DNV·GL

Certificate No:
**TAE000041D**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**That the Electric Power Cable**

with type designation(s)
**MOR Polyrad XT-125, Type P, C..PCBS 0,6/1 kV,**
**MOR Polyrad XT-125, Type P, C..PCPEBS 0,6/1 kV,**
**MOR Polyrad XT-125, Type P, C(OS)..PCBS 0,6/1 kV,**
**MOR Polyrad XT-125, Type P, C(OS)..PCPEBS 0,6/1 kV**

Issued to
**General Cable Industries, Inc.**
**WILLIMANTIC, CT, USA**

is found to comply with
**DNV GL rules for classification – Ships, offshore units, and high speed and light craft**
**IEEE 1580 (2010)**
**IEEE 45 1998**

## Application :

**General power and lighting, control.**
**Mud resistant according to NEK606.**

**Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.**

| Type | Rated voltage (kV) | Temp. class (°C) |
|---|---|---|
| MOR Polyrad XT-125, Type P, C..PCBS 0,6/1 kV | 0,6/1 | 95 |
| MOR Polyrad XT-125, Type P, C..PCPEBS 0,6/1 kV | 0,6/1 | 95 |
| MOR Polyrad XT-125, Type P, C(OS)..PCBS 0,6/1 kV | 0,6/1 | 95 |
| MOR Polyrad XT-125, Type P, C(OS)..PCPEBS 0,6/1 kV | 0,6/1 | 95 |

Issued at **Høvik** on **2020-09-11**
This Certificate is valid until **2024-06-29**.
DNV GL local station: **New York**

for **DNV GL**

Approval Engineer: **Ivar Bull**

**Marta Alonso Pontes**
**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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



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Job Id: **262.1-004504-6**
Certificate No: **TAE000041D**

## Product description

Type: MOR Polyrad XT-125, Type P, C..PCBS 0,6/1 kV,
MOR Polyrad XT-125, Type P, C..PCPEBS 0,6/1 kV,
MOR Polyrad XT-125, Type P, C(OS)..PCBS 0,6/1 kV,
MOR Polyrad XT-125, Type P, C(OS)..PCPEBS 0,6/1 kV

Conductors: Tinned stranded copper
Insulation: XLPO (Cross-linked Polyethylene) (Type P)
Filler: Flame Retardant, Non-hygroscopic Polypropylene (as needed)
Screen: Aluminium/Mylar tape w/ tinned copper drain wire or a tinned Copper wire braid. (O/S only)
Inner Sheath: Chlorosulphonated Polyethylene (Type CP) or Thermoset chlorinated polyethylene (Type CPE)
Metal covering: Bronze or Aluminium wire braid
Outer Sheath: Chlorosulphonated Polyethylene (Type CP) or Thermoset chlorinated polyethylene (Type CPE)

| Number of cores x conductor cross- section | |
|---|---|
| mm² | AWG/ MCM |
| 2 x 0,96 | 18 |
| 3 x 0,96 | 18 |
| 4 x 0,96 | 18 |
| 5 x 0,96 | 18 |
| 6 x 0,96 | 18 |
| 7 x 0,96 | 18 |
| 10 x 0,96 | 18 |
| 12 x 0,96 | 18 |
| 16 x 0,96 | 18 |
| 20 x 0,96 | 18 |
| 37 x 0,96 | 18 |
| 44 x 0,96 | 18 |
| 45 x 0,96 | 18 |
| 60 x 0,96 | 18 |
| 61 x 0,96 | 18 |
| 91 x 0,96 | 18 |
| | |
| 2 x 1,31 | 16 |
| 3 x 1,31 | 16 |
| 4 x 1,31 | 16 |
| 5 x 1,31 | 16 |
| 6 x 1,31 | 16 |
| 7 x 1,31 | 16 |
| 8 x 1,31 | 16 |
| 10 x 1,31 | 16 |
| 12 x 1,31 | 16 |
| 14 x 1,31 | 16 |
| 20 x 1,31 | 16 |
| 24 x 1,31 | 16 |
| 37 x 1,31 | 16 |
| 40 x 1,31 | 16 |
| 44 x 1,31 | 16 |
| 60 x 1,31 | 16 |
| 91 x 1,31 | 16 |
| | |
| 2 x 1,94 | 14 |

| Number of cores x conductor cross- section | |
|---|---|
| mm² | AWG/ MCM |
| 3 x 1,94 | 14 |
| 4 x 1,94 | 14 |
| 5 x 1,94 | 14 |
| 6 x 1,94 | 14 |
| 7 x 1,94 | 14 |
| 8 x 1,94 | 14 |
| 10 x 1,94 | 14 |
| 12 x 1,94 | 14 |
| 14 x 1,94 | 14 |
| 19 x 1,94 | 14 |
| 20 x 1,94 | 14 |
| 24 x 1,94 | 14 |
| 30 x 1,94 | 14 |
| 37 x 1,94 | 14 |
| 40 x 1,94 | 14 |
| 44 x 1,94 | 14 |
| 60 x 1,94 | 14 |
| 91 x 1,94 | 14 |
| | |
| 2 x 3,08 | 12 |
| 3 x 3,08 | 12 |
| 4 x 3,08 | 12 |
| 5 x 3,08 | 12 |
| 6 x 3,08 | 12 |
| 7 x 3,08 | 12 |
| 8 x 3,08 | 12 |
| 10 x 3,08 | 12 |
| 12 x 3,08 | 12 |
| 14 x 3,08 | 12 |
| 19 x 3,08 | 12 |
| 20 x 3,08 | 12 |
| 37 x 3,08 | 12 |
| 40 x 3,08 | 12 |
| 60 x 3,08 | 12 |
| | |
| 2 x 5,52 | 10 |

| Number of cores x conductor cross- section | |
|---|---|
| mm² | AWG/ MCM |
| 3 x 5,52 | 10 |
| 4 x 5,52 | 10 |
| 5 x 5,52 | 10 |
| 6 x 5,52 | 10 |
| 7 x 5,52 | 10 |
| 8 x 5,52 | 10 |
| 9 x 5,52 | 10 |
| 10 x 5,52 | 10 |
| 12 x 5,52 | 10 |
| 20 x 5,52 | 10 |
| 37 x 5,52 | 10 |
| | |
| 3 x 0,62 | 20 |
| 4 x 0,62 | 20 |
| 5 x 0,62 | 20 |
| 6 x 0,62 | 20 |
| | |
| 3 x 0,96 | 18 |
| 4 x 0,96 | 18 |
| 6 x 0,96 | 18 |
| 7 x 0,96 | 18 |
| 12 x 0,96 | 18 |
| 20 x 0,96 | 18 |
| 25 x 0,96 | 18 |
| 3 x 1,22 | 16 |
| 4 x 1,22 | 16 |
| 12 x 1,22 | 16 |
| 15 x 1,22 | 16 |
| | |
| 2 x 1,94 | 14 |
| 3 x 1,94 | 14 |
| 5 x 1,94 | 14 |
| 6 x 1,94 | 14 |
| 7 x 1,94 | 14 |
| 14 x 1,94 | 14 |
| 19 x 1,94 | 14 |

| Number of cores x conductor cross- section | |
|---|---|
| $mm^2$ | AWG/ MCM |
| 30 x 1,94 | 14 |
| 44 x 1,94 | 14 |

| Number of cores x conductor cross- section | |
|---|---|
| $mm^2$ | AWG/ MCM |
| 60 x 1,94 | 14 |
| 91 x 1,94 | 14 |

| Number of cores x conductor cross- section | |
|---|---|
| $mm^2$ | AWG/ MCM |
| | |
| 4 x 5,52 | 10 |

## Application/Limitation

The requirements of SOLAS Amendments 1981 Chapter II-1, Part D, Reg. 45, 5.2 (provision to be taken to limit Fire Propagation along Bunches of Cables or Wires) are fulfilled without any additional measures.

## Type Approval documentation

## Tests carried out

Type tests according to IEEE 45, IEEE 1580 and IEC 60332-3 cat. A

## Marking of product

MOR Polyrad XT-125, Type P, C..PCBS 0,6/1 kV – IEC 60332-3-22 - Lot No or
MOR Polyrad XT-125, Type P, C..PCPEBS 0,6/1 kV – IEC 60332-3-22 - Lot No or
MOR Polyrad XT-125, Type P, C(OS)..PCBS 0,6/1 kV – IEC 60332-3-22 - Lot No or
MOR Polyrad XT-125, Type P, C(OS)..PCPEBS 0,6/1 kV – IEC 60332-3-22 - Lot No

## 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) and selected type tests (ref. to applicable class programs) checked (if not available these tests 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