

# TYPE APPROVAL CERTIFICATE

Certificate No: **TAE00001NA** Revision No:

This is to certify:	
That the Cable Ties	
with type designation(s) Roller Ball (RB/SS), Releasable (RCT), Ladder (ST)	
Yesha Electricals Private Ltd. BARODA, GUJARAT, India	
is found to comply with DNV rules for classification – Ships, offshore units, and hig	h speed and light craft
Application:	
Product(s) approved by this certificate is/are accepted for ins	stallation on all vessels classed by DNV.
Material Metallic (Stainless steel) Suitable for open deck Yes	
Issued at Hamburg on 2022-02-21	6 Pan/
This Certificate is valid until <b>2027-02-20</b> .  DNV local station: <b>Mumbai NB &amp; CMC</b>	for <b>DNV</b>
Approval Engineer: Carsten Hunsalz	Arne Schaarmann Head of Section

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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.



Job Id: **262.1-036946-1** Certificate No: **TAE00001NA** 

Revision No: 1

## **Product description**

Cable Ties of Roller Ball-, Releasable- and Ladder-Type. Made of stainless steel 316, with or without coating. Coating material: Thermosetting polyester.

Type:		Roller Ball (RB/SS)			
Material:	Metallic / Metallic-Coated Stainless steel 316, 316L				
Article	Length	Width	Thickness [mm]	Diameter Range	Loop Tensile
	[mm]	[mm]	[un-coated]	[mm]	Strength [N]
SSxxxx	100-1600	4,6	0,26	25 to 490	778
SSxxxx	100-1600	7,9	0,26	20 to 490	1112

Type:		Releasable (RCT)			
Material:		Metallic-Coated Stainless steel 316, 316L			
Article	Length	Width	Thickness [mm]	Diameter Range	Loop Tensile
	[mm]	[mm]	[un-coated]	[mm]	Strength [N]
RCTxxxx	150-1600	5	0,5	36 to 500	1335
RCTxxxx	150-1600	10	0,5	40 to 500	1559

Type:		Ladder (ST)			
Material:		Metallic / Metallic-Coated Stainless steel 316, 316L			
Article	Length	Width	Thickness [mm]	Diameter Range	Loop Tensile
	[mm]	[mm]	[un-coated]	[mm]	Strength [N]
STxxxx	100-1600	7	0,3	25 to 500	529
STxxxx	100-1600	12	0,3	25 to 495	778

Details according manufacturer's specification

Classification according to IEC 62275:

6.1 Material:	Metallic / Metallic-Coated
6.2 Loop tensile strength:	Type 2: Retains 100% strength after testing
6.3 Temperature:	Maximum operation temperature [°C]: 300°C / 170°C Metallic / Metallic-Coated Minimum operation temperature [°C]: -40°C / -60°C Metallic / Metallic-Coated Minimum installation temperature [°C]: -40°C / -40°C Metallic / Metallic-Coated
6.4 Contribution to fire:	Non-flame propagating
6.5.1 Resistance to UV light:	resistant
6.5.2 Resistance to corrosion:	resistant

# **Application/Limitation**

For fixing of cables, outdoor and indoor, onboard ships and mobile offshore units.

To be installed according with the manufacturer's instructions and DNV rules.

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### **Type Approval documentation**

Specification: Yesha Electricals Private Ltd.

Test Report:

RP-2122-004832-RB-4.6C.pdf, RP-2122-004853-RCT-5C.pdf, RP-2122-004852-RCT-10C.pdf,

RP-2122-004831-RB-HC.pdf, RP-2122-004845-LD-12C.pdf, RP-2122-004843-LD-7.pdf,

RP-2122-004747-RB-H.pdf, RP-2122-004850-LD-7C.pdf, RP-2122-004842-LD-12.pdf, RP-2122-004827-RB-4.6.pdf

#### **Tests carried out**

Mandatory tests for metallic types according to type approval programme DNV-CP-0407 and IEC 62275 2018-08

Loop tensile strength for ties retaining 100% strength after testing.

## **Marking of product**

The smallest package is to be marked with the following:

- Manufacturer's name / trade mark & catalog type designation
- Manufacturer's rated load (tensile strength) as per catalogue
- Dimensions
- Type of product
- Maximum bundle diameter
- Temperature conditions

#### Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

**END OF CERTIFICATE** 

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