TYPE APPROVAL CERTIFICATE

Certificate No:
TAE00004C3
Revision No:
2

This is to certify:

That the Cable Cleats

with type designation(s)
Cable Cleat

Issued to
CCG Cable Terminations (Pty) Ltd.
KEMPTON PARK, **South Africa**

is found to comply with
DNV 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.

Material	**Composite**
Suitable for open deck	**Yes**

Issued at **Høvik** on **2021-11-01**

This Certificate is valid until **2026-10-31**.
DNV local station: **Newcastle-upon-Tyne**

Approval Engineer: **Ivar Bull**

for **DNV**
Digitally Signed By: Sjåvåg, Trond
Location: DNV Høvik, Norway

Trond Sjåvåg
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.

Product description

Classification	**According to IEC 61914:2015**
6.1 Material	Composite, Body: Stainless steel 316L, Pad: LSZH Halogen Free Plastic
6.2 Max. and min. temperature	- 40 to +105°C
6.3 Resistance to impact	Very Heavy
6.4 Type of retention and resistance to electromechanical forces	Lateral and axial retention, withstanding more than one short circuit depending on cleat distance and peak short circuit
6.5.1 Resistant to UV light	Resistant
6.5.2 Resistant to corrosion	High
10 Fire hazards	Resistant to flame propagation

No	**Part. No.**	**Cable diameter (mm)**	**Dimensions (mm)**	
			H	W
1	CC-T1323	Φ13-23	73	68
2	CC-T2125	Φ21-25	75	72
3	CC-T2329	Φ23-29	80	79
4	CC-T2531	Φ25-31	83	82
5	CC-T2733	Φ27-33	84	85
6	CC-T2935	Φ29-35	89	90
6	CC-T3238	Φ32-38	92	96
8	CC-T3541	Φ35-41	98	100
9	CC-T3844	Φ38-44	100	106
10	CC-T4248	Φ42-48	104	113
11	CC-T4551	Φ45-51	107	120
12	CC-T4753	Φ47-53	110	122
13	CC-T4955	Φ49-55	113	125
14	CC-T5157	Φ51-57	115	127
15	CC-T5359	Φ53-59	118	135
16	CC-T5561	Φ55-61	122	138
17	CC-T5763	Φ57-63	125	141
18	CC-T5965	Φ59-65	126	145
19	CC-T6167	Φ61-67	131	148
20	CC-T6369	Φ63-69	134	153
21	CC-T6571	Φ65-71	139	155
22	CC-T6773	Φ67-73	143	156
23	CC-T6975	Φ69-75	146	161
24	CC-T7177	Φ71-77	150	164
25	CC-T7379	Φ73-79	154	166
26	CC-T7581	Φ75-81	157	170
27	CC-T7783	Φ77-83	160	174
28	CC-T7985	Φ79-85	162	178
29	CC-T8187	Φ81-87	168	181
30	CC-T8389	Φ83-89	172	185
31	CC-T8896	Φ88-96	180	195
32	CC-T96103	Φ96-103	189	203
33	CC-T103111	Φ103-111	198	206
34	CC-T111119	Φ111-119	207	215
35	CC-T119128	Φ119-128	216	223

No	Part. No.	Cable diameter (mm)	Dimensions (mm)	
			H	W
1	CC-S2832	Φ28-32	60	57
2	CC-S3034	Φ30-34	61	59
3	CC-S3236	Φ32-36	63	61
4	CC-S3438	Φ34-38	65	63
5	CC-S3640	Φ36-40	67	64
6	CC-S3842	Φ38-42	69	65
7	CC-S4044	Φ40-44	70	68
8	CC-S4246	Φ42-46	71	69
9	CC-S4448	Φ44-48	73	72
10	CC-S4650	Φ46-50	74	73
11	CC-S4852	Φ48-52	75	77
12	CC-S5054	Φ50-54	78	78
13	CC-S5256	Φ52-56	79	80
14	CC-S5458	Φ54-58	80	82
15	CC-S5660	Φ56-60	81	85
16	CC-S5862	Φ58-62	82	87
17	CC-S6064	Φ60-64	85	88
18	CC-S6266	Φ62-66	87	90
19	CC-S6468	Φ64-68	89	91
20	CC-S6670	Φ66-70	90	92
21	CC-S6872	Φ68-72	92	94
22	CC-S7074	Φ70-74	95	97
23	CC-S7276	Φ72-76	97	99
24	CC-S7478	Φ74-78	98	102
25	CC-S7680	Φ76-80	100	104
26	CC-S7882	Φ78-82	102	106
27	CC-S8084	Φ80-84	105	107
28	CC-S8286	Φ82-86	107	110
29	CC-S8488	Φ84-88	109	111
30	CC-S8690	Φ86-90	110	113
31	CC-S9094	Φ90-94	115	121
32	CC-S94118	Φ94-1118	133	139
33	CC-S118130	Φ118-130	140	144
34	CC-S127150	Φ127-150	161	166

* For detailed information wrt. dimension, please see manufacturer drawing

Resistant to electromechanical forces, withstanding one short circuit:
Test condition: Cable O.D. 35mm

Ipk	Cleat distances
180 kA	0.3 m

Resistant to electromechanical forces, withstanding more than one short circuit:
Test condition: Cable O.D. 35mm

Ipk	Cleat distances
125 kA	0.6 m

For distance between cable cleats, manufacturer catalogue and instruction to be followed.

Application/Limitation

To be installed in accordance with the manufacturer`s instructions and DNV GL rules.

For fixing 3 core and single core AC current cables on board Mobile Offshore Units and Ships. Each cable cleat shall include all phases.

Type Approval documentation

Drawing: Cable Cleats, Single cable type. drawing number SC 010921.
Cable Cleats, Trefoil cable cleat. drawing number TC 010921

Test reports: SYFF Co Ltd Test Report no. SYFF13-0001 dated 2013-12-23
STIEE Test Report AT17-2056

Tests carried out

Type tests according to IEC 61914:2015

Marking of product

Manufaturer name - Type designation - product identification

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