



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE00003AC
Revision No:
1

This is to certify:
that the Cable Gland

with type designation(s)
HSK-K-Ex-Active, HSK-K-Multi-Ex-Active, HSK-K-FLAKA-Ex-Active, HSK-K-MZ-Ex

issued to
Hummel AG
Denzlingen, Germany

is found to comply with
DNV 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.

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

Issued at **Høvik** on **2024-03-01**

for **DNV**

This Certificate is valid until **2029-02-28**.

DNV local unit: **Augsburg**

Approval Engineer: **Carsten Hunsalz**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

HSK-Ex Standard:

Type designation:	HSK-K-Ex-Active
Gland material:	Polyamide, fiberglass reinforced, VO according to UL 94
Seal material:	Buna-N
Operating temperature range:	-20 °C to +85 °C
Degree of protection:	IP 68 (10 bar) within the specified clamping range
Cable type:	Braided / Armoured or Unbraided / Unarmoured (no connection for braid/armour)
Gland sizes range:	Metric thread size: 12, 16, 20, 25, 32, 40, 50, 63 NPT thread size: 3/8", 1/2", 1/2" (16), 3/4", 1", 1 1/4", 1 1/2"
Ex classification:	II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
Ex certificate number:	BVS 14 ATEX E 025 X, IECEx BVS 14.0020X

Type designation:	HSK-K-Multi-Ex-Active
Gland material:	Polyamide, fiberglass reinforced, VO according to UL 94
Seal material:	Elastomer (O-Ring: Buna-N)
Operating temperature range:	-20 °C to +85 °C
Degree of protection:	IP 68 (10 bar) within the specified clamping range
Cable type:	Braided / Armoured or Unbraided / Unarmoured (no connection for braid/armour)
Gland sizes range:	Metric thread size: 16, 20, 25, 32, 40, 50, 63 NPT thread size: 3/8", 1/2", 1/2" (16), 3/4", 1", 1 1/4", 1 1/2"
Ex classification:	II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
Ex certificate number:	BVS 14 ATEX E 025 X, IECEx BVS 14.0020X

Type designation:	HSK-K-FLAKA-Ex-Active
Gland material:	Polyamide, fiberglass reinforced, VO according to UL 94
Seal material:	Elastomer (O-Ring: Buna-N)
Operating temperature range:	-20 °C to +85 °C
Degree of protection:	IP 68 (10 bar) within the specified clamping range
Cable type:	Braided / Armoured or Unbraided / Unarmoured (no connection for braid/armour)
Gland sizes range:	Metric thread size: 20, 25, 32, 40, 50 NPT thread size: 1/2" (16), 3/4", 1", 1 1/4", 1 1/2"
Ex classification:	II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
Ex certificate number:	BVS 14 ATEX E 025 X, IECEx BVS 14.0020X

HSK-Ex for special applications:

Type designation:	HSK-K-MZ-Ex
Gland material:	Polyamide-AL
Seal material:	Buna-N
Operating temperature range:	-20 °C to +70 °C
Degree of protection:	IP 68 (10 bar) within the specified clamping range
Cable type:	Braided / Armoured or Unbraided / Unarmoured (no connection for braid/armour)
Gland sizes range:	Metric thread size: 16, 20, 25, 32, 40, 50, 63 PG thread size: 9, 11, 13.5, 16, 21, 29, 36, 42, 48
Ex classification:	II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
Ex certificate number:	KEMA 99ATEX6671 X, KEMA 99ATEX6971 X, IECEx KEM 07.0014X

Accessories:

Type designation:	Plug V-Ex
Material:	Polyamide, fiber reinforced
O-Ring:	Buna-N
Operating temperature range:	-20 °C to +90 °C
Degree of protection:	IP 68 (10 bar)
Sizes range:	Metric thread size: 12, 16, 20, 25, 32, 40, 50, 63 PG thread size: 7, 9, 11, 13.5, 16, 21, 29, 36, 42, 48
Ex classification:	II 2G Ex e IIC Gb / II 1D Ex ta IIIC Da
Ex certificate number:	DMT 03 ATEX E 049, IECEx BVS 07.0021

Type designation:	Plug HSK-V-Ex / HSK-V-Ex MZ version
Material:	Elastomer
Operating temperature range:	-40 °C to +95 °C
Sizes range:	Metric thread size: 12, 16, 20, 25, 32, 40, 50*, 63* PG thread size: 7, 9, 11, 13.5, 16, 21, 29, 36, 42*, 48* NPT thread size: 3/8", 1/2", 1/2" (16), 3/4", 1", 1 1/4", 1 1/2" * Not for MZ version
Ex classification:	II 2G Ex e IIC Gb / II 1D Ex ta IIIC Da
Ex certificate number:	BVS 03 ATEX E 298 X, IECEx BVS 07.0022X

Application/Limitation

Manufacturer's installation description, instructions and DNV rules to be followed.

Not to be used in bulkheads/decks or for penetrating boundaries of tanks.

Not suitable for open deck.

The information related to Ex certification from recognised test institution is given as information only. Applications where Ex certified equipment is required will in general be subject to approval case by case based on documentation as required in DNV Rules

Degree of protection will be safeguarded only when sealing and cable entry fittings are properly fitted. The manufacturer's instructions must be followed.

Type Approval documentation

Test reports/Certificates:

BVS 14 ATEX E 025 X dated 2018.09.25, IECEx BVS 14.0020X dated 2018.10.02,
 KEMA 99ATEX6671 X dated 2017.07.19, KEMA 99ATEX6971 X dated 2023.01.18,
 IECEx KEM 07.0014X dated 2017.07.19 and 2023.01.18,
 DMT 03 ATEX E 049 dated 2014.11.05, IECEx BVS 07.0021 dated 2014.11.12,
 BVS 03 ATEX E 298 X dated 2015.06.25, IECEx BVS 07.0022X dated 2015.07.02

Catalogue: Cable Glands – 2018-05
 Operating Instruction Edition July 2021

Tests carried out

Type tests in accordance with IEC/EN/EN IEC 60079-0:2017/2012/2018, IEC/EN 60079-7:2015, IEC/EN 60079-31:2022/2014, IEC/EN 60529:2013/2014

Marking of product

Name of manufacturer – type designation – Ex rating.

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