
Vročje valjani jekleni profili I in H - Mere in mase

Hot rolled steel channels, I and H sections - Dimensions and masses

Warmgewalzter U-Profilstahl, I- und H-Träger - Maße und Masse

Profilés en U en aciers laminés à chaud, poutrelles I et H - Dimensions et masses

Ta slovenski standard je istoveten z: EN 10365:2026

ICS:

77.140.70

Jekleni profili

Steel profiles

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EN 10365

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and masses**

Profilés en U en aciers laminés à chaud, poutrelles I et
H - Dimensions et masses

Warmgewalzter U-Profilstahl, I- und H-Träger - Maße
und Masse

This European Standard was approved by CEN on 27 April 2026.

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European foreword

This document (EN 10365:2026) has been prepared by Technical Committee CEN/TC 459 "ECISS – European Committee for Iron and Steel Standardization"¹, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2027 and conflicting national standards shall be withdrawn at the latest by January 2027.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 10365:2017.

In comparison to the previous edition, following technical modifications have been made:

- addition of diverse new dimensions;
- addition of Annex A with formulae for static values;
- editorial update.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

¹ Through its sub-committee SC 3 "Structural steels other than reinforcements" (secretariat: DIN).

EN 10365:2026 (E)**1 Scope**

This document specifies the nominal dimensions and masses of the hot rolled steel channels, I and H sections.

The following shapes are covered by this document:

Sections:

- parallel flange I sections IPE;
- parallel wide flange beams HE;
- parallel extra wide flange beams HL and HLZ;
- parallel wide flange columns HD;
- parallel wide flange bearing piles HP and UBP;
- parallel flange universal beams UB;
- parallel flange universal columns UC;
- taper flange I sections IPN and J.

Channels:

- parallel flange channels UPE and PFC;
- taper flange channels UPN, U and CH.

These requirements do not apply to hot rolled steel channels, I- and H- sections from stainless steel.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10024, *Hot rolled taper flange I sections — Tolerances on shape and dimensions*

EN 10025-2, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10025-3, *Hot rolled products of structural steels — Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*

EN 10025-4, *Hot rolled products of structural steels — Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels*

EN 10025-5, *Hot rolled products of structural steels — Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*

EN 10034, *Structural steel I and H sections — Tolerances on shape and dimensions*

EN 10079, *Definition of steel products*

EN 10279, *Hot rolled steel channels — Tolerances on shape, dimensions and mass*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10079 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/>

4 Designation

A section shall be designated according to Tables 1 to 15.

This form of designation shall be used in any enquiry and order.

5 Dimensions and masses

Hot rolled steel channels, I and H sections complying with this document shall be manufactured with the specified dimensions given in the Table 1 to 15 and according to Figures 1 to 4 below.

Radii of fillets, toes of shape profiles and angles for taper flanges vary with individual manufacturers and therefore are not specified. Radii and angles given by the manufacturer or fixed otherwise, are only for the calculation of the nominal sectional properties and cannot be used for any other purpose.

NOTE Concerning the comparable ISO standard for taper flange sections (i.e. ISO 657-1) the kinds of sections are different and the measuring point for the flange thickness is also different.

The masses per unit length specified in Tables 1 to 15 were calculated on the basis of a density of 7 850 kg/m³.

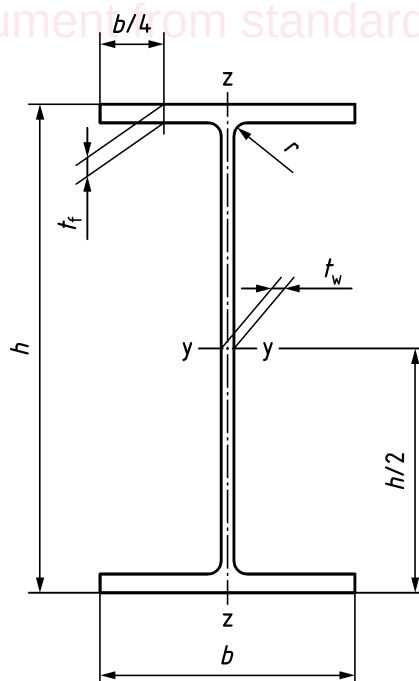
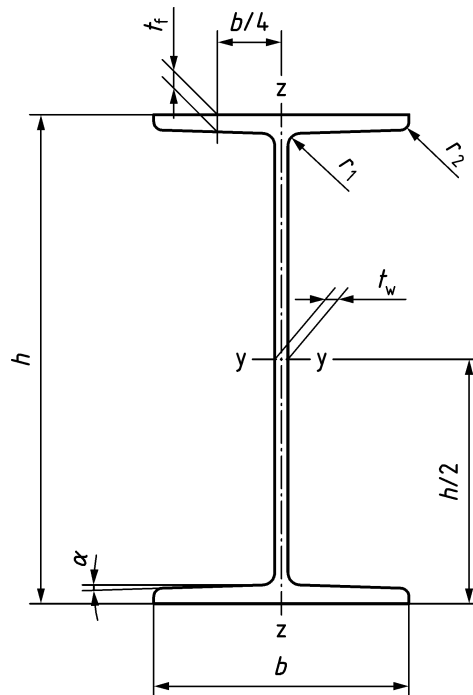
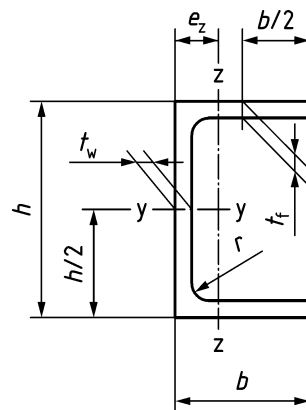


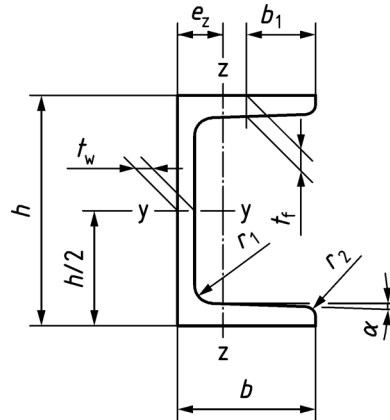
Figure 1 — IPE, HE, HL, HLZ, HD, HP, UBP, UB and UC parallel flange sections

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**Key**

for IPN-sections:

taper flange angle $\alpha = 14\%$ **Figure 2 — Taper flange I sections IPN and J****Figure 3 — Parallel flange channels UPE and PFC**

**Key**

for UPN-channels:

$h \leq 300$ mm taper flange angle $\alpha = 8\%$ and $b_1 = b/2$

$h > 300$ mm taper flange angle $\alpha = 5\%$ and $b_1 = (b - t_w)/2$

for CH- and U-channels: $b_1 = b/2$

Figure 4 — Taper flange channels UPN, U and CH

6 Tolerances on dimensions, shape and mass

Tolerances on dimensions, shape and mass shall be as given in EN 10034 for I (parallel flanges) and H sections.

Tolerances on dimensions, shape and mass shall be as given in EN 10024 for taper flange I sections.

Tolerances on dimensions, shape and mass shall be as given in EN 10279 for channels.

Tolerances for shapes not included in the mentioned standards shall be as agreed upon between the manufacturer and the purchaser.

7 Material

Sections and channels shall preferably be made from steel of a grade as specified in EN 10025-2, EN 10025-3, EN 10025-4 and EN 10025-5. Other steel grades as specified in EN 10225-2, EN 10028-2 and EN 10273 may also be used for specific applications.

The desired steel grade shall be specified at the time of ordering.

Table 1 — Parallel flange I sections IPE

Designation	<i>M</i> kg/m	Dimensions				<i>A</i> cm ²
		<i>h</i> mm	<i>b</i> mm	<i>tw</i> mm	<i>tf</i> mm	
IPE AA 80	4,9	78,0	46,0	3,2	4,2	6,3
IPE A 80	5,0	78,0	46,0	3,3	4,2	6,4
IPE 80	6,0	80,0	46,0	3,8	5,2	7,6
IPE AA 100	6,7	97,6	55,0	3,6	4,5	8,6
IPE A 100	6,9	98,0	55,0	3,6	4,7	8,8
IPE 100	8,1	100,0	55,0	4,1	5,7	10,3
IPE AA 120	8,4	117,0	64,0	3,8	4,8	10,7
IPE A 120	8,7	117,6	64,0	3,8	5,1	11,0
IPE 120	10,4	120,0	64,0	4,4	6,3	13,2
IPE AA 140	10,1	136,6	73,0	3,8	5,2	12,8
IPE A 140	10,5	137,4	73,0	3,8	5,6	13,4
IPE 140	12,9	140,0	73,0	4,7	6,9	16,4
IPE AA 160	12,3	156,4	82,0	4,0	5,6	15,7
IPE A 160	12,7	157,0	82,0	4,0	5,9	16,2
IPE 160	15,8	160,0	82,0	5,0	7,4	20,1
IPE AA 180	14,9	176,4	91,0	4,3	6,2	19,0
IPE A 180	15,4	177,0	91,0	4,3	6,5	19,6
IPE 180	18,8	180,0	91,0	5,3	8,0	23,9
IPE O 180	21,3	182,0	92,0	6,0	9,0	27,1
IPE AA 200	18,0	196,4	100,0	4,5	6,7	22,9
IPE A 200	18,4	197,0	100,0	4,5	7,0	23,5
IPE 200	22,4	200,0	100,0	5,6	8,5	28,5
IPE O 200	25,1	202,0	102,0	6,2	9,5	32,0
IPE AA 220	21,2	216,4	110,0	4,7	7,4	27,0
IPE A 220	22,2	217,0	110,0	5,0	7,7	28,3
IPE 220	26,2	220,0	110,0	5,9	9,2	33,4
IPE O 220	29,4	222,0	112,0	6,6	10,2	37,4
IPE AA 240	24,9	236,4	120,0	4,8	8,0	31,7
IPE A 240	26,2	237,0	120,0	5,2	8,3	33,3
IPE 240	30,7	240,0	120,0	6,2	9,8	39,1
IPE O 240	34,3	242,0	122,0	7,0	10,8	43,7
IPE A 270	30,7	267,0	135,0	5,5	8,7	39,2
IPE 270	36,1	270,0	135,0	6,6	10,2	45,9
IPE O 270	42,3	274,0	136,0	7,5	12,2	53,8
IPE A 300	36,5	297,0	150,0	6,1	9,2	46,5
IPE 300	42,2	300,0	150,0	7,1	10,7	53,8
IPE O 300	49,3	304,0	152,0	8,0	12,7	62,8

Designation	<i>M</i> kg/m	Dimensions				<i>A</i> cm ²
		<i>h</i> mm	<i>b</i> mm	<i>tw</i> mm	<i>tf</i> mm	
IPE A 330	43,0	327,0	160,0	6,5	10,0	54,7
IPE 330	49,1	330,0	160,0	7,5	11,5	62,6
IPE O 330	57,0	334,0	162,0	8,5	13,5	72,6
IPE AA 360	47,0	356,4	170,0	6,0	10,9	59,9
IPE A 360	50,2	357,6	170,0	6,6	11,5	64,0
IPE 360	57,1	360,0	170,0	8,0	12,7	72,7
IPE O 360	66,0	364,0	172,0	9,2	14,7	84,1
IPE AA 400	53,4	395,6	180,0	6,3	11,3	68,0
IPE A 400	57,4	397,0	180,0	7,0	12,0	73,1
IPE 400	66,3	400,0	180,0	8,6	13,5	84,5
IPE O 400	75,7	404,0	182,0	9,7	15,5	96,4
IPE V 400	84,0	408,0	182,0	10,6	17,5	107,0
IPE AA 450	62,1	445,4	190,0	6,8	12,3	79,1
IPE A 450	67,2	447,0	190,0	7,6	13,1	85,6
IPE 450	77,6	450,0	190,0	9,4	14,6	98,8
IPE O 450	92,4	456,0	192,0	11,0	17,6	117,7
IPE V 450	107	460,0	194,0	12,4	19,6	132,0
IPE AA 500	73,2	495,2	200,0	7,5	13,6	93,3
IPE A 500	79,4	497,0	200,0	8,4	14,5	101,1
IPE 500	90,7	500,0	200,0	10,2	16,0	115,5
IPE O 500	107	506,0	202,0	12,0	19,0	136,7
IPE V 500	129	514,0	204,0	14,2	23,0	164,1
IPE AA 550	79,5	541,0	210,0	8,5	12,5	101,3
IPE AA 550x85	84,7	545,0	210,0	8,0	14,7	108,0
IPE A 550	92,1	547,0	210,0	9,0	15,7	117,3
IPE 550	106	550,0	210,0	11,1	17,2	134,4
IPE O 550	123	556,0	212,0	12,7	20,2	156,1
IPE V 550	159	566,0	216,0	17,1	25,2	202,0
IPE A 600	108	597,0	220,0	9,8	17,5	137,0
IPE 600	122	600,0	220,0	12,0	19,0	156,0
IPE O 600	154	610,0	224,0	15,0	24,0	196,8
IPE V 600	184	618,0	228,0	18,0	28,0	233,8
IPE 750 × 134	134	750,0	264,0	12,0	15,5	170,6
IPE 750 × 147	147	753,0	265,0	13,2	17,0	187,5
IPE 750 × 173	173	762,0	267,0	14,4	21,6	221,3
IPE 750 × 196	196	770,0	268,0	15,6	25,4	250,8
IPE 750 × 220	220	779,0	266,0	16,5	30,0	280,7

Table 2 — Wide flange beams HE

Designation	<i>M</i> kg/m	Dimensions				<i>A</i> cm ²
		<i>h</i> mm	<i>b</i> mm	<i>tw</i> mm	<i>tf</i> mm	
HE 100 AA	12,2	91,0	100,0	4,2	5,5	15,6
HE 100 A	16,7	96,0	100,0	5,0	8,0	21,2
HE 100 B	20,4	100,0	100,0	6,0	10,0	26,0
HE 100 C	30,9	110,0	103,0	9,0	15,0	39,3
HE 100 M	41,8	120,0	106,0	12,0	20,0	53,2
HE 120 AA	14,6	109,0	120,0	4,2	5,5	18,6
HE 120 A	19,9	114,0	120,0	5,0	8,0	25,3
HE 120 B	26,7	120,0	120,0	6,5	11,0	34,0
HE 120 C	39,2	130,0	123,0	9,5	16,0	49,9
HE 120 M	52,1	140,0	126,0	12,5	21,0	66,4
HE 140 AA	18,1	128,0	140,0	4,3	6,0	23,0
HE 140 A	24,7	133,0	140,0	5,5	8,5	31,4
HE 140 B	33,7	140,0	140,0	7,0	12,0	43,0
HE 140 C	48,2	150,0	143,0	10,0	17,0	61,5
HE 140 M	63,2	160,0	146,0	13,0	22,0	80,6
HE 160 AA	23,8	148,0	160,0	4,5	7,0	30,4
HE 160 A	30,4	152,0	160,0	6,0	9,0	38,8
HE 160 B	42,6	160,0	160,0	8,0	13,0	54,3
HE 160 C	59,2	170,0	163,0	11,0	18,0	75,4
HE 160 M	76,2	180,0	166,0	14,0	23,0	97,1
HE 180 AA	28,7	167,0	180,0	5,0	7,5	36,5
HE 180 A	35,5	171,0	180,0	6,0	9,5	45,3
HE 180 B	51,2	180,0	180,0	8,5	14,0	65,3
HE 180 C	69,8	190,0	183,0	11,5	19,0	89,0
HE 180 M	88,9	200,0	186,0	14,5	24,0	113,3
HE 200 AA	34,6	186,0	200,0	5,5	8,0	44,1
HE 200 A	42,3	190,0	200,0	6,5	10,0	53,8
HE 200 B	61,3	200,0	200,0	9,0	15,0	78,1
HE 200 C	81,9	210,0	203,0	12,0	20,0	104,4
HE 200 M	103	220,0	206,0	15,0	25,0	131,3
HE 220 AA	40,4	205,0	220,0	6,0	8,5	51,5
HE 220 A	50,5	210,0	220,0	7,0	11,0	64,3
HE 220 B	71,5	220,0	220,0	9,5	16,0	91,0
HE 220 C	94,1	230,0	223,0	12,5	21,0	119,9
HE 220 M	117	240,0	226,0	15,5	26,0	149,4