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**Motorcycles and mopeds —
Communication between
vehicle and external equipment
for diagnostics — Diagnostic
connector and related electrical
circuits, specification and use**

National foreword

This British Standard is the UK implementation of ISO 19689:2016.

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

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**Motorcycles and mopeds —
Communication between vehicle and
external equipment for diagnostics
— Diagnostic connector and related
electrical circuits, specification and use**

*Motos et vélomoteurs — Communication entre véhicule et
équipement externe pour les diagnostics — Raccord de diagnostic et
circuits électriques relatifs, spécifications et utilisation*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 38, *Motorcycles and mopeds*.

Introduction

This International Standard specifies on-board diagnostic connector for motorcycles and mopeds.

Motorcycles and mopeds — Communication between vehicle and external equipment for diagnostics — Diagnostic connector and related electrical circuits, specification and use

1 Scope

This International Standard specifies a minimum set of requirements for a diagnostic connector used in communication between motorcycles and mopeds, and external equipment for diagnostics. Its aim is to promote the use of a common diagnostic connector throughout the motorcycle industry. The diagnostic connection consists of two mating connectors, the vehicle connector and the external test equipment connector. Applicable to all types of motorcycles and mopeds, the connector specified is sealed with positive locking feature and is intended for short-term diagnostic connection only.

This International Standard specifies functional requirements for

- a) the vehicle connector, separated into the four principal areas of
 - connector location,
 - connector design,
 - connector contact allocation, and
 - electrical requirements for connector and related electrical circuits, and
- b) the external test equipment connector, separated into the three principal areas of
 - connector design,
 - connector contact allocation, and
 - electrical requirements for connector and related electrical circuits.

The dimensional requirements of the vehicle connector are given as a minimum specification, to allow design freedom.

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.

ISO 8092-2:2005, *Road vehicles — Connections for on-board electrical wiring harnesses — Part 2: Definitions, test methods and general performance requirements*

ISO 16750-2, *Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 2: Electrical loads*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.