

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Clip, Saddle, Band

with type designation(s)

TSL-xxx-M, TSL-xxx-I, TSL-xxx-S, TSL-xxx-LHD, TSL-xxx-HD, TSL-xxx-EHD

Issued to

Y. Y. Cable Accessories Co., Ltd.
Tainan City, Taiwan

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.

Issued at **Hamburg** on **2017-05-08**

This Certificate is valid until **2022-05-07**.

DNV GL local station: **Kaohsiung**

for **DNV GL**

Approval Engineer: **Carsten Hunsalz**

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Duy Nam Le
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: **262.1-021353-1**
Certificate No: **TAE00001WG**

Product description

Type: TSL-xxx-M Miniature section
TSL-xxx-S Standard section
TSL-xxx-LHD Light Heavy Duty section

Material: Nylon 6/6, black, UV light resistant
Loop tensile strength: Type 2 acc. IEC 62275 – retain 100% strength after testing
Min. installation temperature: 0 °C
Min. operation temperature: -40 °C
Max. operation temperature: +85 °C

Article	Length [mm]	Width [mm]	Min. Diameter Range [mm]	Max. Diameter Range [mm]	Loop Tensile Strength [N]
TSL-80-M	78	2.5	2	13	71
TSL-100-M	100	2.5	2	21	80
TSL-120-M	116	2.5	2	25	80
TSL-140-M	140	2.5	2	32	80
TSL-160-M	161	2.5	2	38	80
TSL-200-M	203	2.5	2	53	80
TSL-120-S	121	4.6	3	23	222
TSL-160-S	157	4.6	3	36	222
TSL-190-S	188	4.6	4	49	222
TSL-200-S	199	4.6	4	49	222
TSL-250-S	250	4.6	4	65	222
TSL-290-S	288	4.6	4	77	222
TSL-300-S	302	4.6	4	77	222
TSL-370-S	371	4.6	4	104	222
TSL-385-S	387	4.6	4	106	222
TSL-430-S	430	4.6	4	121	222
TSL-500-S	507	4.6	4	145	222
TSL-530-S	533	4.6	4	154	222
TSL-150-LHD	149	7.5	6	31	534
TSL-200-LHD	200	7.5	6	45	534
TSL-290-LHD	290	7.5	5	74	534
TSL-370-LHD	370	7.5	5	102	534
TSL-450-LHD	450	7.5	8	126	534
TSL-540-LHD	541	7.5	8	155	534

Type: TSL-xxx-I Intermediate section
TSL-xxx-HD Heavy Duty section
TSL-xxx-EHD Extra Heavy Duty section

Material: Nylon 6/6, black, UV light resistant
Loop tensile strength: Type 1 acc. IEC 62275 – retain 50% strength after testing
Min. installation temperature: 0 °C
Min. operation temperature: -40 °C
Max. operation temperature: +85 °C

Article	Length [mm]	Width [mm]	Min. Diameter Range [mm]	Max. Diameter Range [mm]	Loop Tensile Strength [N]
TSL-140-I	142	3.5	2	31	180

TSL-150-I	150	3.5	2	33	180
TSL-180-I	180	3.5	2	44	180
TSL-200-I	201	3.5	2	50	180
TSL-250-I	250	3.5	2	65	180
TSL-300-I	290	3.5	2	78	180
TSL-370-I	372	3.5	4	104	180
TSL-430-HD	430	8.7	9	113	800
TSL-530-HD	530	8.7	9	148	800
TSL-610-HD	613	8.7	9	170	800
TSL-710-HD	709	8.7	9	205	800
TSL-770-HD	774	8.7	9	224	800
TSL-800-HD	800	8.7	9	235	800
TSL-910-HD	920	8.7	9	266	800
TSL-950-HD	940	8.7	9	276	800
TSL-1020-HD	1160	8.7	9	347	800
TSL-1200-HD	1220	8.7	9	366	800
TSL-1530-HD	1530	8.7	192	460	800
TSL-240-EHD	246	12.4	12	56	1150
TSL-300-EHD	293	12.4	12	72	1150
TSL-400-EHD	404	12.4	22	105	1150
TSL-500-EHD	510	12.4	22	140	1150
TSL-600-EHD	618	12.4	42	176	1150
TSL-700-EHD	724	12.4	42	205	1150
TSL-800-EHD	830	12.4	42	235	1150
TSL-1030-EHD	1020	12.4	42	297	1150

Application/Limitation

For fixing of cables, outdoor and indoor, onboard ships and mobile offshore units.

Type Approval documentation

Tests carried out

Mandatory tests for non metallic types according to type approval programme DNVGL-CP-0407 and IEC 62275 2013-11

Marking of product

Company name, type, catalogue number, length, width, Quantity.
The marking is placed on each minimum pack quantity.

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)

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- 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