



## Tensile Load of Metric Coarse Screw Threads 粗牙螺絲拉力要求

JIS B1051

Nominal Size	Pitch (mm)	Nominal stress area (mm <sup>2</sup> )	Strength-class of external threaded fastener									
			3.6	4.6	4.8	5.6	5.8	6.8	8.8	9.8	10.9	12.9
			Min tensile load N{kgf}									
M1.6	0.35	1.27	420	510	530	640	660	760	1020	1140	1320	1550
			{42.8}	{52.0}	{54.0}	{65.3}	{67.3}	{77.5}	{104}	{116}	{135}	{158}
M2	0.4	2.07	680	830	870	1040	1080	1240	1660	1860	2150	2530
			{69.3}	{84.6}	{88.7}	{106}	{110}	{126}	{169}	{190}	{219}	{258}
M2.2	0.45	2.48	820	990	1040	1240	1290	1490	1980	2230	2580	3030
			{83.6}	{101}	{106}	{126}	{132}	{152}	{202}	{227}	{263}	{309}
M2.5	0.45	3.39	1120	1360	1420	1700	1760	2030	2710	3050	3530	4140
			{114}	{139}	{145}	{173}	{179}	{207}	{276}	{311}	{360}	{422}
M3	0.5	5.03	1660	2010	2110	2510	2620	3020	4020	4530	5230	6140
			{169}	{205}	{215}	{256}	{267}	{308}	{410}	{462}	{533}	{626}
M3.5	0.6	6.78	2240	2710	2850	3390	3530	4070	5420	6100	7050	8270
			{228}	{276}	{291}	{346}	{360}	{415}	{353}	{622}	{719}	{843}
M4	0.7	8.78	2900	3510	3690	4390	4570	5270	7020	7900	9130	10700
			{296}	{358}	{376}	{448}	{466}	{537}	{716}	{806}	{931}	{1090}
M5	0.8	14.2	4690	5680	5960	7100	7380	8520	11350	12800	14800	17300
			{478}	{579}	{608}	{724}	{753}	{869}	{1160}	{1310}	{1510}	{1760}
M6	1	20.1	6630	8040	8440	10000	10400	12100	16100	18100	20900	24500
			{676}	{820}	{861}	{1020}	{1060}	{1230}	{1640}	{1850}	{2130}	{2500}
M7	1	28.9	9540	11600	12100	14400	15000	17300	23100	26000	30100	35300
			{973}	{1180}	{1230}	{1470}	{1530}	{1760}	{2360}	{2650}	{3070}	{3600}
M8	1.25	36.6	12100	14600	15400	18300	19000	22000	29200	32900	38100	44600
			{1230}	{1490}	{1570}	{1870}	{1940}	{2240}	{2980}	{3350}	{3890}	{4550}
M10	1.5	58.0	19100	23200	24400	29000	30200	34800	46400	52200	60300	70800
			{1950}	{2370}	{2490}	{2960}	{3080}	{3550}	{4730}	{5320}	{6150}	{7220}
M12	1.75	84.3	27800	33700	35400	42200	43800	50600	67400	75900	87700	103000
			{2830}	{3440}	{3610}	{4300}	{4470}	{5160}	{6870}	{7740}	{8940}	{10500}
M14	2	115	38000	46000	48300	57500	59800	69000	92000	104000	120000	140000
			{3870}	{4690}	{4930}	{5860}	{6100}	{7040}	{9380}	{10600}	{12200}	{14300}
M16	2	157	51800	62800	65900	78500	81600	94000	125000	141000	163000	192000
			{5280}	{6400}	{6720}	{8000}	{8320}	{9590}	{12700}	{14400}	{16600}	{19600}
M18	2.5	192	63400	76800	80600	96000	99800	115000	159000	-	200000	234000
			{6470}	{7830}	{8220}	{9790}	{10200}	{11700}	{16200}	-	{20400}	{23900}
M20	2.5	245	80800	98000	103000	122000	127000	147000	203000	-	255000	299000
			{8240}	{9990}	{10500}	{12400}	{13000}	{15000}	{20700}	-	{26000}	{30500}



## Tensile Load of Metric Fine Screw Threads 幼牙螺絲拉力要求

JIS B1051

Nominal Size	Nominal stress area (mm <sup>2</sup> )	強度級別									
		3.6	4.6	4.8	5.6	5.8	6.8	8.8	9.8	10.9	12.9
		Min. tensile load N{kgf}									
M8x1	39.2	12900	15700	16500	19600	20400	23500	31360	35300	40800	47800
		{1320}	{1600}	{1680}	{2000}	{2080}	{2400}	{3200}	{3600}	{4160}	{4870}
M10x1	64.5	21300	25800	27100	32300	33500	38700	51600	58100	67100	78700
		{2170}	{2630}	{2760}	{3290}	{3420}	{3950}	{5260}	{5930}	{6840}	{8030}
M10x1.25	61.2	20200	24500	25700	30600	31800	36700	49000	55100	63600	74700
		{2060}	{2500}	{2620}	{3120}	{3240}	{3740}	{5000}	{5620}	{6490}	{7620}
M12x1.25	92.1	30400	36800	38700	46000	47900	55300	73700	82900	95800	112000
		{3100}	{3750}	{3950}	{4690}	{4880}	{5640}	{7520}	{8450}	{9770}	{11400}
M12x1.5	88.1	29100	35200	37000	44100	45800	52900	70500	79300	91500	107500
		{2970}	{3590}	{3770}	{4500}	{4670}	{5390}	{7190}	{8090}	{9330}	{10960}
M14x1.5	125	41200	50000	52500	62500	65000	75000	100000	112000	130000	152000
		{4200}	{5100}	{5350}	{6370}	{6630}	{7650}	{10200}	{11400}	{13300}	{15500}
M16x1.5	167	55100	66800	70100	83500	86800	100000	134000	150000	174000	204000
		{5620}	{6810}	{7150}	{8510}	{8850}	{10200}	{13700}	{15300}	{17700}	{20800}
M18x1.5	216	71300	86400	90700	108000	112000	130000	179000	-	225000	264000
		{7270}	{8810}	{9250}	{11000}	{11400}	{13300}	{18300}	-	{22900}	{26900}
M20x1.5	272	89800	109000	114000	136000	141000	163000	226000	-	283000	332000
		{9160}	{11100}	{11600}	{13900}	{14400}	{16600}	{23000}	-	{28900}	{33900}
M22x1.5	333	110000	133000	140000	166000	173000	200000	276000	-	346000	406000
		{11200}	{13600}	{14300}	{16900}	{17600}	{20400}	{28100}	-	{35300}	{41400}
M24x2	384	127000	154000	161000	192000	200000	230000	319000	-	399000	469000
		{13000}	{15700}	{16400}	{19600}	{20400}	{23500}	{32500}	-	{40700}	{47800}
M27x2	496	164000	198000	208000	248000	258000	298000	412000	-	516000	605000
		{16700}	{20200}	{21200}	{25300}	{26300}	{30400}	{42000}	-	{52600}	{61700}