



## SIN Concentrated Load

Metric

### Constants

$F_y$	350 MPa
$\phi_s$	0.8

### Concentrated Load Resistance (kN)

Web $t_w$ (mm)		WT0 1.52 Bearing Length (mm)							
$t_f$ (mm)	0	50	100	150	200	250	300	350	400
6.4	13.50	34.77	56.03	77.30	98.56	119.83	141.09	162.36	183.62
7.9	16.88	38.14	59.41	80.67	101.94	123.20	144.47	165.73	187.00
9.5	20.25	41.52	62.78	84.05	105.31	126.58	147.84	169.11	190.37
12.7	27.01	48.27	69.54	90.80	112.07	133.33	154.60	175.86	197.13
15.9	33.76	55.02	76.29	97.55	118.82	140.08	161.35	182.61	203.88
19.1	40.51	61.77	83.04	104.30	125.57	146.83	168.10	189.36	210.63
25.4	54.01	75.28	96.54	117.81	139.07	160.34	181.60	202.87	224.13

Web $t_w$ (mm)		WTA 1.90 Bearing Length (mm)							
$t_f$ (mm)	0	50	100	150	200	250	300	350	400
6.4	16.87	43.43	69.99	96.56	123.12	149.68	176.25	202.81	229.37
7.9	21.08	47.65	74.21	100.77	127.34	153.90	180.46	207.03	233.59
9.5	25.30	51.86	78.43	104.99	131.55	158.12	184.68	211.24	237.81
12.7	33.74	60.30	86.86	113.43	139.99	166.55	193.12	219.68	246.24
15.9	42.17	68.73	95.30	121.86	148.42	174.99	201.55	228.11	254.68
19.1	50.60	77.17	103.73	130.29	156.86	183.42	209.98	236.55	263.11
25.4	67.47	94.03	120.60	147.16	173.72	200.29	226.85	253.41	279.98

Web $t_w$ (mm)		WTB 2.66 Bearing Length (mm)							
$t_f$ (mm)	0	50	100	150	200	250	300	350	400
6.4	23.62	60.82	98.01	135.21	172.40	209.60	246.79	283.99	321.19
7.9	29.52	66.72	103.92	141.11	178.31	215.50	252.70	289.89	327.09
9.5	35.43	72.62	109.82	147.02	184.21	221.41	258.60	295.80	333.00
12.7	47.24	84.43	121.63	158.83	196.02	233.22	270.41	307.61	344.80
15.9	59.05	96.24	133.44	170.64	207.83	245.03	282.22	319.42	356.61
19.1	70.86	108.05	145.25	182.45	219.64	256.84	294.03	331.23	368.42
25.4	94.48	131.67	168.87	206.06	243.26	280.46	317.65	354.85	392.04

Web $t_w$ (mm)		WTC 3.04 Bearing Length (mm)							
$t_f$ (mm)	0	50	100	150	200	250	300	350	400
6.4	27.01	69.54	112.07	154.60	197.13	239.66	282.18	324.71	367.24
7.9	33.76	76.29	118.82	161.35	203.88	246.41	288.94	331.47	374.00
9.5	40.51	83.04	125.57	168.10	210.63	253.16	295.69	338.22	380.75
12.7	54.01	96.54	139.07	181.60	224.13	266.66	309.19	351.72	394.25
15.9	67.52	110.05	152.58	195.11	237.64	280.16	322.69	365.22	407.75
19.1	81.02	123.55	166.08	208.61	251.14	293.67	336.20	378.73	421.26
25.4	108.03	150.56	193.09	235.61	278.14	320.67	363.20	405.73	448.26



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Web $t_w$ (mm)		WTF 4.18								
		Bearing Length (mm)								
$t_f$ (mm)		0	50	100	150	200	250	300	350	400
6.4		37.12	95.58	154.04	212.50	270.97	329.43	387.89	446.35	504.81
7.9		46.40	104.86	163.32	221.79	280.25	338.71	397.17	455.63	514.09
9.5		55.68	114.14	172.61	231.07	289.53	347.99	406.45	464.91	523.37
12.7		74.25	132.71	191.17	249.63	308.09	366.55	425.01	483.47	541.93
15.9		92.81	151.27	209.73	268.19	326.65	385.11	443.57	502.03	560.49
19.1		111.37	169.83	228.29	286.75	345.21	403.67	462.13	520.59	579.05
25.4		148.49	206.95	265.41	323.87	382.33	440.79	499.25	557.71	616.18

Web $t_w$ (mm)		WTH 4.94								
		Bearing Length (mm)								
$t_f$ (mm)		0	50	100	150	200	250	300	350	400
6.4		43.87	112.97	182.06	251.15	320.25	389.34	458.43	527.53	596.62
7.9		54.84	123.94	193.03	262.12	331.21	400.31	469.40	538.49	607.59
9.5		65.81	134.90	204.00	273.09	342.18	411.28	480.37	549.46	618.56
12.7		87.75	156.84	225.93	295.03	364.12	433.21	502.31	571.40	640.49
15.9		109.69	178.78	247.87	316.96	386.06	455.15	524.24	593.34	662.43
19.1		131.62	200.72	269.81	338.90	407.99	477.09	546.18	615.27	684.37
25.4		175.50	244.59	313.68	382.78	451.87	520.96	590.05	659.15	728.24

Web $t_w$ (mm)		WTK 6.07								
		Bearing Length (mm)								
$t_f$ (mm)		0	50	100	150	200	250	300	350	400
6.4		53.99	139.01	224.04	309.06	394.09	479.11	564.13	649.16	734.18
7.9		67.49	152.51	237.54	322.56	407.58	492.61	577.63	662.66	747.68
9.5		80.99	166.01	251.03	336.06	421.08	506.11	591.13	676.15	761.18
12.7		107.98	193.00	278.03	363.05	448.08	533.10	618.12	703.15	788.17
15.9		134.98	220.00	305.02	390.05	475.07	560.10	645.12	730.14	815.17
19.1		161.97	246.99	332.02	417.04	502.07	587.09	672.11	757.14	842.16
25.4		215.96	300.98	386.01	471.03	556.06	641.08	726.10	811.13	896.15