DNV·GL

Certificate No:
TAE00002U6

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cable Ties

with type designation(s)
SHT18RI, T18 series, T25 series, T30 series, T40 series, T50 series, T60 series, T120 series, T150 series, T200 series, IT18 series, IT50 series, RT250 series, LK series, RF series, REL250X, RELK series & LPH series

Issued to
HellermannTyton Co., Ltd.
Himeji, Hyogo Pref, Japan

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft
IEC 62275 (2006-10)

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Material	**Non-metalic**
Suitable for open deck	**Partly**

Issued at **Høvik** on **2018-07-10**
This Certificate is valid until **2022-06-30**.
DNV GL local station: **Kobe**

Approval Engineer: **Nicolay Horn**

for **DNV GL**

Andreas Kristoffersen
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.

Name and place of manufacturer

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Product description

Self locking cable tie. Non-reopenable in one or more of the following materials:
Nylon 66 (Natural color) (N)
Nylon 66 weather/UV resistant (Black), (W)
Nylon 66 Heat Stabilised (Light green) (HS)
Nylon 66 Heat Stabilised and weather/UV resistant (Black) (HSW)
ETFE (Blue)
Nylon 46(Beige) (HR)

Colour: Black, Natural (transparent), Red, Blue, yellow, green.
O: tested to be satisfactory

Classification of cable ties according to IEC 62275 section 6:

SHT18RI:	N	W	HS	HR
Retains 50/100% strength after test:	100	100	100	50
Resistance to UV-light	–	O	–	–
Loop tensile strength, 1,8mm width	80 N	80 N	80 N	80 N
Max. tested operating temperature	85ºC	85ºC	110ºC	130ºC
Min. tested operating temperature	-40ºC	-40ºC	-40ºC	- 40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC	- 40ºC

T18S, T18R, T18I & T18L :	N	W	HS	HSW	ETFE	HR
Retains 50/100% strength after test:	100	100	100	100	50	50
Resistance to UV-light	–	O	–	O	O	–
Loop tensile strength, 2,2/2,5mm	80 N	80 N	80 N	80 N	80 N	80 N
Max. tested operating temperature	85ºC	85ºC	110ºC	110ºC	170ºC	130ºC
Min. tested operating temperature	-40ºC	-40ºC	-40ºC	-40ºC	-80ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC	-40ºC	-80ºC	-40ºC

T25L & T25LL	N	W
Loop tensile strength, 2,8 mm width	110 N	110 N

Max. tested operating temperature	85ºC	85ºC
Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

T30R, T30M, T30L, T30LL &30XL:	N	W	HS	HSW	ETFE	HR
Retains 50/100% strength after test:	100	100	100	100	50	50
Resistance to UV-light	–	O	–	O	O	–
Loop tensile strength, 3,5mm width	135 N	135 N	135 N	135 N	135 N	135 N
Loop tensile strength, 3,6mm width	135 N	135 N	135 N	135 N		
Max. tested operating temperature	85ºC	85ºC	110ºC	110ºC	170ºC	130ºC
Min. tested operating temperature	-40ºC	-40ºC	-40ºC	-40ºC	-80ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC	-40ºC	-80ºC	-40ºC

T40S & T40I:	N	W	HS
Retains 50/100% strength after test:	100	100	100
Resistance to UV-light	–	O	–
Loop tensile strength, 3,5mm width	180 N	180 N	180 N
Loop tensile strength, 4,0mm width	180 N	-	-
Max. tested operating temperature	85	85	110
Min. tested operating temperature	-40ºC	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC

T50S, T50R, T50L, T50I, T50R-DH & T50L-DH:	N	W	HS	HSW	ETFE	HR
Retains 50/100% strength after test:	50	100	100	100	50	50
Resistance to UV-light	–	O	–	O	O	–
Loop tensile strength, 4,6mm width	225 N	225 N	225 N	225 N	-	225 N
Loop tensile strength, 4,7mm width	225 N	225 N	225 N	-	222 N	
Loop tensile strength, 4,8mm width	225 N	225 N	225 N	225 N		225 N
Max. tested operating temperature	85ºC	85ºC	110ºC	110ºC	170ºC	130ºC
Min. tested operating temperature	-40ºC	-40ºC	-40ºC	-40ºC	-80ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC	-40ºC	-80ºC	-40ºC

T60S & T60R:	N	W	HS	HSW	HR
Retains 50/100% strength after test:	100	100	100	100	50
Resistance to UV-light	–	O	–	O	–
Loop tensile strength, 4,8mm width	270 N	270 N	270 N	270 N	270 N
Max. tested operating temperature	85ºC	85ºC	110ºC	110ºC	130ºC
Min. tested operating temperature	-40ºC	-40ºC	-40ºC	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC	-40ºC	-40ºC

T120R, T120S, T120I, T120M & T120L:	N	W	HS	HSW	HR
Retains 50/100% strength after test:	100	100	100	100	50
Resistance to UV-light	–	O	–	O	–
Loop tensile strength, 7,5mm width	535 N	535 N	535 N	535 N	535 N
Max. tested operating temperature					
Min. tested operating temperature	-40ºC	-40ºC	-40ºC	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC	-40ºC	-40ºC
T150R, T150M, T150L, T150XL & T150XLL	N	W			
Loop tensile strength, 8,8 mm width	780 N	780 N			

Max. tested operating temperature	85ºC	85ºC
Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

T200M & T200R	N	W
Loop tensile strength, 8,8 mm width	900 N	900 N
Max. tested operating temperature	85ºC	85ºC
Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

IT18R, IT18FL, IT18I & IT18FD:	N	W
Retains 50/100% strength after test:	100	100
Resistance to UV-light	–	O
Loop tensile strength, 2,5mm width	80 N	80 N
Max. tested operating temperature	85ºC	85 ºC
Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

IT50R, IT50/2, IT50/3 & IT50L	N	W
Loop tensile strength, 4,7 mm width	225 N	225 N
Max. tested operating temperature	85ºC	85ºC
Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

LK2A, LK3A & LK5 :	N	W	HS
Retains 50/100% strength after test:	100	100	100
Resistance to UV-light	–	O	–
Loop tensile strength, 3,5mm width	225 N	225 N	225 N
Loop tensile strength, 4,8mm width	360 N	360 N	360 N
Loop tensile strength, 8,7mm width	1115 N	1115 N	1115 N
Loop tensile strength, 13mm width	85ºC	85ºC	110ºC
Max. tested operating temperature	-40ºC	-40ºC	-40ºC
Min. tested operating temperature	-40ºC	-40ºC	-40ºC
Min. tested installation temperature	225 N	225 N	225 N

RF100, RF140 & RF250:	N	W	HSW
Retains 50/100% strength after test:	100	100	100
Resistance to UV-light	–	O	O
Loop tensile strength, 7,4mm width	222 N	222 N	222 N
Max. tested operating temperature	85ºC	85ºC	110ºC
Min. tested operating temperature	-40ºC	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC	-40ºC

RT250S, RT250R, RT250M, RT250I RT250L & RT250XL	N	W
Loop tensile strength, 12,5 mm width	1115 N	1115 N
Max. tested operating temperature	85ºC	85ºC
Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

RELK2R, RELK2M & RELK2L	N	W
Loop tensile strength, 4,6 mm width	225 N	225 N
Max. tested operating temperature	85ºC	85ºC

Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

REL 250X	N
Loop tensile strength, 12,2 mm width	1115 N
Max. tested operating temperature	80ºC
Min. tested operating temperature	-40ºC
Min. tested installation temperature	-40ºC

LPH 275 & LPH350	N	W
Loop tensile strength, 9,0 mm width	480 N	480 N
Max. tested operating temperature	85ºC	85ºC
Min. tested operating temperature	-40ºC	-40ºC
Min. tested installation temperature	-40ºC	-40ºC

TYPE	Length mm	Width mm
SHT18	100	1.8
T 18 S	80	2.2
T 18 R	100	2.5
T 18 I	148	2.5
T 18 L	205	2.5
T 25L	240	2.8
T 25LL	330	2.8
T 30 R	152	3.5
T 30 L (T30M)	202	3.6
T 30LL	290	3.5
T 30XL	370	3.5
T 40 S	153	3.5
T 40 I	296	4.0
T 50 S	158	4.7
T 50 R	225	4.6
T 50 L	225	4.8
T 50 I	225	4.8
T 50R-DH	210	4.7
T 50L-DH	395	4.7
T 60 S	251	4.8
T 60 R	301	4.8
T 120 R	380	7.6
T 120 S	225	7.6
T 120 I	300	7.6
T 120 M	460	7.6
T 120 L	760	7.6
T 150 R	390	8.8
T 150 M	535	8.8
T 150 L	820	8.8

TYPE	Length mm	Width mm
T 150 XL	1095	8.9
T 150 XLL	1325	8.9
IT18R	100	2.5
IT18FL	110	2.5
IT18I	140	2.5
IT18FD	100	2.5
IT50R	210	4.7
IT50R/2	205	4.7
IT50R/3	205	4.7
IT50L	380	4.7
RT250S	230	12.5
RT250R	515	12.5
RT250M	565	12.5
RT250I	735	12.5
RT250L	880	12.5
RT250XL	1020	12.5
RF100	100	7.4
RF140	140	7.4
RF250	250	7.4
LK 2 A	270	4.8
LK 3 A	281	8.7
LK5	541	13.0
RELK2R	200	4.6
RELK2M	250	4.6
RELK2L	350	4.6
LPH275	265	9.0
LPH350	355	9.0
T200M	605	9.6
T200R	465	9.6

Application/Limitation

For fixing of cables onboard ships and offshore units. If used on open deck, UV-resistant ties must be used.

Where the rules states metal cable ties to be used, plastic cable ties may be used in addition but not instead of the metal ties.

Type Approval documentation

Tests carried out

Type tests according to IEC 62275: Installation test. Minimum installation temperature test. Minimum operation temperature test. Loop tensile strength test for cable ties retaining 100% strength after testing. Vibration test. Resistance to UV light.

Dimension report, Fluid compatibility, Melting temperature, Thermal shock, Flammability.

Marking of product

Type/catalogue number, Length/Width.
The marking is placed on each minimum pack quantity only.

Periodical assessment

The scope of the periodical assessment 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.

Assessment to be performed at 1.5 and 3 year and at renewal.

END OF CERTIFICATE