



# Type Approval Certificate

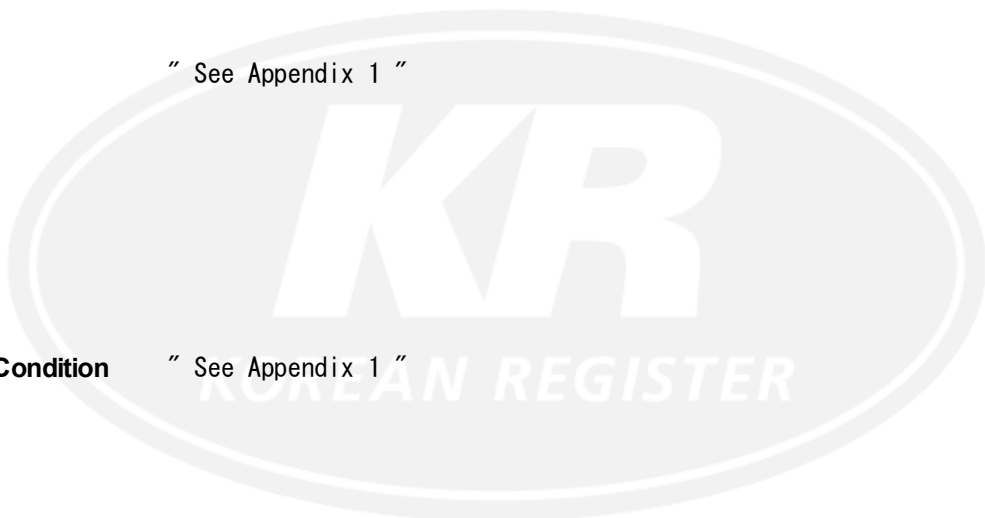
[ Mechanical Joints ]

**Initial Approval** 1 October 2015

**Manufacturer** UNI-Coupling B.V.  
Kerkdijk-Zuid 11a, 5492 HW, Sint-Oedenrode, Netherlands

**Product Description** UNI-GRIP(G)  
- Mechanical Joint(Slip-on joint \_ Grip type)  
- Axially restrained

" See Appendix 1 "



**Approval Condition** " See Appendix 1 "

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 5, Ch. 6, Sec. 1 of the Rules for Classification of Steel Ships and IACS UR P.2.7.4

This Certificate is valid until 30 September 2030

Issued at Busan, Korea on 4 August 2025



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME25033776373) and certificate No.(RTD34402-PE001).



**KOREAN REGISTER**

*General Manager of  
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
  2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
  3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
  4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

## Product Description and/or Approval Condition

Date of Issue : 4 August 2025

### 1. Product Description :

#### 1) Mechanical Joints Specification

##### (1) Design Pressure

Size range(OD) (mm)	PN (bar)
21 ~ 276	16
64 ~ 364	10
318 ~ 412	6
318 ~ 412	2.5

##### (2) Temperature Range

Rubber Material/Size range(OD) (mm)	Temperature range (°C)
NBR	-20 ~ 80
EPDM / 21 ~ 172	-30 ~ 125
EPDM / 180 ~ 406.4	-20 ~ 80

##### (3) Material

Component	Material	
	W2 (DIN) / W2 (AS)	W5 (DIN) / W5 (AS)
Casing	1.4016 / 301	1.4571 / 316Ti
Lock Bars S-Type	1.0760 / -	1.4571 / 316Ti
Lock Bars L-Type	1.4571 / -	- / -
Bolts	1.0760 / -	A4-80 / 316
Anchor Ring	1.4310 / 301	1.4310 / 301
Rubber Sleeve	NBR / EPDM	NBR / EPDM
Pipe Material	Carbon steel, stainless steel, Cu, CuNiFe	

##### (4) Performed type approval tests ; Tightness test, Burst test, Vibration test, Pull out test, Fire resistance test Vacuum test, Repeat assembly test

##### (5) Approved Drawing Numbers :

Screw-DIN-912-W5, Brug Group 1-W5-G-F-R, Brug Group 1-G-F-R  
 Brug Group 2-W5-G-F-R-A-B-C, Brug Group 2-G-F-R-A-B-C, Flamprotection HOUSING  
 Rubber Group 1-2-G, Rubber Group 1-2-N-G, Rubber Group 2-2-G-200-750  
 Rubber Group 2-2-G, Rubber Group 2-2-N-G-200-750, Rubber Group 2-2-N-G  
 Gripring Group 1-G, Gripring Group 2-G, Gripringuitslag-Group 1+2-G  
 Housing Group 1-W5-F-G-R, Housing Group 1-F-G-R, Housing Group 2-W5-F-R-A  
 Housing Group 2-W5-F-R-B, Housing Group 2-W5-F-R-C, Housing Group 2-W5-G  
 Housing Group 2-F-R-A, Housing Group 2-F-R-B, Housing Group 2-F-R-C  
 Housing Group 2-G, Bolt\_Guided\_Group 1-2-3, Bolt\_Guided\_Group 1-2-3-W5  
 Hollow\_Bolt\_Guidet\_Group 1-2-W5, Bolt\_Threaded\_Group 1-2-3  
 Bolt\_Threaded\_Group 1-2-3-W5, Hollow\_Bolt\_Threaded\_Group 1-2-W5, Revet

## Product Description and/or Approval Condition

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2. Intended for ;  
As the fire endurance test is conducted under ' 30 min wet' condition, the mechanical joints are to be mounted in accordance with "Table 5.6.10 Application of Mechanical Joints, Pt.5, Ch.6 Sec.1" of Rules for the Classification of Steel Ships.
3. Approval condition and Limitation ;
- 1) These mechanical joints are not to be used for Class I piping system.
  - 2) These mechanical joints are to be mounted in accordance with the manufacturer's instructions.
  - 3) These mechanical joints, which in the event of damage could cause fire or flooding, are not to be used in piping sections directly connected to the sea openings or tanks containing flammable fluids.
  - 4) Piping in which these mechanical joints are fitted is to be adequately adjusted, aligned and supported. Supports or hangers are not to be used to force alignment of piping at the point of connection.
  - 5) These mechanical joints are not used in those systems where pulsation other than water hammer is expected.
  - 6) These mechanical joints are not to be used in pipelines in cargo holds, tanks, and other spaces which are not easily accessible. Application of these joints inside tanks may be permitted only for the same media that is in the tanks.
  - 7) Individual Product Certification is required where the mechanical joints are intended to be used for Class II piping system.

< End of Certificate >

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