IECEX		Ex Certificate Conformity					
INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres for rules and details of the IECEx Scheme visit www.iecex.com							
Certificate No.:	IECEx PTB 12.0055X	Page 1 of 4	Certificate history:				
Status:	Current	Issue No: 1	Issue 0 (2013-03-01)				
Date of Issue:	2023-12-21						
Applicant:	AGRO AG Korbackerweg 7 5502 Hunzenschwil Switzerland						
Equipment:	Cable gland type EX Compact MS, EX Comp	pact A2 and EX Compact A4					
Optional accessory:							
Type of Protection:	db, eb, ta						
Marking:	Ex db eb IIC Gb Ex ta IIIC Da						
			an a				

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

Date: (for printed version)

1.

- This certificate and schedule may only be reproduced in full. This certificate is not transferable and remains the property of the issuing body. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code. 2.
- 3.

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB) **Bundesallee 100** 38116 Braunschweig Germany

**Dr.-Ing. Detlev Markus** 

Head of Department "Explosion Protection in Energy Technology"

D. harlers 09.21.24





		IECEx Certificate of Conformity
Certificate No .:	IECEx PTB 12.0055X	Page 2 of 4
Date of issue:	2023-12-21	Issue No: 1
Manufacturer:	AGRO AG Korbackerweg 7 5502 Hunzenschwil Switzerland	
Manufacturing locations:	AGRO AG Korbackerweg 7 5502 Hunzenschwil Switzerland	
IEC Standard list bel found to comply with Rules, IECEx 02 and STANDARDS :	ow and that the manufacturer's q the IECEx Quality system requir Operational Documents as ame any acceptable variations to it spo	(s), representative of production, was assessed and tested and found to comply with the juality system, relating to the Ex products covered by this certificate, was assessed and rements. This certificate is granted subject to the conditions as set out in IECEx Scheme ended
IEC 60079-0:2017 Edition:7.0	Explosive atmospheres - Part (	0: Equipment - General requirements
IEC 60079-1:2014 Edition:7.0	Explosive atmospheres - Part	1: Equipment protection by flameproof enclosures "d"
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 3	31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7:2017 Edition:5.1	Explosive atmospheres - Part 7	7: Equipment protection by increased safety "e"
		ndicate compliance with safety and performance requirements e expressly included in the Standards listed above.
TEST & ASSESSME A sample(s) of the ed		met the examination and test requirements as recorded in:
Test Report:		
DE/PTB/ExTR12.006	<u>59/01</u>	

Quality Assessment Report:

CH/SEV/QAR12.0001/09



# IECEx Certificate of Conformity

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Issue No: 1

#### EQUIPMENT:

Date of issue:

Equipment and systems covered by this Certificate are as follows:

#### Description

The cable gland type EX Compact MS, EX Compact A2 and EX Compact A4 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 "eb", Flameproof Enclosure "db", and Protection by Enclosure "ta" type of protection.

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

Technical data and Nomenclature see Annex.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Only permanently wired cables shall be entered. The user shall provide for the required strain relief.

- 2. When the cable gland is used with equipment of the type of protection Flameproof Enclosure "db", the threaded holes have to meet the minimum requirements as set forth in the relevant standard.
- 3. When the cable gland is used with equipment of the type of protection Flameproof Enclosure "db", and if the reference pressure exceeds 20 bar, the cable gland must be included in the type test of IEC 60079-1, section 15.1.3 (overpressure test) as required for IIA, IIB or IIC classification of the corresponding equipment.



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

- 1. No technical changes. Updated to current editions of IEC 60079-0 (Ed. 7), IEC 60079-1 (Ed. 7), IEC 60079-7 (Ed. 5.1), IEC 60079-31 (Ed. 2).
- Marking is changed to: Ex db eb IIC Gb Ex ta IIIC Da

Annex:

COCA120055-01\_1.pdf



Attachment to Certificate IECEx PTB 12.0055X, Issue No. 1



Applicant:

AGRO AG Korbackerweg 7 5502 Hunzenschwil Switzerland

Electrical Apparatus:

Cable gland type EX Compact MS, EX Compact A2 and EX Compact A4

## Description

The cable gland type EX Compact MS, EX Compact A2 and EX Compact A4 is made from brass or steel. It consists of a pressure nut, adapter socket, press-fit element, sealing ring and 'O' ring.

It is used for entering cables into electrical equipment of the types of protection Increased Safety "eb", Flameproof Enclosure "db", and Protection by Enclosure "ta". It can be 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 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
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
Ingress protection	IP 66, IP68 in accordance with IEC 60529



Attachment to Certificate IECEx PTB 12.0055X, Issue No. 1



Article number		al cable di- ø / mm	Torque / Nm	
	min	max	Pressure nut	Lower part
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

Article number	Nominal cable di- ameter ø / mm		Torque / Nm	
	min	max	Pressure nut	Lower part
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

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Attachment to Certificate IECEx PTB 12.0055X, Issue No. 1



### Nomenclature

EX1126.	**.	**.	***
1	2	3	4

- 1) Code type EX Compact
- 2) Code size of connection thread

12 = M12x1.5 17 = M16x1.5 20 = M20x1.5 25 = M25x1.5 32 = M32x1.5 40 = M40x1.5 50 = M50x1.5 63 = M63x1.5 3/8NPT = NPT 3/8" 1/2NPT = NPT 3/4" 1NPT = NPT 1" 11/4NPT = NPT 1<sup>1</sup>/4" 11/2NPT = NPT 1<sup>1</sup>/4" 2NPT = NPT 2"

- 3) Code combination of material of the cable gland and the gasket, O-ring always FPM without number = brass, nickel plated / NBR
  94 = steel A2 (1.4305) / NBR
  97 = steel A4 (1.4435) / NBR
- 4) Code max. cable ø e.g. 140 = 14 mm

## Specific Conditions of Use

- Only permanently wired cables shall be entered. The user shall provide for the required strain relief.
- 2) When the cable gland is used with equipment of the type of protection Flameproof Enclosure "db", the threaded holes have to meet the minimum requirements as set forth in the relevant standard.
- 3) When the cable gland is used with equipment of the type of protection Flameproof Enclosure "db", and if the reference pressure exceeds 20 bar, the cable gland must be included in the type test of IEC 60079-1, section 15.1.3 (overpressure test) as required for IIA, IIB or IIC classification of the corresponding equipment.

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