

TYPE APPROVAL CERTIFICATE

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

with type designation(s)

SPCPEBS(HD), SPCPEBS, DPCPEBS, TPCPEBS, FPCPEBS, QPCPEBS and C()PCPEBS

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)
SPCPEBS(HD), SPCPEBS DPCPEBS, TPCPEBS, FPCPEBS, QPCPEBS and C()PCPEBS	2 0,6/1	95 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: **262.1-019612-2**
Certificate No: **TAE00003SD**

Product description

SPCPEBS(HD) 2 kV, SPCPEBS 2 kV, DPCPEBS, TPCPEBS, QPCPEBS and C()PCPEBS 0,6/1 kV

Construction:

Conductor: Tinned stranded copper
Insulation: P95, cross-linked polyolefin (Type P)
Inner Sheath: Tape (single conductor), CPE
Metal covering: Copper or Bronze or Aluminum wire braid
Outer sheath: CPE

Number of cores x conductor cross-section		Overall diameter		Part Number
mm2	AWG	mm	inches	37-102-XXX
2 kV				
1 x 0,97	18	8,23	0,324	-101YY
1 x 1,32	16	8,48	0,334	-102YY
1 x 2,08	14	8,86	0,349	-105YY
1 x 3,29	12	9,35	0,368	-106YY
1 x 5,53	10	9,86	0,388	-108YY
1 x 7,58	8	11,07	0,436	-109YY
1 x 12,5	6	12,09	0,476	-110YY
1 x 21,5	4	14,17	0,558	-112YY
1 x 30,7	2	15,85	0,624	-114YY
1 x 46,1	1	16,89	0,665	-115YY
1 x 56,3	1/0	18,52	0,729	-116YY
1 x 66,5	2/0	20,22	0,796	-117YY
1 x 92,1	3/0	22,50	0,886	-118YY

Number of cores x conductor cross-section		Overall diameter		Part Number
mm2	AWG	mm	inches	37-102-XXX
(HD)2 kV				
1 x 112,6	4/0	24,18	0,952	-119YY
1 x 133,1	262	28,22	1,111	-120YY
1 x 158,7	313	29,90	1,177	-121YY
1 x 189,4	373	31,52	1,241	-122YY
1 x 225,2	444	33,45	1,317	-123YY
1 x 271,3	535	36,45	1,435	-124YY
1 x 300		37,72	1,485	-543YY
1 x 327,6	646	38,68	1,523	-126YY
1 x 394,2	777	41,10	1,618	-127YY
1 x 563,1	1111	49,23	1,938	-129YY

Number of cores x conductor cross-section		Overall diameter		Part Number
mm2	AWG	mm	inches	37-102-XXX
0,6/1 kV				
2 x 0,97	18	13,08	0,515	-550YY
2 x 1,32	16	14,07	0,554	-501YY
2 x 2,08	14	14,83	0,584	-507YY
2 x 3,29	12	15,80	0,622	-515YY
2 x 5,53	10	16,81	0,662	-553YY
2 x 7,58	8	19,84	0,781	-209YY
2 x 12,5	6	22,94	0,903	-210YY
2 x 16		24,89	0,980	-541YY
2 x 21,5	4	28,19	1,110	-594YY
2 x 56,3	1/0	36,75	1,447	-216YY
2 x 92,1	3/0	41,91	1,650	-218YY
2 x 112,6	4/0	46,94	1,848	-219YY
3 x 0,97	18	13,51	0,532	-556YY
3 x 1,32	16	14,55	0,573	-502YY
3 x 1,5		15,80	0,622	-534YY
3 x 2,08	14	15,37	0,605	-508YY

Number of cores x conductor cross-section		Overall diameter		Part Number
mm2	AWG	mm	inches	37-102-XXX
3 x 3,29	12	16,41	0,646	-516YY
3 x 5,53	10	17,50	0,689	-308YY
3 x 7,58	8	20,78	0,818	-309YY
3 x 12,5	6	24,03	0,946	-310YY
3 x 21,5	4	29,59	1,165	-312YY
3 x 30,7	2	33,20	1,307	-314YY
3 x 46,1	1	36,35	1,431	-315YY
3 x 56,3	1/0	38,84	1,529	-316YY
3 x 66,5	2/0	41,78	1,645	-317YY
3 x 92,1	3/0	46,08	1,814	-318YY
3 x 112,6	4/0	49,68	1,956	-319YY
3 x 133,1	262	56,77	2,235	-320YY
3 x 158,7	313	60,40	2,378	-321YY
3 x 189,4	373	63,93	2,517	-322YY
3 x 225,2	444	68,07	2,680	-323YY
3 x 271,3	535	75,84	2,986	-324YY
3 x 327,6	646	82,27	3,239	-326YY

Number of cores	Overall	Part Number
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Number of cores	Overall	Part Number
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x conductor cross-section		diameter		
mm2	AWG	mm	inches	37-102-XXX
3 x 394,2	777	87,88	3,460	-327YY
4 x 0,97	18	14,17	0,558	-557YY
4 x 1,32	16	15,34	0,604	-529YY
4 x 2,08	14	16,26	0,640	-509YY
4 x 2,5		16,79	0,661	-538YY
4 x 3,29	12	17,42	0,686	-517YY
4 x 5,53	10	18,64	0,734	-408YY
4 x 6		20,50	0,807	-540YY
4 x 7,58	8	23,39	0,921	-409YY
4 x 12,5	6	25,83	1,017	-410YY
4 x 16		30,50	1,201	-545YY
4 x 21,5	4	31,95	1,258	-412YY
4 x 25		35,61	1,402	-542YY
4 x 30,7	2	35,99	1,417	-414YY
4 x 46,1	1	39,50	1,555	-415YY
4 x 56,3	1/0	42,29	1,665	-416YY
4 x 66,5	2/0	47,22	1,859	-417YY
4 x 92,1	3/0	51,82	2,040	-418YY
4 x 112,6	4/0	55,85	2,199	-419YY
4 x 133,1	262	62,00	2,441	-420YY
4 x 158,7	313	66,07	2,601	-421YY
4 x 189,4	373	71,63	2,820	-422YY
4 x 225,2	444	76,25	3,002	-423YY
4 x 271,3	535	84,79	3,338	-424YY
4 x 327,6	646	90,17	3,550	-426YY
5 x 0,97	18	15,54	0,612	-558YY
5 x 1,32	16	16,23	0,639	-559YY
5 x 2,08	14	17,25	0,679	-510YY
5 x 3,29	12	18,57	0,731	-560YY
5 x 5,53	10	19,94	0,785	-561YY
5 x 7,58	8	25,10	0,988	-562YY
5 x 12,5	6	28,88	1,137	-563YY
5 x 21,5	4	34,54	1,360	-565YY
5 x 30,7	2	39,07	1,538	-566YY
5 x 46,1	1	44,60	1,756	-567YY
5 x 56,3	1/0	47,73	1,879	-568YY
5 x 66,5	2/0	53,04	2,088	-569YY
5 x 112,6	4/0	60,91	2,398	-701YY
6 x 2,08	14	18,29	0,720	-511YY
6 x 3,29	12	19,74	0,777	-547YY
7 x 1,32	16	17,40	0,685	-505YY
7 x 1,5		18,49	0,728	-549YY
7 x 2,08	14	18,29	0,720	-521YY
7 x 2,5		19,71	0,776	-588YY
7 x 7,58	8	28,14	1,108	-570YY

x conductor cross-section		diameter		
mm2	AWG	mm	inches	37-102-XXX
8 x 1,32	16	18,08	0,712	-503YY
10 x 1,32	16	20,22	0,796	-504YY
10 x 1,5		22,81	0,898	-535YY
10 x 2,08	14	22,80	0,898	-512YY
10 x 3,29	12	24,74	0,974	-518YY
12 x 2,08	14	23,34	0,919	-585YY
12 x 2,5		25,70	1,012	-539YY
14 x 2,08	14	24,23	0,954	-523YY
16 x 1,32	16	23,44	0,923	-546YY
18 x 2,5		30,20	1,189	-900YY
20 x 1,32	16	25,30	0,996	-550YY
20 x 2,08	14	28,37	1,117	-513YY
20 x 3,29	12	30,94	1,218	-519YY
24 x 1,32	16	28,50	1,122	-525YY
24 x 1,5		31,19	1,228	-536YY
24 x 2,08	14	30,78	1,212	-571YY
24 x 3,29	12	33,68	1,326	-572YY
30 x 2,08	14	32,21	1,268	-573YY
36 x 1,32	16	30,68	1,208	-710YY
36 x 2,08	14	33,35	1,313	-574YY
36 x 3,29	12	36,73	1,446	-575YY
37 x 1,32	16	31,57	1,243	-526YY
37 x 1,5		33,50	1,319	-537YY
37 x 2,08	14	34,24	1,348	-514YY
37 x 3,29	12	37,62	1,481	-520YY
44 x 0,97	18	31,88	1,255	-576YY
44 x 1,32	16	33,50	1,319	-577YY
44 x 2,08	14	36,40	1,433	-578YY
60 x 1,32	16	37,72	1,485	-527YY
60 x 2,08	14	40,16	1,581	-579YY
91 x 0,97	18	45,34	1,785	-718YY
91 x 1,32	16	45,47	1,790	-581YY
91 x 2,08	14	49,66	1,955	-582YY

Application/Limitation

General power and lighting. Control.

The cable may be installed and sized according to IEC 92-352, 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 - SPCPEBS(HD) 2 kV or SPCPEBS 2 kV or DPCPEBS 0,6/1 kV or TPCPEBS 0,6/1 kV or QPCPEBS 0,6/1 kV or C()PCPEBS 0,6/1 kV - Size

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