



High strength structural bolts (HV)
 Vis à haute resistance (HV)

Tornillos de cabeza hexagonal de alta resistencia (HV)

d	M12	M16	M20	M22	M24	M27	M30	M36
P	1,75	2	2,5	2,5	3	3	3,5	4
b 1	21	26	31	32	34	37	40	48
2	23	28	33	34	37	39	42	50
k	8	10	13	14	15	17	19	23
s	22	27	32	36	41	46	50	60

L\d: Peso/Weight 1000 ud. kg

30	49,10							
35	53,60							
40	58,00	105,00						
45	62,10	113,00	188,00					
50	66,60	121,00	200,00	257,00				
55	71,00	129,00	212,00	272,00				
60	75,40	137,00	225,00	286,00	362,00			
65	79,90	145,00	237,00	301,00	380,00			
70	84,30	153,00	249,00	316,00	398,00	532,00		
75	88,80	160,00	262,00	331,00	415,00	554,00	701,00	
80	93,20	168,00	274,00	346,00	433,00	576,00	728,00	
85	97,60	176,00	286,00	361,00	451,00	599,00	756,00	1.184,0
90	102,00	184,00	298,00	375,00	467,00	621,00	784,00	1.224,0
95	107,00	192,00	310,00	390,00	485,00	644,00	812,00	1.264,0
100		199,00	322,00	405,00	503,00	665,00	838,00	1.304,0
105		207,00	335,00	420,00	520,00	688,00	865,00	1.336,0
110		215,00	347,00	435,00	538,00	710,00	893,00	1.376,0
115		223,00	359,00	450,00	556,00	732,00	921,00	1.415,0
120		231,00	372,00	465,00	574,00	755,00	949,00	1.455,0
125		239,00	384,00	479,00	591,00	777,00	976,00	1.495,0
130		247,00	396,00	494,00	609,00	800,00	1.001,0	1.535,0
135			409,00	509,00	627,00	822,00	1.032,0	1.575,0
140			421,00	524,00	645,00	845,00	1.059,0	1.615,0
145			433,00	539,00	662,00	867,00	1.087,0	1.655,0
150			446,00	554,00	680,00	890,00	1.115,0	1.695,0
155			458,00	569,00	698,00	912,00	1.143,0	1.735,0
160				584,00	716,00	935,00	1.170,0	1.775,0
165				599,00	733,00	957,00	1.198,0	1.815,0
170					751,00	979,00	1.226,0	1.855,0
175					769,00	1.002,0	1.254,0	1.895,0
180					787,00	1.024,0	1.281,0	1.935,0
185					804,00	1.047,0	1.309,0	1.974,0
190					822,00	1.069,0	1.337,0	2.014,0
195					840,00	1.092,0	1.365,0	2.054,0
200						1.114,0	1.392,0	2.091,0

1) Medidas sobre la línea/Sizes above the line. 2) Medidas bajo la línea/Sizes below the line.

CALIDADES/GRADES:

4.6	4.8	5.6	5.8	6.8	8.8	10.9	12.9	A2	A4
-----	-----	-----	-----	-----	-----	------	------	----	----