



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to: 16/30023

PRODUCER	UNI – Coupling B.V Sint-Oedenrode Kerkdijk-Zuid 11 a The Netherlands
DESCRIPTION	Axially restraint pipe couplings for detachable sealing and anchoring plain-ended pipes of Carbon steel, Stainless steel, Cu and CuNiFe with plain-ended pipes of PVC, PE, PP, PB or ABS. PVC, PE, PP, PB and ABS with plain-ended pipes of PVC, PE, PP, PB or ABS
TYPE	UNI-Plastgrip UNI-Combigrp
APPLICATION	For marine, offshore and industrial piping systems, the couplings are to be selected and installed in accordance with the manufacturer's recommendations.

Certificate No. 16/30023

Issue Date 16 December 2016

Expiry Date 15 December 2021

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For marine piping systems, the couplings are acceptable for non-essential piping systems in locations specified in the following Rules;

- Rules and Regulations for the Classification of Ships, Part 5, Chapter 12, Section 2.12.
- Rules and Regulations for the Classification of Special Service Craft Part 15, Chapter 1, Section 5.8.
- Rules and Regulations for the Classification of Inland Waterways Ships, Part 5, Chapter 10, Section 2.11.

For other systems not mentioned in the Rules, not listed below or for Offshore or Industrial systems then these will be considered.

Restrictions:-

The couplings are not acceptable in the following locations:-

1. Class I & II piping.
2. Co2, Starting and control air systems.
3. Inside machinery spaces of category A or accommodation spaces for:-
 - a. Inert gas systems
 - b. Pipe systems for flammable liquids including corresponding vent and sounding pipes.
 - c. Bilge lines
 - d. Ballast water systems
 - e. Sea- and Fresh Cooling water systems.
 - f. Condensate return pipes
4. Steam systems
5. Bilge lines in other machinery spaces or high fire risk spaces
6. Scuppers and discharge (overboard). Deck drains, except for pipes above the freeboard deck.

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7. Pipe lines in cargo holds, tanks and other spaces which are not easily accessible.
8. Fire main, water spray systems.
9. Flammable fluids (Flashpoint > 60°)
10. Flammable fluids (Flash point ≤ 60°)
11. In systems where pressure pulsations are present or likely to occur.
12. Maximum working temperature and/or working pressure could be limited by the typical temperature limits for thermoplastic pipes.

STANDARD

Lloyd's Register's Rules for the Classification of Ships (2015) / Special Service Craft (2015) / Inland Waterways (2015), IACS Unified Requirement P2. Rev.3 (2012) (Type Approval of Mechanical Joints) Lloyd's Register Type Approval System Test Specification Number 2, May 2015, Appendix 4.

RATINGS

UNI-Plastgrip S Ø 39 – 165 mm / PN 10 (Standard massive lock bars)
UNI-Plastgrip L Ø 39 – 165 mm / PN 10 (Light hollow lock bars)

OD Nominal	Pipe OD (mm)	Nominal Pressure (bar)
42,4/40	39-43	10
48,3/50	47,5-52,5	10
60,3/63	58-64	10
73/75/76,1/79,5	72-80	10
88,9/90	88-96	10
104,8/108/110	104-112	10
125/127/129	122-130	10

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139,7/140/141,3/141,6	137-145	10
159/160	157-165	10

UNI-Combigrip S Ø 39 – 165 mm /PN 10 (Standard massive lock bars)

UNI-Combigrip L Ø 39 – 165 mm /PN 10 (Light hollow lock bars)

OD Nominal	Pipe OD (mm)	Nominal Pressure (bar)
42,4/40	39-43	10
48,3/50	47,5-52,5	10
60,3/63	58-64	10
73/75/76,1/79,5	72-80	10
88,9/90	88-96	10
104,8/108/110	104-112	10
108/110/114,3	108-115	10
125/127/129	122-130	10
139,7/140/141,3/141,6	137-145	10
159/160	157-165	10

Temperature range:

EPDM sleeve: -30°C up to +125°C
NBR Sleeve: -20°C up to +80°C

Suitable provision for expansion is to be made where necessary in each range of pipes.

For material combinations for the corresponding media the producer's recommendations and instructions to be sought.

Marking of the products to show:

Producer's name or trade mark, type designation, material combination, size, gasket material, torque and max working pressure or pressure Class.

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"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

When Rules and Standards mentioned in this certificate are changed within the validity of this certificate, than this certificate becomes no longer valid.

The Design Appraisal Document No. 1630023 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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