

TOLERANCES ACCORDING TO EN 10162 STANDARDS

Nominal thickness	Tolerances for a nominal width			
	<1200	>1200 <1500	>1500 <1800	>1800
<2,00	±0,13	±0,14	±0,16	-
>2,00 <2,50	±0,14	±0,16	±0,17	±0,19
>2,50 <3,00	±0,15	±0,17	±0,18	±0,20
>3,00 <4,00	±0,17	±0,18	±0,20	±0,20
>4,00 <5,00	±0,18	±0,20	±0,21	±0,22
>5,00 <6,00	±0,20	±0,21	±0,22	±0,23
>6,00 <8,00	±0,22	±0,23	±0,23	±0,26

Length of the shortest flange (mm)	Allowable angular tolerances
10	±3°
>10 <40	±1°45'
>40 <80	±H5'
>80 <110	±r
>110	±0°45'

OUTSIDE DIMENSIONS

The allowable tolerances of the dimensions of the cross section of cold rolled profiles for special applications (special profiles) must be agreed upon at the time of the order and specified in the drawings.

Wall thickness (mm) t	Allowable tolerances for outside dimensions (mm)				
	<1200	>1200 <1500	>1500 <1800	>1500 <1800	>1800
<1,5	±0,75	±0,75	±1,00	c)	c)
>1,5 <3	±0,80	±1,00	±1,25	±1,50	C)
>3 <6	±1,00	±1,25	±1,50	±1,75	±2,00
>6 <8	±1,25	±1,50	±1,75	±2,00	±2,25
>8	c)	c)	c)	c)	c)

Wall thickness (mm) t	Allowable tolerances for outside dimensions (mm)				
	<40	>40 <100	>100 <200	>200 <400	>400
<1,5	±0,50	±0,50	±0,75	±1,25	a)
>1,5 <3	±0,75	±0,75	±1,00	±1,50	±1,75
>3 <6	±1,00	±1,00	±1,25	±1,75	±2,00
>6 <8	±1-25	±1-25	±1,50	±2,00	±2,50
>8	a)	a)	a)	a)	a)

a) The allowable tolerances are regulated according to the greater of the two outside dimensions.

b) The specified values apply to cold rolled profiles with trimmed edges. For profiles with untrimmed edges the allowable tolerances must be doubled.

c) The allowable tolerances must be agreed upon at the time of the order.

a) The tolerances must be agreed upon at the time of the order.

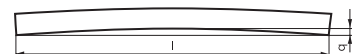
LENGTH

Designation of the length	Length (mm)	Tolerance (mm)a)	Information at the time of order b)
Normalized length	6000	0/+50	specify "Normalized length"
Fixed length	From 4000 to 24000	0/+50	specify length (mm) and add "Fixed length"
Exact length	<2000 >2000 <6000 >6000 <10000 >10000 <15000 >15000	±1 ±2 ±3 ±4 ±6	specify length (mm) and add "Exact length"

a) In the case of exact length the total range of tolerances can be entirely positive or entirely negative, if agreed between the supplier and the customer (for example, 0/+2 mm instead of mm).

STRAIGHTNESS

The allowable deviation q from the straight line (see Figure) must not exceed 0.002 / (length). In the case of a complex transversal section, such as with markedly asymmetrical profiles, the straightness tolerances allowed must be agreed upon at the time of the offer request and the order.



TORSION

The torsion angle must not exceed 1 degree per meter. In case of complex profiles the allowable torsion must be agreed upon at the time of the offer request and the order.

CONCAVITY, CONVEXITY

The concavity or convexity tolerances of the flat sides (see Figure 10) must not exceed 0.8% of h (h); the minimum tolerance, however, is 0.5 mm. The concavity and convexity tolerance is independent of the cross section tolerances and cannot be included in the latter. Concavity or convexity is always allowed, within the allowable tolerances.

