



(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 10 ATEX 1034 X**

(4) Equipment: Screwed cable gland, types EX Compact MS, EX Compact A2 and EX Compact A4

(5) Manufacturer: AGRO AG

(6) Address: Korbackerweg 7, CH-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 assessment and test report PTB Ex 10-10129.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN 60079-0:2006, EN 60079-1:2007, EN 60079-7:2007, EN 61241-0:2006, EN 61241-1:2004**

(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 Ex d IIC and Ex e II**

**II 2 D Ex tD A21 IP68**

Zertifizierungssektor Explosionsschutz

Braunschweig, November 29, 2010

On behalf of PTB:

Dr.-Ing. M. Thedens  
Oberregierungsrat



## SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 10 ATEX 1034 X**

(15) Description of equipment

The screwed EX Compact MS, EX Compact A2 and EX Compact A4 cable glands are made from brass or steel. They consist of a pressure nut, adapter socket, press-fit element, sealing ring and 'O' ring.

They are used for entering cables into electrical equipment that is designed to Increased Safety "e", Flameproof Enclosure "d", and Protection by Enclosure "tD" type of protection.

They are installed in enclosures with threaded holes or through-holes.

### Technical data

Type name	Type and size of thread
EX Compact MS	M16x1.5 to M63x1.5
EX Compact A2	M16x1.5 to M63x1.5
EX Compact A4	M16x1.5 to M63x1.5

Nominal diameter of cables ..... 3 mm to 50 mm

Torque ..... 14 Nm to 84 Nm

Minimum wall thickness:

for equipment with threaded holes ..... 3.0 mm (metal)

5.0 mm (plastic)

for equipment with through-holes ..... 1.0 mm (metal)

2.0 mm (plastic)

Ambient temperatures: ..... -60 °C to +105 °C

Protection against solid foreign

objects, water, and contact ..... IP68 in accordance with

EN 60529

(16) Assessment and Test Report PTB Ex 10-10129

(17) Special conditions for safe use

Only permanently installed cables may be entered through the glands. The operating company must ensure that adequate strain relief is provided.

# Physikalisch-Technische Bundesanstalt



Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 10 ATEX 1034 X

(18) Essential health and safety requirements

Met by compliance with the afore-mentioned Standards.

Zertifizierungssektor Explosionsschutz  
On behalf of PTB:

Braunschweig, November 29, 2010

Dr.-Ing. M. Thedens  
Oberregierungsrat



## 1st SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 10 ATEX 1034 X

(Translation)

Equipment: Screwed cable gland, type EX Compact MS, EX Compact A2, EX Compact A4

Marking:  II 2 G Ex d IIC bzw. Ex e II  
 II 2 D Ex tD A21 IP6

Manufacturer: AGRO AG

Address: Korbackerweg 7, CH-5502 Hunzenschwil, Switzerland

### Description of supplements and modifications

The screwed EX Compact MS, EX Compact A2 and EX Compact A4 cable glands, which are made from brass or steel, are modified in the following respects:

- 1) The internal thread of the screwed cable gland can optionally be an NPT thread.
- 2) The screwed cable gland has been re-examined on the basis of standards EN 60079-0:2012, EN 60079-1:2007 and EN 60079-31:2009.

The marking therefore changes to:

 II 2 G Ex db eb IIC

 II 2 D Ex ta IIIC

### Technical data

Type name	Type and size of thread
EX Compact MS	M16x1.5 to M63x1.5 NPT 3/8" to NPT 2"
EX Compact A2	M16x1,5 to M63x1,5 NPT 3/8"to NPT 2"
EX Compact A4	M16x1.5 to M63x1.5 NPT 3/8" to NPT 2"

Nominal diameter of cables ..... 3 mm to 50 mm

Torque 12 Nm to 84 Nm

Minimum wall thickness:

for equipment with threaded holes: ..... 3.0 mm (metal)

..... 5.0 mm (plastic)

for equipment with through-holes ..... 1.0 mm (metal)

..... 2.0 mm (plastic)

Ambient temperatures:..... -60 °C to +105 °C

Protection against solid foreign objects,

water and contact ..... IP68 acc. to EN 60529

Product number	Nominal cable diameter $\varnothing$ (mm)		Torque	
	min	max	Pressure nut (Nm)	Adapter socket (Nm)
EX1126.17.**.070	3	7	12	12
EX1126.17.**.100	5	10	16	16
EX1126.20.**.110	5	11	20	20
EX1126.20.**.140	9	14	25	25
EX1126.25.**.150	7.5	15	30	30
EX1126.25.**.180	12.5	18	25	25
EX1126.32.**.230	17	23	50	50
EX1126.32.**.260	21	26	50	50
EX1126.40.**.260	21	26	50	50
EX1126.40.**.320	24	32	40	40
EX1126.50.**.360	28	36	30	30
EX1126.50.**.420	35	42	38	38
EX1126.63.**.440	36	44	80	80
EX1126.63.**.500	43	50	84	84

Product number	Nominal cable diameter $\varnothing$ (mm)		Torque	
	min	max	Pressure nut (Nm)	Adapter socket (Nm)
EX1126.3/8NPT.**.070	3	7	12	12
EX1126.3/8NPT.**.100	5	10	16	16
EX1126.1/2NPT.**.110	5	11	20	20
EX1126.1/2NPT.**.140	9	14	25	25
EX1126.3/4NPT.**.150	7.5	15	30	30
EX1126.3/4NPT.**.180	12.5	18	25	25
EX1126.1NPT.**.230	17	23	50	50
EX1126.1NPT.**.260	21	26	50	50
EX1126.11/4NPT.**.320	24	32	40	40
EX1126.11/2NPT.**.360	28	36	30	30
EX1126.11/2NPT.**.420	35	42	38	38
EX1126.2NPT.**.440	36	44	80	80
EX1126.2NPT.**.500	43	50	84	84

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 10 ATEX 1034 X

## Special conditions for safe use

Only permanently installed cables may be entered through the glands. The operating company must ensure that adequate strain relief is provided.

The cable gland is suited for installation in electrical equipment that is designed to Increased safety "e", Flameproof Enclosure "d" and Protection by Enclosure "ta" type of protection. For use in equipment designed to Flameproof Enclosure "d" type of protection, the threaded holes must conform with the minimum requirements specified in EN 60079-1.

If the reference pressure exceeds 20 bar, the cable gland shall be included in the type test in accordance with EN 60079-1, section 15.1.3 (overpressure test), as required for I, IIA, IIB or IIC classification of the corresponding electrical equipment.

The cable gland shall be fixed in the electrical equipment so that rotation and accidental loosening will be prevented.

The pressure nut must be tightened with the torque that is specified in the operating instructions.

## Applied standards

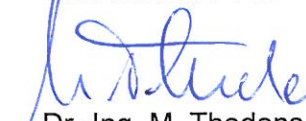
EN 60079-0:2012, EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 13-12122

Zertifizierungssektor Explosionsschutz

On behalf of PTB:

Braunschweig, June 4, 2012

  
Dr.-Ing. M. Thedens  
Oberregierungsrat

