#### PD IEC/PAS 61076-2-114:2016



# **BSI Standards Publication**

# Connectors for electronic equipment — Product requirements

Part 2-114: Circular connectors — Detail specification for data and power connectors with M8 screw-locking



#### **National foreword**

This Published Document is the UK implementation of IEC/PAS 61076-2-114:2016.

The UK participation in its preparation was entrusted to Technical Committee EPL/48, Electromechanical components and mechanical structures for electronic equipment.

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

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# PUBLICLY AVAILABLE SPECIFICATION

### **PRE-STANDARD**

Connectors for electronic equipment – Product requirements – Part 2-114: Circular connectors – Detail specification for data and power connectors with M8 screw-locking

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

# CONNECTORS FOR ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

# Part 2-114: Circular connectors – Detail specification for data and power connectors with M8 screw-locking

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IEC PAS 61076-2-114 has been processed by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

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Following publication of this PAS, which is a pre-standard publication, the technical committee or subcommittee concerned may transform it into an International Standard.

This PAS shall remain valid for an initial maximum period of 3 years starting from the publication date. The validity may be extended for a single period up to a maximum of 3 years, at the end of which it shall be published as another type of normative document, or shall be withdrawn.

A bilingual version of this publication may be issued at a later date.

#### INTRODUCTION

IEC SC 48B – Connectors	IEC 61076-2-114
Specification available from: IEC General secretariat or from the addresses shown on the inside cover.	
ELECTRONIC COMPONENTS	
DETAIL SPECIFICATION in accordance with IEC 61076-1	
	Circular connectors M8 for data and power applications with screw- locking and 4 ways  Male and female connectors Male and female contacts  Rewireable – Non-rewireable  Free cable connectors Straight and right angle connectors  Fixed connectors
	Flange mounting Single hole mounting

# CONNECTORS FOR ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

# Part 2-114: Circular connectors – Detail specification for data and power connectors with M8 screw-locking

#### 1 Scope

This part of IEC 61076 describes circular connectors with M8 screw-locking typically used for data transmissions in industrial applications. These connectors consist of fixed and free connectors either rewireable or non-rewireable, with M8 screw-locking. Male connectors have round contacts  $\emptyset$ 0.8 mm.

The coding provided by this PAS prevents the mating of accordingly coded male or female connectors to any other similarly sized interfaces covered by other standards.

NOTE M8 is the dimension of the thread of the screw-locking mechanism of these circular connectors.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-581, International Electrotechnical Vocabulary – Part 581: Electromechanical components for electronic equipment

IEC 60068-1, Environmental testing - Part 1: General and guidance

IEC 60068-2-60, Environmental testing – Part 2-60: Tests – Test Ke: Flowing mixed gas corrosion test

IEC 60352 (all parts), Solderless connectors

IEC 60512 (all parts), Connectors for electronic equipment - Tests and measurements

IEC 60512-1-100, Connectors for electronic equipment – Tests and measurements – Part 1-100: General – Applicable publications

IEC 60512-29-100, Connectors for electronic equipment – Tests and measurements – Part 29-100: Signal integrity tests up to 500 MHz on M12 style connectors – Tests 29a to 29g

IEC 60529:1989, Degrees of protection provided by enclosures (IP code)

IEC 60603-7:2008, Connectors for electronic equipment – Part 7: Detail specification for 8-way, unshielded, free and fixed connectors

IEC 60603-7-1, Connectors for electronic equipment – Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors