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Product Catalog

Georg Fischer Central Plastics

Connector and Equipment Catalog

Piping System Solutions

(800) 654-3872 (405) 273-6302

www.centralplastics.com

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PIPING SYSTEMS

The Right

Georg Fischer Central Plastics: Not Just a Different Connection but a Connection that makes a Difference.

How do you select a business partner with the right connections? If quality, service and value are important to you—not to mention sophisticated design, engineering and manufacturing capabilities—Central is tough to beat. In short, we make the connections you need for your company and your applications.

Founded in 1955, we have long been a stable, professionally managed and forward-thinking organization. Partnering with Georg Fischer Central Plastics means you can trust us. Trust us to not just manufacture and supply reliable products for piping systems you service, but also trust us in finding the right way to meet the unique needs of your company.

The Central Advantage: Technology Meeting Your Most Demanding and Changing Challenges

The speed of the professionals in our design department is unsurpassed. Combine that with the high-volume capacity of our manufacturing facility, and you begin to understand how Central can ship even your largest order so quickly. And that's a connection you can use to your advantage in today's hurry-up marketplace.

Another way Central makes the right connection is by constantly staying abreast of new technology. If there's a better way to do something we'll either find it or invent it. Many Central processes are proprietary, a result of our employees and clients recognizing and acting on an opportunity for improvement.

Which means you'll get a solution customized to your specific application.

Everyone talks "quality," but what does it really mean? To Central, quality starts with a relentless analysis of customer need and a near obsession with precision—precision to your standards as well as our own.

Computer-aided design and computer-controlled machinery assure that the products you order are perfectly made. And that if you order more of the same, even years from now, they will be precisely the same as today's.

Our Uncompromising Quality Contributes to Your Company's Value to Your Customers

Our commitment is documented. Central earned ISO 9001 certification in 1998, testimony to years of excellence not only in product design, development and production, but also in marketing, purchasing and customer service

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PIPING SYSTEMS

from Main to Meter.

Responsive GF Central Service Before, During and After Your Order: It's Just Good Business!

At Georg Fischer Central Plastics, customer service actually starts before you're technically a customer. It starts with our listening. Top management is accessible to every client, large or small, taking the time to understand your requirements up front. Our customer service reps are more than order-takers. They're knowledgeable industry consultants and they're specially trained to answer the hard questions, talk through complex plans, and give smart answers for your unique application. And, you never have to wait for answers or action. It's the connection you need to make your problem go away.

GF Central: The Comprehensive Source for all your Piping System Connector needs.

We think about quality, service and value so you don't have to. That's why we take such pains to make sure things are done right the first time, consistently and predictably.

That's not all. Because we also help you explore new ways of doing things, you know where to turn when it's time to get something innovative done. So, if you have an interesting product idea, we would like to discuss it with you.

We create the technology to build our fittings, sell our fittings and service our fittings. Nobody else puts it together the way we do. Georg Fischer Central Plastics is the one connection you really need to make.

CENTRAL
The connection since 1955®

The Right Connection

Table of Contents

Table of Contents

Table of Contents

Butt Fittings
Saddle Fittings
Socket Fitttings
Flange Adapters
MJ Adapters
PE Ball Valves
Fusion Equipment

Conventional Fusion Products & Equipment

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Conventional Fusion: General Product Information

Due to the unique material characteristics of polyethylene, heat fusion allows successful joining of pipe and fittings into a single leak-free system with no connections to corrode or loosen.

"The basic principle of heat fusion (in this case butt, saddle or socket fusion) is to heat and melt the joint surfaces and force the melted surfaces together, which causes the materials to mix and fuse into a monolithic joint." ***AWWA PE Pipe - Design and Installation, Manual of Water Supply Practices M55***

Georg Fischer Central Plastics has been actively involved in the research and development of innovative joining methods for polyethylene piping systems since the early 1960's. Recognized as an industry leader in the world of manufactured Polyethylene (PE) fittings; Georg Fischer Central Plastics offers our customers the broadest and most complete line of Butt, Saddle, and Socket fusion fittings. All designed, manufactured and tested in Shawnee, Oklahoma. under ISO 9001 standards and serviced by an experienced staff of the most knowledgeable and customer friendly professionals you could hope to find.

Bringing unrivaled knowledge, experience and manufacturing capabilities to industries throughout the world, Georg Fischer Central Plastics delivers innovative and cost effective pipe joining solutions right to your door step. Servicing the polyethylene fitting needs in natural gas, potable water, municipal wastewater, oil and gas gathering, mining, landfill, telecommunications, geothermal, irrigation and other industries; Georg Fischer Central Plastics is helping to ensure that your conventional fusion job is done right - the first time.

With an extensive and state of the art in-house testing facility, Georg Fischer Central Plastics performs the following tests on all of our Butt, Saddle, and Socket fittings.

- ASTM D 1599 - Minimum Hydraulic Burst Pressure Test.
- ASTM D 1598 -Sustained Pressure Test Results.
- ASTM D638 Tensile Strength Test.
- PE3408/PE4710 Fittings are tested to the requirements of AWWA C906 (where applicable)
- PE3408/PE4710 FM Tested and Approved (where applicable)

Conventional Fusion: Allowable Operating Pressures

The following charts represent the **Allowable Operating Pressure** for fittings manufactured from three grades of polyethylene resin used in our products. These values represent the most common **Standard Dimension Ratios** (SDR) used in the industries that we service and are further divided based on the design factors determined by each of their related governing authorities.

- .32 for natural gas distribution systems regardless of resin used
- .50 for water applications for PE3408 resins
- .63 for water applications for PE4710 resins

} All design factors are assuming a standard operating temperature of 73°F

NOTE: For other fluids, temperatures, chemicals and environmental considerations additional design factors may be required. (i.e. Canadian gas utilities use a .40 design factor for their natural gas applications.)

DOT Allowable Operating Pressure for Natural Gas Plastic Pipe Systems

.32 design factor @ 73°F

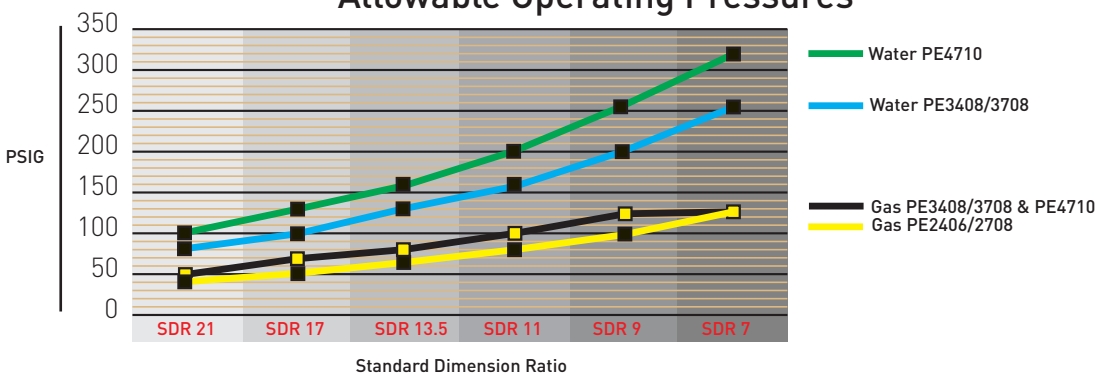
SDR	PE2406/PE2708 **DOT Allowable**	PE3408 **DOT Allowable**	PE4710 **DOT Allowable**
21	40	50	50
17	50	64	64
13.5	64	80	80
11	80	100	100
9	100	125**	125**
7	125**	125**	125**

** DOT Regulations only allow a 125 psig max for natural gas plastic pipe systems regardless of the materials Maximum Allowable Operating Pressure (MAOP).

Allowable Operating Pressure for Municipal & Industrial Applications

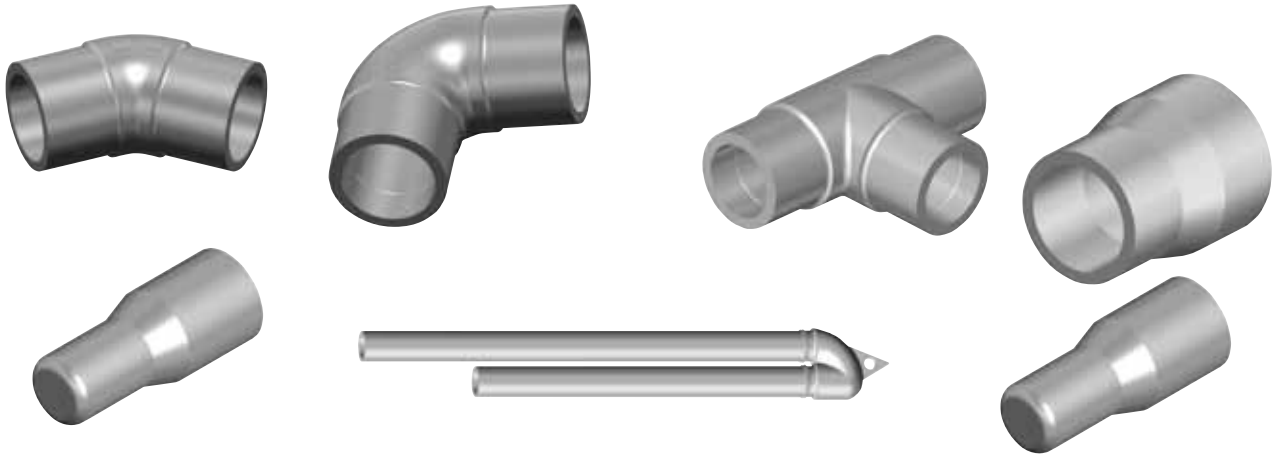
SDR	PE3408 **.50 design factor @ 73°F**	PE4710 **.63 design factor @ 73°F**
21	80	100
17	100	130
13.5	130	160
11	160	200
9	200	255
7	265	335

Allowable Operating Pressures



NOTE: Operating Pressure for Conventional Tapping Tees and Conventional Branch Saddles are determined by the material used, the outlet SDR and the governing regulations.

Conventional Fusion: Butt Fusion Fittings



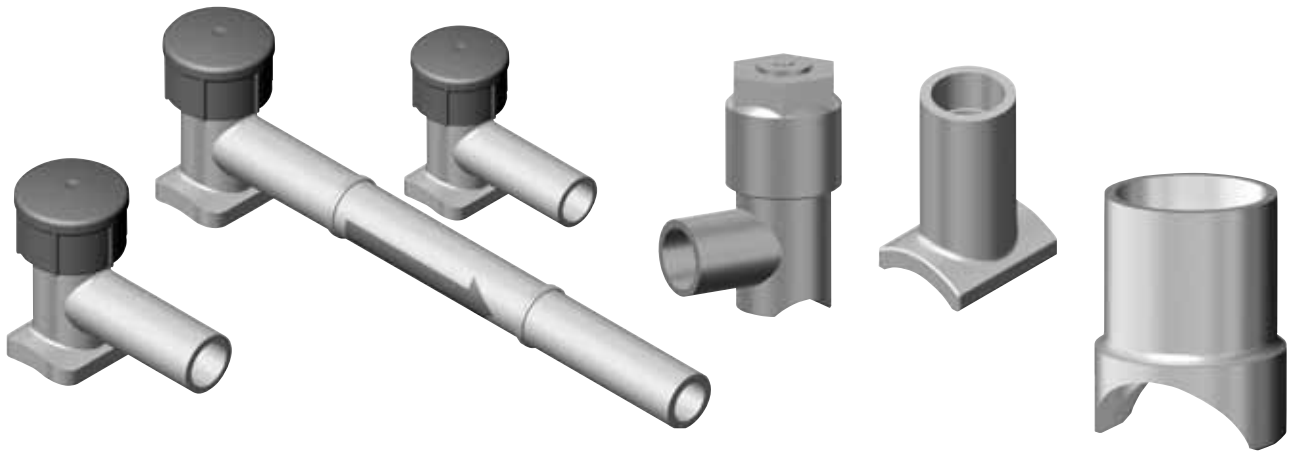
GF Central's Molded PE2406/PE2708 Butt fittings are manufactured and tested to the requirements of ASTM D2513 and ASTM D3261 and are sized for use with pipe conforming to ASTM D2513 and with Butt fittings conforming to ASTM D3261. GF Central's PE2406 /PE2708 Butt fittings are molded from a virgin yellow medium density resin in accordance with the material specifications listed in ASTM D3350 with a designation of PE2406/PE2708. All Georg Fischer Central Plastics PE2406/PE2708 Butt Fittings are compatible for heat fusion with any pipe or fitting manufactured from a like or similar resin. GFCP's PE2406/PE2708 fittings have been qualified for fusion using PPI generic fusion procedures.

Georg Fischer Central's Molded PE3408/PE4710 Butt fittings are manufactured and tested to the requirements of ASTM D2513, ASTM D3261, and ANSI/AWWA C906 for use with outside diameter controlled pipe and fittings conforming to ASTM D2513, ASTM D3035, ASTM F-714. Georg Fischer Central's PE3408/PE4710 Butt fittings are molded from an NSF listed resin in accordance with the material specifications listed in ASTM D3350 with a designation of PE3408/PE4710. GFCP PE3408/PE4710 Butt fittings are manufactured and tested to the requirements of ASTM D2513 and ASTM D3261 (where applicable) and are compatible for heat fusion with any pipe and or fitting manufactured from a like or similar resin. GF Central's PE3408/PE4710 fittings have been qualified for fusion using PPI generic fusion procedures.

FEATURES

- Pressure rated for natural gas and potable water applications.
- IAPMO Approved (where applicable).
- CSA Approved (where applicable).
- PE3408/PE4710 FM Approved (where applicable).
- PE3408/PE4710 fittings are tested to the requirements of AWWA C906.
- Can be joined by butt, socket , electrofusion or mechanical methods.
- Can be heat fused with all conventional and electrofusion fusion methods.

Conventional Fusion: Saddle Fusion Fittings



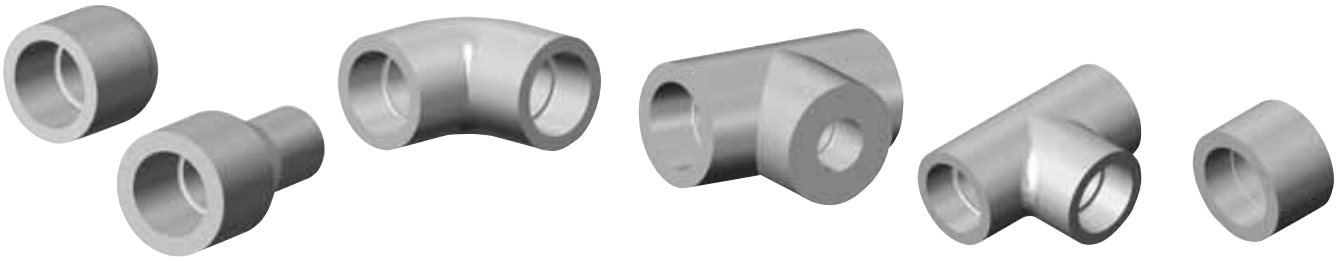
Georg Fischer Central's Molded PE2406/PE2708 Side-Wall Tapping Tees, Service Saddles, and Branch Saddles are manufactured and tested to the requirements of ASTM D2513 and ASTM D3261 and are sized for use with pipe conforming to ASTM D2513 and with Butt fittings conforming to ASTM D3261 as applicable. GF Central's PE2406/PE2708 Side-Wall Tapping Tees, Service Saddles and Branch Saddles are molded from a virgin yellow medium density resin in accordance with the material specifications listed in ASTM D3350. All Georg Fischer Central Plastic's PE2406/PE2708 Side-Wall Tapping Tees, Service Saddles and Branch Saddles are compatible for side-wall fusion with any pipe or fitting manufactured from a like or similar resin. Georg Fischer Central's PE2406/PE2708 fittings have been qualified for fusion using PPI generic fusion procedures.

GF Central's Molded PE3408/PE4710 Side-Wall Tapping Tees, Service Saddles, and Branch Saddles are manufactured and tested to the requirements of ASTM D2513, ASTM D3261 and ANSI/AWWA C906 for use with outside diameter controlled pipe and fittings conforming to ASTM D2513, ASTM D3035, ASTM F-714 and with Butt fittings conforming to ASTM D3261. Georg Fischer Central's PE3408/PE4710 Side-Wall Tapping Tees, Service Saddles and Branch Saddles are molded from an NSF listed resin in accordance with the material specifications listed in ASTM D3350. All GF Central Plastic's PE3408/PE4710 Side-Wall Tapping Tees, Service Saddles, and Branch Saddles are manufactured and tested to the requirements of ASTM D2513 and ASTM D3261 (where applicable) and are compatible for side-wall fusion with any pipe and or fitting manufactured from a like or similar resin. Georg Fischer Central's PE3408/PE4710 fittings have been qualified for fusion using PPI generic fusion procedures.

AVAILABLE FEATURES

- Pressure rated for natural gas and potable water applications.
- IAPMO Approved (where applicable).
- CSA Approved (where applicable).
- PE3408/PE4710 are tested to the requirements of AWWA C906.
- Can be heat fused to pipe wall using conventional side-wall fusion methods.
- Outlets can be heat fused using conventional and electrofusion fusion methods.

Conventional Fusion: Socket Fusion Fittings



Georg Fischer Central's Molded PE2406/PE2708 Socket Fusion fittings are manufactured and tested to the requirements of ASTM D2513 and ASTM D2683 and are sized for use with pipe conforming to ASTM D2513. GF Central's PE2406/PE2708 Socket fittings are molded from a virgin yellow medium density resin in accordance with the material specifications listed in ASTM D3350. All Georg Fischer Central Plastic's PE2406/PE2708 Socket Fusion Fittings are compatible for heat fusion with any pipe or fitting manufactured from a like or similar resin. Georg Fischer Central's PE2406/PE2708 fittings have been qualified for fusion using ASTM D2657 generic fusion procedures.

Georg Fischer Central's Molded PE3408/PE4710 Socket Fusion fittings are fully manufactured and tested to the requirements of ASTM D2513 and ASTM D2683 and are manufactured for use with outside diameter controlled pipe and fittings conforming to ASTM D2513 and ASTM F-714. GF Central's PE3408/PE4710 Socket fittings are molded from a virgin black high density resin in accordance with the material specifications listed in ASTM D3350. All GF Central Plastic's PE3408/PE4710 Fusion fittings are manufactured and tested to the requirements of ASTM D2513 and ASTM D2683 and are compatible for heat fusion with any pipe and or fitting manufactured from a like or similar resin. GF Central's PE3408/PE4710 fittings have been qualified for fusion using ASTM D2657 generic fusion procedures.

AVAILABLE FEATURES

- Pressure ratings up to SDR7 on most sizes.
- IAPMO Approved (where applicable).
- CSA Approved (where applicable).
- Can be used with all socket fusion methods.

Conventional Fusion: PE Adapters

Georg Fischer Central's PE3408/PE4710 Flange Adapters and MJ Adapters are manufactured and tested to the requirements of ASTM D3261 and ASTM D3261 and ANSI/AWWA C906 for use with pipe conforming to ASTM D2513/3035, F-714 and with Butt fittings conforming to ASTM D3261 as applicable. Georg Fischer Central's PE3408/PE4710 Flange Adapters and MJ Adapters are molded from an NSF listed resin in accordance with the material specifications listed in ASTM D3350. All GF Central Plastic's PE3408/PE4710 Flange Adapters and MJ Adapters are compatible for heat fusion with any pipe or fitting manufactured from a like or similar resin.

FEATURES

- Pressure rated for municipal and trial applications.
- PE3408/PE4710 FM Approved (where applicable).
- PE3408/PE4710 fittings are tested to the requirements of AWWA C906.
- Can be heat fused using conventional and electrofusion fusion methods.
- Can be beveled for butterfly valves when requested.
- MJ Adapters can be provided with stiffeners when requested.

Conventional Fusion: General Equipment Information

Georg Fischer Central Plastics has been a manufacturer of polyethylene fusion equipment since the early days of plastic product development and to this day we continue to manufacture a line of quality fusion equipment. Our equipment includes:

BS-4 BUTT FUSION MACHINE – capable of butt fusing ½" thru 4" pipe and fittings. This compact machine is manufactured using structural aluminum castings for stability, yet is still light weight - ONLY 34 POUNDS. Extra wide grooved pipe clamps and liners help to assure alignment on coiled and out-of-round pipe. The precision ground guide bars are in the center line of pipe to maintain equal load balance and proper alignment. Clamp knobs are stainless steel with thrust bearings. A pressure control knob allows operator to lock position during cooling time for better joint integrity.

BS-4 ELECTRIC TRIMMER with adjustable trimming stops. The chain driven 110 or 220 volt BS-4 Electric Trimmer utilizes a 1/2 hp, 620 watt, 5.63 amp motor. The main spindle turns on sealed ball bearings for longer life. Trimmer blades are made of hardened stainless steel for longer wear, better edge and rust free operation.

MANUAL TRIMMER – is typically used in conjunction with the Central Gas Fired Heating Tool and allows quality fusion in remote areas. The manual trimmer can be used in lieu of electric trimmer.

BUTT, SOCKET AND SADDLE HEATING TOOLS

- Versatile heating tools capable of Socket, Saddle or Butt Fusion
- Interchangeable Heater Faces – Heating tools are interchangeable with most conventional heater faces currently in the field.
- Central Quality – GF Central's heater face coating is designed to provide durability and long wear.
- Portable – Lightweight for easy handling.
- Recessed Thermometer – Easy to read dial thermometer recessed in the handle.
- Gas Fired Tools – Economical tools for quick line repairs. No generator is required – simply heat desired temperature with a conventional gas torch.

AVAILABLE FUSION EQUIPMENT ACCESSORIES

- Butt Fusion Heater Faces
- Socket Heater Faces
- Tapping Tee Faces
- High-Volume Multi-Saddle Faces
- Branch Saddle Faces
- BS-4 Butt Fusion Machine Liner Kits
- Special Liner Kits
- Socket Fusion Depth Gauges
- Socket Fusion Cold Rings
- Socket Fusion Fitting Holders
- Socket Fusion Chamfer Tools
- Squeeze-Off Tools

On March 8, 2007, GF Central Plastics officially expanded the breadth of our fusion equipment product offering through the acquisition of

Georg Fischer Connectra LLC

The inclusion of Connectra fusion products will now allow Georg Fischer Central Plastics to offer a more comprehensive line of fusion equipment with Butt Fusion capabilities up to 42".