DNV·GL

Certificate No:
TAE00001G9

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Clip, Saddle, Band

with type designation(s)
DACT, DAMCT, DAL & DARCT

Issued to
Dong-A Bestech Co., Ltd.
BUCHON KYONGGI-DO, Republic of Korea

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft
IEC 62275 (2006-10)
DNV GL class programme DNVGL-CP-0407 – Type approval – Cable ties

Application :

For fixing of cables on board ships and offshore units.
UV-resistant black cable ties can be used at outdoor.

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

This Certificate is valid until **2021-10-31**.

Issued at **Busan** on **2016-11-01**

for **DNV GL**

DNV GL local station: **Seoul**

Approval Engineer: **Sang Bum Park**

Baeg Soon Choi
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.

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Job Id:
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Product description

Type

DACT, DAMCT (Width 2.4 to 9.0mm)	: Locking Cable Tie
DAL (12.7mm)	: Extra Heavy Locking Cable Tie
DARCT (3.6 & 4.8mm)	: Releasable Cable Tie
DARCT (12.7mm)	: Extra Heavy Releasable Cable Tie

Material

Nylon 66 Resin / Non-flame propagating

Color

Natural(N) or Black(B)

Tensile strength

Type 2 – Retain 100% strength after testing

2.3~2.5 mm	79.4N
3.6 mm	174.4N
4.8 mm	217.5N
6.1~6.3 mm	443.9N
7.6 mm	523.3N
9.0 mm	762.4N
12.7 mm	1078.0N

Temperature range

Operating temperature	: -60°C up to 85°C
Installation temperature(Min.)	: -40°C

Resistance to UV light

Black colour only

Part No.	Length	Width	Part No.	Length	Width
DACT(N) 80-2.3	80	2.4	DACT(B) 80-2.3	80	2.4
DACT(N) 100-2.5	100	2.5	DACT(B) 100-2.5	100	2.5
DACT(N) 160-2.5-L	160	2.5	DACT(B) 160-2.5-L	160	2.5
DACT(N) 200-2.5-L	200	2.5	DACT(B) 200-2.5-L	200	2.5
DACT(N) 140-3.6-L	140	3.6	DACT(B) 140-3.6-L	140	3.6
DACT(N) 200-3.6-L	200	3.6	DACT(B) 200-3.6-L	200	3.6
DACT(N) 210-3.6-L	210	3.6	DACT(B) 210-3.6-L	210	3.6
DACT(N) 300-3.6-L	300	3.6	DACT(B) 300-3.6-L	300	3.6
DACT(N) 370-3.6-L	370	3.6	DACT(B) 370-3.6-L	370	3.6
DACT(N) 120-4.8-L	120	4.8	DACT(B) 120-4.8-L	120	4.8
DACT(N) 160-4.8-L	160	4.8	DACT(B) 160-4.8-L	160	4.8
DACT(N) 190-4.8-L	190	4.8	DACT(B) 190-4.8-L	190	4.8
DACT(N) 200-4.8-L	200	4.8	DACT(B) 200-4.8-L	200	4.8
DACT(N) 200-4.8(S)-L	200	4.8	DACT(B) 200-4.8(S)-L	200	4.8
DACT(N) 250-4.8-L	250	4.8	DACT(B) 250-4.8-L	250	4.8
DACT(N) 280-4.8-L	280	4.8	DACT(B) 280-4.8-L	280	4.8
DACT(N) 300-4.8-L	300	4.8	DACT(B) 300-4.8-L	300	4.8
DACT(N) 370-4.8-L	370	4.8	DACT(B) 370-4.8-L	370	4.8
DAMCT(N) 270-6.1-L	270	6.1	DAMCT(B) 270-6.1-L	270	6.1

Part No.	Length	Width	Part No.	Length	Width
DAMCT(N) 300-6.3-L	300	6.3	DAMCT(B) 300-6.3-L	300	6.3
DAMCT(N) 370-6.3-L	370	6.3	DAMCT(B) 370-6.3-L	370	6.3
DAMCT(N) 200-7.6-L	200	7.6	DAMCT(B) 200-7.6-L	200	7.6
DAMCT(N) 300-7.6-L	300	7.6	DAMCT(B) 300-7.6-L	300	7.6
DAMCT(N) 370-7.6-L	370	7.6	DAMCT(B) 370-7.6-L	370	7.6
DAMCT(N) 450-9.0-L	450	9.0	DAMCT(B) 450-9.0-L	450	9.0
DAMCT(N) 530-9.0-L	530	9.0	DAMCT(B) 530-9.0-L	530	9.0
DAMCT(N) 650-9.0-L	650	9.0	DAMCT(B) 650-9.0-L	650	9.0
DAMCT(N) 780-9.0-L	780	9.0	DAMCT(B) 780-9.0-L	780	9.0
DAMCT(N) 880-9.0-L	880	9.0	DAMCT(B) 880-9.0-L	880	9.0
DAMCT(N) 1000-9.0-L	1000	9.0	DAMCT(B) 1000-9.0-L	1000	9.0

Part No.	Length	Width	Part No.	Length	Width
DAL(N) 300-12.7-L	300	12.7	DAL(B) 300-12.7-L	300	12.7
DAL(N) 400-12.7-L	400	12.7	DAL(B) 400-12.7-L	400	12.7
DAL(N) 540-12.7-L	540	12.7	DAL(B) 540-12.7-L	540	12.7
DAL(N) 780-12.7-L	780	12.7	DAL(B) 780-12.7-L	780	12.7

Part No.	Length	Width	Part No.	Length	Width
DARCT(N) 140-3.6	140	3.6	DARCT(B) 140-3.6	140	3.6
DARCT(N) 200-4.8	200	4.8	DARCT(B) 200-4.8	200	4.8
DARCT(N) 280-4.8	280	4.8	DARCT(B) 280-4.8	280	4.8
DARCT(N) 300-4.8	300	4.8	DARCT(B) 300-4.8	300	4.8
DARCT(N) 370-4.8	370	4.8	DARCT(B) 370-4.8	370	4.8
DARCT(N) 300-12.7-L	300	12.7	DARCT(B) 300-12.7-L	300	12.7
DARCT(N) 400-12.7-L	400	12.7	DARCT(B) 400-12.7-L	400	12.7
DARCT(N) 540-12.7-L	540	12.7	DARCT(B) 540-12.7-L	540	12.7
DARCT(N) 780-12.7-L	780	12.7	DARCT(B) 780-12.7-L	780	12.7

Application/Limitation

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

When cables are not laid on top of horizontal cable trays or supports, metallic cable clips or saddles shall be added at regular distances (e.g. 1 to 2 m) in order to retain the cable during a fire.

Type Approval documentation

Tests carried out

Type test according to IEC 62275 :
- 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 Propagating Test (Needle Flame Test)
- Resistance to UV light
- Resistance to corrosion

Marking of product

Product marking: Manufacturer's name, part number and date of production

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.

Survey to be performed at least every second year.

END OF CERTIFICATE