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BSI Standards Publication

Connectors for fluid power and general use — Assembly instructions for connectors with adjustable stud ends and O-ring sealing

bsi.

National foreword

This Published Document is the UK implementation of ISO/TS 11686:2023. It supersedes PD ISO/TS 11686:2017, which is withdrawn.

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A list of organizations represented on this committee can be obtained on request to its committee manager.

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Raccordements pour applications générales et transmissions hydrauliques — Instructions d'assemblage pour des connecteurs avec des éléments mâles ajustables et joint torique

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Foreword

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This document was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

This second edition cancels and replaces the first edition (ISO/TS 11686:2017), which has been technically revised.

The main changes are as follows:

— Figure 1 has been completely redrawn and Positions 4 and 5 have been corrected to accurately reflect the position of the washer, nut, O-ring and body.

— Figure 1 Position 3 and Figure 2 have been redrawn to remove horizontal line in the flowpath;

— in Table A.1, plug figures from ISO 11926 have been removed and adjustable figure to ISO 1179-3 has been added.

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Introduction

In fluid power systems, power is transmitted and controlled through a fluid (liquid or gas) under pressure within an enclosed circuit. In general applications, a fluid may be conveyed under pressure.

Components may be connected through their ports by connections (connectors) and conductors (tubes and hoses). Tubes are rigid conductors; hoses are flexible conductors.

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Connectors for fluid power and general use — Assembly instructions for connectors with adjustable stud ends and O-ring sealing

1 Scope

This document provides common installation instructions for all connectors that have adjustable stud ends and O-ring sealing. Conformance with the requirements of this document will result in a considerable reduction of leaks in hydraulic systems.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5598, *Fluid power systems and components — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5598 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Instructions for the assembly of connectors with adjustable stud ends and O-ring sealing

4.1 Preparation prior to assembly

4.1.1 To protect the sealing surfaces and prevent dirt and other contaminants from entering the system, protective caps and/or plugs shall not be removed until it is time to assemble the components.

4.1.2 Just prior to assembly, protective caps and/or plugs shall be removed, and the connector and the port shall be inspected to ensure that both mating parts are free of burrs, nicks, scratches or any foreign material.

4.1.3 If an O-ring is not present, one shall be installed on the port end of the connector using a proper O-ring installation tool, taking care not to cut or nick the O-ring.

4.1.4 The O-ring shall be lubricated with a light coat of system fluid or compatible oil.

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