



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX PTB 05.0016X** Issue No.: **1**

Status: **Current**

Date of Issue: **2006-11-14** Page **1** of **4**

Applicant: **R. STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany
Germany

Electrical Apparatus: **Cable gland, Types 8161/5 and 8161/6**
Optional accessory:

Type of Protection: **Increased Safety "e", Protection by enclosure "tD"**

Marking: **Ex e II**
Ex tD A21 IP66
Tamb - 40 °C to +75°C

*Approved for issue on behalf of the IECEx
Certification Body:*

Dr. Ing. Uwe Klausmeyer

Position:

Head of Section "Flameproof Enclosures"

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**Physikalisch-Technische
Bundesanstalt (PTB)**

Bundesallee 100
38116 Braunschweig
Germany





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Manufacturer: **R. STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany
Germany

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:

DE/PTB/05-020

File Reference:

B003119



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description of equipment

The Cable Glands, types 8161/5 and 8161/6, made of polyamide serve as means to feed cables into electrical equipment, which is carried out in the type of protection "e" increased safety. Type 8161/6 Cable Glands are equipped with blue cap nuts and are intended to be used with cables of intrinsically safe circuits.

Nomenclature

Cable Gland	Type	8161/a
a	5: type of protection increased safety "e",	
	6: type of protection increased safety "e", blue cap nuts for intrinsically safe circuits	
	Remark: Both types optionally followed by numerals or letters without influence to explosion-protection	

Technical data

Nominal Size	for use with following cable diameter range
M 16 x 1,5	from 4 mm up to 9 mm
M 20 x 1,5	from 6 mm up to 13 mm
M 25 x 1,5	from 10 mm up to 17 mm from 7 mm up to 12 mm (with additional sealing ring)
M 25 x 1,5	4 times from 3 mm up to 5,5 mm (multi entry)
M 32 x 1,5	from 13 mm up to 21 mm
M 32 x 1,5	4 times from 5 mm up to 7 mm (multi entry)
M 40 x 1,5	from 17 mm up to 28 mm
M 50 x 1,5	from 23 mm up to 35 mm
M 63 x 1,5	from 31 mm up to 48 mm
working temperature range	-40°C up to +75°C
suitable for Group II devices with degree of mechanical risk:	high
enclosure wall or flange with tapped holes, thickness of material:	
plastic	minimum 5,0 mm
metal	minimum 3,0 mm
enclosure wall or flange with through holes, thickness of material:	
plastic	minimum 2,0 mm
metal	minimum 1,0 mm
degree of protection:	IP 66 according to IEC 60 529

Notes for manufacturing and operation

The degree of protection – minimum IP 54 according to IEC 60529 – is only to be achieved with a choice of suitable cable glands, approved sealing rings and proper installation to the electrical equipment.

CONDITIONS OF CERTIFICATION: YES as shown below:

The Cable glands are only suitable for fixed cable installation. The end user has to ensure, that an appropriate strain

relief is guaranteed. The maximum thermal ratings of the inserted cables are to be considered.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

The ambient temperature is changed to -40 °C up to +75 °C. A cable sealing material, which is suitable for this temperature range, may optionally be used.