DNV·GL

Certificate No:
**TAE0000386**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**That the Cable Gland**

with type designation(s)
**PERFECT 50.6xx M, PERFECT 50.6xx M/EMV, PERFECT 50.6xx M/R, PERFECT 50.6xx M/EMV/R**
**PERFECT 50.6xx ES, PERFECT 50.6xx ES/EMV, PERFECT 50.6xx ES/R**
**PERFECT 50.6xx ES/EMV/R**
**Locknut 50.2xx M, Locknut 50.2xx MPOT, Locknut 50.2xx ES**

Issued to
**Jacob GmbH Elektrotechnische Fabrik**
**Kernen im Remstal, Baden-Württemberg, 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.**

| Type | Material | Suitable for open deck | Suitable for Hazardous areas |
|---|---|---|---|
| **PERFECT 50.6xx M** | **Brass (nickel plated)** | **Yes** | **n/a** |
| **PERFECT 50.6xx M/EMV** | **Brass (nickel plated)** | **Yes** | **n/a** |
| **PERFECT 50.6xx M/R** | **Brass (nickel plated)** | **Yes** | **n/a** |
| **PERFECT 50.6xx M/EMV/R** | **Brass (nickel plated)** | **Yes** | **n/a** |
| **PERFECT 50.6xx ES** | **Stainless steel** | **Yes** | **n/a** |
| **PERFECT 50.6xx ES/EMV** | **Stainless steel** | **Yes** | **n/a** |
| **PERFECT 50.6xx ES/R** | **Stainless steel** | **Yes** | **n/a** |
| **PERFECT 50.6xx ES/EMV/R** | **Stainless steel** | **Yes** | **n/a** |
| **Locknut 50.2xx M** | **Brass (nickel plated)** | **Yes** | **n/a** |
| **Locknut 50.2xx MPOT** | **Brass (nickel plated)** | **Yes** | **n/a** |
| **Locknut 50.2xx ES** | **Stainless steel** | **Yes** | **n/a** |

Issued at **Hamburg** on **2018-10-18**
This Certificate is valid until **2023-10-17**.
DNV GL local station: **Augsburg**

for **DNV GL**

Approval Engineer: **Maik Gagern**

**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.


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Job Id: **262.1-029416-1**
Certificate No: **TAE0000386**

## Product description

Cable Glands:
PERFECT 50.6xx M, PERFECT 50.6xx M/EMV, PERFECT 50.6xx M/R, PERFECT 50.6xx M/EMV/R
PERFECT 50.6xx ES, PERFECT 50.6xx ES/EMV, PERFECT 50.6xx ES/R, PERFECT 50.6xx ES/EMV/R

Nomenclature:
xx = place holder for connecting thread size „12", „16", „20", „25", „32", „40", „50", „63";
(M12x1,5 to M63x1,5 / metric, as per EN 60423);
M1 = additional version; optional suffix: other thread length, e.g. „L", „08"

Locknuts:
50.2xx M, 50.2xx MPOT, 50.2xx ES

Nomenclature:
xx = place holder for connecting thread size „12", „16", „20", „25", „32", „40", „50", „63";
(M12x1,5 to M63x1,5 / metric, as per EN 60423)

## Application/Limitation

Installation and operating instructions of the manufacturer to be observed.
Ingress protection IP 68 / 5bar / 30min

## Type Approval documentation

## Tests carried out

Acc. to DNV GL Class Programme DNVGL-CP-0408 (2016-03) / EN 62444 (2013)

## Marking of product

Jacob GmbH registered trademark (Letters WJ) on smallest packaging unit and / or on the product.
Type designation / size on smallest packaging unit

## 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