





(1) **EU-TYPE EXAMINATION CERTIFICATE**

(Translation)

- (2) Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number:

PTB 00 ATEX 1059

Issue: 1

- (4) Product: Cable gland type 18**.**.** and blanking element (locking plug) type 8710.**
- (5) Manufacturer: AGRO AG
- (6) Address: Korbackerweg 7, CH-5502 Hunzenschwil, Switzerland
- (7) This product and any acceptable variation thereto is 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 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential Test Report PTB Ex 24-11138.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN IEC 60079-0:2018, EN 60079-1:2014, EN IEC 60079-7:2015/A1:2018, EN 60079-31:2014
- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:



Braunschweig, February 28, 2024



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EU-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 Nationales Metrologieinstitut



(13)

SCHEDULE

(14) EU-Type Examination Certificate Number PTB 00 ATEX 1059 . Issue: 1

(15) Description of Product

Cable gland type 18**.**.**

The cable gland type 18**.**, made of steel or nickel-plated brass, is used to introduce nonpermanently laid cables into enclosures of the type of protection Flameproof Enclosure "db", Increased Safety "eb" or Protection by enclosure "ta".

Technical data	
Type and size of connection thread	M16x1.5 to M63x1.5 Pg 9 to Pg 48 NPT 3/8" to NPT1 1/2" G 3/8" to G 2"
Nominal cable diameter	7 mm to 44 mm
Minimum wall thickness for enclosures of Type of Protection increased safety "eb"	Threaded holes ≥ 5 mm (plastic enclosure) ≥ 3 mm (metal enclosure) Through holes
	≥ 2 mm (plastic enclosure) ≥ 1 mm (metal enclosure)
Minimum wall thickness for enclosures of Type of Protection flameproof enclosure "db"	Threaded holes <u>></u> 8 mm and at least 8 full threads available Through holes Not allowed
Ingress protection	IP68
Ambient temperature	−40 °C to +100 °C

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Article final digits	Nomina diamete	al cable rø/mm	Torque /	Nm
	min	max	Pressure nut and lower	Clamping jaw
			part	screws
.09.26	7	9	10	0.95
.11.26	9	11	10	0.95
.13.26	11	13	16	1.00
.16.26				
.16.27				
.21.26	13	16,5	20	1.00
.21.27	16,5	20	24	1.00
.29.26	20	24	30	1.45
.29.27	24	28	35	1.55
.36.26	28	32	44	2.20
.36.27	32	36	60	2.70
.48.26	36	40	60	3.20
.48.27	40	44	65	3.20

Nomenclature Cable gland type 18**.**.**

18	**	**	**	**
1	2	3	4	5

1: Type

2: Code type and size connection thread

3: Code basis size of the cable gland

4: Code material of housing and elastomeric sealing ring

5: Code size of the gasket

Code of type an	d size of the co	onnection thread	
12 = M12x1.5	07 = Pg7	3/8G = G3/8"	3/8NPT = NPT 3/8"
17 = M16x1.5	09 = Pg9	1/2G = G1/2"	1/2NPT = NPT 1/2"
20 = M20x1.5	11 = Pg11	3/4G = G3/4"	3/4NPT = NPT 3/4"
25 = M25x1.5	13 = Pg13.5	1G = G1"	1NPT = NPT 1"
32 = M32x1.5	16 = Pg16	11/4G = G11/4"	11/2 NPT = NPT 1 ½ "
40 = M40x1.5	21 = Pg21	11/2G = G11/2"	11/4NPT = NPT 1 1/4"
50 = M50x1.5	29 = Pg29	2G = G2"	
63 = M63x1.5	36 = Pg36		
	42 = Pg42		
	48 = Pg48		

Code basis size of the cable gland
without = basis size corresponds with the size of the connection thread
07 = basis size 7
09 = basis size 9
11 = basis size 11
13 = basis size 13

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16 = basis size 16 21 = basis size 21 29 = basis size 29 36 = basis size 26 49 = basis size 48

Code of the material combination of body and gasket
without = brass, nickel plated / HNBR, NBR
94 = steel A2 (1.4305) / HNBR, NBR
97 = steel A4 (1.4435) / HNBR, NBR

Code of the size of the gasket 26 small gasket 27 big gasket

Blanking element (locking plug) type 8710.**

The blanking element (locking plug) type 8710.**, made of steel or nickel-plated brass, is used to close cable entry openings in enclosures of the type of protection Flameproof Enclosure "db", Increased Safety "eb" or Protection by enclosure "ta".

Technical data	
Type and size of blanking element (locking plug) thread	M12x1.5 to M63x1.5 Pg7 to Pg36 NPT3/8" to NPT1 1/2"
Torque	6 Nm to 60 Nm
Minimum wall thickness for enclosures of Type of Protection increased safety "eb"	Threaded holes ≥ 5 mm (plastic enclosure) ≥ 3 mm (metal enclosure)
	Through holes ≥ 2 mm (plastic enclosure) ≥ 1 mm (metal enclosure)
Minimum wall thickness for enclosures of Type of Protection flameproof enclosure "db"	Threaded holes ≥ 8 mm and at least 8 full threads available Through holes
	Not allowed
Ingress protection	IP68
Ambient temperature Metric and Pg thread (with O-ring FPM) NPT thread (without O-ring)	−40 °C to +100 °C −40 °C to +200 °C

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Metric threa	ad	Pg thread		NPT thread	
Size	Torque / Nm	Size	Torque / Nm	Size	Torque / Nm
8710.12	6	8710.07	6	8710.3/8NPT	9
8710.17	9	8710.09	9	8710.1/2NPT	16
8710.20	16	8710.11	12	8710.3/4NPT	20
8710.25	20	8710.13	16	8710.1/NPT	30
8710.32	30	8710.16	16	8710.11/4NPT	35
8710.40	35	8710.21	20	8710.11/2NPT	45
8710.50	45	8710.29	25		
8710.63	60	8710.36	35		

Nomenclature blanking element (locking plug) type 8710.**

8710	**	**
1	2	3

1: Type

2: Code material of body

3: Code type and size connection thread (see cable gland)

Code material of body		
without = brass, nickel-plated		
96 = steel A2 (1.4305)		
98 = steel A4 (1.4435)		

Code of type an	d size of the co	onnection thread	
12 = M12x1.5	07 = Pg7	3/8G = G3/8"	3/8NPT = NPT 3/8"
17 = M16x1.5	09 = Pg9	1/2G = G1/2"	1/2NPT = NPT 1/2"
20 = M20x1.5	11 = Pg11	3/4G = G3/4"	3/4NPT = NPT ³ / ₄ "
25 = M25x1.5	13 = Pg13.5	1G = G1"	1NPT = NPT 1"
32 = M32x1.5	16 = Pg16	11/4G = G11/4"	11/2 NPT = NPT 1 ½ "
40 = M40x1.5	21 = Pg21	11/2G = G11/2"	11/4NPT = NPT 1 1/4"
50 = M50x1.5	29 = Pg29	2G = G2"	
63 = M63x1.5	36 = Pg36		
	42 = Pg42		
	48 = Pg48		

Changes with respect to previous editions:

- 1) No technical changes. Updated to current editions of EN IEC 60079-0:2018, EN 60079-1:2014, EN IEC 60079-7:2015/A1:2018, EN 60079-31:2014.
- Marking is changed to:
 II 2 G Ex db eb IIC Gb
 II 2 D Ex ta IIIC Da

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- (16) Test Report PTB Ex 24-11138
- (17) Specific conditions of use

None

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

According to Article 41 of Directive 2014/34/EU, EC-type examination certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (April 20, 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-type examination certificates and new issues of such certificates may continue to hold the original certificate number issued before April 20, 2016.

Konformitätsbewertungsstelle, Sektor Explosionsschutz On behalf of PTB: Braunschweig, February 28, 2024

Dr.-Ing. D. Markus Direktor und Ptofessor

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