



Germanischer Lloyd

Approval Certificate

This is to certify, that the undernoted products have been approved in accordance with the relevant requirements of the GL Approval System.

Certificate No. **33 958 - 06 HH**

Company **SPW GmbH**
Sail Propeller- u. Wellenbau
Westkai 58
27572 Bremerhaven

Product **Controllable Pitch Propeller**

Type **Feathering Propellers Type Variprop, Size DF-80 - DF-380**

Technical Data / Application	Type	Blades	Diameter [mm]	Engine Power [kW]
				max.
		-	max.	
	DF-80	2,3,4	432	22
	DF-107	2,3,4	508	59
	DF-112	3,4	635	88
	DF-128	3,4	715	103
	DF-140	3,4	762	132
	DF-160	3	864	202
	DF-180	3	914	257
	DF-190	4	864	202
	DF-210	4	914	257
	DF-230	3	1016	308
	DF-260	4	1016	308
	DF-280	3	1270	404
	DF-310	4	1270	404
	DF-380	4	1575	550

Approval Standard **GL - Rules Part 1, Chapter 2, Section 6.**

Documents **Drawings and technical data sheets, approved with Ref. No. 06-065897 and 09-142027.**

Remarks **Valid for auxiliary drive of Sailships.**

Valid until **2014-11-04**

Page **1 of 1**

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