



Allthread

Minimum Tensile Stress

ALLTHREAD - MINIMUM TENSILE STRESS (MPa or N/mm²)

Nominal Size	Pitch mm	Stress Area mm ²	Class 4.6	Class 8.8	Class 10.9	Sampsonrod™	Hobrod™	Brass
M3	0.50	5.03	400	800	1040	-	-	400
M4	0.70	8.78	400	800	1040	-	-	400
M5	0.80	14.20	400	800	1040	-	-	400
M6	1.00	20.10	400	800	1040	800	1040	400
M8	1.25	36.60	400	800	1040	800	1040	400
M10	1.50	58.00	400	800	1040	800	1040	400
M12	1.75	84.30	400	800	1040	800	1040	380
M14	2.00	115.00	400	800	1040	800	1040	-
M16	2.00	157.00	400	800	1040	800	1040	380
M18	2.50	192.00	400	830	1040	830	1040	-
M20	2.50	245.00	400	830	1040	830	1040	380
M22	2.50	303.00	400	830	1040	830	1040	-
M24	3.00	353.00	400	830	1040	830	1040	380
M27	3.00	459.00	400	830	1040	830	1040	-
M30	3.50	561.00	400	830	1040	830	1040	-
M33	3.50	694.00	400	830	1040	830	1040	-
M36	4.00	817.00	400	830	1040	830	1040	-
M39	4.00	976.00	400	830	1040	830	1040	-
M42	4.50	1121.00	400	830	1040	830	1040	-
M48	5.00	1473.00	400	830	1040	830	1040	-
M52	5.00	1758.00	400	830	1040	830	1040	-
M64	6.00	2676.00	400	830	1040	830	1040	-

Allthread

Minimum Stress Under Proof Load



ALLTHREAD - MINIMUM STRESS UNDER PROOF LOAD (MPa or N/mm²)

Nominal Size	Pitch mm	Stress Area mm ²	Class 4.6	Class 8.8	Class 10.9	Sampsonrod™	Hobrod™	Brass
M3	0.50	5.03	225	580	830	-	-	160
M4	0.70	8.78	225	580	830	-	-	160
M5	0.80	14.20	225	580	830	-	-	160
M6	1.00	20.10	225	580	830	580	830	160
M8	1.25	36.60	225	580	830	580	830	160
M10	1.50	58.00	225	580	830	580	830	160
M12	1.75	84.30	225	580	830	580	830	160
M14	2.00	115.00	225	580	830	580	830	-
M16	2.00	157.00	225	580	830	580	830	160
M18	2.50	192.00	225	600	830	600	830	-
M20	2.50	245.00	225	600	830	600	830	160
M22	2.50	303.00	225	600	830	600	830	-
M24	3.00	353.00	225	600	830	600	830	160
M27	3.00	459.00	225	600	830	600	830	-
M30	3.50	561.00	225	600	830	600	830	-
M33	3.50	694.00	225	600	830	600	830	-
M36	4.00	817.00	225	600	830	600	830	-
M39	4.00	976.00	225	600	830	600	830	-
M42	4.50	1121.00	225	600	830	600	830	-
M48	5.00	1473.00	225	600	830	600	830	-
M52	5.00	1758.00	225	600	830	600	830	-
M64	6.00	2676.00	225	600	830	600	830	-



Allthread

Minimum Proof Load

ALLTHREAD - MINIMUM PROOF LOAD (KN)

Nominal Size	Pitch mm	Stress Area mm ²	Class 4.6	Class 8.8	Class 10.9	Sampsonrod™	Hobrod™	Brass
M3	0.50	5.03	1.13	2.92	4.17	-	-	0.80
M4	0.70	8.78	1.98	5.09	7.29	-	-	1.40
M5	0.80	14.20	3.20	8.24	11.79	-	-	2.27
M6	1.00	20.10	4.52	11.66	16.68	11.66	16.68	3.22
M8	1.25	36.60	8.24	21.23	30.38	21.23	30.38	5.86
M10	1.50	58.00	13.10	33.60	48.10	33.60	48.10	9.28
M12	1.75	84.30	19.00	48.90	70.00	48.90	70.00	13.49
M14	2.00	115.00	25.90	66.70	95.50	66.70	95.50	-
M16	2.00	157.00	35.30	91.10	130.30	91.10	130.30	25.12
M18	2.50	192.00	43.20	115.20	159.40	115.20	159.40	-
M20	2.50	245.00	55.10	147.00	203.30	147.00	203.30	39.20
M22	2.50	303.00	68.20	181.80	251.50	181.80	251.50	-
M24	3.00	353.00	79.40	211.80	293.00	211.80	293.00	56.48
M27	3.00	459.00	103.30	275.40	381.00	275.40	381.00	-
M30	3.50	561.00	126.20	336.60	465.60	336.60	465.60	-
M33	3.50	694.00	156.20	416.40	576.00	416.40	576.00	-
M36	4.00	817.00	183.80	490.20	678.10	490.20	678.10	-
M39	4.00	976.00	219.60	585.60	810.10	585.60	810.10	-
M42	4.50	1121.00	252.20	672.60	930.40	672.60	930.40	-
M48	5.00	1473.00	331.40	883.80	1222.60	883.80	1222.60	-
M52	5.00	1758.00	395.60	1054.80	1459.10	1054.80	1459.10	-
M64	6.00	2676.00	602.10	1605.60	2221.10	1605.60	2221.10	-

Allthread

Minimum Ultimate Tensile Load



ALLTHREAD - MINIMUM ULTIMATE TENSILE LOAD (KN)

Nominal Size	Pitch mm	Stress Area mm ²	Class 4.6	Class 8.8	Class 10.9	Sampsonrod™	Hobrod™	Brass
M3	0.5	5.03	2.01	4.02	5.23	-	-	2.01
M4	0.7	8.78	3.51	7.02	9.13	-	-	3.51
M5	0.8	14.20	5.68	11.36	14.77	-	-	5.68
M6	1	20.10	8.04	16.08	20.90	16.08	20.90	8.04
M8	1.25	36.60	14.60	29.28	38.06	29.28	38.06	14.64
M10	1.5	58.00	23.20	46.40	60.30	46.40	60.30	23.20
M12	1.75	84.30	33.70	67.40	87.70	67.40	87.70	32.03
M14	2	115.00	46.00	92.00	119.60	92.00	119.60	-
M16	2	157.00	62.80	125.60	163.30	125.60	163.30	59.66
M18	2.5	192.00	76.80	159.40	199.70	159.40	199.70	-
M20	2.5	245.00	98.00	203.30	254.80	203.30	254.80	93.10
M22	2.5	303.00	121.20	251.50	315.10	251.50	315.10	-
M24	3	353.00	141.20	293.00	367.10	293.00	367.10	134.14
M27	3	459.00	183.60	381.00	477.40	381.00	477.40	-
M30	3.5	561.00	224.40	465.60	583.40	465.60	583.40	-
M33	3.5	694.00	277.60	576.00	721.80	576.00	721.80	-
M36	4	817.00	326.80	678.10	849.70	678.10	849.70	-
M39	4	976.00	390.40	810.10	1015.00	810.10	1015.00	-
M42	4.5	1121.00	448.40	930.40	1165.80	930.40	1165.80	-
M48	5	1473.00	589.20	1222.60	1531.90	1222.60	1531.90	-
M52	5	1758.00	703.20	1459.10	1828.30	1459.10	1828.30	-
M64	6	2676.00	1070.40	2221.10	2783.00	2221.10	2783.00	-