

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

Miscellaneous lampholders –  
Part 2-3: Particular requirements – Lampholders for double-capped linear LED  
lamps

Douilles diverses pour lampes –  
Partie 2-3: Exigences particulières – Douilles pour lampes LED linéaires à deux  
culots





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Lampholders for double-capped linear LED lamps****AMENDMENT 1****FOREWORD**

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Amendment 1 to IEC 60838-2-3:2016 has been prepared by subcommittee 34B: Lamp caps and holders, of IEC technical committee 34: Lighting.

The text of this Amendment is based on the following documents:

Draft	Report on voting
34B/2150/CDV	34B/2167/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications/](http://www.iec.ch/publications/).

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- amended.

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## 5 General conditions for tests

### 5.1

*Add the following title to Subclause 5.1:*

#### 5.1 GX16t-5 lampholders

*Add, at the end of Subclause 5.1, after Figure 3, the following new Subclause 5.2:*

#### 5.2 GJ6.6 lampholders

For a pair of GJ6.6 inflexible lampholders, the axial tolerances shall conform to IEC 60061-2, sheet 7005-188-1 (Mounting distance of a combined pair of inflexible lampholders).

NOTE GJ6.6 lampholders are classified as inflexible (see 3.3).

## 8 Protection against electric shock

### 8.1

*Add the following title to Subclause 8.1:*

#### 8.1 GX16t-5 contact making during insertion

*Add, after Subclause 8.1, the following new Subclause 8.2:*

#### 8.2 GJ6.6 contact making during insertion

GJ6.6t, GJ6.6d-1 and GJ6.6d-2 lampholders shall provide protection against electric shock during the lamp insertion to the holder.

*Compliance is checked by measurement or by using the contact making test gauge for holders specified in IEC 60061-3, sheet 7006-188-X.*

NOTE 1 GJ6.6 lamps are inserted by snapping into the lampholder. The orientation is mechanically ensured prior to making electrical contact. Mechanical protection against electric shock is provided by inaccessible electrical contacts.

NOTE 2 The IEC 60061-3 gauges for GJ6.6 fits are under development.

## 11 Construction

### 11.1

Add the following title to Subclause 11.1:

#### 11.1 Absence of lamp support

At the end of Subclause 11.1, number the existing NOTE as NOTE 1 and add the following new NOTE 2:

NOTE 2 GJ6.6 lampholders provide additional lamp support inherently by incorporating a closure of the holder to the lamp cap. The lampholder is side entry from the lamp axis perspective but the cap pins are axial entry into the holder.

### 11.2

Add the following title to Subclause 11.2:

#### 11.2 Seating position

### 11.3

Replace the existing Subclause 11.3 with the following new titled Subclause 11.3:

#### 11.3 Contact force

##### 11.3.1 Gx16t-5 lampholders

Lampholders shall be so designed that adequate contact force is provided.

- a) For bi-pin lampholders, making contact mainly along one side of each pin of the cap, the contact force is measured with a single-ended gauge having dimensions and pin distances according to standard sheet 7006-183C of IEC 60061-3, gauges E and G.

*The contact force shall be between:*

- 2 N and 30 N for lampholders not providing support to prevent bending of the lamp pins;
- 2 N and 45 N for lampholders, when the lamp pins are supported by the holder construction.

*First the maximum contact force is measured with a pin distance as shown for gauge G. This is followed by measurement of the minimum contact force with the pin distance of gauge E.*

- b) For single-pin lampholders the contact force is measured with a single-ended gauge having dimensions according to standard sheet 7006-183C of IEC 60061-3, gauges E and G.

*The contact force shall be between 2 N and 25 N.*

- c) For bi-pin lampholders the torque required for the insertion and removal of the lamp shall be measured with single-ended gauges having pin dimensions and pin distances according to standard sheet 7006-183C of IEC 60061-3 gauges G and F.

*The torque required to insert the gauges until the position representing the operating position of the lamp is reached, shall not exceed 0,5 Nm.*

*The torque required to clear the gauges from the normal seated position shall be between 0,1 Nm and 0,5 Nm.*

*During complete removal of the gauges, the maximum values shall not be exceeded.*

During force and torque testing, care should be taken that the front face of the gauges is kept parallel with the holder face.

As a preconditioning cycle, there shall be one clockwise and one anticlockwise rotation, or one insertion and withdrawal routine of each test device, before the initial measurement is taken.

### 11.3.2 GJ6.6 lampholders

Lampholders shall be so designed that adequate contact force is provided.

Adequate contact force is tested for GJ6.6 lampholders by two gauges:

- retention force gauge for GJ6.6 lampholders;
- contact making test gauge for GJ6.6 holders.

*Compliance is checked by measurement or passing both of the following IEC 60061-3 gauge test procedures:*

- *gauge sheet 7006-188-X, retention force gauge for GJ6.6 lampholders;*
- *gauge sheet 7006-188-X, contact making test gauge for GJ6.6 holders.*

NOTE The IEC 60061-3 gauges for GJ6.6 fits are under development.

## 11.4

*Replace the existing Subclause 11.4, including Figure 4, with the following new titled Subclause 11.4 and Figure 4:*

### 11.4 Holder dimensions

#### 11.4.1 General

Lampholders shall comply with the relevant standard sheets of IEC 60061-2 with regard to the holder dimensions.

#### 11.4.2 GX16t-5 lampholders

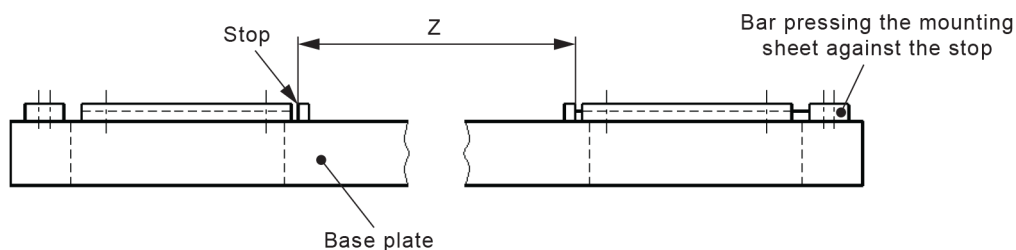
*Compliance is checked as follows:*

- *With two pairs of matching holders mounted in the mounting jig shown in Figure 4 and by use of the relevant "GO" gauges and the relevant gauges for testing contact-making.*
- *Lampholders which, due to their design, do not allow testing in the mounting jig, and flexibly mounted lampholders (see 3.4) shall be tested together with the relevant luminaire and by use of the relevant gauges adapted to the specific lamp length according to standard sheet 7005-183 of IEC 60061-2.*

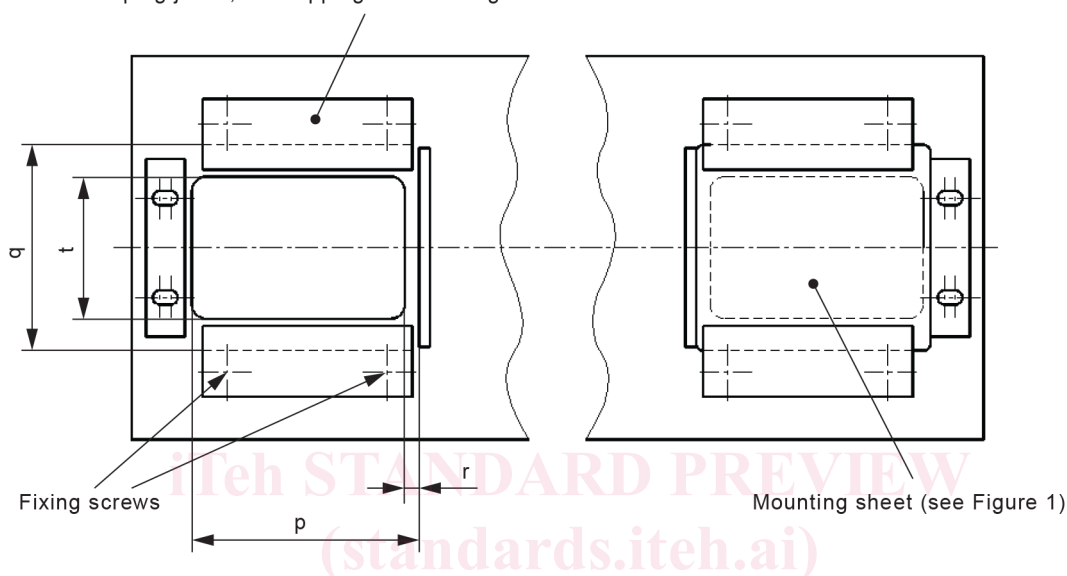
*When testing contact-making, the gauges are pushed in the direction of each of the holder faces in turn with a force of 10 N. For holders with a limited mass of 500 g for the lamp, the force is limited to 5 N.*

*When testing in the mounting jig, this force can be achieved by vertical position of the gauge.*

*For lampholders intended for use with more than one lamp at the same time, additional mass according to the number of lamps is placed on the lampholder face.*



Clamping jaws<sup>a</sup>; overlapping on mounting sheet: 10 mm



**Key**

The drawing is intended only to illustrate the essential dimensions of the jig.

<sup>a</sup> For certain lampholders, for example twin-lampholders, it may be necessary to use two-piece clamping jaws.

Reference	Dimension mm	Tolérance mm
Z	b	±0,05
p	65	±0,1
q	60,2	+0,1 -0,0
r	5	±0,1
t	40	±0,1

<sup>b</sup> Z = 589,9 mm for testing lampholders GX16t-5 (derived from dimension  $A_{max}$  of a 14,5 W lamp, see IEC 62931).

PURPOSE: Testing of a combined pair of holders regarding compliance with the specified "Go" gauges and those for testing contact-making.

TESTING: The mounting sheets with a pair of matching holders are inserted into the mounting jig, pressed against the stop and fixed by use of the clamping jaws. In this position, the gauges are applied.

**Figure 4 – Mounting jig for the testing of lampholders**



### 11.4.3 GJ6.6 lampholders

*Dimensional compliance of GJ6.6 lampholders to the specifications in IEC 60061-2 is checked by measurement or by the following gauges specified in IEC 60061-3:*

- *gauge sheet 7006-188-X, contact making test gauge for GJ6.6 holders;*
- *gauge sheet 7006-188-X, hole locator "GO" gauge for GJ6.6 holders.*

NOTE The IEC 60061-3 gauges for GJ6.6 fits are under development.

## Annex A

*Replace the existing text and table with the following new text and numbered Table A.1:*

Independent and built-in lampholders used with double-capped linear LED lamps provided with the caps listed in Table A.1 are covered by this standard (see the scope).

**Table A.1 – Lampholders covered by this standard**

Lampholder	Lampholder sheet (see IEC 60061-2)
GX16t-5	7005-183
GJ6.6t	7005-188
GJ6.6d-1	7005-188
GJ6.6d-2	7005-188
GJ6.6	7005-188

<https://standards.iteh.ai/catalog/standards/sist/17e7fb83-4d7d-4ab5-bc04-359c80e78579/iec-60838-2-3-2016-amd1-2023>

## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

## DOUILLES DIVERSES POUR LAMPES –

Partie 2-3: Exigences particulières –  
Douilles pour lampes LED linéaires à deux culots

## AMENDEMENT 1

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Le texte de cet Amendement est issu des documents suivants:

Projet	Rapport de vote
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Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.