

Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL)	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
	Group			
Very high	Da Group III	Two independent means of protection or safe even when two faults occur independently of each other	Equipment remains functioning in zones 20, 21 and 22	None specified
High	Mb Group I	Suitable for normal operation and severe operating conditions	Equipment de-energized when explosive atmosphere present	T150°C
High	Gb Group II	Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account	Equipment remains functioning in zones 1 and 2	None specified

1. GENERAL

The marking of the Unions shall include the following:

Ex eb I Mb*

Ex db I Mb*

Ex eb IIC Gb

Ex db IIC Gb

Ex ta IIIC Da

Ta: -60°C to 85°C/-60°C to 200°C (See description for details)

*** Aluminium alloy is not acceptable for Group I applications**

Type 780 Unions

The Type 780/PX780 Unions are metallic and are intended for in-line connection of male to female, male to male or female to female threads when conventional adaptors/reducers are impractical.

PX780 Unions

The PX78* Unions are a barrier seal version of the union and have an alternative thread entry internal arrangement, which includes an additional compound tube, resin dam and compression washer.

Description

The Type 780/PX780 Unions are metallic and are intended for in-line connection of male to female, male to male or female to female threads when conventional adaptors/reducers are impractical. Additionally, they may be used to convert an existing cable entry aperture to a different threadform and/or size. Each union comprises two parts held together with a nut. The interface between the two parts is a serrated face which forms a flamepath when the nut is tightened. The unions are designed such that connection at both ends is achieved without twisting the cable.

PX780 Unions

The PX78* Unions are a barrier seal version of the union and have an alternative thread entry internal arrangement, which includes an additional compound tube, resin dam and compression washer. The compound tube is filled with a sealing compound that provides a flameproof seal around the cable cores passing through it.

Available sizes:

Threadforms are between M20 to M100 (or equivalent per the list below). Rear thread 'B' for any given size is permitted to be a maximum of one step in thread size larger than front thread 'C'. There is no limitation on how small rear thread size 'B' is in comparison to front thread 'C'.

Materials of manufacture:

The Type 780/PX780 Unions are manufactured in brass, aluminium, mild steel and stainless steel. All brass manufactured parts can be optionally nickel plated. All mild steel manufactured parts can be optionally zinc plated.

Examples of alternative threadforms:

Metric ET (Conduit), PG, BSPP, BSPT, ISO, NPT, NPSM entry threads of all model series to be manufactured with a pitch between 0.7 mm and 2.0 mm, with 1.5 mm as standard.

Based on the following documentation: IECEx CML 18.0190X Issue No.: 1

2. **INSTALLATION INSTRUCTIONS**

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

3. **SPECIAL CONDITIONS FOR SAFE USE** *(denoted by "X" after certificate number)*

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

- i. The PX780 unions shall only be fitted to enclosures where the temperature, at the point of mounting, does not exceed -60°C to +85°C.
- ii. The interfaces between the male thread of the Union adaptor/reducer and an associated enclosure and between the female thread of the union adaptor/reducer and the cable entry device cannot be defined. Therefore, it is the installer's responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces.

4. **SCHEDULE OF LIMITATIONS** *(denoted by "U" after certificate number)*

None.

5. **CONDITIONS OF CERTIFICATION**

All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

