



**TECHNICAL DATA**

ADAPTOR TYPE : 780  
 INGRESS PROTECTION : IP66 when used with CMP sealing accessories  
 PROCESS CONTROL SYSTEM : ISO 9001 - 2000  
 : ISO/IEC 80079-34:2011

**EXPLOSIVE ATMOSPHERES CLASSIFICATION**

ATEX CERTIFICATION No : CML 18ATEX1327X  
 ATEX CERTIFICATION CODE : II 2G 1D Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da IP6X  
 : IM2 Ex db I Mb / Ex eb I Mb

UKEX CERTIFICATION No : CML 21UKEX1240X  
 UKEX CERTIFICATION CODE : II 2G 1D Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da IP6X  
 : IM2 Ex db I Mb / Ex eb I Mb

IECEX CERTIFICATION No : IECEx CML 18.0190X  
 IECEX CERTIFICATION CODE : Ex db IIC Gb, Ex eb IIC Gb, Ex db I Mb, Ex eb I Mb, Ex ta IIIC Da IP6X

cCSAus CERTIFICATION No : 1055233  
 CODE OF PROTECTION : Class I, Div 1 and 2, Groups A,B,C and D; Enclosure Type 4X: Class I Zone 1, AEx de II; Ex de II

INMETRO CERTIFICATION No : TÜV 18.2088X  
 INMETRO CERTIFICATION CODE : Ex db IIC Gb, Ex eb IIC Gb, Ex db I Mb, Ex eb I Mb, Ex ta IIIC Da IP6X

**INSTALLATION INSTRUCTIONS**

- Installation should only be performed by a competent person using the correct tools. Spanners should be used for tightening. Read all instructions before beginning installation.
- 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

**SPECIFIC CONDITIONS OF USE**

- Only one union is to be used with any single cable entry on the associated equipment.

**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 (I.P.) Sealing Washer |

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;  
 EN60079-0:2012 + A11: 2013, EN 60079-1: 2014, EN 60079-7: 2015 , EN 60079-31:2014

*Malcolm Webber*  
 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

**CE 2776**  
**UK 2503**

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

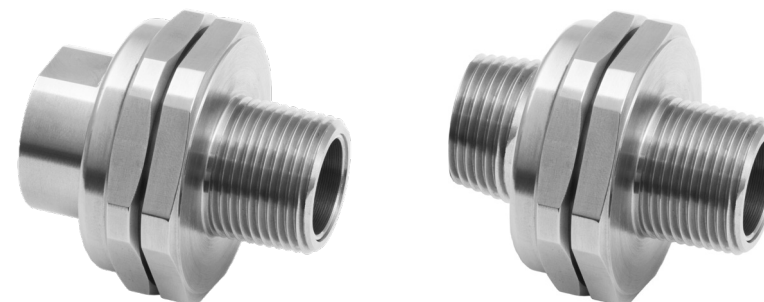
Approved Body: Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ



# INSTALLATION INSTRUCTIONS FOR UNION TYPE 780

UNION TYPE 780 FOR CONNECTING CONDUITS TO ENCLOSURES OR CONDUITS TO EACH OTHER.

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



Product Selection Table								
METRIC								
Ordering Reference (Brass, Metric)	Male Forward Thread Size "A"	Minimum Thread Length "E"	Female Rear Thread Size "B"	Bore Diameter "C"	Max Protrusion Length "F"	Across Flats Hex "D"	Across Corners Ø "D"	Installation Torque (Nm)
780DM2M2	M20 X 1.5	15.0	M20 X 1.5	14.5	35.3	41.0	44.8	7
780DM3M3	M25 X 1.5	15.0	M25 X 1.5	20.3	35.3	46.0	50.3	10
780DM4M4	M32 X 1.5	15.0	M32 X 1.5	26.6	35.3	52.0	56.9	15
780DM5M5	M40 X 1.5	15.0	M40 X 1.5	32.8	35.3	60.0	65.7	25
780DM6M6	M50 X 1.5	15.0	M50 X 1.5	44.4	35.3	70.0	76.7	30
780DM7M7	M63 X 1.5	15.0	M63 X 1.5	56.3	35.6	79.0	86.6	45
780DM8M8	M75 X 1.5	15.0	M75 X 1.5	68.3	40.3	89.9	98.6	45
780DM9M9	M90 X 2.0	24.0	M90 X 2.0	80.3	41.1	110.0	120.7	45
780DM10M10	M100 x 2.0	24.0	M100 x 2.0	90.3	41.1	122.0	133.9	45
<i>All dimensions shown are in millimetres unless otherwise stated</i>								
<i>For material options please add the following suffix to the Ordering Reference; Brass (no suffix required), Nickel Plated Brass "5", 316 Grade Stainless Steel "4", Copper Free Aluminium "1"</i>								
NPT								
Ordering Reference (Brass, NPT)	Male Forward NPT Thread Size "A"	Male Forward NPT Thread Size "A"	Female Rear Thread Size "B"	Bore Diameter "C"	Max Protrusion Length "F"	Across Flats Hex "D"	Across Corners Ø "D"	Installation Torque (Nm)
780DT1T1	1/2"	0.79	1/2"	14.5	35.3	41.0	44.8	7
780DT2T2	3/4"	0.80	3/4"	20.3	35.3	46.0	50.3	10
780DT3T3	1"	0.98	1"	26.6	35.3	52.0	56.9	15
780DT4T4	1-1/4"	1.01	1-1/4"	32.8	35.3	60.0	65.7	25
780DT5T5	1-1/2"	1.03	1-1/2"	40.4	35.3	70.0	76.7	30
780DT6T6	2"	1.06	2"	50.6	35.6	79.0	86.6	45
780DT7T7	2-1/2"	1.57	2-1/2"	62.0	40.3	89.9	98.6	45
780DT8T8	3"	1.63	3"	80.3	41.1	110.0	120.7	45
780DT9T9	3 1/2"	1.69	3 1/2"	90.3	41.1	122.0	133.9	45
<i>All dimensions shown are in millimetres unless otherwise stated</i>								
<i>For material options please add the following suffix to the Ordering Reference; Brass (no suffix required), Nickel Plated Brass "5", 316 Grade Stainless Steel "4", Copper Free Aluminium "1"</i>								

FI426		
Certification	Revision	Date
IFS	10	03/24
ATEX / IECEx	6	04/19
CSA / cCSAus	5	-
UKEX	0	04/21



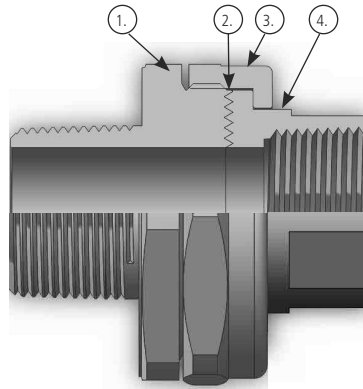
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# INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES 780

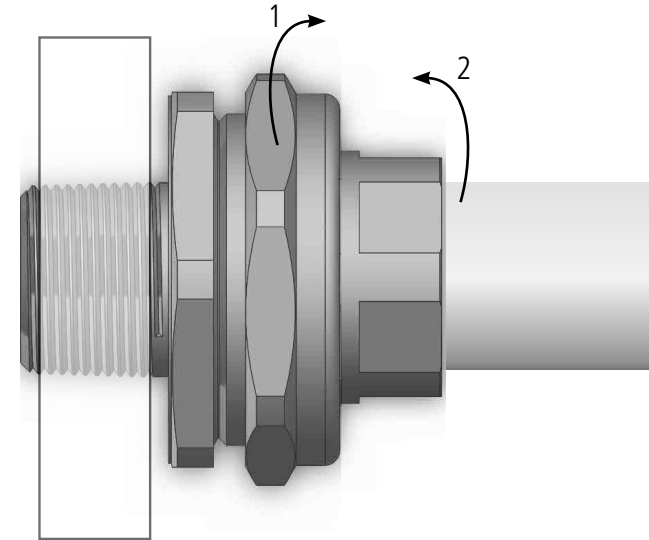
**UNION COMPONENTS** - It is not necessary to dismantle the cable gland any further than illustrated below

- 1. Entry Item
- 2. Serrated Flamepath
- 3. Nut
- 4. Conduit Connector

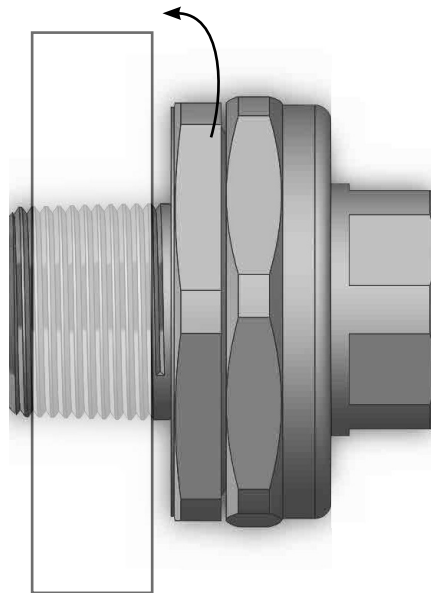


**NOTE: THERE IS NO NEED TO DISSASSEMBLE THE UNION  
PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION**

- 2. Slacken the nut (3) slightly to allow the conduit connector to turn relative to the entry item
- (1). Connect the conduit to the conduit connector and fully tighten.



- 1. Attach the union entry item (1) to the enclosure and fully tighten using a spanner.



- 3. Fully tighten the nut (3) to ensure that the elements forming the serrated flamepath (2) are closely engaged.

