



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**
- (3) EC-type-examination Certificate Number:



PTB 02 ATEX 1125

- (4) Equipment: Cable gland, type Progress ... Ex
- (5) Manufacturer: AGRO AG
- (6) Address: Korbackerweg 7, 5502 Hunzenschwil, Switzerland
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 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 the confidential report PTB Ex 03-12309.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014:1997 + A1 + A2 EN 50019:2000
- (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 in accordance 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/D EEx e II IP 68

Zertifizierungsstelle Fachamt Schutz

Braunschweig, April 07, 2003

By order:

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1125

(15) Description of equipment

The cable gland of type Progress ... EX is made from brass or steel. It is used as cable entry into electrical equipment designed to type of protection Increased Safety "e". The cable gland is mounted in enclosures provided with threaded holes and feed-through openings.

The main elements of the cable gland are the forcing nut, the adapter gland, and the sealing element. The sealing element, or an additional cable grip, provides the required strain relief. Accessories provided include reducers, expansion fittings, plugs and counternuts.

Technical data

Type	Type and size of thread
Progress MS EMV KB EX	M16x1.5 to M63x1.5, long and short Conduit thread Pg9 to Pg48, long and short
Progress MS KB EX	M16x1.5 to M63x1.5, long and short Conduit thread Pg9 to Pg48, long and short
Progress S2 KB EX	M12x1.5 to M63x1.5, long Conduit thread Pg7 to Pg48, long
Progress MS HT KB EX	M16x1.5 to M63x1.5, long and short Conduit thread Pg9 to Pg48, long and short
Progress S2 HT KB EX	M12x1.5 to M63x1.5, long Conduit thread Pg7 to Pg48, long
Progress S4 HT KB EX	M12x1.5 to M63x1.5, long Conduit thread Pg7 to Pg48, long
Progress MS T+KB EX	M16x1.5 to M40x1.5, long and short Conduit thread Pg9 to Pg29, long and short
Progress MS HT T+KB EX	M16x1.5 to M40x1.5, long and short Conduit thread Pg9 to Pg29, long and short
Expansion MS EX	M16x1.5 to M50x1.5, short Conduit thread Pg9 to Pg48, short
Expansion S2 EX	M8x1 to M50x1.5, short Conduit thread Pg7 to Pg48, short
Expansion S4 HT Ex	M8x1 to M50x1.5, short Conduit thread Pg7 to Pg48, short
Reducer MS EX	M10x1 to M63x1.5, short Conduit thread Pg7 to Pg48, short
Reducer S2 EX	M10x1 to M63x1.5, short Conduit thread Pg7 to Pg48, short
Reducer S4 HT EX	M10x1 to M63x1.5, short Conduit thread Pg7 to Pg48, short
Plug MS EX	M8x1 to M63x1.5, long and short Conduit thread Pg7 to Pg48, long and short
Plug S2 EX	M8x1 to M63x1.5, long and short
Plug S4 HT EX	M8x1 to M63x1.5, long and short
Counternut MS EX, MS EMV EX and S2 EX	M8x1 to M63x1.5 Conduit thread Pg7 to Pg36

sheet 2/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

Nominal diameter of cables 3 mm to 52 mm
 Min. wall thickness:
 for equipment with threaded holes4.0 mm
 for equipment with feed-through openings2.0 mm to 6.0 mm
 Max. operating temperatures, sealing ring TPE, black -20 °C to +100 °C
 sealing ring FPM, green -20 °C to +200 °C

(16) Test report PTB Ex 03-12309

(17) Special conditions for safe use

None;

Notes for manufacturing and operation

Cable glands with heavy-gauge conduit thread must be clearly marked.

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionsschutz

By order:

U. Klammann

Dr.-Ing. U. Klammann
 Regierungsdirektor



Braunschweig, April 07, 2003

1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1125

(Translation)

Equipment: Cable gland, type Progress ... EX

Marking:  II 2 G EEx e II
 II 2 D IP 68

Manufacturer: AGRO AG

Address: Korbackerweg 7, 5502 Hunzenschwil, Switzerland

Description of supplements and modifications

The cable gland, type Progress ... EX, made from brass or steel, is extended by the following components:

Extensions MS HT EX, reduction fittings MS HT EX, and locking plugs MS HT EX, of the sizes specified below.

Locking plugs S2 EX and S4 HT EX of sizes M75 x 1.5 and Pg7 to Pg48.

In addition, an alternative TPE material may be used for the sealing element.

Technical data

Extension MS HT EX	M16x1.5 to M50x1.5, short Pg9 to Pg48, short
Reduction fitting MS HT EX	M10x1 to M63x1.5, short Pg7 to Pg48, short
Locking plug MS EX	M8x1 to M75x1.5, long and short Pg7 to Pg48, long and short
Locking plug MS HT EX	M8x1 to M75x1.5, long and short Pg7 to Pg48, long and short
Locking plug S2 EX	M8x1 to M75x1.5, long and short Pg7 to Pg48, long and short
Locking plug S4 HT EX	M8x1 to M75x1.5, long and short Pg7 to Pg48, long and short

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1125

Max. working temperature range

Sealing element

TPE, black -20 °C to +100 °C

TPE, black (alternative) -20 °C to +100 °C

FPM, green -20 °C to +200 °C

Connection thread - sealing ring

FPM, green -20 °C to +200 °C

NBR, black -20 °C to +100 °C

Applied standards

EN 50014:1997 + A1 + A2

EN 50019:2000

EN 50281-1-1:1998

Test report: PTB Ex 06-16076

Zertifizierungsstelle Explosionsschutz

Braunschweig, June 28, 2006

By order

Dr.-Ing. U. Klausmeyer
Direktor und Professor



2nd SUPPLEMENT
according to Directive 94/9/EC Annex III.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1125
(Translation)

Equipment: Cable gland, type Progress ... EX

Marking:  II 2 G EEx e II
 II 2 D IP 68

Manufacturer: AGRO AG

Address: Korbacherweg 7, 5502 Hunzenschwil, Switzerland

Description of supplements and modifications

The cable gland, type Progress ... EX, made from brass or steel, is extended to include the type series Progress MS EMV Rapid Ex and Progress MS EMV Rapid KB Ex, made from nickelized brass. The sizes of these glands are listed below.

The ambient temperatures for the TPE sealing ring, black, is extended to -40 °C ... +100 °C.

Technical data

Type name	Type and size of thread
Progress MS EMV Rapid KB EX	M16x1.5 to M32x1.5, long and short Pg9 to Pg29, long and short

Max. working temperatures, TPE sealing ring, black -20 °C to +100 °C

Applied standards

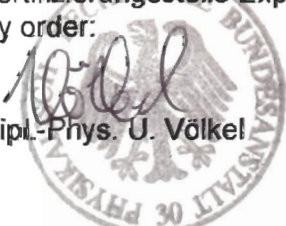
EN 50014:1997 + A1 + A2

Test report: PTB Ex 06-16301

Zertifizierungsstelle Explosionsschutz

Braunschweig, September 28, 2006

By order:


Dipl.-Phys. U. Völkel

Sheet 1/1

3rd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1125

(Translation)

Equipment: Cable gland, type Progress ... EX

Marking:  II 2 G EEx e II
 II 2 D IP 68

Manufacturer: AGRO AG

Address: Korbackerweg 7, CH-5502 Hunzenschwil, Switzerland

Description of supplements and modifications

The cable gland, type Progress ... EX, made from brass or steel, has been re-inspected on the basis of Standards EN 60079-0, EN 60079-7, EN 61241-0 and EN 61241-1.

The marking will thus change to:

 II 2 G Ex e II

 II 2 D Ex tD A21 IP 68

The cable gland is extended to include type series Progress MS T+KB EX, Progress MS HT T+KB EX and Progress MS W 90 KB EX with the sizes specified below.

Type series Progress MS KB EX, Progress MS EMV KB EX, Progress MS EMV RAPID KB EX and Progress S2 KB EX can optionally come with NPT screw thread.

The ambient temperature range for sealing rings made from TPE and NBR is extended to -40 °C ... +100 °C, and for sealing rings made from FPM to -40 °C... +200 °C.

Technical data

Progress MS T+KB EX	M16x1.5 to M40x1.5, long and short Pg9 to Pg29, long and short NPT 3/8 " to NPT 2"
Progress MS HT T+KB EX	M16x1.5 to M40x1.5, long and short Pg9 to Pg29, long and short
Progress MS W 90 KB EX	M12x1.5 to M40x1.5, long and short Pg7 to Pg29, long and short

Sheet 1/2

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

Physikalisch-Technische Bundesanstalt



Braunschweig und Berlin

3rd SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1125

Progress MS KB EX	M16x1.5 to M63x1.5, long and short Pg9 to Pg48, long and short NPT 1/4 " to NPT 2"
Progress MS EMV KB EX	M16x1.5 to M63x1.5, long and short Pg9 to Pg48, long and short NPT 1/4 " to NPT 2"
Progress MS EMV RAPID KB EX	M16x1.5 to M32x1.5, long and short Pg9 to Pg29, long and short NPT 1/4 " to NPT 1"
Progress S2 KB EX	M12x1.5 to M63x1.5, long Pg 7 to Pg 48, long NPT 1/4 " to NPT 2"

Nominal cable diameter 3 mm to 52 mm

Minimum wall thicknesses:

When installed in devices with tapped holes: 4.0 mm

When installed in devices with through-holes..... 2.0 mm to 6.0 mm

Max. working temperature range, Sealing ring TPE, black -40 °C to +100 °C

Sealing ring FPM, green..... -40 °C to +200 °C

Sealing ring NBR..... -40 °C to +100 °C

Notes for manufacturing and operation

Cable glands with PG thread and NPT thread must be clearly marked.

Applied standards

EN 60079-0:2006

EN 60079-7:2007

EN 61241-0:2006

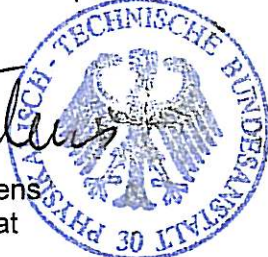
EN 61241-1:2004

Test report: PTB Ex 08-18040

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, March 27, 2008

Sheet 2/2

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.