

Translation, original language: German

(1) EC-TYPE EXAMINATION CERTIFICATE

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: KEMA 99ATEX6971 X Issue Number: 3

(4) Equipment: Cable glands, Series HSK-M-Ex, HSK-M-EMV-Ex, HSK-M-EMV-D-Ex, HSK-MZ-Ex, HSK-MZ-EMV-Ex, HSK-INOX-Ex, HSK-INOX-EMV-Ex, HSK-K-MZ-Ex, HSK-M-PVDF-Ex, HSK-M-EMV-PVDF-Ex, HSK-MZ-EMV-PVDF-Ex, HSK-MZ-PVDF-Ex, HSK-INOX-PVDF-Ex and HSK-INOX-EMV-PVDF-Ex

(5) Manufacturer: Hummel AG

(6) Address: Geschäftsbereich ET, Lise-Meitner-Strasse 2, 79211 Denzlingen, Germany

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential test report no. 211594700.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2006
EN 61241-0 : 2006

EN 60079-7 : 2007
EN 61241-1 : 2004

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:



II 2 G Ex e II
II 1 D Ex tD A20 IP6X

This certificate is issued on September 15, 2008 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

KEMA Quality B.V.

T. Pijpker
Certification Manager

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 99ATEX6971 X** Issue No. 3

(15) **Description**

Cable Glands Series HSK-M-Ex, HSK-M-EMV-Ex, HSK-M-EMV-D-Ex, HSK-MZ-Ex, HSK-MZ-EMV-Ex, HSK-INOX-Ex, HSK-INOX-EMV-Ex, HSK-K-MZ-Ex, HSK-M-PVDF-Ex, HSK-M-EMV-PVDF-Ex, HSK-MZ-EMV-PVDF-Ex, HSK-MZ-PVDF-Ex, HSK-INOX-PVDF-Ex and HSK-INOX-EMV-PVDF-Ex in type of protection increased safety "e".

Operating temperature range: -60 °C to +105 °C (standard versions HSK-M and HSK-INOX)
-20 °C to +130 °C (PVDF versions HSK-M and HSK-INOX)
-20 °C to +70 °C (HSK-K-MZ-Ex)

The cable glands provide a degree of protection of IP66/68 in accordance with EN 60529.

Installation instructions

The installation instructions for safe use of the cable entries, as provided by the manufacturer, shall be followed in detail to assure correct installation of the cable entry.

Routine tests

None.

(16) **Test Report**

KEMA No. 211594700.

(17) **Special conditions for safe use**

- The cable glands Series HSK-M... and HSK-INOX... are tested with a reduced tensile force (25 %) in accordance with clause A.3.1 of EN 60079-0 and may only be used for fixed installation of Group II apparatus. The user shall ensure adequate clamping of the cable.
- The cable entries of series HSK-K-MZ-Ex are capable of withstanding an impact energy level of 4 Joules and shall be protected against higher impact energy levels.

(18) **Essential Health and Safety Requirements**

Assured by compliance with the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 211594700.