

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Termination and Joint for Cable

with type designation(s)
MONOe and MONOi

Issued to

NEXANS network solutions NV
Erembodegem, Belgium

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

Issued at **Høvik** on **2019-07-09**

for **DNV GL**

This Certificate is valid until **2024-07-08**.

DNV GL local station: **Antwerp**

Approval Engineer: **Nicolay Horn**

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Trond Sjøvåg
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.



Name and place of manufacturer

Nexans Italy
 Offida
 ITALY

Product description

Medium Voltage Indoor and Outdoor Termination kit FOR 11 (12) kV, 15 (17.5) kV, 22 (24) kV & 33 (36) kV. Type: MONOe & MONOi

MONOe Outdoor Terminations for 1C cable

Termination type	Voltage Um (kV)	Application range (mm ²)	L (mm)
3x12 MONO e1.95	12	25 - 95	400
3x12 MONO e1.240	12	70 - 240	400
3x12 MONO e1.400	12	185 - 400	420
3x12 MONO e1.630	12	400 - 630	460
3x24 MONO e1.95	24	25 - 95	420
3x24 MONO e1.240	24	70 - 240	440
3x24 MONO e1.400	24	185 - 400	510
3x24 MONO e1.630	24	400 - 630	540
3x36 MONO e1.95	36	25 - 95	480
3x36 MONO e1.240	36	70 - 240	480
3x36 MONO e1.400	36	185 - 400	520
3x36 MONO e1.630	36	400 - 630	560

MONOe Outdoor Terminations for 3C cable

Termination type	Voltage Um (kV)	Application range (mm ²)	L (mm)
3x12 MONO e3.95W	12	25 - 95	700
3x12 MONO e3.240W	12	70 - 240	700
3x12 MONO e3.300W	12	120 - 300	700
3x12 MONO e3.500W	12	300 - 500	700
3x24 MONO e3.95W	24	25 - 95	800
3x24 MONO e3.240W	24	70 - 240	800
3x24 MONO e3.400W	24	185 - 400	800
3x24 MONO e3.95W	24	25 - 95	1200
3x36 MONO e3.240W	36	70 - 240	1200
3x36 MONO e3.400W	36	185 - 400	1200

MONOi Indoor Terminations

Termination type	Voltage Um (kV)	Application range (mm ²)	L (mm)
3x12 MONO i1.95	12	25 - 95	270
3x12 MONO i1.240	12	70 - 240	270
3x12 MONO i1.400	12	185 - 400	300
3x12 MONO i1.630	12	400 - 630	320
3x24 MONO i1.95	24	25 - 95	330
3x24 MONO i1.240	24	70 - 240	330
3x24 MONO i1.400	24	185 - 400	360
3x24 MONO i1.630	24	400 - 630	380
3x36 MONO i1.95	36	25 - 95	420

Termination type	Voltage Um (kV)	Application range (mm ²)	L (mm)
3x36 MONO i1.240	36	70 - 240	420
3x36 MONO i1.400	36	185 -400	450
3x36 MONO i1.630	36	400 -630	407

MONOe Indoor Terminations for 3C cable

Termination type	Voltage Um (kV)	Application range (mm ²)	L (mm)
3x12 MONO i3.95W	12	25 - 95	600
3x12 MONO i3.240W	12	70 - 240	600
3x12 MONO i3.300W	12	120 - 300	600
3x12 MONO i3.500W	12	300 - 500	600
3x24 MONO i3.95W	24	25 - 95	700
3x24 MONO i3.240W	24	70 - 240	700
3x24 MONO i3.400W	24	185 - 400	700
3x24 MONO i3.95W	24	25 - 95	1000
3x36 MONO i3.240W	36	70 - 240	1000
3x36 MONO i3.400W	36	185 - 400	1000

Application/Limitation

Installation has to be done in accordance with the installation instructions.
Use in net with voltages above 15 (17.5) kV to be accepted case by case.

Type Approval documentation

Technical info:

Heat Shrinkable Outdoor Termination for Single Core Polymeric Cables with Cu wire or Tape Screen and Heat Shrinkable indoor Termination for Single Core Polymeric Cables with Cu wire or Tape Screen, datasheet from Nexans.

Test reports:

KEMA Type Test Certificate of Complete Type Test no. 1320 & 1321-15 dated 2015-12-02, IPH Type Test Report nos. 06448-17-0526 & 06448-17-0631 dated 2017- 12-15. RWE test report no. 14_379-2 dated 2015-10-22.

Tests carried out

Tested according to CENELEC HD 629.1 S2:2006.

Marking of product

Nexans – Factory Identification – Product Description– Voltage class.

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 to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance



Job Id: **262.1-028514-1**
Certificate No: **TAE000039J**

- 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