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**Uporovno točkovno varjenje - Elektrodne kape z zunanjim konusom (ISO 5830:1984)**

Resistance spot welding - Male electrode caps (ISO 5830:1984)

Widerstandspunktschweißen - Elektrodeneinsteckkappen (ISO 5830:1984)

Soudage par points par résistance - Embouts amovibles mâles d'électrode (ISO 5830:1984)

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**Ta slovenski standard je istoveten z: EN ISO 5830:2021**

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**ICS:**

25.160.30	Varilna oprema	Welding equipment
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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 5830**

January 2021

ICS 25.160.30

English Version

**Resistance spot welding - Male electrode caps (ISO 5830:1984)**

Soudage par points par résistance - Embouts amovibles mâles d'électrode (ISO 5830:1984)

Widerstandspunktschweißen - Elektrodeneinsteckkappen (ISO 5830:1984)

This European Standard was approved by CEN on 6 December 2020.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 20 January 2021.

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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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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

The text of ISO 5830:1984 has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 5830:2021 by Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2021, and conflicting national standards shall be withdrawn at the latest by July 2021.

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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# International Standard



# 5830

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

## Resistance spot welding — Male electrode caps

*Soudage par points par résistance — Embouts amovibles mâles d'électrode*

First edition — 1984-10-15

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UDC 621.791.037.2 : 621.791.763

Ref. No. ISO 5830-1984 (E)

**Descriptors :** welding, resistance welding, spot welding, resistance welding electrodes, electrode holders, dimensions, designation, marking.

Price based on 2 pages

## 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 5830 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*.

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# Resistance spot welding — Male electrode caps

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## 1 Scope and field of application

This International Standard specifies the dimensions and tolerances for male electrode caps for resistance spot welding when a female taper (see ISO 1089) is used to fix the electrode adaptor (see ISO 5829).

It only applies to electrode caps for which the electrode force  $F_{\max}$ , given for the diameter  $d_1$ , does not exceed 4,0 kN.

## 2 References

ISO 1089, *Electrode taper fits for spot welding equipment — Dimensions*.

ISO 1302, *Technical drawings — Method of indicating surface texture on drawings*.

ISO 5182, *Materials for resistance welding electrodes and ancillary equipment*.

ISO 5829, *Resistance spot welding electrode adaptors, female taper 1 : 10*.

## 3 Dimensions

The dimensions shall be those given in the figures and the table.

## 4 Designation

Electrode caps covered by this International Standard shall be designated by noting in order :

- the reference to this International Standard;
- the external diameter,  $d_1$ ;
- the length,  $l_1$ .

*Example :*

Designation for a male electrode cap for spot welding type L, external diameter  $d_1 = 16$  mm and length  $l_1 = 25$  mm.

**Male electrode cap ISO 5830 - L 16 × 25**

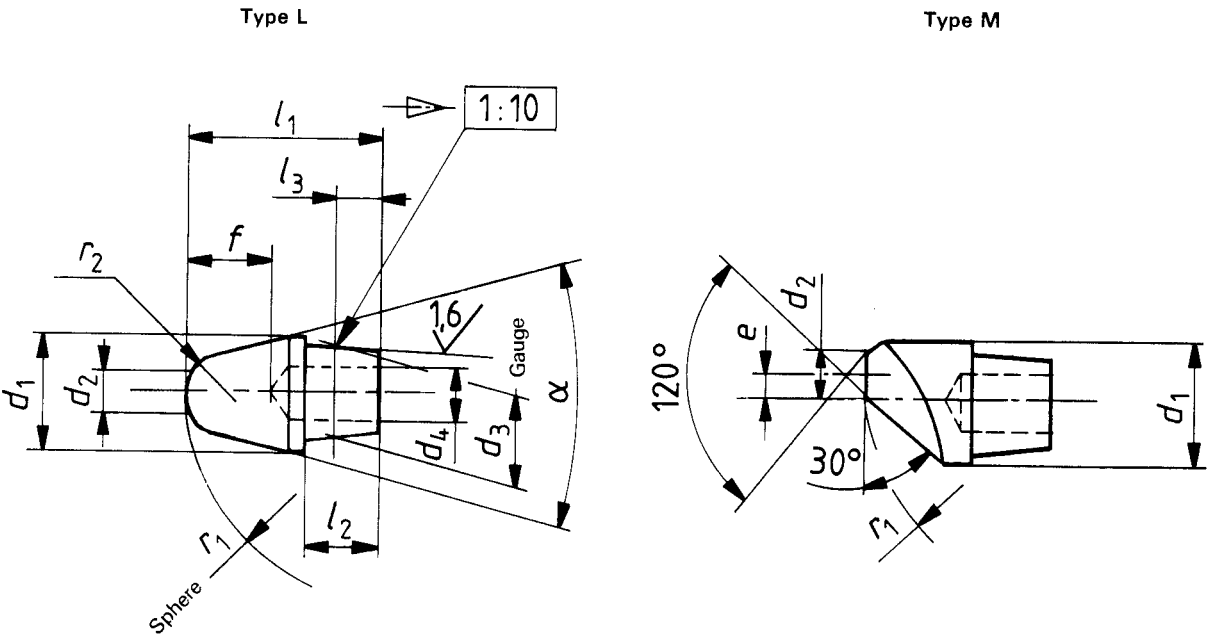
## 5 Material

The material shall conform to code A 2/2 of ISO 5182.

## 6 Marking

The packing shall be marked with the designation laid down in clause 4, but excluding the identity block, for example :

**ISO 5830 - L 16 × 25**



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Type N

NOTE — For types M and N, all the other dimensions are the same as for type L.

Figure — Male electrode cap

Table — Dimensions

Linear dimensions in millimetres												Electrode force $F_{\max}$ kN
$d_1$ h11	$d_2$	$d_3^{1)}$	$d_4$	$l_1$	$l_2$ $+0,5$ $0$	$l_3$	$e$	$f$	$r_1$	$r_2$	$\alpha$	
16	6	11,8	8	25	10	6	4	10	40	6	30°	4,00

1)  $d_3$  is a gauge dimension at the taper reference line.