- Translation valid only with German certificate!
- (1) EC-Type Examination Certificate
- (2) Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 94/9/EG
- (3) EC-Type Examination Certificate Number TÜV 99 ATEX 1517 X
- (4) Equipment: Flow Control Sensor Type FCSC...
- (5) Manufacturer: Hans Turck GmbH & Co. KG
- (6) Address: Witzlebenstr. 7, D-45472 Mülheim
- (7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Hannover/Sachsen-Anhalt e.V., TÜV CERT-certification department, notified body no. 0032 in accordance to Article 9 of the instructions of the Council of the European Parliament of 23 March 1994, (94/9/EG) 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 test results are recorded in confidential test report No. 99/PX29490.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014:1997 EN 50020:1994 prEN 50284:1997

- (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 and construction of the specified equipment conforming to Directive 94/9/EC. Further requirements of this directive apply to the manufacture and placing on the market of this equipment. Theses demands are not covered by this certification.
- (12) The marking of the equipment shall include the following:

 $\langle \epsilon_x \rangle$  II 1/2 G EEx ia IIC T6

## TÜV Hannover/Sachsen-Anhalt e.V.

TÜV Cert-Zertifizierungsstelle Am TÜV 1 D-30519 Hannover Hannover, 22.11.1999

(13) APPENDIX

(14) EC-Type Examination Certificate No. TÜV 99 ATEX 1517 X

(15) Description of device

The type FCSC... sensors are designed for monitoring the flow of liquid or gaseous media. The measurement transducer can be installed in explosion hazardous areas to category 1 (Zone 0), the housing can be installed in explosion hazardous areas to category 2 (Zone 1).

The highest admissible ambient temperature relating to the temperature class and sensor version can be taken from the following table

Maximum medium/ambient temperature			
Temperature class	Standard sensor type FCSC	Highest temperature sensor types FCSCH	
T6	45°C	45°C	
T5 – T3	60°C	60°C	

Enhancement of the temperature range: see (17) – Special conditions

Electrical data

Sensor current circuit (pigtail or connector)

In intrinsically safe protection degree EEx ia/ib IIC/IIB only for connection to certified intrinsically-safe circuits with the following maximum value:  $P_i = 0.69 W$ 

The internal capacitance and inductance are negligable.

- (16) Examination records consisting of 4 pages are mentioned in the test report
- (17) Special conditions

The measurement transducers may only be used in category 1 explosion hazardous atmospheres when the admissible atmospheric conditions are present (temperature of -20°C to 60°C, pressure of 0.8 bar to 1.1 bar). If the explosive atmosphere is not conform to the conditions of category 1 (Zone 0), the highest permissible ambient temperatures in the measurement transducer area should be taken from the following table.

Maximum medium/ambient temperature		
Temperature class	Standard sensor type FCSC	Highest temperature sensor types FCSCH
Т6	45°C	45°C
T5	60°C	60°C
T4	80°C	95°C
Т3		120°C

The gas group is confined to IIB on non-metallic sensors and sensors with measurement transducer coating

(18) Basic safety and health requirements

No additional requirements

Konformitätserklärung Nr. 3015 M TURCK **Declaration of Conformity** Wir/We HANS TURCK GMBH & CO KG WITZLEBENSTR. 7 D - 45472 MÜLHEIM A. D. RUHR erklären in alleiniger Verantwortung, daß die Produkte declare under our sole responsibility that the products Strömungswächter Typ FCS... (Ex-Kennzeichnung FCSC) auf die sich die Erklärung bezieht, mit den folgenden Normen übereinstimmen to which this declaration relates are in conformity with the following Diese Konformitätserklärung entspricht der Europäischen Norm EN 45014 standards. "Allgemeine Kriterien für Konformitätserklärungen von Anbietern". Die Grundlage der Kriterien sind EN 50081 - 2 internationale Dokumente, insbesondere ISO/IEC Leitfaden 22, 1982, "Information EN 50082 - 2 on manufacturer's declaration of conformity with standards or other technical specifications". und wo anwendbar / and where applicable This Declaration of Conformity is suitable EN 50014 to the European Standard EN 45014 "General criteria for supplier's declaration EN 50020 of conformity". The basis for the criteria has been found in international docomentation, particularly in ISO/IEC-Guide 22, 1982, "Information on Gemäß den Bestimmungen der Richtlinie manufacturer's declaration of conformity Following the provisions of Directive (falls zutreffend/ if applicable) with standards or other technical specifications". EMV - Richtlinie / EMC Directive 89 / 336 / EWG 3. Mai 1989 Richtlinie ATEX 100a / Directive ATEX 100a 23. März 1994 94/9/EG Niederspannungsrichtlinie / Low Voltage Directive 73 / 23 / EWG 19. Februar 1973 Aussteller der EG-Baumusterbescheinigung: TÜV Hannover / Sachsen-Anhalt e.V. TÜV-CERT-Zertifizierungsstelle Am TÜV 1, D-30519 Hannover Kenn-Nr. 0032 Registriernummer: TÜV 96 ATEX 1517X ı'V (I.V. W. Stoll) Mülheim, den 27.10.00 Ort und Datum der Austellung / Name und Unterschrift des Befugten / name and Place and date of issue signiture of authorized person

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