



BSI Standards Publication

Fibre optic interconnecting devices and passive components — Basic test and measurement procedures

Part 3-47: Examinations and measurements —
End face geometry of PC/APC spherically polished
ferrules using interferometry

National foreword

This British Standard is the UK implementation of EN 61300-3-47:2014. It is identical to IEC 61300-3-47:2014. It supersedes BS EN 61300-3-15:2007, BS EN 61300-3-16:2003, BS EN 61300-3-17:2000, and BS EN 61300-3-23:1998, which are withdrawn.

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

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(IEC 61300-3-47:2014)

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Ferrulen mittels Interferometrie
(IEC 61300-3-47:2014)

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Foreword

The text of document 86B/3773/FDIS, future edition 1 of IEC 61300-3-47, prepared by subcommittee 86B "Fibre optic interconnecting devices and passive components" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61300-3-47:2014.

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 3-47: Examinations and measurements – End face geometry of PC/APC spherically polished ferrules using interferometry

1 Scope

This part of IEC 61300 describes a procedure to measure the end face geometry of a spherically polished ferrule or connector. Within this standard the words “ferrule” and “connector” can be used interchangeably.

2 Terms and definitions

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

2.1

radius of curvature

B

radius of curvature of the portion of the spherically polished ferrule end face which is domed for physical contact

Note 1 to entry: It is assumed that the end face is spherical, although in practice the end face is often aspherical (see Figure 1).

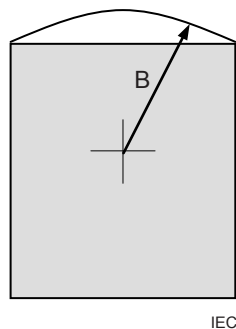


Figure 1 – Radius of curvature of a spherically polished ferrule end face

2.2

apex offset

C

distance between the axis of the ferrule and the line parallel to the axis which passes through the vertex (or highest point on the dome), formed by spherically polishing the ferrule, as shown in Figure 2