

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No .:	IECEx BVS 21.0016X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2021-03-25		
Applicant:	<b>Exepd GmbH</b> i_Park Tauberfranken 23 97922 Lauda-Königshofen <b>Germany</b>		
Equipment:	Microswitch M12 AS1-*7-*****		
Optional accessory	<i>r</i> .		
Type of Protection:	Flameproof enclosures "d"		
Marking:	Ex db IIC T6 Gb		
Approved for issue Certification Body:	on behalf of the IECEx	Jörg Koch	
Position:		Head of Certification Body	
Signature: (for printed version)	)		
Date:			
2. This certificate is n	d schedule may only be reproduced in full. to transferable and remains the property of the issu thenticity of this certificate may be verified by visitin	uing body. Ig www.iecex.com or use of this QR Code.	
Certificate issue	ed by:		
DEKRA Testing Certification B	g and Certification GmbH ody		DEKRA

DEKRA Testing and Certification Gmb Certification Body Dinnendahlstrasse 9 44809 Bochum Germany





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	<b>Exepd GmbH</b> i_Park Tauberfranken 23 97922 Lauda-Königshofen <b>Germany</b>	
Additional manufacturing locations:		

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements Edition:7.0

**IEC 60079-1:2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" Edition:7.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/BVS/ExTR21.0007/00

Quality Assessment Report:

DE/TPS/QAR20.0014/00



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EQUIPMENT: Equipment and systems covered by this Certificate are as follows:

2021-03-25

#### Subject and Type

Microswitch M12

Type AS1-A7-\*\*\*\*\* with single core connection and

Type AS1-L7-\*\*\*\*\* with cable connection

### Description

The \* character in the type key are without influence on the explosion protection.

The microswitch consists of an electrical switching element in a housing with the type of protection flameproof enclosure "d". The electrical connection is made by means of cast-in single core or cable.

The microswitch is suitable in accordance with the special conditions described in section 7, especially for mechanical protection, for the use in potentially explosive atmospheres.

#### Parameters

See Annex

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

- The microswitch M12 type AS1-A7 \*\*\*\*\*\* with single core connection must be installed and connected completely in a housing or in a wall of a housing of a type of protection class described in IEC 60079-0 section 1. When installed in a wall of this housing, the operator must be protected against mechanical hazards, e.g. by means of a suitable housing part, a protective collar or a pre-arranged actuating element suitable according to the requirements of IEC 60079-0.
- The microswitch M12 type AS1-L7 \*\*\*\*\*\* with cable connection must be completely protected from mechanical hazards and daylight protected according to the requirements of IEC 60079-0. When installed in a housing wall, the operator must be protected against mechanical hazards, e.g. by means of a suitable housing part, a protective collar or a pre-arranged actuating element suitable according to the requirements of IEC 60079-0.
- The connection of the free cable ends must be in a room in one of the types of protection described in IEC 60079-0 section 1.
- The mechanical life of the switch is rated at 200,000 actuations. In addition, an increase in the gap values due to wear cannot be ruled out, thus endangering the explosion protection safety.
- When designing the actuation, the parameters of the operating instructions specified by the manufacturer must be observed for the maximum switching travel, the avoidance of the mechanical load on the switch housing and the right-angled actuating direction.

#### Annex:

BVS\_21\_0016x\_Exepd\_Annex.pdf





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### IECEx BVS 21.0016X Annex

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Parameters Rated switching voltage Rated switching current / Utilization category	AC or or	250 V 5 A / AC-12 4 A / AC-12 1 A / AC-13/15	
Rated switching voltage Rated switching current / Utilization category	DC or or	24 V 5 A / DC-12 4 A / DC-12 0.6 A / DC-13	
Rated cross section	3-wire	0.5 mm²	
Ambient temperature range			
Up to 4 A Above 4 A up to 5 A		-20 °C up to +60 °C -20 °C up to +40 °C	
Max switching frequency Mechanical life		5 switches per second 200.000 switches	