

# 証明書の見方について

株式会社タカチ電機工業

- ・ AGMシリーズは当社がAGRO社より輸入販売している製品になります。
- ・ 当社ではAGMシリーズになりますが、AGRO社では「Progress MS」になります。
- ・ 添付の書類はAGRO社から入手し、IP68を証明しているものになります。

AGMシリーズに相当する製品のAGRO社品名

**DNV-GL**  
Certificate No: TAE00003JH

**TYPE APPROVAL CERTIFICATE**

**This is to certify:**  
That the Cable Gland

with type designation(s)  
SYNTEC MS, PROGRESS MS, MS L, MS FKN, MS FK, MS MULTI, MS T, MS W90, MS Adapter, MS Kombi, MS HT, MS KB, MS T+KB, S2, S2 HT, S4 HT, MS EMV, MS EMV Rapid, MS EMV FKN, MS Adapter EMV, MS Kombi EMV, EMV Serie 85, Serie 51/52, PROGRESS EMV easyConnect, PROGRESS EMV powerConnect

Issued to  
**AGRO AG**  
Hunzenschwil, AG, Switzerland

is found to comply with  
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

**Application :**  
Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.  
Metallic cable glands for non-hazardous areas.

Type	Material	Suitable for open deck	Suitable for Hazardous areas
SYNTEC MS	Metallic	Yes	No
PROGRESS MS, MS L, MS FKN, MS FK, MS MULTI, MS T, MS W90, MS Adapter, MS Kombi, MS HT, MS KB, MS T+KB, S2, S2 HT, S4 HT, MS EMV, MS EMV Rapid, MS EMV FKN, MS Adapter EMV, MS Kombi EMV, EMV Serie 85	Metallic	Yes	No
Serie 51/52	Metallic	Yes	No
PROGRESS EMV easyConnect	Metallic	Yes	No
PROGRESS EMV powerConnect	Metallic	Yes	No

Issued at **Hamburg** on **2019-09-23**

This Certificate is valid until **2024-09-22**.  
DNV GL local station: **Augsburg**

Approval Engineer: **Uwe Supke**

for **DNV GL**  
Digitally Signed By: Schaarmann, Arne  
Location: DNV GL SE Hamburg, Germany  
Signing Date: 2019-09-24

**Arne Schaarmann**  
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Form code: TA 251      Revision: 2016-12      www.dnvgl.com      Page 1 of 33  
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**Metallic cable glands for non-hazardous areas.**

Type	Material	Suitable for open deck	Suitable for Hazardous areas
SYNTEC MS PROGRESS MS, MS L, MS FKN, MS FK, MS MULTI, MS T, MS W90, MS Adapter, MS Kombi, MS HT, MS KB, MS T+KB, S2, S2 HT, S4 HT, MS EMV, MS EMV Rapid, MS EMV FKN, MS Adapter EMV, MS Kombi EMV, EMV Serie 85	Metallic	Yes	No
	Metallic	Yes	No
Serie 51/52 PROGRESS EMV easyConnect PROGRESS EMV powerConnect	Metallic	Yes	No
	Metallic	Yes	No
	Metallic	Yes	No

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Job Id: **262.1-009078-3**  
 Certificate No: **TAE00003JH**

Type designation  AGMシリーズ	PROGRESS MS Cable glands PROGRESS nickel-plated brass Long entry thread metric One-piece sealing insert not overall length insulated  VDE Approval No.: 40019686 Appendix No.: 206A
6.1 Material (Metallic, Non-metallic, composite)	Nickel plated brass CuZn39Pb3
6.2 Mechanical properties (without or with cable anchorage – type A, B , impact category)	Without cable anchorage M6-12 With cable anchorage type A: M12-M75 Impact category 4-8
6.3 Electrical properties (with electric continuity or insulating characteristics)	According to EN 62444
6.4 Resistance to external influences	
6.4.1 IP class 保護等級	IP68 1 bar 30' IP68 (水深10m相当に30分の耐水)
6.4.2 Temperature range if different from -20C to +65C	-40°C up to +100°C
Gland sizes [mm]	M6-M75
Seal material	TPE / NBR

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6.1 Material (Metallic, Non-metallic, composite)	Nickel plated brass CuZn39Pb3
6.2 Mechanical properties (without or with cable anchorage – type A, B , impact category)	With cable anchorage type A: M16-M75 Impact category 5-8
6.3 Electrical properties (with electric continuity or insulating characteristics)	According to EN 62444
6.4 Resistance to external influences	
6.4.1 IP class	IP68 1 bar 30'