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August 1982

ISO metric screw threads
Principles for a tolerance system for screw threads from 1 mm diameter upwards

DIN 13 Part 14

Metrisches ISO-Gewinde; Grundlagen des Toleranzsystems für Gewinde ab 1 mm Durchmesser

Supersedes March 1972 edition

As it is current practice in standards published by the International Organization for Standardization (ISO), the comma has been used throughout as a decimal marker.

For connection with International Standard ISO 965/1 – 1980 published by the International Organization for Standardization (ISO), see Explanatory notes.

For ISO metric screw threads, fundamental deviations and tolerances for screw threads from 1 mm diameter upwards, see DIN 13 Part 15.

Contents

1 Field of application and purpose

This standard specifies a tolerance system for screw threads from 1 mm diameter upwards in accordance with DIN 13 Part 1 to Part 11 with a basic profile for ISO metric screw threads in accordance with DIN 13 Part 19.

2 Principles for a tolerance system

The tolerance system gives the size and position of tolerance classes and contains a selection of tolerance grades and tolerance positions. Moreover lengths of thread engagement are correlated with the nominal screw thread diameters and thread pitches.

The tolerance grade given as a figure specifies the size of the tolerance class. The position of the tolerance class with respect to zero line (basic size) is given by a letter indicating the size of the fundamental deviation. This is the upper deviation A_o for the external thread (bolt thread) and the lower deviation A_u for the internal thread (nut thread) (see figure 1).

Note: In departure from the tolerance system for workpieces with cylindrical and parallel surfaces as specified in DIN 7150 Part 1 the figure precedes the letter in the tolerance system for screw threads.

2.1 Tolerance grades

The following tolerance grades shall apply to the thread diameters, as follows:

D_1	minor diameter of nut thread	4; 5; 6; 7; 8
D_2	pitch diameter of nut thread	4; 5; 6; 7; 8
d	major diameter of bolt thread	4; 6; 8
d_2	pitch diameter of bolt thread	3; 4; 5; 6; 7; 8; 9

Generally speaking, the tolerance grades for the major, pitch and minor diameters are the same, but in special cases they may also differ, i.e. tolerance grades for major, pitch and minor diameters may be used in any combination.

In clause 6 certain tolerance grades and their combinations are recommended for the pitch and minor diameters of the nut thread and for the major and pitch diameters of the bolt thread.

2.2 Tolerance positions

The following tolerance positions are specified:

– for nut thread: G with positive fundamental deviation
H with fundamental deviation 0

Continued on pages 2 to 8

— for bolt thread: a, b, c, d, e, f, g, with negative fundamental deviation
h with negative fundamental deviation 0

Tolerance positions G and a to g are suitable for surface protection with coating thicknesses currently used.

2.3 Tolerance classes

The tolerance classes recommended in clause 7 (combination of tolerance grades and tolerance positions) shall apply to the customary tolerance qualities Fine, Medium and Coarse. It further gives a selection of bolt thread and nut thread tolerance classes for commercial fasteners.

Tolerance classes other than those given in clause 7 are not standardized and should only be used for special cases.

2.4 Correlation of recommended tolerance classes

The tolerance classes in the tolerance qualities Medium, Fine, Coarse are correlated with the three thread engagement groups Normal (N), Short (S) and Long (L).

The following general rules apply to the selection of tolerance qualities:

Tolerance quality Medium:
for general use

Tolerance quality Fine:
for precision threads when little variation of fit character is permissible.

Tolerance quality Coarse:
for cases where no special requirements are specified with regard to accuracy and where manufacturing difficulties can arise, for example, when threading hot-rolled bars, when threads are cut in deep blind holes or when threading plastics components.

2.5 Tolerance classes for coated threads

For coated threads, the tolerance classes apply to the workpieces **before** coating, unless otherwise agreed upon. After coating, the thread profile shall not in any point transgress the **limits for position H or h** (embodied by the thread GO gauges close to the wear limit).

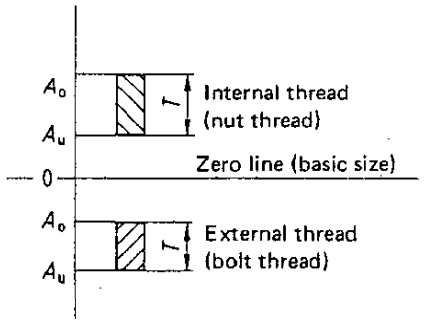


Figure 1. Representation of tolerance classes and tolerance T (e.g. tolerance position G and tolerance position g with respect to zero line)

3 Concepts, dimension letters, symbols

For concepts relating to screw threads see DIN 2244

The term 'bolt thread' is used for external threads, the term 'nut thread' for internal threads.

Table 1. **Dimension letters, symbols**

Dimension letters Symbols	Designation
D D_1 D_2	Major diameter of nut thread Minor diameter of nut thread Pitch diameter of nut thread
d d_3 d_2	Major diameter of bolt thread Minor diameter of bolt thread Pitch diameter of bolt thread
P H R	Pitch Height of fundamental triangle Bolt root radius
S N L	Short length of thread engagement Normal length of thread engagement Long length of thread engagement
T $T_{D1}; T_{D2}$ $T_d; T_{d2}$	Tolerance Tolerances for $D_1; D_2; d; d_2$
A_u A_o	Lower deviation Upper deviation

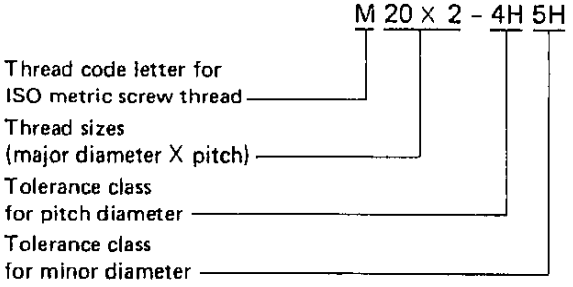
4 Designation

The complete designation for a screw thread comprises the thread code letter together with the thread size and the tolerance class symbol for either the pitch diameter and the minor diameter of the nut thread or for the major diameter of the bolt thread.

Tolerance quality Medium applies to screw threads without tolerance indication, i.e. 6H to nut threads and 6g to bolt threads for screw threads exceeding 1,4 mm diameter and 5H or 6h for screw threads up to and including 1,4 mm diameter for group N lengths of thread engagement. Should other tolerance classes be required, possibly as a function of group S or group L lengths of thread engagement, then the tolerance classes must be indicated.

When the tolerance classes for the pitch diameter and the minor diameter of the nut thread or of the pitch diameter and the major diameter of the bolt thread are the same, there is no need to repeat the symbols.

Example of designation for nut thread (fine thread):



M 20 × 2 - 5H

Tolerance class for pitch diameter and minor diameter when both tolerance classes are the same

Example of designation for bolt thread (normal thread):

M 6 - 5g 6g

Thread code letter for ISO metric screw thread

Thread sizes

Tolerance class for pitch diameter

Tolerance class for major diameter

M 6 - 4h

Tolerance class for pitch diameter and major diameter when both tolerance classes are the same

To allow for gauging (see DIN 13 Part 17, June 1976 edition), when group L lengths of thread engagement are involved, symbol L shall be appended to the tolerance class symbol; e.g.:

M 20 × 2 - 7 G - L

A fit between threaded parts is indicated by the nut thread tolerance class followed by the bolt thread tolerance class separated by an oblique stroke.

Example of designation for thread fits:

M 6 - 7H/8g

M 20 × 2 - 6H/5g 6g

In design drawings and other production documents the conventional designations, e.g. M 10f, M 10 or M 10m and M 10g, where f = fine, m = medium and g = coarse, may be retained. These are covered by the tolerance classes shown in the heavity outlined boxes in table 6.

5 Lengths of thread engagement, thread engagement groups

The gap between mating and actual pitch diameters grows with increasing length of thread engagement as a result of deviations of form, position and pitch as a function of the length. This has been taken into account when correlating tolerance grades with lengths of thread engagement of thread engagement groups S, N and L.

The lengths of thread engagement (lengths of the thread in operation) are correlated with one of the three groups S (Short), N (Normal) or L (Long), in accordance with table 2.

6 Recommended tolerance grades

Tables 3 and 4 give the recommended tolerance grades for nut and bolt threads of tolerance qualities Fine, Medium, Coarse for engagement groups S, N, L.

Table 2. **Lengths of thread engagement**

Dimensions in mm

Nominal thread diameter $d = D$		Pitch	Lengths of thread engagement of group			
			S	N		L
over	up to	P	up to	over	up to	over
0,99	1,4	0,2 0,25 0,3	0,5 0,6 0,7	0,5 0,6 0,7	1,4 1,7 2	1,4 1,7 2
1,4	2,8	0,2 0,25 0,35 0,4 0,45	0,5 0,6 0,8 1 1,3	0,5 0,6 0,8 1 1,3	1,5 1,9 2,6 3 3,8	1,5 1,9 2,6 3 3,8
2,8	5,6	0,2 0,25 0,35 0,5 0,6 0,7 0,75 0,8	0,6 0,7 1 1,5 1,7 2 2,2 2,5	0,6 0,7 1 1,5 1,7 2 2,2 2,5	1,7 2 3 4,5 5 6 6,7 7,5	1,7 2 3 4,5 5 6 6,7 7,5
5,6	11,2	0,2 0,25 0,35 0,5 0,75 1 1,25 1,5	0,6 0,8 1,1 1,6 2,4 3 4 5	0,6 0,8 1,1 1,6 2,4 3 4 5	1,9 2,4 3,3 4,7 7,1 9 12 15	1,9 2,4 3,3 4,7 7,1 9 12 15
11,2	22,4	0,35 0,5 0,75 1 1,25 1,5 1,75 2 2,5	1,3 1,9 2,8 3,8 4,5 5,6 6 8 10	1,3 1,9 2,8 3,8 4,5 5,6 6 8 10	4 5,4 8,1 11 13 16 18 24 30	4 5,4 8,1 11 13 16 18 24 30
22,4	45	0,35 0,5 0,75 1 1,5 2 3 3,5 4 4,5	1,5 2,1 3,1 4 6,3 8,5 12 15 18 21	1,5 2,1 3,1 4 6,3 8,5 12 15 18 21	4,5 6,2 9,3 12 19 25 36 45 53 63	4,5 6,2 9,3 12 19 25 36 45 53 63
45	90	0,35 0,5 0,75 1 1,5 2 3 4 5 5,5 6	1,7 2,4 3,6 4,8 7,5 9,5 15 19 24 28 32	1,7 2,4 3,6 4,8 7,5 9,5 15 19 24 28 32	5 7,1 11 14 22 28 45 56 71 85 95	5 7,1 11 14 22 28 45 56 71 85 95
90	180	0,75 1 1,5 2 3 4 6 8	4,1 5,5 8,3 12 18 24 36 45	4,1 5,5 8,3 12 18 24 36 45	12 16 25 36 53 71 106 132	12 16 25 36 53 71 106 132

Table 2. (concluded)

Nominal thread diameter $d = D$		Pitch	Lengths of thread engagement of group			
			S	N		L
over	up to	P	up to	over	up to	over
180	355	1	6,3	6,3	19	19
		1,5	9,5	9,5	28	28
		2	13	13	38	38
		3	20	20	60	60
		4	26	26	80	80
		6	40	40	118	118
		8	50	50	150	150
355	500	2	15	15	44	44
		3	22	22	65	65
		4	29	29	87	87
		6	43	43	130	130
		8	60	60	170	170
500	800	8	63	63	190	190
800	1000	8	67	67	200	200

Tolerance grade 6 shall be used for threads exceeding 1,4 mm nominal diameter of tolerance quality Medium and engagement group 'N'.

Tolerance grades below 6 are intended for tolerance quality Fine and/or engagement group 'S'.

Tolerance grades above 6 are intended for tolerance quality Coarse and also for tolerance quality Medium in the case of engagement group L.

Tables 3 and 4 do not specify tolerance grades for engagement group S and tolerance quality Coarse. The reduced overlap would mean an insufficient bearing capacity for the short lengths of thread engagement of this engagement group.

7 Recommended tolerance classes

In order to reduce the number of gauges and tools required, the tolerance classes specified in tables 5 and 6 shall be given preference.

The tolerance classes in tables 5 and 6 are intended for threads without surface protection and, in the case of threads intended for phosphating or electroplating, for the threads prior to coating.

Any of the recommended nut thread tolerance classes can be combined with any of the recommended bolt thread tolerance classes, with the exception of screw threads having a nominal external diameter $\leq 1{,}4$ mm. For these threads the combination 5H/6h or finer shall be chosen. However, in order to achieve a sufficient overlap, the fits H/g; H/h or G/h shall be chosen.

8 Root contours

For nut threads as well as bolt threads the actual root contours shall not at any point transgress the basic profile specified in DIN 13 Part 19.

Table 3. **Tolerance grades for nut threads**

Tolerance quality	Tolerance grades for nut thread for thread engagement group					
	S		N		L	
	Pitch diameter	Minor diameter	Pitch diameter	Minor diameter	Pitch diameter	Minor diameter
Fine	4	4	5	5	5	6
Medium	5	5	6 (5)	6 (5)	7	7
Coarse	–	–	7	7	8	8
The bracketed tolerance grade 5 shall apply to nut threads within the range 1 to 1,4 mm diameter						

Table 4. **Tolerance grades for bolt threads**

Tolerance quality	Tolerance grades for bolt threads for thread engagement group					
	S		N		L	
	Major diameter	Pitch diameter	Major diameter	Pitch diameter	Major diameter	Pitch diameter
Fine	4	3	4	4	4	5
Medium	6	5	6	6	6	7
Coarse	–	–	8	8	8	9

Table 5. **Tolerance classes for threads of commercial fasteners**

Tolerance quality		Nut	Bolt
Medium	for threads within the range 1 to 1,4 mm diameter	5H	6h
	for threads above 1,4 mm diameter	6H	6g
Coarse		7H	8g

The nominal profile (see DIN 13 Part 1 to Part 12) and the production profile (see DIN 13 Part 19) of the bolt thread shall be radiused in the root with $R = \frac{H}{6} = 0{,}144\,P$.

This includes the nominal values of the minor diameter d_3 specified in DIN 13 Part 1 to Part 11 which are equal to the recommended maximum values of the minor diameters specified in DIN 13 Part 13 and Part 20 to Part 26. Moreover it is recommended to take these values as the basis for stress calculations. The stress cross sections and minor diameters specified in DIN 13 Part 28 are also calculated on the basis of these values.

Table 6. **Recommended tolerance classes for thread engagement group N** (before application of a protective coating, if required)

Tolerance quality	Tolerance classes for surface condition [1]		
	bright or phosphated [3]	bright, phosphated or provided with a thin coating obtained by electroplating [2] [3]	bright (with large clearance) or provided with a thick coating obtained by electroplating [2]
Fine — nut	4H [4]; 4H 5H [5]; 5H	4H [4]; 5H	4G [4]; 4G 5G [5]; 5G
Fine — bolt	4h	4g	4e
Medium — nut	–	for normal threads within the range 1 to 1,4 mm diameter: 5H for normal threads above 1,4 mm diameter: 6H for fine threads with pitches 0,35 to 8 mm: 6H	for normal threads within the range 1 to 1,4 mm diameter: 5G for normal threads above 1,4 mm diameter: 6G for fine threads with pitches 0,35 to 8 mm: 6G
Medium — bolt	–	for normal threads within the range 1 to 1,4 mm diameter: 6h for normal threads above 1,4 mm diameter: 6g for fine threads with pitches 0,35 to 8 mm: 6g	for normal threads within the range 1 to 1,4 mm diameter: 5e for normal threads above 1,4 mm diameter: 6e for fine threads with pitches 0,35 to 8 mm: 6e
Coarse — nut	–	for normal threads above 2,5 mm diameter and fine threads with pitches 0,5 to 8 mm: 7H	for normal threads above 2,5 mm diameter and fine thread with pitches 0,5 to 8 mm: 7G
Coarse — bolt	–	for normal threads above 2,5 mm diameter and fine threads with pitches 0,5 to 8 mm: 8g	for normal threads above 2,5 mm diameter and fine threads with pitches 0,5 to 8 mm: 8e

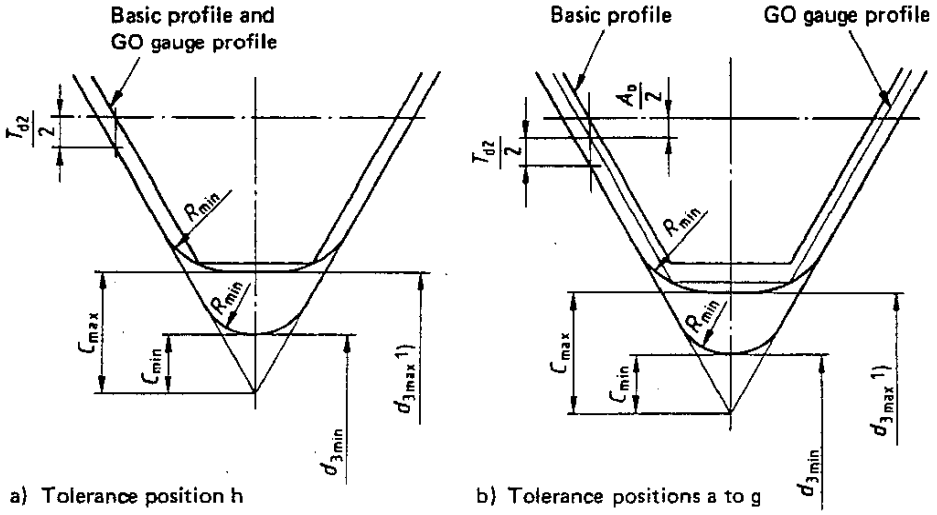
1) In borderline cases the customer is obliged to accept threads with surface protection (including phosphating, oil blackening) using GO gauges close to the wear limit for tolerance position h, unless otherwise agreed upon.

2) When the pitch diameter is at a minimum for the nut thread and maximum for the bolt thread, the possible coating thickness shall be equal to 1/4 of the relevant fundamental deviation.

3) Threads made to the h and H tolerance position only allow surface protection (including phosphating) if the tolerance class is not utilized right up to zero line.

4) Tolerance classes 4H and 4G are only intended for special cases and for threads with pitches up to 0,3 mm.

5) The combined tolerances classes 4H 5H and 4G 5G (tolerance grade 4 for nut thread pitch diameter and tolerance grade 5 for nut thread minor diameter) have been in use for threads with pitches exceeding 0,3 mm. ISO 965/1 provides for tolerance classes 5H and 5G (see also Explanatory notes).



a) Tolerance position h

b) Tolerance positions a to g

Figure 2. Root

The minimum root diameter of the bolt thread, i.e. the minimum truncation C_{min} is expressed by $R_{min} = 0{,}125\,P \approx \frac{H}{7}$ (for values of R_{min} see table 7).

This holds true for tooling. With R_{min} the minimum value of the minor diameter is equal to

$$d_{3min} = d_2 - |A_o| - T_{d2} - H + 0{,}25\,P$$

For a theoretical maximum truncation C_{max} (figure 2), which is only possible if the pitch diameter is nearly equal to the minimum material dimension, the two radii of $R_{min} = 0{,}125\,P$ go through the points of intersection between the maximum material flanks and the minor diameter of the GO gauge and blend tangentially into the minimum material flanks of the thread.

In this case the maximum truncation is equal to

$$C_{max} = \frac{H}{4} - R_{min}\left[1 - \cos\left(\frac{\pi}{3} - \arccos\left(1 - \frac{T_{d2}}{4 \cdot R_{min}}\right)\right)\right] + \frac{T_{d2}}{2}$$

and the theoretical maximum minor diameter is equal to

$$d_{3max} = d - \frac{7}{8}\sqrt{3} \cdot P - T_{d2} - |A_o| + 2C_{max}$$

Should the recommended maximum values for d_3 (see DIN 13 Part 13 and Part 20 to Part 26) which result from $R = 0{,}144\,P = \frac{H}{6}$, be exceeded, then overlapping with the maximum material profile of the nut thread may occur.

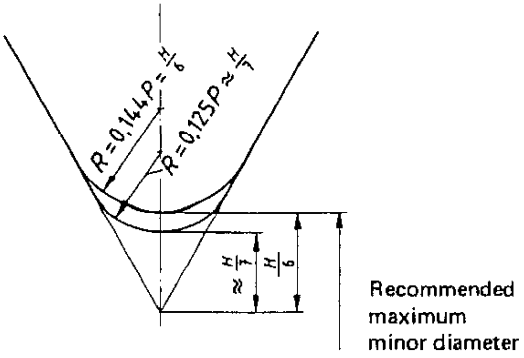


Figure 3. Recommended limits for truncation of bolt thread root

Table 7. **Minimum radius at bolt thread root R_{min}**

Pitch P mm	R_{min} µm	Pitch P mm	R_{min} µm
0,2	25	1,25	156
0,25	31	1,5	188
0,3	38	1,75	219
0,35	44	2	250
0,4	50	2,5	313
0,45	56	3	375
0,5	63	3,5	438
0,6	75	4	500
0,7	88	4,5	563
0,75	94	5	625
0,8	100	5,5	688
1	125	6	750
		8	1000

9 Formulae

The values of fundamental deviations and tolerances given in DIN 13 Part 15 have been determined empirically. In order to obtain a consistent system, mathematical formulae have been developed.

The values for the major, pitch and minor diameter tolerances and for the lengths of thread engagement have been calculated from the formulae and then rounded off to the nearest value in the R 40 series of preferred numbers in accordance with DIN 323 Part 1. However, when decimal fractions occur, the value has been further rounded off to the nearest whole number. In order to reproduce a smooth progression, these rules of rounding off have not always been used.

9.1 Fundamental deviations

The fundamental deviations for nut and bolt threads for tolerance positions G, H and e to h have been calculated according to the following formulae:

1) See also note on the recommended maximum values for d_3 in clause 8, last paragraph.

A_u (G) = + (15 + 11 P)
A_u (H) = 0
A_o (e) = − (50 + 11 P) for pitches ≥ 0,5 mm
A_o (f) = − (30 + 11 P)
A_o (g) = − (15 + 11 P)
A_o (h) = 0

A_u and A_o are expressed in µm, P is expressed in mm.

The other fundamental deviations have been based on the following formulae:

A_o (a) = − (270 + 19 P)
A_o (b) = − (185 + 19 P)
A_o (c) = − (115 + 19 P)
A_o (d) = − (65 + 19 P) for pitches up to 2,5 mm

The calculated values have been rounded in order to achieve a continuous progression.

9.2 Lengths of thread engagement

The Normal lengths of thread engagement in table 2 have been calculated according to the following rules:

For each pitch within a certain diameter range, d has been set equal to the smallest diameter in this range.

Minimum Normal length of thread engagement

$$N_{min} = 2{,}24\ P \cdot d^{0.2}$$

Maximum Normal length of thread engagement

$$N_{max} = 6{,}7\ P \cdot d^{0.2}$$

N, P and d are expressed in mm.

9.3 Tolerances for major diameter of grade 6 bolt thread (T_d)

These tolerances have been calculated according to the following formula:

$$T_d(6) = 180\sqrt[3]{P^2} - \frac{3{,}15}{\sqrt{P}}$$

T_d is expressed in µm and P in mm.

Tolerances T_d for the other tolerance grades are obtained by multiplying tolerances T_d (6) by factor x given in table 8.

9.4 Tolerances for minor diameter of grade 6 nut thread (T_{D1})

These tolerances have been calculated according to the following formula:

a) Pitches from 0,2 to 0,8 mm

$$T_{D1}(6) = 433\ P - 190\ P^{1.22}$$

b) Pitches of 1 mm and above

$$T_{D1}(6) = 230\ P^{0.7}$$

T_{D1} is expressed in µm, P in mm.

The tolerances T_{D1} for the other tolerance grades are obtained by multiplying tolerances T_{D1} (6) by factor y given in table 8.

9.5 Tolerances for pitch diameter

9.5.1 Tolerances for pitch diameter of grade 6 bolt thread (T_{d2})

The tolerances have been calculated according to the following formula where d is equal to the geometric mean of the diameter:

$$T_{d2}(6) = 90\ P^{0.4} \cdot d^{0.1}$$

T_{d2} is expressed in µm, P and d are expressed in mm.

The tolerances T_{d2} for the other tolerance grades are obtained by multiplying the tolerances T_{d2} (6) by the factor z given in table 8.

In table 6 given in DIN 13 Part 15 [2], no value for T_{d2} appears if values of T_{d2} calculated according to the formula above exceed the tolerances T_d of the corresponding tolerance grades.

9.5.2 Tolerances for pitch diameter of nut thread (T_{D2})

The tolerances T_{D2} are obtained by multiplying tolerances T_{d2} (6) by factor w given in table 9.

$$T_{D2}(n) = w \cdot T_{d2}(6)$$

Table 3 given in DIN 13 Part 15 [2] does not list any tolerances if the values calculated by using the formula exceed the 0,25 P value.

Table 8. **Factors x, y and z**

Tolerance grade n	$T_d(n) = x \cdot T_d(6)$ Factor x	$T_{D1}(n) = y \cdot T_{D1}(6)$ Factor y	$T_{d2}(n) = z \cdot T_{d2}(6)$ Factor z
3	–	–	0,5
4	0,63	0,63	0,63
5	–	0,8	0,8
6	1	1	1
7	–	1,25	1,25
8	1,6	1,6	1,6
9	–	–	2

Table 9. **Factor w**

Tolerance grade n	Factor w
4	0,85
5	1,06
6	1,32
7	1,7
8	2,12

[2] August 1982 edition

Standards referred to

DIN 13 Part 1 to Part 12, Part 15, Part 17, Part 19 to Part 26, Part 28 ISO metric screw threads

DIN 323 Part 1 Preferred numbers and series of preferred numbers; basic values, calculated values, rounded values

DIN 2244 Screw threads; concepts

DIN 7150 Part 1 ISO system of limits and fits for sizes from 1 to 500 mm; introduction

DIN 55350 Part 11 Glossary of terms used in quality assurance and statistics; terminology in quality assurance; basic concepts

Previous editions

DIN 40404: 11.57
DIN 13 Part 32: 10.60, 10.62, 06.64, 07.65
DIN 13 Part 14: 01.52, 03.72

Amendments

Compared with the March 1972 edition, the following amendments have been made:

a) In subclause 2.1, the bracketed tolerance grades for the pitch diameter of the nut and bolt threads (D_2, d_2) have been omitted.

b) Tolerance T_{d3} for the bolt thread minor diameter has been omitted.

c) Table 6 "Recommended tolerance classes for thread engagement group N" has been revised and extended.

d) Clause 8 "Root contours" contains new specifications with respect to root truncation, together with formulae.

e) The standard has been revised editorially.

Explanatory notes

regarding DIN 13 Part 14 and Part 15

These standards agree in substance with International Standard ISO 965/1 – 1980.

"ISO general purpose metric screw threads – Tolerances – Part 1: Principles and basic data"

Compared with this international standard, Standards DIN 13 Part 14 and Part 15 contain the following amendments:

- The tolerance positions for bolt threads have been extended to include a, b, c and d.
- The DIN designations have been specified more comprehensively.
- The nominal screw thread diameters have been extended to include 1000 mm, and pitch $P = 8$ has been adopted for the first time.
- Data on tolerance grades for nut and bolt threads as a function of the tolerance quality and the engagement group have been included.
- The tables give a larger number of thread pitches for the various nominal screw thread diameters.
- Specifications with regard to threads without tolerance indication have been adopted for the first time.

The following specifications of International Standard ISO 965/1 have not been adopted:

- tables 8 and 9 "Recommended tolerance classes for bolt and nut threads"
  (instead of this, recommended tolerance classes for threads of commercial fasteners and for thread engagement group N) are specified in tables 5 and 6 of DIN 13 Part 14)
- symbols ei, EI, es and ES for the upper and lower deviations (A_o, A_u) and L_N for Normal (N) length of thread engagement

The following amendments will be made in a subsequent revision:

It is intended to include in table 6 of the next edition of this standard the following tolerance classes for internal threads formed by rolling:

- 6H for pitch diameter
- 7H for minor diameter

This combination of tolerance classes has already established itself for M3 to M16 normal threads and M8 X 1 to M30 X 2 fine threads. For details see DIN 13 Part 14 A1 (at present at the stage of draft).