

Title (en)

PLUG UNIT AND CONNECTION SYSTEM FOR CONNECTING CAPILLARIES, PARTICULARLY FOR HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY

Title (de)

STECKEREINHEIT UND VERBINDUNGSSYSTEM FÜR DAS VERBINDELN VON KAPILLAREN, INSbesondere FÜR DIE HOCHLEISTUNGSFLÜSSIGKEITSCHROMATOGRAPHIE

Title (fr)

UNITÉ DE FICHE ET SYSTÈME DE CONNEXION POUR CONNECTER DES CAPILLAires, EN PARTICULIER POUR CHROMATOGRAPHIE EN PHASE LIQUIDE À HAUTE PERFORMANCE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2010063267A1] The invention relates to a plug unit (3) for connecting capillaries, particularly for high-performance liquid chromatography, having a plug capillary (10) extending through a hole of a plug housing (20), wherein the plug housing (20) is designed such that it can be releaseably connected to a socket unit (5), wherein the front end of the plug capillary (10) extends into a capillary receptacle opening (53) of the socket unit (5) when the plug unit (3) and socket unit (5) are in the connected state and the front face thereof is opposite and substantially flush with a front end of a socket capillary (57) or a socket capillary opening (55) of the socket unit and butts against the front edge thereof, and wherein the front face of the plug housing (20) facing the end of the plug capillary (10) in the assembled state of the plug unit (3) and the socket unit (5) acts directly or indirectly on a ring-shaped sealing element (40) encompassing the plug capillary (10) in the area of the front end of the plug capillary (10), such that the front end of the plug capillary (10) is sealed against the capillary receptacle opening (53) of the socket unit (5) by an elastic, or elastic and plastic, deformation of the sealing element (40). According to the invention, during assembly and in the assembled state of the plug unit (3) and the socket unit (5), the front face of the annular sealing element (40) acts on a contact area (11) of the front end of the plug capillary (10) extending past the inner diameter of the annular sealing element (40) in the radial direction, wherein the front face of plug capillary (10) necessarily moves against the front face of the socket capillary (57) or socket capillary opening (55) during the assembly process, and is pressed against the same in the assembled state.

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Citation (search report)

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