



TECHNICAL DATA
CABLE GLAND TYPE : 781D / 781E
INGRESS PROTECTION : IP66
PROCESS CONTROL SYSTEM : ISO 9001
 : ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION
ATEX CERTIFICATION No : CML 25ATEX1012X
ATEX CERTIFICATION CODE 781D : Ⓔ II 2G Ex db IIC Gb, II 1D Ex ta IIIC Da
ATEX CERTIFICATION CODE 781E : Ⓔ II 2G Ex eb IIC Gb, II 1D Ex ta IIIC Da
UKEX CERTIFICATION No : CML 21UKEX1241U
UKEX CERTIFICATION CODE 781D : Ⓔ II 2G Ex db IIC Gb, II 1D Ex ta IIIC Da
UKEX CERTIFICATION CODE 781E : Ⓔ II 2G Ex eb IIC Gb, II 1D Ex ta IIIC Da
IECEX CERTIFICATION No : IECEX CML 25.0004X
IECEX CERTIFICATION CODE 781D : Ex db IIC Gb, Ex ta IIIC Da
IECEX CERTIFICATION CODE 781E : Ex eb IIC Gb, Ex ta IIIC Da
cCSAus CERTIFICATION No : 1055233
cCSAus CERTIFICATION CODE 781D : Ex d IIC, Class I, Zone 1 AEx d IIC; Class I Div 1, Groups A,B,C,D, IP66, Enclosure Type 4X
cCSAus CERTIFICATION CODE 781E : Ex e II, Class I, Zone 1, AEx e II, IP66, Enclosure Type 4X
UL CERTIFICATION No : E253914
UL CERTIFICATION CODE 781D : Class I, Zone 1 AEx d IIB; Zone 20 AEx ta IIIC
UL CERTIFICATION CODE 781E : Class I, Zone 1, AEx e IIC;

- 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. 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).
 - Breather Drain Type 781 devices do not have any serviceable parts and are therefore not intended to be repaired.

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 Type 781 breather/drain plugs shall be installed in the bottom face of enclosures only.
 - The 781D can be used with enclosures up to 30 litres for group IIB gases and enclosures up to 2.5 litres for group IIC gases
 - The breather drain plug shall not be used with any form of adaptor or reducer.
 - The temperature range for these products is:
 781D: -60°C to +130°C
 781E (Metal / Viton o-ring): -20°C to +130°C
 781E (Metal / Silicon o-ring): -60°C to +130°C
 781E (Plastic): -20°C to +105°C
 - The interfaces between the male thread of the 781 Breather / Drain and an associated enclosure cannot be defined, therefore it is the installer's responsibility to ensure that the appropriate ingress protection level is maintained at the interfaces

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 and EN60079-31:2014

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 17th March 2020

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UK 2503

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



INSTALLATION INSTRUCTIONS FOR CMP BREATHER DRAIN TYPE 781D & 781E

BREATHER DRAIN DEVICES FOR USE IN Ex d (781D) OR Ex e (781E) APPLICATIONS.

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



781E



781D

781D - Breather drain for Ex d applications
781E - Breather drain for Ex e applications

Product Selection Table

Ordering Reference (781D)	Ordering Reference (781E)	Thread Size	Minimum Thread Length	Protrusion Length	Across Flats Dimension	Across Corners Dimensions	Max Installation Torque (Nm)
781DM2	781EM2	M20 x 1.5	15.0	12.7	30.0	33.0	7
781DM3	781EM3	M25 x 1.5	15.0	12.7	36.0	39.6	10
781DT1	781ET1	½" NPT	19.9	12.7	30.0	33.0	7
781DT2	781ET2	¾" NPT	20.2	12.7	36.0	39.6	10

All dimensions shown are in millimetres unless otherwise stated

Materials

Order reference is for Brass.
 - Add "5" at the end for Nickel Plated Brass (e.g. 781DM25)
 - Add "4" at the end for stainless steel (e.g. 781EM24)
 - Add "2" at the end for plastic (e.g. 781EM22) - Not available for 781D

F1427		
Certification	Revision	Date
UKEX	0	04/21
IFS	18	01/25
ATEX / IECEX	7	01/25
CSA / cCSAus	5	01/17
UL	1	01/17

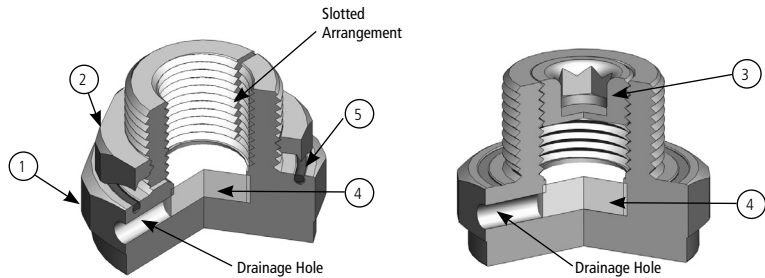


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INSTALLATION INSTRUCTIONS FOR CMP ACCESSORY TYPES 781D & 781E BREATHER DRAIN PLUGS

ACCESSORY COMPONENTS - It is not necessary to dismantle the breather / drain any further than illustrated below

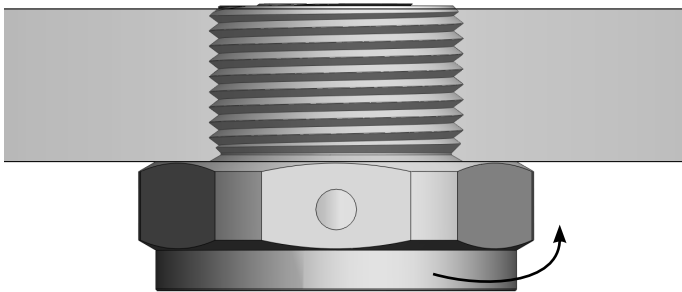
- 1. Body
- 2. Castellated Locknut (781E only)
- 3. Threaded Insert (781D only)
- 4. Felt pad
- 5. 'O' Ring Seal



PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

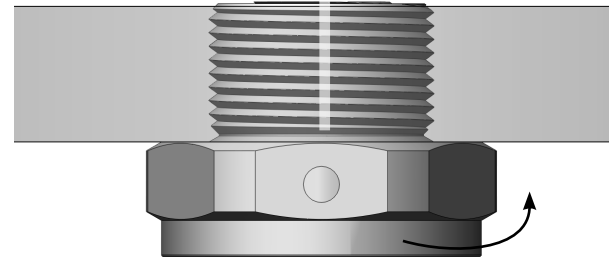
781D ONLY

Screw the breather drain body (1) into the equipment and tighten with a spanner.
Do not disturb the threaded insert (3).
This insert forms a protective flamepath and is also the drain path for any water that may get into the equipment.



781E ONLY - THREADED ENTRY

- 1. Remove the castellated locknut
 - 2. If the equipment entry is threaded, screw the breather drain body (1) into the entry hole and tighten with a spanner. There is no need to fit the castellated locknut.
- Do not disturb the felt pad (4).



781E ONLY - CLEARANCE HOLE ENTRY

If the equipment entry is a clearance hole, then position the body (1) in the entry hole and secure using the castellated locknut and tighten. Ensure that the nut castellations are towards the enclosure wall to ease water drainage.
Do not disturb the felt pad (4).

