DNV·GL

Certificate No:
TAE00001E9

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Electric Power Cable

with type designation(s)
0.6/1kV (FA-)SPY(C), (FA-)DPY(C), (FA-)DPYE(C), (FA-)TPY(C), (FA-)TPYE(C), (FA-)FPY(C), (FA-)FPYE(C), (FA-)5PY(C), (FA-)5PYE(C), (FA-)6PY(C), (FA-)9PYE(C), (FA-)10PY(C), (FA-)DPYSLA(C), (FA-)TPYSLA(C)

Issued to
TMC Co., Ltd
Cheonan-si Chungcheongnam-do, Republic of Korea

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft
JIS C 3410:2010

Application :

General power and lighting. Flame retardant.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.
Voltage class (kV) **0.6/1**
Temp. class (°C) **90**

This Certificate is valid until **2021-10-11**.
Issued at **Busan** on **2016-10-12**
DNV GL local station: **Seoul** for **DNV GL**

Approval Engineer: **Dong Ho Park**

Baeg Soon Choi
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.

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Job Id: **262.1-015062-2**
Certificate No: **TAE00001E9**

Product description

Type : 0.6/1kV (FA-)SPY(C*), (FA-)DPY(C*), (FA-)DPYE(C*), (FA-)TPY(C*), (FA-)TPYE(C*), (FA-)FPY(C*), (FA-)FPYE(C*), (FA-)5PY(C*), (FA-)5PYE(C*), (FA-)6PY(C*), (FA-)9PYE(C*), (FA-)10PY(C*), (FA-)DPYSLA(C*), (FA-)TPYSLA(C*)

Conductor : Stranded tinned annealed copper wires
Insulation : EPR
Common shield : AL/PS tape with tinned copper drain wire ('SLA' type only)
Sheath : PVC
* Cable type with 'C' for cold resistant characteristic (option)

Number of cores x conductor cross-section	**Number of cores x conductor cross-section**	**Number of cores x conductor cross-section**	**Number of cores x conductor cross-section**
mm²	mm²	mm²	mm²
(FA-)SPY(C)	2x10+E	3x150+E	6x2.5
1x1.5	2x16+E	3x185+E	6x4
1x2.5	2x25+E	**(FA-)FPY(C)**	6x6
1x4	2x35+E	4x1.5	**(FA-)9PYE(C)**
1x6	2x50+E	4x2.5	9x1.5+E
1x10	2x70+E	4x4	9x2.5+E
1x16	2x95+E	4x6	9x4+E
1x25	2x120+E	4x10	**(FA-)10PY(C)**
1x35	2x150+E	4x16	10x1.5
1x50	2x185+E	4x25	10x2.5
1x70	**(FA-)TPY(C)**	4x35	10x4
1x95	3x1.5	4x50	**(FA-)DPYSLA(C)**
1x120	3x2.5	4x70	2x1.5
1x150	3x4	4x95	2x2.5
1x185	3x6	4x120	2x4
1x240	3x10	4x150	2x6
1x300	3x16	4x185	2x10
(FA-)DPY(C)	3x25	**(FA-)FPYE(C)**	2x16
2x1.5	3x35	4x1.5+E	2x25
2x2.5	3x50	4x2.5+E	2x35
2x4	3x70	4x4+E	2x50
2x6	3x95	4x6+E	2x70
2x10	3x120	4x10+E	2x95
2x16	3x150	4x16+E	2x120
2x25	3x185	**(FA-)5PY(C)**	**(FA-)TPYSLA(C)**
2x35	**(FA-)TPYE(C)**	5x1.5	3x1.5
2x50	3x1.5+E	5x2.5	3x2.5
2x70	3x2.5+E	5x4	3x4
2x95	3x4+E	5x6	3x6
2x120	3x6+E	5x10	3x10
2x150	3x10+E	5x16	3x16
2x185	3x16+E	**(FA-)5PYE(C)**	3x25
0.6/1kV **(FA-)DPYE(C)**	3x25+E	5x1.5+E	3x35
	3x35+E	5x2.5+E	3x50
2x1.5+E	3x50+E	5x4+E	3x70
2x2.5+E	3x70+E	5x6+E	3x95
2x4+E	3x95+E	**(FA-)6PY(C)**	3x120
2x6+E	3x120+E	6x1.5	

Application/Limitation

The requirement of SOLAS Chapter II-1 Part D Reg. 45, 5.2 to limit Fire Propagation along Bunches of Cables or Wires are fulfilled without any additional measures for 'FA-' type only.

Type Approval documentation

Tests carried out

Standard	Issued	Limitation
JIS 3410	2010	
IEC 60332-1(As JIS 3410, 7.6)	2004	
IEC 60332-3-22 (As JIS 3410, 7.7)	2009	'FA-' type only
CSA C22.2 No.03	2009	'C' type only

Marking of product

0.6/1kV – Cable type – Size – TMC – Year of manufacture – Length or
0.6/1kV – Cable type – Size – IEC 60332-3 CAT.A – TMC – Year of manufacture – Length

Periodical assessment

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type Approval Certificate are complied with and that no alterations are made to the design and/or the material of product.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Check of the results from Production Sample Tests(PST) and Routine Tests(RT) (if not available, PSTand RT are to be carried out)
- Review of type approval documentation
- Review of possible changes in design, material and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate

Survey is to be performed at least every second year.

END OF CERTIFICATE