

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Cable Ties

with type designation(s)

Ball-Lok, Mini Tie-lok, Tie-lok, 316 stainless steel band, Multi lok ties, Band-it ties, Cable fixing band and clipd, Band-it ties, all purpose band, 201 Stainless Steel Coated Band, GCS Coated band, AA Stainless Steel Coated Band

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.

Type	Material	Suitable for open deck
Ball-Lok	Coated/Uncoated Stainless steel	Yes
Mini Tie-lok	Stainless steel	Yes
Tie-lok	Stainless steel	Yes
316 stainless steel band	Stainless steel	Yes
Multi lok ties	Coated/Uncoated Stainless steel	Yes
Band-it ties	Coated/Uncoated Stainless steel	Yes
Cable fixing band and clipd	Composite	Yes
Band-it ties, all purpose band	Coated/Uncoated Stainless steel	Yes
201 Stainless Steel Coated Band	Composite	Yes
GCS Coated band	Composite	Yes
AA Stainless Steel Coated Band	Composite	Yes

Issued at **Høvik** on **2025-12-18**

This Certificate is valid until **2030-12-17**.

for **DNV**

DNV local unit: **Essen**

Approval Engineer: **Qiang William Guo**

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 USD 300 000.

Name and place of manufacturer

BAND-IT Company Limited Speedwell Ind. Ets Staveley Chesterfield S43 3PF United Kingdom	BAND-IT-IDEX, Inc. 4799 Dahlia St. Denver, Colorado 80216 USA	IDEX Technology (Suzhou) Co., Ltd. No.51 TangBang Road, CaoHu Boulevard, Xiang Cheng District, Suzhou Jiangsu 215131 China
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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
Width: 4,6 or 7,9 mm
Length: 150 -1067mm

	Uncoated	Coated
Family	KE11 & KE13 (SS304) KE01 & KE03 (SS316) XE11 & XE13(SS304) XE01 & XE03 (SS316)	KE02 & KE04 (SS316) KE06 & KE08 (SS316) XE02 & XE04 (SS316) XE06 & XE08 (SS316)
Temperatur range [°C] min to max	-60°C to 300°C	-40°C to 150°C
Tensile strength for 4,6 x 0,25 mm types [N]	890N	667N
Tensile strength for 7,9 x 0,25 mm types [N]	1334N	778N

Type name: **Tie-Lok Ties**
Material: Stainless Steel, 304 (AS200 series) & 316 (AS400 series)
Thickness: 0.38 mm
Width: 6,4 mm
Length: 254 – 889 mm

	Uncoated	Coated
Family	AS200 (SS304) AS400 (SS316)	-
Temperatur range [°C] min to max	-60°C to 300°C	-
Tensile strength for 6,4 x 0,38 mm types [N]	1112N	-

Type name: **Mini Tie-Lok Ties**
Material: Stainless Steel 304 or 316
Thickness: 0.38 mm
Width: 4,5 mm
Length: 165 -737mm

	Uncoated	Coated
Family	AS200 (SS304) AS400 (SS316)	-
Temperature range [°C] min to max	-60°C to 300°C	-
Tensile strength for 4,5 x 0,38 mm types [N]	444N	-

Type name: **316 Stainless Steel Band**, (C44 family with uncoated AE45 Clip)
Material: 316 Stainless Steel
Thickness: 0,38mm
Width: 6,4 – 19,1 mm
Length: 25 m

	Uncoated	Coated
Family	C44 and AE44	-
Temperatur range [°C] min to max	-60°C to 300°C	-
Tensile strength for 6,4 x 0,38 mm types [N]	1779N	-
Tensile strength for 9,6 x 0,38 mm types [N]	3336N	-
Tensile strength for 12,7 x 0,38 mm types [N]	5337N	-
Tensile strength for 15,8 x 0,38 mm types [N]	6672N	-
Tensile strength for 19,1 x 0,38 mm types [N]	8006N	-

Type name: **Multi-Lok Ties**

Material: Stainless Steel 316 covered with RILSON ESY (NYLON 11)
Thickness: 0.265 mm
Width: 7 or 12 mm
Length: 150 -610 mm

	Uncoated	Coated
Family	AE60 & AE70	AE61 & AE71
Temperatur range [°C] min to max	-60°C to 300°C	-40°C to 150°C
Tensile strength for 7 x 0,28 mm types [N]	250lbs	1112N
Tensile strength for 12 x 0,28 mm types [N]	415lbs	1846N

Type name: **Band-It Ties**
Material: Stainless Steel, 316 coated with PPA 571 or NYLON 11
Thickness: 0.4 mm
Width: 6,4 or 9,5 mm
Length: 150 -914mm

	Uncoated	Coated
Family	AE10 & AE30	AE11 & AE31
Temperatur range [°C] min to max	-60°C to 300°C	-40°C to 150°C
Tensile strength for 6,3 x 0,4 mm types [N]	333N/1334N double	333N/1334N double
Tensile strength for 9,5 x 0,4 mm types [N]	444N/2224N double	444N/2224N double

Type name: **Cable fixing band and clips**, AE43 family (with AE45 or LE15 clip)
Material: Stainless Steel, 316 coated with Plascoat PPA 571
Thickness: 0.4 mm (1,22mm coated)
Width: 6,4 to 19,1 mm
Length: 25m

	Uncoated	Coated
Family	-	AE43
Temperatur range [°C] min to max	-	-40°C to 150°C
Tensile strength for 6,4 x 1,22 mm types [N]	-	1490N
Tensile strength for 9,6 x 1,22 mm types [N]	-	2246N
Tensile strength for 12,7 x 1,22 mm types [N]	-	2980N
Tensile strength for 15,8 x 1,22 mm types [N]	-	3736N
Tensile strength for 19,1 x 1,22 mm types [N]	-	4448N

Type name: **Band-it AA stainless steel band** (AE98 family with uncoated AE45 Clip)
Material: AA Stainless Steel, coated with Plascoat PPA 571
Thickness: 0.3 mm (1,12mm coated)
Width: 12.75 mm
Length: 25m

	Uncoated	Coated
Family	-	AE98
Temperatur range [°C] min to max	-	-40°C to 150°C
Tensile strength for 12,7 x 1,22 mm types [N]	-	1334N

Type name: **201 Stainless Steel Coated Band** (AE93 family with AE45 Clip)
Material: 201 Stainless Steel, coated with Plascoat PPA 571
Thickness: 0.39 mm (1,22mm coated)
Width: 9,6 to 19,1 mm
Length: 25m

	Uncoated	Coated
Family	-	AE93
Temperatur range [°C] min to max	-	-40°C to 150°C
Tensile strength [N]	-	1334N

Type name: **BAND-IT Ties All purpose Band**
Material: Galvanised Carbon Steel, Stainless Steel 316 or Copper (pre-punched holes 5Ø, 7Ø, 8Ø)
Uncoated or coated with PPA 571
Thickness: 0.73 mm (1,40 mm coated)
Width: 12, 17 and 26 mm
Length: 10m or 25 m

	Uncoated	Coated
Family	AE40 (SS316)	AE46 (SS316)

	AE50 (GCS) AE80 (Copper)	AE56 (GCS)
Temperature range [°C] min to max	-60°C to 300°C	-40°C to 150°C

Type name: **Band-it Galvanised Carbon Steel band** (AE53 family with uncoated AE45 Clip)
Material: Galvanised Carbon Steel, coated with Plascoat PPA 571
Thickness: 0.73 mm
Width: 12, 17 and 26 mm
Length: 25m

	Uncoated	Coated
Family	-	AE53
Temperature range [°C] min to max	-	-40°C to 150°C
Tensile strength for 16 x 0,51 mm types [N]	-	1334N

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

Tests carried out

Vibration, Flammability and Corrosion protection. Holding power.

Marking of product

According to product description – Manufacturing place

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 shall 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