



**MULTI/JOINT®
3000 Plus**

The connection for all
pipe diameters
Restraint – Non restraint
DN50 – DN300

Georg Fischer Waga N.V.



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GEORG FISCHER
PIPING SYSTEMS

MULTI/JOINT® 3000 Plus

» Wide range restraint fittings up to DN300 »

In your daily work you may encounter old pipes of different materials in the ground. You will need to connect these with new pipe materials and preferably have a restraint joint. Well known jointing methods, such as collars, flanging, welding and the use of thrust blocks can be very time consuming. Would you prefer to work fast and reduce costs? The reliable MULTI/JOINT® 3000 Plus system is your answer! Wide range fittings allow you to quickly make a restraint connection between all pipe materials, without special tools!

Proven quality

The MULTI/JOINT® 3000 Plus system comprises wide range fittings, flange adaptors, reduction pieces, bends, duck feet bends, end caps and T-pieces of ductile cast iron in the ranges DN50 - DN300. Thanks to the unique wide range sealing system all fittings can be made restraint as long as the nominal diameters are the same. All you need to know is the outer diameter of the pipe, the medium and the working pressure. The MULTI/JOINT® 3000 Plus system has a range up to 43 mm and connects pipes from 46 - 356 mm (stepless to 310 mm). The high quality restraint fittings are suitable for applications in water pipes up to 16 bar and gas pipes up to 8 bar. The MULTI/JOINT® system has earned its reputation for quality on the international market over the past 20 years.

Save time and stock

The MULTI/JOINT® 3000 Plus fittings can basically be mounted under all conditions and are easy to install. There is no need for special tools; you can go straight to work. This saves a lot of time during installation. Thanks to the "one size fits all" principle you can also save on your stock costs.



→ Fields of applications

- Water transport
- Water distribution
- Gas distribution
- Waste water
- Maintenance and repair
- Industrial applications

» Maintenance free connections »



→ Your benefits

- Peace of mind
- The quick, simple and safe repair solution
- Reduction of your stock costs thanks to the “one size fits all” principle
- Durable and corrosion-proof
- Suitable for all pipe materials and re-usable
- Applicable for under- and above-ground use

Long life expectancy

The ductile cast iron MULTI/JOINT® 3000 Plus products are supplied with a corrosion proof Resicoat® epoxy powder coating. This combination extends the life expectancy compared to similar products in steel. The fittings are maintenance-free and have a designed life expectancy of 50 years. This is a clear advantage; after all, you want to be able to guarantee a constant supply of water and gas to the end user and prevent maintenance and repair.



» One complete system »

Model			Type
	Coupling	restraint non restraint	3007 3000
	Reduced coupling	restraint non restraint	3107 3100
	Flange adaptor	restraint non restraint	3057 3050
	Reduced flange adaptor	restraint non restraint	3157 3150
	PE adaptor	restraint	3067
	Spigot- end	restraint non restraint	3087 3080
	Reduced spigot end	restraint non restraint	3187 3180
	End cap blind	restraint non restraint	3207 blind 3200 blind
	End cap 1/2 - 2" threaded	restraint non restraint	3207 1/2 - 2" threaded 3200 1/2 - 2" threaded
	Duckfoot	restraint non restraint	3457 3450
	Reduced duckfoot	restraint non restraint	3557 3550
	Bend	restraint non restraint	3407 3400
	T piece	restraint non restraint	3757 3750

» Unique sealing - reliable connection »



Unique sealing system

When the quality standard is high, you need a reliable connection. The MULTI/JOINT® 3000 Plus system meets the demands and is suitable for applications in water and gas. The uniqueness of the system lies in the sealing which consists of a flexible ring (Uni/Fleks® ring or Uni/Fiks® ring) which consists of plastic segments and a rubber sealing ring (EPDM or NBR). The Uni/Fiks® version is supplied with metal grippers which make the MULTI/JOINT® 3000 Plus restraint on all types of pipe materials.

The **Uni/Fleks® ring** is a combination of a plastic ring, consisting of plastic segments, with a thin rubber sealing (Varioseal®). This rubber sealing (available both in EPDM and NBR) is a reliable solution for both water and gas applications. The Uni/Fleks® ring is non restraint.

When metal grippers (Uni/Fiksers®) are placed in the Uni/Fleks® ring, the sealing system is restraint. The **Uni/Fiks® ring** with the Uni/Fiksers® makes a restraint connection up to an impressive 16 bar for water and 8 bar for gas, both on rigid pipes and plastic pipes.

→ MULTI/JOINT® 3000 Plus because:

- the MULTI/JOINT® 3000 Plus fittings have easy accessible misaligned bolts. Installers can easily assess the correctness of their own installation in the trench
- the fittings have an angularity of $\pm 8^\circ$ per socket end; for a coupling this means a total of maximum 16° angularity
- the fittings are supplied with separate flange drillings for PN10 and PN16
- the technical life expectancy of all MULTI/JOINT® 3000 Plus products is 50 years
- the MULTI/JOINT® is a proven quality connection for more than 20 years. The restraint version has been on the market for over 10 years
- Internationally proven track record



» Easy installation »

The plastic **segments** in the **rings** DN150 – DN300 consist of two parts; the wedge and the topple. The wedge is made of POM and is in contact with the pipe material. The topple, made of polyamide, ensures the integrity of the ring. This combination results in a progressive sealing and gripping mechanism. The plastic segments in the ring sizes DN50 – DN125 consist of one part, made of POM. Furthermore the design of the ring enables large range coverage in outside diameters.

The **Uni/Fiksers**[®] ensure optimal restraint both on rigid pipe materials and on plastic pipes, without compromise.

Easy installation and dismantling

The relatively long length of the body of the MULTI/JOINT[®] 3000 Plus fittings creates a large installation length. This large installation length makes the installation easy, as one can use this length as desired. Especially when mounting valves this simplifies the job as there is no need to dismantle the joints. Moreover, the fittings are supplied with a clear installation manual. Since the fittings can easily be dismantled, the system is also suitable for temporary installation.



» Technical specifications »

Specifications MULTI/JOINT® 3000 Plus

Body	Ductile cast iron GGG45 in accordance with EN-GJS-450-10.
Clampring	Ductile cast iron GGG45 in accordance with EN-GJS-450-10.
Coating	Resicoat® epoxy powder coating, type RT 9000 R4, meets the requirements of ACS, Belgaqua, KTW, NSF Standard 61, WRAS, KIWA for use in potable water lines. Colour red [RAL 3003]. Minimum layer thickness 250 micron, in accordance with the GSK-register.



Varioseal® rubber gasket	Potable water: EPDM in accordance with EN 681-1. Water and gas: NBR in accordance with EN 682.
Uni/Fiks® and Uni/Fleks® ring	POM (polyoxymethylene) and/or glass fibre filled Polyamide.

Uni/Fiksers®	Stainless steel A4 [AISI 316].
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Working-temperature	-5°C to +50°C.
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Bolts and nuts	Stainless steel A2 (304). Bolts are teflon coated, nuts are galvanised and passivated to prevent galling. Optional: stainless steel A4 (316).
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Washer	Stainless steel A2 [AISI 304].
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Flanges	Drilling pattern PN16 / PN10 in accordance with EN 1092-2 or patterns in accordance with AWWA and JIS.
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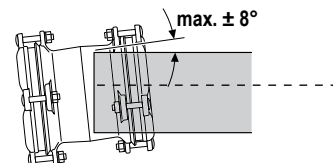
Working pressure (PFA)*	Non restraint: up to PFA 25 bar water and up to 8 bar gas. Restraint: up to PFA 16 bar water and up to 8 bar gas.
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* For details see user manual or contact your supplier.

Certificates	ACS (France), Belgaqua (Belgium), WRc (UK), ÖVGW (Austria), SVGW (Switzerland), DVGW (Germany) and others.
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DN (mm)	range (mm)
DN50	46 - 71
DN65	63 - 90
DN80	84 - 105
DN100	104 - 132
DN125	132 - 155
DN150	154 - 192
DN200	192 - 232
DN225	230 - 268
DN250	267 - 310
DN300	315 - 356

Nominal angularity*



* based on the middle of the coupling range

Gasket



Insert stiffener

In case of connecting PE or PVC pipes, always install an insert stiffener.



Molykote copper paste

In case of reusing MULTI/JOINT® 3000 Plus fittings, we recommend greasing the bolts with Molykote copper paste to ensure smooth re-tightening.



Georg Fischer Waga N.V. → worldwide at home



Our solutions

MULTI/JOINT® 3000 Plus wide-range couplings restraint - non restraint DN50 - DN300 [2" - 12"]				
MULTI/JOINT® XL wide-range couplings non restraint DN300 - DN600 [12" - 24"]				
ST-System dedicated couplings and flange adaptors with or without reduction DN40 - DN2800 [2" - 112"]				
FGR stainless steel couplings restraint - non restraint DN25 - DN2000 [1" - 80"]				
Plast/Join® mechanical connection for plastic pipes restraint - non restraint d63 - d315				
Multi/Clamp stainless steel repair clamps, tapping tees and saddles DN25 - DN1000 [1" - 40"]				
Multi/Saddle Plus wide-range tapping saddle [1" - 2"] with or without shut-off mechanism pipes: DN60 - DN300 [2 1/2" - 12"]				
Others W400/W410 drilling device WAL/V leak clamp DN80 - DN1200 [3" - 48"] MULTI/JOINT® 3000 Plus PE adaptor				

Our expertise

Georg Fischer Waga N.V. is the jointing technology specialist, offering a complete range of products that have been used in the water & gas market for many years. No matter how complicated your connection problem is, we can offer you a solution.

- Innovator and market leader in connection technology
- Extensive application know-how and know-why
- Decades of experience
- Long-term system solutions
- "One stop" shopping
- Local support worldwide

Adding Quality to People's Lives

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

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