



MULTI/JOINT® 3000 Plus

System/Products

→ Raising the bar for
wide range couplings
restraint - non restraint
DN200 - DN300

Georg Fischer Waga N.V.

MULTI/JOINT® 3000 Plus

» Raising the bar for wide range couplings »

The MULTI/JOINT® 3000 Plus couplings are wide range, restraint couplings, available in the sizes DN200 to DN300. As the successor of the well-known MULTI/JOINT® 3000 couplings, the MULTI/JOINT® 3000 Plus offers higher restraint pressures, a bigger range for the DN225, and last but not least, 1 single Uni/Fikser®, for maximum restraint on all pipe materials.

Uni/Fikser®

The new MULTI/JOINT® 3000 Plus couplings have a new gripping element, called the Uni/Fikser®. This new stainless steel gripping element actually combines the Multi/Fikser® and the Poly/Fikser® function of the MULTI/JOINT® 3000 system and ensures sufficient restraint on both metal and plastic pipes. Thanks to the Uni/Fikser®, stocking of 2 different coupling versions is no longer necessary. Also coupling selection is very much simplified. One version does the job for all pipe materials! Still, the Uni/Fiksers® can be removed on the spot, converting the restraint coupling into a non-restraint coupling.

Higher restraint pressures

Non-restraint wide range couplings usually can handle operating pressures of 16 bar in water applications. The big challenge however is to also reach this 16 bar with restraint wide range couplings. Not only for the smaller dimensions up to DN150, but also for sizes DN200 and bigger. With the MULTI/JOINT® 3000 Plus couplings, we have generally managed to increase the maximum restraint operating pressure to 16 bar (gas 8 bar) for DN200 to DN250 and 10 bar (gas 5 bar) for DN300.

Improved range for the DN225

Another improvement of the new MULTI/JOINT® 3000 Plus system, is the new range for the size DN225, which has been extended to 230 mm – 268 mm. With this new range, we now offer a solution for connecting pipes with an outside diameter between 257 mm and 267 mm. MULTI/JOINT® now offers a stepless range from 46mm all the way up to 310mm.



→ Fields of application

- Water transport lines
- Water & Gas distribution lines
- Service lines
- Maintenance & Repair

Your benefits



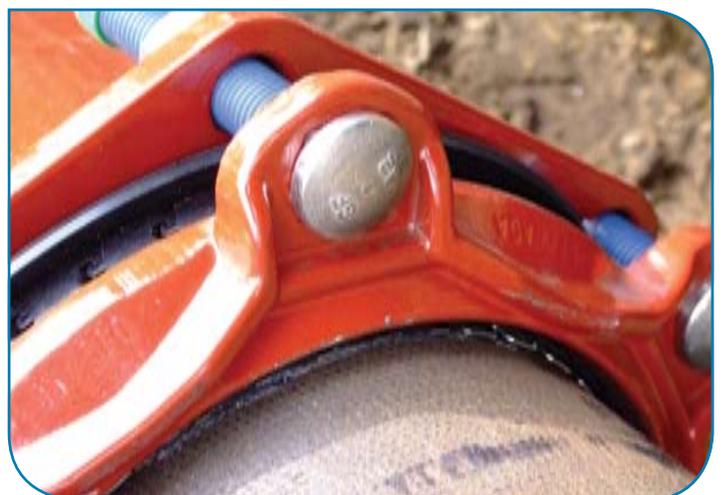
→ Your benefits

Cost reduction:

- stock reduction because one size fits and grips all pipe outside diameters and all pipe materials
- simplified and quicker coupling selection and installation

Increased, long term reliability:

- higher restraint pressures up to 16 bar, due to progressive gripping system
- life expectancy of 50 years



● Perfection in every detail



Sealing principle



1. Uni/Fleks® ring

The sealing system of the MULTI/JOINT® 3000 Plus is an innovative, patented system, consisting of a special segmented plastic ring combined with a thin rubber gasket, called Varioseal®. This combination is called the Uni/Fleks® ring. The rubber gasket offers a reliable sealing in both water and gas, with an expected leak and trouble free functioning of the coupling for 50 years, for every pipe outside diameter within the coupling range.

2. Uni/Fiks® ring

When inserting metal grippers (Uni/Fiksers®) inside the Uni/Fleks® ring, the MULTI/JOINT® sealing system is upgraded to an end-load resistant sealing and gripping ring (Uni/Fiks® ring). The Uni/Fikser® offers end restraint up to 16 bar (8 bar gas) on both rigid and plastic pipes. This combination of large-

tolerance and end-load resistance makes the MULTI/JOINT® 3000 Plus system unique in the world.

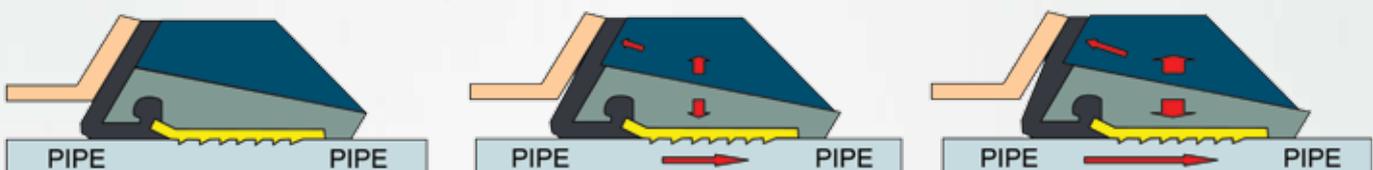
3. Segmented ring

The segments of the ring consist of 2 parts: the bottom part (wedge) and the top part (topple). The wedge is the part which is in contact with the pipe wall and is made of POM. The topple ensures the integrity of the ring and is made of PP. The combination of topple and wedge offers an extremely wide range, plus a progressive sealing and gripping mechanism.

4. Uni/Fikser®

To get the best possible end-load resistance on all different pipe materials without any compromise, the Uni/Fikser® ensures best possible restraint on both rigid and plastic pipe materials. Part A: optimized for plastic pipes; Part B: optimized for rigid pipes.

Progressive sealing and gripping mechanism



Increased axial forces on the pipe = increased grip + sealing

Technical specifications

Specifications MULTI/JOINT® 3000 Plus

Body	Ductile cast iron GGG45, according to EN-GJS-450-10
Clamp ring	Ductile cast iron GGG45, according to EN-GJS-450-10
Coating	RESICOAT® epoxy coating, type RT 9000 R4 ¹⁾ . Colour red (RAL 3003) Minimum layer thickness 250 micron, according to GSK-register.
Varioseal® rubber gasket	NBR according to EN 682 for water and gas. EPDM according to EN681-1 for water.
Working temperature	-5°C up to +50°C
Uni/Fiks® ring	Wedge: POM (Polyoxymethylene) Topple: Glass fibre filled PP (Polypropylene)
Uni/Fiksers®	Stainless steel A4 [AISI 316] only for restraint versions
Bolts ²⁾	Stainless steel A2 [AISI 304] teflon coated to prevent galling
Nuts ²⁾	Stainless steel A2 [AISI 304] galvanised and passivated to prevent galling
Washers	Stainless steel A2 [AISI 304]
Flanges	Drilling pattern PN10 or PN16 (EN 1092-2)
Working pressures ³⁾	non-restraint: PFA 25 bar water and 8 bar gas restraint: PFA 16 bar water and 8 bar gas
Patent number	Patent pending
Certificates	ACS (France), Belgaqua (Belgium), WRc (United Kingdom), ÖVGW (Austria), SVGW (Switzerland) and others

¹⁾ meets requirements of e.g. ACS, Belgaqua, KTW, NSF Standard 61, WRAS, KIWA and many more for use in drinking water pipe lines

²⁾ optional: bolts and nuts in stainless steel A4 [AISI 316]

³⁾ for detailed information about the PFA (working pressure) please check the user manual or contact your supplier

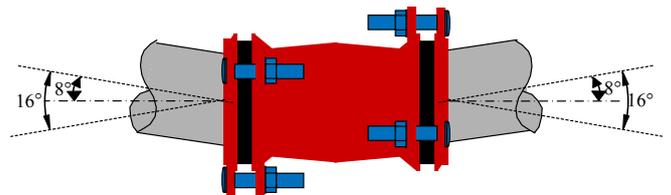
Nominal size DN range restraint / non restraint

DN200	192 - 232 mm
DN225	230 - 268 mm
DN250	267 - 310 mm
DN300	315 - 356 mm

Nominal angularity* restraint non-restraint

coupling	4°	8°
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* based on the middle of the coupling range



Insert stiffeners

In case of connecting PE pipes or PVC pipes, always install an insert stiffener (approved by GF Piping Systems) to ensure the best possible connection.



Molykote copper paste

When re-using the MULTI/JOINT® 3000 Plus fittings, the Teflon coating on the bolts might wear off. Therefore, we recommend greasing the bolts with our Molykote copper paste to ensure a smooth re-tightening.



Select your product

» Our solutions »

Model	Type	Dimensions
 Coupling	restraint	3007 Plus DN200 - DN300
	non-restraint	3000 Plus DN200 - DN300
 Reduced coupling	restraint	3107 Plus DN200/150 - DN300/250
	non-restraint	3100 Plus DN200/150 - DN300/250
 Flange adapter	restraint	3057 Plus DN200/200 Fl - DN300/300 Fl
	non-restraint	3050 Plus DN200/200 Fl - DN300/300 Fl
 Reduced flange adapter	restraint	3157 Plus DN225/200 Fl - DN225/250 Fl
	non-restraint	3150 Plus DN225/200 Fl - DN225/250 Fl
 Spigot end	restraint	3087 Plus DN200/200 - DN200/200
	non-restraint	3080 Plus DN200/200 - DN200/200
 End-cap	restraint	3207 Plus blind DN200 - DN300
	non-restraint	3200 Plus blind DN200 - DN300
 End-cap threaded	restraint	3207 Plus threaded DN200 (¾"-2") - DN300 (¾"-2")
	non-restraint	3200 Plus threaded DN200 (¾"-2") - DN300 (¾"-2")



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Our solutions

MULTI/JOINT® 3000 wide-range couplings restraint - non restraint DN50 - DN150 (2" - 6")				
MULTI/JOINT® 3000 Plus wide-range couplings restraint - non restraint DN200 - DN300 (8" - 12")				
MULTI/JOINT® XL wide-range couplings non restraint DN300 - DN600 (12" - 24")				
ST-System dedicated couplings and flange adaptors with or without reduction DN50 - DN2800 (2" - 112")				
FGP stainless steel couplings restraint - non restraint DN25 - DN2000 (1" - 80")				
Plast/Join® mechanical connection for plastic pipes restraint - non restraint d63 - d315				
Draw-Lock® solution to connect metal to PE DN50 - DN300 (2" - 12") d63 - d315				
Multi/Clamp stainless steel repair clamps, tapping tees and saddles DN25 - DN1000 (1" - 40")				
Multi/Saddle Plus wide-range tapping saddle with or without shut-off mechanism DN60 - DN300 (2 1/2" - 12")				
Others W400/W410 drilling device WAL/V leak clamp DN80 - DN1200 (3" - 48")				

Our expertise

Georg Fischer Waga N.V. is the joining 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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Local distributor

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