

DNV·GL

Certificate No:
RCDB000006F

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

This is to certify:

That the Portlights

with type designation(s)
PLSR, PLSO & PLS

Manufacturer

Man Ship Machinery & Hardware Co. Ltd.
KAOHSIUNG, Taiwan

Has been assessed with respect to Directive 2013/53/EU of the European Parliament and of the Council according to conformity assessment procedure "Module B" described in Annex II of the Decision No 768/2008/EC of the European Parliament and of the Council, and found to comply with the applicable requirements.

Further details are given overleaf.

Issued at **Stockholm** on **2017-05-16**

DNV GL local station:
Kaohsiung

Approval Engineer:
Kristoffer Uulas



Notified Body
No.: **0098**



for **DNV GL SE**

Digitally Signed By:
Höglund, Ville
Location: Stockholm, Sweden
Signing Date: den 17 maj 2017

Ville Höglund
Deputy Head of Certification Body

The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or the applied standards may render this certificate invalid. The product liability rest with the manufacturer or his representative in accordance with Directive 2013/53/EU of the European Parliament and of the Council.



Form code: RCD.Ba

Revision: 2016-12

www.dnvgl.com

Page 1 of 4

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id: **341.3-000362-1**
Certificate No: **RCDB000006F**

Jurisdiction

DNV GL is appointed by the Central Authority of the German Federal States for Safety (ZLS) as a "Notified Body" in accordance with § 15(1) of the Product Safety Act (ProdSG) to carry out conformity assessment procedures on Recreational Crafts in the scope of ProdSG and Directive 2013/53/EU according to the administrative decision No. ZLS-Z1471-2015/1-1.

Certificate history

This is the original Certificate.

Product description

Opening type of portlights. Type designations are listed below

- Frames made of stainless steel (SS) 316
- Glazing of polycarbonate (PC) or polymethylmethacrylate (PMMA)
- Glazing attached to opening frame by silicone sealant
- Hinges of SS 316
- Thumbturns of SS 316 and delrin
- Seal of San-Flex rubber

Applications/Limitations

May be used on Recreational Craft subject to CE-marking under the Directive 2013/53/EU, in the following, as listed, *Application Location Areas* as defined in EN ISO 12216:2002 on *Any Craft Type of Any Design Category*. (see next page)

Type	Model No.	Glazing dimension (mm)	Glazing thickness (mm)	Application location Area	
PLSR	PLSR-0500	Ø = 118	8	<i>I, IIb, III & IV</i>	
	PLSR-0600	Ø = 143	8	<i>I, IIb, III & IV</i>	
	PLSR-0700	Ø = 169	8	<i>I, IIb, III & IV</i>	
	PLSR-0800	Ø = 194	8	<i>I, IIb, III & IV</i>	
	PLSR-1000	Ø = 241	12,7	<i>I, IIb, III & IV</i>	
	PLSR-1200	Ø = 292	12,7	<i>I, IIb, III & IV</i>	
	PLSR-1400	Ø = 343	12,7	<i>IIb, III & IV</i>	
PLSO	PLSO-0512	114 x 292	8	<i>I, IIb, III & IV</i>	
	PLSO-0614	140 x 318	8	<i>I, IIb, III & IV</i>	
	PLSO-0714	165 x 343	8	<i>I, IIb, III & IV</i>	
	PLSO-0716	165 x 394	8	<i>I, IIb, III & IV</i>	
	PLSO-0718	165 x 444	8	<i>I, IIb, III & IV</i>	
	PLSO-0816	190 x 394	8	<i>I, IIb, III & IV</i>	
	PLSO-0818	190 x 444	8	<i>I, IIb, III & IV</i>	
	PLSO-1020	241 x 495	12,7	<i>I, IIb, III & IV</i>	
	PLSO-1024	241 x 596	12,7	<i>I, IIb, III & IV</i>	
	PLSO-1224	292 x 596	12,7	<i>I, IIb, III & IV</i>	
	PLSO-1228	292 x 697	12,7	<i>I, IIb, III & IV</i>	
	PLS	PLS-0512	114 x 289	8	<i>I, IIb, III & IV</i>
		PLS-0714	165 x 343	8	<i>I, IIb, III & IV</i>
PLS-0716		165 x 394	8	<i>I, IIb, III & IV</i>	
PLS-0718		165 x 444	8	<i>I, IIb, III & IV</i>	
PLS-0816		190 x 394	8	<i>I, IIb, III & IV</i>	
PLS-0818		190 x 444	8	<i>I, IIb, III & IV</i>	
PLS-1020		241 x 495	12,7	<i>I, IIb, III & IV</i>	
PLS-1024		241 x 596	12,7	<i>I, IIb, III & IV</i>	
PLS-1224		292 x 596	12,7	<i>I, IIb, III & IV</i>	
PLS-1228		292 x 697	12,7	<i>I, IIb, III & IV</i>	

The certificate covers products with varying dimensions within the smallest and largest dimensions listed of each type. The glazing thickness shall be increased to the thicker size listed when these products exceed the dimension of the following types: PLSR-0800, PLSO-0818, PLS-0818

Technical documentation

Drawings:

- Round Opening Ports Polycarbonate Sheet, PLSR, dated 97.01.10 rev.4
- Oval Opening Ports Polycarbonate Sheet, PLSO, dated 97.01.10 rev.4
- Rectangular Opening Ports Polycarbonate Sheet, PLS, dated 97.01.10 rev.4
- Gluing Procedure

Applied Standards/Tests carried out

Standard:

- EN ISO 12216:2002 Small Craft – Windows, Portlights, Hatches, Deadlights and Doors - Strength and Tightness requirements

Tests:

- Test Report for CE certification of Hatch and Portlight, dated 2001-11-14
- Glue Product test report, dated 18 February 1987

Job Id: **341.3-000362-1**
Certificate No: **RCDB000006F**

Terms and conditions

The following conditions may render this certificate invalid:

- Changes in the design or construction of the product
- Changes or amendments to the Directive
- Changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the Directive

Marking of product

This Certificate is concerned with the design of the product, only. In order to fully meet with the requirements of the Directive and legally affix the CE mark, the manufacturer shall have the final product and/or production assessed according to one of the procedures listed below and finally draw up an EC declaration of conformity.

Conformity assessment procedures for production as described in Annex II of the Decision No 768/2008/EC of the European Parliament and of the Council:

- Conformity to type based on internal production control (Module C)
- Conformity to type based on internal production control plus supervised product testing (Module C1)
- Conformity to type based on quality assurance of the production process (Module D)
- Conformity to type based on product quality assurance (Module E)
- Conformity to type based on product verification (Module F)

Other directives, covering other phenomena, and also having requirements related to CE marking, might also apply.