

Tips on terminating cable shields to enclosures without a connector.

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The simplest and one of the most effective techniques for shield termination is the use of a ring bolted inside the enclosure. The ring is used to clamp the shield of the cable which penetrates through an aperture in the enclosure wall. As the ring clamps the shield around 180° no significant apertures exist and the shielding is very high. Figure 1 illustrates this technique.

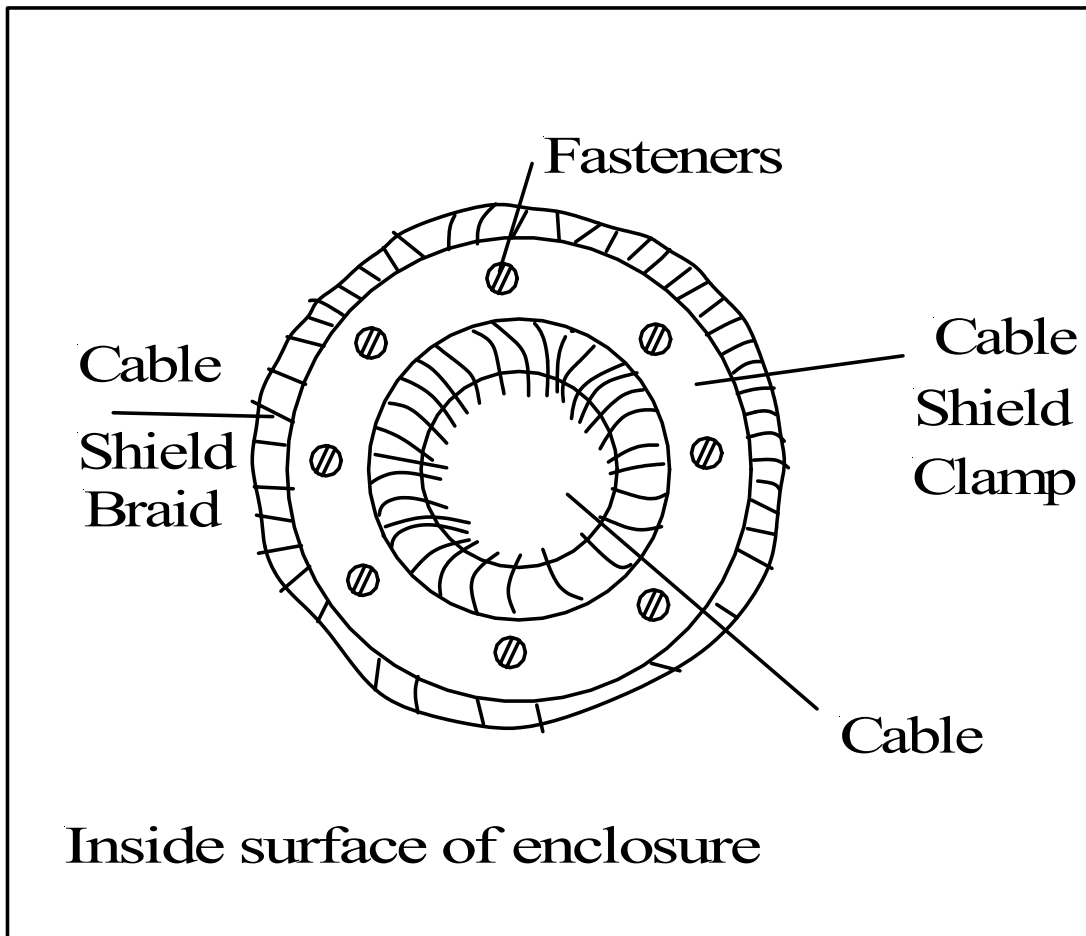


Figure 1 cable clamped by a ring

Another form of shield termination uses a compression fitting, similar to the fitting used in plumbing (in commercial applications we actually use the plumbing fitting). Here the shield is clamped behind a collet using nuts and the inside of the fitting is also held against the enclosure wall by a nut. Figure 2 illustrates this technique.

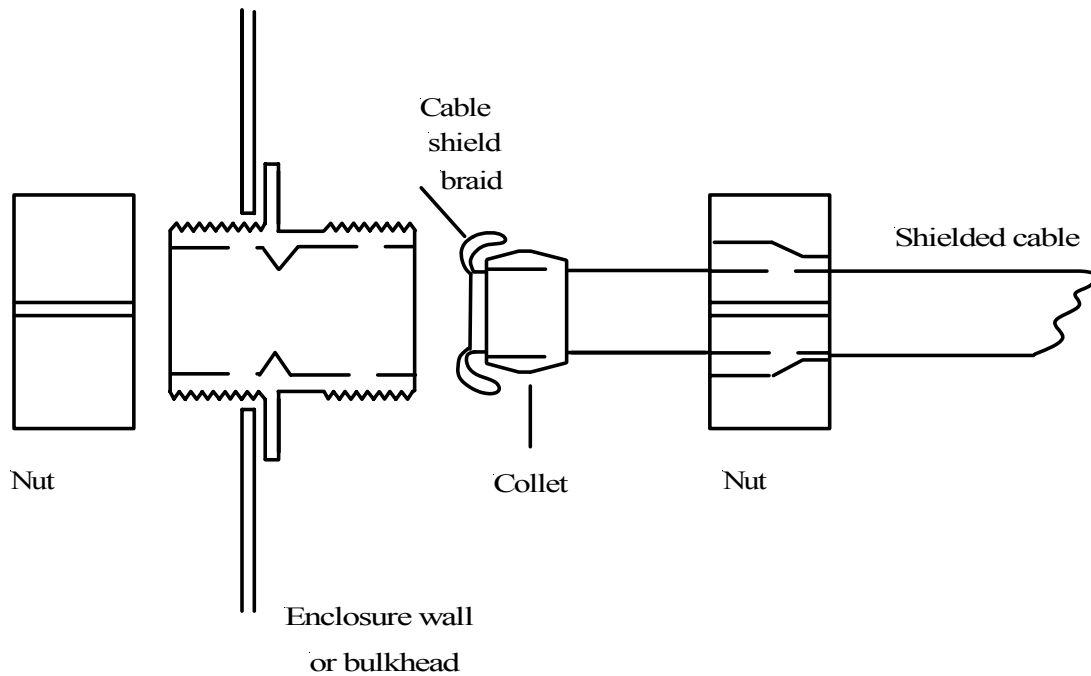


Figure 2 Collet used to clamp shield in a compression fitting

The final method is less satisfactory as it is easy to leave a gap between the end of the shield and the aperture in the enclosure which will compromise the shielding. However it is fairly simple to make and if properly installed will typically achieve adequate shielding. Figure 3 illustrates this technique.

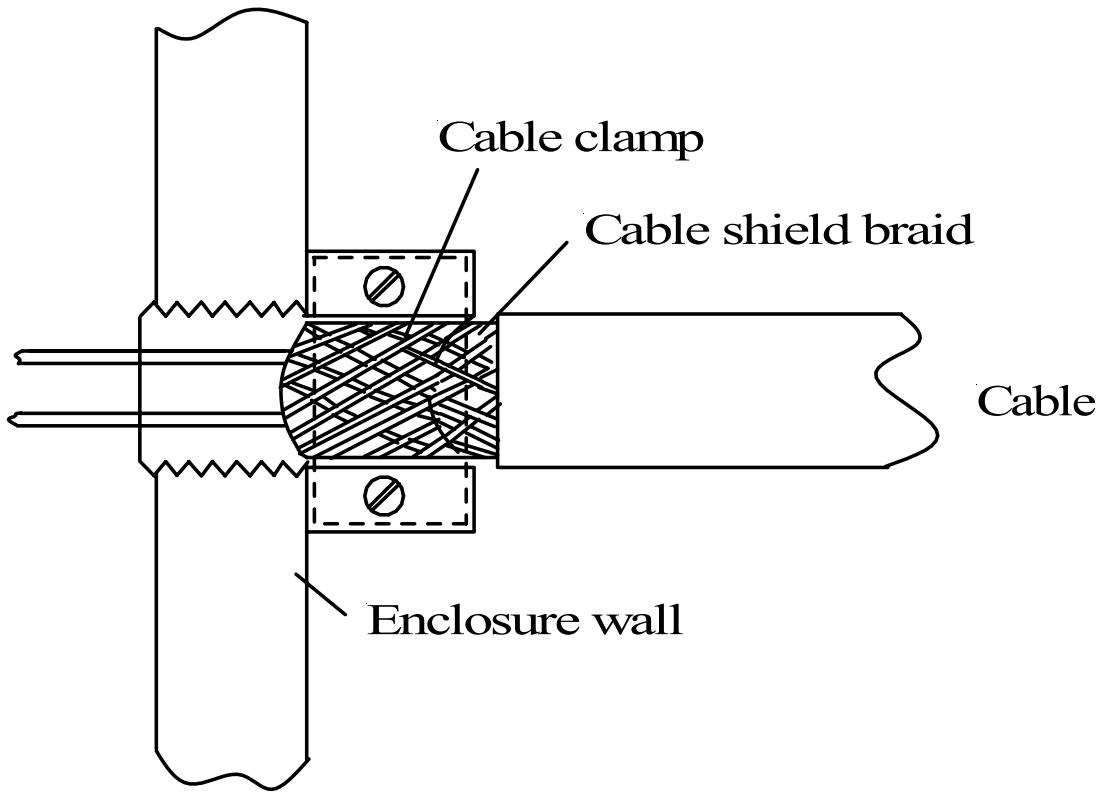


Figure 3 Cable clamp screwed into enclosure wall.