

Ultimate fire protection

HEAT-FIT Fire Retardant System



HEAT-FIT Fire Retardant System

Ultimate fire protection

GF Piping Systems developed the Fire Retardant Pipe Jacket System HEAT-FIT to bring lightweight, corrosion-free thermoplastic piping systems onboard vessels and offshore for essential applications.

The demand for thermoplastic piping systems has grown considerably over the last few years. The lightweight, corrosion-free and long-lasting alternative to traditional metal piping systems is the ideal solution to increase the efficiency of your vessel. Thanks to the newly developed Fire Retardant Pipe Jacket System HEAT-FIT, thermoplastic piping systems can finally be used for essential applications onboard.

The unique Pipe Jacket System HEAT-FIT copes with the strict fire resistance regulations of the International Maritime Organization (IMO) and makes thermoplastic piping systems resistant to temperatures around 1.000°C for at least 30 minutes under pressure. Made of durable and flexible materials, the Pipe Jackets can sustain highly demanding marine industry conditions.

The safety of your crew, passengers, and cargo is of the utmost importance. HEAT-FIT allows you to use thermoplastic piping systems without compromising on safety.



Cruise and ferry

Increase the efficiency of your ship and reduce downtimes.



Offshore work

Reduce maintenance work on your platform.



Merchant fleet

Increase the efficiency of your fleet and reduce your CO2 footprint.




Navy

Lower the total ship weight and increase your ship speed and effectiveness.



Approvals in process, request submitted.



Unrivalled reassurance for your crew and vessel in marine applications

Ships are not only floating cities but are also essential for the world's economy. When using the oceans as traffic and commercial routes, applications onboard have to deal with extreme conditions. Concerning longevity and efficiency, preventing corrosion and installing lightweight solutions are more important here than anywhere else.

As ship sizes increase, construction requirements continue to raise the demand for lightly constructed yet perfectly safe ship systems. As demand rises for more sustainable shipbuilding and operations, more attention is directed towards emission control and ballast water treatment while maintaining passenger security and comfort.

With GF Piping Systems, corrosion is no longer an issue for shipbuilders. The plastic piping systems are non-corrosive

and designed to last throughout the system's entire service life. Therefore, they contribute to the piping system's increased reliability while significantly lowering maintenance costs compared to metal. They are excellently suited for applications involving drinking and sewage water, coolants, acids, leaches, and other chemicals, as well as abrasive compounds.

Energy efficiency and recyclability are important elements in lowering the environmental impact of a piping system. Relevant certificates and approvals worldwide accredit our system's quality, safety, and reliability, including LR (Lloyd's Register) and DNV. Compared to competitive materials, plastic solutions continue to cause less CO₂ emissions and offer a lower ecological footprint, forming the basis for sustainable performance.

Benefits

Instantly protected



Compatible

Designed for fast and straightforward newbuild and retrofit installations without any specialized skills.

Protected

Engineered for highly demanding environments and resistant to fire for up to 30 minutes.



Safe

Made with a lightweight, water-based, non-toxic, and environmentally safe material.

Approved

Compliant with IMO Res. A753 Fire Endurance Level 3. DNV, LR, RINA, ABS, and BV approval in process.

Protection. We've got it covered.

Based on intumescent technology, HEAT-FIT is designed to cope with the harshest marine environmental conditions, and fulfills the IMO Resolutions A753 for fire endurance L3 and A653 for surface flammability, smoke and toxicity.

30% less weight

In combination with the ecoFIT piping system (dn 300), HEAT-FIT is the ultra-light alternative to standard metal piping systems, increasing your vessel's efficiency.

0 hazardous material

HEAT-FIT does not include any environmentally hazardous material as listed in the Green Ship Passport.

1000°C

The fire retardant system protects thermoplastic piping systems from fire up to 1000°C and for up to 30 minutes under pressure (3 bar).





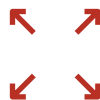
Fast and easy installation

Combined with GF's ecoFIT® piping solution, the lightweight jacketed system is installed within minutes for years of operation for new build and retrofit. For the installation of the easy-to-handle system, no specialized skills nor hot work are necessary.



Non-toxic

HEAT-FIT is constructed of water-based materials, which are environmentally safe, even in case of fire. They do not contain halogens, asbestos, or any other hazardous material and comply with the Green Ship Passport regulations (Hong Kong Convention).



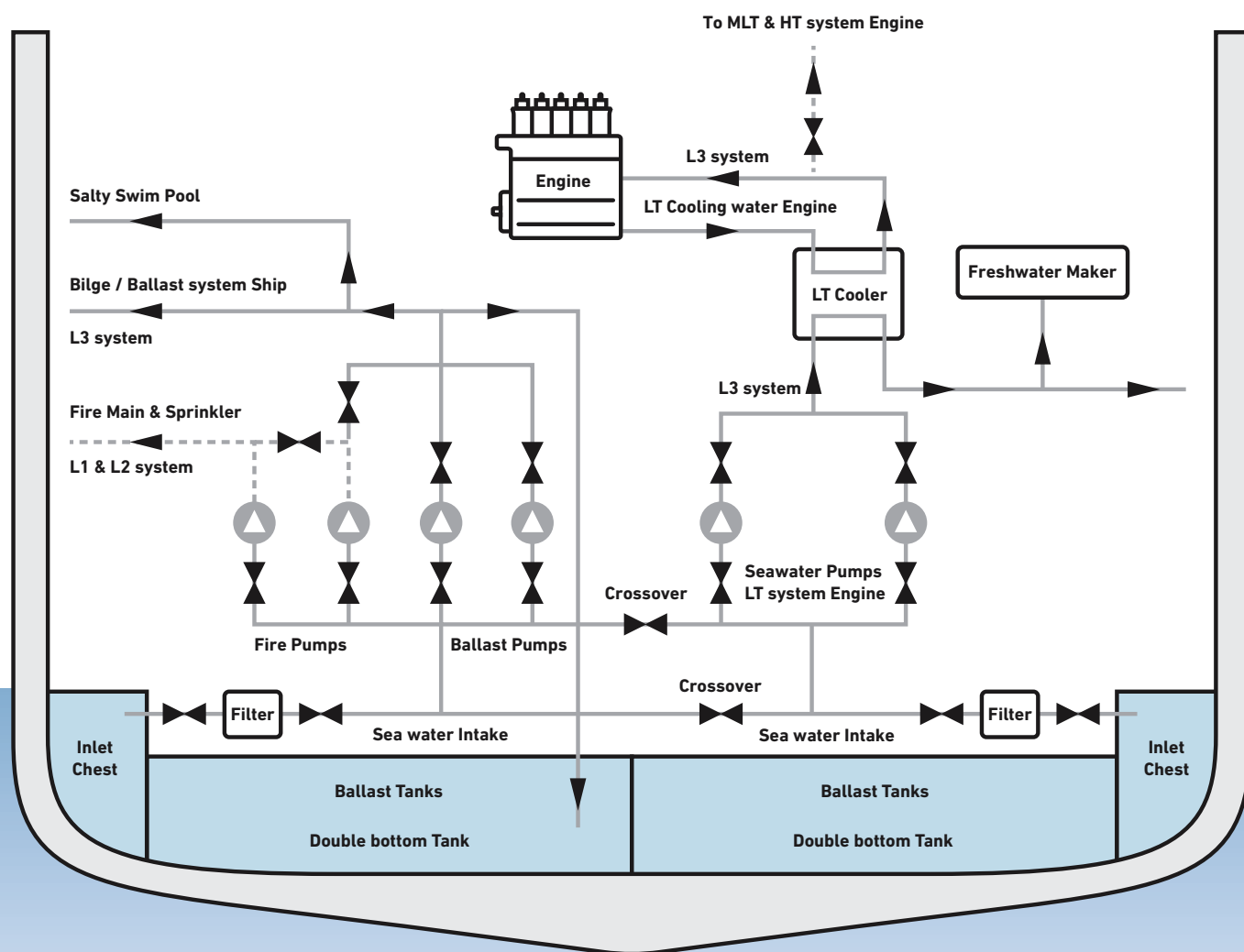
Size Range and Standards

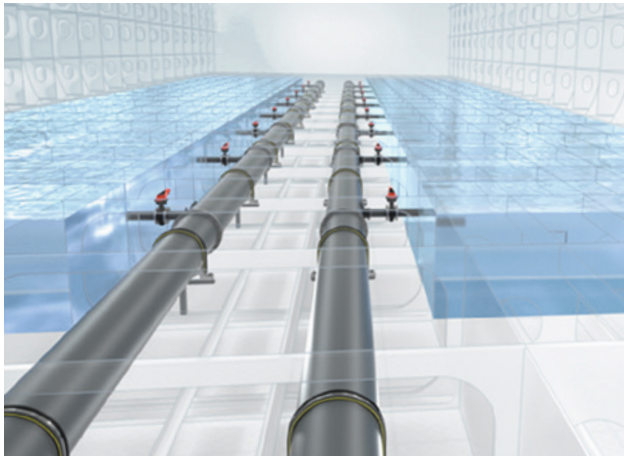
The fire retardant pipe jackets, accessories, and flanges are available for use in combination with the PE piping system ecoFIT in sizes d110, d160, d225, and d315. Prefabrication and specialized solutions on request.

HEAT-FIT complies with IMO Res. A753 fire endurance L3, Surface Flammability, Smoke and Toxicity to IMO A653 / 2010 FTP Code Part 2 and Part 5.

Designed specifically for marine applications

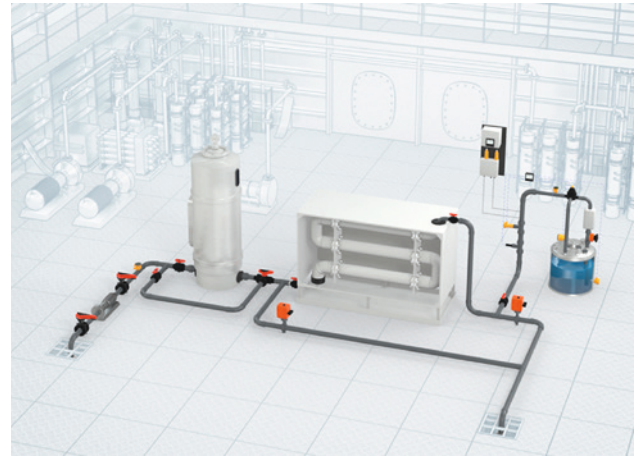
GF Piping Systems has been the global marine industry partner for more than 30 years and supplies non-corrosive and lightweight thermoplastic piping systems. Thanks to the innovative Fire Retardant Pipe Jacket System HEAT-FIT, the range of applications of thermoplastic piping systems has been extended from non-essential to essential applications.





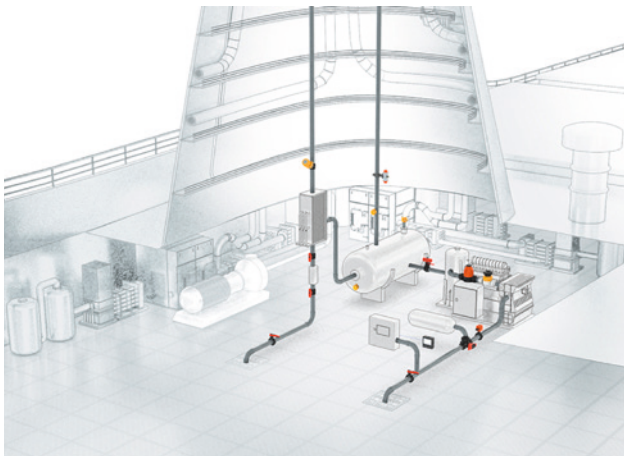
Ballast systems

Ballast water systems provide weight at strategic locations within a vessel. To ensure optimal ballasting operations afloat and during cargo loading and discharging processes in harbors, ballast piping and ballast tank systems are installed onboard.



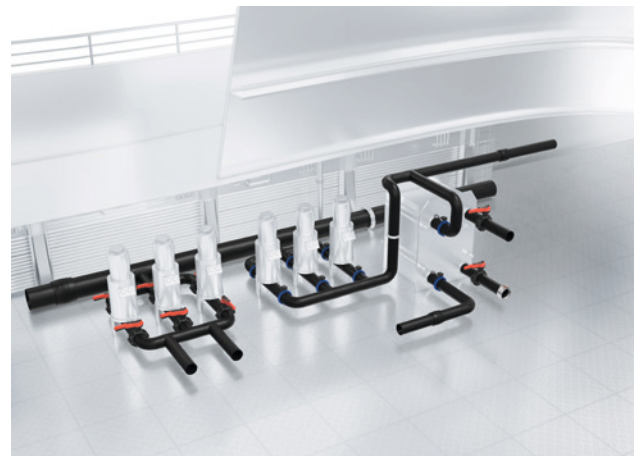
Ballast water treatment

Stabilizing systems with ballast water tanks are essential for safe and efficient shipping operations. However, due to the high level of marine organism ballast, water treatment on ships is required to prevent any risk to people's health or the environment.



Exhaust gas scrubber

Ensure clean emission respecting sulfur cap limitation. The International Maritime Organization has stipulated a reduction in the maximum sulfur limit in marine fuels from 3.5% to 0.5%.



Freshwater and seawater cooling system

The cooling of engines is achieved by circulating a cooling liquid around internal passages within the engine. The cooling liquid is heated up and is then cooled by seawater. Without adequate cooling, certain parts of the engine which are exposed to very high temperatures would soon fail.

The field of application for our new Fire Retardant Pipe Jacket Systems varies from shipbuilding to the retrofitting of pipelines on vessels already in service that require additional fire protection safety measures. HEAT-FIT, in combination with the PE piping system ecoFIT, covers all fluid applications onboard at an operating temperature from -50° to 60° C and guarantees corrosion free operation for the ship's entire service life (at least 25 years).



Lightweight

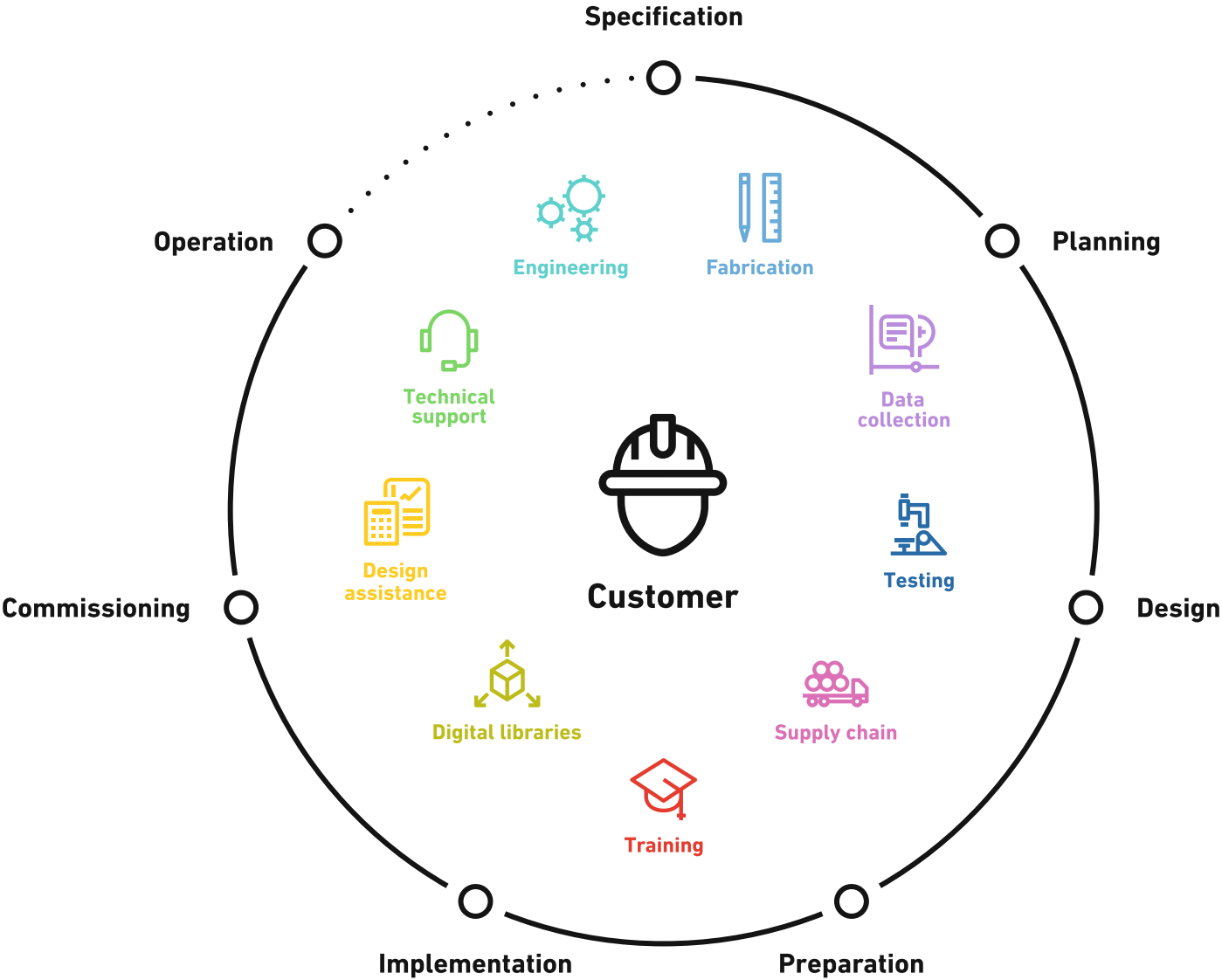


Comprehensive



Approved

One partner from planning to commissioning



Ready when you are

With Specialized Solutions, the global leader GF Piping Systems provides project support every step of the way to achieve construction excellence. Allowing owners and planners to concentrate on their daily business without interruption.

Engineering

Increase the efficiency of your project with tailor-made analysis packages from GF Piping Systems. We can help to minimize project risks by diminishing incorrect calculations or the wrong material selection. You can rely on GF's experience in fast project implementation and chose our durable, safe, and reliable piping systems delivery. Established knowledge, guiding you through.

Prefabrication

Focusing on your individual needs and application, GF Piping System's customizing teams forge tailored solutions, developing custom-made parts to complete systems or special solutions produced in small series, individual consulting, and off-site prefabrication. Through our global network, we offer a wide range of comprehensive solutions. Tailored innovation, inspired by you.

Training

GF Piping Systems instructional courses help you teach your customers and installers essential knowledge for the welding of pipes, piping components, and fire retardant sleeves, as well as an in-depth understanding of cemented, butt, and electrofusion connections. With Specialized Education, we help prevent damage before it occurs, with well-trained and qualified installers.

More information at
gfps.com/specialized-solutions

Next steps

In this brochure, you have received the most important information and technical details. But nothing replaces a personal conversation with an expert from GF Piping Systems. It is all about your needs and how we can support you in your daily business challenges. If you have not already done so, make an appointment today.

Find your local contact on the back cover of this brochure or visit our GF Piping Systems website, where you will find specialized contact persons in your area. You will also find additional information on our products, including technical datasheets, operating instructions, and relevant certificates and approvals.

More information at
gfps.com/heat-fit

Worldwide at home

Our sales companies and representatives ensure local customer support in more than 100 countries.

www.gfps.com

Argentina / Southern South America

Georg Fischer Central Plastics Sudamérica S.R.L.
Buenos Aires / Argentina
Phone +54 11 4512 02 90
gfccentral.ps.ar@georgfischer.com
www.gfps.com/ar

Australia

George Fischer Pty Ltd
Riverwood NSW 2210
Phone +61 (0) 2 9502 8000
australia.ps@georgfischer.com
www.gfps.com/au

Austria

Georg Fischer Rohrleitungssysteme GmbH
3130 Herzogenburg
Phone +43 (0) 2782 856 43-0
austria.ps@georgfischer.com
www.gfps.com/at

Belgium / Luxembourg

Georg Fischer NV/SA
1600 Sint-Pieters-Leeuw / Belgium
Phone +32 (0) 2 556 40 20
Fax +32 (0) 2 524 34 26
be.ps@georgfischer.com
www.gfps.com/be

Brazil

Georg Fischer Sist. de Tub. Ltda.
04571-020 São Paulo/SP
Phone +55 (0) 11 5525 1311
br.ps@georgfischer.com
www.gfps.com/br

Canada

Georg Fischer Piping Systems Ltd
Mississauga, ON L5T 2B2
Phone +1 (905) 670 8005
Fax +1 (905) 670 8513
ca.ps@georgfischer.com
www.gfps.com/ca

China

Georg Fischer Piping Systems Ltd
Shanghai 201319
Phone +86 21 3899 3899
china.ps@georgfischer.com
www.gfps.com/cn

Denmark / Iceland

Georg Fischer A/S
2630 Taastrup / Denmark
Phone +45 (0) 70 22 19 75
info.dk.ps@georgfischer.com
www.gfps.com/dk

Finland

Georg Fischer AB
01510 Vantaa
Phone +358 (0) 9 586 58 25
Fax +358 (0) 9 586 58 29
info.fi.ps@georgfischer.com
www.gfps.com/fi

France

Georg Fischer SAS
95932 Roissy Charles de Gaulle Cedex
Phone +33 (0) 1 41 84 68 84
fr.ps@georgfischer.com
www.gfps.com/fr

Germany

Georg Fischer GmbH
73095 Albershausen
Phone +49 (0) 7161 302 0
info.de.ps@georgfischer.com
www.gfps.com/de

India

Georg Fischer Piping Systems Pvt. Ltd
400 083 Mumbai
Phone +91 22 4007 2000
Fax +91 22 4007 2020
branchoffice@georgfischer.com
www.gfps.com/in

Indonesia

PT Georg Fischer Indonesia
Karawang 41371, Jawa Barat
Phone +62 267 432 044
Fax +62 267 431 857
indonesia.ps@georgfischer.com
www.gfps.com/id

Italy

Georg Fischer S.p.A.
20864 Agrate Brianza (MB)
Phone +39 02 921 86 1
Fax +39 02 921 86 24 7
it.ps@georgfischer.com
www.gfps.com/it

Japan

Georg Fischer Ltd
530-0003 Osaka
Phone +81 (0) 6 6341 2451
jp.ps@georgfischer.com
www.gfps.com/jp

Korea

Georg Fischer Korea Co. Ltd
Unit 2501, U-Tower
120 Heungdeok Jungang-ro
(Yeongdeok-dong)
Giheung-gu, Yongin-si, Gyeonggi-do
Phone +82 31 8017 1450
Fax +82 31 217 1454
kor.ps@georgfischer.com
www.gfps.com/kr

Malaysia

Georg Fischer (M) Sdn. Bhd.
41200 Klang, Selangor Darul Ehsan
Phone +60 (0) 3 3122 5585
Fax +60 (0) 3 3122 5575
my.ps@georgfischer.com
www.gfps.com/my

Mexico / Northern Latin America

Georg Fischer S.A. de C.V.
CP 66603 Apodaca, Nuevo León / Mexico
Phone +52 (81) 1340 8586
Fax +52 (81) 1522 8906
mx.ps@georgfischer.com
www.gfps.com/mx

Middle East

Georg Fischer Piping Systems (Switzerland) Ltd
Dubai / United Arab Emirates
Phone +971 4 289 49 60
gcc.ps@georgfischer.com
www.gfps.com/int

Netherlands

Georg Fischer N.V.
8161 PA Epe
Phone +31 (0) 578 678 222
nl.ps@georgfischer.com
www.gfps.com/nl

New Zealand

Georg Fischer Ltd
5018 Upper Hutt
Phone +04 527 9813
Fax +04 527 9834
nz.ps@georgfischer.com
www.gfps.com/nz

Norway

Georg Fischer AS
1351 Rud
Phone +47 67 18 29 00
no.ps@georgfischer.com
www.gfps.com/no

Philippines

George Fischer Pte. Ltd.
Philippines Representative Office
1500 San Juan City
Phone +632 571 2365
Fax +632 571 2368
sgp.ps@georgfischer.com
www.gfps.com/sg

Poland

Georg Fischer Sp. z o.o.
05-090 Sekocin Nowy
Phone +48 (0) 22 31 31 0 50
poland.ps@georgfischer.com
www.gfps.com/pl

Romania

Georg Fischer Piping Systems (Switzerland) Ltd
020257 Bucharest - Sector 2
Phone +40 (0) 21 230 53 80
ro.ps@georgfischer.com
www.gfps.com/int

Russia

Georg Fischer Piping Systems (Switzerland) Ltd
Moscow 125040
Phone +7 495 748 11 44
ru.ps@georgfischer.com
www.gfps.com/ru

Singapore

George Fischer Pte Ltd
528 872 Singapore
Phone +65 6747 0611
Fax +65 6747 0577
sgp.ps@georgfischer.com
www.gfps.com/sg

Spain / Portugal

Georg Fischer S.A.
28046 Madrid / Spain
Phone +34 (0) 91 781 98 90
es.ps@georgfischer.com
www.gfps.com/es

Sweden

Georg Fischer AB
117 43 Stockholm
Phone +46 (0) 8 506 775 00
info.se.ps@georgfischer.com
www.gfps.com/se

Switzerland

Georg Fischer Rohrleitungssysteme (Schweiz) AG
8201 Schaffhausen
Phone +41 (0) 52 631 3026
ch.ps@georgfischer.com
www.gfps.com/ch

Taiwan

Georg Fischer Co. Ltd
San Chung Dist., New Taipei City
Phone +886 2 8512 2822
Fax +886 2 8512 2823
www.gfps.com/tw

United Kingdom / Ireland

George Fischer Sales Limited
Coventry, CV2 2ST / United Kingdom
Phone +44 (0) 2476 535 535
uk.ps@georgfischer.com
www.gfps.com/uk

USA / Caribbean

Georg Fischer LLC
92618 Irvine, CA / USA
Phone +1 714 731 8800
Fax +1 714 731 6201
us.ps@georgfischer.com
www.gfps.com/us

Vietnam

George Fischer Pte Ltd
Representative Office
Ho Chi Minh City
Phone +84 28 3948 4000
Fax +84 28 3948 4010
sgp.ps@georgfischer.com
www.gfps.com/vn

International

Georg Fischer Piping Systems (Switzerland) Ltd
8201 Schaffhausen / Switzerland
Phone +41 (0) 52 631 3003
Fax +41 (0) 52 631 2893
info.export@georgfischer.com
www.gfps.com/int

The information and technical data (altogether "Data") herein are not binding, unless explicitly confirmed in writing.
The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Georg Fischer Piping Systems apply.