

Description

The invention relates to electrical plug assemblies and particularly to a cable guiding member for shielded electrical plug assemblies.

There is widespread use of modular plugs and receptacles, in particular in the telecommunication and data industries, in which a series of closely spaced conductors terminated in the plugs are connected to a series of contacts in the receptacles. The receptacles are normally fixed to an installation such as a printed circuit board and in anticipation of an expansion of the data transmission facility it is desirable initially to provide an oversize receptacle with provision for more lines than initially required. However, to avoid possibilities of mismatching it is also desirable to utilize a complementary plug, similarly oversized and, in practice, the industry has sought keying arrangements which prevent mating of plugs and receptacles of different sizes. For this reason, there is a requirement to assemble and terminate conductors of shielded cable in an oversize plug.

Problems, however, arise both in feeding the conductors accurately into alignment with the predetermined plug contacts for termination and maintaining the integrity of the shielding of at the rear end of the resulting assembly in spite of the undersize cable.

According to the invention, there is provided a cable guide member which both guides undersize cable accurately into a plug assembly housing and ensures that the rear of the housing is completely shielded after assembly in spite of the undersize cable.

More specifically, the cable guide member is stamped and formed from a single piece of sheet metal and has front and rear ends between which extends a cable supporting base, cable locators upstanding from the base in spaced apart relation to located between them a row of insulated conductors and a sheath of a cable extending between front and rear ends of the guide member and shielding flanges bent up from the base to extend across the rear end between opposite sides edges of the base and the cable locators.

The cable guide member may be provided with means upstanding from the general plane of the base to engage the leading end of the cable sheath to limit forward movement of the cable when loaded onto the base.

In a preferred construction, the base is stepped up towards the front end to provide a platform supporting the row of insulated conductors centrally of the cable, the step providing the limiting means. This locates the row of insulated wires centrally of the cable and housing while the step also facilitates handling.

Desirably, the cable locators comprise a first pair of flanges upstanding from the platform for receiving the insulated conductor array between them and a second pair of flanges upstanding from the base adjacent the rear for receiving the cable sheath between them. The sheath locators comprise a pair of resilient, sheath clamping arms

extending forwardly cantilever fashion from root ends integral with the shield flanges.

The cable guide member can be economically manufactured using conventional stamping and forming techniques.

An example of the invention will now be described with reference to the accompanying drawings in which:

Figure 1 is an exploded isometric view of a cable guide member according to the invention with a leading end portion of flat cable prepared for termination;

Figure 2 is an isometric view of cable loaded into the guide member and aligned for insertion into a shielded modular plug;

Figure 3 is a cross-sectional view of the shielded modular plug with the cable and guide member in elevation;

Figure 4 is an isometric view of an electrical assembly of the invention in which the cable loaded into the guide member is terminated in the shielded modular plug; and

Figure 5 is a cross-sectional view of the terminated assembly according to the invention.

The electrical plug assembly comprises a shielded modular plug 11 similar to that described in our U.S.—A—4,457,575 (disclosure of which is incorporated herein by reference), a cable guide member 12 and a flat cable 13.

The cable guide member 12 is stamped and formed in one-piece from sheet metal and comprises a cable supporting base 14 having front and rear ends 15 and 16, respectively, and opposite side edges 18 and 18'. The base is stepped up towards the front end to provide a lower, cable supporting surface 19 and a raised, insulated conductor row supporting platform 21, the step 22 providing a cable stop as explained below. The cable supporting surface 19 is formed with a series of transversely extending serrations 23. Cable locators comprise a first pair of flanges 24 struck out to upstand from the platform 21 in spaced, opposed relation and a second pair of flanges 25 extending forwardly, cantilever fashion, in spaced, opposed relation at the rear end of the base from inner opposed ends of shield flanges 26 bent up from the rear end of the base and extending to the side edges 18. Locking protuberances 27 are struck out of the base to extend proud of the underside of the base.

The plug housing 11 is moulded from suitable plastics material with a cable receiving mouth 31 opening to a housing rear 32 and communicating internally with a series of passageways 33 extending to a front of the housing for receiving respective individual insulated conductors of the cable and guiding them into alignment with respective terminals 34 of a series of terminals preloaded in the housing.

A stamped and formed metal shield 35 is secured around the housing to extend forwardly from a rear end where it completely surrounds the mouth 31. The shield is integrally formed with resilient flaps 36 returned around a lip 37 to extend into the mouth forwardly in cantilever

fashion. Upper surfaces of the flaps 36 are formed with serrations 38.

Prior to assembly, the outer insulating sheath 41 of the flat cable 13 is cut away from the end to be terminated to expose a row 42 of insulated conductors and the foil shield 43 is reversely bent to extend along the sheath. The prepared end of the cable is then loaded onto the guide with the exposed insulated conductor 42 located between first locators 24 and the sheath clamped between second locators 25.

The subassembly thus formed is inserted into the mouth of the housing, drawer fashion, with flexure of the flaps 36 until the locking protuberances engage the free ends of the flaps in a snap action. The insulated conductors are thereby easily guided into respective passageways.

The terminals are then driven into the wires and the strain relief clamps 39 depressed against the cable ensuring a good electrical contact between the cable foil shield 43, the base 18 of the cable guide and the flaps 36, as shown in Figure 5. The shielding flanges 26 of the cable guide completely close the mouth thereby to shield the rear end of the assembly which would otherwise only be partly shielded as a result of the cable being undersize.

Claims

1. An electrical plug assembly comprising an insulated housing (11) having a cable-receiving mouth (31) opening to a rear end of the housing (11) and communicating internally of the housing (11) with a row of conductor-receiving pathways (33) extending to a front end of the housing in alignment with respective terminals (34) arranged in a row, a shield member (35) of conductive material extending around the housing (11) forwardly from the rear end to provide a substantially continuous shield (35) around the mouth (31) characterized by:

a one-piece cable guide member (12) of conductive material having front and rear ends (15 and 16) between which extends a cable supporting base (14), cable locators (24 and 25) upstanding from the base (14) in spaced apart relation to locate between them an insulated conductor row (42) and cable sheath (41) extending between front and rear ends (15 and 16) of the cable guide member (12) and, shielding flanges (26) upstanding from the base to extend along the rear end between opposite side edges (18, 18') of the base (14) and the cable locators (24 and 25);

whereby on loading a shielded cable (13) into the guide member (12) with an outer insulation sheath (41) stripped cut back from a front end to expose the row of insulated conductors (42) free of the shield (43) with the cable (13) located between the cable locators (24 and 25), the cable guide member (12) can be inserted, front end leading, into the mouth (31), drawer fashion, as a sliding fit guiding the conductor row (42) into respective pathways (33) with the shield flanges (26) completely closing the mouth (31) on each

side of the cable (13) and electrically connected to the shield (43).

2. An electrical plug assembly according to claim 1 characterized in that the cable guide member (12) is stamped and formed from sheet metal.

3. An electrical plug assembly according to claim 2 in which the cable guide member (12) is provided with means (22) upstanding from the general plane of the base (14) to engage the leading end of the cable sheath (41) to limit forward movement of the cable (13) when loaded onto the base (14).

4. An electrical plug assembly according to claim 3 characterized in that the base (14) is stepped up towards the front end (15) to provide a platform (21) supporting the insulated conductor row (42) centrally of the cable (13), the step (22) providing the limiting means (22).

5. An electrical plug assembly according to claim 4 characterized in that the cable locators (24 and 25) comprise a first pair of flanges (24) upstanding from the platform (21) for receiving the insulated conductor row (42) between them and a second pair of flanges (25) upstanding from the base (14) adjacent the rear end (16) for receiving the cable sheath (41) between them.

6. An electrical plug assembly according to claim 5 characterized in that the sheath locators (25) comprise a pair of resilient sheath clamping arms (25) extending forwardly cantilever fashion from root ends integral with the shield flanges (26).

7. An electrical plug assembly according to any one of the preceding claims characterized in that the shield member (35) includes resilient flaps (36) extending forwardly into the mouth (31) cantilever fashion across a floor of the housing (11) and engageable with the base (14) of the cable guide member (12) when the cable guide member (12) is inserted into the housing (11) to effect the electrical connection to the flanges (26) through the base (14).

8. An electrical plug assembly according to claim 7 characterized in that a locking protuberance (27) extends downwardly from the base (14) of the cable guide member (12) for engagement with forward free ends of the flaps (36) to lock the guide member (12) in the housing.

9. An electrical plug assembly according to claim 7 characterized in that a strain relief member (39) is depressable into the mouth (31) into engagement with the cable sheath (41) with the cable shield (43) gripped between the base of the cable guide member (12) and the flaps (36).

10. A cable guide member for an electrical plug assembly according to claim 1 which cable guide member (12) is stamped and formed from a single piece of sheet metal and is characterized by front and rear ends (15 and 16) between which extends a cable supporting base (14), cable locators (24 and 25) upstanding from the base (14) in spaced apart relation to locate between them an insulated conductor row (42) and sheath (41), respectively, of a cable (13) extending between front and



fashion. Upper surfaces of the flaps 36 are formed with serrations 38.

Prior to assembly, the outer insulating sheath 41 of the flat cable 13 is cut away from the end to be terminated to expose a row 42 of insulated conductors and the foil shield 43 is reversely bent to extend along the sheath. The prepared end of the cable is then loaded onto the guide with the exposed insulated conductor 42 located between first locators 24 and the sheath clamped between second locators 25.

The subassembly thus formed is inserted into the mouth of the housing, drawer fashion, with flexure of the flaps 36 until the locking protuberances engage the free ends of the flaps in a snap action. The insulated conductors are thereby easily guided into respective passageways.

The terminals are then driven into the wires and the strain relief clamps 39 depressed against the cable ensuring a good electrical contact between the cable foil shield 43, the base 18 of the cable guide and the flaps 36, as shown in Figure 5. The shielding flanges 26 of the cable guide completely close the mouth thereby to shield the rear end of the assembly which would otherwise only be partly shielded as a result of the cable being undersize.

Claims

1. An electrical plug assembly comprising an insulated housing (11) having a cable-receiving mouth (31) opening to a rear end of the housing (11) and communicating internally of the housing (11) with a row of conductor-receiving pathways (33) extending to a front end of the housing in alignment with respective terminals (34) arranged in a row, a shield member (35) of conductive material extending around the housing (11) forwardly from the rear end to provide a substantially continuous shield (35) around the mouth (31) characterized by:

a one-piece cable guide member (12) of conductive material having front and rear ends (15 and 16) between which extends a cable supporting base (14), cable locators (24 and 25) upstanding from the base (14) in spaced apart relation to locate between them an insulated conductor row (42) and cable sheath (41) extending between front and rear ends (15 and 16) of the cable guide member (12) and, shielding flanges (26) upstanding from the base to extend along the rear end between opposite side edges (18, 18') of the base (14) and the cable locators (24 and 25);

whereby on loading a shielded cable (13) into the guide member (12) with an outer insulation sheath (41) stripped cut back from a front end to expose the row of insulated conductors (42) free of the shield (43) with the cable (13) located between the cable locators (24 and 25), the cable guide member (12) can be inserted, front end leading, into the mouth (31), drawer fashion, as a sliding fit guiding the conductor row (42) into respective pathways (33) with the shield flanges (26) completely closing the mouth (31) on each

side of the cable (13) and electrically connected to the shield (43).

2. An electrical plug assembly according to claim 1 characterized in that the cable guide member (12) is stamped and formed from sheet metal.

3. An electrical plug assembly according to claim 2 in which the cable guide member (12) is provided with means (22) upstanding from the general plane of the base (14) to engage the leading end of the cable sheath (41) to limit forward movement of the cable (13) when loaded onto the base (14).

4. An electrical plug assembly according to claim 3 characterized in that the base (14) is stepped up towards the front end (15) to provide a platform (21) supporting the insulated conductor row (42) centrally of the cable (13), the step (22) providing the limiting means (22).

5. An electrical plug assembly according to claim 4 characterized in that the cable locators (24 and 25) comprise a first pair of flanges (24) upstanding from the platform (21) for receiving the insulated conductor row (42) between them and a second pair of flanges (25) upstanding from the base (14) adjacent the rear end (16) for receiving the cable sheath (41) between them.

6. An electrical plug assembly according to claim 5 characterized in that the sheath locators (25) comprise a pair of resilient sheath clamping arms (25) extending forwardly cantilever fashion from root ends integral with the shield flanges (26).

7. An electrical plug assembly according to any one of the preceding claims characterized in that the shield member (35) includes resilient flaps (36) extending forwardly into the mouth (31) cantilever fashion across a floor of the housing (11) and engageable with the base (14) of the cable guide member (12) when the cable guide member (12) is inserted into the housing (11) to effect the electrical connection to the flanges (26) through the base (14).

8. An electrical plug assembly according to claim 7 characterized in that a locking protuberance (27) extends downwardly from the base (14) of the cable guide member (12) for engagement with forward free ends of the flaps (36) to lock the guide member (12) in the housing.

9. An electrical plug assembly according to claim 7 characterized in that a strain relief member (39) is depressable into the mouth (31) into engagement with the cable sheath (41) with the cable shield (43) gripped between the base of the cable guide member (12) and the flaps (36).

10. A cable guide member for an electrical plug assembly according to claim 1 which cable guide member (12) is stamped and formed from a single piece of sheet metal and is characterized by front and rear ends (15 and 16) between which extends a cable supporting base (14), cable locators (24 and 25) upstanding from the base (14) in spaced apart relation to locate between them an insulated conductor row (42) and sheath (41), respectively, of a cable (13) extending between front and



rear ends (15 and 16) of the cable guide member (12) and, shielding flanges (26) upstanding from the base (14) to extend along the rear end (16) between opposite side edges (18 and 18') of the base (14) and the cable locators (24 and 25).

11. A cable guide member according to claim 10 characterized in that the base (14) is stepped up towards the front end (15) to provide a platform (21) supporting the insulated conductor array (42) centrally of the cable (13), the step (22) being arranged to limit forward movement of the cable (13) by engagement with the leading end of the cable sheath (41).

12. A cable guide member according to claim 11 characterized in that the cable locators (24 and 25) comprise a first pair of flanges (24) upstanding from the platform (21) for receiving the insulated conductor row (42) between them and second pair of flanges (25) upstanding from the base (14) adjacent the rear (16) for receiving the cable sheath (41) between them.

13. A cable guide member according to claim 11 characterized in that the sheath locators (25) comprise a pair of resilient sheath clamping arms (25) extending forwardly cantilever fashion from root ends integral with the shield flanges (26).

Patentansprüche

1. Elektrischer Steckeraufbau mit einem isolierten Gehäuse (11), welches eine Kabelaufnahmeöffnung (31) besitzt, die sich zu einem hinteren Ende des Gehäuses (11) öffnet und intern im Gehäuse (11) mit einer Reihe von Leiternaufnahmepfaden (33) in Verbindung steht, welche sich zu einem vorderen Ende des Gehäuses ausgerichtet mit entsprechenden, in einer Reihe angeordneten Anschlüssen (34) erstreckt, wobei ein Abschirmelement (35) aus leitendem Material sich um des Gehäuse (11) herum vom hinteren Ende aus nach vorne erstreckt, um eine im wesentlichen kontinuierliche Abschirmung (35) um die Öffnung (31) herum zu bilden, dadurch gekennzeichnet, daß ein einstückiges Kabelführungsglied (12) aus leitendem Material mit vorderen und hinteren Enden (15, 16) vorgesehen ist, zwischen denen sich eine Kabeltragbasis (14) erstreckt, daß Kabelpositionierer (24 und 25) von der Basis (14) in beabstandeter Beziehung aufrechtstehen, um zwischen sich eine Reihe (42) isolierter Leiter und eine Kabelhülle (41) zu positionieren, die sich zwischen den vorderen und hinteren Enden (15 und 16) des Kabelführungsgliedes (12) erstrecken, und daß Abschirmflansche (26) von der Basis nach oben stehen, so daß sie sich entlang des hinteren Endes zwischen gegenüberliegenden Seitenkanten (18, 18') der Basis (14) und den Kabelpositionierern (24 und 25) erstrecken, wodurch beim Einführen eines abgeschirmten Kabels (13) in das Führungsglied (12), wobei eine äußere Isolationshülle (41) derart abgezogen und von einem vorderen Ende zurückgeschnitten ist, daß die Reihe von isolierten Leitern (42) von der Abschirmung (43) freigelegt ist und das Kabel (13) zwischen den Kabelpositionie-

ren (24 und 25) angeordnet ist, das Kabelführungsglied (12) mit dem vorderen Ende voreilend in die Öffnung (31) schubladenartig eingesetzt werden kann und mit gleitendem Sitz die Reihe (42) der Leiter in die jeweiligen Pfade (33) innerhalb der Abschirmflansche (26) geführt wird, wobei die Öffnung (31) an jeder Seite des Kabels (13) vollständig verschlossen und elektrisch mit der Abschirmung (43) verbunden wird.

2. Elektrischer Steckeraufbau nach Anspruch 1, dadurch gekennzeichnet, daß das Kabelführungsglied (12) aus Metallblech gestanz und geformt ist.

3. Elektrischer Steckeraufbau nach Anspruch 2, bei dem das Kabelführungsglied (12) mit Mitteln (22) versehen ist, die von der allgemeinen Ebene der Basis (14) aufrecht stehen, um mit dem voreilenden Ende der Kabelhülle (41) in Eingriff zu treten, so daß die Vorwärtsbewegung des Kabels (13) beim Einführen auf die Basis (14) begrenzt wird.

4. Elektrischer Steckeraufbau nach Anspruch 3, dadurch gekennzeichnet, daß die Basis (14) zum vorderen Ende (15) hin aufwärts gestuft ist, so daß eine Plattform (21) gebildet wird, welche die Reihe (42) isolierter Leiter zentral zum Kabel (13) trägt, und daß die Stufe (22) die Begrenzungsmittel (22) bilden.

5. Elektrischer Steckeraufbau nach Anspruch 4, dadurch gekennzeichnet, daß die Kabelpositionierer (24 und 25) ein erstes Paar von Flanschen (24) umfassen, die von der Plattform (21) aufrecht stehen, um die Reihe (42) isolierter Leiter zwischen sich aufzunehmen, und daß ein zweites Paar von Flanschen (25) von der Basis (14) in der Nähe des hinteren Endes (16) aufrecht steht, um die Kabelhülle (41) zwischen sich aufzunehmen.

6. Elektrischer Steckeraufbau nach Anspruch 5, dadurch gekennzeichnet, daß die Hüllenpositionierer (25) ein Paar von elastischen Hüllenklemmarmen (25) umfassen, die sich in frei kragender Weise von Wurzelenden nach vorne erstrecken, die einstückig mit den Abschirmflanschen (26) ausgebildet sind.

7. Elektrischer Steckeraufbau nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß das Abschirmglied (35) elastische Laschen (36) umfaßt, die sich nach vorne in die Öffnung (31) frei kragend über einen Boden des Gehäuses (11) hinweg erstrecken und mit der Basis (14) des Kabelführungsgliedes (12) in Eingriff treten können, wenn das Kabelführungsglied (12) in das Gehäuse (11) eingesetzt ist, um die elektrische Verbindung mit den Flanschen (26) durch die Basis (14) herzustellen.

8. Elektrischer Steckeraufbau nach Anspruch 7, dadurch gekennzeichnet, daß ein Verriegelungsvorsprung (27) sich nach unten von der Basis (14) des Kabelführungsgliedes (12) zum Eingriff mit vorderen freien Enden der Laschen (36) erstreckt, um das Führungsglied (12) in dem Gehäuse zu verriegeln.

9. Elektrischer Steckeraufbau nach Anspruch 7, dadurch gekennzeichnet, daß ein Zugentlastungselement (39) in die Öffnung (31) in Eingriff mit der



Kabelhülle (41) nach unten drückbar ist, wobei die Kabelabschirmung (43) zwischen der Basis des Kabelführungsgliedes (12) und den Laschen (36) ergriffen wird.

10. Kabelführungsglied für einen elektrischen Steckeraufbau nach Anspruch 1, wobei das Kabelführungsglied (12) aus einem einzigen Stück Metallblech gestanzt und geformt ist und dadurch gekennzeichnet ist, daß vordere und hintere Enden (15 und 16) vorgesehen sind, zwischen denen sich eine Kabeltragbasis (14) erstreckt, daß Kabelpositionierer (24 und 25) von der Basis (14) in beabstandeter Beziehung aufrecht stehen, um zwischen sich eine Reihe (42) isolierter Leiter und eine Hülle (41) des Kabels (13) zu positionieren, das sich zwischen den vorderen und hinteren Enden (15 und 16) des Kabelführungsgliedes (12) erstreckt, und daß Abschirmflansche (26) von der Basis (14) aufrecht stehen, so daß sie sich entlang des hinteren Endes (16) zwischen gegenüberliegenden Seitenkanten (18 und 18') der Basis (14) und den Kabelpositionierern (24 und 25) erstrecken.

11. Kabelführungsglied nach Anspruch 10, dadurch gekennzeichnet, daß die Basis (14) zum vorderen Ende (15) hin nach oben gestuft ist, so daß eine Plattform (21) gebildet wird, welche die Anordnung (42) isolierter Leiter zentral zum Kabel (13) trägt, und daß die Stufe (22) derart angeordnet ist, daß sie die Vorwärtsbewegung des Kabels (13) dadurch begrenzt, daß sie in Eingriff tritt.

12. Kabelführungsglied nach Anspruch 11, dadurch gekennzeichnet, daß die Kabelpositionierer (24 und 25) ein erstes Paar von Flanschen (24) umfassen, die von der Plattform (21) aufrecht stehen, um die Reihe (42) der isolierten Leiter zwischen sich aufzunehmen, und ein zweites Paar von Flanschen (25), die von der Basis (14) in der Nähe des hinteren Endes (16) nach oben stehen, um die Kabelhülle (41) zwischen sich aufzunehmen.

13. Kabelführungsglied nach Anspruch 11, dadurch gekennzeichnet, daß die Hüllenpositionierer (25) ein Paar von elastischen Hüllenklemmarmen (25) umfassen, die sich in frei kragender Weise von Wurzelenden nach vorne erstrecken, die einstückig mit den Abschirmflanschen (26) ausgebildet sind.

Revendications

1. Assemblage de fiche électrique comprenant un boîtier isolé (11) présentant une embouchure (31) de réception de câble s'ouvrant vers une extrémité arrière du boîtier (11) et communiquant, à l'intérieur du boîtier (11), avec une rangée de passages (33) de réception de conducteurs s'étendant jusqu'à une extrémité avant du boîtier, en alignement avec des bornes respectives (34) agencées en une rangée, un élément de blindage (35) en matière conductrice s'étendant autour du boîtier (11) vers l'avant à partir de l'extrémité arrière pour former un blindage sensi-

blement continu (35) autour de l'embouchure (31), caractérisé par:

un élément d'une seule pièce (12) de guidage de câble en matière conductrice ayant des extrémités avant et arrière (15 et 16) entre lesquelles s'étend une embase (14) de support de câble, des organes (24 et 25) de positionnement de câble s'élevant de l'embase (14), dans une disposition espacée, afin de positionner entre eux une rangée (42) de conducteurs isolés et une gaine (41) de câble s'étendant entre les extrémités avant et arrière (15 et 16) de l'élément (12) de guidage du câble, et des pattes (26) de blindage s'élevant de l'embase de façon à s'étendre le long de l'extrémité arrière, entre des bords latéraux opposés (18, 18') de l'embase (14) et les organes (24 et 25) de positionnement de câble;

de manière que, lors du chargement d'un câble blindé (13) dans l'élément (12) de guidage, une gaine isolante extérieure (41) étant coupée et enlevée à partir d'une extrémité avant pour mettre à découvert la rangée de conducteurs isolés (42), dans une position dégagée du blindage (43) et le câble (13) étant placé entre les organes (24 et 25) de positionnement de câble, l'élément (12) de guidage de câble puisse être inséré, l'extrémité avant la première, dans l'embouchure (31), à la manière d'un tiroir, en un ajustement coulissant guidant la rangée (42) de conducteurs jusque dans les passages respectifs (33), les pattes (26) de blindage fermant complètement l'embouchure (31) de chaque côté du câble (13) et étant connectées électriquement au blindage (43).

2. Assemblage de fiche électrique selon la revendication 1, caractérisé en ce que l'élément (12) de guidage de câble est estampé et formé à partir d'un métal en feuille.

3. Assemblage de fiche électrique selon la revendication 2, dans lequel l'élément (12) de guidage de câble comporte des moyens (22) s'élevant du plan général de l'embase (14) pour établir une prise avec l'extrémité avant de la gaine (41) du câble afin de limiter un mouvement du câble (13) vers l'avant lorsqu'il est chargé sur l'embase (14).

4. Assemblage de fiche électrique selon la revendication 3, caractérisé en ce que l'embase (14) est épaulée vers le haut en direction de l'extrémité avant (15) pour former une plateforme (21) supportant la rangée (42) de conducteurs isolés, centralement au câble (13), l'épaulement (22) formant les moyens (22) de limitation.

5. Assemblage de fiche électrique selon la revendication 4, caractérisé en ce que les organes (24 et 25) de positionnement de câble comprennent une première paire de pattes (24) s'élevant de la plateforme (21) pour recevoir entre elles la rangée (42) de conducteurs isolés et une seconde paire de pattes (25) s'élevant de l'embase (14) à proximité immédiate de l'extrémité arrière (16) pour recevoir entre elles la gaine (41) du câble.

6. Assemblage de fiche électrique selon la revendication 5, caractérisé en ce que les organes (25) de positionnement de la gaine comprennent deux bras élastiques (25) de bridage de la gaine



s'étendant vers l'avant, en porte-à-faux, à partir d'extrémités de pied réalisées d'une seule pièce avec les pattes de blindage (26).

7. Assemblage de fiche électrique selon l'une quelconque des revendications précédentes, caractérisé en ce que l'élément de blindage (35) comprend des languettes élastiques (36) s'étendant vers l'avant jusque dans l'embouchure (31), en porte-à-faux, en travers d'un fond du boîtier (11) et de manière à pouvoir s'enclencher avec l'embase (14) de l'élément (12) de guidage de câble lorsque l'élément (12) de guidage de câble est inséré dans le boîtier (11) pour effectuer la connexion électrique avec les pattes (26) à travers l'embase (14).

8. Assemblage de fiche électrique selon la revendication 7, caractérisé en ce qu'une saillie (27) de blocage part vers le bas de l'embase (14) de l'élément (12) de guidage de câble afin de s'enclencher avec des extrémités avant libres des languettes (36) pour bloquer l'élément de guidage (12) dans le boîtier.

9. Assemblage de fiche électrique selon la revendication 7, caractérisé en ce qu'un élément (39) de soulagement de traction peut être enfoncé dans l'embouchure (31) pour entrer en prise avec la gaine (41) du câble, le blindage (43) du câble étant pris entre l'embase de l'élément (12) de guidage de câble et les languettes (36).

10. Élément de guidage de câble pour un assemblage de fiche électrique selon la revendication 1, lequel élément (12) de guidage de câble est estampé et formé à partir d'une seule pièce de métal en feuille et est caractérisé par des extrémités avant et arrière (15 et 16) entre lesquelles s'étend une embase (14) de support de câble, des organes (24 et 25) de positionnement de câble s'élevant de l'embase (14), dans une disposition

espacée, afin de positionner entre eux une rangée (42) de conducteurs isolés et une gaine (41), respectivement, d'un câble (13) s'étendant entre les extrémités avant et arrière (15 et 16) de l'élément (12) de guidage de câble, et des pattes (26) de blindage s'élevant de l'embase (14) de façon à s'étendre le long de l'extrémité arrière (16) entre des bords latéraux opposés (18 et 18') de l'embase (14) et les organes (24 et 25) de positionnement de câble.

11. Élément de guidage de câble selon la revendication 10, caractérisé en ce que l'embase (14) est épaulée vers le haut en direction de l'extrémité avant (15) afin de former une plate-forme (21) supportant la rangée (42) de conducteurs isolés, centralement au câble (13), l'épaule-ment (22) étant agencé de façon à limiter un mouvement vers l'avant du câble (13) en entrant en prise avec l'extrémité avant de la gaine (41) du câble.

12. Élément de guidage de câble selon la revendication 11, caractérisé en ce que les organes (24 et 25) de positionnement de câble comprennent une première paire de pattes (24) s'élevant de la plate-forme (21) pour recevoir entre elles la rangée (42) de conducteurs isolés et une seconde paire de pattes (25) s'élevant de l'embase (14), à proximité immédiate de l'arrière (16) pour recevoir entre elles la gaine (41) du câble.

13. Élément de guidage de câble selon la revendication 11, caractérisé en ce que les organes (25) de positionnement de la gaine comprennent une paire de bras élastiques (25) de bridage de gaine s'étendant vers l'avant, en porte-à-faux, à partir d'extrémités de pied réalisées d'une seule pièce avec les pattes (26) de blindage.

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