

CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

23-2362278-PDA 01-Mar-2023 29-Feb-2028 Houston ESD - Piping

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

NIEDAX GMBH & CO. KG

located at

ASBACHER STR. 141, , D-53545 LINZ AM RHEIN, Germany

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Cable Supports

Model: KLMUX 40, KLMUL 40, KLMUL(X) 40, KLMULL(X) 40, KLMZL(X) 40, KLMZLL(X) 40, RSX 60, RSX

85, RSX 110, RLX 60, RLX 85, RLX 110, RLUX 60, RLUX 85, RLUX 110, RSUX 60, RSUX 85, RSUX

110, ...

Endorsements:

Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 29/Feb/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

John Vincent Ulep John Vincent Bog-Acon Ulep, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

NIEDAX GMBH & CO. KG

ASBACHER STR. 141

D-53545 LINZ AM RHEIN

Germany

Telephone: -49-26445606-0 Fax: -49-26445606-13 Email: info@niedax.de Web: www.niedax.de Tier: 2 - PDA Issued

Product: Cable Supports

Model: KLMUX 40, KLMUL 40, KLMUL(X) 40, KLMULL(X) 40, KLMZL(X) 40, KLMZLL(X)

40, RSX 60, RSX 85, RSX 110, RLX 60, RLX 85, RLX 110, RLUX 60, RLUX 85, RLUX 110,

RSUX 60, RSUX 85, RSUX 110, GRSX 60, GRSX 110

Endorsements:

Intended Service:

Support of electric cable installations for marine and offshore applications.

Description:

Cable ladder series KLMUX 40, KLMUL 40, KLMUL(X) 40 and KLMULL(X) 40,

Cable ladder series KLMZL(X) 40 and KLMZLL(X) 40,

Cable tray series RSX 60, 85 and 110, Cable tray series RLX 60, 85 and 110,

Cable tray series RLUX 60, 85 and 110,

Cable tray series RSUX 60, 85 and 110,

Wire mesh cable tray series GRSX 60 and GRSX 110.

All made of electro galvanized, pre-galvanized, hot dip galvanized (F), stainless steel 1.4301 (E3) or stainless steel 1.4571 (E5) materials with relevant assembly and mounting accessories. X in model designation signifies types with UL/CSA approbation.

Rating:

KLMUX 40, KLMUL 40: depth 40 mm; width 100 mm through 1000 mm.

KLMUL(X) 40, KLMULL(X) 40: depth 40 mm, width 100 mm through 1000 mm.

KLMZL(X) 40, KLMZLL(X) 40: depth 40 mm, width 100 mm through 600 mm.

RLX 60/85/110: depth 60 mm/ 85 mm/ 110 mm, width 100 mm through 600 mm; RLUX 60/85/110: depth 60 mm/ 85 mm/ 110 mm, width 100 mm through 600 mm;

RSUX 60/85/110: depth 60 mm/ 85 mm/ 110 mm, width 100 mm through 600 mm;

RSX 60/85/110: depth 60 mm/ 85 mm/ 110 mm, width 100 mm through 600 mm;

GRSX 60/110: depth 60 mm/ 110 mm, width 100 mm through 600 mm.

Rated Load: 58.5 kg/m to 374 kg/m Support spacing: 1.5 m to 3 m

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

- Each specific application is to be approved in conjunction with the particular cable installation system.
- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. Declaration of Conformity Niedax 30, -, Revision: -, Pages: -

Drawing No. ATL APL E233344 499956001, Procedure and Report Material- ATL APL E233344 499956001, Revision: -, Pages: -

Drawing No. ATL APL E233344 499956001 Ergaenzung Kabelleiter Okt 2015, Procedure and Report Material- ATL APL E233344 499956001 Complement- Cable Ladder Oct 2015, Revision: -, Pages: -

Drawing No. GRSX 110 100 - GRSX 110 600, Mesh Wire Cable Tray- GRSX 110 100 - GRSX 110 600,

Revision: -, Pages: -

Drawing No. GRSX 60 100 - GRSX 60 600, Mesh Wire Cable Tray- GRSX 60 100 - GRSX 60 600, Revision: -,

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Drawing No. KLMUL 40 100 - KLMUL 40 1000 NX01019, Cable Ladder- KLMUL 40 100 - KLMUL 40 1000 NX01019, Revision: -, Pages:

Drawing No. KLMUL 40 XXX und KLMULL 40 XXX rung spacing 250mm, Cable Ladder- KLMUL 40 XXX und KLMULL 40 XXX rung spacing 250mm, Revision: -, Pages: -

Drawing No. KLMUL 40 XXX und KLMULL 40 XXX rung spacing 300mm, Cable Ladder- KLMUL 40 XXX und KLMULL 40 XXX rung spacing 300mm, Revision: -, Pages: -

Drawing No. KLMULX 40 100 - KLMULX 40 1000, Cable Ladder- KLMULX 40 100 - KLMULX 40 1000, Revision: -, Pages: -

Drawing No. KLMUX 40 100 - KLMU 40 1000 SX07247, Cable Ladder- KLMUX 40 100 - KLMU 40 1000_SX07247, Revision: -, Pages: -

Drawing No. KLMUX 40 100 - KLMUX 40 1000, Cable Ladder- KLMUX 40 100 - KLMUX 40 1000, Revision: -,

Drawing No. KLMZL 40, KLMZL 40, Revision: -, Pages: -

Drawing No. KLMZL 40 Serie, Cable Ladder with Z-Runge- KLMZL 40 Serie, Revision: -, Pages: -

Drawing No. KLMZL 40 XXX und KLMZLL 40 XXX rung spacing 250mm, Cable Ladder with Z-Runge- KLMZL 40 XXX und KLMZLL 40 XXX rung spacing 250mm, Revision: -, Pages: -

Drawing No. KLMZL 40 XXX und KLMZLL 40 XXX rung spacing 300mm, Cable Ladder with Z-Runge- KLMZL

40 XXX und KLMZLL 40 XXX rung spacing 300mm, Revision: -, Pages: - Drawing No. RLUX 110_100 - RLUX 110_600, Cable Tray- RLUX 110_100 - RLUX 110_600, Revision: -, Pages: -

Drawing No. RLUX 60_100 - RLUX 60_600, Cable Tray- RLUX 60_100 - RLUX 60_600, Revision: -, Pages: -

Drawing No. RLUX 85_100 - RLUX 85_600, Cable Tray- RLUX 85_100 - RLUX 85_600, Revision: -, Pages: -

Drawing No. RLX 110_100 - RLX 110_600, Cable Tray- RLX 110_100 - RLX 110_600, Revision: -, Pages: -

Drawing No. RLX 60 100 - RLX 60 600, Cable Tray- RLX 60 100 - RLX 60 600, Revision: -, Pages: Drawing No. RLX 65 100 - RLX 65 600, Cable Tray- RLX 85 100 - RLX 85 600, Revision: -, Pages: Drawing No. RSUX 110 100 - RSUX 110 600, Cable Tray- RSUX 110 100 - RSUX 110 600, Revision: -, Pages: Drawing No. RSUX 60 100 - RSUX 60 600, Cable Tray- RSUX 60 100 - RSUX 60 600, Revision: -, Pages: Drawing No. RSUX 85 100 - RSUX 85-600, Cable Tray- RSUX 85 100 - RSUX 85-600, Revision: -, Pages: -

Drawing No. RSX 110 100 - RSX 110 600, Cable Tray- RSX 110 100 - RSX 110 600, Revision: -, Pages: -

Drawing No. RSX 60 100 - RSX 60 600, Cable Tray-RSX 60 100 - RSX 60 600, Revision: -, Pages: -

Drawing No. RSX 85 100 - RSX 85 600, Cable Tray- RSX 85 100 - RSX 85 600, Revision: -, Pages: -

Terms of Validity:

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STANDARDS

ABS Rules:

2023 Rules for Conditions of Classification, Part I - 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2023 Rules for Building and Classing Marine Vessels 4-8-4/21.9.1

2023 Rules for Conditions of Classification, Offshore Units and Structures, 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers

Electronically published by ABS Houston. Reference T2362278, dated 01-MAR-2023.

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the following:

2023 Rules for Building and Classing Mobile Offshore Units 4-3-3/5.9.1, 7-1-5/5.9.1b.

National:

2023 NEC/NFPA 70, Art. 392; CAN/CSA-C22.2 No. 126.1-09.

International:

IEC 61537 (Edition 2023)

Government:

NA

EUMED:

NA

OTHERS:

NA