



**BUREAU
VERITAS**



(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

EPS 15 ATEX 1 074 X

Revision 0

(4) Equipment: ALI 3.900..Ex..

(5) Manufacturer: PRÜFTECHNIK Dieter Busch AG

(6) Address: Oskar-Messter-Straße 19-21, 85737 Ismaning

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

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 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 of the Directive. The examination and test results are recorded in the confidential report 15TH0166.

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

EN 60079-0:2012 + A11:2013

EN 60079-11:2012

(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 the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

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



II 2G Ex ib IIC T4 Gb



Certification department of explosion protection

D. Zitzmann



Nuremberg, 06.11.2015

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Certificates without signature are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 15 ATEX 1 074 X, Revision 0.



(13) **Annex**

(14) **EC-Type Examination Certificate EPS 15 ATEX 1 074 X**

Revision 0

(15) Description of equipment:

The RS5 Sensor EX is a part of a laser-optical alignment system provided by PRÜFTECHNIK. It measures the incident position and the inclination of a laser beam generated by the RS5 Laser EX.

The measurement results are transmitted to an external PC via RS232 or to an external module via Bluetooth. From the measurement data misalignments and manual correction factors can be calculated. LED lights signal compliance with the measurement range.

Maximum ambient temperature range	$-10\text{ °C} \leq T_{\text{amb}} \leq +50\text{ °C}$
Degrees of protection provided by enclosure	$\geq \text{IP20}$

Electrical data:

Only for connection with certified equipment for power supply and data acquisition. The following intrinsic safe values (floating ground) shall never be exceeded:

Supply circuit	$U_{o,v} = 6\text{ V}$
Data circuit	$U_{o,d} = \pm 6\text{ V}$
Output current for both circuits in summary	$I_{o,v} + I_{o,d} = 215\text{ mA}$
Output power for both circuits in summary	$P_{o,v} + P_{o,d} = 1,25\text{ W}$
Supply characteristic	rectangular
Maximum permissible external capacitance for $L_o \leq 2\text{ }\mu\text{H}$	$C_o = 30\text{ }\mu\text{F}$
Internal capacitance of the RS5 Sensor Ex	$C_i = 25,2\text{ }\mu\text{F}$
Internal inductance of the RS5 Sensor Ex	$L_i = 0\text{ }\mu\text{H}$

The supply circuit and the data circuits must be considered to be internally connected. It must be ensured that safety-relevant circuit parts are never damaged by feeding-back of power to the connected devices.

For connection with equipment for power supply and data acquisition, e.g. the following devices provided by PRÜFTECHNIK:	OPTALIGN smart, Typ ALI 12.200 EX RF-module EX, Typ ALI 4.621..EX..
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(16) Test report: 15TH0166

(17) Special conditions for safe use:

For special conditions of certification see user manual.



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(18) Essential health and safety requirements:

Met by standards.



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Nuremberg, 06.11.2015