

Certificate No:
TAE0000191
File No:
828.50
Job Id:
262.1-021286-1

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Clip, Saddle, Band

with type designation(s)
Cable Ties TY RAP

Issued to

Thomas & Betts Corporation
Memphis TN, United States

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

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

This Certificate is valid until **2021-07-13**.

Issued at **Høvik** on **2016-07-14**

DNV GL local station: **Houston**

Approval Engineer: **Nicolay Horn**

for **DNV GL**

Marit Laumann
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. If any person suffers loss or damage which is proven to have been caused by any negligent act or omission of the Society, then the Society shall pay compensation to such person for his proven direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question. The maximum compensation shall never exceed USD 2 million. In this provision the "Society" shall mean DNV GL AS as well as all its direct and indirect owners, affiliates, subsidiaries, directors, officers, employees, agents and any other person or entity acting on behalf of DNV GL AS.

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Name and Place of manufacturer

Thomas & Betts Corporation,
Carbo, Caribien

Thomas & Betts
Kecskemet
Hungary

ABB K.K Sendal Factory
Miyagi-Ken
Japan

Product description

Cable Ties of non metallic material.

Type TY-Rap Indoor & out door use*	Dimension [mm]			Declared Tensile (N)	Min&Max Operating Temperature [°C]
	T (Min)	W (Min)	L (Min)		
TY23M	0.762	2.03	89	80	-60 to 85
TY23MX	0.762	2.03	89	80	-60 to 105
TY52315M	0.762	2.03	178	80	-60 to 85
TY52315MX	0.762	2.03	178	80	-60 to 105
TY232M	0.762	2.03	203	80	-60 to 85
TY232MX	0.762	2.03	203	80	-60 to 105
TY234M	0.762	2.03	356	80	-60 to 85
TY234MX	0.762	2.03	356	80	-60 to 105
TY26M	0.965	3.43	279	134	-60 to 85
TY26MX	0.965	3.43	279	130	-60 to 105
TY244M	0.965	3.43	368	134	-60 to 85
TY244MX	0.965	3.43	368	130	-60 to 105
TY24M	0.965	3.43	140	180	-60 to 85
TY24MX	0.965	3.43	140	180	-60 to 105
TY242M	0.965	3.43	203	180	-60 to 85
TY25M	1.04	4.57	178	222	-60 to 85
TY25MX	1.04	4.57	178	220	-60 to 105
TY253M	1.04	4.57	292	222	-60 to 85
TY253MX	1.04	4.57	292	222	-60 to 105
TY28M	1.04	4.57	356	222	-60 to 85
TY28MX	1.04	4.57	356	222	-60 to 105
TY272M	1.45	4.57	203	540	-60 to 85
TY272MX	1.45	4.57	203	540	-60 to 105
TY272MX-RW	1.45	4.57	203	540	-60 to 105
TY27M	1.45	4.57	330	540	-60 to 85
TY27MX	1.45	4.57	330	540	-60 to 105
TY27MX-RW	1.45	4.57	330	540	-60 to 105
TY275M	1.45	4.57	457	540	-60 to 85
TY275MX	1.45	4.57	457	540	-60 to 105
TY275MX-RW	1.45	4.57	457	540	-60 to 105
TY277M	1.45	4.57	610	540	-60 to 85
TY277MX	1.45	4.57	610	540	-60 to 105
TY277MX-RW	1.45	4.57	610	540	-60 to 105
TY29M	1.45	4.57	762	540	-60 to 85
TY29MX	1.45	4.57	762	540	-60 to 105
TY29MX-RW	1.45	4.57	762	540	-60 to 105

* see Application /limitation

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Type TY-Rap Indoor / outdoor *	Dimension [mm]			Declared Tensile (N)	Min&Max Operating Temperature [°C]
	T (Min)	W	L (Min)		
TY23MFR	0.762	2.03	89	80	-20 to 65
TY232MFR	0.762	2.03	203	80	
TY24MFR	0.965	3.43	140	134	
TY25MFR	1.04	4.57	178	220	
TY28MFR	1.04	4.57	356	177	
TY272MFR	1.45	4.57	203	540	
TY27MFR	1.45	4.57	330	540	
TY23MX-A	0.762	2.03	89	80	-60 to 105
TY23MX-E	0.762	2.03	89	80	
TY24MX-A	0.965	3.43	140	133	
TY24MX-E	0.965	3.43	140	133	
TY25MX-A	1.04	4.57	178	222	
TY25MX-E	1.04	4.57	178	222	
TY26MX-A	0.965	3.43	279	133	
TY26MX-E	0.965	3.43	279	133	
TY27MX-A	1.45	4.57	330	540	
TY27MX-E	1.45	4.57	330	540	
TY272MX-A	1.45	4.57	203	222	
TY272MX-E	1.45	4.57	203	222	
TY28MX-A	1.04	4.57	356	222	
TY28MX-E	1.04	4.57	356	222	
TY29MX-A	1.45	4.57	762	540	
TY29MX-E	1.45	4.57	762	540	
TYT25MX	1.04	4.57	178	220	-60 to 85
TYT253MX	1.04	4.57	292	220	
TYT28MX	1.04	4.57	356	220	

* see Application /limitation

Type TY-Rap Indoor door use	Dimension [mm]			Declared Tensile (N)	Min&Max Operating Temperature [°C]
	T (Min)	W (Min)	L (Min)		
TYH23M	0.762	2.03	89	80	-60 to 105
TYH232M	0.762	2.03	203	80	
TYH26M	0.965	3.43	279	120	
TYH24M	0.965	3.43	140	180	
TYH242M	0.965	3.43	203	180	
TYH25M	1.04	4.57	178	220	
TYH253M	1.04	4.57	292	220	
TYH28M	1.04	4.57	356	220	
TYH272M	1.45	4.57	203	134	
TYH27M	1.45	4.57	330	540	
TYH29M	1.45	4.57	762	540	
TYH23M	0.762	2.03	89	540	
TYH232M	0.762	2.03	203	540	
TYH26M	0.965	3.43	279	540	
TYH24M	0.965	3.43	140	540	

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Application/Limitation

Cable bands for use inside and outside (..X type only, UV resistant) on ships and mobile offshore installations.

The type numbers may have additional numbers to designate colors, package quantity etc. Please see the catalogue for fully details.

Type Approval documentation

Tests carried out

Type tests in accordance with UL (IEC) 62275.

Marking of product

Company Name, Type designation and Size

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.

Assessment to be performed at least every second year.

END OF CERTIFICATE