

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Cable Ties**

with type designation(s)
J/JW/JLT/JLTW/JMT/JMTW Series

Issued to

JEONO Co., Ltd.
Gyeonggi-do, Korea

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

For fixing of cables on board ships and offshore units

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Material
Suitable for open deck

Issued at **Busan** on **2018-01-11**

This Certificate is valid until **2021-12-31**.

DNV GL local station: **Seoul**

for **DNV GL**

Approval Engineer: **Eun Jin Lee**

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Michael Jost Auf der Stroth
Head of Section

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: **262.1-012262-6**
Certificate No: **TAE00002JA**

Product description

Type : Non-Metallic cable ties

Type J-Series	JW-Series (Width 2.5 to 12.7mm) Locking cable tie
JLT-Series	JLTW-Series (Width 12.7mm) Lashing cable tie
JMT-Series	JMTW-Series (Width 2.5mm) Marker cable tie
Material	Nylon 66 Resin
Colour	Natural(N) or Black(B)
Loop tensile strength	Type 2 - Retain 100% strength after testing

Part Number	Non-Metallic
Loop tensile strength, 2.5mm width	80 N
Loop tensile strength, 3.6mm width	180 N
Loop tensile strength, 4.8mm width	220 N
Loop tensile strength, 6.0mm width	440 N
Loop tensile strength, 7.6mm width	540 N
Loop tensile strength, 9.0mm width	800 N
Loop tensile strength, 12.7mm width	1150 N
Max. tested operating temperature	85 °C
Min. tested operating temperature	-60 °C
Min. tested installation temperature	-40 °C
Contribution to fire	Non-flame propagating
Resistance to UV light	Type -W only
Resistance to corrosion	Resistant

Part No.	Length	Width
J-100	103	2.5
J-162	162	2.5
J-202	200	2.5
J-140	148	3.6
J-203	200	3.6
J-303	300	3.6
J-200	201	4.8
J-250	250	4.8
J-300	300	4.8
J-373	368	4.8
J-270	270	6.3
J-370	370	7.6
J-450	450	9.0

Part No.	Length	Width
JW-100	103	2.5
JW-162	162	2.5
JW-202	200	2.5
JW-140	148	3.6
JW-203	200	3.6
JW-303	300	3.6
JW-200	201	4.8
JW-250	250	4.8
JW-300	300	4.8
JW-373	368	4.8
JW-270	270	6.3
JW-370	370	7.6
JW-450	450	9.0

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J-530	530	9.0
J-650	650	9.0
J-780	780	9.0
J-300EH	300	12.7
J-400EH	400	12.7
J-540EH	540	12.7
J-780EH	780	12.7

JW-530	530	9.0
JW-650	650	9.0
JW-780	780	9.0
JW-300EH	300	12.7
JW-400EH	400	12.7
JW-540EH	540	12.7
JW-780EH	780	12.7

Part No.	Length	Width
JLT-540	540	12.7

Part No.	Length	Width
JLTW-540	540	12.7

Part No.	Length	Width
JMT-1M	105	2.5
JMT-2M	200	2.5

Part No.	Length	Width
JMTW-1M	105	2.5
JMTW-2M	200	2.5

Application/Limitation

Non-UV resistant cable ties are not to be used on open deck.

Type Approval documentation

Tests carried out

IEC 62275 (2013-11)	Installation test
	Minimum installation temperature test
	Minimum operation temperature test
	Loop tensile strength test for cable tie retaining 100% strength after heat aging, temperature cycling & temperature cycling-vibration test
	Non-Flame Propagation Test(Needle Flame Test)
	Resistance to UV light (Type -W only)
	Resistance to corrosion

Marking of product

Manufacturer's logo

Periodical assessment

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line
- 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