

# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAS00001H7**  
Revision No:  
**5**

## This is to certify:

**That the Chain, shackles, swivels, sockets**

with type designation(s)  
**Green pin standard shackles, Green pin polar shackles**

Issued to  
**Royal Van Beest Group B.V.**  
**Slidrecht, Zuid-Holland, Netherlands**

is found to comply with  
**DNV standard DNV-ST-0378 – Offshore and platform lifting appliances**

## Application :

**Included on the third page of this document.**

Issued at **Høvik** on **2025-05-12**

This Certificate is valid until **2030-05-11**.

DNV local unit: **Netherlands CMC**

for **DNV**

Approval Engineer: **Luisa Brites**

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**Per Esvall**  
**Head of Section**



Digitally Signed By: Jos van Loon  
Principal Surveyor CMC &NB Benelux & France  
Signing Date: 2025-05-28

Reason: Validation of Type Approval Certificate, expiry date of certificate remains as stated.

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

This Type Approval Certificate concerns the following shackles:

Group	Grade	Green Pin Shackle		Body		Safety bolt	Screw collar pin
		Standard	Polar	Dee shackle	Bow shackle		
G-4151	6	X		X			X
G-4153	6	X		X		X	
G-4161	6	X			X		X
G-4163	6	X			X	X	
G-5163 (*)	8		X		X	X	

(\*) Note: Not covered by the scope of the EN 13889: Forged steel shackles for general lifting purposes - Dee shackles and bow shackles - Grade 6 - Safety.

Table 1: Shackle specifications by group

The groups of shackles and their respective parts designation are detailed in the table below.

Bow diameter [mm]	Group				
	G-4151	G-4153	G-4161	G-4163	G-5163 (*)
5	GPGDBB05		GPGHBB05		
7	GPGDBB06		GPGHBB06	GPGHMB06	
9	GPGDBB08		GPGHBB08	GPGHMB08	
10	GPGDBB10		GPGHBB10	GPGHMB10	
11	GPGDBB11		GPGHBB11	GPGHMB11	
13.5	GPGDBB13	GPGDMB13	GPGHBB13	GPGHMB13	POGHMB13
16	GPGDBB16	GPGDMB16	GPGHBB16	GPGHMB16	POGHMB16
19	GPGDBB19	GPGDMB19	GPGHBB19	GPGHMB19	POGHMB19
22	GPGDBB22	GPGDMB22	GPGHBB22	GPGHMB22	POGHMB22
25	GPGDBB25	GPGDMB25	GPGHBB25	GPGHMB25	POGHMB25
28	GPGDBB28	GPGDMB28	GPGHBB28	GPGHMB28	POGHMB28
32	GPGDBB32	GPGDMB32	GPGHBB32	GPGHMB32	POGHMB32
35	GPGDBB35	GPGDMB35	GPGHBB35	GPGHMB35	POGHMB35
38	GPGDBB38	GPGDMB38	GPGHBB38	GPGHMB38	POGHMB38
45	GPGDBB45	GPGDMB45	GPGHBB45	GPGHMB45	POGHMB45
50	GPGDBB50	GPGDMB50	GPGHBB50	GPGHMB50	POGHMB50
57	GPGDBB57	GPGDMB57	GPGHBB57	GPGHMB57	POGHMB57
65	GPGDBB65	GPGDMB65	GPGHBB65	GPGHMB65	POGHMB65
75		GPGDMB75		GPGHMB75	POGHMB75

(\*) See Note to Table 1

Table 2: Shackle groups and designated parts

### Application/Limitation

Minimum design temperature: -20°C  
 Maximum design dynamic factor: 1.3

The Safe Working Load (SWL) and Minimum Breaking Load (MBL), in metric tonnes (t), are detailed in the following table:

Bow diameter [mm]	SWL [t]	MBL [t]	
		G-4151 G-4153 G-4161 G-4163	G-5163 <sup>(1)</sup>
5 <sup>(2), (3), (4)</sup>	0.33	1.98	
7 <sup>(4)</sup>	0.5	3	
9 <sup>(4)</sup>	0.75	4.5	
10 <sup>(4)</sup>	1	6	
11 <sup>(4)</sup>	1.5	9	
13.5	2	12	14
16	3.25	19.5	22.8
19	4.75	28.5	33.3
22	6.5	39	45.5
25	8.5	51	59.5
28	9.5	57	66.5
32	12	72	84
35	13.5	81	94.5
38	17	102	119
45	25	150	175
50 <sup>(2)</sup>	35	210	245
57 <sup>(2)</sup>	42.5	255	297.5
65 <sup>(2)</sup>	55	330	385
75 <sup>(2)</sup>	85	510	595

Notes:  
<sup>(1)</sup> See Note to Table 1.  
<sup>(2)</sup> Not covered by the range of load limits of the EN 13889: Forged steel shackles for general lifting purposes - Dee shackles and bow shackles - Grade 6 - Safety.  
<sup>(3)</sup> Not covered by the range of load limits of the ISO 2415: Forged shackles for general lifting purposes - Dee shackles and bow shackles.  
<sup>(4)</sup> Not covered by the range of load limits of the ASME B30.26: Rigging hardware - Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings.

Table 3: SWL and MBL



Job Id: **262.1-015665-5**  
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## Type Approval documentation

The following drawings are Type Approved:



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## **Certification**

This Type Approval covers design(s) only; it is not valid for the final product but may be used as a basis for obtaining a product certificate.

If a DNV Product Certificate is required, the following shall apply:

- The manufacturing survey shall be conducted by a DNV Surveyor.
- Each shackle shall be tested in accordance with DNV-ST-0378 Table 14-2 in the presence of a DNV Surveyor.

## **Marking of product**

Each shackle shall be marked according to DNV-ST-0378 Sec.14 [14.5].

## **Periodical assessment**

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE