



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx ExTC 18.0001X

Issue No: 1

Certificate history:

Status: **Current**

Issue No. 1 (2019-05-29)

Issue No. 0 (2018-05-12)

Date of Issue: **2019-05-29**

Page 1 of 4

Applicant: **Eilbeck Cranes**  
6 Moorlands Road  
Ingleburn NSW 2565  
**Australia**

Equipment: **Flat cable gland - M32, M40, M50 and M63: ECE-SED-\*\*\* Series**

Optional accessory:

Type of Protection: **Increased safety 'eb', Protection by Enclosure 'tb'**

Marking:

Ex eb IIC Gb

Ex tb IIIC Db

IP66

Approved for issue on behalf of the IECEx  
Certification Body:

Ajay Maira

Position:

Certification Authority

Signature:  
(for printed version)

Date:

2019-05-29

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**Ex Testing and Certification Pty Ltd**  
1/30 Kennington Drive  
Tomago NSW 2322  
Australia



TESTING & CERTIFICATION



# IECEX Certificate of Conformity

Certificate No: IECEX ExTC 18.0001X

Issue No: 1

Date of Issue: **2019-05-29**

Page 2 of 4

Manufacturer: **Eilbeck Cranes**  
53 Lancaster St,  
Ingleburn NSW 2565  
**Australia**

Additional Manufacturing location(s):

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 apparatus 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 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

**IEC 60079-31 : 2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

**IEC 60079-7 : 2015** Explosive atmospheres – Part 7: Equipment protection by increased safety "e"  
Edition:5.0

*This Certificate **does not** indicate compliance with electrical 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:

[AU/EXTC/ExTR18.0003/00](#)

[AU/EXTC/ExTR19.0008/00](#)

Quality Assessment Report:

[AU/EXTC/QAR18.0002/01](#)



# IECEx Certificate of Conformity

Certificate No: IECEx ExTC 18.0001X

Issue No: 1

Date of Issue: **2019-05-29**

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The range of glands are intended for use with flat cables in Group II and Group III explosive environments. The entry thread sizes include M63, M50, M40, M32 all with a 1.5mm pitch. The cable has a silicon sealing ring which is compressed with slotted washers by a collar with at least 4 screws at a minimum torque of 0.5Nm. The cable clamping mechanism is by the use of two independent clamping jaws that are 6mm thick and have a slightly corrugated 10mm clamping face for the full width. Unless specified in the conditions of use the clamping arrangement is designed so that the jaws bottom out on the body of the gland.

The range of glands has a service temperature range of  $-40^{\circ}\text{C}$  to  $130^{\circ}\text{C}$ .

A Nylon IP sealing ring provides Ingress Protection to the enclosure.

See Annexe for more details.

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

Refer to the Annex for details



# IECEX Certificate of Conformity

Certificate No: IECEX ExTC 18.0001X

Issue No: 1

Date of Issue: **2019-05-29**

Page 4 of 4

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Refer to the Annex for details.

**Annex:**

[IECEX\\_ExTC\\_18.0001X-1 Certificate Annex Final.pdf](#)

# IECEX Certificate of Conformity



## Annexe



Annexe for Certificate No.:

IECEX ExTC 18.0001X

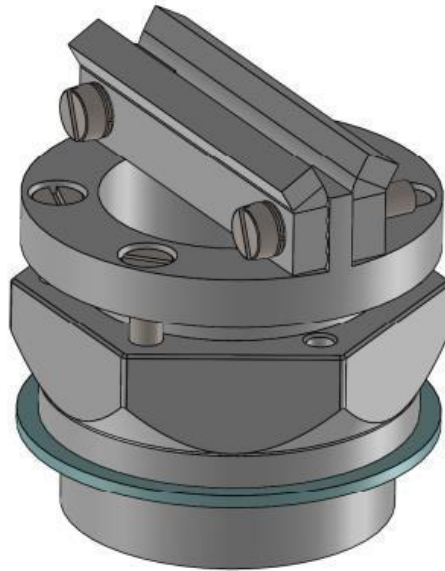
Issue No.:

1

### Description (continued from certificate):

The range of glands include the following:

Gland Size	Thread Size	Cable Width		Cable Height	
		Max	Min	Max	Min
ECE-SED-100	M63x1.5	47.5mm	34.5mm	15.5mm	5.0mm
ECE-SED-200	M50x1.5	36.9mm	27.5mm	11.5mm	6.4mm
ECE-SED-300	M40x1.5	29.1mm	17.0mm	10.3mm	4.5mm
ECE-SED-400	M32x1.5	22.0mm	14.5mm	7.8mm	4.5mm



**M50 Style Gland**

# IECEX Certificate of Conformity



## Annexe



Annexe for Certificate No.:

IECEX ExTC 18.0001X

Issue No.: 1

### Specific Conditions of Use pertaining to Issue 0 of this Certificate:

1. Flat cables with the following dimensional ranges are to be used:

Gland	Width		Height	
	Max	Min	Max	Min
ECE-SED-100	47.5mm	43.5mm	7.2mm	6.0mm
ECE-SED-200	33.9mm	31.0mm	7.8mm	6.6mm
ECE-SED-201	33.1mm	30.0mm	11.0mm	9.9mm
ECE-SED-300	29.1mm	26.1mm	6.4mm	5.4mm
ECE-SED-301	28.0mm	25.4mm	10.3mm	8.7mm
ECE-SED-302	25.3mm	23.0mm	9.4mm	8.0mm
ECE-SED-400	20.7mm	18.7mm	7.8mm	6.6mm
ECE-SED-401	17.3mm	15.6mm	6.4mm	5.4mm

2. The clamping screws for ECE-SED-201, ECE-SED-301 and ECE-SED-302 shall have a minimum torque of 1Nm applied.
3. Cables shall not be allowed to enter the cable clamp at angles greater than  $\pm 30^\circ$ .
4. The equipment may be used in the ambient temperature range of  $-40^\circ\text{C}$  to  $130^\circ\text{C}$ .

### Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex M63 CABLE GLANDS CABLE ( 43.5 x 6 – 47.5 x 7.2 ) ASSEMBLY	ECE-SED-100	1	2	2018-04-20
Ex CABLE GLANDS M63 CABLE GLAND MAIN BODY MACHINING	ECE-SED-111	1	1	2018-03-08
Ex CABLE GLAND M63 CABLE GLAND TOP BODY MACHINING	ECE-SED-112	1	0	2016-10-26
Ex CABLE GLANDS M63 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-SED-113	1	0	2016-10-26

# IECEX Certificate of Conformity



## Annexe



**Annexe for Certificate No.:**

**IECEX ExTC 18.0001X**

**Issue No.:**

**1**

Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex CABLE GLANDS M63 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-SED-114	1	0	2016-10-26
Ex M63 CABLE GLANDS WASHER PL-CABLE ( 43.5x6 – 47.5x7.2) PROFILING	ECE-SED-115	1	0	2016-10-26
Ex M63 CABLE GLANDS RUBBER INSERT-CABLE (43.5x6 – 47.5x7.2) PROFILING	ECE-SED-116	1	1	2017-03-28
Ex M50 CABLE GLANDS CABLE (31x6.6 – 33.9x7.8) ASSEMBLY	ECE-SED-200	1	2	2018-04-20
Ex M50 CABLE GLANDS CABLE (30x9.9 – 33.1x11) ASSEMBLY	ECE-SED-201	1	2	2018-04-20
Ex CABLE GLANDS M50 CABLE GLAND MAIN BODY MACHINING	ECE-SED-211	1	0	2016-10-26
Ex CABLE GLANDS M50 CABLE GLAND TOP BODY MACHINING	ECE-SED-212	1	0	2016-10-26
Ex CABLE GLANDS M50 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-SED-213	1	0	2016-10-26
Ex CABLE GLANDS M50 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-SED-214	1	0	2016-10-26
Ex M50 CABLE GLANDS WASHER PL-CABLE (31x6.6 – 33.9x7.8) PROFILING	ECE-SED-215	1	0	2016-10-26
Ex M50 CABLE GLANDS RUBBER INSERT-CABLE (31x6.6 – 33.9x7.8) PROFILING	ECE-SED-216	1	1	2017-03-28
Ex M50 CABLE GLANDS WASHER PL-CABLE (30x9.9 – 33.1x11) PROFILING	ECE-SED-217	1	0	2016-10-26
Ex M50 CABLE GLANDS RUBBER INSERT-CABLE (30x9.9 – 33.1x11) PROFILING	ECE-SED-218	1	1	2017-03-28

# IECEX Certificate of Conformity



## Annexe



**Annexe for Certificate No.:**

**IECEX ExTC 18.0001X**

**Issue No.:**

**1**

Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex M40 CABLE GLANDS CABLE (26.1x5.4 – 29.1x6.4) ASSEMBLY	ECE-SED-300	1	2	2018-04-20
Ex M40 CABLE GLANDS CABLE (25.4x8.7 – 28x10.3) ASSEMBLY	ECE-SED-301	1	2	2018-04-20
Ex M40 CABLE GLANDS CABLE (23x8 – 25.3x9.4) ASSEMBLY	ECE-SED-302	1	2	2018-04-20
Ex CABLE GLANDS M40 CABLE GLAND MAIN BODY MACHINING	ECE-SED-311	1	0	2016-10-26
Ex CABLE GLAND M40 CABLE GLAND TOP BODY MACHINING	ECE-SED-312	1	1	2018-03-16
Ex CABLE GLANDS M40 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-SED-313	1	0	2016-10-26
Ex CABLE GLANDS M40 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-SED-314	1	0	2016-10-26
Ex M40 CABLE GLANDS WASHER PL-CABLE (26.1x5.4 – 29.1x6.4) PROFILING	ECE-SED-315	1	0	2016-10-26
Ex M40 CABLE GLANDS RUBBER INSERT-CABLE (26.1x5.4 – 29.1x6.4) PROFILING	ECE-SED-316	1	0	2016-10-26
Ex M40 CABLE GLANDS WASHER PL-CABLE (25.4x8.7 – 28x10.3) PROFILING	ECE-SED-317	1	0	2016-10-26
Ex M40 CABLE GLANDS RUBBER INSERT-CABLE (25.4x8.7 – 28x10.3) PROFILING	ECE-SED-318	1	0	2016-10-26
Ex M40 CABLE GLANDS WASHER PL-CABLE (23x8 – 25.3x9.4) PROFILING	ECE-SED-319	1	0	2016-10-26
Ex M40 CABLE GLANDS RUBBER INSERT-CABLE (23x8 – 25.3x9.4) PROFILING	ECE-SED-320	1	1	2017-03-28



# IECEX Certificate of Conformity



## Annexe



**Annexe for Certificate No.:**

**IECEX ExTC 18.0001X**

**Issue No.:**

**1**

Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex M32 CABLE GLANDS CABLE (18.7x6.6-20.7x7.8) ASSEMBLY	ECE-SED-400	1	2	2018-04-20
Ex M32 CABLE GLANDS CABLE (15.6x5.4-17.3x6.4) ASSEMBLY	ECE-SED-401	1	2	2018-04-20
Ex CABLE GLANDS M32 CABLE GLAND MAIN BODY MACHINING	ECE-SED-411	1	0	2016-10-26
Ex CABLE GLAND M32 CABLE GLAND TOP BODY MACHINING	ECE-SED-412	1	1	2018-03-16
Ex CABLE GLANDS M32 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-SED-413	1	0	2016-10-26
Ex CABLE GLANDS M32 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-SED-414	1	0	2016-10-26
Ex M32 CABLE GLANDS WASHER PL-CABLE (18.7x6.6-20.7x7.8) PROFILING	ECE-SED-415	1	0	2016-10-26
Ex M32 CABLE GLANDS RUBBER INSERT-CABLE (18.7x6.6-20.7x7.8) PROFILING	ECE-SED-416	1	1	2017-03-28
Ex M32 CABLE GLANDS WASHER PL-CABLE (15.6x5.4-17.3x6.4) PROFILING	ECE-SED-417	1	0	2016-10-26
Ex M32 CABLE GLANDS RUBBER INSERT-CABLE (15.6x5.4-17.3x6.4) PROFILING	ECE-SED-418	1	1	2017-03-28
Installation, Operating and Maintenance Manual for Ex Flat Cable Gland	ESH-IOM-008	9	0	2018-03-23

# IECEX Certificate of Conformity



## Annexe



Annexe for Certificate No.:

IECEX ExTC 18.0001X

Issue No.: 1

### Variations permitted by Issue 1 of this certificate:

1. Added additional grommet sizes to the range of glands.
2. All previous drawings have been replaced with the ones listed in this issue of the certificate.
3. All specific conditions of use have been superseded by the ones listed in this issue of the certificate.
4. The description has been updated to reflect cable ranges.

### Specific Conditions of Use pertaining to Issue 1 of this certificate:

1. Flat cables with the following dimensional ranges are to be used:

Gland Size	Thread Size	Cable Width		Cable Height	
		Max	Min	Max	Min
ECE-SED-100	M63x1.5	47.5mm	34.5mm	15.5mm	5.0mm
ECE-SED-200	M50x1.5	36.9mm	27.5mm	11.5mm	6.4mm
ECE-SED-300	M40x1.5	29.1mm	17.0mm	10.3mm	4.5mm
ECE-SED-400	M32x1.5	22.0mm	14.5mm	7.8mm	4.5mm

Note: The cable sizes above rely on the correct cable grommets to be fitted in the appropriate gland body. Refer to manufacturer's documents for details.

2. The sealing grommet compression screws for all glands shall have a minimum torque of 1Nm applied.
3. When not specified the clamping screws shall have a minimum torque of 2.5Nm.
4. Cables shall not be allowed to enter the cable clamp at angles greater than  $\pm 30^\circ$ .
5. The equipment may be used in the ambient temperature range of  $-40^\circ\text{C}$  to  $130^\circ\text{C}$ .

### Drawings Associated with the Issue 1 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex M63 CABLE GLANDS ARRANGEMENT AND ASSEMBLY DRAWING ASSEMBLY	ECE-DMS-100	1	2	2019-05-20

# IECEX Certificate of Conformity



## Annexe



**Annexe for Certificate No.:**

**IECEX ExTC 18.0001X**

**Issue No.:**

**1**

Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex CABLE GLANDS M63 CABLE GLAND MAIN BODY MACHINING	ECE-DMS-111	1	1	2018-07-10
Ex CABLE GLANDS M63 CABLE GLAND TOP BODY MACHINING	ECE-DMS-112	1	1	2018-07-10
Ex CABLE GLANDS M63 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-DMS-113	1	1	2018-07-10
Ex CABLE GLANDS M63 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-DMS-114	1	1	2018-07-10
Ex M63 CABLE GLANDS WASHERS PL-CABLE PROFILING	ECE-DMS-115	1	2	2019-05-20
Ex M63 CABLE GLANDS RUBBER INSERT-CABLE PROFILING	ECE-DMS-116	1	3	2019-05-20
Ex M50 CABLE GLANDS ARRAGEMENT AND ASSEMBLY DRAWING ASSEMBLY	ECE-DMS-200	1	2	2019-05-20
Ex CABLE GLANDS M50 CABLE GLAND MAIN BODY MACHINING	ECE-DMS-211	1	1	2018-07-10
Ex CABLE GLANDS M50 CABLE GLAND TOP BODY MACHINING	ECE-DMS-212	1	1	2018-07-10
Ex CABLE GLANDS M50 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-DMS-213	1	1	2018-07-10
Ex CABLE GLANDS M50 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-DMS-214	1	1	2018-07-10
Ex M50 CABLE GLANDS WASHER PL-CABLE PROFILING	ECE-DMS-215	1	2	2019-05-20

# IECEX Certificate of Conformity



## Annexe



Annexe for Certificate No.:

IECEX ExTC 18.0001X

Issue No.:

1

Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex M50 CABLE GLANDS RUBBER INSERT-CABLE PROFILING	ECE-DMS-216	1	3	2019-05-20
Ex M40 CABLE GLANDS ARRANGEMENT AND ASSEMBLY DRAWING ASSEMBLY	ECE-DMS-300	1	3	2019-05-20
Ex CABLE GLANDS M40 CABLE GLAND MAIN BODY MACHINING	ECE-DMS-311	1	1	2018-07-10
Ex CABLE GLANDS M40 CABLE GLAND TOP BODY MACHINING	ECE-DMS-312	1	1	2018-07-10
Ex CABLE GLANDS M40 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-DMS-313	1	1	2018-07-10
Ex CABLE GLANDS M40 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-DMS-314	1	1	2018-07-10
Ex M40 CABLE GLANDS WASHER PL-CABLE PROFILING	ECE-DMS-315	1	2	2019-05-20
Ex M40 CABLE GLANDS RUBBER INSERT-CABLE PROFILING	ECE-DMS-316	1	2	2019-05-20
Ex M32 CABLE GLANDS ARRANGEMENT AND ASSEMBLY DRAWING ASSEMBLY	ECE-DMS-400	1	2	2019-05-20
Ex CABLE GLANDS M32 CABLE GLAND MAIN BODY MACHINING	ECE-DMS-411	1	1	2018-07-10
Ex CABLE GLANDS M32 CABLE GLAND TOP BODY MACHINING	ECE-DMS-412	1	1	2018-07-10

# IECEX Certificate of Conformity



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Title:	Drawing No.:	Pages	Rev. Level:	Date:
Ex CABLE GLANDS M32 CABLE GLAND CLAMP JAW 1 FABRICATION/MACHINING	ECE-DMS-413	1	1	2018-07-10
Ex CABLE GLANDS M32 CABLE GLAND CLAMP JAW 2 FABRICATION/MACHINING	ECE-DMS-414	1	1	2018-07-10
Ex M32 CABLE GLANDS WASHER PL CABLE PROFILING	ECE-DMS-415	1	2	2019-05-20
Ex M32 CABLE GLANDS RUBBER INSERT-CABLE PROFILING	ECE-DMS-416	1	3	2019-05-20
Installation, Operating & Maintenance Manual - Ex Flat Cable Gland	ESH-FCG-IOM-001	9	2	-