

The connection for all pipe diameters Restraint 2" - 24"

# MULTI/JOINT® 3000 Plus



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In your daily work you may encounter pipe systems of various material 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! Our wide range fittings allow you to quickly make a restraint connection between all pipe materials, without special tools!

### Wide range restraint fittings up to 24"

#### Unique sealing system

The MULTI/JOINT<sup>®</sup> 3000 Plus system comprises wide range fittings, flange adaptors, reduction pieces, bends, duck feet bends and end caps of ductile iron in the ranges 2" - 24". 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 outside diameter of the pipe, the medium and the working pressure.

#### **Proven quality**

The MULTI/JOINT<sup>®</sup> 3000 Plus system has a range up to 1.693" and connects pipes from 1.811" - 25.078" (stepless up to 12.204"). The high quality restraint fittings are suitable for applications in water up to 232 psi and gas up to 116 psi. The MULTI/JOINT<sup>®</sup> system has earned its reputation for quality on the international market over the past 25 years.

#### Save time and stock

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

#### **Fields of application**

- Maintenance and repair
- Water distribution
- Water transport
- Wastewater
- Gas distribution
- Industrial applications



### MULTI/JOINT® 3000 Plus because:

- the MULTI/JOINT<sup>®</sup> 3000 Plus fittings have an angularity of ±8° per socket end; for a coupling this means a total of maximum 16° angularity
- the MULTI/JOINT<sup>®</sup> 3000 Plus fittings have easily accessible misaligned bolts. Installers can easily assess the correctness of their own installation in the trench
- the MULTI/JOINT<sup>®</sup> 3000 Plus fittings are supplied with separate flange drillings for AWWA C-110, ANSI B16.1 125 LB, PN10 or PN16
- the technical life expectancy of all the MULTI/JOINT<sup>®</sup> 3000 Plus products is 50 years
- the MULTI/JOINT<sup>®</sup> 3000 Plus is a proven quality connection for more than 25 years.
- the MULTI/JOINT<sup>®</sup> 3000 Plus has an internationally proven track record
- To work clean, safe and durable all the MULTI/JOINT<sup>®</sup>
  3000 Plus fittings are supplied with hygiene protection to prevent them from being contaminated or damaged

### **Your benefits**

- Save installation time and stock
- One piece, stab-fit installation
- Accommodates 16 degrees of angularity (8 degrees on each end)
- No need for thrust blocks
- Suitable for all pipe materials, such as
  (D)CI, AC, PE, PVC and (stainless) steel
- Reusable
- Proven track record of 25 years
- Durable and corrosion proof
- Applicable for under and aboveground use
- Maintenance-free connections

### Unique sealing system, a reliable connection

When the quality standard is high, you need a reliable connection. The MULTI/JOINT<sup>®</sup> 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 makes the MULTI/JOINT<sup>®</sup> 3000 Plus restraint on all types of pipe materials.





#### Clamp ring:

ductile iron GGG45 EN-GJS-450-10 with Resicoat® epoxy powder coating type RT 9000 R4

#### Uni/Fikser:

stainless steel AISI 316

#### Hygiene protection:

Ensures the fitting stays clean from production to point of use

> (cap in the picture: 2" - 16")

# **Easy installation**

#### Uni/Fleks ring

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.

#### Uni/Fiks ring

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 232 psi for water and 116 psi for gas, both on rigid and plastic pipes.

#### Progressive sealing and gripping mechanism

The plastic segments in the ring sizes 2" – 5" consist of one part, made of POM. Furthermore the design of the ring enables large range coverage in outside diameters. The plastic segments in the ring sizes 6" – 24" 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. In the ring sizes 18" – 24" a clip has been added to fixate the ring in the body of the fitting ensuring easy installation with no interference.

#### Uni/Fikser

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

#### Easy installation and reuse

The relatively long body of the MULTI/JOINT<sup>®</sup> 3000 Plus fittings offers a large insertion depth. This large installation length makes the installation easy, as you can use this length as desired. Moreover, the fittings are supplied with a clear installation manual. Since the fittings can easily be deinstalled, the system is also suitable for temporary installation after which multiple reuse is possible.

#### Angularity

The MULTI/JOINT<sup>®</sup> 3000 Plus system has a nominal angularity of 8° per socket end. For a coupling this means a nominal angularity of maximum 16°. The angularity ensures flexibility during and after installation. The flexibility allows the pipe to move in the fitting after installation without compromising the functioning. This to compensate for differential ground settlement after the trench is backfilled.



#### Washer:

stainless steel AISI 304 or stainless steel AISI 316

# One complete system

Model			Туре
2	Coupling	restraint	3007
	Reduced coupling	restraint	3107
*	Flange adaptor	restraint	3057
2	End cap blind	restraint	3207 blind
2	End cap 2" threaded	restraint	3207 2" threaded
<i>s</i> ?	Bend	restraint	3407







#### Long life expectancy

The ductile iron MULTI/JOINT<sup>®</sup> 3000 Plus products are supplied with a corrosion proof Resicoat<sup>®</sup> epoxy powder coating. This combination extends the life expectancy significantly.

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 renewed maintenance and repair.



DN	Size	Range	Range	Working
(mm)	(inch)	(mm)	(inch)	pressure**
DN50	2"	46 - 71	1.811 - 2.795	232 psi
DN65	2 1⁄2"	63 - 90	2.480 - 3.543	232 psi
DN80	3"	84 - 105	3.307 - 4.133	232 psi
DN100	4"	104 - 132	4.094 - 5.196	232 psi
DN125	5"	132 - 155	5.196 - 6.102	232 psi
DN150	6"	154 - 192	6.062 - 7.559	232 psi
DN200	8"	192 - 232	7.559 - 9.133	232 psi
DN225	9"	230 - 268	9.050 - 10.551	232 psi
DN250	10"	267 - 310	10.511 - 12.204	232 psi
DN300	12"	315 - 356	12.401 - 14.015	232 psi
DN350	14"	352 - 393	13.858 - 15.472	150 psi
DN400	16"	392 - 433	15.433 - 17.047	150 psi
DN450	18"	450 - 482	17.716 - 18.976	150 psi
DN500	20"	500 - 532	19.685 - 20.944	150 psi
DN550	22"	548 - 580	21.574 - 22.834	150 psi
DN600	24"	605 - 637	23.818 - 25.078	150 psi
				** restraint

<sup>+</sup>Durable and reliable connections for a quick, safe and simple repair solution

# **Technical specifications**

#### **Specifications**

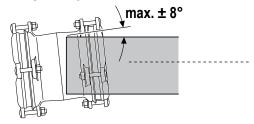
Ductile iron GGG45 in accordance with EN-GJS-450-10.		
Ductile iron GGG45 in accordance with EN-GJS-450-10.		
Resicoat <sup>®</sup> epoxy powder coating, type RT 9000 R4, meets the requirements of		
NSF Standard 61. Colour red (RAL 3003). Minimum layer thickness 250 micron, in		
accordance with the GSK-register.		
Potable water: EPDM, NSF 61 approved.		
Non potable water and gas: NBR.		
POM (polyoxymethylene) and/or glass fibre filled Polyamide.		
Stainless steel AISI 316.		
Stainless steel AISI 304 or stainless steel AISI 316. Bolts are PTFE coated, nuts are		
galvanised and passivated to prevent galling.		
Stainless steel AISI 304 or stainless steel AISI 316.		
Drilling pattern in accordance with AWWA C-110 or patterns PN16/PN10 in accordance		
with EN1092-2.		
-5°C to +50°C / 23°F to 122°F		
Non restraint: up to 362 psi water and up to 116 psi gas.		
Restraint: up to 232 psi water and up to 116 psi gas.		
* For details see user manual or contact your supplier.		
NSF, ACS (France), Belgaqua (Belgium), WRc (United Kingdom), ÖVGW (Austria), SVGW		
Switzerland), DVGW (Germany) and KIWA (The Netherlands).		
EN 14525: ÖVGW, SVGW and KIWA.		
AWWA C219-11, AWWA C111/A21.11-12, AWWA C153/A21.53-11, RMDCS 02511,		
ASTM F1476-07(2013), AWWA C227-11		

#### **Insert stiffener**

In case of connecting PE pipes always install an insert stiffener. In case of connecting PVC pipes install an insert stiffener if the wall thickness is smaller than SDR21.



#### Nominal angularity\*

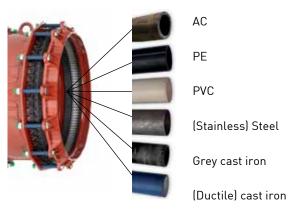


\* based on the middle of the range

#### Sealing system



#### Suitable for all materials



### **Contact information**

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