

● Poutrelles américaines à larges ailes

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams

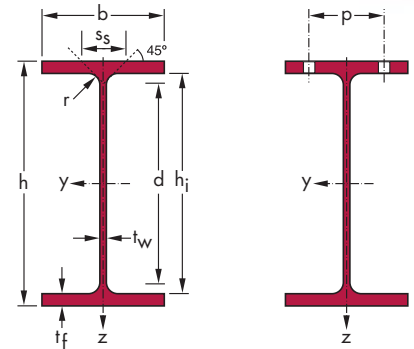
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)	Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche	
G kg/m	h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	P _{min} mm	P _{max} mm	A _L m ² /m	A _G m ² /t
						x 10 ²							
W 100 x 100 x 19.3 ^{+/*} 19.3	106	103	7.1	8.8	6	24.70	88.4	76.4	-	-	-	0.599	30.90
W 130 x 130 x 23.8 ^{+/*} 23.8	127	127	6.1	9.1	8	30.40	108.8	92.8	M12	60	70	0.736	30.95
W 130 x 130 x 28.1 ^{+/*} 28.1	131	128	6.9	10.9	8	35.90	109.2	93.2	M12	62	70	0.747	26.46
W 150 x 100 x 13.5 ^{+/*} 13.5	150	100	4.3	5.5	6	17.30	139	127	-	-	-	0.681	50.11
W 150 x 100 x 18.0 ^{+/*} 18.0	153	102	5.8	7.1	6	22.90	138.4	126.4	-	-	-	0.692	37.86
W 150 x 100 x 24.0 ^{+/*} 24.0	160	102	6.6	10.3	6	30.60	139.4	127.4	-	-	-	0.704	29.40
W 150 x 150 x 22.5 ⁺ 22.5	152	152	5.8	6.6	6	28.60	138.8	126.8	M16	70	82	0.890	39.81
W 150 x 150 x 29.8 ⁺ 29.8	157	153	6.6	9.3	6	37.90	138.4	126.4	M16	72	84	0.902	30.33
W 150 x 150 x 37.1 ⁺ 37.1	162	154	8.1	11.6	6	47.40	138.8	126.8	M16	74	84	0.913	24.59
W 200 x 100 x 15.0 ⁺ 15.0	200	100	4.3	5.2	8	19.10	189.6	173.6	-	-	-	0.778	51.76
W 200 x 100 x 19.3 ⁺ 19.3	203	102	5.8	6.5	8	24.80	190	174	-	-	-	0.789	40.34
W 200 x 100 x 22.5 ⁺ 22.5	206	102	6.2	8	8	28.60	190	174	-	-	-	0.794	35.25
W 200 x 135 x 21 ^{+/*} 21.0	203	133	5	6.4	8	27.08	190.2	174.2	M12	62	76	0.914	43.00
W 200 x 135 x 26.6 ⁺ 26.6	207	133	5.8	8.4	8	33.90	190.2	174.2	M12	62	76	0.921	34.49
W 200 x 135 x 31.3 ⁺ 31.3	210	134	6.4	10.2	8	39.70	189.6	173.6	M12	64	76	0.930	29.66
W 200 x 165 x 35.9 ⁺ 35.9	201	165	6.2	10.2	10	45.70	180.6	160.6	M16	78	96	1.03	28.75
W 200 x 165 x 41.7 ⁺ 41.7	205	166	7.2	11.8	10	53.20	181.4	161.4	M16	80	96	1.04	24.97
W 200 x 200 x 46.1 ⁺ 46.1	203	203	7.2	11	10	58.90	181	161	M24	94	110	1.19	25.78
W 200 x 200 x 52 ⁺ 52.0	206	204	7.9	12.6	10	66.50	180.8	160.8	M24	94	110	1.20	22.89
W 200 x 200 x 59 ⁺ 59.0	210	205	9.1	14.2	10	75.50	181.6	161.6	M24	96	112	1.20	20.28
W 200 x 200 x 71 ⁺ 71.0	216	206	10.2	17.4	10	91.00	181.2	161.2	M24	98	112	1.22	17.07
W 200 x 200 x 86 ⁺ 86.0	222	209	13	20.6	10	110.0	180.8	160.8	M24	100	116	1.24	14.28
W 200 x 200 x 100 ⁺ 100	229	210	14.5	23.7	10	127.0	181.6	161.6	M24	102	116	1.25	12.59

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

* Profilé canadien, tonnage minimum et conditions de livraison nécessitent un accord préalable.

* Tonnage minimum et conditions de livraison nécessitent un accord préalable.

+ Minimum order: 40 t per section and grade or upon agreement.

* Canadian section, minimum tonnage and delivery conditions upon agreement.

* Minimum tonnage and delivery conditions upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.

* Kanadisches Walzprofil, die Mindestmengen pro Bestellung sowie die Lieferbedingungen sind im Voraus zu vereinbaren.

* Die Mindestmengen pro Bestellung sowie die Lieferbedingungen sind im Voraus zu vereinbaren.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A913		
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z							pure bending y-y		pure compression					
	G lbs/ft	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ⬆ mm ³	i _y mm	A _{vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ⬆ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235		S 355	S 460
		x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹							
W 4 x 4 x 13	13	475.9	89.79	103.3	4.39	8.27	160.6	31.19	47.94	2.55	31.73	6.52	3.79	1	1	-	1	1	-	✓
W 5 x 5 x 16	16	885.5	139.5	157.2	5.41	9.20	311.0	48.98	74.66	3.20	33.67	8.10	10.80	1	1	-	1	1	-	✓
W 5 x 5 x 19	19	1099	167.7	190.9	5.53	10.53	381.4	59.60	90.86	3.26	38.03	13.33	13.74	1	1	-	1	1	-	✓
W 6 x 4 x 9	9	685.5	91.40	102.4	6.29	7.21	91.80	18.36	28.26	2.30	22.35	1.74	4.79	1	3	-	1	3	-	✓
W 6 x 4 x 12	12	915.9	122.1	138.6	6.33	9.69	125.9	25.37	39.29	2.36	27.47	3.86	6.68	1	1	-	1	1	-	✓
W 6 x 4 x 16	16	1342	167.8	191.5	6.63	11.43	182.6	35.80	55.24	2.45	34.23	9.35	10.21	1	1	-	1	1	-	✓
W 6 x 6 x 15	15	1206	158.6	176.1	6.51	9.59	386.6	50.87	77.56	3.68	26.07	4.34	20.42	3	3	-	3	3	-	✓
W 6 x 6 x 20	20	1714	218.4	243.9	6.73	11.17	555.5	72.62	110.5	3.83	32.23	10.16	30.28	1	2	-	1	2	-	✓
W 6 x 6 x 25	25	2220	274.1	309.9	6.85	13.93	706.8	91.79	140.0	3.86	38.36	19.51	39.93	1	1	-	1	1	-	✓
W 8 x 4 x 10	10	1280	128.0	145.2	8.18	9.80	86.89	17.38	27.10	2.13	24.09	1.93	8.22	1	3	-	3	4	-	✓
W 8 x 4 x 13	13	1662	163.7	188.1	8.17	13.06	115.4	22.63	35.69	2.15	28.21	3.99	11.10	1	1	-	1	2	-	✓
W 8 x 4 x 15	15	2004	194.5	222.8	8.36	14.14	142.0	27.85	43.72	2.22	31.59	5.97	13.87	1	1	-	1	2	-	✓
W 8 x 5.25 x 14	14	1980	195.1	217.7	8.55	11.40	251.3	37.78	58.03	3.05	27.17	3.74	24.25	2	3	-	2	4	-	✓
W 8 x 5.25 x 18	18	2587	250.0	279.8	8.72	13.49	329.8	49.60	76.17	3.11	32.01	7.35	32.48	1	1	-	1	2	-	✓
W 8 x 5.25 x 21	21	3139	298.9	335.3	8.87	14.87	409.6	61.13	93.76	3.20	36.12	12.04	40.82	1	1	-	1	2	-	✓
W 8 x 6.5 x 24	24	3438	342.1	379.4	8.67	14.77	764.3	92.64	141.1	4.09	38.34	14.56	69.50	1	1	-	1	1	-	✓
W 8 x 6.5 x 28	28	4088	398.8	445.6	8.77	17.21	900.5	108.5	165.5	4.12	42.56	22.39	83.95	1	1	-	1	1	-	✓
W 8 x 8 x 31	31	4545	447.8	495.6	8.81	16.96	1535	151.2	229.5	5.12	40.96	22.27	141.3	1	3	-	1	3	-	✓
W 8 x 8 x 35	35	5268	511.5	569.0	8.90	18.60	1784	174.9	265.5	5.18	44.79	32.41	166.7	1	1	-	1	1	-	✓
W 8 x 8 x 40	40	6113	582.2	652.9	8.99	21.59	2040	199.1	302.8	5.19	49.26	46.86	195.4	1	1	-	1	1	-	✓
W 8 x 8 x 48	48	7658	709.0	802.8	9.18	24.52	2537	246.3	374.5	5.28	56.68	82.02	250.0	1	1	-	1	1	-	✓
W 8 x 8 x 58	58	9467	852.9	980.5	9.26	31.06	3138	300.3	458.2	5.33	65.87	140.8	317.8	1	1	-	1	1	-	✓
W 8 x 8 x 67	67	11325	989.1	1149	9.45	35.33	3663	348.9	532.9	5.38	73.60	211.3	385.5	1	1	-	1	1	-	✓

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

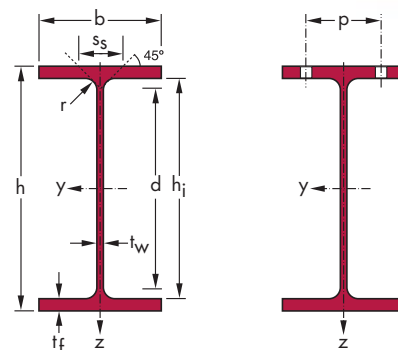
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)		Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche		
G kg/m		h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	p _{min} mm	p _{max} mm	A _L m ² /m	A _G m ² /t	
								x 10 ²							
W 250 x 100 x 17.9 ⁺	17.9	251	101	4.8	5.3	8	22.80	240.4	224.4	-	-	-	0.883	49.17	
W 250 x 100 x 22.3 ⁺	22.3	254	102	5.8	6.9	8	28.50	240.2	224.2	-	-	-	0.891	39.59	
W 250 x 100 x 25.3 ⁺	25.3	257	102	6.1	8.4	8	32.20	240.2	224.2	-	-	-	0.896	35.30	
W 250 x 100 x 28.4 ⁺	28.4	260	102	6.4	10	8	36.30	240	224	-	-	-	0.902	31.74	
W 250 x 145 x 24 ^{+/*}	24.0	253	145	5	6.4	8	31.12	240.2	224.2	M16	72	76	1.06	43.48	
W 250 x 145 x 32.7 ⁺	32.7	258	146	6.1	9.1	8	41.90	239.8	223.8	M16	72	76	1.07	32.77	
W 250 x 145 x 38.5 ⁺	38.5	262	147	6.6	11.2	8	49.10	239.6	223.6	M16	74	78	1.09	28.04	
W 250 x 145 x 44.8 ⁺	44.8	266	148	7.6	13	8	57.00	240	224	M16	74	78	1.10	24.34	
W 250 x 200 x 49.1 ⁺	49.1	247	202	7.4	11	13	62.60	225	199	M27	90	112	1.26	25.76	
W 250 x 200 x 58 ⁺	58.0	252	203	8	13.5	13	74.20	225	199	M27	90	113	1.28	21.92	
W 250 x 200 x 67 ⁺	67.0	257	204	8.9	15.7	13	85.80	225.6	199.6	M27	90	114	1.29	19.20	
W 250 x 250 x 73 ⁺	73.0	253	254	8.6	14.2	13	92.90	224.6	198.6	M27	102	148	1.48	20.31	
W 250 x 250 x 80 ⁺	80.0	256	255	9.4	15.6	13	102.0	224.8	198.8	M27	102	150	1.49	18.59	
W 250 x 250 x 89 ⁺	89.0	260	256	10.7	17.3	13	114.0	225.4	199.4	M27	104	150	1.50	16.75	
W 250 x 250 x 101 ⁺	101	264	257	11.9	19.6	13	129.0	224.8	198.8	M27	106	152	1.51	14.91	
W 250 x 250 x 115 ⁺	115	269	259	13.5	22.1	13	146.0	224.8	198.8	M27	106	154	1.52	13.29	
W 250 x 250 x 131 ⁺	131	275	261	15.4	25.1	13	167.0	224.8	198.8	M27	108	156	1.54	11.75	
W 250 x 250 x 149 ⁺	149	282	263	17.3	28.4	13	190.0	225.2	199.2	M27	110	158	1.56	10.47	
W 250 x 250 x 167 ⁺	167	289	265	19.2	31.8	13	212.0	225.4	199.4	M27	112	160	1.58	9.42	
W 310 x 100 x 21.0 ⁺	21.0	303	101	5.1	5.7	8	26.80	291.6	275.6	-	-	-	0.986	46.74	
W 310 x 100 x 23.8 ⁺	23.8	305	101	5.6	6.7	8	30.40	291.6	275.6	-	-	-	0.989	41.47	
W 310 x 100 x 28.3 ⁺	28.3	309	102	6	8.9	8	35.90	291.2	275.2	-	-	-	1.00	35.31	
W 310 x 100 x 32.7 ⁺	32.7	313	102	6.6	10.8	8	41.80	291.4	275.4	-	-	-	1.01	30.68	
W 310 x 165 x 31 ^{+/*}	31.0	306	164	5	7.4	8	39.38	291.2	275.2	M20	78	82	1.24	40.25	
W 310 x 165 x 38.7 ⁺	38.7	310	165	5.8	9.7	8	49.40	290.6	274.6	M20	80	84	1.25	32.27	
W 310 x 165 x 44.5 ⁺	44.5	313	166	6.6	11.2	8	56.70	290.6	274.6	M20	80	84	1.26	28.27	
W 310 x 165 x 52 ⁺	52.0	317	167	7.6	13.2	8	66.50	290.6	274.6	M20	82	86	1.27	24.28	

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

+ Profilé canadien, tonnage minimum et conditions de livraison nécessitent un accord préalable.

+ Minimum order: 40 t per section and grade or upon agreement.

+ Canadian section, minimum tonnage and delivery conditions upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.

+ Kanadisches Walzprofil, die Mindestmengen pro Bestellung sowie die Lieferbedingungen sind im Voraus zu vereinbaren.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A572/A709/A992	A913	
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z							pure bending y-y		pure compression					
	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ⬆ mm ³	i _y mm	A _{vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ⬆ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235	S 355			S 460
G lbs/ft																				
		x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹							
W 10 x 4 x 12	12	2252	179.5	207.8	9.92	13.26	91.34	18.09	28.67	2.00	24.80	2.50	13.74	1	3	-	4	4	-	✓
W 10 x 4 x 15	15	2901	228.4	264.6	10.06	16.08	122.6	24.03	38.20	2.07	29.01	4.68	18.63	1	1	-	3	4	-	✓
W 10 x 4 x 17	17	3430	266.9	307.5	10.30	17.06	149.2	29.25	46.20	2.15	32.27	6.77	22.95	1	1	-	2	4	-	✓
W 10 x 4 x 19	19	3998	307.5	352.9	10.51	18.02	177.5	34.81	54.71	2.21	35.72	9.80	27.64	1	1	-	2	4	-	✓
W 10 x 5.75 x 16	16	3477	274.8	307.5	10.57	13.90	325.6	44.90	69.02	3.23	27.17	4.16	49.44	3	3	-	4	4	-	✓
W 10 x 5.75 x 22	22	4895	379.4	424.9	10.83	17.19	472.6	64.74	99.48	3.36	33.67	10.05	73.10	1	1	-	2	4	-	✓
W 10 x 5.75 x 26	26	6014	459.1	514.1	11.05	18.89	593.7	80.77	123.9	3.47	38.37	17.03	93.24	1	1	-	2	3	-	✓
W 10 x 5.75 x 30	30	7118	535.2	603.0	11.14	21.91	703.5	95.06	146.2	3.50	42.99	26.45	112.4	1	1	-	1	2	-	✓
W 10 x 8 x 33	33	7069	572.4	633.9	10.63	21.77	1513	149.8	228.5	4.92	44.63	24.53	210.4	1	3	-	1	3	-	✓
W 10 x 8 x 39	39	8736	693.4	770.8	10.85	24.04	1884	185.6	282.8	5.04	50.23	41.11	267.7	1	1	-	1	1	-	✓
W 10 x 8 x 45	45	10360	806.6	902.0	11.00	27.01	2224	218.0	332.2	5.10	55.53	62.61	323.4	1	1	-	1	1	-	✓
W 10 x 10 x 49	49	11290	892.1	986.1	11.02	25.78	3880	305.5	463.3	6.46	52.27	57.94	552.9	1	2	3	1	2	3	✓
W 10 x 10 x 54	54	12570	982.4	1091	11.10	28.10	4314	338.3	513.3	6.50	55.83	76.15	622.9	1	2	3	1	2	3	✓
W 10 x 10 x 60	60	14260	1097	1226	11.18	31.84	4841	378.2	574.5	6.51	60.50	104.4	712.4	1	1	2	1	1	2	✓
W 10 x 10 x 68	68	16380	1241	1398	11.27	35.73	5549	431.9	656.6	6.56	66.37	150.3	828.0	1	1	1	1	1	1	✓
W 10 x 10 x 77	77	18940	1408	1599	11.38	40.43	6405	494.6	752.8	6.62	72.89	215.3	975.3	1	1	1	1	1	1	✓
W 10 x 10 x 88	88	22150	1611	1847	11.52	46.39	7446	570.6	869.7	6.68	80.80	315.9	1161	1	1	1	1	1	1	✓
W 10 x 10 x 100	100	25940	1840	2129	11.69	52.63	8622	655.7	1001	6.74	89.30	456.5	1384	1	1	1	1	1	1	✓
W 10 x 10 x 112	112	30020	2078	2427	11.87	59.05	9879	745.6	1139	6.81	98.01	639.3	1631	1	1	1	1	1	1	✓
W 12 x 4 x 14	14	3708	244.8	287.1	11.75	16.56	98.31	19.47	31.19	1.91	25.85	3.17	21.63	1	2	-	4	4	-	✓
W 12 x 4 x 16	16	4280	280.7	328.6	11.87	18.30	115.6	22.89	36.70	1.95	28.36	4.50	25.59	1	1	-	4	4	-	✓
W 12 x 4 x 19	19	5431	351.5	406.9	12.27	19.89	158.1	30.99	49.15	2.09	33.14	7.72	35.44	1	1	-	4	4	-	✓
W 12 x 4 x 22	22	6507	415.8	480.9	12.47	22.22	191.9	37.62	59.63	2.14	37.57	12.36	43.61	1	1	-	3	4	-	✓
W 12 x 6.5 x 21	21	6554	428.4	476.3	12.90	16.66	544.4	66.39	101.6	3.72	29.17	6.25	121.3	3	3	-	4	4	-	✓
W 12 x 6.5 x 26	26	8527	550.1	611.8	13.12	19.64	726.8	88.10	134.8	3.83	34.61	12.76	163.7	1	2	-	4	4	-	✓
W 12 x 6.5 x 30	30	9934	634.8	708.3	13.21	22.26	854.7	103.0	157.8	3.88	38.37	19.30	194.4	1	1	-	3	4	-	✓
W 12 x 6.5 x 35	35	11851	747.7	838.5	13.32	25.81	1026	122.9	188.6	3.92	43.39	31.10	236.4	1	1	-	2	4	-	✓

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

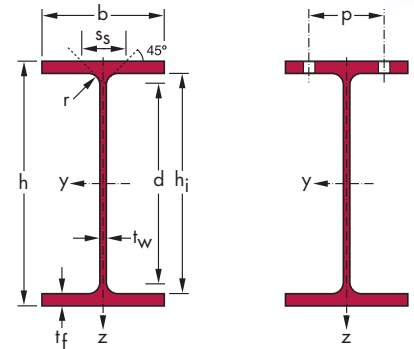
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)	Dimensions Abmessungen							Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche	
G kg/m	h mm	b mm	t _w mm	t _f mm	r mm	A mm ²		h _i mm	d mm	Ø	P _{min} mm	P _{max} mm	A _L m ² /m	A _G m ² /t
						x 10 ²								
W 310 x 200 x 60 ⁺	60.0	303	203	7.5	13.1	15	76.10	276.8	246.8	M27	90	113	1.38	23.12
W 310 x 200 x 67 ⁺	67.0	306	204	8.5	14.6	15	85.20	276.8	246.8	M27	90	114	1.39	20.75
W 310 x 200 x 74 ⁺	74.0	310	205	9.4	16.3	15	94.80	277.4	247.4	M27	90	115	1.40	18.74
W 310 x 250 x 79 ⁺	79.0	306	254	8.8	14.6	15	101.0	276.8	246.8	M27	90	164	1.58	20.09
W 310 x 250 x 86 ⁺	86.0	310	254	9.1	16.3	15	110.0	277.4	247.4	M27	90	164	1.59	18.44
W 310 x 310 x 97 ^{+/+}	97.0	308	305	9.9	15.4	15	123.0	277.2	247.2	M27	102	200	1.79	18.50
W 310 x 310 x 107 ⁺	107	311	306	10.9	17	15	136.0	277	247	M27	104	200	1.80	16.83
W 310 x 310 x 117 ⁺	117	314	307	11.9	18.7	15	150.0	276.6	246.6	M27	106	202	1.81	15.38
W 310 x 310 x 129 ⁺	129	318	308	13.1	20.6	15	165.0	276.8	246.8	M27	106	202	1.82	14.01
W 310 x 310 x 143 ⁺	143	323	309	14	22.9	15	182.0	277.2	247.2	M27	108	204	1.83	12.78
W 310 x 310 x 158 ⁺	158	327	310	15.5	25.1	15	201.0	276.8	246.8	M27	108	204	1.84	11.68
W 310 x 310 x 179 ⁺	179	333	313	18	28.1	15	228.0	276.8	246.8	M27	112	208	1.86	10.39
W 310 x 310 x 202 ⁺	202	341	315	20.1	31.8	15	257.0	277.4	247.4	M27	114	210	1.88	9.26
W 310 x 310 x 226 ⁺	226	348	317	22.1	35.6	15	288.0	276.8	246.8	M27	116	212	1.89	8.35
W 310 x 310 x 253 ⁺	253	356	319	24.4	39.6	15	323.0	276.8	246.8	M27	118	214	1.91	7.57
W 310 x 310 x 283 ⁺	283	365	322	26.9	44.1	15	360.0	276.8	246.8	M27	120	216	1.94	6.85
W 310 x 310 x 313 ⁺	313	374	325	30	48.3	15	399.0	277.4	247.4	M27	124	220	1.96	6.26
W 310 x 310 x 342 ⁺	342	382	328	32.6	52.6	15	437.0	276.8	246.8	M27	126	222	1.99	5.78
W 360 x 130 x 32.9 ⁺	32.9	349	127	5.8	8.5	10	41.90	332	312	M12	62	70	1.18	35.96
W 360 x 130 x 39.0 ⁺	39.0	353	128	6.5	10.7	10	49.60	331.6	311.6	M12	64	70	1.19	30.38
W 360 x 170 x 44 ⁺	44.6	352	171	6.9	9.8	10	57.10	332.4	312.4	M22	82	84	1.36	30.24
W 360 x 170 x 51 ⁺	51.0	355	171	7.2	11.6	10	64.50	331.8	311.8	M22	84	84	1.36	26.88
W 360 x 170 x 57.8 ⁺	58.0	358	172	7.9	13.1	10	72.30	331.8	311.8	M22	84	84	1.37	24.21
W 360 x 200 x 64 ⁺	64.0	347	203	7.7	13.5	15	81.30	320	290	M27	90	113	1.46	22.93
W 360 x 200 x 72 ⁺	72.0	350	204	8.6	15.1	15	91.00	319.8	289.8	M27	90	114	1.47	20.61
W 360 x 200 x 79 ⁺	79.0	354	205	9.4	16.8	15	101.0	320.4	290.4	M27	90	115	1.48	18.72

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

+ Profilé canadien, tonnage minimum et conditions de livraison nécessitent un accord préalable.

+ Minimum order: 40 t per section and grade or upon agreement.

+ Canadian section, minimum tonnage and delivery conditions upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.

+ Kanadisches Walzprofil, die Mindestmengen pro Bestellung sowie die Lieferbedingungen sind im Voraus zu vereinbaren.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1						A572/A709/A992 A913		
	axe fort y-y strong axis y-y starke Achse y-y						axe faible z-z weak axis z-z schwache Achse z-z							pure bending y-y		pure compression					
	G lbs/ft	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ♦ mm ³	i _y mm	A _{vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ♦ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235	S 355		S 460	
		x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹								
W 12 x 8 x 40	40	12860	848.9	940.7	13.02	27.60	1829	180.2	275.2	4.91	51.27	39.15	383.7	1	1	-	1	3	-	✓	
W 12 x 8 x 45	45	14510	948.4	1057	13.06	31.08	2069	202.8	310.3	4.93	55.27	54.03	438.5	1	1	-	1	2	-	✓	
W 12 x 8 x 50	50	16450	1061	1188	13.17	34.43	2344	228.7	350.2	4.97	59.57	74.05	504.7	1	1	-	1	1	-	✓	
W 12 x 10 x 53	53	17670	1155	1275	13.26	31.95	3990	314.2	477.8	6.30	55.57	65.49	846.5	1	2	-	1	2	-	✓	
W 12 x 10 x 58	58	19850	1280	1417	13.43	33.55	4455	350.8	533.1	6.36	59.27	86.96	960.0	1	1	-	1	2	-	✓	
W 12 x 12 x 65	65	22240	1444	1591	13.43	35.52	7286	477.8	724.7	7.69	58.27	91.50	1559	1	3	3	1	3	3	✓	✓
W 12 x 12 x 72	72	24790	1594	1765	13.49	39.08	8123	530.9	805.8	7.72	62.47	122.1	1754	1	3	3	1	3	3	✓	✓
W 12 x 12 x 79	79	27510	1753	1949	13.56	42.68	9024	587.9	892.8	7.76	66.87	161.1	1966	1	2	3	1	2	3	✓	✓
W 12 x 12 x 87	87	30770	1935	2164	13.65	47.07	10040	651.9	990.9	7.80	71.87	214.5	2218	1	1	2	1	1	2	✓	✓
W 12 x 12 x 96	96	34760	2153	2419	13.81	50.82	11270	729.4	1109	7.86	77.37	288.3	2535	1	1	1	1	1	1	✓	✓
W 12 x 12 x 106	106	38630	2363	2672	13.88	56.26	12470	804.8	1225	7.89	83.27	380.3	2840	1	1	1	1	1	1	✓	✓
W 12 x 12 x 120	120	44530	2675	3053	13.99	65.24	14380	918.7	1401	7.95	91.77	543.7	3338	1	1	1	1	1	1	✓	✓
W 12 x 12 x 136	136	51982	3049	3510	14.19	73.62	16588	1053	1608	8.02	101.3	782.7	3959	1	1	1	1	1	1	✓	✓
W 12 x 12 x 152	152	59560	3423	3975	14.36	81.65	18930	1194	1825	8.10	110.9	1089	4611	1	1	1	1	1	1	✓	✓
W 12 x 12 x 170	170	68230	3833	4490	14.55	91.01	21460	1346	2059	8.16	121.2	1495	5362	1	1	1	1	1	1	✓	✓
W 12 x 12 x 190	190	78680	4311	5098	14.78	101.5	24590	1527	2340	8.26	132.7	2062	6317	1	1	1	1	1	1	✓	✓
W 12 x 12 x 210	210	89560	4789	5716	14.98	114.1	27700	1705	2617	8.33	144.2	2742	7329	1	1	1	1	1	1	✓	✓
W 12 x 12 x 230	230	100510	5262	6334	15.16	125.1	31020	1892	2907	8.42	155.4	3552	8392	1	1	1	1	1	1	✓	✓
W 14 x 5 x 22	22	8258	473.2	541.5	14.07	22.31	291.0	45.82	71.80	2.64	34.52	8.65	84.11	1	1	-	4	4	-	✓	
W 14 x 5 x 26	26	10231	579.7	661.5	14.33	25.25	375.0	58.60	91.60	2.74	39.62	15.04	109.6	1	1	-	4	4	-	✓	
W 14 x 6.75 x 30	30	12140	690.1	777.0	14.57	26.29	817.9	95.66	147.7	3.78	38.18	16.10	239.1	1	2	-	4	4	-	✓	
W 14 x 6.75 x 34	34	14130	796.3	894.5	14.80	28.04	968.1	113.2	174.4	3.87	42.16	23.92	285.0	1	1	-	4	4	-	✓	
W 14 x 6.75 x 38	38	16040	896.2	1009	14.91	30.73	1113	129.4	199.5	3.93	45.82	33.46	330.4	1	1	-	3	4	-	✓	
W 14 x 8 x 43	43	17830	1027	1141	14.80	31.66	1885	185.7	284.3	4.81	52.27	43.21	523.4	1	1	-	2	4	-	✓	
W 14 x 8 x 48	48	20100	1149	1282	14.86	35.26	2140	209.8	321.6	4.85	56.37	59.71	599.1	1	1	-	2	3	-	✓	
W 14 x 8 x 53	53	22650	1280	1433	14.98	38.67	2416	235.7	361.6	4.89	60.57	80.72	685.7	1	1	-	1	2	-	✓	

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

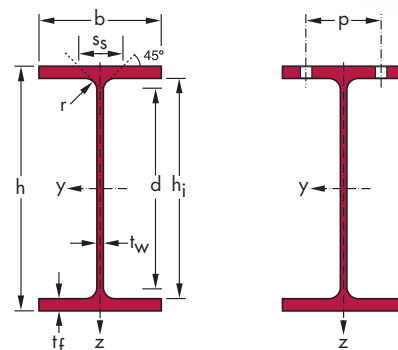
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)		Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche	
G kg/m		h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	p _{min} mm	p _{max} mm	A _L m ² /m	A _G m ² /t
							x 10 ²							
W 360 x 250 x 91 ⁺	91.0	353	254	9.5	16.4	15	115.0	320.2	290.2	M27	90	164	1.68	18.47
W 360 x 250 x 101 ⁺	101	357	255	10.5	18.3	15	129.0	320.4	290.4	M27	90.5	165	1.69	16.67
W 360 x 250 x 110 ⁺	110	360	256	11.4	19.9	15	141.0	320.2	290.2	M27	91.4	166	1.70	15.39
W 360 x 250 x 122 ⁺	122	363	257	13	21.7	15	155.0	319.6	289.6	M27	93	167	1.71	13.99
W 360 x 370 x 134 ⁺	134	356	369	11.2	18	15	171.0	320	290	M27	100	264	2.14	15.98
W 360 x 370 x 147 ⁺	147	360	370	12.3	19.8	15	188.0	320.4	290.4	M27	100	264	2.15	14.58
W 360 x 370 x 162 ⁺	162	364	371	13.3	21.8	15	206.0	320.4	290.4	M27	102	266	2.16	13.34
W 360 x 370 x 179 ⁺	179	368	373	15	23.9	15	228.0	320.2	290.2	M27	104	268	2.17	12.12
W 360 x 370 x 196 ⁺	196	372	374	16.4	26.2	15	250.0	319.6	289.6	M27	104	268	2.18	11.10
W 360 x 410 x 216 ⁺	216	375	394	17.3	27.7	15	275.0	319.6	289.6	M27	106	288	2.27	10.48
W 360 x 410 x 237 ⁺	237	380	395	18.9	30.2	15	301.0	319.6	289.6	M27	108	290	2.28	9.64
W 360 x 410 x 262 ⁺	262	387	398	21.1	33.3	15	334.0	320.4	290.4	M27	110	292	2.30	8.75
W 360 x 410 x 287 ⁺	287	393	399	22.6	36.6	15	366.0	319.8	289.8	M27	112	294	2.31	8.04
W 360 x 410 x 314 ⁺	314	399	401	24.9	39.6	15	400.0	319.8	289.8	M27	114	296	2.33	7.42
W 360 x 410 x 347 ⁺	347	407	404	27.2	43.7	15	442.0	319.6	289.6	M27	116	298	2.35	6.77
W 360 x 410 x 382 ⁺	382	416	406	29.8	48	15	488.0	320	290	M27	118	300	2.37	6.20
W 360 x 410 x 421 ⁺	421	425	409	32.8	52.6	15	537.0	319.8	289.8	M27	122	304	2.39	5.68
W 360 x 410 x 463 ⁺	463	435	412	35.8	57.4	15	590.0	320.2	290.2	M27	124	306	2.42	5.23
W 360 x 410 x 509 ⁺	509	446	416	39.1	62.7	15	652.0	320.6	290.6	M27	128	310	2.45	4.81
W 360 x 410 x 551 ⁺	551	455	418	42	67.6	15	703.0	319.8	289.8	M27	132	312	2.47	4.49
W 360 x 410 x 592 ⁺	592	465	421	45	72.3	15	755.0	320.4	290.4	M27	134	316	2.50	4.22
W 360 x 410 x 634 ⁺	634	474	424	47.6	77.1	15	806.0	319.8	289.8	M27	140	312	2.52	3.98
W 360 x 410 x 677 ⁺	677	483	428	51.2	81.5	15	865.0	320	290	M27	144	316	2.55	3.76
W 360 x 410 x 744 ⁺	744	498	432	55.6	88.9	15	948.0	320.2	290.2	M27	148	320	2.59	3.48
W 360 x 410 x 818 ⁺	818	514	437	60.5	97	15	1050	320	290	M27	154	326	2.63	3.21
W 360 x 410 x 900 ⁺	900	531	442	65.9	106	15	1150	319	289	M27	158	330	2.67	2.96
W 360 x 410 x 990 ⁺	990	550	448	71.9	115	15	1260	320	290	M27	164	336	2.72	2.75
W 360 x 410 x 1086 ⁺	1086	569	454	78	125	15	1390	319	289	M27	170	342	2.77	2.55

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

+ Minimum order: 40 t per section and grade or upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A572/A709/A992	A913		
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z							pure bending y-y		pure compression						
	G lbs/ft	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ⬆ mm ³	i _y mm	A _{vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ⬆ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235			S 355	S 460
		x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹								
W 14 x 10 x 61	61	26690	1512	1676	15.19	38.83	4483	353.0	537.8	6.23	59.87	91.18	1269	1	1	-	1	2	-	✓	
W 14 x 10 x 68	68	30150	1689	1880	15.29	42.98	5062	397.0	605.5	6.27	64.67	125.3	1450	1	1	-	1	2	-	✓	
W 14 x 10 x 74	74	33090	1838	2055	15.36	46.67	5570	435.2	664.2	6.30	68.77	160.3	1609	1	1	-	1	1	-	✓	
W 14 x 10 x 82	82	36530	2013	2266	15.35	52.81	6147	478.4	732.0	6.30	73.97	211.8	1788	1	1	-	1	1	-	✓	
W 14 x 14.5 x 90	90	41510	2332	2562	15.60	45.19	15080	817.3	1237	9.40	64.77	168.8	4305	2	3	3	2	3	3	✓	✓
W 14 x 14.5 x 99	99	46290	2572	2838	15.70	49.72	16720	903.9	1369	9.43	69.47	223.7	4836	1	3	3	1	3	3	✓	✓
W 14 x 14.5 x 109	109	51540	2832	3139	15.81	53.98	18560	1001	1516	9.49	74.47	295.5	5432	1	2	3	1	2	3	✓	✓
W 14 x 14.5 x 120	120	57440	3122	3482	15.86	60.72	20680	1109	1683	9.52	80.37	393.8	6119	1	1	2	1	1	2	✓	✓
W 14 x 14.5 x 132	132	63630	3421	3837	15.94	66.50	22860	1222	1856	9.56	86.37	517.1	6829	1	1	1	1	1	1	✓	✓
W 14 x 16 x 145	145	71140	3794	4262	16.07	70.32	28250	1434	2176	10.13	90.27	637.3	8515	1	1	1	1	1	1	✓	✓
W 14 x 16 x 159	159	78780	4146	4686	16.18	77.10	31040	1572	2387	10.16	96.87	825.5	9489	1	1	1	1	1	1	✓	✓
W 14 x 16 x 176	176	89410	4620	5260	16.35	86.55	35020	1760	2676	10.23	105.3	1116	10940	1	1	1	1	1	1	✓	✓
W 14 x 16 x 193	193	99710	5074	5813	16.50	93.46	38780	1944	2957	10.29	113.4	1464	12300	1	1	1	1	1	1	✓	✓
W 14 x 16 x 211	211	110200	5525	6374	16.62	103.3	42600	2125	3236	10.33	121.7	1870	13740	1	1	1	1	1	1	✓	✓
W 14 x 16 x 233	233	124900	6140	7139	16.81	113.9	48090	2380	3629	10.43	132.2	2510	15850	1	1	1	1	1	1	✓	✓
W 14 x 16 x 257	257	141300	6794	7965	17.03	126.0	53620	2641	4031	10.49	143.4	3326	18130	1	1	1	1	1	1	✓	✓
W 14 x 16 x 283	283	159600	7510	8880	17.24	139.9	60080	2938	4489	10.58	155.6	4398	20800	1	1	1	1	1	1	✓	✓
W 14 x 16 x 311	311	180200	8283	9878	17.48	154.3	67040	3254	4978	10.66	168.2	5735	23850	1	1	1	1	1	1	✓	✓
W 14 x 16 x 342	342	204500	9172	11030	17.75	170.6	75400	3625	5552	10.78	182.1	7513	27630	1	1	1	1	1	1	✓	✓
W 14 x 16 x 370	370	226100	9939	12050	17.95	184.9	82490	3947	6051	10.85	194.8	9410	30870	1	1	1	1	1	1	✓	✓
W 14 x 16 x 398	398	250200	10760	13140	18.20	200.3	90170	4284	6574	10.93	207.2	11560	34670	1	1	1	1	1	1	✓	✓
W 14 x 16 x 426	426	274200	11570	14220	18.42	214.0	98250	4634	7117	11.03	219.4	14020	38570	1	1	1	1	1	1	✓	✓
W 14 x 16 x 455	455	299500	12400	15350	18.62	231.9	106900	4994	7680	11.13	231.8	16790	42920	1	1	1	1	1	1	✓	✓
W 14 x 16 x 500	500	342100	13740	17170	19.00	256.1	119900	5552	8549	11.25	251.0	21840	49980	1	1	1	1	1	1	✓	✓
W 14 x 16 x 550	550	392200	15260	19260	19.39	283.3	135500	6203	9561	11.40	272.1	28510	58650	1	1	1	1	1	1	✓	✓
W 14 x 16 x 605	605	450200	16960	21620	19.79	313.8	153300	6938	10710	11.55	295.5	37350	68890	1	1	1	1	1	1	✓	✓
W 14 x 16 x 665	665	518900	18870	24280	20.27	349.2	173400	7739	11960	11.72	319.5	48210	81530	1	1	1	1	1	1	✓	✓
W 14 x 16 x 730	730	595700	20940	27210	20.73	385.8	196200	8645	13380	11.90	345.6	62290	96080	1	1	1	1	1	1	✓	✓

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

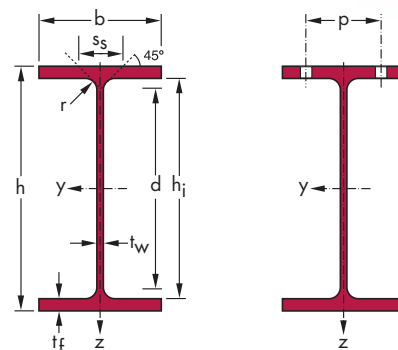
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)	Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche		
G kg/m	h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	P _{min} mm	P _{max} mm	A _L m ² /m	A _G m ² /t	
						x 10 ²								
W 410 x 140 x 38.8 ⁺	38.8	399	140	6.4	8.8	10	49.50	381.4	361.4	M12	68	82	1.33	34.03
W 410 x 140 x 46.1 ⁺	46.1	403	140	7	11.2	10	58.80	380.6	360.6	M12	68	82	1.33	28.91
W 410 x 180 x 53 ⁺	53.0	403	177	7.5	10.9	10	68.40	381.2	361.2	M22	86	90	1.48	27.76
W 410 x 180 x 60 ⁺	60.0	407	178	7.7	12.8	10	76.10	381.4	361.4	M22	86	90	1.49	25.10
W 410 x 180 x 67 ⁺	67.0	410	179	8.8	14.4	10	85.80	381.2	361.2	M22	86	92	1.50	22.29
W 410 x 180 x 75 ⁺	75.0	413	180	9.7	16	10	94.80	381	361	M22	88	92	1.51	20.19
W 410 x 180 x 85 ⁺	85.0	417	181	10.9	18.2	10	108.0	380.6	360.6	M22	90	94	1.52	17.87
W 410 x 260 x 100 ⁺	100	415	260	10	16.9	10	127.0	381.2	361.2	M27	90	170	1.83	18.41
W 410 x 260 x 114 ⁺	114	420	261	11.6	19.3	10	146.0	381.4	361.4	M27	91.6	171	1.84	16.10
W 410 x 260 x 132 ⁺	132	425	263	13.3	22.2	10	169.0	380.6	360.6	M27	93.3	173	1.86	14.07
W 410 x 260 x 149 ⁺	149	431	265	14.9	25	10	190.0	381	361	M27	94.9	175	1.88	12.56
W 460 x 150 x 52 ⁺	52.0	450	152	7.6	10.8	10	66.50	428.4	408.4	M16	76	82	1.48	28.37
W 460 x 150 x 60 ⁺	60.0	455	153	8	13.3	10	76.10	428.4	408.4	M16	76	84	1.49	25.01
W 460 x 150 x 68 ⁺	68.0	459	154	9.1	15.4	10	87.10	428.2	408.2	M16	78	84	1.50	21.88
W 460 x 190 x 61 ^{+/+}	61.0	450	189	8.1	10.8	10	76.40	428.4	408.4	M24	92	96	1.62	27.06
W 460 x 190 x 67 ^{+/+}	67.0	454	190	8.5	12.7	10	85.50	428.6	408.6	M24	92	96	1.63	24.33
W 460 x 190 x 74 ⁺	74.0	457	190	9	14.5	10	94.80	428	408	M24	92	96	1.64	22.08
W 460 x 190 x 82 ⁺	82.0	460	191	9.9	16	10	105.0	428	408	M24	92	98	1.65	20.10
W 460 x 190 x 89 ⁺	89.0	463	192	10.5	17.7	10	114.0	427.6	407.6	M24	94	98	1.66	18.52
W 460 x 190 x 97 ⁺	97.0	466	193	11.4	19	10	123.0	427.8	407.8	M24	94	100	1.66	17.17
W 460 x 190 x 106 ⁺	106	469	194	12.6	20.6	10	134.0	427.8	407.8	M24	96	100	1.67	15.83

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

♦ Profilé canadien, tonnage minimum et conditions de livraison nécessitent un accord préalable.

+ Minimum order: 40 t per section and grade or upon agreement.

♦ Canadian section, minimum tonnage and delivery conditions upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.

♦ Kanadisches Walzprofil, die Mindestmengen pro Bestellung sowie die Lieferbedingungen sind im Voraus zu vereinbaren.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A572/A709/A992	A913		
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z							pure bending yy		pure compression						
	G lbs/ft	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ⬆ mm ³	i _y mm	A _{Vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ⬆ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235			S 355	S 460
	x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹									
W 16 x 5.5 x 26	26	12620	632.6	727.8	15.93	27.40	403.5	57.65	90.55	2.85	35.67	11.17	153.2	1	1	-	4	4	-	✓	
W 16 x 5.5 x 31	31	15550	771.9	883.6	16.26	30.49	513.6	73.37	114.9	2.95	41.11	19.25	196.6	1	1	-	4	4	-	✓	
W 16 x 7 x 36	36	18600	922.9	1045	16.54	32.41	1009	114.0	176.6	3.85	41.01	22.75	387.2	1	1	-	4	4	-	✓	
W 16 x 7 x 40	40	21570	1060	1194	16.87	33.77	1205	135.4	209.0	3.99	45.02	32.81	467.4	1	1	-	4	4	-	✓	
W 16 x 7 x 45	45	24530	1196	1354	16.91	38.39	1379	154.1	238.6	4.01	49.28	46.90	538.5	1	1	-	3	4	-	✓	
W 16 x 7 x 50	50	27460	1330	1510	16.98	42.37	1559	173.2	268.7	4.05	53.37	63.79	612.8	1	1	-	2	4	-	✓	
W 16 x 7 x 57	57	31530	1512	1725	17.06	48.05	1803	199.3	310.1	4.08	59.04	93.24	715.2	1	1	-	2	3	-	✓	
W 16 x 10.25 x 67	67	39760	1916	2129	17.70	44.05	4954	381.1	581.4	6.25	55.52	99.70	1961	1	1	-	2	4	-	✓	
W 16 x 10.25 x 77	77	46140	2197	2456	17.79	51.20	5725	438.7	670.9	6.27	61.92	149.4	2296	1	1	-	1	3	-	✓	
W 16 x 10.25 x 89	89	53830	2533	2850	17.89	58.87	6739	512.5	785.4	6.33	69.42	227.1	2730	1	1	-	1	2	-	✓	
W 16 x 10.25 x 100	100	61840	2870	3247	18.04	66.35	7765	586.1	899.8	6.39	76.62	324.1	3195	1	1	-	1	1	-	✓	
W 18 x 6 x 35	35	21200	942.0	1088	17.89	36.40	634.0	83.43	131.5	3.09	40.92	21.24	304.8	1	1	-	4	4	-	✓	
W 18 x 6 x 40	40	25480	1120	1284	18.33	38.85	796.1	104.1	163.1	3.24	46.32	33.58	387.2	1	1	-	4	4	-	✓	
W 18 x 6 x 46	46	29680	1293	1487	18.44	44.31	940.5	122.1	192.1	3.28	51.62	51.07	461.2	1	1	-	4	4	-	✓	
W 18 x 7.5 x 41	41	25380	1128	1286	18.23	38.59	1217.5	128.8	200.5	3.99	41.42	26.02	586.0	1	2	-	4	4	-	✓	
W 18 x 7.5 x 45	45	29470	1298	1473	18.56	40.91	1454.4	153.1	237.5	4.12	45.62	37.46	706.8	1	1	-	4	4	-	✓	
W 18 x 7.5 x 50	50	33260	1456	1650	18.75	43.67	1661	174.8	271.0	4.19	49.74	52.03	811.4	1	1	-	4	4	-	✓	
W 18 x 7.5 x 55	55	37000	1608	1829	18.83	48.06	1862	195.0	303.0	4.22	53.63	69.55	915.7	1	1	-	3	4	-	✓	
W 18 x 7.5 x 60	60	40960	1769	2013	18.96	51.33	2093	218.0	338.8	4.29	57.66	91.36	1035	1	1	-	3	4	-	✓	
W 18 x 7.5 x 65	65	44680	1917	2189	19.02	55.76	2282	237.8	370.4	4.31	61.35	113.9	1137	1	1	-	2	4	-	✓	
W 18 x 7.5 x 71	71	48790	2081	2385	19.04	61.34	2515	259.2	405.3	4.32	65.49	146.6	1260	1	1	-	1	3	-	✓	

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

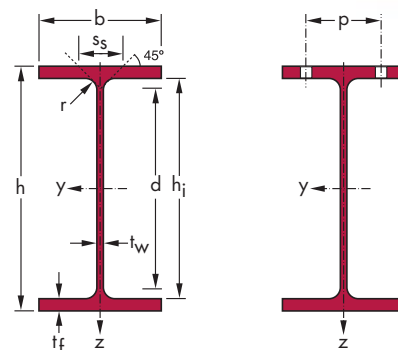
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)		Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche	
G kg/m		h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	p _{min} mm	p _{max} mm	A _L m ² /m	A _G m ² /t
							x 10 ²							
W 460 x 280 x 113 ⁺	113	463	280	10.8	17.3	10	144.0	428.4	408.4	M27	90	174	2.01	17.76
W 460 x 280 x 128 ⁺	128	467	282	12.2	19.6	10	163.0	427.8	407.8	M27	90	176	2.02	15.74
W 460 x 280 x 144 ⁺	144	472	283	13.6	22.1	10	184.0	427.8	407.8	M27	92	178	2.03	14.06
W 460 x 280 x 158 ⁺	158	476	284	15	23.9	10	201.0	428.2	408.2	M27	94	178	2.04	12.95
W 460 x 280 x 177 ⁺	177	482	286	16.6	26.9	10	226.0	428.2	408.2	M27	94	180	2.06	11.60
W 460 x 280 x 193 ⁺	193	489	283	17	30.5	10	247.0	428	408	M27	97	193	2.06	10.65
W 460 x 280 x 213 ⁺	213	495	285	18.5	33.5	10	271.0	428	408	M27	98.5	195	2.08	9.76
W 460 x 280 x 235 ⁺	235	501	287	20.6	36.6	10	299.0	427.8	407.8	M27	100.6	197	2.09	8.90
W 460 x 280 x 260 ⁺	260	509	289	22.6	40.4	10	331.0	428.2	408.2	M27	102.6	199	2.11	8.12
W 530 x 165 x 66 ⁺	66.0	525	165	8.9	11.4	13	83.90	502.2	476.2	M22	88.9	93	1.67	25.40
W 530 x 165 x 74 ⁺	74.0	529	166	9.7	13.6	13	94.80	501.8	475.8	M22	89.7	94	1.68	22.47
W 530 x 165 x 85 ⁺	85.0	535	166	10.3	16.5	13	108.0	502	476	M22	90.3	94	1.69	19.96
W 530 x 210 x 92 ⁺	92.0	533	209	10.2	15.6	13	118.0	501.8	475.8	M27	94	104	1.86	20.13
W 530 x 210 x 101 ⁺	101	537	210	10.9	17.4	13	129.0	502.2	476.2	M27	94	104	1.87	18.41
W 530 x 210 x 109 ⁺	109	539	211	11.6	18.8	13	139.0	501.4	475.4	M27	96	106	1.88	17.23
W 530 x 210 x 123 ⁺	123	544	212	13.1	21.2	13	157.0	501.6	475.6	M27	96	106	1.89	15.32
W 530 x 210 x 138 ⁺	138	549	214	14.7	23.6	13	176.0	501.8	475.8	M27	98	108	1.90	13.74
W 530 x 315 x 150 ⁺	150	543	312	12.7	20.3	13	192.0	502.4	476.4	M27	92.7	222	2.28	15.18
W 530 x 315 x 165 ⁺	165	546	313	14	22.2	13	211.0	501.6	475.6	M27	94	223	2.29	13.87
W 530 x 315 x 182 ⁺	182	551	315	15.2	24.4	13	232.0	502.2	476.2	M27	95.2	225	2.30	12.71
W 530 x 315 x 196 ⁺	196	554	316	16.5	26.3	13	250.0	501.4	475.4	M27	96.5	226	2.31	11.79
W 530 x 315 x 219 ⁺	219	560	318	18.3	29.2	13	279.0	501.6	475.6	M27	98.3	228	2.33	10.65
W 530 x 315 x 248 ⁺	248	571	315	19	34.5	13	315.0	502	476	M27	99	225	2.34	9.49
W 530 x 315 x 272 ⁺	272	577	318	21.1	37.6	13	346.0	501.8	475.8	M27	101.1	228	2.36	8.68
W 530 x 315 x 300 ⁺	300	585	319	23.1	41.4	13	382.0	502.2	476.2	M27	103.1	229	2.38	7.94
W 610 x 180 x 82 ⁺	82.0	599	178	10	12.8	13	105.0	573.4	547.4	M24	90	100	1.87	22.80
W 610 x 180 x 92 ⁺	92.0	603	179	10.9	15	13	117.0	573	547	M24	90.9	101	1.88	20.34

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

+ Minimum order: 40 t per section and grade or upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A572/A709/A992 A913		
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z							pure bending y-y		pure compression					
	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ⬆ mm ³	i _y mm	A _{vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ⬆ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235	S 355		S 460	
G lbs/ft																				
	x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹								
W 18 x 11 x 76	76	55600	2402	2673	19.65	52.45	6335	452.5	691.3	6.63	57.12	118.8	3143	1	1	-	2	4	-	✓
W 18 x 11 x 86	86	63690	2728	3049	19.73	59.32	7333	520.1	795.9	6.70	63.11	172.6	3666	1	1	-	2	3	-	✓
W 18 x 11 x 97	97	72600	3076	3454	19.86	66.42	8358	590.7	905.5	6.74	69.51	245.5	4224	1	1	-	1	2	-	✓
W 18 x 11 x 106	106	79620	3346	3774	19.91	73.41	9137	643.5	988.7	6.75	74.51	314.1	4662	1	1	-	1	2	-	✓
W 18 x 11 x 119	119	91040	3777	4282	20.07	81.97	10510	734.7	1131	6.82	82.16	445.2	5431	1	1	-	1	1	-	✓
W 18 x 11 x 130	130	102400	4186	4754	20.39	84.90	11540	815.5	1253	6.85	89.72	607.3	6055	1	1	-	1	1	-	✓
W 18 x 11 x 143	143	114300	4619	5272	20.54	92.94	12950	908.7	1398	6.91	97.22	803.3	6882	1	1	-	1	1	-	✓
W 18 x 11 x 158	158	127300	5083	5839	20.63	103.8	14450	1007	1554	6.95	105.5	1059	7775	1	1	-	1	1	-	✓
W 18 x 11 x 175	175	143700	5646	6525	20.83	114.8	16300	1128	1743	7.01	115.1	1423	8922	1	1	-	1	1	-	✓
W 21 x 6.5 x 44	44	35100	1337	1563	20.47	50.13	857.3	103.9	166.2	3.20	46.93	33.29	562.9	1	1	-	4	4	-	✓
W 21 x 6.5 x 50	50	41100	1554	1810	20.77	54.98	1042	125.5	200.3	3.31	52.13	49.20	688.6	1	1	-	4	4	-	✓
W 21 x 6.5 x 57	57	48580	1816	2105	21.22	59.15	1264	152.2	241.8	3.42	58.53	74.55	845.5	1	1	-	4	4	-	✓
W 21 x 8.25 x 62	62	55240	2073	2362	21.67	58.07	2379	227.7	354.8	4.50	56.59	76.96	1589	1	1	-	4	4	-	✓
W 21 x 8.25 x 68	68	61760	2300	2623	21.85	62.72	2692	256.4	399.9	4.56	60.95	102.9	1813	1	1	-	4	4	-	✓
W 21 x 8.25 x 73	73	66730	2476	2826	21.93	66.47	2951	279.7	436.5	4.61	64.39	127.4	1991	1	1	-	3	4	-	✓
W 21 x 8.25 x 83	83	76100	2798	3208	22.02	75.34	3377	318.6	499.2	4.64	70.71	182.3	2300	1	1	-	2	4	-	✓
W 21 x 8.25 x 93	93	86160	3139	3617	22.10	84.98	3870	361.7	569.1	4.68	77.16	254.0	2660	1	1	-	1	3	-	✓
W 21 x 12.5 x 101	101	100900	3716	4148	22.93	73.11	10290	659.3	1010	7.32	68.53	218.2	7019	1	1	-	2	4	-	✓
W 21 x 12.5 x 111	111	111000	4066	4556	22.95	80.55	11360	725.8	1113	7.34	73.63	286.2	7782	1	1	-	2	3	-	✓
W 21 x 12.5 x 122	122	123600	4486	5042	23.10	87.84	12730	808.1	1241	7.41	79.23	377.6	8812	1	1	-	1	3	-	✓
W 21 x 12.5 x 132	132	134000	4839	5459	23.14	95.36	13850	876.7	1349	7.44	84.33	474.6	9629	1	1	-	1	2	-	✓
W 21 x 12.5 x 147	147	151100	5396	6116	23.27	106.2	15680	986.0	1520	7.50	91.93	649.7	11020	1	1	-	1	1	-	✓
W 21 x 12.5 x 166	166	177500	6219	7063	23.77	112.4	18000	1143	1759	7.57	103.2	985.6	12930	1	1	-	1	1	-	✓
W 21 x 12.5 x 182	182	197300	6840	7814	23.87	125.0	20190	1270	1959	7.63	111.5	1293	14660	1	1	-	1	1	-	✓
W 21 x 12.5 x 201	201	220800	7548	8672	24.05	137.8	22450	1408	2176	7.67	121.1	1718	16550	1	1	-	1	1	-	✓
W 24 x 7 x 55	55	56030	1871	2199	23.17	63.40	1209	135.8	218.3	3.40	50.83	50.58	1034	1	1	-	4	4	-	✓
W 24 x 7 x 62	62	64680	2145	2515	23.45	69.44	1441	161.0	258.5	3.50	56.13	72.81	1239	1	1	-	4	4	-	✓

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

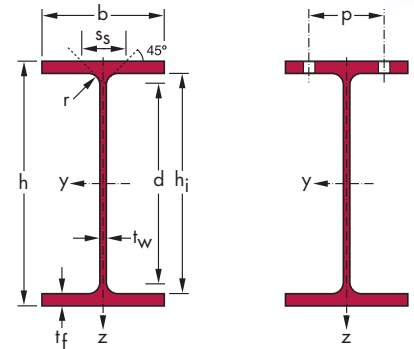
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)	Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche		
G kg/m	h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	P _{min} mm	P _{max} mm	A _L m ² /m	A _G m ² /t	
						x 10 ²								
W 610 x 230 x 101 ⁺	101	603	228	10.5	14.9	13	130.0	573.2	547.2	M27	94	122	2.07	20.36
W 610 x 230 x 113 ⁺	113	608	228	11.2	17.3	13	145.0	573.4	547.4	M27	94	122	2.08	18.37
W 610 x 230 x 125 ⁺	125	612	229	11.9	19.6	13	159.0	572.8	546.8	M27	96	124	2.09	16.71
W 610 x 230 x 140 ⁺	140	617	230	13.1	22.2	13	179.0	572.6	546.6	M27	96	124	2.11	15.03
W 610 x 230 x 153 ⁺	153	623	229	14	24.9	13	196.0	573.2	547.2	M27	94	139	2.12	13.74
W 610 x 325 x 155 ^{+/+}	155	611	324	12.7	19	13	197.0	573	547	M27	96	218	2.47	15.95
W 610 x 325 x 174 ⁺	174	616	325	14	21.6	13	222.0	572.8	546.8	M27	98	220	2.48	14.24
W 610 x 325 x 195 ⁺	195	622	327	15.4	24.4	13	248.0	573.2	547.2	M27	98	222	2.50	12.77
W 610 x 325 x 217 ⁺	217	628	328	16.5	27.7	13	277.0	572.6	546.6	M27	100	222	2.51	11.53
W 610 x 325 x 241 ⁺	241	635	329	17.1	31	13	308.0	573	547	M27	100	224	2.53	10.62
W 610 x 325 x 262 ⁺	262	641	327	19	34	13	333.0	573	547	M27	102	222	2.53	9.69
W 610 x 325 x 285 ⁺	285	647	329	20.6	37.1	13	361.0	572.8	546.8	M27	104	224	2.55	8.92
W 610 x 325 x 341 ⁺	341	661	333	24.4	43.9	13	434.0	573.2	547.2	M27	108	228	2.58	7.59
W 610 x 325 x 415 ⁺	415	679	338	29.5	53.1	13	529.0	572.8	546.8	M27	114	232	2.63	6.33
W 610 x 325 x 455 ⁺	455	689	340	32	57.9	13	579.0	573.2	547.2	M27	116	234	2.65	5.84
W 610 x 325 x 498 ⁺	498	699	343	35.1	63	13	635.0	573	547	M27	120	238	2.68	5.37
W 610 x 325 x 551	551	711	347	38.6	69.1	13	702.0	572.8	546.8	M27	122	242	2.71	4.92
W 690 x 250 x 125 ⁺	125	678	253	11.7	16.3	15	160.0	645.4	615.4	M27	100	148	2.32	18.47
W 690 x 250 x 140 ⁺	140	684	254	12.4	18.9	15	179.0	646.2	616.2	M27	100	148	2.33	16.69
W 690 x 250 x 152 ⁺	152	688	254	13.1	21.1	15	194.0	645.8	615.8	M27	102	148	2.34	15.39
W 690 x 250 x 170 ⁺	170	693	256	14.5	23.6	15	216.0	645.8	615.8	M27	102	150	2.36	13.86
W 690 x 250 x 192 ⁺	192	702	254	15.5	27.9	15	244.0	646.2	616.2	M27	104	148	2.36	12.35
W 760 x 265 x 147 ⁺	147	753	265	13.2	17	17	188.0	719	685	M27	106	160	2.51	17.06
W 760 x 265 x 161 ⁺	161	758	266	13.8	19.3	17	205.0	719.4	685.4	M27	106	160	2.52	15.72
W 760 x 265 x 173 ⁺	173	762	267	14.4	21.6	17	221.0	718.8	684.8	M27	106	162	2.53	14.58
W 760 x 265 x 185 ⁺	185	766	267	14.9	23.6	17	235.0	718.8	684.8	M27	106	162	2.54	13.74
W 760 x 265 x 196 ⁺	196	770	268	15.6	25.4	17	251.0	719.2	685.2	M27	108	162	2.55	12.96
W 760 x 265 x 220 ⁺	220	779	266	16.5	30	17	281.0	719	685	M27	108	160	2.56	11.62

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

♦ Profilé canadien, tonnage minimum et conditions de livraison nécessitent un accord préalable.

+ Minimum order: 40 t per section and grade or upon agreement.

♦ Canadian section, minimum tonnage and delivery conditions upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.

♦ Kanadisches Walzprofil, die Mindestmengen pro Bestellung sowie die Lieferbedingungen sind im Voraus zu vereinbaren.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A572/A709/A992	A913		
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z							pure bending yy		pure compression						
	G lbs/ft	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ⬆ mm ³	i _y mm	A _{Vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ⬆ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235			S 355	S 460
	x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹									
W 24 x 9 x 68	68	76470	2536	2905	24.27	67.31	2950	258.8	404.4	4.77	55.57	79.88	2545	1	1	-	4	4	-	✓	
W 24 x 9 x 76	76	87570	2881	3290	24.62	71.99	3425	300.5	468.8	4.87	61.01	113.3	2981	1	1	-	4	4	-	✓	
W 24 x 9 x 84	84	98650	3224	3679	24.86	77.28	3932	343.4	535.6	4.96	66.37	156.0	3442	1	1	1	4	4	4	✓	✓
W 24 x 9 x 94	94	111990	3630	4150	25.05	85.02	4514	392.5	613.1	5.03	72.71	220.0	3982	1	1	1	3	4	4	✓	✓
W 24 x 9 x 103	103	125200	4019	4602	25.29	91.66	4998	436.5	682.4	5.05	79.03	297.5	4457	1	1	1	3	4	4	✓	✓
W 24 x 12.75 x 104	104	129000	4222	4728	25.57	81.57	10780	666.0	1022	7.39	65.93	197.7	9437	1	2	3	4	4	4	✓	✓
W 24 x 12.75 x 117	117	147200	4778	5362	25.74	90.28	12370	761.0	1170	7.46	72.43	283.2	10920	1	1	2	3	4	4	✓	✓
W 24 x 12.75 x 131	131	167900	5398	6074	25.95	99.83	14240	871.0	1340	7.56	79.43	400.9	12700	1	1	1	2	4	4	✓	✓
W 24 x 12.75 x 146	146	190800	6076	6848	26.21	107.7	16310	995.0	1531	7.67	87.13	564.6	14680	1	1	1	2	3	4	✓	✓
W 24 x 12.75 x 162	162	214200	6746	7605	26.57	112.8	18430	1120	1721	7.79	94.33	758.6	16780	1	1	1	1	3	4	✓	✓
W 24 x 12.75 x 176	176	235990	7363	8349	26.63	125.6	19850	1214	1871	7.72	102.2	998.1	18250	1	1	1	1	2	3	✓	✓
W 24 x 12.75 x 192	192	260700	8059	9175	26.78	136.7	22060	1341	2071	7.79	110.0	1295	20480	1	1	1	1	1	2	✓	✓
W 24 x 12.75 x 229	229	318300	9630	11070	27.09	163.4	27090	1627	2522	7.90	127.4	2153	25720	1	1	1	1	1	1	✓	✓
W 24 x 12.75 x 279	279	399800	11780	13690	27.48	199.9	34300	2030	3160	8.05	150.9	3824	33470	1	1	1	1	1	1	✓	✓
W 24 x 12.75 x 306	306	444520	12903	15093	27.72	218.5	38090	2241	3496	8.11	163.0	4948	37770	1	1	1	1	1	1	✓	✓
W 24 x 12.75 x 335	335	494700	14150	16670	27.92	241.1	42580	2483	3885	8.19	176.3	6420	42850	1	1	1	1	1	1	✓	✓
W 24 x 12.75 x 370	370	557510	15682	18599	28.18	267.2	48400	2790	4377	8.30	192.0	8525	49570	1	1	1	1	1	1	✓	✓
W 27 x 10 x 84	84	118480	3495	4009	27.22	84.24	4410	348.6	545.5	5.25	61.87	119.4	4816	1	1	-	4	4	-	✓	
W 27 x 10 x 94	94	136070	3979	4549	27.64	90.07	5174	407.4	636.4	5.39	67.77	168.4	5709	1	1	-	4	4	-	✓	
W 27 x 10 x 102	102	150600	4378	5002	27.88	95.63	5777	454.9	710.3	5.46	72.87	221.4	6408	1	1	1	4	4	4	✓	✓
W 27 x 10 x 114	114	169930	4904	5618	28.02	106.1	6618	517.0	809.3	5.53	79.27	306.7	7393	1	1	1	4	4	4	✓	✓
W 27 x 10 x 129	129	197900	5639	6457	28.49	114.8	7643	601.8	941.0	5.60	88.87	463.2	8657	1	1	1	3	4	4	✓	✓
W 30 x 10.5 x 99	99	166100	4411	5110	29.76	105.4	5289	399.2	630.8	5.31	67.12	161.5	7141	1	1	-	4	4	-	✓	
W 30 x 10.5 x 108	108	186060	4909	5666	30.17	111.0	6070	456.6	719.7	5.45	72.32	211.7	8259	1	1	1	4	4	4	✓	✓
W 30 x 10.5 x 116	116	205800	5402	6218	30.49	116.4	6873	514.9	809.9	5.57	77.52	273.6	9391	1	1	1	4	4	4	✓	✓
W 30 x 10.5 x 124	124	223000	5821	6691	30.76	121.1	7510	562.5	883.9	5.65	82.02	336.7	10320	1	1	1	4	4	4	✓	✓
W 30 x 10.5 x 132	132	240300	6241	7174	30.95	127.3	8175	610.1	958.8	5.71	86.32	408.9	11290	1	1	1	4	4	4	✓	✓
W 30 x 10.5 x 148	148	278200	7143	8198	31.48	136.3	9440	709.9	1113	5.80	96.42	609.0	13200	1	1	1	3	4	4	✓	✓

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

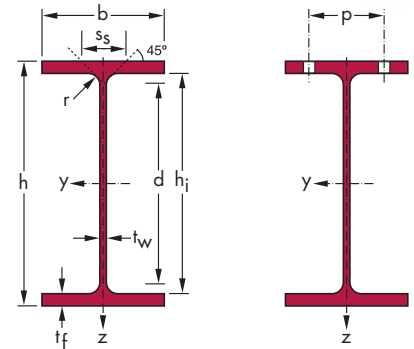
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)	Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche		
G kg/m	h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	P _{min} mm	P _{max} mm	A _L m ² /m	A _G m ² /t	
						x 10 ²								
W 840 x 295 x 176 ⁺	176	835	292	14	18.8	18	224.0	797.4	761.4	M27	108	186	2.78	15.79
W 840 x 295 x 193 ⁺	193	840	292	14.7	21.7	18	247.0	796.6	760.6	M27	108	186	2.79	14.40
W 840 x 295 x 210 ⁺	210	846	293	15.4	24.4	18	268.0	797.2	761.2	M27	110	188	2.80	13.29
W 840 x 295 x 226 ⁺	226	851	294	16.1	26.8	18	288.0	797.4	761.4	M27	110	188	2.81	12.42
W 840 x 295 x 251 ⁺	251	859	292	17	31	18	319.0	797	761	M27	112	186	2.82	11.25
W 920 x 310 x 201 ⁺	201	903	304	15.2	20.1	19	256.0	862.8	824.8	M27	112	198	2.96	14.70
W 920 x 310 x 223 ⁺	223	911	304	15.9	23.9	19	285.0	863.2	825.2	M27	112	198	2.97	13.26
W 920 x 310 x 238 ⁺	238	915	305	16.5	25.9	19	303.0	863.2	825.2	M27	112	200	2.98	12.53
W 920 x 310 x 253 ⁺	253	919	306	17.3	27.9	19	323.0	863.2	825.2	M27	114	200	2.99	11.80
W 920 x 310 x 271 ⁺	271	923	307	18.4	30	19	346.0	863	825	M27	114	202	3.00	11.06
W 920 x 310 x 289 ⁺	289	927	308	19.4	32	19	368.0	863	825	M27	116	202	3.01	10.45
W 920 x 310 x 313 ⁺	313	932	309	21.1	34.5	19	399.0	863	825	M27	118	204	3.03	9.67
W 920 x 420 x 342 ⁺	342	912	418	19.3	32	24	436.0	848	800	M27	126	312	3.42	9.98
W 920 x 420 x 365 ⁺	365	916	419	20.3	34.3	24	465.0	847.4	799.4	M27	128	314	3.43	9.40
W 920 x 420 x 387 ⁺	387	921	420	21.3	36.6	24	494.0	847.8	799.8	M27	128	314	3.44	8.88
W 920 x 420 x 417 ⁺	417	928	422	22.5	39.9	24	532.0	848.2	800.2	M27	130	316	3.46	8.27
W 920 x 420 x 446 ⁺	446	933	423	24	42.7	24	570.0	847.6	799.6	M27	130	318	3.47	7.76
W 920 x 420 x 488 ⁺	488	942	422	25.9	47	24	622.0	848	800	M27	132	316	3.48	7.13
W 920 x 420 x 534 ⁺	534	950	425	28.4	51.1	24	680.0	847.8	799.8	M27	136	320	3.50	6.56
W 920 x 420 x 585 ⁺	585	960	427	31	55.9	24	716.0	848.2	800.2	M27	138	322	3.52	6.02
W 920 x 420 x 653 ⁺	653	972	431	34.5	62	24	832.0	848	800	M27	144	320	3.56	5.45
W 920 x 420 x 784 ⁺	784	996	437	40.9	73.9	24	998.0	848.2	800.2	M27	152	326	3.62	4.62
W 920 x 420 x 967 ⁺	967	1028	446	50	89.9	24	1232	848.2	800.2	M27	160	334	3.70	3.83

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

+ Minimum order: 40 t per section and grade or upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A572/A709/A992	A913		
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z							pure bending yy		pure compression						
	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ⬆ mm ³	i _y mm	A _{vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ⬆ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235	S 355			S 460	
G lbs/ft																					
	x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹									
W 33 x 11.5 x 118	118	246400	5901	6816	33.15	123.8	7823	535.8	843.6	5.91	72.69	226.9	12990	1	1	-	4	4	-	✓	✓
W 33 x 11.5 x 130	130	278400	6630	7627	33.60	130.9	9029	618.5	971.3	6.05	79.19	309.9	15070	1	1	2	4	4	4	✓	✓
W 33 x 11.5 x 141	141	310700	7346	8430	34.02	138.1	10260	700.2	1098	6.18	85.29	409.0	17260	1	1	1	4	4	4	✓	✓
W 33 x 11.5 x 152	152	340100	7992	9163	34.32	145.1	11380	774.3	1213	6.28	90.79	517.5	19280	1	1	1	4	4	4	✓	✓
W 33 x 11.5 x 169	169	386500	8999	10304	34.79	154.7	12900	883.6	1383	6.36	100.1	737.6	22050	1	1	1	4	4	4	✓	✓
W 36 x 12 x 135	135	325200	7203	8356	35.61	144.9	9442	621.2	982.3	6.07	77.66	298.0	18340	1	1	-	4	4	-	✓	✓
W 36 x 12 x 150	150	376800	8273	9540	36.32	153.2	11220	738.5	1163	6.27	85.96	426.8	22020	1	1	2	4	4	4	✓	✓
W 36 x 12 x 160	160	406400	8883	10229	36.59	159.6	12290	805.6	1267	6.36	90.56	518.8	24200	1	1	1	4	4	4	✓	✓
W 36 x 12 x 170	170	437500	9520	10963	36.79	167.9	13370	873.6	1375	6.43	95.36	630.9	26450	1	1	1	4	4	4	✓	✓
W 36 x 12 x 182	182	471600	10218	11783	36.91	178.8	14520	945.8	1491	6.48	100.7	775.0	28840	1	1	1	4	4	4	✓	✓
W 36 x 12 x 194	194	504500	10884	12566	37.04	188.9	15640	1016	1603	6.52	105.7	929.8	31210	1	1	1	4	4	4	✓	✓
W 36 x 12 x 210	210	548200	11765	13629	37.10	205.6	17040	1103	1748	6.54	112.4	1171	34160	1	1	1	3	4	4	✓	✓
W 36 x 16.5 x 230	230	624900	13700	15450	37.85	190.1	39010	1867	2882	9.46	111.4	1193	75410	1	1	1	3	4	4	✓	✓
W 36 x 16.5 x 245	245	670500	14640	16520	38.00	200.4	42120	2011	3106	9.52	117.0	1446	81730	1	1	1	3	4	4	✓	✓
W 36 x 16.5 x 260	260	718300	15600	17630	38.17	210.9	45280	2156	3332	9.58	122.6	1734	88370	1	1	1	2	4	4	✓	✓
W 36 x 16.5 x 280	280	787600	16970	19210	38.46	223.9	50070	2373	3668	9.70	130.4	2200	98540	1	1	1	2	4	4	✓	✓
W 36 x 16.5 x 300	300	846800	18150	20600	38.56	239.1	53980	2552	3951	9.73	137.5	2685	106740	1	1	1	2	3	4	✓	✓
W 36 x 16.5 x 328	328	935390	19860	22615	38.80	259.3	59010	2797	4336	9.75	148.0	3514	117890	1	1	1	1	2	4	✓	✓
W 36 x 16.5 x 359	359	1031000	21710	24830	38.94	284.8	65560	3085	4796	9.82	158.7	4542	132070	1	1	1	1	2	3	✓	✓
W 36 x 16.5 x 393	393	1143090	23814	27363	39.16	312.0	72770	3408	5310	9.88	170.9	5932	148220	1	1	1	1	1	2	✓	✓
W 36 x 16.5 x 439	439	1292000	26590	30730	39.41	348.7	83050	3854	6022	9.99	186.6	8124	171280	1	1	1	1	1	1	✓	✓
W 36 x 16.5 x 527	527	1593000	31980	37340	39.95	417.6	103300	4728	7424	10.18	216.8	13730	218490	1	1	-	1	1	-	✓	✓
W 36 x 16.5 x 650	650	2033000	39540	46810	40.64	517.1	133900	6003	9486	10.43	257.9	24930	292450	1	1	-	1	1	-	✓	✓

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.

● Poutrelles américaines à larges ailes (suite)

Dimensions: ASTM A6/A6M - 02

Tolérances: ASTM A6/A6M - 02

● American wide flange beams (continued)

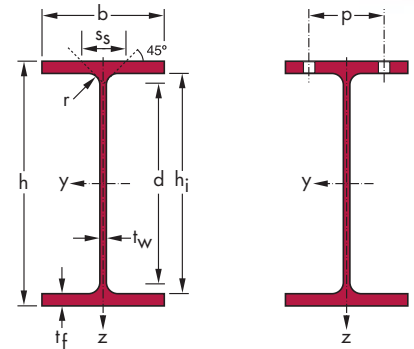
Dimensions: ASTM A6/A6M - 02

Tolerances: ASTM A6/A6M - 02

● Amerikanische Breitflanschträger (Fortsetzung)

Abmessungen: ASTM A6/A6M - 02

Toleranzen: ASTM A6/A6M - 02



Désignation Designation Bezeichnung (metric)	Dimensions Abmessungen						Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche		
G kg/m	h mm	b mm	t _w mm	t _f mm	r mm	A mm ²	h _i mm	d mm	Ø	P _{min} mm	P _{max} mm	A _L m ² /m	A _G m ² /t	
						x 10 ²								
W 1000 x 300 x 222 ⁺	222	970	300	16	21.1	30	282.0	928	868	M27	134	194	3.06	13.77
W 1000 x 300 x 249 ⁺	249	980	300	16.5	26	30	317.0	928	868	M27	134	194	3.08	12.37
W 1000 x 300 x 272 ⁺	272	990	300	16.5	31	30	346.0	928	868	M27	134	194	3.10	11.37
W 1000 x 300 x 314 ⁺	314	1000	300	19.1	35.9	30	400.0	928	868	M27	136	194	3.11	9.90
W 1000 x 300 x 350 ⁺	350	1008	302	21.1	40	30	446.0	928	868	M27	140	196	3.13	8.96
W 1000 x 300 x 393 ⁺	393	1016	303	24.4	43.9	30	501.0	928	868	M27	142	198	3.14	8.01
W 1000 x 300 x 415 ⁺	415	1020	304	26	46	30	528.0	928	868	M27	144	198	3.15	7.60
W 1000 x 300 x 438 ⁺	438	1026	305	27	49	30	556.0	928	868	M27	137	215	3.17	7.24
W 1000 x 300 x 494 ⁺	494	1036	309	31	54	30	629.0	928	868	M27	148	204	3.19	6.47
W 1000 x 300 x 584 ⁺	584	1056	314	36	64	30	744.0	928	868	M27	154	208	3.24	5.56
W 1000 x 400 x 296 ⁺	296	982	400	16.5	27.1	30	377.0	928	868	M27	134	294	3.48	11.76
W 1000 x 400 x 321 ⁺	321	990	400	16.5	31	30	408.0	928	868	M27	134	294	3.50	10.89
W 1000 x 400 x 371 ⁺	371	1000	400	19	36.1	30	473.0	928	868	M27	136	294	3.51	9.47
W 1000 x 400 x 412 ⁺	412	1008	402	21.1	40	30	525.0	928	868	M27	140	296	3.53	8.58
W 1000 x 400 x 443 ⁺	443	1012	402	23.6	41.9	30	564.0	928.2	868.2	M27	142	296	3.53	7.99
W 1000 x 400 x 483 ⁺	483	1020	404	25.4	46	30	615.0	928	868	M27	144	298	3.55	7.36
W 1000 x 400 x 539 ⁺	539	1030	407	28.4	51.1	30	687.0	927.8	867.8	M27	146	302	3.58	6.64
W 1000 x 400 x 554 ⁺	554	1032	408	29.5	52	30	706.0	928	868	M27	150	296	3.59	6.47
W 1000 x 400 x 591 ⁺	591	1040	409	31	55.9	30	753.0	928.2	868.2	M27	148	304	3.60	6.10
W 1000 x 400 x 642 ⁺	642	1048	412	34	60	30	818.0	928	868	M27	154	300	3.62	5.65
W 1000 x 400 x 748 ⁺	748	1068	417	39	70	30	953.0	928	868	M27	160	306	3.67	4.91
W 1000 x 400 x 883 ⁺	883	1092	424	45.5	82	30	1125	928	868	M27	166	312	3.74	4.23
W 1100 x 400 x 343 ⁺	343	1090	400	18	31	20	436.0	1028	988	M27	116	294	3.71	10.83
W 1100 x 400 x 390 ⁺	390	1100	400	20	36	20	497.0	1028	988	M27	118	294	3.73	9.55
W 1100 x 400 x 433 ⁺	433	1108	402	22	40	20	551.0	1028	988	M27	120	296	3.75	8.66
W 1100 x 400 x 499 ⁺	499	1118	405	26	45	20	635.0	1028	988	M27	124	300	3.77	7.56

+ Commande minimale: 40 t par profilé et qualité ou suivant accord.

+ Minimum order: 40 t per section and grade or upon agreement.

+ Mindestbestellmenge: 40 t pro Profil und Güte oder nach Vereinbarung.



Notations pages 211-215 / Bezeichnungen Seiten 211-215

Désignation Designation Bezeichnung (imperial)	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					A913 A572/A709/A992			
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z								pure bending y-y		pure compression					
	G lbs/ft	I _y mm ⁴	W _{el.y} mm ³	W _{pl.y} ♦ mm ³	i _y mm	A _{vz} mm ²	I _z mm ⁴	W _{el.z} mm ³	W _{pl.z} ♦ mm ³	i _z mm	s _s mm	I _t mm ⁴	I _w mm ⁶	S 235	S 355	S 460	S 235		S 355	S 460	
	x 10 ⁴	x 10 ³	x 10 ³	x 10	x 10 ²	x 10 ⁴	x 10 ³	x 10 ³	x 10		x 10 ⁴	x 10 ⁹									
W 40 x 12 x 149	149	407700	8405	9803	37.97	172.2	9546	636.0	1020	5.81	93.35	406.0	21370	1	1	-	4	4	-	✓	✓
W 40 x 12 x 167	167	481100	9818	11350	38.97	180.7	11750	784.0	1245	6.09	103.6	584.4	26620	1	1	2	4	4	4	✓	✓
W 40 x 12 x 183	183	553800	11190	12820	39.96	184.6	14000	934.0	1470	6.35	113.6	822.4	32070	1	1	2	4	4	4	✓	✓
W 40 x 12 x 211	211	644200	12880	14850	40.11	213.4	16230	1082	1713	6.37	126.0	1252	37540	1	1	1	4	4	4	✓	✓
W 40 x 12 x 235	235	723000	14350	16590	40.30	236.0	18460	1223	1941	6.44	136.2	1707	43020	1	1	1	3	4	4	✓	✓
W 40 x 12 x 264	264	807700	15900	18540	40.18	271.3	20500	1353	2168	6.40	147.3	2332	48080	1	1	1	2	4	4	✓	✓
W 40 x 12 x 278	278	853100	16728	19571	40.17	288.6	21710	1428	2298	6.41	153.1	2713	51080	1	1	1	2	3	4	✓	✓
W 40 x 12 x 294	294	909800	17740	20770	40.41	300.9	23360	1532	2464	6.47	160.1	3200	55290	1	1	1	1	3	4	✓	✓
W 40 x 12 x 331	331	1028000	19845	23413	40.42	344.5	26820	1736	2818	6.53	174.1	4433	64010	1	1	1	1	2	3	✓	✓
W 40 x 12 x 392	392	1246100	23600	28039	40.93	403.2	33430	2130	3475	6.70	199.1	7230	81240	1	1	1	1	1	2	✓	✓
W 40 x 16 x 199	199	618700	12600	14220	40.52	181.5	28850	1443	2235	8.75	105.6	762.6	65900	1	1	2	4	4	4	✓	✓
W 40 x 16 x 215	215	696400	14070	15800	41.27	184.6	33120	1656	2555	9.00	113.6	1021	76030	1	1	2	4	4	4	✓	✓
W 40 x 16 x 249	249	812100	16240	18330	41.48	212.5	38480	1924	2976	9.03	126.1	1575	89440	1	1	1	4	4	4	✓	✓
W 40 x 16 x 277	277	909800	18050	20440	41.66	235.0	43410	2160	3348	9.10	136.1	2134	101460	1	1	1	3	4	4	✓	✓
W 40 x 16 x 297	297	966510	19101	21777	41.41	261.8	45500	2264	3529	8.98	142.5	2545	106740	1	1	1	2	4	4	✓	✓
W 40 x 16 x 324	324	1067480	20931	23923	41.66	282.7	50710	2510	3919	9.08	152.5	3311	119900	1	1	1	2	4	4	✓	✓
W 40 x 16 x 362	362	1202540	23350	26824	41.83	316.4	57630	2832	4436	9.16	165.7	4546	137550	1	1	1	1	2	4	✓	✓
W 40 x 16 x 372	372	1232000	23880	27500	41.79	328.0	59100	2897	4547	9.15	168.6	4860	141330	1	1	1	1	2	3	✓	✓
W 40 x 16 x 397	397	1331040	25597	29530	42.05	346.3	64010	3130	4916	9.22	177.9	5927	154330	1	1	1	1	2	3	✓	✓
W 40 x 16 x 431	431	1450590	27683	32097	42.12	379.6	70280	3412	5379	9.27	189.1	7440	170670	1	1	1	1	1	2	✓	✓
W 40 x 16 x 503	503	1731940	32433	37881	42.62	438.9	85110	4082	6459	9.45	214.1	11670	210650	1	1	1	1	1	1	✓	✓
W 40 x 16 x 593	593	2096420	38396	45265	43.16	516.5	104970	4952	7874	9.66	244.6	18750	265670	1	1	-	1	1	-	✓	
W 44 x 16 x 230	230	867400	15920	18060	44.58	206.5	33120	1656	2568	8.71	103.4	1037	92710	1	1	2	4	4	4	✓	✓
W 44 x 16 x 262	262	1005000	18280	20780	44.98	230.6	38480	1924	2988	8.80	115.4	1564	108680	1	1	1	4	4	4	✓	✓
W 44 x 16 x 290	290	1126000	20320	23160	45.19	254.4	43410	2160	3362	8.87	125.4	2130	123500	1	1	1	4	4	4	✓	✓
W 44 x 16 x 335	335	1294000	23150	26600	45.14	300.4	49980	2468	3870	8.87	139.4	3135	143410	1	1	1	2	4	4	✓	

♦ W_{pl}: Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise. Voir page 215.

♦ W_{pl}: For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity. See page 215.

♦ W_{pl}: Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören. Siehe Seite 215.