

TECHNICAL DATA

CABLE GLAND TYPE : 737 and 797

INGRESS PROTECTION : IP66, IP67 & IP68 (when fitted with CMP sealing accessories) see reverse for further guidance

PROCESS CONTROL SYSTEM : ISO 9001 - ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERE CLASSIFICATION

ATEX CERTIFICATION No. : CML 18ATEX1320X

ATEX CERTIFICATION CODE : Metallic: 🐼 II 2G Ex db IIC Gb, Ex eb IIC Gb, II 1D Ex ta IIIC Da, IM2 Ex db I Mb, Ex eb I Mb

: Non-metallic: (&) II 2G Ex eb IIC Gb, II 1D Ex ta IIIC Da

UKEX CERTIFICATION No.

: Metallic: ( Il 2G Ex db IIC Gb, Ex eb IIC Gb, II 1D Ex ta IIIC Da, IM2 Ex db I Mb, Ex eb I Mb **UKEX CERTIFICATION CODE** 

: Non-metallic: ( ) II 2G Ex eb IIC Gb. II 1D Ex ta IIIC Da

IECEX CERTIFICATION No. : IECEx CML 18.0177X

IECEX CERTIFICATION CODE : Metallic: Ex db I Mb, Ex eb I Mb, Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da

· Non-metallic: Ex eh IIC Gh. Ex ta IIIC Da

cCSAus CERTIFICATION No. · 1055233 (Metallic only)

cCSAus CERTIFICATION CODE : Class I, Groups A,B,C and D; IP66,67 and 68, Enclosure Type 4X, Class II Groups E,F and G; Class III Ex de II, Class I, Zone 1, AEx de II

CERTIFICATION No. · F214221 (Reducers with NPT or Metric Threads only) UL CERTIFICATION CODE : Class I Groups A,B,C,D, Class II Groups E,F,G, Class III

#### INSTALLATION INSTRUCTIONS

- Installation should only be performed by a competent person using the correct tools. Ensure thread type and size are compatible with the associated enclosure / fitting threads. Fully tighten threads
- The interface between a cable entry device and its associated enclosure / cable entry will require additional sealing to achieve ingress protection (IP) ratings higher than IP54. The minimum protection level is IP54 for explosive gas atmospheres and IP6X for explosive dust atmospheres. Parallel threads (and tapered threads when using a non-threaded entry) require a CMP sealing washer or integral O-ring face seal (where available) to maintain IP66, 67 and 68 (when applicable). It is the installer's responsibility to ensure the IP rating is maintained at the interface.

Note: When fitted to a threaded entry, all tapered threads will automatically provide an ingress protection rating of IP66.

A CMP earth tag should be used when it is necessary to provide an earth bond connection. CMP earth tags have been independently tested to comply with Category B rating specified in IEC 62444 (there are no ratings stated in IEC 60079-0). Ratings are shown in the associated table, CMP earth tags slip over the cable gland or accessory entry thread from inside/outside the enclosure and must be secured with a locknut (if fitted internally).

| CMP Earth Tag Size | Short Circuit Ratings Symmetrical Fault Current (kA) for 1 second |
|--------------------|---|
| 20                 | 3.06  |
| 25                 | 4.06  |
| 32                 | 5.40  |
| 40                 | 7.20  |
| 50                 | 10.40   |
| 63                 | 10.40   |
| 75                 | 10.40   |

#### SPECIAL CONDITIONS FOR SAFE USE

- The following condition applies to all adaptors and reducers:
- a. Only one adaptor or reducer shall be used per cable entry.
- The following conditions apply to all adaptors, reducers and stopping plugs:
  - a. The adaptors reducers and stopping plugs shall be assembled in such a way that their protrusion from an associated enclosure is not increased.
  - The interfaces between a male thread of an adaptor/reducer and an associated enclosure, between a female thread of an adaptor/reducer and a cable entry device, and between a stopping plug and an associated enclosure cannot be defined. Therefore, it is the installers responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces
- The following condition applies to non-metallic and aluminium adaptors, reducers and stopping plugs:
  - a. Non-metallic and aluminium adaptors, reducers and stopping plugs shall not be used in group I applications
- The following conditions apply to non-metallic adaptors, reducers and stopping plugs:
- a. Non-metallic adaptors, reducers & stopping plugs shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -20°C
- b. Refer to the manufacturers instructions for the action necessary regarding electrostatic risk
- The following condition applies to non-metallic adaptors and reducers:
  - a. Any cable gland used with the non-metallic adaptors and reducers shall be non-metallic and of the A2 type.

#### ELECTROSTATIC DISCHARGE HAZARD

If cleaning is necessary then non-metallic parts can be cleaned with a damp cloth and allowed to dry naturally. Do not clean using a dry cloth.

#### **ACCESSORIES**

The following accessories are available from CMP Products, as optional extras, to assist with fixing, sealing and earthing: Locknut | Earth Tag | Serrated Washer | Entry Thread

Approved Body: Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ

CMP Products Limited on its sole responsibility declares that the equipment referred to herein conforms to the requirements of the ATEX Directive 2014/34/EU and UK statutory requirements SI 2016 No. 1107 (as amended). This is shown in the following harmonised/designated standards;

- EN60079-0:2018, EN60079-1:2014, EN60079-7:2015+A1:2018, EN 60079-15:2017, EN 60079-31:2014, BS 6121:1989, EN 62444:2013

Malcolm Webber - Product Engineering Manager - (Authorised Person)

CMP Products Limited, Cramlington, NE23 1WH, UK

EU Economic Operator: CMP Products Germany GmbH. Address: Lukasstraße 25a, 52070 Aachen

17th March 2020

Notified Body: CML B.V., Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands

# INSTALLATION INSTRUCTIONS FOR CMP ADAPTORS/REDUCERS TYPE 737 AND 797

ADAPTORS AND REDUCERS FOR USE IN EXPLOSIVE ATMOSPHERES TO CHANGE THE SIZE, TYPE OR GENDER OF A THREADED COMPONENT.

# INCORPORATING EU DECLARATION OF CONFORMITY TO DIRECTIVE 2014/34/EU AND UK STATUTORY **REQUIREMENTS SI 2016 No. 1107 (AS AMENDED)**









737 REDUCER

**ADAPTOR** 

797 ADAPTOR MALE TO MALE

797 **ADAPTOR FEMALE TO FEMALE** 

#### **TYPE 737 ADAPTOR**

Female thread size is the same size or larger than the male thread

#### **TYPE 737 REDUCER**

Female thread size is smaller than the male thread

#### TYPE 737R

737 Adaptor or Reducer incorporating an O ring thread seal

#### **TYPE 797 ADAPTOR**

- Adaptor to change a thread gender
- The 737 Adaptors and Reducers, and 797 Adaptors are available in metal for use in Ex d and Ex e environments.
- The 737 Adaptors and Reducers are also available in nylon for Ex e environments only.

#### **Product Selection table**

| Male Thread (mm) | Female Thread (mm) | 737        | 797<br>(Female to Female) | 797<br>(Male to Male) | Metallic Products Recommended<br>Tightening Torque<br>(Nm) |
|------------------|--------------------|------------|---------------------------|-----------------------|--|
|                  | M10                |            | 797DM1ABFM1ABF            |                       | 10   |
| M12              | M12                | 737DM1AM1A | 797DM1AFM1AF              | 797DM1AMM1AM          | 10   |
| M16              | M16                | 737DM1M1   | 797DM1FM1F                | 797DM1MM1M            | 20   |
| M20              | M20                | 737DM2M2   | 797DM2FM2F                | 7797DM2MM2M           | 25   |
| M25              | M25                | 737DM3M3   | 797DM3FM3F                | 797DM3MM3M            | 30   |
| M32              | M32                | 737DM4M4   | 797DM4FM4F                | 797DM4MM4M            | 35   |
| M40              | M40                | 737DM5M5   | 797DM5FM5F                | 797DM5MM5M            | 45   |
| M50              | M50                | 737DM6M6   | 797DM6FM6F                | 797DM6MM6M            | 65   |
| M63              | M63                | 737DM7M7   | 797DM7FM7F                | 797DM7MM7M            | 95   |
| M75              | M75                | 737DM8M8   | 797DM8FM8F                | 797DM8MM8M            | 120  |
| M90              | M90                | 737DM9M9   | 797DM9FM9F                | 797DM9MM9M            | 155  |
| M100             | M100               | 737DM10M10 | 797DM10FM10F              | 797DM10MM10M          | 170  |
| M115             | M115               | 737DM11M11 | 797DM11FM11F              | 797DM11MM11M          | 195  |
| M130             | M130               | 737DM12M12 | 797DM12FM12F              | 797DM12MM12M          | 205  |

Note: Other materials and thread types are available, consult the CMP website (www.cmp-products) for details.



Glasshouse Street • St. Peters • Newcastle upon Tyne • NE6 1BS Tel: +44 191 265 7411 • Fax: +44 1670 715 646 E-Mail: customerservices@cmp-products.com • Web: www.cmp-products.com

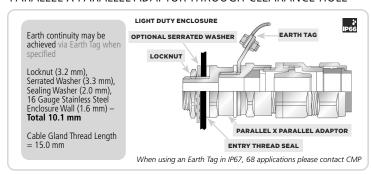
| F1435        |          |       |  |  |
|--------------|----------|-------|--|--|
| Certificate  | Revision | Date  |  |  |
| UKEX         | 0        | 04/21 |  |  |
| IFS          | 17       | 03/24 |  |  |
| ATEX / IECEx | 8        | 04/19 |  |  |
| CSA / cCSAus | 6        | -     |  |  |
| UL           | 6        | -     |  |  |

# INSTALLATION INSTRUCTIONS FOR CMP 737 AND 797

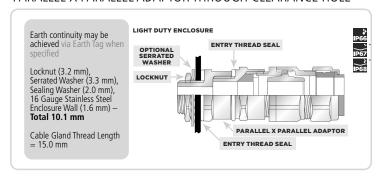
The illustrations provided below are indicative of some of the common methods of installation configurations adopted. These are for informative guidance only and relevant site conditions and Engineering Specification along with any specified National or International Codes of Practice must always take precedence.

Images show typical CMP Cable Gland

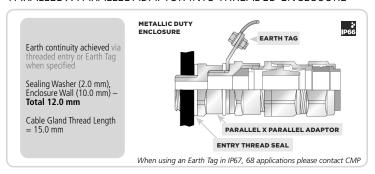
# PARALLEL X PARALLEL ADAPTOR THROUGH CLEARANCE HOLE



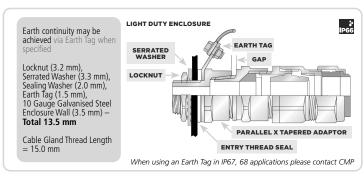
## PARALLEL X PARALLEL ADAPTOR THROUGH CLEARANCE HOLE



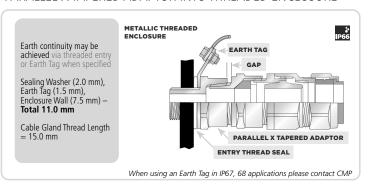
# PARALLEL X PARALLEL ADAPTOR INTO THREADED ENCLOSURE



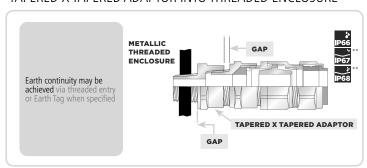
# PARALLEL X TAPERED ADAPTOR THROUGH CLEARANCE HOLE



# PARALLEL X TAPERED ADAPTOR INTO THREADED ENCLOSURE



### TAPERED X TAPERED ADAPTOR INTO THREADED ENCLOSURE



| INSTALLATION TORQUES |  |  |  |  |
|----------------------|--|--|--|--|
| Male Thread Metric   | Metallic Products Recommended Tightening Torque (Nm) |  |  |  |
| M16                  | 20   |  |  |  |
| M20                  | 25   |  |  |  |
| M25                  | 30   |  |  |  |
| M32                  | 35   |  |  |  |
| M40                  | 45   |  |  |  |
| M50                  | 65   |  |  |  |
| M63                  | 95   |  |  |  |
| M75                  | 120  |  |  |  |
| M90                  | 155  |  |  |  |
| M100                 | 170  |  |  |  |
| M115                 | 195  |  |  |  |
| M130                 | 205  |  |  |  |

<sup>\*</sup> IP67, IP68 Rating with deluge seal \*\* IP67, IP68 Rating with deluge seal and appropriate thread grease on tapered threads