



EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

In accordance with Article 10.1 of EU Regulation 391/2009

Certificate No:
MRE000000E
Revision No:
4

This Certificate is issued to

BAKS Wytwarzanie Osprzetu Instalacyjno – Elektrotechnicznego
Kazimierz Sielski
Karczew, Poland

for

Cable Trays and Ducts (Metallic)

with type designation(s)

Cable Ladder

The product is found to comply with

EU RO Mutual Recognition Technical Requirements for Cable Trays and Ducts (Metallic)

Intended service

Cable trays and ducts intended to be used in ship's cabling systems necessary for the applications mentioned in 1.b in the TA program.

This is to certify:

that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

This Certificate is valid until **2028-03-12**.

Issued at **Høvik** on **2025-08-28**

DNV local unit: **Gdansk CMC**

Approval Engineer: **Ivar Bull**



for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

Frederik Tore Elter
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.

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.

Product description

Type Designation	DOPZ; DOPZE
Application	Cable ladder for both indoor and outdoor installation.
Material	Hot-Dip Galvanized Steel with or without additional marine paint, Stainless Steel ASI304 304L, 316, 316 L, 316Ti or Stainless Steel acc to AISI and PN-EN ISO 10088
Flame Propagation	Non-flame propagation
Electrical Continuity	With electrical continuity characteristics
Electrical Conductivity	Electrical Conductivity
Temperature	Min. : -105 °C Max. : 90 °C
Impact Resistance	20 J

Product symbol	Width (mm)	Material thickness (mm)	Safe Working Load (kg / m)	Length (mm)
DOPZ100H30/3	100	5 ± 0.2 mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOPZ150H30/3	150	5 ± 0.2 mm		Max. 6000
DOPZ200H30/3	200	5 ± 0.2 mm		Max. 6000
DOPZ250H30/3	250	5 ± 0.2 mm		Max. 6000
DOPZ300H30/3	300	5 ± 0.2 mm		Max. 6000
DOPZ350H30/3	350	5 ± 0.2 mm		Max. 6000

Product symbol	Width (mm)	Material thickness (mm)	Safe Working Load (kg / m)	Length (mm)
DOPZE100H30/3	100	4 ± 0.2 mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOPZE150H30/3	150	4 ± 0.2 mm		Max. 6000
DOPZE200H30/3	200	4 ± 0.2 mm		Max. 6000
DOPZE250H30/3	250	4 ± 0.2 mm		Max. 6000
DOPZE300H30/3	300	4 ± 0.2 mm		Max. 6000
DOPZE350H30/3	350	4 ± 0.2 mm		Max. 6000

Type Designation	DOZ; DOZE, DOTT, DOTE
Application	Cable ladder for both indoor and outdoor installation.
Material	Hot-Dip Galvanized steel with or without additional marine paint, Stainless Steel ASI304 304L, 316, 316 L, 316Ti or Stainless Steel acc to AISI and PN-EN ISO 10088
Flame Propagation	Non-flame propagation
Electrical Continuity	With electrical continuity characteristics
Electrical Conductivity	Electrical Conductivity
Temperature	Min. : -105 °C Max. : 90 °C
Impact Resistance	20 J

Total width (mm)	Width (mm)	Material thickness (mm)	Safe Working Load (Kg / m)	Length (mm)
DOZ100H30/3	100	5 ± 0.2 mm, 3 ± 0.2 mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOZ150H30/3	150	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ200H30/3	200	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ250H30/3	250	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ300H30/3	300	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ350H30/3	350	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ400H30/3	400	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ500H30/3	500	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ600H30/3	600	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ700H30/3	700	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ800H30/3	800	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ900H30/3	900	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000
DOZ1000H30/3	1000	5 ± 0.2 mm, 3 ± 0.2 mm		Max. 6000

Total width (mm)	Width (mm)	Material thickness (mm)	Safe Working Load (Kg / m)	Length (mm)
DOZ100H35/3	100	3mm, Rung thickness 1.5mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOZ150H35/3	150	3mm, Rung thickness 1.5mm		Max. 6000
DOZ200H35/3	200	3mm, Rung thickness 1.5mm		Max. 6000
DOZ250H35/3	250	3mm, Rung thickness 1.5mm		Max. 6000
DOZ300H35/3	300	3mm, Rung thickness 1.5mm		Max. 6000
DOZ350H35/3	350	3mm, Rung thickness 1.5mm		Max. 6000
DOZ400H35/3	400	3mm, Rung thickness 1.5mm		Max. 6000
DOZ500H35/3	500	3mm, Rung thickness 1.5mm		Max. 6000
DOZ600H35/3	600	3mm, Rung thickness 1.5mm		Max. 6000
DOZ700H35/3	700	3mm, Rung thickness 1.5mm		Max. 6000
DOZ800H35/3	800	3mm, Rung thickness 1.5mm		Max. 6000
DOZ900H35/3	900	3mm, Rung thickness 1.5mm		Max. 6000
DOZ1000H35/3	1000	3mm, Rung thickness 1.5mm		Max. 6000

Total width (mm)	Width (mm)	Material thickness (mm)	Safe Working Load (Kg / m)	Length (mm)
DOZ100H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOZ150H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ200H40/3	200	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ250H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ300H40/3	300	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ350H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ400H40/3	400	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ500H40/3	500	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ600H40/3	600	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ700H40/3	700	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ800H40/3	800	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ900H40/3	900	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZ1000H40/3	1000	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000

DOZE100H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOZE150H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE200H40/3	200	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE250H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE300H40/3	300	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE350H40/3	100	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE400H40/3	400	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE500H40/3	500	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE600H40/3	600	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE700H40/3	700	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE800H40/3	800	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE900H40/3	900	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000
DOZE1000H40/3	1000	4 ± 0.2 mm, 5 ± 0.2 mm		Max. 6000

DOTT100H30/3	100	3mm, Rung thickness 1.5mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOTT150H30/3	150	3mm, Rung thickness 1.5mm		Max. 6000
DOTT200H30/3	200	3mm, Rung thickness 1.5mm		Max. 6000
DOTT250H30/3	250	3mm, Rung thickness 1.5mm		Max. 6000
DOTT300H30/3	300	3mm, Rung thickness 1.5mm		Max. 6000
DOTT350H30/3	350	3mm, Rung thickness 1.5mm		Max. 6000
DOTT400H30/3	400	3mm, Rung thickness 1.5mm		Max. 6000
DOTT500H30/3	500	3mm, Rung thickness 1.5mm		Max. 6000
DOTT600H30/3	600	3mm, Rung thickness 1.5mm		Max. 6000

DOTE100H40/3	100	4mm, Rung thickness 1.5mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOTE150H40/3	150	4mm, Rung thickness 1.5mm		Max. 6000
DOTE200H40/3	200	4mm, Rung thickness 1.5mm		Max. 6000
DOTE250H40/3	250	4mm, Rung thickness 1.5mm		Max. 6000
DOTE300H40/3	300	4mm, Rung thickness 1.5mm		Max. 6000
DOTE350H40/3	350	4mm, Rung thickness 1.5mm		Max. 6000
DOTE400H40/3	400	4mm, Rung thickness 1.5mm		Max. 6000
DOTE500H40/3	500	4mm, Rung thickness 1.5mm		Max. 6000
DOTE600H40/3	600	4mm, Rung thickness 1.5mm		Max. 6000

Type Designation	DOCZ with sides made from "C" profile and rungs type "Z"
Application	Cable ladder for both indoor and outdoor installation.
Material	Hot-Dip Galvanized steel with or without additional marine paint, Stainless Steel AISI304 304L, 316, 316 L, 316Ti or Stainless Steel acc to AISI and PN-EN ISO 10088
Flame Propagation	Non-flame propagation
Electrical Continuity	With electrical continuity characteristics
Electrical Conductivity	Electrical Conductivity
Temperature	Min. : -105 °C Max. : 90 °C
Impact Resistance	20 J

Total width (mm)	Width (mm)	Material thickness (mm)	Safe Working Load (Kg / m)	Length (mm)
DOZCP100H30/3	100	1,5 ± 0.2 mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOZCP200H30/3	200	1,5 ± 0.2 mm		Max. 6000
DOZCP300H30/3	300	1,5 ± 0.2 mm		Max. 6000
DOZCP400H30/3	400	1,5 ± 0.2 mm		Max. 6000
DOZCP500H30/3	500	1,5 ± 0.2 mm		Max. 6000
DOZCP600H30/3	600	1,5 ± 0.2 mm		Max. 6000
DOZCP700H30/3	700	1,5 ± 0.2 mm		Max. 6000
DOZCP800H30/3	800	1,5 ± 0.2 mm		Max. 6000
DOZCP900H30/3	900	1,5 ± 0.2 mm		Max. 6000
DOZCP1000H30/3	1000	1,5 ± 0.2 mm		Max. 6000

Total width (mm)	Width (mm)	Material thickness (mm)	Safe Working Load (Kg / m)	Length (mm)
DOZCP100H40/3	100	1,5 ± 0.2 mm	According to SWL diagram in manufacturer catalogue	Max. 6000
DOZCP150H40/3	150	1,5 ± 0.2 mm		Max. 6000
DOZCP200H40/3	200	1,5 ± 0.2 mm		Max. 6000
DOZCP250H40/3	250	1,5 ± 0.2 mm		Max. 6000
DOZCP300H40/3	300	1,5 ± 0.2 mm		Max. 6000
DOZCP350H40/3	350	1,5 ± 0.2 mm		Max. 6000
DOZCP400H40/3	400	1,5 ± 0.2 mm		Max. 6000
DOZCP500H40/3	500	1,5 ± 0.2 mm		Max. 6000
DOZCP600H40/3	600	1,5 ± 0.2 mm		Max. 6000
DOZCP700H40/3	700	1,5 ± 0.2 mm		Max. 6000
DOZCP800H40/3	800	1,5 ± 0.2 mm		Max. 6000
DOZCP900H40/3	900	1,5 ± 0.2 mm		Max. 6000
DOZCP1000H40/3	1000	1,5 ± 0.2 mm		Max. 6000

Manufactured by

BAKS - Kazimierz Sielski Profesjonalne Systemy Tras Kablowych
 Karczew, Poland

Application/Limitation

The installation is to be mechanically protected in accordance with DNV GL Rules and especially on weather decks in cargo hold areas and through cargo holds.

Cable ladders must not to be used as a walkway.

Type Approval documentation

Name	Number	Date
Manufacturer products catalogue (products data sheets)		2018-02-16
BBJ Test report	LA-17.108/1/E LA-17.108/2/E	2017-10-25 2017-10-25
BAKS Protocol of Durability Test	No. F-8.2.4-01-04/III	2018-02-12
VDE, test of electrical continuity	263213-TL6-1	2019-08-22
BBJ, Association of Polish electricians Catalogue pages received 10.06.2025	LA-19-064/E	2019-07-22
SWL test reports witnessed by DNV	F-8.2.4-01-04/III	2025-05-28
Drawings DOTE, DOTT, DOZ, DOZCP		2025-05-16

Marking of product

Manufacturer name – Type designation – Material – Width – Height.

Other Conditions

Type tests according to IEC 61537.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that design and materials used comply with type approved documents
- Ensuring traceability between manufacturer’s product type marking and the type approval certificate

Periodical assessment is to be performed annually and at renewal of this certificate.

Generic Statement for EU RO MR Type Approval Certificate

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).

END OF CERTIFICATE