



Certificate no.:
TAE00004VK

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Cable Ties

with type designation(s)
WT...

issued to

Phoenix Contact GmbH & Co. KG
Blomberg, Nordrhein-Westfalen, Germany

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

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

Issued at **Hamburg** on **2024-04-09**

This Certificate is valid until **2029-04-08**.

for **DNV**

DNV local unit: **Essen**

Approval Engineer: **Harald Amberger**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2023-09

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Product description

Type : STANDARD CABLE TIES

Material: Polyamide 6.6 natural, +1% carbon black for black type

Type Code		Length [mm]	Width [mm]	Thickness [mm]	Diameter Range [mm]	Loop Tensile Strength [N]
Nat.	black					
WT-HF 2,5x98	WT-HF 2,5x98BK	98	2,5	1,0	1 to 21	80
WT-HF 2,5x98-L	WT-HF 2,5x98BK-L	98	2,5	1,0	1 to 21	80
WT-HF 2,6x160	WT-HF 2,6x160BK	160	2,6	1,1	1 to 40	80
WT-HF 2,6x200	WT-HF 2,6x200BK	200	2,6	1,1	2 to 51	80
WT-HF 2,6x200-L	WT-HF 2,6x200BK-L	200	2,6	1,1	2 to 51	80
WT-HF 3,6x140	WT-HF 3,6x140BK	140	3,5	1,1	2,5 to 32	180
WT-HF 3,6x140-L	WT-HF 3,6x140BK-L	140	3,6	1,1	2,5 to 32	180
WT-HF 3,6x290	WT-HF 3,6x290BK	290	3,5	1,3	3 to 79	180
WT-HF 3,6x290-L	WT-HF 3,6x290BK-L	290	3,5	1,3	3 to 79	180
WT-HF 4,5x160	WT-HF 4,5x160BK	160	4,5	1,3	2,5 to 38	220
WT-HF 4,5x160-L	WT-HF 4,5x160BK-L	160	4,5	1,3	2,5 to 38	220
WT-HF 3,6x200	WT-HF 3,6x200BK	200	3,5	1,2	3 to 50	180
WT-HF 3,6x200-L	WT-HF 3,6x200BK-L	200	3,5	1,2	3 to 50	180
WT-HF 4,5x200	WT-HF 4,5x200BK	200	4,5	1,4	3 to 50	220
WT-HF 4,5x200-L	WT-HF 4,5x200BK-L	200	4,5	1,4	3 to 50	220
WT-HF 4,5x290	WT-HF 4,5x290BK	290	4,5	1,5	3,5 to 78	220
WT-HF 4,5x360	WT-HF 4,5x360BK	360	4,5	1,5	3,5 to 100	220
WT-HF 4,5x430	WT-HF 4,5x430BK	430	4,5	1,5	3,5 to 115	220
WT-HF 7,8x300	WT-HF 7,8x300BK	300	7,5	1,7	4 to 80	540
WT-HF 7,8x365	WT-HF 7,8x365BK	365	7,5	1,7	8 to 100	540
WT-HF 7,8x540	WT-HF 7,8x540BK	540	7,5	1,7	35 to 158	540
WT-HF 9x780	WT-HF 9x780BK	780	9,0	1,9	34 to 233	700
WT-HF 12,6x850	WT-HF 12,6x850BK	500	12,5	2,0	30 to 143	1080
WT-HF 12,6x1000	WT-HF 12,6x1000BK	1000	12,5	2,0	40 to 302	1080

Details according manufacturer`s specification

Classification according to IEC 62275:

6.1 Material:	Non-metallic
6.2 Loop tensile strength:	Type 1: Retains 50% strength after testing
6.3 Temperature:	Maximum operation temperature [°C]: +85°C Minimum operation temperature [°C]: -40°C Minimum installation temperature [°C]: -10°C
6.4 Contribution to fire:	Not necessary to declare
6.5.1 Resistance to UV light:	Not declared
6.5.2 Resistance to corrosion:	Not declared

Type : UV RESISTANT CABLE TIES

Material: Polyamide 6.6 black UV stabilized

Type Code		Length [mm]	Width [mm]	Thickness [mm]	Diameter Range [mm]	Loop Tensile Strength [N]
Nat.	black					
	WT-UV HF 2,5x98BK	98	2,5	1	1 to 21	80
	WT-UV HF 3,6x140BK	140	3,6	1,1	2 to 32	130
	WT-UV HF 3,6x200BK	200	3,6	1,2	3 to 50	130
	WT-UV HF 4,5x200BK	200	4,5	1,4	3 to 50	220
	WT-UV HF 4,5x290BK	290	4,8	1,4	3,5 to 78	220
	WT-UV HF 7,8x365BK	365	7,5	1,8	8 to 100	540

Details according manufacturer`s specification

Classification according to IEC 62275:

6.1 Material:	Non-metallic
6.2 Loop tensile strength:	Type 1: Retains 50% strength after testing
6.3 Temperature:	Maximum operation temperature [°C]: +85°C Minimum operation temperature [°C]: -40°C Minimum installation temperature [°C]: -10°C
6.4 Contribution to fire:	Not necessary to declare
6.5.1 Resistance to UV light:	Yes
6.5.2 Resistance to corrosion:	resistant

Application/Limitation

For fixing of cables, outdoor (except STANDARD and SELF EXTINGUISHING types) and indoor, onboard ships and mobile offshore units.

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

Type Approval documentation

Tests carried out

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

Loop tensile strength for ties retaining 50% strength after testing.

Marking of product

The smallest package is to be marked with the following:

- Manufacturer's name / trade mark & catalogue 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