

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cable Gland

with type designation(s)

SKINTOP MS-M & MS-M-XL, MSR-M & MSR-M-XL, MS-SC-M & MS-SC-M-XL

Issued to

**U.I. Lapp GmbH
Stuttgart, Germany**

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.

Material	Metallic
Suitable for open deck	Yes
Suitable for Hazardous areas	No

Issued at **Hamburg** on **2018-02-09**

This Certificate is valid until **2023-02-08**.

for **DNV GL**

DNV GL local station: **Augsburg**

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.



Product description

Cable gland of nickel plated brass (PA6, CR/NBR). Types MS-M & MS-M-XL, MSR-M & MSR-M-XL with reduced insertion seal, MS-SC-M, MS-SC-M-XL & BRUSH; EMC safe gland for cable with copper screen. Optional with BRUSH.

Classification according to DIN EN 62444

6.1 Material	Metallic
6.2.2 Mechanical properties	With cable anchorage, type A.
6.2.3 Impact category	6
6.3 Electrical properties	Not declared
6.4.1 IP class	IP68*
6.4.2 Temperatur range	-25 °C to +100 °C

*for M12 to M63: IP69K according to DIN 40050-9

Overview MS-M

Size of thread	Cable diameter min/max [mm]:	Article number:	Article number with BRUSH:
M12x1,5	3,5-7	5311 2000	-
M16x1,5	4,5-10	5311 2010	-
M20x1,5	7-13	5311 2020	-
M25x1,5	9-17	5311 2030	5311 2676
M32x1,5	11-21	5311 2040	5311 2677
M40x1,5	19-28	5311 2050	5311 2678
M50x1,5	27-35	5311 2060	5311 2679
M63x1,5	34-45	5311 2070	5311 2680
M63x1,5 plus	44-55	5311 2080	5311 2681
M75x1,5	58-68	5311 2510	5311 2510

Overview MS-M-XL

Size of thread	Cable diameter min/max [mm]:	Article number:
M12x1,5	3,5-7	5311 2005
M16x1,5	4,5-9	5311 2015
M20x1,5	7-12,5	5311 2025
M25x1,5	9-16,5	5311 2035
M32x1,5	11-21	5311 2045
M40x1,5	19-28	5311 2055
M50x1,5	27-35	5311 2065

Overview MSR-M

Size of thread	Cable diameter min/max [mm]:	Article number:
M12x1,5	1-5	5311 2100
M16x1,5	2-7	5311 2110
M20x1,5	5-10	5311 2120
M25x1,5	6-13	5311 2130
M32x1,5	7-15	5311 2140
M40x1,5	15-23	5311 2150
M50x1,5	22-29	5311 2160
M63x1,5	28-39	5311 2170
M75x1,5	53-62	5311 2511

Job Id: **262.1-008275-4**
Certificate No: **TAE00002M2**

Overview MSR-M_XL

Size of thread	Cable diameter min/max [mm]:	Article number:
M12x1,5	1-5	5311 2105
M16x1,5	2-7	5311 2115
M20x1,5	5-10	5311 2125
M25x1,5	6-13	5311 2135
M32x1,5	7-15	5311 2145
M40x1,5	15-23	5311 2155
M50x1,5	22-29	5311 2165

Overview MS-SC-M

Size of thread	Cable diameter min/max [mm]:	Article number:
M12x1,5	3,5-7	5311 2610
M16x1,5	4,5-9	5311 2620
M20x1,5	7-12,5	5311 2630
M25x1,5	9-16,5	5311 2640
M32x1,5	11-21	5311 2650
M40x1,5	19-28	5311 2660
M50x1,5	27-35	5311 2670

Overview MS-SC-M-XL

Size of thread	Cable diameter min/max [mm]:	Article number:
M12x1,5	3,5-7	53112615
M16x1,5	4,5-9	53112625
M20x1,5	7-12,5	53112635
M25x1,5	9-16,5	53112645
M32x1,5	11-21	53112655
M40x1,5	19-28	53112665
M50x1,5	27-35	53112675

Application/Limitation

Manufacturer's installation description, instructions and DNV GL rules to be followed
Not to be used in bulkheads/decks or for penetrating boundaries of tanks

Type Approval documentation



Job Id: **262.1-008275-4**
Certificate No: **TAE00002M2**

Tests carried out

Type test report in accordance with DIN EN 62444:2014-05

Marking of product

U.I. Lapp – Type designation.

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