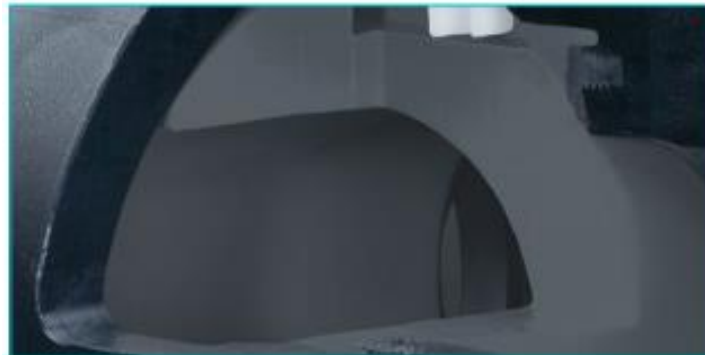
## **Withstands even extreme temperatures and difficult installation situations**

Safety is always the highest priority in gas and water installations, which is why we have developed the ELGEF Plus ball valve further to ensure 100% tightness to the outside, even under extreme conditions.



### **Optimized ball seal system**

The innovative sealing system for d90 and d110 mm offers you extra safety, even under the extreme installation conditions often found on building sites. With the new sealing geometry and static and dynamic sealing components, the ball is safe float and encapsulated, optimal for all situations.



### **Injection-molded ball**

The ball is manufactured in one piece in a modern injection molding process, giving the ball a smooth surface, which could never be achieved with machining. This leads to optimal flow conditions in the opened position, minimising disruptive flow turbulences and pressure losses.



## Withstands even extreme temperatures and difficult installation situations

With our easy-to-use traceability label, you can check your system



## Triple O-ring seal

The triple O-ring seal of the torque transmission head ensures 100% tightness to the outside, even under extreme temperatures. This is a definite plus in terms of your safety.



## Traceability barcode

Each ball valve is equipped with a traceability barcode to ensure complete valve traceability – from the raw material batch to the fusion parameters during installation.

## Solutions for all application areas

### Small dimensions

For the dimension range d20-d110 mm we offer the ELGEF Plus ball valve in gas and water applications.

### Supplemented by large dimensions

In the dimension range d125-d225 mm we offer our time-tested range of ball valves.

### Extension spindles

Extension spindles are available for the dimensions d20–d110 mm in the new standardized version according to DVGW GW 336 with a square profile of 20 or 25 mm. This standardization allows you to significantly reduce your inventory and cut down on storage costs. As an alternative, the conventional polygon connection can also be used.

### Drilling device W410

The W410 tapping tool from GF can be used to mount ELGEF Plus ball valves into an existing distribution network under pressure. With this installation technology, you do not have to interrupt the supply to integrate an additional outlet or extension in an existing piping system. This means considerable savings on installation costs.

### Accessories

A full line of accessories is available for the ELGEF Plus ball valve, so you have a complete system for the entire piping installation.

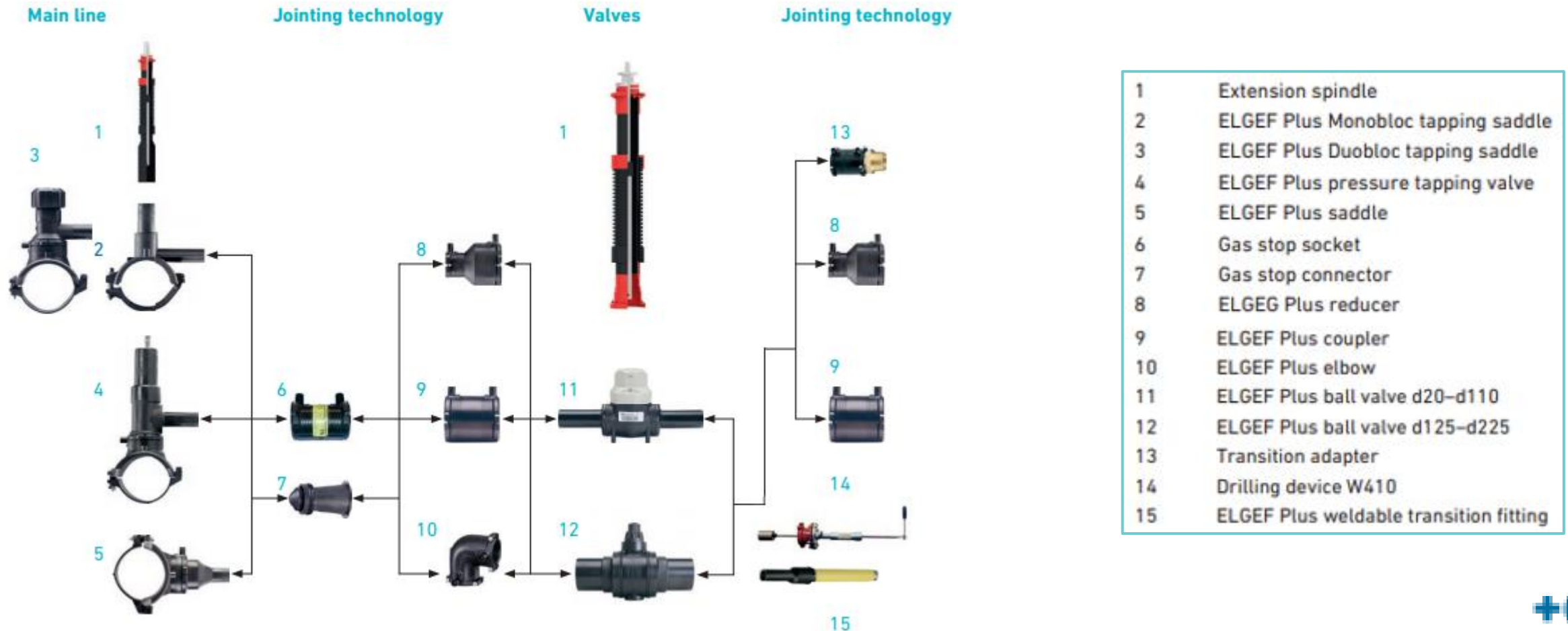


ELGEF Plus ball valve d20–d110 mm.





## ELGEF Plus Electrofusion System – Everything Fits Together







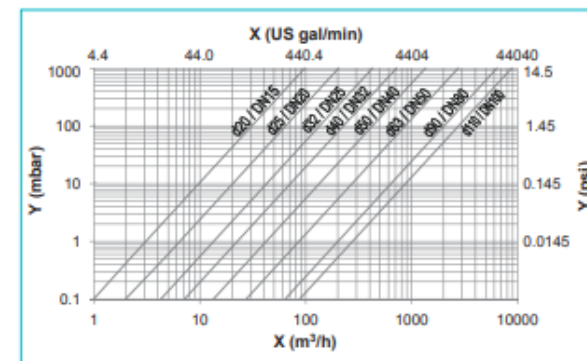
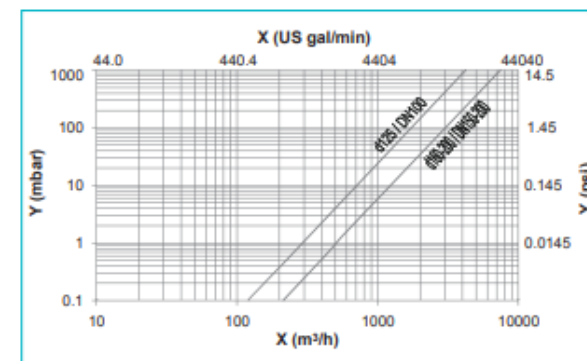
	d20–d110	d125–d225
SDR 11	✓	✓
PN 10 bar (gas)	✓	✓
PN 16 bar (water)	✓	✓
<b>Design features</b>		
Full-plastic ball valve	✓	✓
Triple O-ring seal	✓	double
Smooth inner surface prevents deposits and incrustation	✓	✓
With PE spigots acc. to EN 1555	✓	✓
Long spigot ends enable a second fusion	✓	for d225 mm
<b>Material</b>		
PE 100 housing	✓	✓
PE spigot ends of PE 100 SDR11 (ISO S5)	✓	✓
Ball	Injectionmoulded	ball machined
Torque transmission head	POM*	PP**
Gas-tight control pins of POM	✓	✓
Elastomer seals for gas and water	✓	✓

	d20–d110	d125–d225
<b>Connecting elements</b>		
ELGEF Plus fittings	✓	✓
ELGEF Plus transition adaptor	✓	✓
ELGEF Plus electrofusion saddle and branch fittings	✓	✓
<b>Accessories</b>		
Extension spindle	✓	✓
Drilling device	✓	✓
Street covers	✓	✓
Base plate	on request	160–225***

A line graph showing the relationship between Aperture angle (%) on the x-axis and Flow factor kv, Cv (%) on the y-axis. The x-axis ranges from 0 to 100 with major grid lines every 20 units. The y-axis ranges from 0 to 100 with major grid lines every 10 units. A smooth curve starts at the origin (0,0) and increases monotonically, passing through approximately (20, 2), (40, 10), (60, 22), (80, 50), and ending at (100, 100).

Aperture angle (%)	Flow factor kv, Cv (%)
0	0
20	2
40	10
60	22
80	50
100	100

**Pressure loss (reference value for air, 23°C)  
per EN 12117**



Please see the assembly instructions and the "Technical Manual for Utilities" for installation and operation. Subject to technical modifications and the use of equivalent or better materials. Illustrations are not binding. More technical information available online at [www.qfps.com](http://www.qfps.com)

Code	D (mm)	DN (mm)
BVPE20/11	20	15
BVPE25/11	25	20
BVPE32/11	32	25
BVPE40/11	40	32
BVPE50/11	50	40
BVPE63/11	63	50
BVPE75/11	75	65
BVPR90/11	90	80
BVPE110/11	110	100
BVPE125/11	125	100
BVPE160/11	160	150
BVPE180/11	180	150
BVPE200/11	200	200
BVPE225/11	225	200

*\*\*Larger sizes available on request*



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