



**SLOVENSKI STANDARD**  
**SIST ISO 724:1995**

**01-november-1995**

---

**ISO metrski vijačni navoji za splošno uporabo - Osnovne mere**

ISO general-purpose metric screw threads -- Basic dimensions

Filetages métriques ISO pour usages généraux -- Dimensions de base

**Ta slovenski standard je istoveten z: ISO 724:1993**

[SIST ISO 724:1995](https://standards.iteh.ai/catalog/standards/sist/0e94ac3a-05e7-41b2-b3b-733c70618fa3/sist-iso-724-1995)

<https://standards.iteh.ai/catalog/standards/sist/0e94ac3a-05e7-41b2-b3b-733c70618fa3/sist-iso-724-1995>

**ICS:**

21.040.10      Metrski navoji                      Metric screw threads

**SIST ISO 724:1995**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST ISO 724:1995

<https://standards.iteh.ai/catalog/standards/sist/0e94ac3a-05e7-41b2-b3f3-733c70618fa3/sist-iso-724-1995>

INTERNATIONAL  
STANDARD

**ISO**  
**724**

Second edition  
1993-10-15

---

---

**ISO general-purpose metric screw  
threads — Basic dimensions**

**iTeh STANDARD PREVIEW**  
*Filetages métriques ISO pour usages généraux — Dimensions de base*  
**(standards.iteh.ai)**

SIST ISO 724:1995

<https://standards.iteh.ai/catalog/standards/sist/0e94ac3a-05e7-41b2-b3f3-733c70618fa3/sist-iso-724-1995>



Reference number  
ISO 724:1993(E)

**ISO 724:1993(E)****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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 724 was prepared by Technical Committee ISO/TC 1, *Screw threads*, Sub-Committee SC 1, *Basic data*.

This second edition cancels and replaces the first edition (ISO 724:1978), the table of which has been technically revised.

ITIH STANDARD PREVIEW

(standards.iteh.ai)

SIST ISO 724:1995

http://standards.iteh.ai/catalog/standards/sist/7241995/05e7-41b2-b3B-70c70618fa3/sist-iso-724-1995

© ISO 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

# ISO general-purpose metric screw threads — Basic dimensions

## 1 Scope

This International Standard specifies the basic dimensions, in millimetres, of ISO metric screw threads in accordance with ISO 261. The values refer to the basic profile in accordance with ISO 68.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 68:—<sup>1)</sup>, *ISO general-purpose screw threads — Basic profile.*

ISO 261:—<sup>2)</sup>, *ISO general-purpose metric screw threads — General plan.*

ISO 5408:1983, *Cylindrical screw threads — Vocabulary.*

## 3 Definitions

For the purposes of this International Standard, the definitions given in ISO 5408 apply.

## 4 Symbols

$D$  basic major diameter of internal thread (nominal diameter)

$d$  basic major diameter of external thread (nominal diameter)

$D_2$  basic pitch diameter of internal thread

$d_2$  basic pitch diameter of external thread

$D_1$  basic minor diameter of internal thread

$d_1$  basic minor diameter of external thread

$H$  height of fundamental triangle

$P$  pitch

## 5 Basic dimensions

Dimensions shall be as shown in figure 1 and given in table 1.

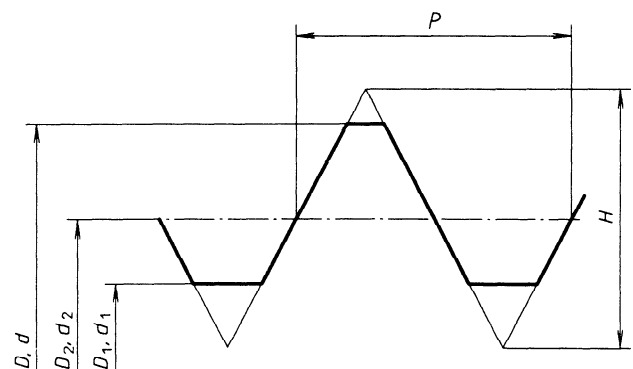


Figure 1 — Basic dimensions

1) To be published. (Revision of ISO 68:1973)

2) To be published. (Revision of ISO 261:1973)

## ISO 724:1993(E)

The values of  $D_2$ ,  $d_2$ ,  $D_1$  and  $d_1$  have been calculated from the following formulae and rounded, in table 1, to the third decimal place:

$$D_2 = D - 2 \times \frac{3}{8} H = D - 0,649 5P$$

$$d_2 = d - 2 \times \frac{3}{8} H = d - 0,649 5P$$

$$D_1 = D - 2 \times \frac{5}{8} H = D - 1,082 5P$$

$$d_1 = d - 2 \times \frac{5}{8} H = d - 1,082 5P$$

Table 1 — Basic dimensions

Nominal diameter = Major diameter $D, d$	Pitch $P$	Pitch diameter $D_2, d_2$	Minor diameter $D_1, d_1$
1	0,25	0,838	0,729
	0,2	0,870	0,783
1,1	0,25	0,938	0,829
	0,2	0,970	0,883
1,2	0,25	1,038	0,929
	0,2	1,070	0,983
1,4	0,3	1,205	1,075
	0,2	1,270	1,183
1,6	0,35	1,373	1,221
	0,2	1,470	1,383
1,8	0,35	1,573	1,421
	0,2	1,670	1,583
2	0,4	1,740	1,567
	0,25	1,838	1,729
2,2	0,45	1,908	1,713
	0,25	2,038	1,929
2,5	0,45	2,208	2,013
	0,35	2,273	2,121
3	0,5	2,675	2,459
	0,35	2,773	2,621
3,5	0,6	3,110	2,850
	0,35	3,273	3,121

Nominal diameter = Major diameter $D, d$	Pitch $P$	Pitch diameter $D_2, d_2$	Minor diameter $D_1, d_1$
4	0,7	3,545	3,242
	0,5	3,675	3,459
4,5	0,75	4,013	3,688
	0,5	4,175	3,959
5	0,8	4,480	4,134
	0,5	4,675	4,459
5,5	0,5	5,175	4,959
	1	5,350	4,917
6	0,75	5,513	5,188
	1	6,350	5,917
7	0,75	6,513	6,188
	1,25	7,188	6,647
8	1	7,350	6,917
	0,75	7,513	7,188
	1,25	8,188	7,647
9	1	8,350	7,917
	0,75	8,513	8,188
	1,5	9,026	8,376
10	1,25	9,188	8,647
	1	9,350	8,917
	0,75	9,513	9,188
	0,75	9,513	9,188

Nominal diameter = Major diameter $D, d$	Pitch $P$	Pitch diameter $D_2, d_2$	Minor diameter $D_1, d_1$
<b>11</b>	1,5	10,026	9,376
	1	10,350	9,917
	0,75	10,513	10,188
<b>12</b>	1,75	10,863	10,106
	1,5	11,026	10,376
	1,25	11,188	10,647
	1	11,350	10,917
<b>14</b>	2	12,701	11,835
	1,5	13,026	12,376
	1,25	13,188	12,647
	1	13,350	12,917
<b>15</b>	1,5	14,026	13,376
	1	14,350	13,917
<b>16</b>	2	14,701	13,835
	1,5	15,026	14,376
	1	15,350	14,917
	1,5	16,026	15,376
<b>17</b>	1	16,350	15,917
	2,5	16,376	15,294
<b>18</b>	2	16,701	15,835
	1,5	17,026	16,376
	1	17,350	16,917
	2,5	18,376	17,294
<b>20</b>	2	18,701	17,835
	1,5	19,026	18,376
	1	19,350	18,917
	2,5	20,376	19,294
<b>22</b>	2	20,701	19,835
	1,5	21,026	20,376
	1	21,350	20,917
	3	22,051	20,752
<b>24</b>	2	22,701	21,835
	1,5	23,026	22,376
	1	23,350	22,917

Nominal diameter = Major diameter $D, d$	Pitch $P$	Pitch diameter $D_2, d_2$	Minor diameter $D_1, d_1$
<b>25</b>	2	23,701	22,835
	1,5	24,026	23,376
	1	24,350	23,917
<b>26</b>	1,5	25,026	24,376
<b>27</b>	3	25,051	23,752
	2	25,701	24,835
	1,5	26,026	25,376
	1	26,350	25,917
<b>28</b>	2	26,701	25,835
	1,5	27,026	26,376
	1	27,350	26,917
<b>30</b>	3,5	27,727	26,211
	3	28,051	26,752
	2	28,701	27,835
	1,5	29,026	28,376
	1	29,350	28,917
<b>32</b>	2	30,701	29,835
	1,5	31,026	30,376
<b>33</b>	3,5	30,727	29,211
	3	31,051	29,752
	2	31,701	30,835
	1,5	32,026	31,376
<b>35</b>	1,5	34,026	33,376
<b>36</b>	4	33,402	31,670
	3	34,051	32,752
	2	34,701	33,835
	1,5	35,026	34,376
<b>38</b>	1,5	37,026	36,376
<b>39</b>	4	36,402	34,670
	3	37,051	35,752
	2	37,701	36,835
	1,5	38,026	37,376
<b>40</b>	3	38,051	36,752
	2	38,701	37,835
	1,5	39,026	38,376

## ISO 724:1993(E)

Nominal diameter = Major diameter <i>D, d</i>	Pitch <i>P</i>	Pitch diameter <i>D<sub>2</sub>, d<sub>2</sub></i>	Minor diameter <i>D<sub>1</sub>, d<sub>1</sub></i>
<b>42</b>	4,5	39,077	37,129
	4	39,402	37,670
	3	40,051	38,752
	2	40,701	39,835
	1,5	41,026	40,376
<b>45</b>	4,5	42,077	40,129
	4	42,402	40,670
	3	43,051	41,752
	2	43,701	42,835
	1,5	44,026	43,376
<b>48</b>	5	44,752	42,587
	4	45,402	43,670
	3	46,051	44,752
	2	46,701	45,835
	1,5	47,026	46,376
<b>50</b>	3	48,051	46,752
	2	48,701	47,835
	1,5	49,026	48,376
<b>52</b>	5	48,752	46,587
	4	49,402	47,670
	3	50,051	48,752
	2	50,701	49,835
	1,5	51,026	50,376
<b>55</b>	4	52,402	50,670
	3	53,051	51,752
	2	53,701	52,835
	1,5	54,026	53,376
<b>56</b>	5,5	52,428	50,046
	4	53,402	51,670
	3	54,051	52,752
	2	54,701	53,835
<b>58</b>	1,5	55,026	54,376
	4	55,402	53,670
	3	56,051	54,752
	2	56,701	55,835
	1,5	57,026	56,376

Nominal diameter = Major diameter <i>D, d</i>	Pitch <i>P</i>	Pitch diameter <i>D<sub>2</sub>, d<sub>2</sub></i>	Minor diameter <i>D<sub>1</sub>, d<sub>1</sub></i>
<b>60</b>	5,5	56,428	54,046
	4	57,402	55,670
	3	58,051	56,752
	2	58,701	57,835
	1,5	59,026	58,376
<b>62</b>	4	59,402	57,670
	3	60,051	58,752
	2	60,701	59,835
	1,5	61,026	60,376
<b>64</b>	6	60,103	57,505
	4	61,402	59,670
	3	62,051	60,752
	2	62,701	61,835
	1,5	63,026	62,376
<b>65</b>	4	62,402	60,670
	3	63,051	61,752
	2	63,701	62,835
	1,5	64,026	63,376
<b>68</b>	6	64,103	61,505
	4	65,402	63,670
	3	66,051	64,752
	2	66,701	65,835
	1,5	67,026	66,376
<b>70</b>	6	66,103	63,505
	4	67,402	65,670
	3	68,051	66,752
	2	68,701	67,835
	1,5	69,026	68,376
<b>72</b>	6	68,103	65,505
	4	69,402	67,670
	3	70,051	68,752
	2	70,701	69,835
	1,5	71,026	70,376
<b>75</b>	4	72,402	70,670
	3	73,051	71,752
	2	73,701	72,835
	1,5	74,026	73,376



Nominal diameter = Major diameter <i>D, d</i>	Pitch <i>P</i>	Pitch diameter <i>D<sub>2</sub>, d<sub>2</sub></i>	Minor diameter <i>D<sub>1</sub>, d<sub>1</sub></i>
<b>76</b>	6	72,103	69,505
	4	73,402	71,670
	3	74,051	72,752
	2	74,701	73,835
	1,5	75,026	74,376
<b>78</b>	2	76,700	75,835
<b>80</b>	6	76,103	73,505
	4	77,402	75,670
	3	78,051	76,752
	2	78,701	77,835
	1,5	79,026	78,376
<b>82</b>	2	80,701	79,835
<b>85</b>	6	81,103	78,505
	4	82,402	80,670
	3	83,051	81,752
	2	83,701	82,835
	<b>90</b>	6	86,103
4		87,402	85,670
3		88,051	86,752
2		88,701	87,835
<b>95</b>		6	91,103
	4	92,402	90,670
	3	93,051	91,752
	2	93,701	92,835
	<b>100</b>	6	96,103
4		97,402	95,670
3		98,051	96,752
2		98,701	97,835
<b>105</b>		6	101,103
	4	102,402	100,670
	3	103,051	101,752
	2	103,701	102,835
	<b>110</b>	6	106,103
4		107,402	105,670
3		108,051	106,752
2		108,701	107,835

Nominal diameter = Major diameter <i>D, d</i>	Pitch <i>P</i>	Pitch diameter <i>D<sub>2</sub>, d<sub>2</sub></i>	Minor diameter <i>D<sub>1</sub>, d<sub>1</sub></i>
<b>115</b>	6	111,103	108,505
	4	112,402	110,670
	3	113,051	111,752
	2	113,701	112,835
<b>120</b>	6	116,103	113,505
	4	117,402	115,670
	3	118,051	116,752
	2	118,701	117,835
<b>125</b>	6	121,103	118,505
	4	122,402	120,670
	3	123,051	121,752
	2	123,701	122,835
<b>130</b>	6	126,103	123,505
	4	127,402	125,670
	3	128,051	126,752
	2	128,701	127,835
<b>135</b>	6	131,103	128,505
	4	132,402	130,670
	3	133,051	131,752
	2	133,701	132,835
<b>140</b>	6	136,103	133,505
	4	137,402	135,670
	3	138,051	136,752
	2	138,701	137,835
<b>145</b>	6	141,103	138,505
	4	142,402	140,670
	3	143,051	141,752
	2	143,701	142,835
<b>150</b>	8	144,804	141,340
	6	146,103	143,505
	4	147,402	145,670
	3	148,051	146,752
	2	148,701	147,835
<b>155</b>	6	151,103	148,505
	4	152,402	150,670
	3	153,051	151,752