

DET NORSKE VERITAS

Type Approval Certificate

CERTIFICATE NO. E-8925

This Certificate consists of 6 pages

This is to certify that the

Clip, Saddle, Band

with type designation(s)

Ball-Lok, Tie-Lok, Multi-Lok, BAND-IT Ties, All Purpose and Cable Fixing Band

Holder of certificate

BAND-IT Company Limited

NR. CHESTERFIELD, United Kingdom

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det

Norske Veritas' Offshore Standards

Application

For fixing of cables, outdoor and indoor, onboard ships and mobile offshore units.

Place and date Høvik, 2009-03-06 FDET Norske Veritas AS

Trond Sjåvåg

1864 * 1864 *

Local Office DNV Sheffield This Certificate is valid until 2012-06-30

Ivar Bull

Surveyor sz

Notice: 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.

f any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage.

However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million.In this provision "Det Norske Veritas" shall

DET NORSKE VERITAS AS

Form No.: 20.90a Issue: January 98

VERITASVEIEN 1, 1322 HØVIK, NORWAY

TEL: (+47) 67 57 99 00

FAX: (+47) 67 57 99 11

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Job Id.: 262.1-004422-2

Name and place of manufacturer:

BAND-IT Company Limited NR. CHESTERFIELD United Kingdom BAND-IT-IDEX, Inc. Denver, Colorado USA

Product description

Type name:

Ball-Lok Ties

Material:

Stainless Steel 304 or 316, 316 with or without Nylon 11 or Epoxy coating

Thickness:

0.265 mm

			705 11								
Widt	Width Length		1	Ref. no. SS 304		Ref.no. SS 316		Ref.no. SS 316			
Inc	ches	n	ım	Inches	mm	- Unco	oated	Unc	oated	Epoxy	coated
0.18	0.31	4.6	7.9	7.9	201	KE1128	KE1328	KE0128	KE0328	KE0228	KE0428
0.18	0.31	4.6	7.9	10.2	259	KE1138	KE1338	KE0138	KE0338	KE0238	KE0438
0.18	0.31	4.6	7.9	14.2	360	KE1148	KE1348	KE0148	KE0348	KE0248	KE0448
0.18	0.31	4.6	7.9	20.4	520	KE1158	KE1358	KE0158	KE0358	KE0258	KE0458
0.18	0.31	4.6	7.9	26.8	679	KE1168	KE1368	KE0168	KE0368	KE0268	KE0468
0.18	0.31	4.6	7.9	33.0	838	KE1178	KE1378	KE0178	KE0378	KE0278	KE0478
0.18	0.31	4.6	7.9	42.0	1067	KE1188	KE1388	KE0188	KE0388	KE0288	KE0488

Type name:

Tie-Lok Ties

Material:

Stainless Steel, 304 (AS200 series) & 316 (AS400 series)

Thickness:

0.4 mm

Width		Length		Ref. no.	Ref.no.
Inches	mm	Inches	mm	SS 304	SS 316
0.25	6.35	10.0	254	AS211	AS411
0.25	6.35	15.5	419	AS212	AS412
0.25	6.35	22.5	572	AS213	AS413
0.25	6.35	29.0	737	AS214	AS414
0.25	6.35	35.0	889	AS215	AS415

Type name:

Mini Tie-Lok Ties

Material:

Stainless Steel, 304 (AS200 series) & 316 (AS400 series)

Thickness:

0.4 mm

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Width		Length		Ref. no.	Ref.no.
Inches	mm	Inches	mm	SS 304	SS 316
0.177	4.5	6.6	165	AS221	AS421
0.177	4.5	10.0	254	AS222	AS422
0.177	4.5	16.0	406	AS223	AS423
0.177	4.5	22.5	572	AS224	AS424
0.177	4.5	29.0	737	AS225	AS425

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Type name:

Multi-Lok Ties

Material:

Stainless Steel, 316 covered with RILSAN ESY (NYLON 11)

Thickness: 0.265 mm

With		Length		Ref. no.	Ref. no.
Inches	mm	Inches	mm	Coated	Uncoated
0.28	7	6	150	AE611	AE601
0.28	7	9	225	AE612	AE602
0.28	7	12	300	AE613	AE603
0.28	7	18	450	AE614	AE604
0.28	7	24	610	AE615	AE605
0.47	12	6	150	AE711	AE701
0.47	12	9	225	AE712	AE702
0.47	12	12	300	AE713	AE703
0.47	12	18	450	AE714	AE704
0.47	12	24	610	AE715	AE705

Type name:

Band-It Ties

Material:

Stainless Steel, 316 coated with Plascoat PPA 571or NYLON 11

Thickness:

 $0.4 \, \mathrm{mm}$

Length		Ref. no.	
Inches	mm	6.3 mm width	9.5 mm width
6	150	AE 111	AE 311
9	225	AE 112	AE 312
12	300	AE 113	AE 313
18	450	AE 114	AE 314
24	610	AE 115	AE 315
30	762	AE 116	AE 316
36	914	AE 117	AE 317

Type name:

Cable fixing band and clips

Material:

Stainless Steel, 316 coated with Plascoat PPA 571

Thickness: 0.4 mm

Wi	dth	Ref.no.	Ref.no.	
Inches	mm	SS316	Uncoated clips	
0.25	9.5	AE 433	AE 453	
0.50	12.7	AE 434	AE 454	
0.63	15.9	AE 435	AE 455	
0.75	19.05	AE 436	AE 456	

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Form No.: 20.90a Issue: January 98



Job Id.: 262.1-004422-2

Type name: BAND-IT Ties All purpose Band

Material: Galvanised Carbon Steel, 316 coated with Plascoat PPA 571

Thickness: $0.726 \, \text{mm}$

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Wi	dth	Ho Diar	ole neter	Ref. no.	Ref. no.
Inches	mm	Inches	mm	Coated	Uncoated
0.47	12	0.20	5	AE565	AE505
0.67	17	0.28	7	AE566	AE506
1.02	26	0.31	8	AE567	AE507

Type name: BAND-IT Ties All purpose Band

Material: Stainless Steel, 316 coated with Plascoat PPA 571

Thickness: 0.726 mm

			**		
Wi	dth	Ho Diar	ole nete r	Ref. no.	Refno.
Inches	mm	Inches	mm	Coated	Uncoated
0.47	12	0.20	5	AE465	AE405
0.67	17	0.28	7	AE466	AE406
1.02	26	0.31	8	AE467	AE407

Type name: BAND-IT Ties All purpose Band

Material: Copper Thickness: 0.726 mm

Wi	dth	Ho Diar	ole neter	Ref. no.
Inches	mm	Inches	mm	Uncoated
0.47	12	0.20	5	AE805
0.67	17	0.28	7	AE806

Application/Limitation

For fixing of cables, outdoor and indoor, onboard ships and mobile offshore units. Non-UV resistant ties not to be used on open deck.

Type Approval documentation

Data sheets:

Specifications, Band-It, Bayer and Plascoat

PA221 dated 92-03-18, PA29089 dated 92-03-16, Drawings:

Drawings: AE601 dated 91-08-22 and AE701 dated 91-08-22.

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Customer specification drawings: KE012, KE022, KE032, KE042, AS211, AS221, AE433, AE565, AE601, AE611, AE701, AE711.

Band-it Catalogue B-80EE 3/06. Rilsan PA11 Nylon 11. Coating.

Plastcoat PPA571 Polymer Alloy Coating.

Additional documentation Band-IT-IDEX, Inc documentation: AE11 Rev. P, AE31 Rev. L, AA11 Rev. A, AA31, Rev. A, AA86 Rev. -.

Test reports:

Test reports: BAM 1.3/7787, TNO B-83-14, C.W. no. 1003 Test reports: 8457 dated 91-12-03 and 8463 dated 92-01-06 Test reports: 8485 dated 92-03-16, 8489 dated 92-03-23

Test reports: 8977 dated 91-01-23 (Mini Tie-Lok)

Test reports: 9174 dated 99-05-26 Test report: HAD 136 dated 03-06-18

Product test results ¼" cable ties, 3/8" cable ties, ¼" tie loks, 4,6mm ball loks tested 2007. Short circuit testing of coated stainless steel ties for trefoil cable configurations. Sintef

report LR F2440 dated 2007-02-12,

Shock and vibration tests. Admirality Engineering laboratories dated 1972.

Shock tests. Ministry of defence. 12 October 2004.

Tests carried out

Vibration, Flammability and Corrosion protection. Holding power.

Marking of product

Product marking: According to product description.

Certificate retention survey

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 (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance

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• Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE

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