



Translation

EC-type Examination Certificate

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

BVS 08 ATEX E 018 X

Equipment: Turning angle transmitter type 892.44 / Manometer type PGT23,
type PGT43, type DPGT43, type APGT43, type 712.15, type PGT43HP,
type DPGT43HP type PGT63HP

Manufacturer: WIKA Alexander Wiegand GmbH & Co. KG

Address: 63911 Klingenberg/Main, Germany

The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 the test and assessment report BVS PP 08.2026 EG.

The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2006 General requirements
EN 60079-11:2007 Intrinsic safety "i"

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 appendix to this certificate.

This EC-type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to 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

The marking of the equipment shall include the following:



**II 2G Ex ia IIC T4 / T5 / T6
I M2 Ex ia I**

DEKRA EXAM GmbH

Bochum, dated 11.03.2008

Signed: Dr. Eickhoff

Signed: Dr. Wittler

Certification body

Special services unit

(13) Appendix to

(14) **EC-type Examination Certificate**

BVS 08 ATEX E 018 X

(15) 15.1 Subject and type

Turning angle transmitter type 892.44 / Manometer type PGT23, type PGT43, type DPGT43, type APGT43, type 712.15, type PGT43HP, type DPGT43HP, type PGT63HP

15.2 Description

The turning angle transmitter type 892.44 consists of an electronic module that contains a circuit board fitted with electronic components. The PCB is embedded in casting compound.

The intrinsically safe circuits (supply and signal circuit, connections for button / keyboard and for programming) are placed on plug connections on the circuit board.

The turning angle transmitter is intended for being mounted (even subsequently) into non-electrical equipment (mechanical measuring devices e.g. manometers of type PGT23, type PGT43, type DPGT43, type APGT43, type 712.15, type PGT43HP, type DPGT43HP, type PGT63HP) and serves the purpose of transmitting measuring data to an intrinsically safe supply and signal circuit (current loop of 4-20 mA).

The mechanical movements of e.g. a spring-elastic manometer measuring device are transmitted to a magnetic field sensor inside turning angle transmitter by means of a permanent magnet.

15.3 Parameters

| Parameter | Supply circuit | Button / keyboard circuit | Programming circuit |
|--|---------------------|---|---|
| Degree of protection | Ex ia IIC / Ex ia I | Ex ia IIC / Ex ia I | Ex ia IIC / Ex ia I |
| Voltage U_i | DC 30 V | N/A | N/A |
| Current I_i | 100 mA | N/A | N/A |
| Power P_i | 1000 mW | N/A | N/A |
| Internal effective capacity C_i | 12 nF | N/A | N/A |
| Internal effective inductance L_i | negligible | N/A | N/A |
| Voltage U_o | N/A | DC 30 V | DC 30 V |
| Current I_o | N/A | 15.3 mA) ¹ | 15.3 mA) ¹ |
| Power P_o | N/A | 115 mW) ¹ | 115 mW) ¹ |
| Max. external capacity C_o | N/A | 66 nF) ¹ | 66 nF) ¹ |
| Max. external inductance L_o | N/A | 150 mH) ¹ | 150 mH) ¹ |
| Max. relation of inductance / resistance L_o/R_o | N/A | 310 $\mu\text{H}/\Omega$) ¹ | 310 $\mu\text{H}/\Omega$) ¹ |
| Curve | N/A | linear | linear |
| Plug connection | X3 Pin 7-8 | X4 Pin 1-4 | X3 Pin 1-3 |
| Note:) ¹ 4-wire circuit; added value: 3 signal wires parallel against GND N/A = not applicable | | | |

Ambient temperature range:

- 40 °C ≤ T_a ≤ +60 °C (T6)

- 40 °C ≤ T_a ≤ +75 °C (T5)

- 40 °C ≤ T_a ≤ +85 °C (T4)

(16) Test and assessment report
BVS PP 08.2026 EG as of 11.03.2008

(17) Special conditions for safe use

17.1 The turning angle transmitter has to be mounted into an enclosure that meets at least the requirements of degree of protection IP 20 (if used for Group II) or IP 54 (if used for Group I) according to EN 60529.

The internal wiring of such an enclosure has to be executed according to sections 6.3.11 and 7.6.e of EN 60079-11:2007.

Connecting clamps or plug connectors for the intrinsically safe circuit have to be laid out according to sections 6.2.1 and 6.2.2 of EN 60079-11:2007.

Ambient temperature range: -40 °C ≤ T_a ≤ +60 °C (T6) / +75 °C (T5) / +85 °C (T4).

17.2 Manometer with mounted turning angle transmitter

None

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 09.06.2008
BVS-Scha/Ar E 0818/08

DEKRA EXAM GmbH



Certification body



Special services unit