

STN	Letectvo a kozmonautika Konektor s rozšíreným lúčovým ukončením, optické vlákno bez fyzického kontaktu v dutinách podľa EN 3645 Časť 103: Mnohovidové kolíkové ukončenie, veľkosť 12 Technická špecifikácia	STN EN 4869-103 31 1921
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Aerospace series - Expanded beam termini, fibre optic non-physical contact in EN 3645 standard cavities - Part 103: Multimode male termini size 12 - Technical specification

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/25

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EUROPEAN STANDARD

EN 4869-103

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2024

ICS 49.090

English Version

**Aerospace series - Expanded beam termini, fibre optic
non-physical contact in EN 3645 standard cavities - Part
103: Multimode male termini size 12 - Technical
specification**

Série aérospatiale - Terminaisons à faisceau élargi,
contact à fibre optique non physique dans des cavités
EN 3645 standard - Partie 103 : Terminaisons mâles
multimodes taille 12 - Spécification technique

Luft- und Raumfahrt - Strahlaufweitender Anschluss,
berührungsloser Lichtwellenleiterkontakt in EN 3645-
Standardkontaktkammer - Teil 103: Multimode-
Stiftanschluss, Größe 12 - Technische
Lieferbedingungen

This European Standard was approved by CEN on 19 August 2024.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN 4869-103:2024 (E)

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European foreword

This document (EN 4869-103:2024) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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EN 4869-103:2024 (E)**1 Scope**

This document specifies the dimensions and performance requirements of a multimode male size 12, non-physical contact expanded beam terminus. This terminus is applicable (for use) with connectors which have standard size 12 pin crimp contact cavities: connectors with cavities for contact of type EN 3155-008M12.

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.

EN 2591-100,¹ *Aerospace series — Elements of electrical and optical connection — Test methods — Part 100: General*

EN 2591-304, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 304: Damp heat steady state*

EN 2591-407, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 407: Durability of contact retention system and seals*

EN 2591-601, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 601: Optical elements — Insertion loss*

EN 2591-602, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 602: Optical elements — Variation of attenuation and optical discontinuity*

EN 2591-604, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 604: Optical elements — Cleaning capability of optical face*

EN 2591-605, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 605: Optical elements — Return loss*

EN 2591-609, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 609: Optical elements — Effectiveness of cable attachment — Cable cyclic flexing*

EN 2591-610, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 610: Optical elements — Effectiveness of cable attachment — Cable pulling*

EN 2591-611, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 611: Optical elements — Effectiveness of cable attachment — Cable torsion*

EN 2591-612, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 612: Optical elements — Effectiveness of cable attachment — Cable axial compression*

EN 2591-613, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 613: Optical elements — Impact test*

¹ Published as ASD-STAN prEN at the date of publication of this document, available at: <https://www.asd-stan.org/>.

EN 2591-617, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 617: Optical elements — Temperature cycling*

EN 2591-6301, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 6301: Optical elements — Endurance at temperature*

EN 2591-6303, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 6303: Optical elements — Cold/low pressure and damp heat*

EN 2591-6305, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 6305: Optical elements — Rapid change of temperature*

EN 2591-6307, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 6307: Optical elements — Salt mist*

EN 2591-6314, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 6314: Optical elements — Immersion at low air pressure*

EN 2591-6405, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 6405: Optical elements — Axial load*

EN 2591-6406, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 6406: Optical elements — Mechanical endurance*

EN 4639-101, *Aerospace series — Connectors, optical, rectangular, modular, multicontact, 1,25 diameter ferrule, with removable alignment sleeve holder — Part 101: Optical contact for cable EN 4641-100 — Operating temperatures between -65 °C and 125 °C — Product standard*

EN 4639-102, *Aerospace series — Connectors, optical, rectangular, modular, multicontact, 1,25 diameter ferrule, with removable alignment sleeve holder — Part 102: Optical contact for cable EN 4641-102 — Operating temperatures between -55 °C and 100 °C — Product standard*

EN 4641-100, *Aerospace series — Cables, optical 125 µm diameter cladding — Part 100: Tight structure 62,5/125 µm core GI fibre 1,8 mm outside diameter — Product standard*

EN 4641-102,¹ *Aerospace series — Cables, optical, 125 µm outside diameter cladding — Part 102: Semi-loose 62,5 µm/125 µm GI fibre nominal 1,8 mm outside diameter — Product standard*

EN 4641-301, *Aerospace series — Cables, optical 125 µm diameter cladding — Part 301: Tight structure 50/125 µm GI fibre nominal 1,8 mm, outside diameter — Product standard*

EN 4869-001, *Aerospace series — Expanded beam termini, fibre optic non-physical contact in EN 3645 standard cavities — Part 001: Technical specification*

MIL-I-81969/14,² *Installing and removal tools, connector electrical contact, type III, class 2, composition B*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

² Published by Department of Defense (DoD), available at: <https://assist.dla.mil/online/start/>.