

# Selecting cables

## ATX advice

Care should be taken to choose the cable glands that the cable section corresponds to the one indicated by ATX, whose references are European constructors.

For external hard uses, it is recommended to use triple level weatherproof cable glands (ATX

patented) that ensure a protection of the armour against corrosion. Connection to earth allows to satisfy standard requirements on cable clamping too.

The choice of cable glands depends on :

### Its use

External or internal. In normal service, a cable exhibits a rise in temperature on the surface which must be taken into account in zones where there is a risk of explosion. This rise in temperature stems from a Joule effect of the current passing through the cable. In normal use, the maximum permissible current must therefore be limited to 85 % of the permissible intensity for the zones without explosion risks (required in NFC 15-100 standard, § 522-18).

### Its method of installation

Overhead, underground, in cable ducts or guttering.

In fixed installation (rigid cable), for mobile equipment (flexible cable).

### Its characteristics

The use of category C1 and CR1 is even recommended :

- Flexible cables, series H07 RNF (NFC 32 102, IEC 60.245 standards).

- Non-armoured rigid cables, series U 1000 RO 2V (NFC 32 321, IEC 60.502 standards).

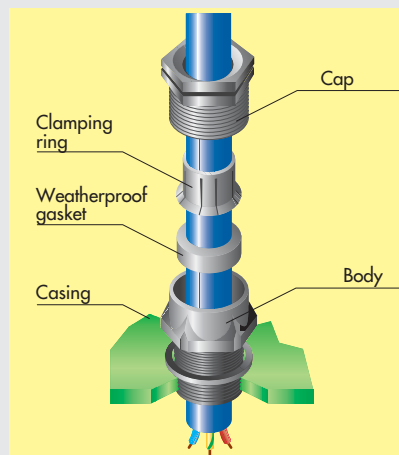
- Rigid armoured cables, series U1000 RGP FV (NFC 32 111 standards).

All these cables can be used for voltages up to 1000 V, except flexible cables whose operating voltage is limited to 750 V.

## Assembly of non-armoured cables

These flexible or rigid cables, with one single sheath, are assembled by being passed directly into the cable entry.

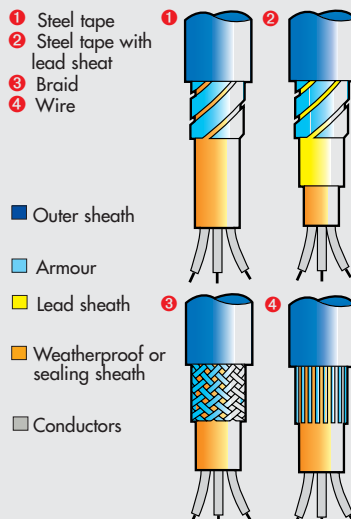
Weatherproof is made by clamping the weatherproof ring of the cable gland on the cable.



## Assembly of armoured cables

These cables are used for their mechanical properties as well as for ensuring earth continuity.

### Armoured cables



Assembly is carried out according to the diagram below :

- The weatherproof ring must always clamp the weatherproof sheath or, if it is used, the lead sheath of the cable.

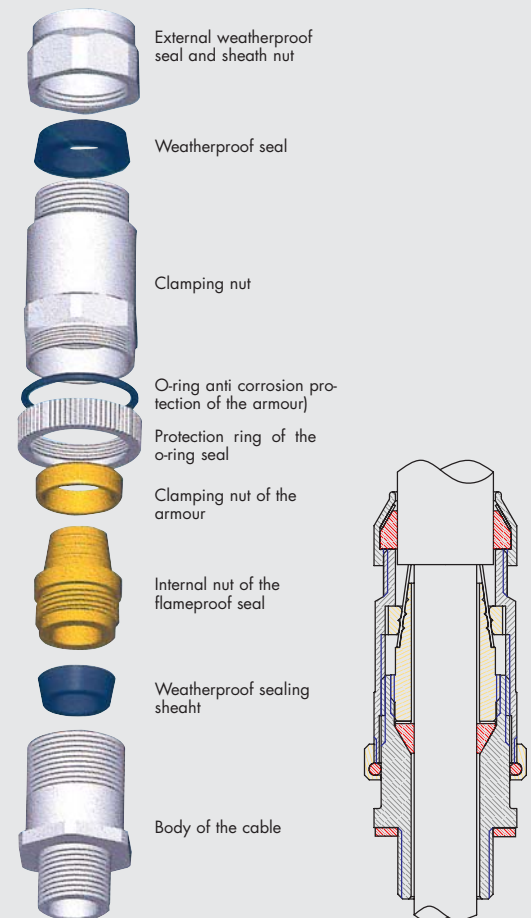
- Clamping of the armour between the two cones shown ensures perfect earth continuity.

The clamping cones are marked :

- W for wire armour.

- X for braid armour.

- Y or Z for steel tape armour.



View of product parts of an EEx"d" EEx"e" cable glands (see page 262)

Cut out view of an assembled cable gland