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**GOVERNMENT APPROVED TEST LABORATORY**

IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

**IA CERTIFICATE (IMPORT)**

Page 1 of 7

Date Issued: **20 Feb 2026** Certificate Validity: **20 Feb 2029**

**IA Certificate Validity:** In accordance with ARP 0108 and the National Code of Practice, import IA certificates has a validity period of three (3) years from the date of issue. The IA certificate's validity period depends on the validity of the international document that it is based upon, and it is invalidated should the international certificate be cancelled or the product quality assurance or notification becomes invalid. Equipment imported under a valid IA certificate and handed over to the end user, the IA Certificate validity falls away and the Ex equipment remains compliant with the relevant standards for its lifetime, provided the equipment is maintained in its original certified configuration. No modifications are allowed. Imported apparatus not sold by the IA certificate expiry date is deemed to not be covered by this IA Certificate and this IA Certificate shall undergo a renewal process. Renewal of this IA certificate is the responsibility of the IA Certificate Holder. The IA Certificate Holder must provide and maintain records to the end-user, of date of sale for traceability purposes.

Certificate Number: **S-XPL/10.0120** Issue Number: **9**  
 Equipment: **Microwave barrier**  
 Model / Type: **VEGAMIP MPR61(\*).\*\*\*\*\*R/T\*\*\*, MPR62(\*).\*\*\*\*\*R/T\*\*\*\*\* & MPT61(\*).\*\*\*\*\*T\*\*\***  
 IA Certificate Holder: **VEGA Grieshaber KG**  
 IA Certificate Holder Location: **Am Hohenstein 113, 77761 Schiltach, Germany**  
 Manufacturer: **VEGA Grieshaber KG**  
 Manufacturer Location: **VEGA Americas Inc  
 4241 Allendorf Drive, Cincinnati, Ohio, 45209  
 United States of America**  
 Serial No: All serial numbers, imported between issued- and validity date and all serial numbers covered by either valid QAN or QAR.

Identified by Inspection Authority Number  
**S-XPL/10.0120**

And as described in the Explotlabs file number **XPL/11048/10.0120 Issue 9** is hereby certified "Explosion Protected (Refer to clause 1, for Ex Rating)", having been examined and inspected in accordance with the relevant requirements of the South African National Standards.

**SANS 60079-0: 2012 Ed 5** Explosive atmospheres Part 0: Equipment — General requirements  
**IEC 60079-0: 2011 Ed 6**  
**SANS 60079-31: 2014 Ed 2** Explosive atmospheres Part 31: Equipment dust ignition protection by enclosure "t"  
**IEC 60079-31: 2013 Ed 2**

Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL)	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
	Group			
Very high	Da Group III	Two independent means of protection or safe even when two faults occur independently of each other	Equipment remains functioning in zones 20, 21 and 22	See Manual
High	Db Group III	Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account	Equipment remains functioning in zones 21 and 22	
Enhanced	Dc Group III	Suitable for normal operation	Equipment remains functioning in zone 22	

This certificate supersedes all previous documents bearing the reference no XPL/11048/10.0120 Issue 8.

DOCUMENT No: XPL0213 | RELEASE DATE: 11/03/2025 | REV: 9  
 This document is an Explotlabs Controlled Document – Responsibility falls on personnel to ensure correct revision is applied as noted in the electronic system.



## 1. GENERAL

The marking of the Microwave barrier shall include the following:

**Ex ta IIIC T** see manual **Da**

**Ex ta/tb IIIC T** see manual **Da/Db**

**Ex ta/tc IIIC T** see manual **Da/Dc**

**Ex tb IIIC T** see manual **Db**

**Description**

The microwave barrier type VEGAMIP MP\*6\* is used to measure a level limit in areas with combustible dust. It is based on radar and uses microwaves in GHz range. It can be installed in any Zone or partition wall. The VEGAMIP consists of a transmitting and a receiving unit which are mounted separately. Each unit is built of a housing with electronic insert and connected antenna, extensions and rinsing connections are possible. The receiving unit VEGAMIP MPR62(\*) consists of two mechanical and electrical separated components, connected via rated cable. Further there are different versions based on various antennas and electronic inserts.

The enclosure is separately certified (IECEx BVS 14.0077U).

**General product information:**

Microwave barrier type

VEGAMIP MPR61(\*)\*\*\*\*\* (Receiver)

Additional equipment

X - without

\* - antenna extension, air purge connection etc.

Cable entry / cable gland

M - M20 x 1.5 / with

N - 1/2 NPT / without

J - 1/2 NPT / with

\* - separately certifies cable glands and blind plugs

(M20x1.5 or 1/2NPT)

Housing / protection

A - aluminium / IP66

V - stainless steel 316L / IP66

H - Al special color / IP66 / 68 0.2 bar

Electronics

R - power supply DC 20...72 V / AC 20...253 V T - power supply DC

20...55 V load DC 20...55 V, 400 mA

Seal process fitting

\* - FKM, FFKM, ...

Process fitting see manual

Version / material

A - standard antenna system/aluminium -40 °C...+80 °C

B - horn antenna Ø40 mm / 316L

C - horn antenna Ø48 mm / 316L

D - horn antenna Ø75 mm / 316L

J - horn antenna Ø95 mm / 1.4848

E - horn antenna Ø95 mm / 316L

F - plastic horn antenna Ø80 mm / PP / -40 °C...+80 °C

X - for separate horn antenna

Approval

GX – IECEx Ex ta, ta/tb, ta/tc, tb IIIC T\* Da, Da/Db, Da/Dc, Db IP66

DK – IECEx Ex ta, ta/tb, ta/tc, tb IIIC T\* Da, Da/Db, Da/Dc, Db IP66 +

IECEx Ex db IIC T6 Ga/Gb, Gb<sup>1</sup>

optional version differentiation,

without relevance for explosion protection

<sup>1</sup> The assessment for use in explosive gas atmospheres is not part of this certificate.

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Microwave barrier type VEGAMIP MPR62(\*)\*\*\*\*\* (Receiver)

Additional equipment  
X - without  
\* - antenna extension, air purge connection etc.

Cable entry / cable gland  
M - M20 x 1.5 / with  
N - 1/2 NPT / without  
J - 1/2 NPT / with  
\* separately certifies cable glands and blind plugs  
(M20x1.5 or 1/2NPT)

Sensor housing / protection  
A - aluminium / IP66  
V - stainless steel 316L / IP66  
H - Al special color / IP66/68 0.2 bar

Connection cable length/ material / plug connection  
\* Customer-specific / PUR / without

Housing / protection  
A - aluminium / IP66  
V - stainless steel 316L / IP66  
H - Al special color / IP66/68 0.2 bar

Electronics  
R - power supply DC 20...72 V / AC 20...253 V  
T - power supply DC 20...55 V load DC 20...55 V, 400 mA

Seal process fitting  
\* - FKM, FFKM, ...

Process fitting see manual

Version / material  
A - standard antenna system/aluminium -40 °C...+80 °C  
B - horn antenna Ø40 mm / 316L  
C - horn antenna Ø48 mm / 316L  
D - horn antenna Ø75 mm / 316L  
J - horn antenna Ø95 mm / 1.4848  
E - horn antenna Ø95 mm / 316L  
F - plastic horn antenna Ø80 mm / PP -40 °C...+80 °C  
X - for separate horn antenna

Approval  
GX – IECEx Ex ta, ta/tb, ta/tc, tb IIIC T\* Da, Da/Db, Da/Dc, Db IP66

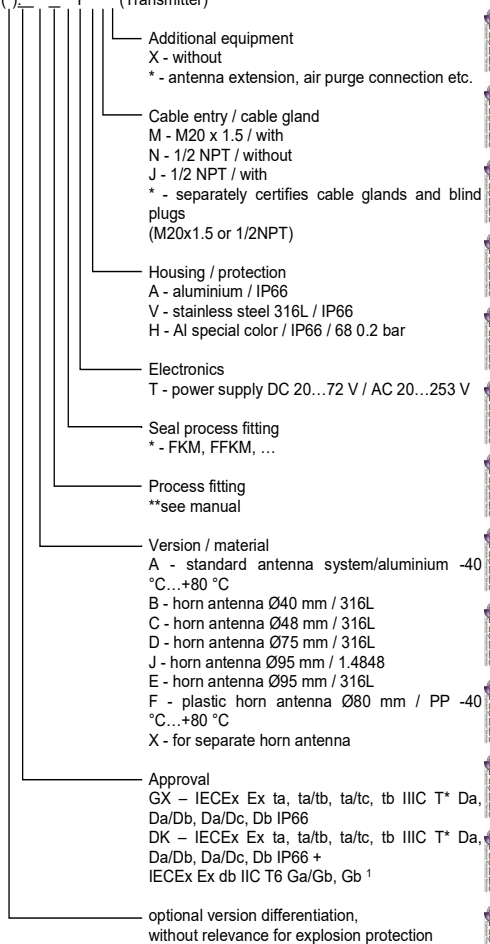
optional version differentiation,  
without relevance for explosion protection

<sup>1</sup> The assessment for use in explosive gas atmospheres is **not** part of this certificate.

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Microwave barrier type VEGAMIP MPT61(\*)\*\* \*\* \* T \* \*\* (Transmitter)



<sup>1</sup> The assessment for use in explosive gas atmospheres is not part of this certificate.

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**Parameters**Electrical data

VEGAMIP MPT61(\*).GX/DK\*\*\*\*T\*\*\*

input

supply voltage

(terminals 1, 2 in the terminal compartment)

AC 20... 253 V, 50 / 60 Hz

DC 20... 72 V

power consumption

AC 1.8 VA

DC ca. 1.3 W

VEGAMIP MPR61(\*).GX/DK\*\*\*\*R\*\*\*

VEGAMIP MPR62(\*).GX\*\*\*\*R\*\*\*

input

supply voltage

(terminals 1, 2 in the terminal compartment)

AC 20... 253 V, 50 / 60 Hz

DC 20... 72 V

power consumption

AC 1.8 VA

DC ca. 1.6 W

relay circuit (maximal data)

contact set 1 (terminals 3, 4, 5)

AC 253 V, 5 A

contact set 2 (terminals 6, 7, 8)

DC 30 V, 4 A

DC 125 V, 0.2 A

VEGAMIP MPR61(\*).GX/DK\*\*\*\*T\*\*\*

VEGAMIP MPR62(\*).GX\*\*\*\*T\*\*\*

input

supply voltage

terminals 1, 2 in the terminal compartment)

DC 20... 55 V

&lt; 1 W

power consumption

signal circuit (maximal data)

terminals 4, 5 in the terminal compartment)

 $U_{Load} = DC 20... 55 V$  $I_{Load} \leq 400 mA$ 

High frequency parameters

transmitting/-emitting frequency K-Band ca. 24 GHz

output radiating power (normal operation)

PEIRP 0.1 W

max. output radiating power (2 faults)

PEIRP 0.2 W

Thermal data

Permitted ambient temperature range

At the sensor (in Zone 20 or 21)

VEGAMIP MPR/T6(\*).GX/DK\*\*\*\*R/T\*\*\* -40 °C...+130 °C

VEGAMIP MPR/T6(\*).GX/DKA/F\*\*\*\*R/T\*\*\* -40 °C...+ 80 °C

high temperature version

VEGAMIP MPR/T6(\*).GX/DK\*\*\*\*R/T\*\*\* -60 °C...+250 °C

ceramics version

VEGAMIP MPR/T6(\*).GX/DK\*\*\*\*R/T\*\*\* -170 °C...+450 °C

At the electronics enclosure (in zone 20, 21 or 22)

VEGAMIP MPR/T6(\*).GX/DK\*\*\*\*R/T\*\*\* -40 °C... +60 °C

max. surface temperature T

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The max. surface temperature is the higher one of the following:

- At the sensor process temperature + 3 K  
(in Zone 20 or 21)
- At the electronics enclosure limited by thermo fuse to 102 °C  
(in Zone 20, 21 or 22)

Degrees of protection according to IEC/SANS 60529, IP66

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

- Optional process connector
- Adjustment of model code

Based on the following documentation:

IECEx BVS 09.0054 Issue No. 4 and/or BVS 09 ATEX E 132

## 2. INSTALLATION INSTRUCTIONS

It is the IA Certificate Holder's responsibility to supply OEM installation instructions with each unit offered for sale as required by IEC/SANS 60079-0, clause 30.

The equipment shall be installed, operated, and maintained in accordance with the manufacturer's instructions and the applicable South African standards and regulations.

## 3. SPECIAL CONDITIONS FOR SAFE USE (denoted by "X" after certificate number)

None.

## 4. SCHEDULE OF LIMITATIONS (denoted by "U" after certificate number)

Not applicable.

## 5. CONDITIONS OF CERTIFICATION

This approval is granted based on the submitted documentation.

Any modifications or alterations to the equipment will invalidate this IA Certificate.

The Certificate Holder is responsible for maintaining accurate records of the equipment and this IA Certificate.

All production units must be covered by either a QAN (Quality Assurance Notification) or QAR (Quality Assurance Report).

**Renewal:** This IA certificate may be renewed under a valid Quality Assurance Notification (QAN) or Quality Assurance Report (QAR). Imported apparatus not sold by the IA certificate expiry date must undergo this renewal process. This condition remains the responsibility of the IA Certificate Holder. Renewal of this IA certificate is the responsibility of the IA Certificate Holder.

Renewal involves a document review, including:

- Verification of the latest ATEX/IECEx certificate.
- Confirmation of a valid QAN/QAR.

Certificate holders are responsible for submitting these documents.

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**6. MARKING**

The equipment shall bear the manufacturer's original marking plate containing all relevant Ex-certification details (applicable under the ATEX Directive). The following (or similar) information shall be clearly and permanently marked on all units:

IA Certificate Holder : VEGA Grieshaber KG  
 Ex Rating : Ex ta IIIC T see manual Da  
                   Ex ta/tb IIIC T see manual Da/Db  
                   Ex ta/tc IIIC T see manual Da/Dc  
                   Ex tb IIIC T see manual Db  
 IA Certificate No : S-XPL/10.0120

*This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with:*

- i) SANS 10086 and IEC/SANS 61241-14 requirements as applicable;
- ii) Any conditions mentioned in the above report;
- iii) Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act; and
- iv) Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.
- v) A revision certificate replaces all previous versions of the certificate.
- vi) \* - Only covers equipment imported between the "Issued" and "Expire" dates.
- vii) If and when your QAN (Quality Assurance Notification) or QAR (Quality Assurance Report) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted, the existing IA Certification will then be cancelled. It is thus the Certificate Holder's responsibility to always submit the updated and valid QAN/QAR certificate(s) to Explolabs (Pty) Ltd

**Reviewed by:**



**CC Lourens**

**Technical Specialist**

**EXPLOLABS EXPLOSION PREVENTION SERVICES**

*This report/certificate shall not be reproduced except in full without the written approval of the company Explolabs (Pty) Ltd shall not be liable for any losses or damages sustained on account of any failure or omission to properly perform our duties in terms of any contract undertaken by us. This disclaimer is immutable and automatically incorporated in any contract undertaken by us; notwithstanding anything to the contrary, save for the express written waiver of our managing director. By marking the equipment in accordance with the documentation/standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and tests have been successfully completed and that the product complies with the documentation and standard(s). The contents of electronic reports/certificates cannot be guaranteed. Original certification documents will be kept on file at Explolabs (Pty) Ltd*

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