

PROOF LOAD (ISO 898-2)

DIAMETER	PITCH	Proof load ^a , N							
		Property class							
		04	05	5	6	8	9	10	12
M5	0.80	5 400	7 100	8 250	9 500	12 140	13 000	14 800	16 300
M6	1.00	7 640	10 000	11 700	13 500	17 200	18 400	20 900	23 100
M7	1.00	11 000	14 500	16 800	19 400	24 700	26 400	30 100	33 200
M8	1.25	13 900	18 300	21 600	24 900	31 800	34 400	38 100	42 500
M10	1.50	22 000	29 000	34 200	39 400	50 500	54 500	60 300	67 300
M12	1.75	32 000	42 200	51 400	59 000	74 200	80 100	88 500	100 300
M14	2.00	43 700	57 500	70 200	80 500	101 200	109 300	120 800	136 900
M16	2.00	59 700	78 500	95 800	109 900	138 200	149 200	164 900	186 800
M18	2.50	73 000	96 000	121 000	138 200	176 600	176 600	203 500	230 400
M20	2.50	93 100	122 500	154 400	176 400	225 400	225 400	259 700	294 000
M22	2.50	115 100	151 500	190 900	218 200	278 800	278 800	321 200	363 600
M24	3.00	134 100	176 500	222 400	254 200	324 800	324 800	374 200	423 600
M27	3.00	174 400	229 500	289 200	330 500	422 300	422 300	486 500	550 800
M30	3.50	213 200	280 500	353 400	403 900	516 100	516 100	594 700	673 200
M33	3.50	263 700	347 000	437 200	499 700	638 500	638 500	735 600	832 800
M36	4.00	310 500	408 500	514 700	588 200	751 600	751 600	866 000	980 400
M39	4.00	370 900	488 000	614 900	702 700	897 900	897 900	1 035 000	1 171 000

^a For the application of thin nuts, it should be considered that the stripping load is lower than the proof load of a nut with full loadability

HARDNESS (ISO898-2)

Thread, D	Property class															
	04		05		5		6		8		9		10		12	
	Vickers hardness, HKV															
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
M5 ≤ D ≤ M16					130		150		200	302					295 ^c	
M16 < D ≤ M39	188	302	272	353	146	302	170	302	233 ^a	353 ^b	188	302	272	353	272	353
	Brinell hardness, HB															
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
M5 ≤ D ≤ M16					124		143		190	287					280 ^c	
M16 < D ≤ M39	179	287	259	336	139	287	162	287	221 ^a	336 ^b	179	287	259	336	259	336
	Rockwell hardness, HRC															
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
M5 ≤ D ≤ M16									-	30					29 ^c	
M16 < D ≤ M39	-	30	26	36	-	30	-	30	-	36 ^b	-	30	26	36	26	36

Surface integrity shall be in accordance with ISO 6157-2

Vickers hardness test is the reference method for acceptance

^a Minimum value for high nuts (style 2): 180 HV (171 HB)

^b Minimum value for high nuts (style 2): 302 HV (287 HB; 30 HRC)

^c Minimum value for high nuts (style 2): 272 HV (259 HB, 26 HRC)