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**Steel — Conversion of elongation  
values —**

**Part 2:  
Austenitic steels**

*Acier — Conversion des valeurs d'allongement —  
Partie 2: Aciers austénitiques*

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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](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 20, *General technical delivery conditions, sampling and mechanical testing methods*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459/SC 1, *Test methods for steel (other than chemical analysis)*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 2566-2:1984), of which it constitutes a minor revision. The changes are as follows:

- complete editorial revision;
- [Tables 2](#) to [5](#) have been renamed due to reordering in order to follow the logical flow of information of this document;
- [Clause 9](#) has been restructured into four sub-clauses in order to follow the logical flow of information of this document.

A list of all parts in the ISO 2566 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

Several different gauge lengths are commonly in use for the determination of percentage elongation of steels in tensile testing. Fixed gauge lengths of 50 mm, 80 mm, 100 mm and 200 mm are used; proportional gauge lengths of  $k\sqrt{S_0}$  are also used for flat and round test pieces, where  $k$  may be one of a number of values, i.e. 4; 5,65; 8,16 or 11,3.

The value  $5,65\sqrt{S_0}$  is adopted as the internationally preferred proportional gauge length.

Arising from this choice and the existence of specifications stipulating minimum percentage elongations on different gauge lengths, a growing need has been evident for an International Standard that could be used to convert test results into values based on the different gauge lengths. Accordingly, this document includes tables of conversion factors, tables of actual conversions for some of the most commonly used gauge lengths and elongation values, and figures which may also be used for such conversions. When using these conversions, however, note should be taken of the limitations on their applicability as stated in [Clause 1](#).

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# Steel — Conversion of elongation values —

## Part 2: Austenitic steels

### 1 Scope

This document specifies a method of converting room temperature percentage elongations after fracture obtained on various proportional and non-proportional gauge lengths to other gauge lengths.

[Formula \(1\)](#), on which conversions are based, is considered to be reliable when applied to austenitic stainless steels within the tensile strength range 450 to 750 N/mm<sup>2</sup> and in the solution treated condition.

These conversions are not applicable to:

- a) cold reduced steels;
- b) quenched and tempered steels;
- c) non-austenitic steels.

These conversions are not applicable when the gauge length exceeds  $25\sqrt{S_0}$  or where the width to thickness ratio of the test piece exceeds 20.

### 2 Normative references

There are no normative references in this document.

### 3 Terms, definitions and symbols

#### 3.1 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

##### 3.1.1

##### **gauge length**

length of the parallel portion of the test piece used for measurement of strain

Note 1 to entry: The term is hereafter used in this document to denote the original gauge length,  $L_0$ , marked on the test piece for the determination of percentage elongation after fracture,  $A$ .

##### 3.1.2

##### **proportional gauge length**

*gauge length* ([3.1.1](#)) having a specified relation to the square root of the cross-sectional area, for example  $5,65\sqrt{S_0}$

3.1.3

**non-proportional gauge length**

*gauge length* (3.1.1) not specifically related to the cross-sectional area of the test piece, usually expressed in a given dimension, for example 50 mm

3.2 Symbols

- A Percentage elongation after fracture on a gauge length, obtained on test
- A<sub>r</sub> Percentage elongation on a different gauge length, required by conversion
- d Diameter of test piece
- L<sub>0</sub> Original gauge length
- S<sub>0</sub> Original cross-sectional area of test piece

4 Basic formula

The data contained in this document are based on a formula obtained from a statistical assessment of international test results, which, in a simplified form, can be expressed as [Formula \(1\)](#):

$$A_r = 1,25A \left( \frac{\sqrt{S_0}}{L_0} \right)^{0,127} \tag{1}$$

where

- A<sub>r</sub> is the required elongation on gauge length L<sub>0</sub> ;
- A is the elongation on gauge length of  $5,65\sqrt{S_0}$  ;
- L<sub>0</sub> is the original gauge length;
- S<sub>0</sub> is the original cross-sectional area of test piece.

Expressed in terms of  $4\sqrt{S_0}$ , [Formula \(1\)](#) becomes [Formula \(2\)](#):

$$A_r = 1,19A \left( \frac{\sqrt{S_0}}{L_0} \right)^{0,127} \tag{2}$$

where A is the elongation on gauge length of  $4\sqrt{S_0}$ .

[Tables 1 to 21](#) and [Figures 1 to 5](#) are based on [Formulae \(1\)](#) and [\(2\)](#).

Care should be exercised in the case of strip under 3 mm thickness, as the index in [Formulae \(1\)](#) and [\(2\)](#) increases with decreasing thickness; the value to be used shall be the subject of agreement between the customer and the supplier.

5 Requirements on conversions

While, as indicated, the conversions are considered to be reliable within the stated limitations, because of the various factors influencing the determination of percentage elongations, they shall be used for acceptance purposes only by agreement between the customer and supplier.

In cases of dispute, the elongation shall be determined on the gauge length stated in the relevant specification.

## 6 Conversion from one proportional gauge length to another proportional gauge length

Simple multiplying factors based on the formula are used for such conversions, and the relationships between a number of the more widely used proportional gauge lengths are given in [Table 1](#). Detailed conversions of elongations obtained on  $4\sqrt{S_0}$  to  $5,65\sqrt{S_0}$  are given in [Table 2](#).

**Table 1 — Conversion factors: Proportional gauge length**

Conversion from:	Factor for conversion to:						
	$4\sqrt{S_0}$	$5,65\sqrt{S_0}$	$8,16\sqrt{S_0}$	$11,3\sqrt{S_0}$	$4d$	$5d$	$8d$
$4\sqrt{S_0}$	1,000	0,957	0,931	0,876	0,985	0,957	0,902
$5,65\sqrt{S_0}$	1,045	1,000	0,954	0,916	1,029	1,000	0,942
$8,16\sqrt{S_0}$	1,095	1,048	1,000	0,959	1,078	1,048	1,987
$11,3\sqrt{S_0}$	1,141	1,092	1,042	1,000	1,124	1,092	1,029
$4d$	1,015	0,972	0,928	0,890	1,000	0,972	0,916
$5d$	1,045	1,000	0,954	0,916	1,029	1,000	0,942
$8d$	1,109	1,061	1,013	0,972	1,092	1,062	1,000

**Table 2 — Elongation values<sup>a</sup> on  $5,65\sqrt{S_0}$  corresponding to those obtained on  $4\sqrt{S_0}$  gauge length**

Actual elongation (%) measured on $4\sqrt{S_0}$	Corresponding elongation (%) on $5,65\sqrt{S_0}$									
	0	1	2	3	4	5	6	7	8	9
10	10	11	11	12	13	14	15	16	17	18
20	19	20	21	22	23	24	25	26	27	28
30	29	30	31	32	33	33	34	35	36	37
40	38	39	40	41	42	43	44	45	46	47
50	48	49	50	51	52	53	54	55	56	56

<sup>a</sup> Factor 0,957. Values rounded to nearest whole number.

## 7 Conversion from one non-proportional gauge length to another non-proportional gauge length for test pieces of equal cross-sectional area

The conversion of elongation values of different fixed gauge lengths on test pieces of equal cross-sectional area are also made by simple factors. Conversion factors for gauge lengths of 50, 80, 100 and 200 mm are given in [Table 3](#).

**Table 3 — Conversion factors<sup>a</sup>: Non-proportional gauge length**

Conversion from:	Factor for conversion to:			
	50 mm	80 mm	100 mm	200 mm
50 mm	1,000	0,942	0,916	0,839
80 mm	1,062	1,000	0,972	0,890
100 mm	1,092	1,029	1,000	0,916
200 mm	1,193	1,123	1,092	1,000

<sup>a</sup> Provided cross-sectional areas are the same.

## 8 Conversion from a non-proportional gauge length to another non-proportional gauge length for test pieces of different cross-sectional areas

It is preferable for this calculation to be made in two stages with an initial conversion to  $5,65\sqrt{S_0}$ .

### EXAMPLE

Elongation of 24 % on 200 mm for a 40 mm x 15 mm test piece in terms of equivalent on a 30 mm x 10 mm test piece with gauge lengths equal to 200 mm, 100 mm and 50 mm.

$$24 \times 1/0,957 = 25,1 \text{ \% on } 5,65\sqrt{S_0} \text{ (see Table 3)}$$

$$25,1 \times 0,916 = 23,0 \text{ \% on } 30 \text{ mm x } 10 \text{ mm with } 200 \text{ mm gauge length}$$

$$25,1 \times 1,000 = 25,1 \text{ \% on } 30 \text{ mm x } 10 \text{ mm with } 100 \text{ mm gauge length}$$

$$25,1 \times 1,093 = 27,4 \text{ \% on } 30 \text{ mm x } 10 \text{ mm with } 50 \text{ mm gauge length}$$

Elongation on other proportional gauge lengths can be obtained by using the factors given in [Table 1](#).

## 9 Conversion from a proportional gauge length to a non-proportional gauge length

### 9.1 General

The conversion factors are variable according to the cross-sectional area of the non-proportional test piece. [Table 4](#) gives the multiplying factors for conversion from elongation on  $5,65\sqrt{S_0}$  to the equivalent on fixed gauge lengths of 50 mm, 80 mm, 100 mm and 200 mm for a range of cross-sectional areas. For conversions in the reverse direction, i.e. elongation on a fixed gauge length to the equivalent of  $5,65\sqrt{S_0}$ , the reciprocal of the factors is used.

### EXAMPLE

- Elongation of 20 % on  $5,65\sqrt{S_0}$  is equivalent to  $20 \times 1,046 = 20,9 \text{ \%}$  on a 25 mm wide test piece of 6 mm thickness with a 50 mm gauge length (see [Table 3](#)).

From the example shown, it will be seen that conversions involving other proportional gauge lengths can be obtained by prior or subsequent use of the factors shown in [Table 1](#).

### 9.2 Conversion factors from $5,65\sqrt{S_0}$ to non-proportional gauge length

Factors shown under "non-proportional gauge length" give the value of

$$1,25 \left( \frac{\sqrt{S_0}}{L} \right)^{0,127}$$

To convert from values on a gauge length of  $5,65\sqrt{S_0}$  to a non-proportional gauge length, multiply by the appropriate factor.

To convert from values on a non-proportional gauge length to  $5,65\sqrt{S_0}$  divide by the appropriate factor.

See also [Figures 1](#) and [2](#).

Table 4 — Conversion factors from  $5,65\sqrt{S_0}$  to non-proportional gauge lengths

Cross sectional area of test piece: mm <sup>2</sup>	Factor for non-proportional gauge length of:			
	200 mm	100 mm	80 mm	50 mm
5	0,706	0,771	0,794	0,842
10	0,738	0,806	0,829	0,880
15	0,757	0,827	0,851	0,903
20	0,771	0,842	0,867	0,920
25	0,782	0,854	0,879	0,933
30	0,792	0,864	0,889	0,944
35	0,779	0,873	0,898	0,953
40	0,806	0,880	0,906	0,961
45	0,812	0,887	0,912	0,969
50	0,818	0,893	0,919	0,975
55	0,823	0,898	0,924	0,981
60	0,827	0,903	0,929	0,986
70	0,835	0,912	0,938	0,996
80	0,842	0,920	0,946	1,005
90	0,849	0,927	0,953	1,012
100	0,854	0,933	0,960	1,019
110	0,860	0,939	0,966	1,025
120	0,864	0,944	0,971	1,031
130	0,869	0,949	0,976	1,036
140	0,873	0,953	0,981	1,041
150	0,877	0,957	0,985	1,045
160	0,880	0,961	0,989	1,050
170	0,884	0,965	0,993	1,054
180	0,887	0,969	0,996	1,058
190	0,890	0,972	1,000	1,061
200	0,893	0,975	1,003	1,065
210	0,896	0,978	1,006	1,068
220	0,898	0,981	1,009	1,071
230	0,901	0,984	1,012	1,074
240	0,903	0,986	1,015	1,077
250	0,906	0,989	1,017	1,080
260	0,908	0,991	1,020	1,083
270	0,910	0,994	1,022	1,085
280	0,912	0,996	1,025	1,088
290	0,914	0,998	1,027	1,090
300	0,916	1,000	1,029	1,093
310	0,918	1,003	1,031	1,095
320	0,920	1,005	1,033	1,097
330	0,922	1,007	1,035	1,099
340	0,923	1,008	1,037	1,101
350	0,925	1,010	1,039	1,103
360	0,927	1,012	1,041	1,105

Table 4 (continued)

Cross sectional area of test piece: mm <sup>2</sup>	Factor for non-proportional gauge length of:			
	200 mm	100 mm	80 mm	50 mm
370	0,928	1,014	1,043	1,107
380	0,930	1,016	1,045	1,109
390	0,932	1,017	1,047	1,111
400	0,933	1,019	1,048	1,113
410	0,935	1,021	1,050	1,114
420	0,936	1,022	1,051	1,116
430	0,937	1,024	1,053	1,118
440	0,939	1,025	1,055	1,119
450	0,940	1,027	1,056	1,121
460	0,941	1,028	1,058	1,123
470	0,943	1,029	1,059	1,124
480	0,944	1,031	1,060	1,126
490	0,945	1,032	1,062	1,127
500	0,946	1,033	1,063	1,129
550	0,952	1,040	1,070	1,135
600	0,957	1,045	1,076	1,142
650	0,962	1,051	1,081	1,148
700	0,967	1,056	1,086	1,153
750	0,971	1,060	1,091	1,158
800	0,975	1,065	1,095	1,163
850	0,979	1,069	1,100	1,167
900	0,982	1,073	1,104	1,171
950	0,986	1,076	1,107	1,176
1 000	0,989	1,080	1,111	1,179
1 050	0,992	1,083	1,114	1,183
1 100	0,995	1,087	1,118	1,187
1 150	0,998	1,090	1,121	1,190
1 200	1,000	1,093	1,124	1,193
1 250	1,003	1,095	1,127	1,196
1 300	1,006	1,098	1,130	1,199
1 350	1,008	1,101	1,132	1,202
1 400	1,010	1,103	1,135	1,205
1 450	1,013	1,106	1,138	1,208
1 500	1,015	1,108	1,140	1,210
1 550	1,017	1,110	1,142	1,213
1 600	1,019	1,113	1,145	1,215
1 650	1,021	1,115	1,147	1,217
1 700	1,023	1,117	1,149	1,220
1 750	1,025	1,119	1,151	1,222
1 800	1,027	1,121	1,153	1,224
1 850	1,028	1,123	1,155	1,226
1 900	1,030	1,125	1,157	1,228

Table 4 (continued)

Cross sectional area of test piece: mm <sup>2</sup>	Factor for non-proportional gauge length of:			
	200 mm	100 mm	80 mm	50 mm
1 950	1,032	1,127	1,159	1,230
2 000	1,033	1,129	1,161	1,232
2 050	1,035	1,130	1,163	1,234
2 100	1,037	1,132	1,165	1,236
2 150	1,038	1,134	1,166	1,238
2 200	1,040	1,135	1,168	1,240
2 250	1,041	1,137	1,170	1,242
2 300	1,043	1,139	1,171	1,243
2 350	1,044	1,140	1,173	1,245
2 400	1,045	1,142	1,175	1,247
2 450	1,047	1,143	1,176	1,248
2 500	1,048	1,145	1,178	1,250
2 550	1,050	1,146	1,179	1,252
2 600	1,051	1,148	1,181	1,253
2 650	1,052	1,149	1,182	1,255
2 700	1,053	1,150	1,183	1,256
2 750	1,055	1,152	1,185	1,258
2 800	1,056	1,153	1,186	1,259
2 850	1,057	1,154	1,187	1,260
2 900	1,058	1,156	1,189	1,262
2 950	1,059	1,157	1,190	1,263
3 000	1,060	1,158	1,191	1,265

### 9.3 Conversion factors from $4\sqrt{S_0}$ to non-proportional gauge length

Factors shown under “non-proportional gauge length” give the value of

$$1,19 \left( \frac{\sqrt{S_0}}{L} \right)^{0,127}$$

To convert from values on a gauge length of  $4\sqrt{S_0}$  to a non-proportional gauge length, multiply by the appropriate factor.

To convert from values on a non-proportional gauge length to  $4\sqrt{S_0}$ , divide by the appropriate factor.

See also [Figures 3](#) and [4](#).

Table 5 — Conversion factors from  $4\sqrt{S_0}$  to non-proportional gauge length

Cross sectional area of test piece: mm <sup>2</sup>	Factor for non-proportional gauge length of:			
	200 mm	100 mm	80 mm	50 mm
5	0,673	0,734	0,756	0,802
10	0,703	0,767	0,790	0,838
15	0,721	0,787	0,810	0,860
20	0,734	0,802	0,825	0,876
25	0,745	0,813	0,837	0,888
30	0,754	0,823	0,847	0,899
35	0,761	0,831	0,855	0,907
40	0,767	0,838	0,862	0,915
45	0,773	0,844	0,869	0,922
50	0,778	0,850	0,874	0,928
55	0,783	0,855	0,880	0,934
60	0,787	0,860	0,885	0,939
70	0,795	0,868	0,893	0,948
80	0,802	0,876	0,901	0,956
90	0,808	0,882	0,908	0,964
100	0,813	0,888	0,914	0,970
110	0,818	0,894	0,919	0,976
120	0,823	0,899	0,924	0,981
130	0,827	0,903	0,929	0,986
140	0,831	0,907	0,934	0,991
150	0,835	0,911	0,938	0,995
160	0,838	0,915	0,941	0,999
170	0,841	0,919	0,945	1,003
180	0,844	0,922	0,949	1,007
190	0,847	0,925	0,952	1,010
200	0,850	0,928	0,955	1,014
210	0,853	0,931	0,958	1,017
220	0,855	0,934	0,961	1,020
230	0,858	0,937	0,963	1,023
240	0,860	0,939	0,966	1,025
250	0,862	0,941	0,969	1,028
260	0,864	0,944	0,971	1,031
270	0,866	0,946	0,973	1,033
280	0,868	0,948	0,976	1,036
290	0,870	0,950	0,978	1,038
300	0,872	0,952	0,980	1,040
310	0,874	0,954	0,982	1,042
320	0,876	0,956	0,984	1,044
330	0,877	0,958	0,986	1,046
340	0,879	0,960	0,988	1,048

Table 5 (continued)

Cross sectional area of test piece: mm <sup>2</sup>	Factor for non-proportional gauge length of:			
	200 mm	100 mm	80 mm	50 mm
350	0,881	0,962	0,989	1,050
360	0,882	0,964	0,991	1,052
370	0,884	0,965	0,993	1,054
380	0,885	0,967	0,995	1,056
390	0,887	0,968	0,996	1,058
400	0,888	0,970	0,998	1,059
410	0,890	0,972	0,999	1,061
420	0,891	0,973	1,001	1,063
430	0,892	0,974	1,002	1,064
440	0,894	0,976	1,004	1,066
450	0,895	0,977	1,005	1,067
460	0,896	0,979	1,007	1,069
470	0,897	0,980	1,008	1,070
480	0,899	0,981	1,010	1,072
490	0,900	0,983	1,011	1,073
500	0,901	0,984	1,012	1,074
550	0,906	0,990	1,018	1,081
600	0,911	0,995	1,024	1,087
650	0,916	1,000	1,029	1,092
700	0,920	1,005	1,034	1,098
750	0,924	1,010	1,039	1,102
800	0,928	1,014	1,043	1,107
850	0,932	1,018	1,047	1,111
900	0,935	1,021	1,051	1,115
950	0,938	1,025	1,054	1,119
1 000	0,941	1,028	1,058	1,123
1 050	0,944	1,031	1,061	1,126
1 100	0,947	1,034	1,064	1,130
1 150	0,950	1,037	1,067	1,133
1 200	0,952	1,040	1,070	1,136
1 250	0,955	1,043	1,073	1,139
1 300	0,957	1,045	1,075	1,142
1 350	0,960	1,048	1,078	1,144
1 400	0,962	1,050	1,081	1,147
1 450	0,964	1,053	1,083	1,150
1 500	0,966	1,055	1,085	1,152
1 550	0,968	1,057	1,088	1,154
1 600	0,970	1,059	1,090	1,157
1 650	0,972	1,061	1,092	1,159
1 700	0,974	1,063	1,094	1,161
1 750	0,976	1,065	1,096	1,163
1 800	0,977	1,067	1,098	1,165

**Table 5** (continued)

Cross sectional area of test piece: mm <sup>2</sup>	Factor for non-proportional gauge length of:			
	200 mm	100 mm	80 mm	50 mm
1 850	0,979	1,069	1,100	1,167
1 900	0,981	1,071	1,102	1,169
1 950	0,982	1,073	1,103	1,171
2 000	0,984	1,074	1,105	1,173
2 050	0,985	1,076	1,107	1,175
2 100	0,987	1,078	1,109	1,177
2 150	0,988	1,079	1,110	1,179
2 200	0,990	1,081	1,112	1,180
2 250	0,991	1,082	1,114	1,182
2 300	0,993	1,084	1,115	1,184
2 350	0,994	1,085	1,117	1,185
2 400	0,995	1,087	1,118	1,187
2 450	0,997	1,088	1,120	1,188
2 500	0,998	1,090	1,121	1,190
2 550	0,999	1,091	1,122	1,191
2 600	1,000	1,092	1,124	1,193
2 650	1,002	1,094	1,125	1,194
2 700	1,003	1,095	1,127	1,196
2 750	1,004	1,096	1,128	1,197
2 800	1,005	1,098	1,129	1,199
2 850	1,006	1,099	1,130	1,200
2 900	1,007	1,100	1,132	1,201
2 950	1,008	1,101	1,133	1,203
3 000	1,010	1,102	1,134	1,204

**9.4 Elongation values**

Tables 6 to 9 can be used for conversion to  $5,65\sqrt{S_0}$ , whilst Tables 14 to 17 can be used to obtain elongations on fixed gauge lengths corresponding to  $5,65\sqrt{S_0}$ . Similarly, Tables 10 to 13 can be used for conversion to  $4\sqrt{S_0}$  and Tables 18 to 21 for elongations on fixed gauge lengths corresponding to  $4\sqrt{S_0}$ .

**Table 6 — Elongation values<sup>a</sup> on  $5,65\sqrt{S_0}$  corresponding to those obtained on 50 mm gauge length**

Actual elongation (%) on 50 mm gauge length	Corresponding elongation (%) on $5,65\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	12	11	11	10	10	10	10	10	9	9	9	9	9	9	9	9	9	8	8	8	8	8
11	13	12	12	11	11	11	11	11	10	10	10	10	10	10	10	9	9	9	9	9	9	9
12	14	14	13	12	12	12	12	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10
13	15	15	14	14	13	13	13	12	12	12	12	12	12	11	11	11	11	11	11	11	11	10
14	17	16	15	15	14	14	14	13	13	13	13	13	12	12	12	12	12	12	12	12	11	11
15	18	17	16	16	15	15	15	14	14	14	14	13	13	13	13	13	13	13	13	13	12	12
16	19	18	17	17	16	16	16	15	15	15	15	14	14	14	14	14	14	14	14	13	13	13
17	20	19	18	18	17	17	17	16	16	16	16	15	15	15	15	15	15	14	14	14	14	14
18	21	20	20	19	18	18	18	17	17	17	16	16	16	16	16	15	15	15	15	15	15	14
19	23	22	21	20	19	19	19	18	18	18	17	17	17	17	16	16	16	16	16	16	15	15
20	24	23	22	21	20	20	20	19	19	19	18	18	18	18	17	17	17	17	17	17	16	16
21	25	24	23	22	21	21	21	20	20	19	19	19	19	18	18	18	18	18	18	17	17	17
22	26	25	24	23	22	22	22	21	21	20	20	20	19	19	19	19	19	19	18	18	18	18
23	27	26	25	24	23	23	23	22	22	21	21	21	20	20	20	20	20	20	19	19	19	18
24	28	27	26	25	24	24	24	23	23	22	22	22	21	21	21	21	20	20	20	20	19	19
25	30	28	27	26	25	25	25	24	23	23	23	22	22	22	22	22	21	21	21	21	20	20
26	31	30	28	27	26	26	26	25	24	24	24	23	23	23	23	22	22	22	22	21	21	21
27	32	31	29	28	27	27	26	26	25	25	25	24	24	24	24	23	23	23	23	22	22	22
28	33	32	30	29	28	28	27	27	26	26	26	25	25	25	24	24	24	24	23	23	23	22
29	34	33	32	30	29	29	28	28	27	27	27	26	26	25	25	25	25	25	24	24	24	23
30	36	34	33	31	30	30	29	29	28	28	27	27	27	26	26	26	26	25	25	25	24	24
31	37	35	34	32	31	31	30	29	29	28	28	27	27	27	27	27	26	26	26	26	25	25
32	38	36	35	33	32	32	31	31	30	30	29	29	28	28	28	28	27	27	27	26	26	26
33	39	37	36	34	33	33	32	32	31	31	30	30	29	29	29	28	28	28	28	27	27	26
34	40	39	37	35	34	34	33	33	32	31	31	31	30	30	29	29	29	29	28	28	28	27
35	42	40	38	36	35	35	34	33	33	32	32	31	31	31	30	30	30	30	29	29	28	28
36	43	41	39	37	36	36	35	34	34	33	33	32	32	32	31	31	31	31	30	30	29	29
37	44	42	40	38	38	37	36	35	35	34	34	33	33	32	32	32	32	31	31	31	30	30
38	45	43	41	40	39	38	37	36	36	35	35	34	34	33	33	33	32	32	32	31	31	30
39	46	44	42	41	40	39	38	37	37	36	36	35	35	34	34	34	33	33	33	32	32	31
40	47	45	43	43	41	40	39	38	38	37	37	36	35	35	35	34	34	34	34	33	32	32
41	49	47	45	43	42	41	40	39	39	38	38	37	36	36	36	35	35	35	34	34	33	33
42	50	48	46	44	43	42	41	40	39	39	38	38	37	37	36	36	36	36	35	35	34	34
43	51	49	47	45	44	43	42	41	40	40	39	39	38	38	37	37	37	36	36	36	35	34
44	52	50	48	46	45	44	43	42	41	41	40	40	39	39	38	38	38	37	37	36	36	35
45	53	51	49	47	46	45	44	43	42	42	41	40	40	39	39	39	38	38	38	37	37	36
46	55	52	50	48	47	46	45	44	43	43	42	41	41	40	40	40	39	39	39	38	37	37
47	56	53	51	49	48	47	46	45	44	44	43	42	42	41	41	40	40	40	39	39	38	38

<sup>a</sup> Rounded up to the nearest whole number.

Table 7 — Elongation values<sup>a</sup> on  $5,65\sqrt{S_0}$  corresponding to those obtained on 80 mm gauge length

Actual elongation (%) on 80 mm gauge length	Corresponding elongation (%) on $5,65\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	13	12	12	11	11	11	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	8
11	14	13	13	12	12	12	12	11	11	11	11	10	10	10	10	10	10	10	10	10	9	9
12	15	14	14	13	13	13	13	12	12	12	12	11	11	11	11	11	11	11	11	11	10	10
13	16	16	15	14	14	14	14	13	13	13	13	12	12	12	12	12	12	12	12	11	11	11
14	18	17	16	15	15	15	15	14	14	14	14	13	13	13	13	13	13	13	12	12	12	12
15	19	18	17	17	16	16	16	15	15	15	15	14	14	14	14	14	14	14	14	13	13	13
16	20	19	18	18	17	17	17	16	16	16	16	15	15	15	15	15	14	14	14	14	14	14
17	21	20	20	19	18	18	18	17	17	17	17	16	16	16	16	16	15	15	15	15	15	14
18	23	22	21	20	19	19	19	18	18	18	17	17	17	17	17	16	16	16	16	16	16	15
19	24	23	22	21	20	20	20	19	19	19	18	18	18	18	17	17	17	17	17	17	16	16
20	25	24	23	22	22	21	21	20	20	20	19	19	19	19	18	18	18	18	18	18	17	17
21	26	25	24	23	23	22	22	21	21	21	20	20	20	20	19	19	19	19	19	19	18	18
22	28	27	25	24	24	23	23	22	22	22	21	21	21	20	20	20	20	20	20	20	19	19
23	29	28	27	25	25	24	24	23	23	23	22	22	22	21	21	21	21	21	21	20	20	20
24	30	29	28	27	26	25	25	24	24	24	23	23	23	22	22	22	22	22	22	21	21	20
25	32	30	29	28	27	26	26	25	25	25	24	24	24	23	23	23	23	23	23	22	22	21
26	33	31	30	29	28	27	27	26	26	26	25	25	24	24	24	24	24	23	23	23	22	22
27	34	33	31	30	29	29	28	27	27	27	26	26	25	25	25	24	24	24	24	24	23	23
28	35	34	32	31	30	30	29	28	28	28	27	27	26	26	26	26	25	25	25	25	24	24
29	37	35	33	32	31	31	30	29	29	29	28	28	27	27	27	26	26	26	26	25	25	25
30	38	36	35	33	32	32	31	30	30	30	29	29	28	28	28	27	27	27	27	26	26	25
31	39	37	36	34	33	33	32	31	31	31	30	30	29	29	29	28	28	28	28	27	27	26
32	40	39	37	35	34	34	33	32	32	31	31	31	30	30	29	29	29	29	29	28	28	27
33	42	40	38	36	36	35	34	34	33	32	32	31	31	31	30	30	30	30	29	29	28	28
34	43	41	39	38	37	36	35	35	34	33	33	32	32	32	31	31	31	31	30	30	29	29
35	44	42	40	39	38	37	36	36	35	34	34	33	33	33	32	32	32	32	31	31	30	30
36	45	43	42	40	39	38	38	37	36	35	35	34	34	33	33	33	33	32	32	32	31	31
37	47	45	43	41	40	39	39	38	37	36	36	35	35	34	34	34	34	33	33	32	32	31
38	48	46	44	42	41	40	40	39	38	37	37	36	36	35	35	35	34	34	34	33	33	32
39	49	47	45	43	42	41	41	40	39	38	38	37	37	36	36	36	35	35	35	34	34	33
40	50	48	46	44	43	42	42	41	40	39	39	38	38	37	37	37	36	36	36	35	34	34
41	52	49	47	45	44	43	43	42	41	40	40	39	39	38	38	37	37	37	36	36	35	35
42	53	51	48	46	45	44	44	43	42	41	41	40	40	39	39	38	38	38	37	37	36	36
43	54	52	50	47	46	45	45	44	43	42	42	41	40	40	40	39	39	39	38	38	37	37
44	55	53	51	49	47	46	46	45	44	43	43	42	41	41	41	40	40	40	39	39	38	37
45	57	54	52	50	48	48	47	46	45	44	44	43	42	42	41	41	41	41	40	39	39	38
46	58	55	53	51	50	49	48	47	46	45	45	44	43	43	42	42	42	41	41	40	40	39
47	59	57	54	52	51	50	49	48	47	46	46	45	44	44	43	43	43	42	42	41	40	40

<sup>a</sup> Rounded up to the nearest whole number.

**Table 8 — Elongation values<sup>a</sup> on  $5,65\sqrt{S_0}$  corresponding to those obtained on 100 mm gauge length**

Actual elongation (%) on 100 mm gauge length	Corresponding elongation (%) on $5,65\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	13	12	12	11	11	11	11	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9
11	14	14	13	12	12	12	12	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10
12	16	15	14	14	13	13	13	13	12	12	12	12	12	11	11	11	11	11	11	11	11	10
13	17	16	15	15	14	14	14	14	13	13	13	13	13	12	12	12	12	12	12	12	12	11
14	18	17	17	16	15	15	15	15	14	14	14	14	14	13	13	13	13	13	13	13	12	12
15	19	19	18	17	17	16	16	16	15	15	15	15	15	14	14	14	14	14	14	14	13	13
16	21	20	19	18	18	17	17	17	16	16	16	16	15	15	15	15	15	15	15	14	14	14
17	22	21	20	19	19	18	18	18	17	17	17	17	16	16	16	16	16	16	16	15	15	15
18	23	22	21	20	20	20	19	19	18	18	18	18	17	17	17	17	17	17	16	16	16	16
19	25	24	23	22	21	21	20	20	19	19	19	19	18	18	18	18	18	18	17	17	17	17
20	26	25	24	23	22	22	21	21	21	20	20	20	19	19	19	19	19	19	18	18	18	17
21	27	26	25	24	23	23	23	22	22	21	21	21	20	20	20	20	20	20	19	19	19	18
22	29	27	26	25	24	24	24	23	23	22	22	22	21	21	21	21	21	20	20	20	19	19
23	30	29	27	26	25	25	25	24	24	23	23	23	22	22	22	22	21	21	21	21	20	20
24	31	30	28	27	27	26	26	25	25	24	24	24	23	23	23	23	22	22	22	22	21	21
25	32	31	30	28	28	27	27	26	26	25	25	25	24	24	24	23	23	23	23	23	22	22
26	34	32	31	30	29	28	28	27	27	26	26	26	25	25	25	24	24	24	24	23	23	23
27	35	33	32	31	30	29	29	28	28	27	27	27	26	26	26	26	25	25	25	25	24	24
28	36	35	33	32	31	30	30	29	29	28	28	27	27	27	27	26	26	26	26	25	25	24
29	38	36	34	33	32	32	31	30	30	29	29	28	28	28	27	27	27	27	27	26	26	25
30	39	37	36	34	33	33	32	31	31	30	30	29	29	29	28	28	28	28	27	27	27	26
31	40	38	37	35	34	34	33	32	32	31	31	30	30	30	29	29	29	29	28	28	27	27
32	41	40	38	36	35	35	34	33	33	32	32	31	31	31	30	30	30	30	29	29	28	28
33	43	41	39	37	37	36	35	34	34	33	33	32	32	32	31	31	31	31	30	30	29	29
34	44	42	40	39	38	37	36	36	35	34	34	33	33	33	32	32	32	31	31	31	30	30
35	45	43	42	40	39	38	38	37	36	35	35	34	34	33	33	33	33	32	32	32	31	31
36	47	45	43	41	40	39	39	38	37	36	36	35	35	34	34	34	34	33	33	32	32	31
37	48	46	44	42	41	40	40	39	38	37	37	36	36	35	35	35	34	34	34	33	33	32
38	49	47	45	43	42	41	41	40	39	38	38	37	37	36	36	36	35	35	35	34	34	33
39	51	48	46	44	43	42	42	41	40	39	39	38	38	37	37	37	36	36	36	35	35	34
40	52	50	47	45	44	43	43	42	41	40	40	39	39	38	38	38	37	37	37	36	35	35
41	53	51	49	47	45	45	44	43	42	41	41	40	40	39	39	39	38	38	38	37	36	36
42	54	52	50	48	46	46	45	44	43	42	42	41	41	40	40	39	39	39	38	38	37	37
43	56	53	51	49	48	47	46	45	44	43	43	42	42	41	41	40	40	40	39	39	38	38
44	57	55	52	50	49	48	47	46	45	44	44	43	43	42	42	41	41	41	40	40	39	38
45	58	56	53	51	50	49	48	47	46	46	45	44	44	43	43	42	42	42	41	41	40	39
46	60	57	55	52	51	50	49	48	47	47	46	45	45	44	44	43	43	43	42	42	41	40
47	61	58	56	53	52	51	50	49	48	48	47	46	45	45	44	44	44	43	42	42	41	40

<sup>a</sup> Rounded up to the nearest whole number.

**Table 9 — Elongation values<sup>a</sup> on  $5,65\sqrt{S_0}$  corresponding to those obtained on 200 mm gauge length**

Actual elongation (%) on 200 mm gauge length	Corresponding elongation (%) on $5,65\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																						
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500	
10	14	14	13	12	12	12	12	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	
11	16	15	14	14	13	13	13	13	12	12	12	12	12	11	11	11	11	11	11	11	11	11	10
12	17	16	16	15	15	14	14	14	13	13	13	13	13	13	12	12	12	12	12	12	12	12	11
13	18	18	17	16	16	15	15	15	15	14	14	14	14	14	13	13	13	13	13	13	13	13	12
14	20	19	18	17	17	17	16	16	16	15	15	15	15	15	14	14	14	14	14	14	14	14	13
15	21	20	19	19	18	18	18	17	17	17	16	16	16	16	16	15	15	15	15	15	15	15	14
16	23	22	21	20	19	19	19	18	18	18	17	17	17	17	17	16	16	16	16	16	16	15	15
17	24	23	22	21	21	20	20	19	19	19	19	18	18	18	18	17	17	17	17	17	17	16	16
18	25	24	23	22	22	21	21	21	20	20	20	19	19	19	19	18	18	18	18	18	18	17	17
19	27	26	25	24	23	23	22	22	21	21	21	20	20	20	20	19	19	19	19	19	19	18	18
20	28	27	26	25	24	24	23	23	22	22	22	21	21	21	21	21	20	20	20	20	20	19	19
21	30	28	27	26	25	25	25	24	24	23	23	23	22	22	22	22	21	21	21	21	21	20	20
22	31	30	29	27	27	26	26	25	25	24	24	24	23	23	23	23	22	22	22	22	22	21	21
23	33	31	30	29	28	27	27	26	26	25	25	25	24	24	24	24	23	23	23	23	23	22	22
24	34	33	31	30	29	28	28	27	27	27	26	26	25	25	25	25	24	24	24	24	24	23	23
25	35	34	32	31	30	30	29	29	28	28	27	27	26	26	26	26	25	25	25	25	25	24	24
26	37	35	34	32	31	31	30	30	29	29	28	28	27	27	27	27	26	26	26	26	26	25	25
27	38	37	35	33	33	32	32	31	30	30	29	29	29	28	28	28	27	27	27	27	27	26	26
28	40	38	36	35	34	33	33	32	31	31	31	30	30	29	29	29	29	28	28	28	28	27	27
29	41	39	38	36	35	34	34	33	32	32	32	31	31	30	30	30	30	29	29	29	29	28	28
30	42	41	39	37	36	36	35	34	34	33	33	32	32	31	31	31	31	30	30	30	30	29	29
31	44	42	40	38	37	37	36	35	35	34	34	33	33	32	32	32	32	31	31	31	31	30	30
32	45	43	41	40	39	38	37	36	36	35	35	34	34	33	33	33	33	32	32	32	32	31	31
33	47	45	43	41	40	39	39	38	37	36	36	35	35	34	34	34	34	33	33	33	33	32	31
34	48	46	44	42	41	40	40	39	38	38	37	36	36	36	35	35	35	34	34	34	34	33	32
35	50	47	45	43	42	42	41	40	39	39	38	38	37	37	36	36	36	35	35	34	34	33	33
36	51	49	47	45	44	43	42	41	40	40	39	39	38	38	37	37	37	36	36	35	35	34	34
37	52	50	48	46	45	44	43	42	41	41	40	40	39	39	38	38	38	37	37	36	36	35	35
38	54	51	49	47	46	45	44	43	43	42	41	41	40	40	39	39	39	38	38	37	37	36	36
39	55	53	51	48	47	46	46	44	44	43	43	42	41	41	40	40	40	39	39	38	38	37	37
40	57	54	52	50	48	47	47	46	45	44	44	43	42	42	41	41	41	40	40	39	39	38	38
41	58	56	53	51	50	49	48	47	46	45	45	44	43	43	42	42	42	41	41	40	40	39	39
42	59	57	54	52	51	50	49	48	47	46	46	45	44	44	43	43	43	42	42	41	41	40	40
43	61	58	56	53	52	51	50	49	48	47	47	46	45	45	44	44	44	43	43	42	42	41	41
44	62	60	57	55	53	52	51	50	49	49	48	47	46	46	46	45	45	44	44	43	43	42	42
45	64	61	58	56	54	53	53	51	50	50	49	48	48	47	47	46	46	45	44	44	43	42	42
46	65	62	60	57	56	55	54	52	52	51	50	49	49	48	48	47	47	46	45	45	44	43	43
47	67	64	61	58	57	56	55	54	53	52	51	50	50	49	49	48	48	47	46	45	45	44	43

<sup>a</sup> Rounded up to the nearest whole number.

**Table 10 — Elongation values<sup>a</sup> on  $4\sqrt{S_0}$  corresponding to those obtained on 50 mm gauge length**

Actual elongation (%) on 50 mm gauge length	Corresponding elongation (%) on $4\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	12	12	11	11	11	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	8
11	14	13	13	12	12	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	9	9
12	15	14	14	13	13	13	12	12	12	12	12	11	11	11	11	11	11	11	11	10	10	10
13	16	16	15	14	14	14	13	13	13	13	12	12	12	12	12	12	12	12	11	11	11	11
14	17	17	16	15	15	15	14	14	14	14	13	13	13	13	13	13	13	12	12	12	12	12
15	19	18	17	16	16	16	15	15	15	15	14	14	14	14	14	14	13	13	13	13	13	13
16	20	19	18	17	17	17	16	16	16	16	15	15	15	15	15	14	14	14	14	14	14	13
17	21	20	19	19	18	18	18	17	17	17	16	16	16	16	15	15	15	15	15	15	14	14
18	22	21	21	20	19	19	19	18	18	18	17	17	17	17	16	16	16	16	16	16	15	15
19	24	23	22	21	20	20	20	19	19	18	18	18	18	17	17	17	17	17	17	16	16	16
20	25	24	23	22	21	21	21	20	20	19	19	19	19	18	18	18	18	18	18	17	17	17
21	26	25	24	23	22	22	22	21	21	20	20	20	20	19	19	19	19	19	18	18	18	18
22	27	26	25	24	23	23	23	22	22	21	21	21	20	20	20	20	20	20	19	19	19	18
23	29	27	26	25	24	24	24	23	23	22	22	22	21	21	21	21	21	20	20	20	20	19
24	30	29	27	26	26	25	25	24	24	23	23	23	22	22	22	22	22	21	21	21	20	20
25	31	30	29	27	27	26	26	25	25	24	24	24	23	23	23	23	22	22	22	22	21	21
26	32	31	30	28	28	27	27	26	26	25	25	25	24	24	24	23	23	23	23	23	22	22
27	34	32	31	29	29	28	28	27	27	26	26	25	25	25	25	24	24	24	24	23	23	23
28	35	33	32	31	30	29	29	28	28	27	27	26	26	26	26	25	25	25	25	24	24	24
29	36	35	33	32	31	30	30	29	29	28	28	27	27	27	26	26	26	26	26	25	25	24
30	37	36	34	33	32	31	31	30	30	29	29	28	28	28	27	27	27	27	26	26	26	25
31	39	37	35	34	33	32	32	31	31	30	30	29	29	29	28	28	28	28	27	27	26	26
32	40	38	37	35	34	33	33	32	32	31	31	30	30	29	29	29	29	28	28	28	27	27
33	41	39	38	36	35	34	34	33	33	32	32	31	31	30	30	30	30	29	29	29	28	28
34	42	41	39	37	36	36	35	34	34	33	33	32	32	31	31	31	30	30	30	30	29	29
35	44	42	40	38	37	37	36	35	35	34	34	33	33	32	32	32	31	31	31	30	30	29
36	45	43	41	39	38	38	37	36	36	35	35	34	33	33	33	33	32	32	32	31	31	30
37	46	44	42	40	39	39	38	37	36	36	36	35	34	34	34	33	33	33	33	32	32	31
38	47	45	43	42	40	40	39	38	37	37	37	36	35	35	35	34	34	34	33	33	32	32
39	49	47	45	43	42	41	40	39	38	38	37	37	36	36	36	35	35	35	34	34	33	33
40	50	48	46	44	43	42	41	40	39	39	38	38	37	37	36	36	36	36	35	35	34	34
41	51	49	47	45	44	43	42	41	40	40	39	39	38	38	37	37	37	37	36	36	35	34
42	52	50	48	46	45	44	43	42	41	41	40	40	39	39	38	38	38	37	37	36	36	35
43	54	51	49	47	46	45	44	43	42	42	41	41	40	40	39	39	39	38	38	37	37	36
44	55	52	50	48	47	46	45	44	43	43	42	42	41	40	40	40	39	39	39	38	37	37
45	56	54	51	49	48	47	46	45	44	44	43	42	42	41	41	41	40	40	40	39	38	38
46	57	55	53	50	49	48	47	46	45	45	44	43	43	42	42	42	41	41	40	40	39	39
47	59	56	54	51	50	49	48	47	46	46	45	44	44	43	43	42	42	42	41	41	40	39

<sup>a</sup> Rounded up to the nearest whole number.

Table 11 — Elongation values<sup>a</sup> on  $4\sqrt{S_0}$  corresponding to those obtained on 80 mm gauge length

Actual elongation (%) on 80 mm gauge length	Corresponding elongation (%) on $4\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	13	13	12	12	11	11	11	11	10	10	10	10	10	10	10	10	9	9	9	9	9	
11	15	14	13	13	12	12	12	12	12	11	11	11	11	11	11	11	10	10	10	10	10	10
12	16	15	15	14	14	13	13	13	13	12	12	12	12	12	12	12	11	11	11	11	11	11
13	17	16	16	15	15	14	14	14	14	13	13	13	13	13	13	12	12	12	12	12	12	12
14	19	18	17	16	16	16	15	15	15	14	14	14	14	14	14	13	13	13	13	13	13	12
15	20	19	18	17	17	17	16	16	16	15	15	15	15	15	15	14	14	14	14	14	14	13
16	21	20	19	19	18	18	18	17	17	17	16	16	16	16	15	15	15	15	15	15	14	14
17	22	22	21	20	19	19	19	18	18	18	17	17	17	17	16	16	16	16	16	16	15	15
18	24	23	22	21	20	20	20	19	19	19	18	18	18	18	17	17	17	17	17	17	16	16
19	25	24	23	22	21	21	21	20	20	20	19	19	19	19	18	18	18	18	18	18	17	17
20	26	25	24	23	23	22	22	21	21	21	20	20	20	20	19	19	19	19	19	19	18	18
21	28	27	25	24	24	23	23	22	22	22	21	21	21	21	20	20	20	20	20	20	19	19
22	29	28	27	26	25	24	24	23	23	23	22	22	22	21	21	21	21	21	21	21	20	20
23	30	29	28	27	26	26	25	25	24	24	23	23	23	22	22	22	22	22	22	21	21	21
24	32	30	29	28	27	27	26	26	25	25	24	24	24	23	23	23	23	23	23	22	22	21
25	33	32	30	29	28	28	27	27	26	26	26	25	25	24	24	24	24	24	23	23	23	22
26	34	33	32	30	29	29	28	28	27	27	27	26	26	25	25	25	25	25	24	24	24	23
27	36	34	33	31	31	30	30	29	28	28	28	27	27	26	26	26	26	26	25	25	24	24
28	37	35	34	32	32	31	31	30	29	29	29	28	28	27	27	27	27	26	26	26	25	25
29	38	37	35	34	33	32	32	31	30	30	30	29	29	28	28	28	28	27	27	27	26	26
30	40	38	36	35	34	33	33	32	31	31	31	30	30	29	29	29	29	28	28	28	27	27
31	41	39	38	36	35	34	34	33	32	32	32	31	31	30	30	30	29	29	29	29	28	28
32	42	41	39	37	36	36	35	34	33	33	33	32	32	31	31	31	30	30	30	29	29	29
33	44	42	40	38	37	37	36	35	35	34	34	33	33	32	32	32	31	31	31	30	30	29
34	45	43	41	39	38	38	37	36	36	35	35	34	34	33	33	33	32	32	32	31	31	30
35	46	44	42	41	40	39	38	37	37	36	36	35	35	34	34	34	33	33	33	32	32	31
36	48	46	44	42	41	40	39	38	38	37	37	36	36	35	35	35	34	34	34	33	33	32
37	49	47	45	43	42	41	40	39	39	38	38	37	37	36	36	35	35	35	35	34	33	33
38	50	48	46	44	43	42	42	41	40	39	39	38	38	37	37	36	36	36	35	35	34	34
39	52	49	47	45	44	43	43	42	41	40	40	39	39	38	39	37	37	37	36	36	35	35
40	53	51	48	46	45	44	44	43	42	41	41	40	40	39	39	38	38	38	37	37	36	36
41	54	52	50	48	46	45	45	44	43	42	42	41	40	40	40	39	39	39	38	38	37	37
42	56	53	51	49	47	47	46	45	44	43	43	42	41	41	41	40	40	40	39	39	38	37
43	57	54	52	50	49	48	47	46	45	44	44	43	42	42	42	41	41	41	40	40	39	38
44	58	56	53	51	50	49	48	47	46	45	45	44	43	43	43	42	42	42	41	41	40	39
45	60	57	55	52	51	50	49	48	47	46	46	45	44	44	44	43	43	43	42	41	41	40
46	61	58	56	53	52	51	50	49	48	47	47	46	45	45	44	44	44	43	43	42	42	41
47	62	60	57	54	53	52	51	50	49	49	48	47	46	46	45	45	45	44	44	43	43	42

<sup>a</sup> Rounded up to the nearest whole number.

Table 12 — Elongation values<sup>a</sup> on  $4\sqrt{S_0}$  corresponding to those obtained on 100 mm gauge length

Actual elongation (%) on 100 mm gauge length	Corresponding elongation (%) on $4\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	14	13	12	12	12	11	11	11	11	11	10	10	10	10	10	10	10	10	10	9	9	9
11	15	14	14	13	13	13	12	12	12	12	12	11	11	11	11	11	11	11	11	10	10	10
12	16	16	15	14	14	14	14	13	13	13	13	12	12	12	12	12	12	12	12	11	11	11
13	18	17	16	16	15	15	15	14	14	14	14	13	13	13	13	13	13	13	12	12	12	12
14	19	18	17	17	16	16	16	15	15	15	15	14	14	14	14	14	14	14	13	13	13	13
15	20	20	19	18	17	17	17	16	16	16	16	15	15	15	15	15	15	15	14	14	14	14
16	22	21	20	19	19	18	18	18	17	17	17	16	16	16	16	16	16	16	15	15	15	15
17	23	22	21	20	20	19	19	19	18	18	18	18	17	17	17	17	17	17	16	16	16	16
18	25	23	22	21	21	21	20	20	19	19	19	19	18	18	18	18	18	18	17	17	17	17
19	26	25	24	23	22	22	21	21	20	20	20	20	19	19	19	19	19	18	18	18	18	17
20	27	26	25	24	23	23	23	22	22	21	21	21	20	20	20	20	20	19	19	19	19	18
21	29	27	26	25	24	24	24	23	23	22	22	22	21	21	21	21	21	20	20	20	20	19
22	30	29	27	26	26	25	25	24	24	23	23	23	22	22	22	22	22	21	21	21	20	20
23	31	30	29	27	27	26	26	25	25	24	24	24	23	23	23	23	23	22	22	22	21	21
24	33	31	30	29	28	27	27	26	26	25	25	25	24	24	24	24	23	23	23	23	22	22
25	34	33	31	30	29	29	28	27	27	27	26	26	25	25	25	25	24	24	24	24	23	23
26	35	34	32	31	30	30	29	29	28	28	27	27	26	26	26	26	25	25	25	25	24	24
27	37	35	34	32	31	31	30	30	29	29	28	28	27	27	27	27	26	26	26	26	25	25
28	38	36	35	33	33	32	32	31	30	30	29	29	28	28	28	28	27	27	27	27	26	26
29	39	38	36	35	34	33	33	32	31	31	30	30	29	29	29	29	28	28	28	27	27	27
30	41	39	37	36	35	34	34	33	32	32	31	31	30	30	30	30	29	29	29	28	28	28
31	42	40	39	37	36	35	35	34	33	33	33	32	31	31	31	31	30	30	30	29	29	28
32	44	42	40	38	37	37	36	35	34	34	34	33	33	32	32	32	31	31	31	30	30	29
33	45	43	41	39	38	38	37	36	36	35	35	34	34	33	33	33	32	32	32	31	31	30
34	46	44	42	41	40	39	38	37	37	36	36	35	35	34	34	34	33	33	33	32	32	31
35	48	46	44	42	41	40	39	38	38	37	37	36	36	35	35	35	34	34	34	33	33	32
36	49	47	45	43	42	41	41	39	39	38	38	37	37	36	36	36	35	35	35	34	33	33
37	50	48	46	44	43	42	42	41	40	39	39	38	38	37	37	36	36	36	36	35	34	34
38	52	49	47	45	44	43	43	42	41	40	40	39	39	38	38	37	37	37	37	36	35	35
39	53	51	49	47	45	45	44	43	42	41	41	40	40	39	39	38	38	38	37	37	36	36
40	54	52	50	48	46	46	45	44	43	42	42	41	41	40	40	39	39	39	38	38	37	37
41	56	53	51	49	48	47	46	45	44	44	43	42	42	41	41	40	40	40	39	39	38	38
42	57	55	52	50	49	48	47	46	45	45	44	43	43	42	42	41	41	41	40	40	39	39
43	59	56	54	51	50	49	48	47	46	46	45	44	44	43	43	42	42	42	41	41	40	39
44	60	57	55	52	51	50	50	48	47	47	46	45	45	44	44	43	43	43	42	42	41	40
45	61	59	56	54	52	51	51	49	48	48	47	46	46	45	45	44	44	44	43	43	42	41
46	63	60	57	55	53	53	52	50	50	49	48	47	47	46	46	45	45	45	44	44	43	42
47	64	61	59	56	55	54	53	52	51	50	49	48	48	47	47	46	46	46	45	45	44	43

<sup>a</sup> Rounded up to the nearest whole number.

**Table 13 — Elongation values<sup>a</sup> on  $4\sqrt{S_0}$  corresponding to those obtained on 200 mm gauge length**

Actual elongation (%) on 200 mm gauge length	Corresponding elongation (%) on $4\sqrt{S_0}$ gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	15	14	14	13	13	12	12	12	12	12	11	11	11	11	11	11	11	11	10	10	10	10
11	16	16	15	14	14	14	14	13	13	13	13	12	12	12	12	12	12	12	12	11	11	11
12	18	17	16	16	15	15	15	14	14	14	14	14	13	13	13	13	13	13	13	12	12	12
13	19	18	18	17	17	16	16	16	15	15	15	15	14	14	14	14	14	14	14	13	13	13
14	21	20	19	18	18	17	17	17	16	16	16	16	16	15	15	15	15	15	15	14	14	14
15	22	21	20	20	19	19	18	18	18	17	17	17	17	16	16	16	16	16	16	16	15	15
16	24	23	22	21	20	20	20	19	19	19	18	18	18	18	17	17	17	17	17	17	16	16
17	25	24	23	22	22	21	21	20	20	20	19	19	19	19	18	18	18	18	18	18	17	17
18	27	26	25	23	23	22	22	22	21	21	21	20	20	20	20	19	19	19	19	19	18	18
19	28	27	26	25	24	24	23	23	22	22	22	21	21	21	21	20	20	20	20	20	19	19
20	30	28	27	26	25	25	25	24	24	23	23	23	22	22	22	22	21	21	21	21	20	20
21	31	30	29	27	27	26	26	25	25	24	24	24	23	23	23	23	22	22	22	22	21	21
22	33	31	30	29	28	27	27	26	26	26	25	25	24	24	24	24	24	23	23	23	22	22
23	34	33	31	30	29	29	28	28	27	27	26	26	26	25	25	25	25	24	24	24	23	23
24	36	34	33	31	30	30	29	29	28	28	28	27	27	26	26	26	26	25	25	25	24	24
25	37	36	34	33	32	31	31	30	29	29	29	28	28	27	27	27	27	27	26	26	25	25
26	39	37	35	34	33	32	32	31	31	30	30	29	29	29	28	28	28	28	27	27	26	26
27	40	38	37	35	34	34	33	32	32	31	31	30	30	30	29	29	29	29	28	28	27	27
28	42	40	38	36	36	35	34	34	33	32	32	32	31	31	31	30	30	30	29	29	28	28
29	43	41	39	38	37	36	36	35	34	34	33	33	32	32	31	31	31	31	30	30	29	29
30	45	43	41	39	38	37	37	36	35	35	34	34	33	33	33	32	32	32	31	31	30	30
31	46	44	42	40	39	39	38	37	36	36	36	35	34	34	34	33	33	33	33	32	31	31
32	48	46	44	42	41	40	39	38	38	37	37	36	36	35	35	34	34	34	34	33	33	32
33	49	47	45	43	42	41	41	40	39	38	38	37	37	36	36	36	35	35	35	34	34	33
34	51	48	46	44	43	42	42	41	40	39	39	38	38	37	37	37	36	36	36	35	35	34
35	52	50	48	46	44	44	43	42	41	41	40	39	39	38	38	38	37	37	37	36	36	35
36	54	51	49	47	46	45	44	43	42	42	41	41	40	39	39	39	38	38	38	37	37	36
37	55	53	50	48	47	46	45	44	44	43	42	42	41	41	40	40	40	39	39	38	38	37
38	56	54	52	49	48	47	47	46	45	44	44	43	42	42	41	41	41	40	40	39	39	38
39	58	55	53	51	50	49	48	47	46	45	45	44	43	43	42	42	42	41	41	40	40	39
40	59	57	54	52	51	50	49	48	47	46	46	45	44	44	43	43	43	42	42	41	41	40
41	61	58	56	53	52	51	50	49	48	48	47	46	45	45	45	44	44	44	43	42	42	41
42	62	60	57	55	53	52	52	50	49	49	48	47	47	46	46	45	45	45	44	43	43	42
43	64	61	59	56	55	54	53	51	51	50	49	48	48	47	47	46	46	46	45	44	44	43
44	65	63	60	57	56	55	54	53	52	51	50	50	49	48	48	47	47	47	46	46	45	44
45	67	64	61	59	57	56	55	54	53	52	52	51	50	49	49	48	48	48	47	47	46	45
46	68	65	63	60	58	57	57	55	54	53	53	52	51	50	50	50	49	49	48	48	47	46
47	70	67	64	61	60	59	58	56	55	54	54	53	52	52	51	51	50	50	49	49	48	47

<sup>a</sup> Rounded up to the nearest whole number.

**Table 14 — Elongation values<sup>a</sup> on 50 mm corresponding to those obtained on  $5,65\sqrt{S_0}$  gauge length**

Actual elongation (%) on $5,65\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 50 mm gauge length if cross-sectional area in square millimetres is:																						
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500	
10	8	9	9	10	10	10	10	10	11	11	11	11	11	11	12	12	12	12	12	12	12	13	
11	9	10	10	11	11	11	11	12	12	12	12	12	12	13	13	13	13	13	13	13	13	14	14
12	10	11	11	12	12	12	12	13	13	13	13	13	14	14	14	14	14	14	14	14	15	15	15
13	11	11	12	12	13	13	13	14	14	14	14	14	15	15	15	15	15	15	16	16	16	16	16
14	12	12	13	13	14	14	14	15	15	15	15	16	16	16	16	16	16	17	17	17	17	18	18
15	13	13	14	14	15	15	15	16	16	16	16	17	17	17	17	17	18	18	18	18	18	19	19
16	13	14	15	15	16	16	16	17	17	17	17	18	18	18	18	19	19	19	19	19	20	20	20
17	14	15	16	16	17	17	17	18	18	18	19	19	19	19	20	20	20	20	20	20	21	21	21
18	15	16	17	17	18	18	18	19	19	19	20	20	20	21	21	21	21	21	21	21	22	22	23
19	16	17	17	18	19	19	19	20	20	21	21	21	21	22	22	22	22	22	22	23	23	23	24
20	17	18	18	19	20	20	20	21	21	22	22	22	23	23	23	23	23	24	24	24	24	25	25
21	18	18	19	20	21	21	21	22	22	23	23	23	24	24	24	24	25	25	25	25	25	26	26
22	19	19	20	21	22	22	22	23	23	24	24	24	25	25	25	26	26	26	26	26	27	27	28
23	19	20	21	22	23	23	23	24	24	25	25	26	26	26	27	27	27	27	27	27	28	28	29
24	20	21	22	23	24	24	24	25	26	26	26	27	27	27	28	28	28	28	28	29	29	30	30
25	21	22	23	24	25	25	25	26	27	27	27	28	28	29	29	29	29	29	29	30	30	31	31
26	22	23	24	25	26	26	26	27	28	28	28	29	29	30	30	30	30	31	31	31	31	32	33
27	23	24	25	26	27	27	28	28	29	29	29	30	30	31	31	31	32	32	32	32	33	33	34
28	24	25	26	27	28	28	29	29	30	30	31	31	32	32	32	33	33	33	33	33	34	35	35
29	24	26	27	28	29	29	30	30	31	31	32	32	33	33	33	34	34	34	34	35	35	36	36
30	25	26	28	29	30	30	31	31	32	32	33	33	34	34	35	35	35	35	36	36	36	37	38
31	26	27	29	30	31	31	32	32	33	33	34	34	35	35	36	36	36	37	37	37	38	38	39
32	27	28	29	31	32	32	33	33	34	35	35	36	36	37	37	37	37	38	38	39	39	40	40
33	28	29	30	32	33	33	34	35	35	36	36	37	37	38	38	38	39	39	39	40	41	41	41
34	29	30	31	33	34	34	35	36	36	37	37	38	38	39	39	40	40	40	41	41	42	43	43
35	29	31	32	34	35	35	36	37	37	38	38	39	39	40	40	41	41	41	42	42	43	44	44
36	30	32	33	35	36	36	37	38	38	39	39	40	41	41	42	42	42	42	43	44	44	45	45
37	31	33	34	36	36	37	38	39	39	40	40	41	42	42	43	43	43	44	44	45	46	46	46
38	32	33	35	37	37	38	39	40	40	41	42	42	43	43	44	44	45	45	45	46	47	47	48
39	33	34	36	37	38	39	40	41	42	42	43	43	44	45	45	45	46	46	47	47	48	48	49
40	34	35	37	38	39	40	41	42	43	43	44	45	45	46	46	47	47	47	48	48	49	49	50
41	35	36	38	39	40	41	42	43	44	44	45	46	46	47	47	48	48	48	49	50	51	51	51
42	35	37	39	40	41	42	43	44	45	45	46	47	47	48	48	49	49	50	50	51	52	53	53
43	36	38	40	41	42	43	44	45	46	46	47	48	49	49	50	50	51	51	52	52	53	54	54
44	37	39	40	42	43	44	45	46	47	48	48	49	50	50	51	51	52	52	53	53	54	55	55
45	38	40	41	43	44	45	46	47	48	49	49	50	51	51	52	52	53	53	54	54	55	56	56
46	39	40	42	44	45	46	47	48	49	50	50	51	52	53	53	53	54	54	55	55	56	57	58
47	40	41	43	45	46	47	48	49	50	51	51	52	53	54	54	55	55	55	56	56	57	58	59

<sup>a</sup> Rounded up to the nearest whole number.

**Table 15 — Elongation values<sup>a</sup> on 80 mm corresponding to those obtained on  $5,65\sqrt{S_0}$  gauge length**

Actual elongation (%) on $5,65\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 80 mm gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	8	8	9	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	11	12	12
11	9	9	10	10	10	10	11	11	11	11	11	12	12	12	12	12	12	12	12	12	13	13
12	10	10	10	11	11	11	12	12	12	12	12	13	13	13	13	13	13	13	13	14	14	14
13	10	11	11	12	12	12	12	13	13	13	13	14	14	14	14	14	14	14	15	15	15	15
14	11	12	12	13	13	13	13	14	14	14	14	15	15	15	15	15	15	16	16	16	16	16
15	12	12	13	14	14	14	14	15	15	15	15	16	16	16	16	16	17	17	17	17	17	18
16	13	13	14	14	15	15	15	16	16	16	16	17	17	17	17	18	18	18	18	18	19	19
17	13	14	15	15	16	16	16	17	17	17	17	18	18	18	18	19	19	19	19	19	20	20
18	14	15	16	16	17	17	17	18	18	18	19	19	19	19	20	20	20	20	20	21	21	21
19	15	16	16	17	18	18	18	19	19	19	20	20	20	20	21	21	21	21	21	22	22	22
20	16	17	17	18	19	19	19	20	20	20	21	21	21	22	22	22	22	22	22	23	23	24
21	17	17	18	19	20	20	20	21	21	21	22	22	22	23	23	23	23	23	24	24	24	25
22	17	18	19	20	20	21	21	22	22	22	23	23	23	24	24	24	24	24	25	25	26	26
23	18	19	20	21	21	22	22	23	23	23	24	24	24	25	25	25	25	26	26	26	27	27
24	19	20	21	22	22	23	23	24	24	24	25	25	26	26	26	26	27	27	27	27	28	28
25	20	21	22	23	23	24	24	25	25	25	26	26	27	27	27	28	28	28	28	29	29	29
26	21	22	23	24	24	25	25	26	26	26	27	27	28	28	28	29	29	29	29	30	30	31
27	21	22	23	24	25	26	26	27	27	27	28	28	29	29	29	30	30	30	30	31	31	32
28	22	23	24	25	26	26	27	28	28	28	29	29	30	30	30	31	31	31	31	32	33	33
29	23	24	25	26	27	27	28	29	29	30	30	30	31	31	31	32	32	32	33	33	34	34
30	24	25	26	27	28	28	29	30	30	31	31	31	32	32	33	33	33	33	34	34	35	35
31	25	26	27	28	29	29	30	31	31	32	32	32	33	33	34	34	34	34	35	35	36	37
32	25	27	28	29	30	30	31	32	32	33	33	34	34	34	35	35	35	36	36	36	37	38
33	26	27	29	30	31	31	32	33	33	34	34	35	35	35	36	36	36	37	37	38	38	39
34	27	28	29	31	32	32	33	33	34	35	35	36	36	37	37	37	38	38	38	39	39	40
35	28	29	30	32	33	33	34	34	35	36	36	37	37	38	38	38	39	39	39	40	41	41
36	29	30	31	33	34	35	35	36	37	37	38	38	39	39	39	40	40	40	40	41	42	42
37	29	31	32	34	34	35	36	36	37	38	38	39	39	40	40	41	41	41	42	42	43	44
38	30	32	33	34	35	36	36	37	38	39	39	40	40	41	41	42	42	42	43	43	44	45
39	31	32	34	35	36	37	37	38	39	40	40	41	41	42	42	43	43	43	44	44	45	46
40	32	33	35	36	37	38	38	39	40	41	41	42	43	43	43	44	44	44	45	46	46	47
41	33	34	36	37	38	39	39	40	41	42	42	43	44	44	45	45	45	46	46	47	48	48
42	33	35	36	38	39	40	40	41	42	43	43	44	45	45	46	46	46	47	47	48	49	49
43	34	36	37	39	40	41	41	42	43	44	44	45	46	46	47	47	47	48	48	49	50	51
44	35	36	38	40	41	42	42	43	44	45	45	46	47	47	48	48	49	49	49	50	51	52
45	36	37	39	41	42	43	43	44	45	46	46	47	48	48	49	49	50	50	51	51	52	53
46	37	38	40	42	43	44	44	45	46	47	47	48	49	49	50	50	51	51	52	52	53	54
47	37	39	41	43	44	44	45	46	47	48	48	49	50	51	51	52	52	53	53	54	55	55

<sup>a</sup> Rounded up to the nearest whole number.

Table 16 — Elongation values<sup>a</sup> on 100 mm corresponding to those obtained on  $5,65\sqrt{S_0}$  gauge length

Actual elongation (%) on $5,65\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 100 mm gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	8	8	8	9	9	9	9	10	10	10	10	10	10	10	11	11	11	11	11	11	11	11
11	8	9	9	10	10	10	10	11	11	11	11	11	11	12	12	12	12	12	12	12	12	13
12	9	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	13	13	14	14
13	10	10	11	11	12	12	12	12	13	13	13	13	13	14	14	14	14	14	14	14	15	15
14	11	11	12	12	13	13	13	13	14	14	14	14	14	15	15	15	15	15	15	16	16	16
15	12	12	13	13	14	14	14	14	15	15	15	15	16	16	16	16	16	16	16	17	17	17
16	12	13	13	14	14	15	15	15	16	16	16	16	17	17	17	17	17	17	17	18	18	18
17	13	14	14	15	15	16	16	16	17	17	17	17	18	18	18	18	18	18	18	19	19	19
18	14	15	15	16	16	17	17	17	18	18	18	18	19	19	19	19	19	19	19	20	20	21
19	15	15	16	17	17	17	18	18	19	19	19	19	20	20	20	20	20	21	21	21	21	22
20	15	16	17	18	18	18	19	19	20	20	20	20	21	21	21	21	21	22	22	22	23	23
21	16	17	18	18	19	19	20	20	20	21	21	21	22	22	22	22	23	23	23	23	24	24
22	17	18	19	19	20	20	21	21	21	22	22	22	23	23	23	23	24	24	24	24	25	25
23	18	19	19	20	21	21	21	22	22	23	23	23	24	24	24	24	25	25	25	25	26	26
24	19	19	20	21	22	22	22	23	23	24	24	24	25	25	25	26	26	26	26	27	27	27
25	19	20	21	22	23	23	23	24	24	25	25	25	26	26	26	27	27	27	27	28	28	29
26	20	21	22	23	23	24	24	25	25	26	26	26	27	27	27	28	28	28	28	29	29	30
27	21	22	23	24	24	25	25	26	26	27	27	28	28	28	29	29	29	29	29	30	30	31
28	22	23	24	25	25	26	26	27	27	28	28	29	29	29	30	30	30	30	31	31	32	32
29	22	23	24	26	26	27	27	28	28	29	29	30	30	30	31	31	31	31	32	32	33	33
30	23	24	25	26	27	28	28	29	29	30	30	31	31	31	32	32	32	32	33	33	34	34
31	24	25	26	27	28	29	29	30	30	31	31	32	32	32	33	33	33	33	34	34	35	35
32	25	26	27	28	29	29	30	31	31	32	32	33	33	33	34	34	34	35	35	35	36	37
33	25	27	28	29	30	30	31	32	32	33	33	34	34	35	35	35	35	36	36	37	37	38
34	26	27	29	30	31	31	32	33	33	34	34	35	35	36	36	36	36	37	37	38	38	39
35	27	28	29	31	32	32	33	34	34	35	35	36	36	37	37	37	38	38	38	39	39	40
36	28	29	30	32	33	33	34	34	35	36	36	37	37	38	38	38	39	39	39	40	41	41
37	29	30	31	33	33	34	35	35	36	37	37	38	38	39	39	39	40	40	40	41	42	42
38	29	31	32	33	34	35	35	36	37	38	38	39	39	40	40	40	41	41	42	42	43	43
39	30	31	33	34	35	36	36	37	38	39	39	40	40	41	41	42	42	42	43	43	44	45
40	31	32	34	35	36	37	37	38	39	40	40	41	41	42	42	43	43	43	44	44	45	46
41	32	33	35	36	37	38	38	39	40	41	41	42	42	43	43	44	44	44	45	45	46	47
42	32	34	35	37	38	39	39	40	41	42	42	43	43	44	44	45	45	45	46	47	47	48
43	33	35	36	38	39	40	40	41	42	43	43	44	44	45	45	46	46	46	47	48	49	49
44	34	35	37	39	40	40	41	42	43	44	44	45	45	46	46	47	47	48	48	49	50	50
45	35	36	38	40	41	41	42	43	44	45	45	46	47	47	48	48	48	49	49	50	51	52
46	35	37	39	40	42	42	43	44	45	45	46	47	48	48	49	49	49	50	50	51	52	53
47	36	38	40	41	42	43	44	45	46	46	47	48	49	49	50	50	50	51	51	52	53	54

<sup>a</sup> Rounded up to the nearest whole number.

Table 17 — Elongation values<sup>a</sup> on 200 mm corresponding to those obtained on  $5,65\sqrt{S_0}$  gauge length

Actual elongation (%) on $5,65\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 200 mm gauge length if cross-sectional area in square millimetres is:																						
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500	
10	7	7	8	8	8	8	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	
11	8	8	8	9	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11	12
12	8	9	9	10	10	10	10	11	11	11	11	11	11	11	12	12	12	12	12	12	12	12	13
13	9	10	10	10	11	11	11	11	12	12	12	12	12	12	13	13	13	13	13	13	13	13	14
14	10	10	11	11	12	12	12	12	13	13	13	13	13	13	14	14	14	14	14	14	14	14	15
15	11	11	12	12	12	13	13	13	13	14	14	14	14	14	15	15	15	15	15	15	15	16	16
16	11	12	12	13	13	13	14	14	14	14	14	15	15	15	15	16	16	16	16	16	16	17	17
17	12	13	13	14	14	14	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	18	18
18	13	13	14	15	15	15	15	16	16	16	16	16	17	17	17	17	18	18	18	18	18	19	19
19	13	14	15	15	16	16	16	17	17	17	17	18	18	18	18	19	19	19	19	19	19	20	20
20	14	15	15	16	17	17	17	18	18	18	18	19	19	19	19	20	20	20	20	20	20	21	21
21	15	16	16	17	17	18	18	18	19	19	19	20	20	20	20	21	21	21	21	21	21	22	22
22	16	16	17	18	18	19	19	19	20	20	20	21	21	21	21	22	22	22	22	22	22	23	23
23	16	17	18	19	19	19	20	20	21	21	21	21	22	22	22	22	23	23	23	23	23	24	24
24	17	18	19	19	20	20	21	21	21	22	22	22	23	23	23	24	24	24	24	24	24	25	25
25	18	18	19	20	21	21	21	22	22	23	23	23	24	24	24	24	25	25	25	25	25	26	26
26	18	19	20	21	22	22	22	23	23	24	24	24	25	25	25	26	26	26	26	26	26	27	27
27	19	20	21	22	22	23	23	24	24	24	25	25	26	26	26	27	27	27	27	27	27	28	28
28	20	21	22	23	23	24	24	25	25	25	26	26	26	27	27	27	28	28	28	28	28	29	29
29	20	21	22	23	24	24	25	25	26	26	27	27	27	28	28	28	28	29	29	29	29	30	30
30	21	22	23	24	25	25	26	26	27	27	27	28	28	29	29	29	29	30	30	30	30	31	31
31	22	23	24	25	26	26	26	27	28	28	28	29	29	30	30	30	30	31	31	31	31	32	32
32	23	24	25	26	26	27	27	28	29	29	29	30	30	31	31	31	31	32	32	32	32	33	34
33	23	24	25	27	27	28	28	29	29	30	30	31	31	32	32	32	32	33	33	33	33	34	35
34	24	25	26	27	28	29	29	30	30	31	31	32	32	33	33	33	33	34	34	34	35	35	36
35	25	26	27	28	29	29	30	31	31	32	32	33	33	34	34	34	34	35	35	35	36	36	37
36	25	27	28	29	30	30	31	32	32	33	33	34	34	34	35	35	35	36	36	36	37	37	38
37	26	27	29	30	31	31	32	32	33	34	34	35	35	35	36	36	36	37	37	37	38	38	39
38	27	28	29	31	31	32	32	33	34	34	35	35	36	36	37	37	37	38	38	38	39	39	40
39	28	29	30	31	32	33	33	34	35	35	36	36	37	37	38	38	38	39	39	39	40	40	41
40	28	30	31	32	33	34	34	35	36	36	37	37	38	38	39	39	39	40	40	40	41	41	42
41	29	30	32	33	34	35	35	36	37	37	38	38	39	39	40	40	40	41	41	41	42	42	43
42	30	31	32	34	35	35	36	37	38	38	38	39	40	40	41	41	41	42	42	42	43	43	44
43	30	32	33	35	36	36	37	38	38	39	39	40	41	41	42	42	42	43	43	43	44	44	45
44	31	32	34	35	36	37	38	39	39	40	40	41	42	42	43	43	43	44	44	44	45	45	46
45	32	33	35	36	37	38	38	39	40	41	41	42	43	43	44	44	44	45	45	45	46	47	47
46	32	34	35	37	38	39	39	40	41	42	42	43	44	44	45	45	45	46	46	46	47	48	48
47	33	35	36	38	39	40	40	41	42	43	43	44	44	45	45	46	46	46	47	47	48	49	49

<sup>a</sup> Rounded up to the nearest whole number.

**Table 18 — Elongation values<sup>a</sup> on 50 mm corresponding to those obtained on  $4\sqrt{S_0}$  gauge length**

Actual elongation (%) on $4\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 50 mm gauge length if cross-sectional area in square millimetres is:																						
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500	
10	8	8	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	11	12	12	12	
11	9	9	10	10	10	11	11	11	11	11	11	12	12	12	12	12	12	12	12	12	13	13	13
12	10	10	11	11	11	11	12	12	12	12	12	13	13	13	13	13	13	13	13	14	14	14	14
13	10	11	11	12	12	12	13	13	13	13	13	14	14	14	14	14	14	14	15	15	15	15	15
14	11	12	12	13	13	13	14	14	14	14	14	15	15	15	15	15	15	16	16	16	16	16	17
15	12	13	13	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	18	18
16	13	13	14	15	15	15	16	16	16	16	16	17	17	17	17	18	18	18	18	18	18	19	19
17	14	14	15	16	16	16	16	17	17	17	17	18	18	18	18	19	19	19	19	19	19	20	20
18	14	15	16	16	17	17	17	18	18	19	19	19	19	19	20	20	20	20	20	20	21	21	21
19	15	16	17	17	18	18	18	19	19	20	20	20	20	21	21	21	21	21	21	22	22	22	23
20	16	17	18	18	19	19	19	20	20	21	21	21	21	22	22	22	22	22	22	23	23	23	24
21	17	18	18	19	20	20	20	21	21	22	22	22	23	23	23	23	23	23	24	24	24	25	25
22	18	18	19	20	21	21	21	22	22	23	23	23	24	24	24	24	24	25	25	25	25	26	26
23	18	19	20	21	22	22	22	23	23	24	24	24	25	25	25	25	26	26	26	26	26	27	27
24	19	20	21	22	23	23	23	24	24	25	25	25	26	26	26	26	27	27	27	27	27	28	28
25	20	21	22	23	23	24	24	25	25	26	26	26	27	27	27	28	28	28	28	28	29	29	30
26	21	22	23	24	24	25	25	26	26	27	27	28	28	28	28	29	29	29	29	30	30	31	31
27	22	23	24	25	25	26	26	27	27	28	28	29	29	29	29	30	30	30	30	31	31	32	32
28	22	23	25	26	26	27	27	28	28	29	29	30	30	30	31	31	31	31	31	32	32	33	33
29	23	24	25	27	27	28	28	29	29	30	30	31	31	32	32	32	32	32	33	33	33	34	35
30	24	25	26	27	28	29	29	30	30	31	31	32	32	33	33	33	33	34	34	34	35	35	36
31	25	26	27	28	29	30	30	31	31	32	32	33	33	34	34	34	35	35	35	36	36	36	37
32	26	27	28	29	30	31	31	32	32	33	33	34	34	35	35	35	36	36	36	36	37	38	38
33	26	28	29	30	31	32	32	33	33	34	34	35	35	36	36	37	37	37	37	37	38	39	39
34	27	28	30	31	32	33	33	34	34	35	35	36	37	37	37	38	38	38	38	39	39	40	40
35	28	29	31	32	33	33	34	35	35	36	36	37	38	38	38	38	39	39	39	40	40	41	42
36	29	30	32	33	34	34	35	36	36	37	37	38	39	39	40	40	40	40	40	41	41	42	43
37	30	31	32	34	35	35	36	37	38	38	38	39	40	40	41	41	41	42	42	42	43	43	44
38	30	32	33	35	36	36	37	38	39	39	40	40	41	41	42	42	42	43	43	43	44	45	45
39	31	33	34	36	37	37	38	39	40	40	41	41	42	42	43	43	43	44	44	44	45	46	46
40	32	34	35	37	38	38	39	40	41	41	42	42	43	43	44	44	45	45	45	46	46	47	48
41	33	34	36	38	39	39	40	41	42	42	43	43	44	45	45	45	46	46	46	47	47	48	49
42	34	35	37	38	39	40	41	42	43	43	44	44	45	46	46	46	47	47	47	48	48	49	50
43	34	36	38	39	40	41	42	43	44	44	45	46	46	47	47	48	48	48	48	49	50	50	51
44	35	37	39	40	41	42	43	44	45	45	46	47	47	48	48	49	49	49	49	50	51	52	52
45	36	38	39	41	42	43	44	45	46	46	47	48	48	49	49	50	50	51	51	51	52	53	54
46	37	39	40	42	43	44	45	46	47	47	48	49	49	50	50	51	51	52	52	52	53	54	55
47	38	39	41	43	44	45	46	47	48	48	49	50	50	51	52	52	52	53	53	53	54	55	56

<sup>a</sup> Rounded up to the nearest whole number.

**Table 19 — Elongation values<sup>a</sup> on 80 mm corresponding to those obtained on  $4\sqrt{S_0}$  gauge length**

Actual elongation (%) on $4\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 80 mm gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	8	8	8	9	9	9	9	9	10	10	10	10	10	10	10	11	11	11	11	11	11	11
11	8	9	9	9	10	10	10	10	11	11	11	11	11	11	11	11	12	12	12	12	12	12
12	9	9	10	10	11	11	11	11	11	12	12	12	12	12	12	13	13	13	13	13	13	13
13	10	10	11	11	12	12	12	12	12	13	13	13	13	13	13	14	14	14	14	14	14	14
14	11	11	12	12	12	13	13	13	13	14	14	14	14	14	14	15	15	15	15	15	15	15
15	11	12	12	13	13	14	14	14	14	15	15	15	15	15	16	16	16	16	16	16	16	17
16	12	13	13	14	14	14	15	15	15	15	16	16	16	16	17	17	17	17	17	17	17	18
17	13	13	14	15	15	15	16	16	16	16	17	17	17	17	18	18	18	18	18	18	18	19
18	14	14	15	16	16	16	16	17	17	17	18	18	18	18	19	19	19	19	19	19	20	20
19	14	15	16	16	17	17	17	18	18	18	19	19	19	19	20	20	20	20	20	20	21	21
20	15	16	17	17	18	18	18	19	19	19	20	20	20	20	21	21	21	21	21	21	22	22
21	16	17	17	18	19	19	19	20	20	20	21	21	21	22	22	22	22	22	22	22	23	23
22	17	17	18	19	19	20	20	21	21	21	22	22	22	23	23	23	23	23	24	24	24	25
23	17	18	19	20	20	21	21	22	22	22	23	23	23	24	24	24	24	24	25	25	25	26
24	18	19	20	21	21	22	22	23	23	23	24	24	24	25	25	25	25	25	26	26	26	27
25	19	20	21	22	22	23	23	23	24	24	24	25	25	26	26	26	26	26	27	27	27	28
26	20	21	21	22	23	23	24	24	25	25	25	26	26	27	27	27	27	27	28	28	28	29
27	20	21	22	23	24	24	25	25	26	26	26	27	27	28	28	28	28	29	29	29	30	30
28	21	22	23	24	25	25	26	26	27	27	27	28	28	29	29	29	29	30	30	30	31	31
29	22	23	24	25	26	26	27	27	28	28	28	29	29	30	30	30	30	31	31	31	32	33
30	23	24	25	26	27	27	27	28	29	29	29	30	30	31	31	31	32	32	32	33	33	34
31	23	24	26	27	27	28	28	29	30	30	30	31	31	32	32	32	33	33	33	34	34	35
32	24	25	26	28	28	29	29	30	31	31	31	32	32	33	33	33	34	34	34	35	35	36
33	25	26	27	28	29	30	30	31	32	32	32	33	33	34	34	34	35	35	35	36	36	37
34	26	27	28	29	30	31	31	32	32	33	33	34	34	35	35	35	36	36	36	37	38	38
35	26	28	29	30	31	32	33	33	34	34	35	35	36	36	36	37	37	37	38	39	39	39
36	27	28	30	31	32	32	33	34	34	35	35	36	36	37	37	38	38	38	39	39	40	40
37	28	29	31	32	33	33	34	35	35	36	36	37	37	38	38	39	39	39	40	40	41	41
38	29	30	31	33	34	34	35	36	36	37	37	38	38	39	39	40	40	40	41	41	42	43
39	29	31	32	34	35	35	36	37	37	38	38	39	39	40	40	41	41	41	42	42	43	44
40	30	32	33	34	35	36	37	38	38	39	39	40	40	41	41	42	42	42	43	43	44	45
41	31	32	34	35	36	37	37	38	39	40	40	41	41	42	42	43	43	43	44	44	45	46
42	32	33	35	36	37	38	38	39	40	41	41	42	43	43	43	44	44	44	45	46	46	47
43	32	34	35	37	38	39	39	40	41	42	42	43	44	44	44	45	45	45	46	47	48	48
44	33	35	36	38	39	40	40	41	42	43	43	44	45	45	45	46	46	47	47	48	49	49
45	34	36	37	39	40	41	41	42	43	44	44	45	46	46	47	47	47	48	48	49	50	50
46	35	36	38	40	41	41	42	43	44	45	45	46	47	47	48	48	48	49	49	50	51	52
47	36	37	39	41	42	42	43	44	45	46	46	47	48	48	49	49	49	50	50	51	52	53

<sup>a</sup> Rounded up to the nearest whole number.

**Table 20 — Elongation values<sup>a</sup> on 100 mm corresponding to those obtained on  $4\sqrt{S_0}$  gauge length**

Actual elongation (%) on $4\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 100 mm gauge length if cross-sectional area in square millimetres is:																					
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500
10	7	8	8	8	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	11	11	11
11	8	8	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	11	12	12	12
12	9	9	10	10	10	11	11	11	11	11	11	12	12	12	12	12	12	12	12	13	13	13
13	10	10	10	11	11	11	12	12	12	12	12	13	13	13	13	13	13	13	14	14	14	14
14	10	11	11	12	12	12	12	13	13	13	13	14	14	14	14	14	14	14	15	15	15	15
15	11	12	12	13	13	13	13	14	14	14	14	15	15	15	15	15	15	15	16	16	16	16
16	12	12	13	13	14	14	14	15	15	15	15	16	16	16	16	16	16	16	17	17	17	17
17	12	13	14	14	15	15	15	15	16	16	16	16	16	17	17	17	17	17	18	18	18	19
18	13	14	14	15	15	16	16	16	17	17	17	17	18	18	18	18	18	19	19	19	19	20
19	14	15	15	16	16	17	17	17	18	18	18	18	19	19	19	19	19	20	20	20	20	21
20	15	15	16	17	17	18	18	18	19	19	19	19	20	20	20	20	20	21	21	21	21	22
21	15	16	17	18	18	18	19	19	19	20	20	20	21	21	21	21	21	22	22	22	23	23
22	16	17	18	18	19	19	20	20	20	21	21	21	22	22	22	22	22	23	23	23	24	24
23	17	18	18	19	20	20	20	21	21	22	22	22	23	23	23	23	23	24	24	24	25	25
24	18	18	19	20	21	21	21	22	22	23	23	23	24	24	24	24	24	25	25	25	26	26
25	18	19	20	21	21	22	22	23	23	24	24	24	25	25	25	25	26	26	26	26	27	27
26	19	20	21	22	22	23	23	24	24	24	25	25	26	26	26	26	27	27	27	27	28	28
27	20	21	22	23	23	24	24	25	25	25	26	26	27	27	27	27	28	28	28	28	29	29
28	21	21	22	23	24	25	25	26	26	26	27	27	28	28	28	28	29	29	29	30	30	31
29	21	22	23	24	25	25	26	26	27	27	28	28	29	29	29	29	30	30	30	31	31	32
30	22	23	24	25	26	26	27	27	28	28	29	29	30	30	30	30	31	31	31	32	32	33
31	23	24	25	26	27	27	28	28	29	29	30	30	30	31	31	31	32	32	32	33	33	34
32	24	25	26	27	28	28	28	29	30	30	30	31	31	31	32	32	32	33	33	33	34	35
33	24	25	26	28	28	29	30	30	31	31	31	31	32	32	33	33	33	34	34	34	35	36
34	25	26	27	28	29	30	30	31	32	32	32	32	33	33	34	34	34	35	35	35	36	37
35	26	27	28	29	30	31	31	32	32	33	33	34	34	35	35	35	36	36	36	37	38	38
36	26	28	29	30	31	32	32	33	33	34	34	35	35	36	36	36	37	37	37	38	39	39
37	27	28	30	31	32	32	33	34	34	35	35	36	36	37	37	38	38	38	38	39	40	40
38	28	29	30	32	33	33	34	35	35	36	36	37	37	38	38	39	39	39	40	40	41	41
39	29	30	31	33	34	34	35	36	36	37	37	38	38	39	39	40	40	40	41	41	42	42
40	29	31	32	34	34	35	36	36	37	38	38	39	39	40	40	41	41	41	42	42	43	44
41	30	31	33	34	35	36	36	37	38	39	39	40	40	41	41	42	42	42	43	43	44	45
42	31	32	34	35	36	37	37	38	39	40	40	41	41	42	42	43	43	43	44	44	45	46
43	32	33	34	36	37	38	38	39	40	40	41	42	42	43	43	44	44	44	45	45	46	47
44	32	34	35	37	38	39	39	40	41	41	42	43	43	44	44	45	45	45	46	46	47	48
45	33	35	36	38	39	39	40	41	42	42	43	44	44	45	45	46	46	46	47	47	48	49
46	34	35	37	39	40	40	41	42	43	43	44	45	45	46	46	47	47	47	48	49	49	50
47	35	36	38	39	40	41	42	43	44	44	45	46	46	47	47	48	48	48	49	50	50	51

<sup>a</sup> Rounded up to the nearest whole number.

**Table 21 — Elongation values<sup>a</sup> on 200 mm corresponding to those obtained on  $4\sqrt{S_0}$  gauge length**

Actual elongation (%) on $4\sqrt{S_0}$ gauge length	Corresponding elongation (%) on 200 mm gauge length if cross-sectional area in square millimetres is:																						
	5	10	20	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	2000	2500	
10	7	7	7	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	10	10	10	10	
11	7	8	8	8	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	11	11	11	11
12	8	8	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	11	12	12	12	12
13	9	9	10	10	10	10	11	11	11	11	11	12	12	12	12	12	12	12	12	13	13	13	13
14	9	10	10	11	11	11	11	12	12	12	12	12	13	13	13	13	13	13	13	14	14	14	14
15	10	11	11	12	12	12	12	13	13	13	13	13	14	14	14	14	14	14	14	15	15	15	15
16	11	11	12	12	13	13	13	13	14	14	14	14	14	15	15	15	15	15	15	16	16	16	16
17	11	12	12	13	13	14	14	14	14	15	15	15	15	16	16	16	16	16	16	17	17	17	17
18	12	13	13	14	14	14	15	15	15	16	16	16	16	16	17	17	17	17	17	18	18	18	18
19	13	13	14	15	15	15	15	16	16	16	17	17	17	17	17	18	18	18	18	18	19	19	19
20	13	14	15	15	16	16	16	17	17	17	17	18	18	18	18	19	19	19	19	19	20	20	20
21	14	15	15	16	17	17	17	18	18	18	18	19	19	19	19	19	20	20	20	20	21	21	21
22	15	15	16	17	17	18	18	18	19	19	19	20	20	20	20	20	21	21	21	21	22	22	22
23	15	16	17	18	18	18	19	19	20	20	20	20	21	21	21	21	22	22	22	22	23	23	23
24	16	17	18	18	19	19	20	20	20	21	21	21	22	22	22	22	22	23	23	23	24	24	24
25	17	18	18	19	20	20	20	21	21	22	22	22	23	23	23	23	24	24	24	24	25	25	25
26	17	18	19	20	20	21	21	22	22	22	23	23	24	24	24	24	25	25	25	25	26	26	26
27	18	19	20	21	21	22	22	23	23	23	24	24	25	25	25	25	26	26	26	26	27	27	27
28	19	20	21	21	22	22	23	23	24	24	24	25	25	26	26	26	26	26	27	27	28	28	28
29	20	20	21	22	23	23	24	24	25	25	26	26	26	27	27	27	27	28	28	28	29	29	29
30	20	21	22	23	24	24	24	25	26	26	27	27	27	28	28	28	28	29	29	29	30	30	30
31	21	22	23	24	24	25	25	26	26	27	27	28	28	28	29	29	29	29	30	30	30	31	31
32	22	22	24	25	25	26	26	27	27	28	28	28	29	29	29	29	30	30	30	30	31	31	32
33	22	23	24	25	26	26	27	28	28	28	29	29	30	30	30	31	31	31	31	31	32	32	33
34	23	24	25	26	27	27	28	28	29	29	30	30	31	31	31	32	32	32	32	32	33	33	34
35	24	25	26	27	28	28	28	29	30	30	31	31	32	32	32	32	33	33	33	34	34	34	35
36	24	25	26	28	28	29	29	30	31	31	31	32	32	33	33	33	34	34	34	35	35	35	36
37	25	26	27	28	29	30	30	31	31	32	32	33	33	34	34	34	35	35	35	36	36	36	37
38	26	27	28	29	30	30	31	32	32	33	33	34	34	35	35	35	36	36	36	37	37	37	38
39	26	27	29	30	31	31	32	33	33	34	34	35	35	36	36	36	36	37	37	37	38	38	39
40	27	28	29	31	31	32	33	33	34	34	35	36	36	36	37	37	37	38	38	39	39	39	40
41	28	29	30	31	32	33	33	34	35	35	36	36	37	37	38	38	38	39	39	40	40	40	41
42	28	30	31	32	33	34	34	35	36	36	37	37	38	38	39	39	39	40	40	41	41	41	42
43	29	30	32	33	34	34	35	36	37	37	38	38	39	39	40	40	40	40	41	41	42	42	43
44	30	31	32	34	35	35	36	37	37	38	38	39	40	40	40	41	41	41	42	42	43	43	44
45	30	32	33	35	35	36	37	38	38	39	39	40	41	41	41	42	42	42	43	43	44	44	45
46	31	32	34	35	36	37	37	38	39	40	40	41	41	42	42	43	43	43	44	44	45	45	46
47	32	33	35	36	37	38	38	39	40	41	41	42	42	43	43	44	44	44	45	45	46	46	47

<sup>a</sup> Rounded up to the nearest whole number.

## 10 Use of Figures

Figures 1 to 5 may be used as an alternative quick method to obtain elongation conversions.