

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Electric Power Cable**

with type designation(s)

TP()(IS-OS)PCPE, TT()(IS-OS)PCPE, C()(OS)PCPE, C()(OBS)PCPE

Issued to

**AMERCABLE INCORPORATED dba Nexans AmerCable
Houston, TX, USA**

is found to comply with

DNV GL 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 GL.**

Type	Rated voltage (kV)	Temp. class (°C)
TP()(IS-OS)PCPE	0,6/1	95
TT()(IS-OS)PCPE	0,6/1	95
C()(OS)PCPE	0,6/1	95
C()(OBS)PCPE	0,6/1	95

Issued at **Hamburg** on **2019-11-01**This Certificate is valid until **2024-10-31**.for **DNV GL**DNV GL local station: **Houston**Approval Engineer: **Carsten Hunsalz**

Arne Schaarmann
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.



Job Id: **262.1-019612-4**
Certificate No: **TAE00003SB**

Product description

Type: TP()(IS-OS)PCPE, TT()(IS-OS)PCPE, C()(OS)PCPE, C()(OBS)PCPE 0,6/1 kV

Construction:

Conductor: Tinned stranded copper

Insulation: P95, cross-linked polyolefin (Type P)

Screen: Poly/Aluminium tape w/drain wire or Copper wire braid

Inner Sheath: CPE

Number of cores x conductor cross-section		Overall diameter		Part Number
mm2	AWG	mm	inches	37-102- XXX
Individual Screen				
1 pair 0,97	18	9,96	0,392	-601
2 pair 0,97	18	14,00	0,551	-602
3 pair 0,97	18	14,76	0,581	-603
4 pair 0,97	18	16,00	0,630	-604
5 pair 0,97	18	17,40	0,685	-605
7 pair 0,97	18	18,85	0,742	-606
8 pair 0,97	18	20,32	0,800	-607
10 pair 0,97	18	23,70	0,933	-608
12 pair 0,97	18	24,43	0,962	-609
14 pair 1,00	18	39,83	1,568	-655
16 pair 0,97	18	27,08	1,066	-645
18 pair 0,97	18	28,52	1,123	-641
24 pair 0,97	18	33,38	1,314	-646
1 pair 1,32	16	10,46	0,412	-610
2 pair 1,32	16	14,86	0,585	-611
3 pair 1,32	16	15,67	0,617	-612
4 pair 1,32	16	17,04	0,671	-613
5 pair 1,32	16	18,54	0,730	-614
7 pair 1,32	16	20,12	0,792	-615
8 pair 1,32	16	21,74	0,856	-616
10 pair 1,32	16	25,40	1,000	-617
12 pair 1,32	16	26,21	1,032	-618
16 pair 1,32	16	29,08	1,145	-619
18 pair 1,32	16	30,66	1,207	-626
20 pair 1,32	16	33,71	1,327	-688
24 pair 1,32	16	35,94	1,415	-699
1 pair 2,08	14	10,36	0,408	-620
2 pair 2,08	14	15,27	0,601	-621
3 pair 2,08	14	16,18	0,637	-622
4 pair 2,08	14	17,73	0,698	-623
5 pair 2,08	14	19,41	0,764	-624
7 pair 2,08	14	22,25	0,876	-625
8 pair 2,08	14	24,05	0,947	-629
10 pair 2,08	14	28,17	1,109	-627
12 pair 2,08	14	29,08	1,145	-628

Number of cores x conductor cross-section		Overall diameter		Part Number
mm2	AWG	mm	inches	37-102- XXX
1 triad 0,97	18	9,65	0,380	-647
2 triads 0,97	18	15,85	0,624	-681
3 triads 0,97	18	16,81	0,662	-648
4 triads 0,97	18	18,44	0,726	-682
5 triads 0,97	18	20,22	0,796	-649
7 triads 0,97	18	23,14	0,911	-650
8 triads 0,97	18	25,02	0,985	-683
12 triads 0,97	18	30,30	1,193	-640
1 triad 1,32	16	10,21	0,402	-668
3 triads 1,32	16	18,01	0,709	-669
4 triads 1,32	16	19,76	0,778	-698
6 triads 1,32	16	24,77	0,975	-676
7 triads 1,32	16	24,77	0,975	-670
8 triads 1,32	16	27,64	1,088	-677
Collective Al/Mylar screen				
3 x 0,97	18	9,17	0,361	-630
4 x 0,97	18	9,91	0,390	-631
4 x 1,32	16	10,44	0,411	-632
Collective braid screen				
2 x 0,97	18	9,37	0,369	-633
4 x 0,97	18	10,54	0,415	-634
7 x 0,97	18	12,17	0,479	-635
12 x 0,97	18	15,39	0,606	-636
20 x 0,97	18	18,62	0,733	-637
2 x 2,08	14	10,59	0,417	-638
3 x 2,08	14	11,13	0,438	-639
5 x 2,08	14	12,98	0,511	-708
7 x 2,08	14	14,00	0,551	-709
14 x 2,08	14	18,80	0,740	-642
19 x 2,08	14	21,82	0,859	-643
30 x 2,08	14	26,62	1,048	-644
4 pair 2,08 + 30 x 3,29	14			
	12	44,70	1,760	-658
4 x 7,58 + 3 Pair 2,08+ 2 Triad 2,08+ 26 x 2,08	8 14 14 14	41,66	1,640	-001A

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Number of cores x conductor cross-section		Overall diameter		Part Number
mm2	AWG	mm	inches	37-102- XXX
4 x 7,58 + 3 Pair 2,08+ 2 x 18,6 + 26 x 2,08	8 14 5 14	41,66	1,640	-001

Application/Limitation

Instrumentation and communication.

The cable may be installed and sized according to IEC 60092-352, except for the 2 conditions listed below.

1. Cables with flexible rope stranded conductors are to be installed on continuous cable trays and, if horizontal, on the top of the tray giving support of the complete cable. Cables intended for flexing service may be installed on festooned systems or articulating cableways.
2. Cable ends with flexible rope stranded conductors are to be terminated using approved pressurized terminals suitable for these conductors.

Type Approval documentation

Tests carried out

Type tests according to IEEE1580-2010

Marking of product

AMERCABLE - TP()(IS-OS)PCPE or TT()(IS-OS)PCPE or C()(OS)PCPE or C()(OBS)PCPE - Size - 0,6/1 kV

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
- 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