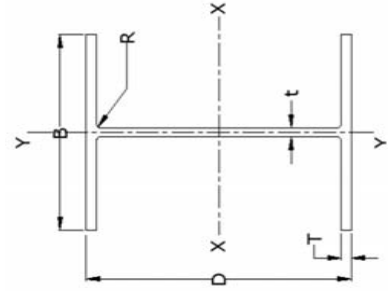


SECTIONAL PROPERTIES

Wide Parallel Flange Beams as per IS 12778 / (DIN 1025)

Beam (WPB)	Mass kg/m	Area cm ²	Dimensions				Sectional Properties										
			Depth H mm	Width B mm	Web Thick t _w mm	Flange Thick t _f mm	Root Rad r mm	Moment of Inertia		Radius of Gyration			Section Modulus			Plastic Section Modulus	
								I _x cm ⁴	I _y cm ⁴	r _x cm	r _y cm	Z _x cm ³	Z _y cm ³	Z _{px} cm ³	Z _{py} cm ³		
WPB 100x100	12.24	15.60	91	100	4.2	5.5	12	236.51	92.06	3.89	2.43	51.98	18.41	58.36	28.45		
WPB 100x100	16.67	21.24	96	100	5	8	349.22	133.81	4.06	2.51	26.76	72.76	26.76	83.02	41.14		
WPB 100x100	20.44	26.04	100	100	6	10	449.54	167.27	4.16	2.53	33.45	89.91	33.45	104.22	51.43		
WPB 100x100	41.79	53.24	120	106	12	20	1142.61	399.15	4.63	2.74	75.31	190.44	75.31	235.82	116.32		
WPB 120x120	14.57	18.55	109	120	4.2	5.5	413.36	158.81	4.72	2.93	26.47	75.85	26.47	84.13	40.63		
WPB 120x120	19.89	25.34	114	120	5	8	606.15	230.90	4.89	3.02	38.48	106.34	38.48	119.50	58.86		
WPB 120x120	26.70	34.01	120	120	6.5	11	864.37	317.52	5.04	3.06	52.92	144.06	52.92	165.22	80.97		
WPB 120x120	52.13	66.41	140	126	12.5	21	2017.57	702.77	5.51	3.25	111.55	288.22	111.55	350.62	171.63		
WPB 140x140	18.08	23.03	128	140	4.3	6	719.45	274.83	5.59	3.45	39.26	112.41	39.26	123.79	59.94		
WPB 140x140	24.66	31.42	133	140	5.5	8.5	1033.13	389.32	5.73	3.52	55.62	155.36	55.62	173.51	84.85		
WPB 140x140	33.72	42.96	140	140	7	12	1509.23	549.67	5.93	3.58	78.52	215.60	78.52	245.44	119.79		
WPB 140x140	63.24	80.56	160	146	13	22	3291.36	1144.34	6.39	3.77	156.76	411.42	156.76	493.84	240.52		
WPB 150x150	22.96	29.25	152	152	5.8	6.8	1243.48	398.36	6.52	3.69	52.42	163.62	52.42	181.56	79.98		
WPB 150x150	30.11	38.36	158	153	6.5	9.4	1761.41	561.58	6.78	3.83	73.41	222.96	73.41	248.94	111.77		
WPB 150x150	36.97	47.09	162	154	8	11.5	2213.83	700.81	6.86	3.86	91.01	273.31	91.01	308.90	138.91		
WPB 160x160	23.84	30.37	148	160	4.5	7	1282.88	478.73	6.50	3.97	59.84	173.36	59.84	190.43	91.37		
WPB 160x160	30.44	38.78	152	160	6	9	1672.97	615.57	6.57	3.98	76.95	220.13	76.95	245.17	117.64		
WPB 160x160	42.59	54.26	160	160	8	13	2492.00	889.23	6.78	4.05	111.15	311.50	111.15	353.98	169.97		
WPB 160x160	76.19	97.06	180	166	14	23	5098.26	1758.77	7.25	4.26	211.90	566.47	211.90	674.58	325.47		



SECTIONAL PROPERTIES

Wide Parallel Flange Beams as per IS 12778 / (DIN 1025)

Beam (WPB)	Mass kg/m	Area cm ²	Dimensions				Sectional Properties									
			Depth H mm	Width B mm	Web Thick t _w mm	Flange Thick t _f mm	Root Rad r mm	Moment of Inertia		Radius of Gyration		Section Modulus		Plastic Section Modulus		
								I _x cm ⁴	I _y cm ⁴	r _x cm	r _y cm	Z _x cm ³	Z _y cm ³	Z _{px} cm ³	Z _{py} cm ³	
WPB 200x200 (HE 200 A)	42.26	53.84	190	200	6.5	10	18	3692.15	1335.51	8.28	4.98	388.65	133.55	429.52	203.83	
WPB 200x200 (HE 200 B)	61.30	78.09	200	200	9	15	18	5696.17	2003.37	8.54	5.07	569.62	200.34	642.58	305.82	
WPB 220x220 (HE 220 A)	50.51	64.35	210	220	7	11	18	5409.69	1954.56	9.17	5.51	515.21	177.69	568.50	270.61	
WPB 220x220 (HE 220 B)	71.47	91.05	220	220	9.5	16	18	8090.96	2843.26	9.43	5.59	735.54	258.48	827.09	393.89	
WPB 240x240 (HE 240 A)	60.32	76.84	230	240	7.5	12	21	7763.17	2768.81	10.05	6.00	675.06	230.73	744.68	351.71	
WPB 240x240 (HE 240 B)	83.20	105.99	240	240	10	17	21	11259.29	3922.66	10.31	6.08	938.27	326.89	1053.20	498.44	
WPB 260x260 (HE 260 A)	68.16	86.83	250	260	7.5	12.5	24	10454.94	3667.56	10.97	6.50	836.39	282.12	919.85	430.19	
WPB 260x260 (HE 260 B)	92.99	118.45	260	260	10	17.5	24	14919.41	5134.51	11.22	6.58	1147.65	394.96	1282.99	602.27	
WPB 280x280 (HE 280 A)	76.36	97.27	270	280	8	13	24	13673.28	4762.64	11.86	7.00	1012.84	340.19	1112.31	518.16	
HE 280 B	103.13	131.37	280	280	10.5	18	24	19270.25	6594.52	12.11	7.08	1376.45	471.04	1534.52	717.60	
WPB 300x300 (HE 300 A)	88.34	112.54	290	300	8.5	14	27	18263.47	6309.55	12.74	7.49	1259.55	420.64	1383.39	641.20	
WPB 300x300 (HE 300 B)	100.84	128.47	294	300	10	16	27	21046.24	7211.39	12.80	7.49	1431.72	480.76	1584.33	733.49	
WPB 300x300 (HE 300 B)	117.04	149.09	300	300	11	19	27	25165.65	8562.82	12.99	7.58	1677.71	570.85	1868.79	870.18	
WPB 300x300 (HE 300 B)	237.92	303.09	340	310	21	39	27	59200.98	19403.07	13.98	8.00	3482.41	1251.81	4077.79	1913.22	

