

## **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:

**PRODUCER** Lanex a.s

PLACE OF Hlucinska 96/1
PRODUCTION 747 23 Bolatice

Czech Republic

**DESCRIPTION** Marine and offshore mooring ropes of synthetic materials

TYPE PP MULTIFILAMENT, Type A - Polypropylene

POLYPROPYLENE, Type A – polypropylene; POLYS, Type A – polypropylene/polyethylene; CRUISER, Type A – polypropylene/polyester;

POLYAMIDE, Type A

APPLICATION Marine and offshore mooring ropes

STANDARD BS EN ISO 1968:2004 – Fibre ropes and cordage. Vocabulary

BS EN ISO 10572:2009 - Mixed polyolefin fibre ropes BS EN ISO 9554:2010 - Fibre ropes. General specification

BS EN ISO 1140:2012 - Fibre ropes. Polyamide. 3, 4, 8, and 12 strand

ropes

BS EN ISO 10556:2009 - Fibre ropes of polyester/polyolefin dual fibres BS EN ISO 1346:2012 - Fibre ropes-polypropylene split film, mono filament and multifilament (PP2) and polypropylene high tenacity

multi filament (PP3) 3, 4 and 8 strand ropes

BS EN ISO 2307:2010 - Fibre ropes - Determination of certain physical

and mechanical properties

Certificate No. 17/00100

**Issue Date** 26<sup>th</sup> October 2017

Expiry Date 26th October 2022

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Marine Technical & Engineering Services, Southampton Lloyd's Register EMEA

Certificate Number: 17/00100

Lloyd's Register Group Limited

Date: 26th October 2017

Energy Southampton Office

Lloyd's Register EMEA 71 Fenchurch Street, London EC3M 4BS

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Reviewed for compliance with Lloyd's Register Type Approval

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## **RATINGS**

**PP MULTIFILAMENT:** 

Diameter (mm): 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 18,

20, 22, 24, 26, 28, 30, 32, 36, 40

Minimum breaking strength (kN):

Make up:

1.75 to 236.0 Twisted 3 strand

**POLYPROPYLENE:** 

Diameter (mm): 3, 4, 6, 7, 8, 8.3, 9.5, 10, 11, 11.5,

12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38,

40

Minimum breaking strength (kN): 2.0 to 228.5

Make up: Twisted 3 strand

**POLYS:** 

Diameter (mm): 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 18,

20, 22, 24, 26, 28, 30, 32, 36, 38,

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**40** 

TYPE APPROVAL SYSTEM

Certificate Number: 17/00100

Energy Southampton Office Non-metallic materials

Minimum breaking strength (kN): 2.65 to 280.8

Make up: Twisted 3 strand

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## **RATINGS**

**CRUISER:** 

Diameter (mm): 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20,

22, 24, 26, 28, 30, 32, 36, 40

Minimum breaking strength (kN): 3.1 to 265.0

Make up: Twisted 3 strand

**POLYAMIDE:** 

Diameter (mm): 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16,

18, 20, 22, 24, 26, 28, 30, 32, 36, 40

Minimum breaking strength (kN): 1.4 to 294.0

Make up: Twisted 3 strand

"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."

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

Certificate No. 17/00100

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