

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC Certification System for Explosive Atmospheres

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

Certificate No .:	IECEx CML 19.0101X	Page 1 of 4	Certificate history:
Status:	Current	Issue No: 4	Issue 3 (2020-10-02) Issue 2 (2020-05-21)
Date of Issue:	2021-12-14		Issue 1 (2020-02-18) Issue 0 (2019-09-06)
Applicant:	Peppers Cable Glands Limited Stanhope Road, Camberley, Surrey, GU15 3BT United Kingdom		
Equipment:	RA** Range of Rotating Adaptors Reducers and I	Elbows	
Optional accessory:			
Type of Protection:	Flameproof "db", Increased Safety "eb", Restrict	ed Breathing "nR", Dust Ignition "ta	"
Marking:	Ex db I Mb Ex db IIC Gb Ex eb I Mb Ex eb IIC Gb Ex nR IIC Gc Ex ta IIIC Da		
	Ts = -60°C to +135°C IP66 / IP68 (2 <i>m</i> for 24 hours)		
Approved for issue o Certification Body:	n behalf of the IECEx R C	Marshall	
Position:	Ope	erations Manager	
Signature: (for printed version)			
Date: (for printed version)			
			jai Aserta ini
2. This certificate is not	chedule may only be reproduced in full. transferable and remains the property of the issuing body. enticity of this certificate may be verified by visiting www.iecex.cor	n or use of this QR Code.	
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New Port Road Ellesmere Port, CH65 4LZ **United Kingdom** 





Certificate No.:	IECEx CML 19.0101X	Page 2 of 4							
Date of issue:	2021-12-14	Issue No: 4							
Manufacturer: Peppers Cable Glands Limited Stanhope Road, Camberley, Surrey, GU15 3BT United Kingdom									
Manufacturing locations:									
IEC Standard list belo found to comply with t	ed as verification that a sample(s), representative of production, wa w and that the manufacturer's quality system, relating to the Ex pro the IECEx Quality system requirements.This certificate is granted s Operational Documents as amended	oducts covered by this certificate, was assessed and							
<b>STANDARDS</b> : The equipment and a to comply with the foll	ny acceptable variations to it specified in the schedule of this certifi owing standards	cate and the identified documents, was found							
IEC 60079-0:2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requiremen	ts							
IEC 60079-1:2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flamepre	oof enclosures "d"							
IEC 60079-15:2017 Edition:5.0	Explosive atmospheres - Part 15: Equipment protection by type of	f protection "n"							
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protecti	on by enclosure "t"							
IEC 60079-7:2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increase	ed safety "e"							
	This Certificate <b>does not</b> indicate compliance with safety and other than those expressly included in the Standar								

### TEST & ASSESSMENT REPORTS:

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

Test Reports:

GB/CML/ExTR19.0164/00 GB/CML/ExTR21.0287/00 GB/CML/ExTR19.0164/01

GB/CML/ExTR20.0040/00

Quality Assessment Report:

GB/CML/QAR19.0022/03



Certificate No .:

IECEx CML 19.0101X

2021-12-14

Date of issue:

Page 3 of 4

Issue No: 4

#### EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The RA\*\* range of rotating adaptors, reducers and elbows are constructed from brass or stainless-steel hexagonal shape extrusion or block of material machined to form a 90° elbow.

Refer to Annex for full description.

SPECIFIC CONDITIONS OF USE: YES as shown below: Refer to Annex for specific conditions of use.



Certificate No.:

Date of issue:

IECEx CML 19.0101X

2021-12-14

Page 4 of 4

Issue No: 4

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

This issue introduced the following changes:

- 1. To permit the use of an alternative internal O-ring seal material.
- 2. To permit modifications to the product length to accommodate design requirements for other approvals.
- 3. To recognise minor certification document modifications.

#### Issue 2

This issue introduced the following changes:

1. Addition of specific condition of use relating to EPL Mb.

#### Issue 3

This issue introduced the following changes:

1. Addition of updated QAR - GB/CML/QAR 19.0022

No other changes

#### Issue 4

This issue introduced the following changes:

- 1. Changes to tolerance dimensions. Reduction of diameters 'K' on F1 and M1 options.
- 2. The option to leave a full hexagon form on components F1 & M1 in brass material.
- 3. Reduction to IPX8 depth and duration.
- 4. Re-introduction of silicone O-ring seal material 714177.

#### Annex:

IECEx CML 19.0101X Certificate Annex Issue 4.pdf





Annexe to:	IECEx CML 19.0101X Issue 4
Applicant:	Peppers Cable Glands Limited
Apparatus:	RA** Range of Rotating Adaptors Reducers and Elbows

CML

### **Description**

The RA\*\* range of rotating adaptors, reducers and elbows are constructed from brass or stainlesssteel hexagonal shape extrusion or block of material machined to form a 90° elbow. The ends are machined to form optional male and female entry thread connections as indicated below:

						M	1ETR	RIC						Ν	PT. F	SPP	, BSF	9Т &	NPS	м						P	G									ET				
KEY: A = ADAPTOR R = REDUCER			M16	M20	M25	M32	M40	M50	M63	M75	M80	M85	1/4"	3/8"	1/2"	3/4"		1-1/4"	1-1/2"	2"	2-1/2"	PG7	PG9	PG11	PG13.5		PG21	PG29	PG36	PG42	PG48	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	. =
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	M50	R	R	R	R	R	R	Α	Α	Α			R	R	R	R	R	R	Α	Α	Α	R	R	R	R	R	R	R	R	Α	Α	R	R	R	R	R	R	Α	Α	+
	M63	R	R	R	R	R	R	R	Α	Α	Α	Α	R	R	R	R	R	R	R	Α	Α	R	R	R	R	R	R	R	R	R	Α	R	R	R	R	R	R	R	Α	+
	M75	R	R	R	R	R	R	R	R	Α	Α	Α	R	R	R	R	R	R	R	R	Α	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
	M80	R	R	R	R	R	R	R	R	Α	Α	Α	R	R	R	R	R	R	R	R	Α	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
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	M90	R	R	R	R	R	R	R	R	R	R	Α	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
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	3"	R	R	R	R	R	R	R	R	R	Α	Α	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	1
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	PG11	R	Α	Α	Α		-	_					R	Α	Α	A		_				R	Α	A	A	Α	Α					R	Α	Α	Α	-	1			
	PG13.5	R	R	A	A	A		_					R	R	A	A	Α				-	R	R	A	A	A	A					R	R	A	A	A	_	_		
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	PG21 PG29	_	R	R	R	R	A	Α	A			_	R	R	R	R	A	A	Α		-	R	R	R		R	R	-	Α			-	R		R	R	A	Α	A	٦
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	PG30 PG42	R	R	R	R	R	R	A	A	A		-	R	R	R	R	R	R	R	A	A	R	R	R	R	R	R	R	R	A	A	R	R	R	R	R	R	A	A	-
	PG42 PG48	R	R	R	R	R	R	R	A	A		_	R	R	R	R	R	R	R	A	A	R	R	R	R	R	R	R	R	R	A	R	R	R	R	R	R	R	A	
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	5/8"	A	A	A	Α	1						-	Ā	A	A	A	1				-	A	A	Ā	Ā							A	A	A	1					
	3/4"	R	A	A	A	А	i –					-	R	A	A	Ā	Α	1			-	R	R	A	Ā	А	Α					R	A	A	А	1				1
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The equipment comprises of two parts, linked together in which they can rotate whilst are interlocked. Once the parts are linked together, they form a cylindrical flameproof joint coupled with O-ring and snap ring to hold the two parts together. The internal or external threads at each end may be provided with the above thread options and configurations. The assembly is rated for IP66 and IP68 ratings.

The Types and Model numbers of the RA\*\* Range of Rotating Adaptors Reducers and Elbows are as follows:

Туре	Adaptors/Reducers	Туре	Elbow
RAFF	Female to Female	RAFF 90	Female to Female Elbow
RAMF	Male to Female	RAMF 90	Male to Female Elbow
RAMM	Male to Male	RAMM 90	Male to Male Elbow

### **Conditions of Manufacture**

None.

### **Specific Conditions of Use**

The following conditions relate to safe installation and/or use of the equipment:

- i. The Adaptors, Reducers, and Elbows are manufactured with a cylindrical joint between the entry body and threaded ferrule. This joint shall not be repaired.
- ii. The Adaptors, Reducers, and Elbows shall not be used outside their service temperature range of -60°C to +135°C.
- iii. The Adaptors, Reducers, and Elbows, when used in Group I (mining) applications, shall be mounted in a location with low risk of mechanical damage.

#### Components covered by Ex Certificates issued to older editions of Standards

None.