Claims

1. A connector comprising a socket of substantially cylindrical form, and a plug that can be removably connected to the socket, in which there are arranged a plurality of contacts; the socket comprising a conductive face on or in which there is arranged at least one conductive track forming at least one circular arc whose center substantially coincides with the center of the conductive face; said track being also arranged so as to allow a mechanical electrical coupling with one of said contacts, connector in which each contact is mounted to be axially mobile, independently of the other contacts, the contacts being arranged through a flexible membrane, said membrane being seal-tight, the connector comprising a mechanism exerting a return force on each contact by an elastic element inducing a return mechanism toward the socket making it possible to exert an individual pressure on each contact, said elastic element being formed by the membrane.

2. The connector as claimed in claim 1, wherein the conductive face of the socket comprises at least two circular conductive tracks arranged concentrically.

3. The connector as claimed in any one of the preceding claims, in which the plug is bent.

4. The connector as claimed in any one of the preceding claims, in which the plug can be connected to be free to rotate about the socket.

5. The connector as claimed in any one of the preceding claims, in which the plug can be connected according to a limited number of orientations about the socket.

6. The connector as claimed in any one of the preceding claims, in which the contacts are distributed asymmetrically on the surface of the conductive face upon connection.

7. The connector as claimed in one of the preceding claims, in which the plug comprises a "socket" part allowing a stacking of several plugs/sockets.

8. The connector as claimed in one of the preceding claims, the plug comprising a spring ring producing the locking and/or the acknowledgement of plugging-in of the socket.

9. The connector as claimed in claim 8, in which the ring bears on balls which are housed in a groove of the socket upon connection.

10. The connector as claimed in one of the preceding claims, in which the socket is fixed to an external device by a fixing element and is connected to the device by contacts interconnecting directly with the device or through an electrical circuit welded to the socket and interfacing with the device.