

**Hertzian Pressure Table**

Bearing Reference	Diameter (mm)	Circumference (mm)	Contact Width (mm)	Approx. Contact Area (mm <sup>2</sup> )	Steel Grade	Maximum Static Force / Hertzian Pressure <b>C</b> For Radial Roller (Newtons)	Maximum Static Force / Hertzian Pressure <b>Ca</b> For Axial Roller (Newtons)
4.053	52.5	164.96	14	7.33	S355J0	5,500	1,680
4.054	62.5	196.38	15	9.35	S450J2	8,200	3,100
4.055	70.1	220.25	16	11.19	S450J2	9,800	3,730
4.056	77.7	244.13	16	12.40	S450J2	10,900	3,870
4.057	77.7	244.13	16	12.40	S450J2	10,900	2,970
4.058	88.4	277.75	21	18.52	S450J2	16,300	6,760
4.059	101.2	317.97	18	18.17	S450J2	16,000	5,150
4.060	107.7	338.39	21	22.56	S450J2	19,800	5,490
4.061	107.7	338.39	21	22.56	S450J2	19,800	7,160
4.062	123	386.47	26	31.90	S450J2	28,000	10,200
4.063	149	468.16	36	53.51	S450J2	47,000	17,800
4.089	165	518.36	35	56.24	S355	42,180	13,910
4.090	190	596.90	43	79.57	S355	59,677	19,400
4.091	220	691.15	53	113.56	S355	85,170	28,000
4.092	250	785.40	55	133.91	S355	100,432	33,900
4.093	280	879.65	67	182.70	S355	137,027	46,500
4.094	320	1005.00	77	239.97	S355	179,975	
4.095	340	1068.00	81	268.21	S355	201,150	
4.096	390	1125.00	111.5	423.50	S355	317,600	